

## City of Sunland Park

## Five Department

## Memorandum

| Date: | September 18, 2020 |
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| To: | All Concerned Personnel |
| From: | Fire Chief Daniel Medrano |
| Subject: | Fire Department Access Roads |

The Sunland Park Fire Department deals with many different types of emergencies; therefore, we have a variety of vehicles with which we respond, some very large. Access is required to maneuver these vehicles and place them into an operational state during emergency situations. Some of these vehicles can exceed 44 feet in length and have an operating width of over 15 feet. Additionally, room is needed for personnel to access equipment stored on both sides of the truck. The number of vehicles needed on an incident and the room required to accommodate multiple apparatus is crucial.

The intent of the fire code is to provide a reasonable level of life safety and property protection from the hazards of fire, explosion, or dangerous conditions and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations. With this intent in mind, the International Fire Code authorizes the authority to render interpretations of the code and to adopt policies, procedures, rules, and regulations to clarify the application of its provisions.

The purpose of this memorandum is to clarify Section 503 and Appendix D of the 2015 IFC as it applies to Fire Apparatus Access Roads. The intent of this interpretation is to provide a reference for consistency of the application of this part of the code. In all cases, unless otherwise addressed in this memorandum, the 2015 IFC will apply.

## Fire Apparatus Access Design

All public roadways shall be constructed to the standards set by the City of Sunland Park and in accordance with the 2015 International Fire Code.

All roadways proposed for fire department access shall be engineered and constructed of an all-weather driving surface of asphalt, concrete or other approved driving surface capable of supporting the imposed load of a fire apparatus weighing at least 75,000 pounds (ref. 2015 IFC D102). Alternative methods such as brick pavers, road base, gravel etc. may be considered on a case-by-case basis but must be approved by a State of New Mexico Certified Civil Engineer as meeting the H -20 loading requirement in writing.

Minimum widths for apparatus access shall be as follows in accordance with the 2015 International Fire Code. Widths are measured curb face to curb face or, where there are no curbs, edge of pavement to edge of pavement. These areas must be maintained unobstructed.

## Parking Lots

Access roadways in parking lots may be reduced to a minimum of 24 feet where parking spaces are designed back to back. Where parking is designed back to curb, a minimum of 28 feet shall be provided without fire lane posting. (see Figure 1).

## Turnarounds and Maneuvering

Dead-end fire apparatus access roads in excess of 150 feet shall be provided with width and turnaround provisions in accordance with 2015 IFC D103.4.

Cul-de-sac bulbs shall be constructed to the following widths (see Figure 2):
Dead-ends not exceeding 500 feet require a minimum of an 84 -foot bulb curb face to curb face.
Dead-ends exceeding 500 feet require a minimum of a 96 -foot bulb curb face to curb face.
Cul-de-sacs and dead-end access roads exceeding 750 feet shall be provided with intermediate turnarounds and require special approval by the Sunland Park Fire Department.

## Traffic Calming Devices

Plans for these devices must be submitted for the Department review and approval. We support the design of safe streets and the need for devices intended to slow traffic, i.e., islands, roundabouts, and bump outs. In most cases, these devices can be designed within our minimum requirements (see figure 3). Plans for these devices must be submitted for our review and approval.

## Typical Fire Access

Figure 1


## City Access Roadway Approved Cul-de-Sacs

Figure 2


For cul-de-sacs under 500 ft in length as measured from the beginning curb of the dead-end roadway to the center of the cul-de-sac, an 84 ft diameter bulb may be used. For any dead-end exceeding 500 ft , a 96 ft diameter bulb shall be used.


## Traffic Calming Devices

## Figure 3



