



Fire & E.M.S.

Community Risk Reduction
City Hall Building
18415 - 101ST AVE NE
Bothell, WA 98011

Phone: (425) 806-6250 Fax: (425) 806-6139

Fire Lane Requirements

Revision Date: 7/30/14
Fire Prevention Engineering
Standard # 001

Reference:
BMC 20.08.040

Scope and Purpose:

This standard is established to assist the Fire Department in the safeguarding our customers, and the firefighters that protect them, from the hazards of fire, hazardous materials, and natural disasters through the standardization of requirements for fire department vehicular access to all structures within the City of Bothell.

Code Authority:

Bothell Municipal Code 20.08.040. "The Fire Code Official is granted the authority to designate all or a portion of any roadway, driveway, alleyway, parking lot or other means of vehicular ingress or egress to business, commercial or multifamily structures, whether such ingress or egress is publicly or privately maintained, as a fire lane in the manner set forth in this code."

Criteria for Designation:

Selection of areas to be designated as fire lanes shall be discretionary with the Fire Chief and shall be based upon the requirements of the specific site for access by fire, police and other emergency equipment.

Design Criteria:

Fire Department access roads, whether public or private, shall be a minimum of **twenty feet (20')** in **width paved with a thirteen foot six inches (13'6") vertical clearance** and have the ability to support the imposed weights of Fire Apparatus which is currently 40,000 pounds. The easement or tract width shall be as designated by the Bothell Design and Construction Standards notebook. Such access shall be provided to within 150 feet (150') of all portions of the ground floor exterior walls of all structures. Anytime a fire department access roadway is going to be reduced to less than 20 feet in width by parking or other obstructions, the roadway width shall either be increased to accommodate the parking or obstruction or the obstruction or parking will not be allowed. If the parking is not allowed the access roadway shall be posted on both sides "**NO PARKING FIRE LANE**". If parking is allowed on one side the opposite side shall be posted.

When two or fewer single-family residences are **served by an independent single driveway**, that driveway shall be **no less than sixteen feet (16')** in width and shall be capable of supporting the imposed weights of fire apparatus (40,000 pounds). The driveway shall be paved (as approved by the city engineer and fire chief). The finished grade of all streets, access roads and driveways, etc. that may be used for fire department access **shall not exceed fifteen percent (15%)**.

Exception: For single-family residences the requirements for roadway grades may be modified if the residence(s) is (are) protected by a complete fire sprinkler system that meet all of the requirements of NFPA 13D.

All access roadways longer than 150 feet (150') in length shall be required to have a turnaround for fire department apparatus. For developments with an access road that serves more than four (4) single-family residences, commercial lots or multifamily developments, a cul-de-sac or a looped roadway shall be provided. A short plat with an access roadway that serves four (4) or fewer single-family residences may utilize either a cul-de-sac or a hammerhead turnaround (all turnarounds must be approved by the city engineer and the fire chief).

Exception: An access roadway that serves two (2) or fewer single-family residences may be exempt from the turnaround requirement with the approval of the fire chief. Multifamily developments that are protected by a complete fire sprinkler system may, with the approval of the fire chief, be exempt from the cul-de-sac requirement but must provided some type of approved turnaround.

The inside turning radii for all access roadways that may be used by the fire department for access to a structure shall be no less than thirty (30) feet.

Marking of Fire Lanes:

All designated fire lanes shall be marked in one of the following manners:

1. Vertical curbs (6 inch) shall be painted red on the top and side, extending the length of the designated fire lane. The pavement adjacent to the painted curbs shall be marked with minimum 18 inch in height block lettering with a minimum three (3") brush stroke reading: "NO PARKING-FIRE LANE." Lettering shall be white in color and spaced no more than fifty (50) feet apart, or
2. Rolled curbs or surface without curbs shall have a red six (6") wide stripe painted extending the length of the designated fire lane. The surface adjacent to the stripe shall be marked with a minimum eighteen (18") in height block lettering with a minimum three (3") brush stroke reading: "NO PARKING - FIRE LANE." Lettering shall be white in color and spaced no more than fifty (50) feet apart, or Page three of Fire Engineering Standard # 001
3. Fire Lane signs shall be installed per the following:
 1. The sign shall be no less than twelve inches (12") wide and eighteen inches (18") high.
 2. The lettering and the background for the lettering shall be reflective in nature.
 3. It shall have red letters on a white background.
 4. The words "NO PARKING" shall have the lettering no less than three inches (3") in height.
 5. The words "FIRE LANE" shall have the lettering no less than two inches (2") in height.

The signs shall be mounted on either pressure treated 4" X 4" wooden posts or on an approved metal post. The signs shall be mounted so the bottom of the sign is no less than seven feet (7') above the ground and spaced no more than fifty (50) feet apart and shall be placed on or immediately next to the curb.