

Fire Lane Marking Requirements



Colorado Springs Fire Department Division of the Fire Marshal

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If you have any questions or comments regarding the information contained within, or if you need assistance interpreting these requirements, please contact:

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PURPOSE

To provide guidance and direction regarding the types of fire lane markings approved within the City of Colorado Springs and how and where such markings are installed.

SCOPE

This document applies to any and all roadways that are designated as fire lanes. This includes but is not limited to private roadways, driveways and some public streets.

DEFINITIONS

Fire Apparatus Access Road. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane and access roadway. (IFC)

Fire Lane. A road or other passageway developed to allow the passage of fire apparatus. A fire lane is not necessarily intended for vehicular traffic other than fire apparatus. (IFC)

IFC. International Fire Code

GUIDELINES

1. Fire Lane Markings Where Required

Fire lane markings are required in different locations depending upon the land-use zone and/or development in which they are being installed. The locations will vary depending upon whether the development is within the Hillside Overlay, a Traditional Neighborhood Development (TND) zone or remaining areas throughout the city. Markings are also required for certain fire apparatus access features such as turnarounds.

1.1. **Hillside Overlay.** When a parcel is zoned within the Hillside Overlay Zone, the following provisions are required. (Hillside Development Design Manual, May 2013)

- On both sides of fire department access roadways twenty feet (20') wide or less.
- On one side of fire department access roadways with widths greater than twenty feet (20') up to and including twenty-four feet (24').
- Follow general standards when fire department access roadways are wider than twenty four feet (24').

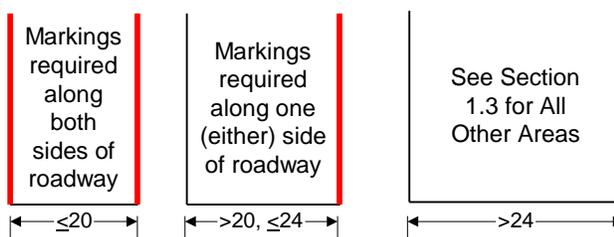


Figure 1 - Hillside fire lane requirements illustration

1.2. **Traditional Neighborhood Developments (TNDs).** When a parcel is zoned as a Traditional Neighborhood Development (TND) or is zoned Planned Urban Development (PUD) but designed as a TND or similar, the following provisions are required. (2009 IFC §503.3 as amended)

- On both sides of fire department access roadways less than twenty two feet (22') wide.

- On one side of fire department access roadways with widths of twenty two feet (22') or more but less than twenty eight feet (28').
- No markings are required for fire department access roadways twenty eight feet (28') in width or more.

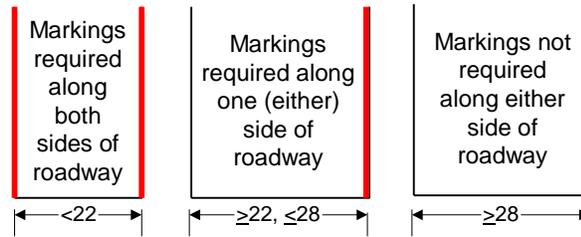


Figure 2 - TND fire lane requirements illustration

1.3. **All Other Areas.** When a parcel is zoned other than those listed in 1.1 and 1.2 above, the following provisions are required. (2009 IFC §103.6 as amended)

- On both sides of fire department access roads less than twenty-eight feet (28') wide.
- On one side of fire department access roads with widths of twenty-eight feet (28') or more but less than thirty-four feet (34').
- No signage is required for access roads thirty-four feet (34') or more in width.

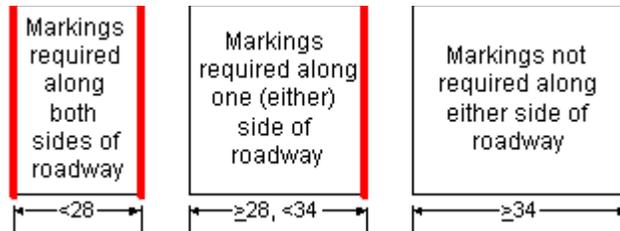


Figure 3 - General fire lane requirements illustration

1.4. **Fire Department Required Turnarounds.** When a fire department turnaround is required for a given site, the turnaround shall be marked as indicated in Figure 4. Note that both fire lane signage and fire lane striping is shown. This is for illustration purposes only. Either the signage or striping is required. However, both methods may be used if desired.

The entrance to a fire department turnaround will be marked differently depending upon the width of the roadway entering into the turnaround which may or may not be based on the zone of the site. Figure 5 illustrates how an entrance to a fire department turnaround shall be marked given the width of a street and/or zone of the site.

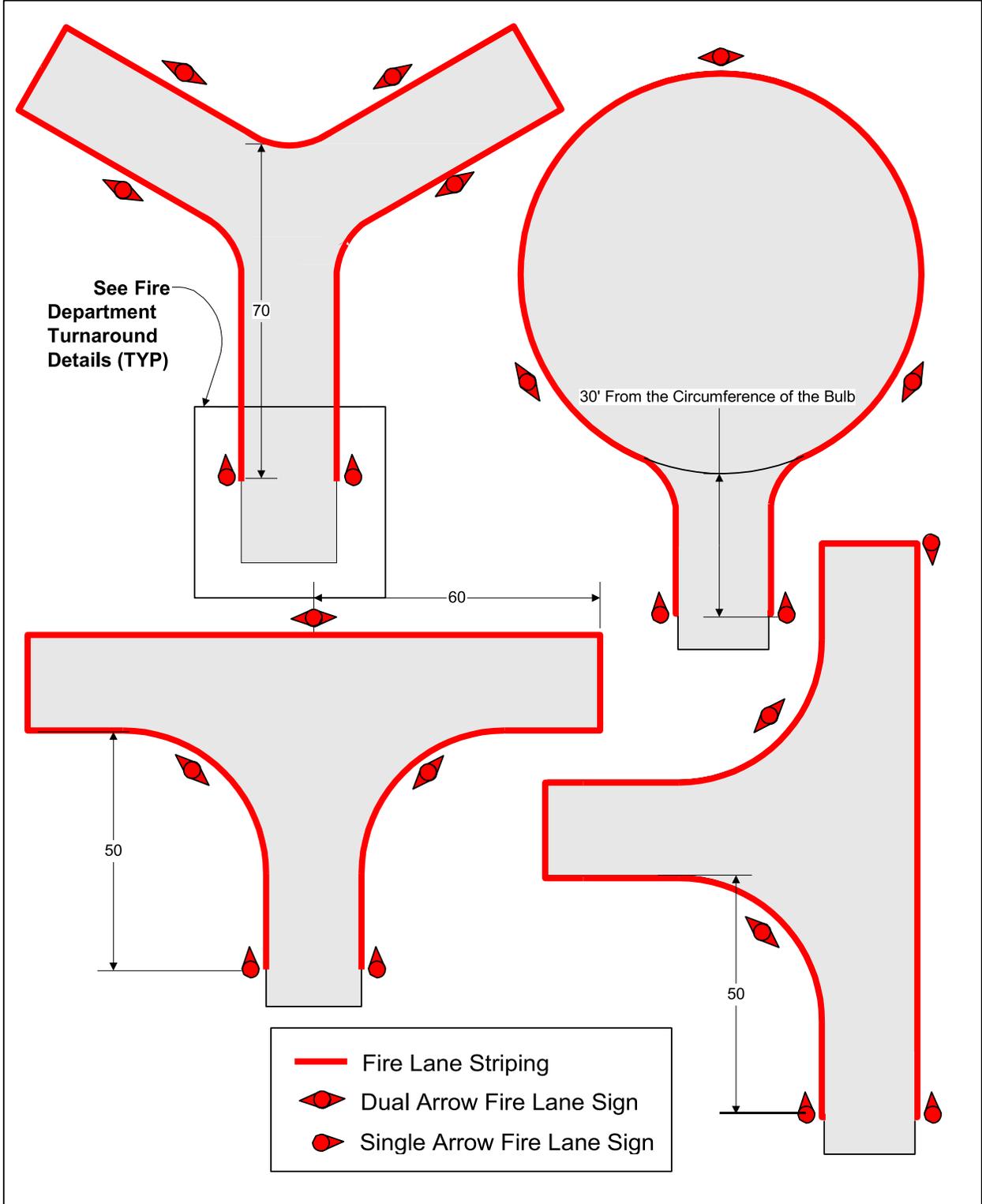


Figure 4 - Fire lane marking requirements for various FD turnarounds

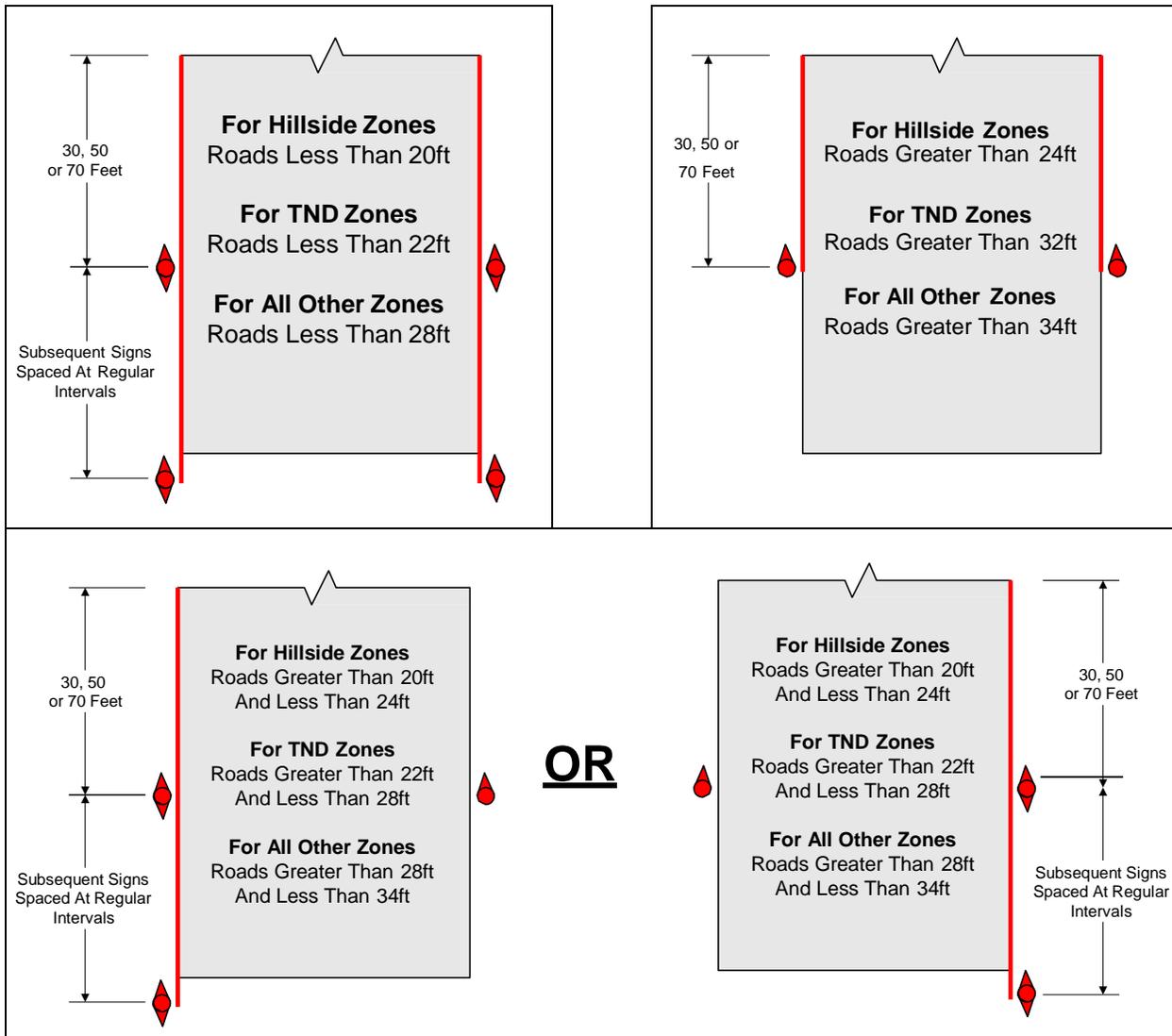


Figure 5 - Markings for entrances to fire department turnarounds

1.5. **Theory Behind Markings.** The IFC requires a minimum 20-ft clear width for fire department access roads. Therefore, a fire department access road without parking may be 20-ft wide. When parking is desired, the width of the access roadway increases to accommodate the parking. The amount of roadway width needed for parking along one side of an access road is 8-ft. In order to provide a minimum 20-ft clear width for fire department use, the access road must then be a minimum of 28-ft. 8-ft for the parking and 20-ft for the clear width.

When parking on both sides of the access roadway is desired, the roadway width for parking is reduced to 7-ft. The thought for this reduction is that vehicles will park closer to the curb when parking along both sides of an access road. This results in an access road 34-ft in width. 7-ft each for parking along both curb lines, which totals to 14-ft, plus 20-ft for the clear width. See Figures 6 through 8 for illustrations of this theory.

It is important to remember, that parking requirements are different within Hillside and Traditional Neighborhood zones. Therefore, the clear width required by the fire code will be reduced to allow for the different parking scenarios within these zones.

It is also important to remember that these are the minimum requirements for fire lane markings. There may be circumstances in which additional fire lane markings are required. These circumstances are

evaluated on a case-by-case basis. Please contact the Division of the Fire Marshal if it's felt that a situation might call for different marking arrangements.

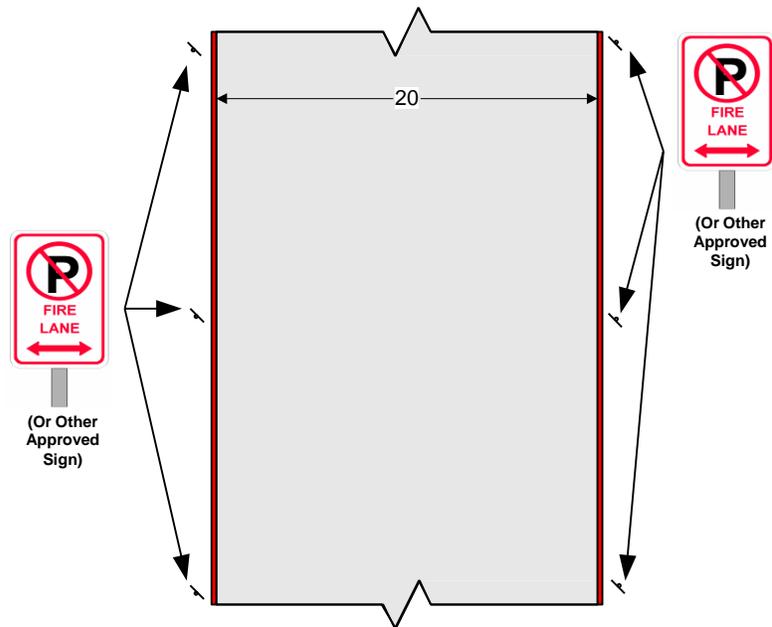


Figure 6 - Access road with no parking permitted

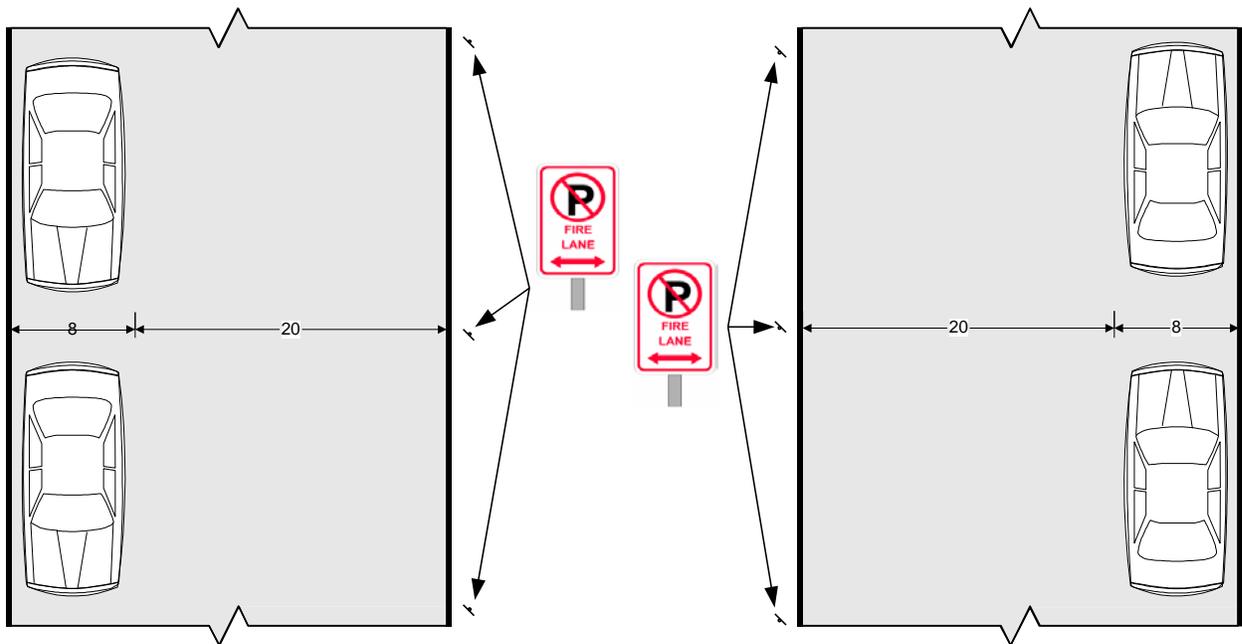


Figure 7 - Access roads with parking along one side

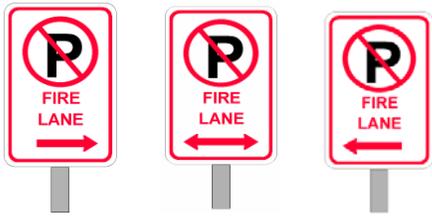


Figure 9 - Fire lane signage example



Figure 10 - Fire lane sign alternatives

Although the crossed out "P" sign is referenced in Figure 10, the signs shown in Figure 11 are also acceptable fire lane signs. See attachment for specific wording design for signs. Fire lane signs not identified here may be submitted for review and approval. These signs must be readily identifiable as an enforcement sign that a driver may have encountered during driver lesson classes. Proposed signs that do not meet this will not be accepted. All signs must meet the R7 series sign criteria set forth by MUTCD. Visit <http://mutcd.fhwa.dot.gov/> for more information.

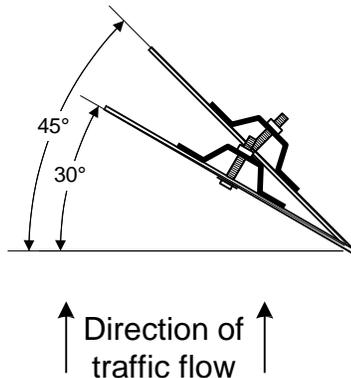


Figure 11 - Angle of signs to oncoming traffic



Figure 13 - Photo of typical fire lane sign installation

- 2.2. **Installations.** When signs are used to indicate the extent of the fire lanes, the posts for the signs shall be set into solid ground at a minimum depth of 18-inches. The height of the bottom edge of the sign shall be no less than 7-ft from grade and the edge of the sign closest to the roadway shall be between 2- and 3-feet from the face of curb or edge of asphalt. The signs shall be affixed to heavy duty U-channel or other approved materials, with two carriage bolts, two washers and two nuts. Signs should be set at an angle of not less than 30 degrees or more than 45 degrees with the line of traffic flow in order to be visible to approaching traffic. See Figures 9, 12 and 13 for illustrations of these requirements.
- 2.3. **Spacing.** Fire lane signs shall be spaced approximately every 100 feet and at every change of roadway direction. A fire lane sign must be visible in the direction of vehicular travel, from any point along the curb of a fire lane.

3. Striping Requirements

3.1. **Design.** When striping is used to identify fire apparatus access roads, the striping shall comply with Figures 14 and 17. All striping used for marking of fire lanes must meet the following criteria:

- 6-inch red traffic paint stripe
- 4-inch white reflective lettering/wording with 3/4-inch stroke stating "No Parking Fire Lane"
- Lettering/wording spaced every 25 feet
- See attachment for additional striping design criteria.



Figure 124 - Fire lane striping example

3.2. **Installations.** The striping must be placed along the entire length of the fire lane. When no curb is available, the red stripe is placed directly on the roadway. When curbing is available, the red stripe is placed on the curb face and top of curb. It is important to note that currently, the use of striping for fire lane markings is limited to private roadways. The use of striping noted here is not permitted for use on public roadways.

Important Note: Striping for marking of fire lanes is permitted for private roadway use only. Striping for fire lane marking is currently not permitted for public roadways.



Figure 135 - Typical fire lane striping installation

3.3. **Signage combined with striping.** When striping with the required lettering is provided, signage is not required. However, if the red striping *without* the required lettering is installed, approved fire lane signage is required. The marking must identify the zone as a fire lane. The red striping alone does not do this, hence the requirement of the signage. Therefore, when marking a fire lane, the required lettering is typically provided with the red striping to prevent additional costs from signage installations.

4. Plan Submittals for Review

4.1. **Requirements.** Where applicable, fire lanes must be identified on all site plans or development plans. This is accomplished by identifying every curb or side of roadway that will incorporate fire lane markings whether signage or striping. Individual signage locations are not required. The extent of the markings must also be identified. Many times, the fire lane will start/stop mid-curb. The plans must identify the location of this start/stop. Typically, a hatched line will be offset from the curb or edge of roadway and follow the roadway. This hatched line would then indicate the curb(s) to be marked as well as the extents of the fire lane. See Figure 18 for an example of this identification.

4.2. Fire Lane Placement Considerations.

Coordination with fire hydrants. The placement of fire lanes should be coordinated with the placement of fire hydrants. This is particularly true when only one side of the roadway requires fire lane marking. By placing the fire lane on the same side of the road as the fire hydrants, the fire hydrants are then provided with an increased level of protection from obstruction-by-parking.

Fire lanes behind parking. For most instances, when perpendicular and/or parallel parking is provided along both sides of a drive, fire lane markings are not required behind such parking. There are of course, some instances in which markings are required and it's the fire lane striping that is used for marking. This is most commonly required when the drive lane, narrower than normal is accompanied with perpendicular parking. In this situation, care must be taken to ensure vehicles parking do not overhang into the already narrow fire lane.

Single points of access. When a site is provided with a single point of access, that single point of access may require fire lane markings along both sides regardless of the width of the access. This is determined on a case-by-case basis and a sites use plays a significant role in this determination. Higher risk uses will typically drive marking both sides of single access points over lower risk hazards.

Additional fire lane markings. There may be other instances in which additional fire lane markings are required. Some of these instances include, but are not limited to, adequate room for turning maneuvers or providing access to special hazards.

ATTACHMENTS

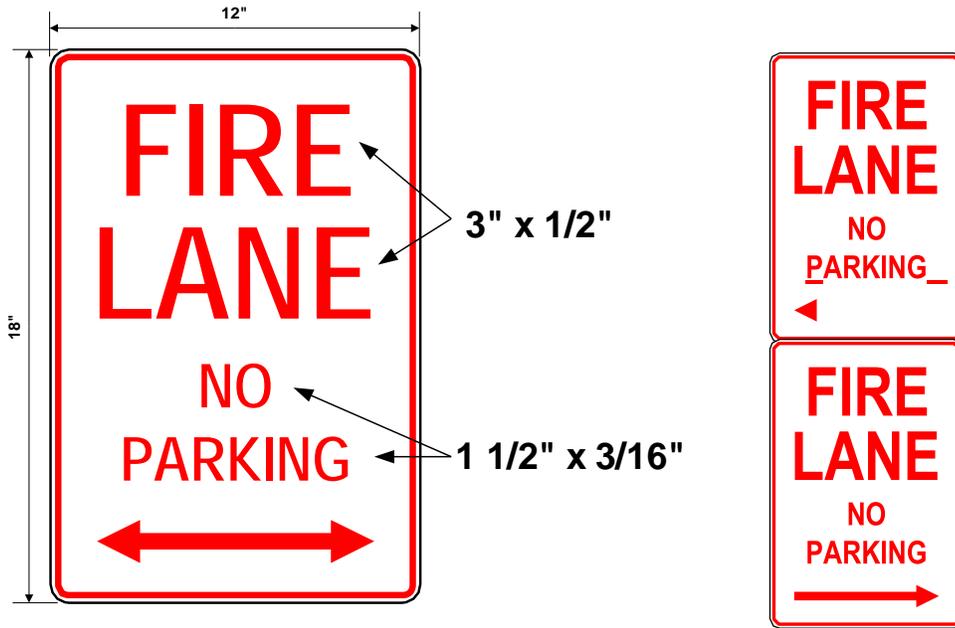


Figure 146 - Detailed fire lane signage design



Figure 157 - Detailed fire lane striping design

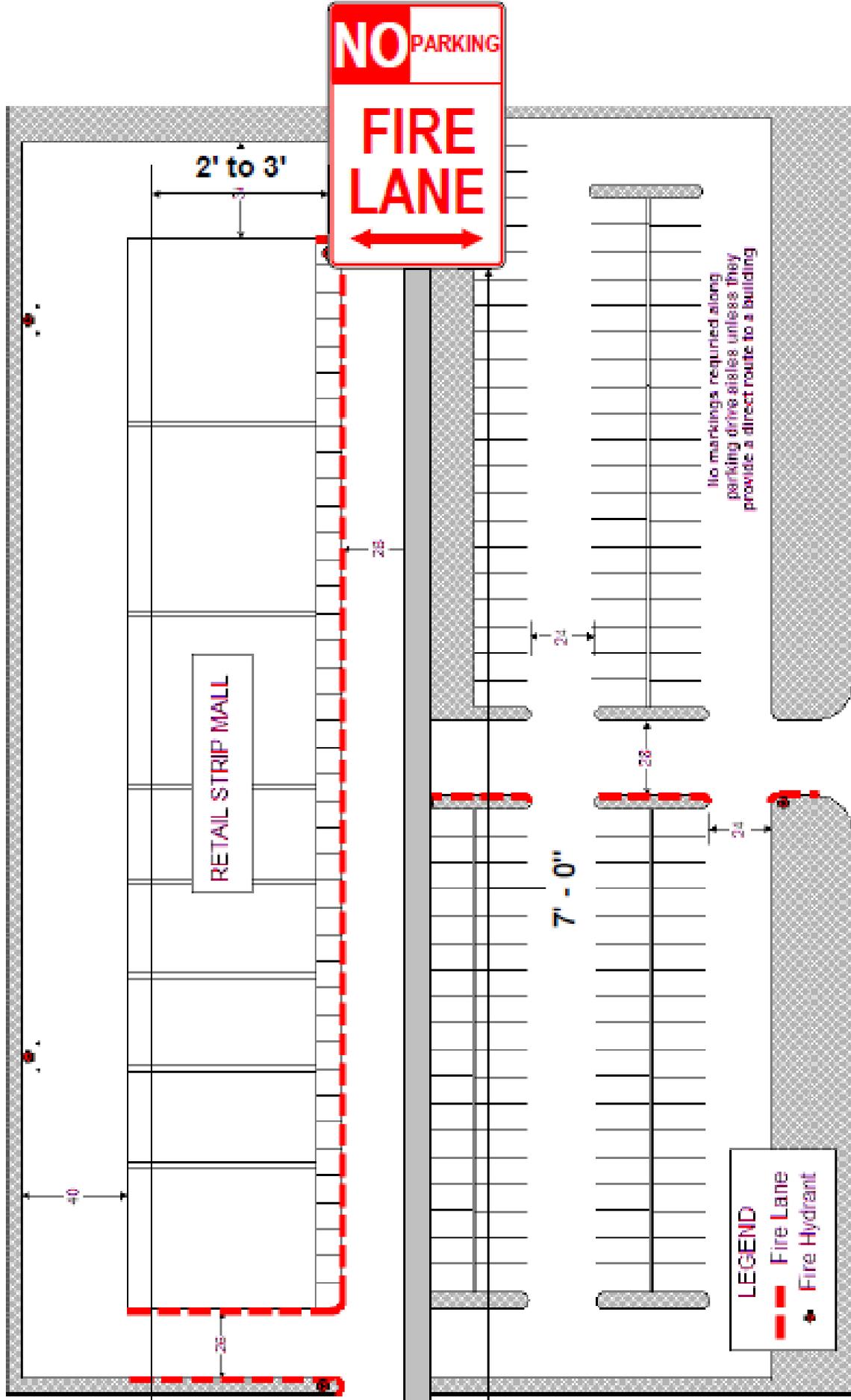


Figure 168 - Example of fire lane markings for site plan

Face of Curb or Edge of Asphalt