



EULESS FIRE DEPARTMENT FIRE MARSHAL'S OFFICE

EFD - FMO 16-3

2015 Edition
International Fire and
Building Code as
Amended

Information Line:
*Limited Access Control Gates/Fire Lanes/
And Speed Bump Specifications*
Revised 08/16

Fire Chief Wes Rhodes Fire Marshal Paul Smith

This policy outlines the requirements for fire lanes, speed bumps in fire lanes and the erection and maintenance of access control gates across dedicated or designated emergency access easements (fire lanes).

PERMITS:

Prior to the permit issuance and the commencement of any work, including the installation of a fire lane, speed bumps in fire lanes or a gate crossing a fire lane or private street, a minimum of three (3) copies of a site plan and/or detailed construction plan shall be submitted to the Fire Marshal's Office for review. Such plans shall be of standard blue print quality, drawn to scale, listing all details, specifications or diagrams necessary to provide a description of work to be done and the gate(s) mechanical operation and design if a gate is to be installed. The applicant should allow a minimum of ten (10) business days for the plan review process.

Permits are required prior to the installation of gates or speed bumps in a fire lane or private street. An annual maintenance/use permit is also required for speed bumps and mechanically operated gates in fire lanes or private streets. Upon review the applicant will be issued a comment sheet outlining any corrections or comments as needed. Upon final review the applicant will be issued a permit to allow the construction of a limited access gate or speed bumps across an emergency access easement.

A permit may be required prior to performing any maintenance on a fire lane. Contact the fire marshal's office prior to commencing any repairs that will involve blocking all or part of a fire lane for guidance on any permit requirements.

A fire permit is not required to install a fire lane, but plan approval must be issued from the fire marshal's office and the City Engineer approving the design, location and installation prior to construction occurring. Permit and/or inspection fees may be assessed by the City Engineer.

DEFINITIONS:

Approved: Means acceptable to the authority having jurisdiction. In this case "approved" means that which is acceptable to the Fire Chief, Fire Marshal or their designated representative.

Dedicated Emergency Access Easement: An access easement that is dedicated by site plan provision and marked as a fire lane for the purpose of allowing emergency equipment and/or the general public to gain access onto and travel within a piece of platted property.

Designated Access: Access ways designated by the Fire Marshal and marked as fire lanes for the purpose of insuring a clear and marked path for the use of emergency apparatus and equipment.

Designated Representative: For the purpose of this policy "designated representative" shall mean a member of the Fire Marshal's Office, Fire Department, Inspection and Development Department or City Engineering Department.

Emergency Services: Shall mean Fire, Police or Medical Services, or other agencies that tend to provide support during emergency situations such as electric service company, gas company, Red Cross, etc.

Emergency Vehicle: Shall mean any motorized vehicle or trailer assigned to a governmental entity or public utility company and used for the purpose of responding to an emergency incident or for providing support services during a fire, police or medical emergency.

Fire Apparatus: A vehicle such as a fire pumper, fire engine, aerial ladder truck, elevated platform, quint, rescue squad, mobile medical care unit or similar firefighting or rescue equipment.

Fire Code Official: Means the organization, office or individual responsible for reviewing and approving an installation or procedure. In this case the "Fire Code Official" shall mean the Eules Fire Marshal or his designated representative.

Fire Lanes: That horizontal dimension between markings intended to identify an access way for emergency fire apparatus or other emergency services and labeled with the intent to prohibit the obstruction thereof and including the area to a height of fourteen (14) feet above the pavement. Also known as an Emergency Access, Drainage and Utility Easement (E.A.D.U.E.).

Fire Zones: An area or section striped with hash marks and labeled with wording to give notice not to obstruct in order to allow for immediate accessibility of emergency services.

Speed Bumps: For purposes of this document the definition of speed bumps shall mean a hump or rise on the roadway surface intended to slow or impede the speed of vehicle traffic within a fire lane.

GENERAL INFORMATION:

- Fire lane guidance is provided by the International Fire Code, 2015 Edition, as amended. This generally requires a fire lane to be installed when any structure or other hazard is located more than one hundred and fifty (150) feet off of a public street or existing approved fire lane. The one hundred and fifty feet (150) referenced herein is generally measured by the route the hose is deployed from the fire apparatus.
- The City of Euless generally requires a dedicated easement for all fire lanes. The easement may be combined with other easements and is commonly referred to as an Emergency Access, Utility and Drainage Easement (E.A.U.D.E.). Note that some older fire lanes, while required to be in place and maintained, are not located within a dedicated and platted easement.
- For enforcement purposes, fire lanes that were installed under previous codes and that are marked appropriately for the Code under which they were installed are legal fire lanes and all enforcement provisions included in the 2015 IFC as amended shall apply.

DESIGN CRITERIA:

- Fire lanes must be constructed of concrete meeting the attached design standard and be capable of supporting a minimum 80,000 pound load limit. Existing asphalt fire lanes may remain as asphalt drives until such time as they are replaced or repaired, at which time they must be rebuilt with concrete. (Note: This does not prevent maintenance being performed on asphalt fire lanes. If a section of asphalt pavement fails and must be replaced, it must be replaced with concrete.)
- Fire Lanes must be twenty-four (24) feet wide. Existing fire lanes that are a minimum of twenty (20) feet wide are considered legally non-conforming. However, if an existing twenty (20) foot wide fire lane is rebuilt, every reasonable effort must be made to extend the width of the new fire lane to twenty-four (24) feet.
- Fire lanes must have a minimum vertical clearance of fourteen (14) feet.
- Fire lanes must be designed with a twenty-eight (28) foot inside radius and a fifty two (52) foot outside radius. Every effort must be made to bring existing non-conforming fire lanes into compliance with this standard as the opportunity arises.
- Approved turnarounds must be installed on any dead end fire lane that exceeds one hundred and fifty (150') feet in length. The radius for a cul-de-sac turnaround shall be not less than fifty (50) feet. An approved turnaround list is included with this document.
- The grade of any fire lane shall not exceed 6%.
- Bridges, if required, shall meet the approval of the Fire Department and Engineering Department and be capable of carrying a load limit of 80,000 pounds.

STRIPING/MARKING:

1. Fire lanes shall be designated by continuous lines a minimum of six (6) inches in width on each side of the dedicated or designated access way, starting at the entrance from a public street and continued as required throughout the property. Such lines shall be bright red in color and the paint shall meet the specifications as described in this policy. The words "NO PARKING" and "FIRE LANE" shall be stenciled in white along the continuous line using one of the acceptable methods outlined in this document.
2. Fire lanes adjacent to curbs shall have the entire face of curb painted bright red and lettered as specified in item #1 above.
3. Where required by the Fire Marshal "NO PARKING - FIRE LANE" signs shall be erected on buildings, posts or fences.
4. The red paint shall meet the Texas Department of Highways and Public Transportation, (TXDOT), specification number TTP-115, chlorinated rubber paint or approved equal.

TYPICAL STRIPING DETAIL

NO PARKING FIRE LANE

NO PARKING FIRE LANE

Lettering shall be white lettering with a minimum four (4) inch stroke on a six (6) inch continuous bright red stripe with the words "FIRE LANE - NO PARKING" or "NO PARKING - FIRE LANE" stenciled every fifteen (15) feet in length within the continuous stripe.

ALTERNATIVE TYPICAL STRIPING DETAIL*

*Note: This striping detail is considered legally nonconforming in the City. As fire lanes are restriped, the typical detail shown above should be used.

FIRE LANE

NO PARKING

White lettering with a minimum four (4) inch stroke on a six (6) inch continuous bright red stripe with the alternating words "FIRE LANE" and "NO PARKING" stenciled every fifteen (15) feet in length.

NOTE: Fire lanes adjacent to curbs shall have the entire face of the curb painted bright red in color. The Fire Marshal may require the entire curb to be painted in red for specific identification purposes. Fire lanes adjacent to buildings, fences or other structures shall have the continuous stripe placed at a range of up to twelve (12) inches from the building, fence or structure for recognition purposes. If identification of such fire lane marking becomes a policing problem, the Fire Marshal may require signs to be erected and placed along or on the building, fence or structure to assist in making public notification.

TYPICAL PLACEMENT DETAIL OF THE FIRE LANE STRIPE ON CURBS

When a fire lane is located adjacent to a curb, the entire face of the curb shall be painted red and the words "No Parking-Fire Lane" shall be stenciled on the face of the curb as specified for a horizontal fire lane.

FIRE LANE MARKINGS WITH BUILDING ADDRESS

Apartment buildings shall have a supplemental address affixed in the fire lane. The supplemental address shall be installed in conjunction with the fire lane marking and designate the official street address assigned to the building or the building number if a single address has been assigned to the property.

The address markings shall be affixed in a 12" X 24" red rectangle box. The box shall contain white block style numbers, measuring not less than nine (9) inches in height, readily readable from a moving vehicle.

The red rectangle box shall be located on the edge of the fire lane stripe, on the same side as the building and centered in proportion to the building.

The maintenance of the supplemental address shall be the same as required of the fire lane markings.

See Appendix Sheet B for further information.

FIRE ZONE MARKINGS:

FIRE ZONE MARKINGS SHALL BE AS FOLLOWS:

1. The Fire Marshal has the authority to establish FIRE ZONES. Fire zones are those areas designated or dedicated for the purpose of allowing unobstructed access of fire department personnel and equipment to a place of entry to a building, fire hydrant, fire sprinkler system connection, fire control valve, or other fire protection device or appliance.
2. The owner, occupant and/or representative in charge of any premise where the Fire Marshal or his authorized representative by reason of necessity has designated a fire zone shall be responsible for the fire zone markings and the maintenance thereof;
3. The markings of fire zones shall meet the requirements for fire lane markings or utilize an approved wording as specified herein.
4. Such lines shall be red in color. The words "FIRE ZONE" followed by the most appropriate, "NO PARKING" or "DO NOT OBSTRUCT ACCESS" painted white in color within the cross-sectioned area. The lettering shall be readily visible and correspond with the area involved.

SIGNAGE:

Signs must be installed along fire lanes when required by the code official. Signs, when required, must be placed as indicated by the code official. Signs must be of an approved type, with a minimum 12 x 18 inch sign made of 18 gauge metal. Signs must have a white background with red letters not less than 2 inches tall stating "No Parking – Fire Lane" in block letters with a stroke width that is easily read. The bottom of the sign shall be approximately 6' 6" above finished grade.

SPEED BUMPS/HUMPS:

1. PERMIT REQUIRED: No person, firm or corporation shall place, construct, erect or maintain any speed bumps or traffic calming device in a marked fire lane or emergency access roadway without first obtaining a permit. The permit is renewable annually.
2. CONSTRUCTION DETAIL: Such speed bumps shall be constructed in a manner as to not exceed the height of four (4) inches from the roadway surface and at a rise ratio of three (3) to one (1). SEE TYPICAL DETAIL CONTAINED WITHIN THIS POLICY STATEMENT.
3. Speed bumps shall be marked or identified over the entire surface with yellow or white paint. Speed bumps located on an asphalt surface shall be white in color and speed bumps on a concrete surface shall be yellow in color.

GATES:

NOTE: Permits are required to install or maintain a gate across a designated fire lane or private street.

“503.6 Security gates. The installation of security gates across a fire apparatus access roadway (fire lane), including private streets, shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

All gate installations across a required fire apparatus access road or across a private street must also conform to the following requirements.

1. Access Gates. Access roadways or access easements that are secured by gates shall comply with the design and specification requirements as established by the fire department. Gate access systems and all components thereof shall be maintained operational at all times. When

access gates are out of service, they shall be secured in the open position until repairs are complete.

2. Any electrically or mechanically operated gate restricting access to, or crossing a fire apparatus access road, easement or private street to an occupancy designated as a subdivision, apartment complex, or other location where, in the opinion of the fire code official, an excessive life safety or property hazard situation exists, must meet the gate requirements for a private subdivision/street as provided in section (8) herein.
3. All electrical or mechanically operated gates must be equipped with a Knox System gate access key switch or approved alternative as approved by the Euless Fire Department.
4. All electrical or mechanically operated gates crossing a fire apparatus access road or private street must be equipped with a readily accessible and well-marked emergency release device to allow manual operation of the gate. A walk through gate must be located in an approved location when required and be secured in an approved manner to allow rapid fire department access through said walk through gate. All sliding gates must be equipped with a chain drop or similar approved device secured by a Knox padlock to allow manual operation of the gate. Chain drop devices must be tested and documented as tested at an interval determined by the fire code official.

Exceptions:

The walk through gate may be deleted on a sliding gate equipped with a chain drop feature, or a swing gate which can be disconnected from the automatic opening features from outside the gate, with the approval of the fire code official.

5. Manually operated gates are permitted provided they utilize a Knox padlock to secure the gate. Manually operated gates, and gates using an emergency disconnect, must be operable by one person using a normal amount of exertion.

6. All gates crossing any fire apparatus access road or private street must be well maintained, must be provided with a proper power supply to all electrical and electronic components at all times, and must be in proper operating condition at all times. Gates must be inspected by a qualified gate repairman and repaired when deemed necessary by the fire code official. Any gate crossing a fire apparatus access road or private street that is taken out of service may not be placed back in service until it has been tested and authorized to be placed back in service by the fire code official.
7. The owner or person in control of any property which contains a security gate or barrier is responsible for any damage caused to emergency equipment by said security gates or barriers.
8. Gates installed across fire department access roads providing access to private subdivisions, apartment complexes or other high hazard locations as determined by the fire code official must also comply with the following requirements:

- 8.1. All electrical or mechanically operated gates installed or replaced after the effective date of this ordinance must be designed to open fully in the event of a power failure and must remain open until power is restored.

Exception:

Gates provided with an approved alternative power source that will operate the gate for a period of twenty-four (24) hours upon loss of primary power when approved by the fire code official.

- 8.2. Gate installations must be approved by the fire code official prior to installation. A permit must be obtained prior to a regulated gate or gate control equipment being installed, and no gate may be closed until the emergency features of the gate have been tested and accepted by the fire code official.
- 8.3. Gates must be equipped with an Opticom, or comparable opening device of a type approved by the fire department, and more than one device per gate may be required. The device shall be positioned a minimum of ten (10) feet above finished street level. The gate must open a minimum of one (1) foot per second. The gate shall also have a Knox key switch

that will open the gate. The location of the Knox switch shall be approved by the fire code official. Gates shall open the full width of the fire lane using a Knox device, ground loop or Opticom like devices.

- 8.4. Gate designs may incorporate one or two gate sections to meet the required minimum gate width of twenty-four (24) feet. If the entrance incorporates a median or other feature that necessitates a divided gate arrangement, the gate widths may be reduced if approved by the fire code official, but in no case shall any single gate or street pavement be reduced to a clear opening of less than twenty (20) feet. If a gate incorporates an overhead obstruction, said obstruction must be a minimum of fourteen (14) feet above the finished road surface.
- 8.5 Approach and departure areas on both sides of a gated entrance must provide adequate setbacks and proper alignment to allow free and unimpeded passage of emergency vehicles through the entrance area.
- 8.6 Any electronic gate that has no Opticom like device to exit shall have a sensor in the ground at least six (6) feet back from the gate that will cause the gate to open when a vehicle approaches.
9. All streets, gates and other fire protection features, signs and equipment are subject to periodic inspection by the city and must be repaired immediately if found to be in a condition of disrepair. The city shall have the right to enter the subdivision or other regulated premises and disable, open, or remove any gate, device or other feature that impedes or controls vehicle access at the sole expense of the property owner or homeowners association.
10. The City of Euless, its officers, representatives and agents, shall not be liable for damage or removal of any gate, barrier, or component thereof which is opened, operated or removed in association with any emergency, inspection, or other official action, nor for any death, injury, or property loss that may occur as a result of a delay in emergency response or any other actions or lack thereof caused by any gate or barrier or the serviceability or lack thereof of said gate, barrier or component.

11. The person or corporation in control of the property is responsible for, and liable for, any violations of this section. This includes but is not limited to, the developer, property owner, homeowner's association and its officers, the occupant of the property, or any others who may own or exercise control over the property."

Also note the following:

"Section 503.7 Access gates on perimeter fencing. Gated communities that have a security fence around the perimeter of the property shall have and be provided with access gates positioned at intervals as may be required by the fire code official. Such gates are to provide police and fire access during an emergency. The gate shall be designed to provide a minimum opening width of forty-eight (48) inches and designed to accommodate a Knox pad lock or approved alternative locking device."

APPLICATION FOR KNOX COMPANY KEY BOX, KEY SWITCH, OR PAD LOCK:

Knox products may be ordered on line at www.knoxbox.com.

You may also order products by mail. Order forms are available from the fire administration office at 201 N. Ector Dr. Complete the order form, include payment and forward all paper work to the Fire Marshal's Office. Upon review and placement of the authorization stamp the application will then be forwarded to the Knox Company. Delivery is usually 4 to 6 weeks. Check or money order is to be made out to the Knox Company, not the City of Euless. The application can be faxed if a credit card is used. The Knox Company will not process an order without the authorization stamp. This is to protect the security of the system. Any questions regarding the ordering information should be directed to the Knox Company or the Euless Fire Department at 817-685-1600.

TEMPORARY FIRE LANES:

TEMPORARY FIRE LANE IDENTIFICATION MAY BE REQUIRED. ANY EXCEPTION OR ALTERNATE METHOD TO BE USED TO IDENTIFY A TEMPORARY FIRE LANE MUST BE FIRST APPROVED BY THE FIRE MARSHAL.

The Fire Marshal or his authorized representative may authorize and/or require temporary fire lane identification during but not limited to the following conditions or situations.

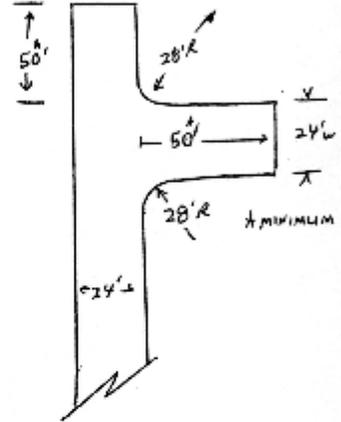
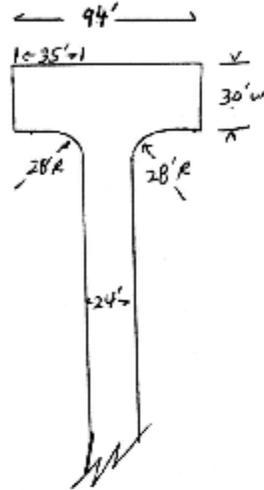
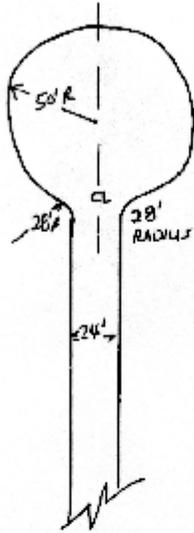
- At construction sites during building construction phases;

**Fire Marshal Policy Statement
Limited Access Gates/Fire Lanes**

- At special events or large gatherings where emergency equipment access may be necessary or required by the nature of the event or gathering;
- During the maintenance of existing worn or faded fire lanes;
- When roadway repairs are being conducted and additional means of continued access needs to be identified;
- When in the Fire Marshal's professional opinion conditions warrant such special identification.

APPENDIX A
FIRE LANE AND SPEED BUMPS

APPROVED TURNAROUNDS

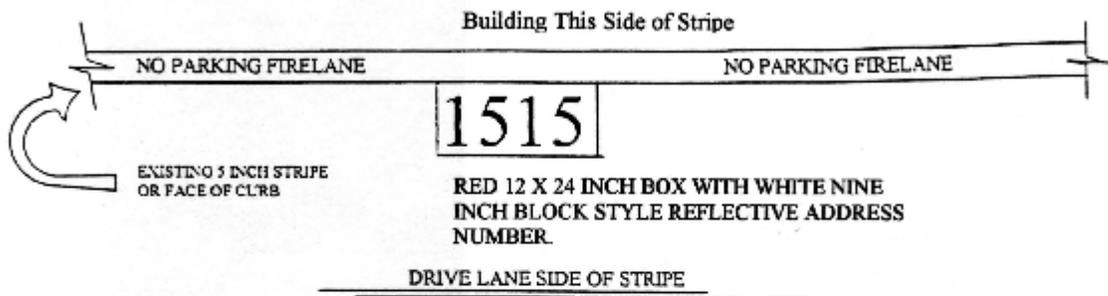


TYPICAL SPEED BUMP DETAIL



APPENDIX B
TYPICAL FIRE LANE LAYOUT
WITH MULTI-FAMILY ADDRESSING

BUILDING ADDRESS:



BUILDING NUMBER:

