CHAPTER TWO
Fire Lanes & Fire Access

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Purpose:
Proper fire lanes directly affect how the Fire Department is able to maneuver through a property. These fire lane standards help to ensure unimpeded access for the fire apparatus.
ACCESS REQUIREMENTS FOR NEW CONSTRUCTION SITES

Early Construction Phase

1. Signage shall read FIRE DEPARTMENT ACCESS and shall include site address, or range of addresses, for all commercial sites and residential model homes.
   a. **Size.** The two-sided sign plate shall be a minimum of 4x4 feet with a thickness of ¾ inch graded plywood.
   b. **Color.** The sign shall be two-sided, and have a red background with a white legend.
   c. **Location.** Signs shall be installed at each point of entry.

2. One (1) Temporary FD Access road shall be provided prior to vertical construction of structures.
   a. The access road shall be a minimum of twenty feet wide with a vertical clearance of 13 feet 6 inches.
   b. Turning radii shall be 42 feet 8 inches minimum outside radius, 20 feet 3 inches maximum inside radius (WB-40).
   c. Fire Department access road shall be designed and maintained by the contractor/builder at all times during construction. Access road shall be within 200 feet of all portions of the facility or all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.
   d. If more than one story, the access road must be within 200 feet of the center of the furthest room on the second floor or level from the access road for buildings with two or more floors. Travel shall be measured along normal pedestrian routes. One flight of stairs shall count as 30 feet and shall be a minimum of 44 inches wide. Dead end fire access roads that exceed 150 feet in length require an approved turnaround.
   e. A road surface made up of ABC or other approved materials compacted to 90% and capable of supporting fire apparatus vehicles 75,000-pound gross vehicle weight (GVW) under any weather condition. The temporary all weather surface shall be maintained by the builder for intended use by the Fire Department during the construction process.

3. One (1) hydrant must be operational and accessible prior to combustibles being delivered on site.
   a. Hydrants shall be located so that they are not more than a 400 feet hose lay away from combustible construction. Distance is measured as the fire truck travels, not line of sight.
TEMPORARY FIRE DEPARTMENT CONSTRUCTION ACCESS SIGN SAMPLES
FIRE ACCESS SUBMITTAL REQUIREMENTS

Three (3) 24 x 36 copies of SITE PLAN or FINAL PLAT showing the location of shall be submitted for review and approval at time of initial building plan submittals.

- Project name and location
- Property lines and construction area
- Cross streets and intersections
- Emergency vehicle access sign location
- A minimum of one (1) point of access is required
- Access road is a minimum of 20 feet wide with a minimum vertical clearance of 13 feet 6 inches
- Turning radius with 42 feet 8 inches minimum outside radius and 20 feet 3 inches maximum inside radius
- A minimum of one (1) approved fire hydrant capable of supplying the required fire flow is required within 400 feet travel distance of all combustibles
- The following statements must be noted on the plans:
  - Access roads will be designed and maintained by the contractor/builder
  - Access surface will be ABC compacted to support 75,000 lbs.

**ALL FIRE INSPECTIONS REQUIRE MINIMUM ADVANCE NOTICE OF TWO BUSINESS DAYS**

A re-inspection fee shall be assessed for failed or incomplete inspections.
FIRE LANE SIGNS

NOTES:

1. The sign plate shall be a minimum of $12 \times 18$ inches with a thickness of .080 aluminum construction.

2. The sign face shall have a white reflective background with a red legend. Use the standard 3M Scotchlite sign face number R7-32 or equivalent, with red screen printed lettering as shown above.
NOTES:

1. The sign plate shall be a minimum of 12 X 18 inches with a thickness of .080 aluminum construction.

2. The sign face shall have a white reflective background with a red legend. Use the standard 3M Scotchlite sign face number R7-32 or equivalent, with red screen printed lettering as shown above.
FIRE LANE SIGN AND POST INSTALLATION SPECIFICATIONS

Recommended materials for installation:

1. 10-foot long U-Channel galvanized or painted post.
2. Fire Sign (12x18 inch) .80 aluminum construction with white reflective background and red screen printed legend
3. ¼" bolts and nuts large flat or fender washers
4. Sign MUST FACE the ONCOMING TRAFFIC
5. Post shall be installed 12 to 18 inches from back of curb or back of sidewalk.
6. Northwest Fire District recommends you blue stake before you dig.
NOTES:

1. Approved signs shall be constructed of .080 aluminum with a reflective background.
2. Minimum of ¼” bolts with flat washers and nuts that boltthrough.
3. Post footing shall be 12 inches in diameter and 18 inches indepth.
4. The sign shall be located seven (7) feet above finished grade to bottom of sign.
5. Fire lane sign shall be installed 12 to 18 inches from back of curb or back of sidewalk.
6. Signs MUST FACE the ONCOMING TRAFFIC.
WALL MOUNT BRACKET FIRE LANE SIGN “FLAG-MOUNT STYLE”

NOTES:

1. 3/16-inch-thick, 2X3X15¾ inch aluminum angle bracket.
2. The sign plate shall be a minimum of 12x18 inches with a thickness of .080 aluminum construction
3. Approved sign bracket is available for flag-mounted FD access signs. Bracket can be used on either the right or left side of the sign.
4. This application only available when sign cannot be installed on an approved post.
FIRE LANE IDENTIFICATION, STENCILING AND SIGN INSTALLATION

NOTES:

1. Approved fire lane signs shall be installed 12 to 18 inches from back of curb or back of sidewalk.

2. Sign MUST FACE the ONCOMING TRAFFIC.

3. Stencils shall be in white lettering (4-inch height, ½ inch stroke) on “Industrial grade” safety red painted curb.

4. Stencil shall read “Fire Lane No Parking.”
DESIGNER FIRE LANE SIGNS

NOTES:

1. The sign plate shall be a minimum of 12 x 18 inches with a thickness of .080 aluminum construction.

2. The sign face shall have a white reflective background with a red legend. Use the standard 3M Scotchlite sign face number R7-32 or equivalent, with red screen printed lettering as shown above.

3. Font style is Handel Gothic capital font.

4. Decorative trim plate shall be 14 x 20 inches with a thickness of .080 aluminum, color owner’s choice.
NOTES:

1. The sign plate shall be 12 x 18 inches with a thickness of .080 aluminum construction.
2. The sign face shall have a white reflective background with red screen printed legend.
4. Decorative trim plate shall be 14\times 20\text{ inches} with a thickness of \text{.080 aluminum, color owner's choice.}
5. Ten-foot long painted 2\times 2\text{ inch square or round post shall be installed 12 to 18 inches from back of curb or back of sidewalk.}
6. The sign shall be located seven (7) feet above finished grade to bottom of the sign.
7. Minimum of \text{ 
} \frac{1}{4}\text{" bolt with flat washers and nuts that bolt through post.}
8. Signs MUST FACE ONCOMING TRAFFIC.
ALTERNATIVE FIRE LANE MARKING SYSTEM

19.5 FT RADIUS
MIN. 45 FT CENTER TURNING RADIUS
45 FT RADIUS

100 FT
MINIMUM WIDTH

LETTERS 24" HT.
3" STROKE
USING HANDEL GOTHIC CAPITAL LETTERS

8" WHITE THERMOPLASTIC STRIPING OR WHITE GLASS BEAD PAINT - APPLY 2 COATS

INSTALL PREFORMED PAVEMENT MARKINGS TYPE 1 (AZ. DOT. SEC. 705-705-2.01)

FIRE LANE LEGEND
PLACED EVERY 100 FT

FIRE LANE

STREET
NOTES:

1. Letters 24-inch height, three (3) inch stroke, using Handel Gothic capital letters.
2. Install performed pavement markings type I (AZ, DOT sect.705-705-0201).
REMOVABLE FIRE LANE SIGN

FIRE LANE SIGN
( BACK VIEW )

FIRE LANE SIGN
( SIDE VIEW )

FIRE LANE SIGN
( FRONT VIEW )

Concrete Footing 12" Dia

2 1/2" x 2 1/2" x 1/8" Square Metal Post

TOP POST
2 1/2" x 2 1/2"
1/8" Thick
Square Metal

BOTTOM SLEEVE
3" x 3" x 3/16"
Square Metal
(20" in Length)

Angle Iron Spot Weld to Sleeve

Fire Lane Sign
Mounted with
4-Carriage Bolts
4-Washers
4-Nuts

Top View
Flat Strap
9"L x 1"W
3/16" HT

12" x 18" Fire Lane Sign

9 FT
6 FT.
20"
FOLDING FIRE LANE SIGN

- Fire Lane Sign
- Flat Strap: 9" x 1" x 3/16" H/T
- 12" x 18" Fire Lane Sign
- Heavy Duty Butt Hinge (Welded)
- 2 1/4" x 2 1/4" x 1 3/8" Square Metal Post
- Concrete Footing: 12" D/A
- Angle Iron
- Fire Lane Sign (Back View)
- Fire Lane Sign (Side View)
- Fire Lane Sign (Front View)

See Locking Detail

Butt Hinge Detail

Locking Detail

Knox Padlock Part # 3790

Arizona 811
ALTERNATIVE SURFACE FIRE LANE MARKING SOFT SURFACE
STANDARD AERIAL FIRE APPARATUS ACCESS ROAD FOR BUILDINGS GREATER THAN 30’ IN HEIGHT

2012 International Fire Code Appendix D105.3:

The side of the building on which the aerial apparatus access road is positioned shall be approved by the Fire Code Official.
REFLECTIVE BLUE MARKER INSTALLATION DETAIL

NOTES:

1. Blue reflectors are required to help identify the location of fire hydrants and fire department connections (FDC) in the dark.
2. Blue reflectors shall be placed one (1) foot off the center line of the street or lane toward the hydrant or FDC.
3. One (1) marker is required to identify a fire hydrant.
4. Two (2) markers are required approximately three (3) inches apart to identify an FDC.

MATERIALS

Acrylic plastic reflector filled with a tightly adherent potting compound.

Reflective area is 3.25 square inches per reflective face.