



Fire Lane Guidelines

This guide is intended to be a resource for when a building, structure, or facility, within the City of Wylie, is required to be provided with fire apparatus access roads or emergency access easements, commonly referred to as a “Fire Lane” for Fire Department Access.

DEFINITION OF A FIRE ACCESS ROAD

1. Fire apparatus access roads: a road that provides fire apparatus access from a fire station to a facility, building, subdivision, or portion thereof. This is a general term inclusive of all other terms such as fire lanes, public street, private street, and access roadway.

FIRE ACCESS ROADS REQUIRED

1. Fire Access Roads are to comply with specifications outlined in IFC 2021, including Appendix D and local amendments. As prescribed by Chapter 46 Article 3 of the Code of Ordinances, City of Wylie, Texas
2. Approved, unobstructed fire department access (fire lanes) shall be provided such that all portions of the exterior of the building shall be within 150 feet (as the hose lays) of a fire lane and/or other approved fire apparatus access roadway. The path of measurement shall be along a minimum of a 10-foot wide unobstructed pathway around the external walls of the structure. (Obstructions include AC units, shrubs, trees, gates, or other construction or utilities.)
 - a. *The 150 ft. hose lay determination shall be measured from the location on the fire lane for which a fire apparatus shall be parked. Typically, this is measured from the center of the fire lane.*
2. More than one fire lane or approved access road may be required when deemed necessary, due to potential impairment of a single road by vehicle congestion, terrain, climatic conditions or other factors.
3. Non-aerial apparatus fire lanes may be required to be located within 30 ft. of a building if deemed to be reasonably necessary by the Fire Chief to enable proper protection of the building.
4. Fire lanes may be required through parking areas, to service entrances of buildings, loading areas and trash collection areas, and other areas deemed necessary to be available to fire and emergency vehicles. Designated loading and unloading/pickup and drop off locations shall be clearly identified and outside of the designated fire lane.
5. Fire Lanes may be either continuous, such that they provide continuous and unobstructed access from at least 2 points of access from a qualifying street(s), or they may be single fire lanes that are dead-ended.

FIRE APPARATUS ACCESS ROADS DURING CONSTRUCTION

1. Fire apparatus access roads shall be installed and made serviceable prior to vertical construction and shall remain serviceable during the time of construction.



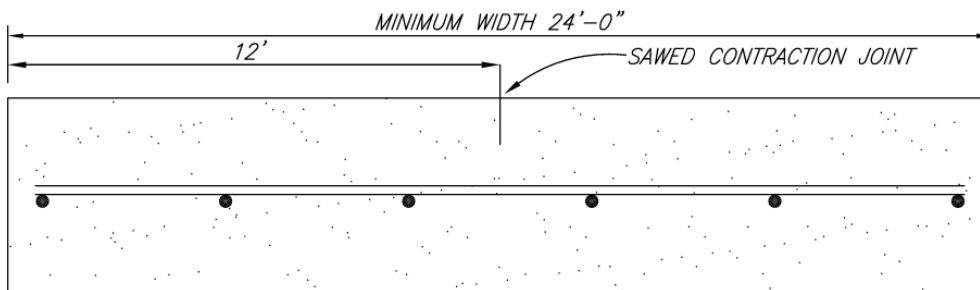
SPECIFICATIONS

1. Typically Fire lane width shall be measured from face of curb to face of curb (FC-FC). In some situations, the fire lane may not use curbs as the edge. In that case, an unobstructed space prescribed below must be maintained.
2. Fire lanes with a width of less than 30 ft. of width require a minimum interior turn radius of 28 ft.
3. Fire lanes with a width of 26 ft. require a minimum interior turning radius of 28 ft.
4. Fire lanes with a width of 30 ft. or greater require a minimum turning radius of 20 ft.
5. **Aerial Apparatus Access Roads:** Buildings or portions of buildings exceeding 30 ft. in height above the lowest level of fire department vehicle access shall be provided with a 26 ft. wide fire lane. The fire lane shall be constructed a minimum of 15 ft. to a maximum of 30 ft. from the building and shall be positioned parallel to one entire long side of the building. Consult with the Fire Marshal's Office for additional guidance.
6. In rare cases, where special circumstances exist, The Fire Marshal's Office may allow plans to be submitted using demonstrating compliance using AASHTO WB-50. This requires communication prior to submittal and may require extra review fees.

FIRE LANE SPECIFICATIONS, ARRANGEMENT AND LOCATION

1. Minimum clear vertical height of 14 ft.
2. Provide an all-weather dust-free driving surface.
3. Support an 85,000 lb., two-axle fire apparatus.
4. Cannot exceed 6% in grade change, with grade transitions not exceeding 5%.
5. Cannot exceed 6% net grade change for hills and valleys.
6. The maximum angle of departure and angle of approach is 6%.
7. The maximum cross slope is 6%.
8. A 10 ft. wide level unobstructed pathway shall be provided through all barriers. A continuous row of parking between the fire lane and the structure shall be considered a barrier. Landscaping may be considered an obstruction based on the type present and location.
9. Drainage Grates will not be allowed in Fire Lanes.

CONSTRUCTION SPECIFICATIONS





1. Fire lanes shall be constructed of a concrete surface capable of supporting the imposed loads of 85,000 lb. The design shall be based on the geotechnical investigation of the site but shall meet the stated minimums.
2. All Fire lanes shall be paved with a minimum of 6 inches of 4500 P.S.I. concrete reinforced with #3 rebar placed on 18-inch centers each way, 100% tied on chairs
3. The subgrade shall be a minimum of 7-inch lime stabilized subgrade. The subgrade shall be stabilized with hydrated lime in sufficient amount to reduce the plasticity index below fifteen (15). If no laboratory control is used, the amount of lime shall be equal to the seven-and-a-half (7½) percent by unit dry weight of soil estimated at 75 pounds per cubic feet of 32 pounds of lime per square yard of surface area treated to a 7-inch thickness.
4. The subgrade shall be compacted to at least 95% standard proctor density. Transverse contraction joints shall be spaced at a maximum of 15 feet. Contraction joints shall be sawed joints to a depth of one and one-half (1.5) inches deep. To ensure proper runoff in order to prevent ponding, the pavement surface should have a minimum slope of 1% (12" per 100 feet.).

MARKING

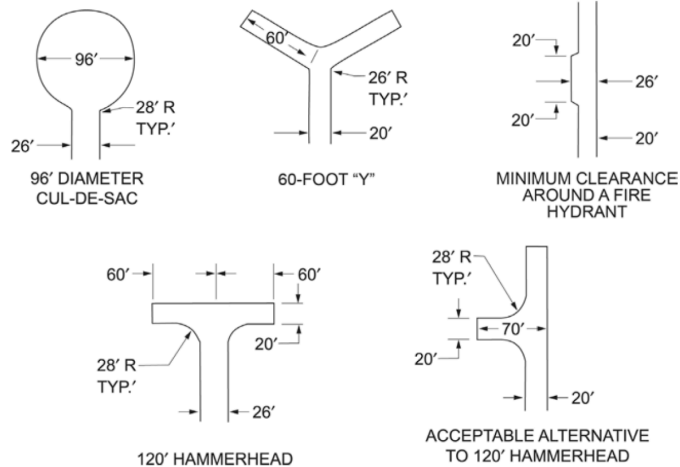
1. Striping – Fire apparatus access roads shall be marked by painted lines of red traffic paint 6 in. width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in 4 in. white letters at 25 ft. intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on both the vertical and horizontal faces of the curb.
2. Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12 in. wide and 18 in. Signs shall be painted on a white background with letters and borders in red, using not less than 2 in. lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be 6'6" in. above finished grade. Signs shall be spaced not more than 50 ft. apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

FIRE LANE TURNAROUNDS

1. Dead-end fire lanes that exceed 150 ft. in length, shall be provided with an approved hammerhead, "Y", or circular turnaround. Parking, median islands, landscaping, or other obstructions within the required turnarounds are prohibited.
2. All approved turnarounds shall be marked and platted as a fire lanes easement.

FIRE LANE SPECIFICATIONS, ARRANGEMENT AND LOCATION

1. A dead-end fire lane greater than 150 feet must be provided with an approved turnaround complying with IFC 2021 Appendix D. Figure D103.1 has been provided for convenience



For SI: 1 foot = 304.8 mm.

FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

PLAN REVIEW

1. Fire lanes provided during the platting process shall be so indicated on the Plat as a fire lane easement. Where fire lanes are provided and a Plat is not required, the limits of the fire lane shall be shown on a Site Plan and placed on a permanent file with the Fire Marshal's Office and Planning Department.
2. Plans for fire lanes must be submitted to the Fire Marshal's Office for review and approval prior to construction, repair or renovation.
3. Fire lanes and mutual access easements shall be provided to serve all buildings through parking areas, to service entrances of buildings, loading areas and trash collection areas, and other areas deemed necessary to be available to fire and emergency vehicles. The Fire Chief is authorized to designate additional requirements for fire lanes and/or require fire lanes where it is reasonably necessary to provide access for fire and rescue personnel, or as required by other provisions of the Fire Code.

All fire lane criteria for the purposes of this guideline and any other guidelines or requirements of the Fire Department shall conform to the 2021 International Fire Code, as adopted and amended by the City of Wylie.

This guide does not replace, nor supersede any codes and/or ordinances adopted by the City of Wylie, or determinations and positions of the Fire Chief or Fire Marshal.