



ONTARIO FIRE DEPARTMENT FIRE PROTECTION STANDARD

FIRE APPARATUS ACCESS ROADS (Fire Lanes)
STANDARD #B-004 EFFECTIVE: 10-25-05 PAGES 7

PURPOSE

To establish a consistent guideline for fire apparatus access roads required by the Ontario Fire Department (OFD).

SCOPE:

This standard applies to all private streets, roads, alleys, drives and access ways within the boundaries served by the OFD that qualify as a fire apparatus access road.

AUTHORITY:

This standard is adopted under authority of the 2007 California Fire Code (CFC) Appendix Chapter 1 Sections 104.1 and Section 503 as adopted by the OFD.

DESIGN:

All fire apparatus access roads shall be constructed in accordance with CFC Section 503 and this Standard.

DEFINITIONS:

Bollards – Permanent or removable poles that are placed within a roadway for the purpose of restricting vehicular access to a portion of a site or to protect a piece of equipment from potential vehicular damage.

Fire Apparatus Access Road – The means for emergency apparatus to access a facility or structure for emergency purposes. Unless given an exception by the OFD, roadways must extend to within 150 feet of all portions of the facility and/or the exterior walls of the first story of any structure as measured by an approved route and must meet specified criteria for width, pavement characteristics, roadway gradient, turning radius, etc. Fire apparatus access roads are also referred to as fire lanes.

Fire Lane Identification – Specific markings that allow fire apparatus access roads to be readily recognized so that they will remain unobstructed and available for emergency use at all times. See OFD Standard B-001.

Gates and Barriers – Devices that restrict pedestrian and vehicle ingress and egress to and from a facility.

Gate and Barrier Locks – Devices that are installed on gates and barriers to secure a property or facility shall be required to have a keyed KNOX device to facilitate fire department and police access.

Premises Identification – The visual means used to readily identify a property or facility. It is also the numbering system that is placed on structures for the purpose of identification of separate buildings within a single facility. See OFD Standards # H-002 and H-003.

Special Fire Protection Areas (SFPA) – A designated area in which the structure density, and other relevant factors potentially increase the possibility of uncontrollable fire.

GENERAL

Fire Apparatus Access Roads

Fire apparatus access roads, sometimes referred to as fire lanes, shall be provided for every facility or building when any portion of the facility and/or the exterior wall of the first story of a building is located more than 150 feet from a public roadway, as measured along an approved route around the exterior of the building. Walkways to buildings that are a part of the approved route as referred to in the 2007 CFC section 503.1.1 shall be a minimum of five feet (5') in width.

Extenuating circumstances, increased hazards, and additional fire safety features may affect these requirements. CFC Section 503.1.1 Specific criteria pertaining to the design of fire access roadways are detailed below.

1. **Fire Apparatus Access Road Construction** – Fire apparatus access roads must be designed with an asphalt, concrete or other approved all-weather driving surface and engineered to support the imposed load of fire apparatus weighing at least 75,000 pounds. Roadways must be designed to facilitate turning radii of apparatus (see OFD Standard B-005) and meet requirements for gradient, height clearance, and width.
2. **Vehicular Access During Construction** – Unless given an exception by the OFD or this standard, the development and each phase shall have at least two (2) points of vehicular access for Fire Department and other emergency vehicles as well as for routes of egress for evacuations. Fire apparatus access roads shall be constructed and approved prior to combustibles being brought onto the site. Temporary "NO PARKING FIRE LANE" signs shall be posted during construction.
3. **Fire Access Roads in a Special Fire Protection Area (SFPA)** – To determine if a project is within a SFPA, contact the OFD, Bureau of Fire Prevention for information on the delineation of these areas.

4. Number of Fire Apparatus Access Roads Required:

- a) Unless given an exception by the OFD, there shall be at least one fire apparatus access road provided if any portion of the facility or the exterior wall of the first story of a building is located more than 150 feet from a public roadway, as measured along an approved route around the exterior of the building.
- b) There may be more than one access road required if it is determined that access by a single road may be insufficient due to terrain, location, travel distance, potential fire or life-safety hazards, or other factors that could limit access or if vehicle congestion, railways, or weather conditions could impair the single entry point. Where two or more access roads are required, at least two shall be placed not less than one half of the length of the maximum overall diagonal dimension of the property or area served apart. See below for additional guidance on when multiple access roads are required.
- c) Commercial and Industrial Developments with buildings exceeding 30 feet or three stories in height shall have at least three means of apparatus access for each structure.
- d) Commercial and Industrial Developments having a gross building area of more than 62,000 square feet shall have at least two separate fire apparatus access roads.

Exception: Developments having a gross building area of up to 124,000 square feet may have a single fire apparatus access road when all buildings are equipped throughout with an approved automatic fire sprinkler system.

- e) Multiple-Family Residential Developments having more than 100 dwelling units shall have at least two separate fire apparatus access roads.

Exception: Developments having up to 200 dwelling units may have a single fire apparatus access road when all buildings, including nonresidential buildings, are equipped throughout with an approved automatic fire sprinkler system.

- f) One and/or Two Family Dwelling Residential Developments having more than 30 dwelling units shall have at least two separate fire apparatus access roads.

Exceptions:

- 1. Where there are more than 30 dwelling units on a single fire access apparatus road and all dwelling units are equipped throughout with an approved automatic fire sprinkler system, access from two directions may not be required.

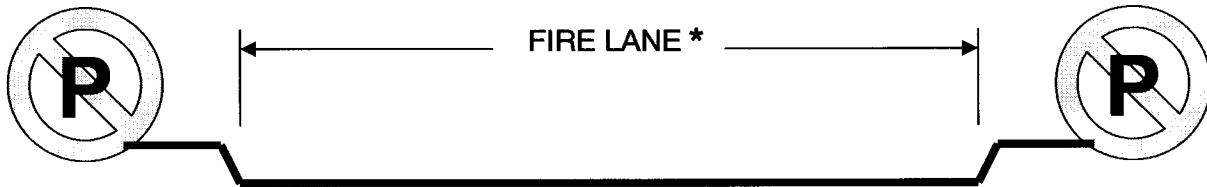
2. The number of dwelling units on a single fire apparatus access road shall not be increased unless the single access road(s) will connect with future development, as approved by the Chief of the Bureau of Fire Prevention.
5. Width of Fire Apparatus Access Roads – The width of a fire apparatus access road is at least 20 feet or per a, b or c below. The width of the access road is measured from curb face to curb face, flow line to flow line, curb face to flow line, or from the inside of a defining edge stripe. Where a raised center median is included, the required width shall be provided on both sides of the median. (See Page 6)
 - a) The minimum width in a Special Fire Protection Area (SFPA) is 24 feet.
 - b) Where a fire hydrant or fire hydrants are located on a fire apparatus access road, the access road shall be at least 26 feet in width.
 - c) Fire apparatus access roads in the immediate vicinity of buildings greater than 30 feet in height shall be at least 26 feet in width. At least one of the access roads required under 5c below shall be located no closer than 15 feet and no farther than 30 feet from the building, and provided parallel to at least one entire side of the building.
6. Parking adjacent to fire apparatus access roads – Whenever the parking, stopping or standing of any vehicle or object would encroach into the clearance requirements for fire apparatus access roads, said parking, stopping or standing shall be restricted by the use of signs and/or red curb markings complying with OFD Standard #B-001.
7. Vertical Clearance – Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches. If trees are located adjacent to the fire apparatus access road, maintain all vegetation overhanging the fire apparatus access road as needed to provide a clear height of 13 feet 6 inches at all times. (See Page 7)
8. Turning Radii – The turning radius for a fire apparatus access road shall be per OFD Standard B-005.
9. Turnarounds – Terminating fire apparatus access roads in excess of 150 feet shall be designed and constructed in accordance with OFD Standard #B-002.
10. Dead-End Fire Apparatus Access Roads – The maximum length of a dead-end fire apparatus access road without mitigating features is 300 feet. With approval from the Chief of the Bureau of Fire Prevention, this may be exceeded if all structures are equipped throughout with an approved automatic fire sprinkler system.
11. Grades – Fire apparatus access roads shall not exceed 10 percent in grade unless approved by the Chief of the Bureau of Fire Prevention.

12. Gates – The Fire Department shall approve Emergency gated access. Proposed gated communities and/or secured commercial/industrial sites shall comply with OFD Standard #B-003.
13. Speed Bumps -- Speed bumps are designed to reduce speed. Therefore, they impede the response of emergency vehicles and increase estimated travel time into an area. The Fire Department does not encourage speed bumps as a mitigation to reduce speed. Alternatives such as stop signs, speed limit signs and street design should be considered. If speed obstruction devices are installed, they should be of the low profile (speed hump) design not more than four inches (4") in height. The Fire Chief shall be the approving authority when all other possibilities are exhausted.
14. Access to Multi-Family Residential Occupancies: Unless given an exception by the OFD, all multi-family residential occupancies shall be within one hundred fifty feet (150') of the edge of the travel way of an improved public alley, street, or fire apparatus access road.
15. Easements: Access drives which cross property lines shall be provided with CC&R's, access easements or reciprocating agreements and shall be recorded on the titles of affected properties. Copies of the draft documents shall be provided to the OFD at the time of OFD plan review. Once the draft is reviewed and approved by the OFD and any other effected agencies, final recordings can be accomplished and a copy of the recorded document filed with the OFD.

STANDARD

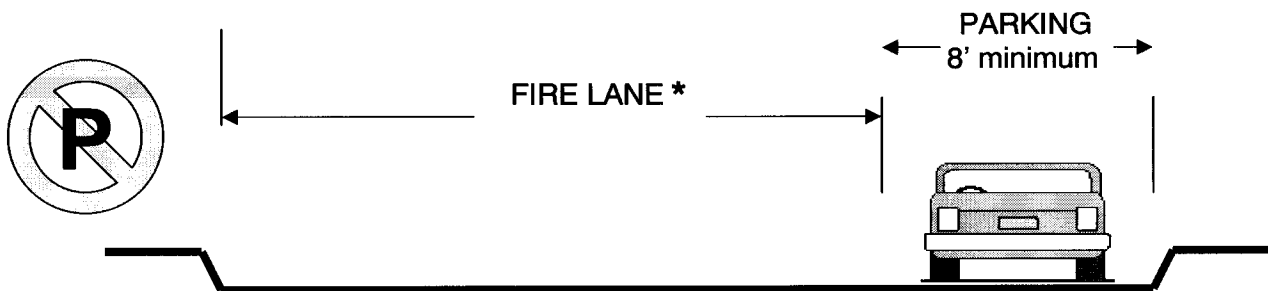
Parking prohibited on both sides

Roadway is required to be posted as a fire lane.



Parking permitted on one side only

Roadway is required to be posted as a fire lane on one side

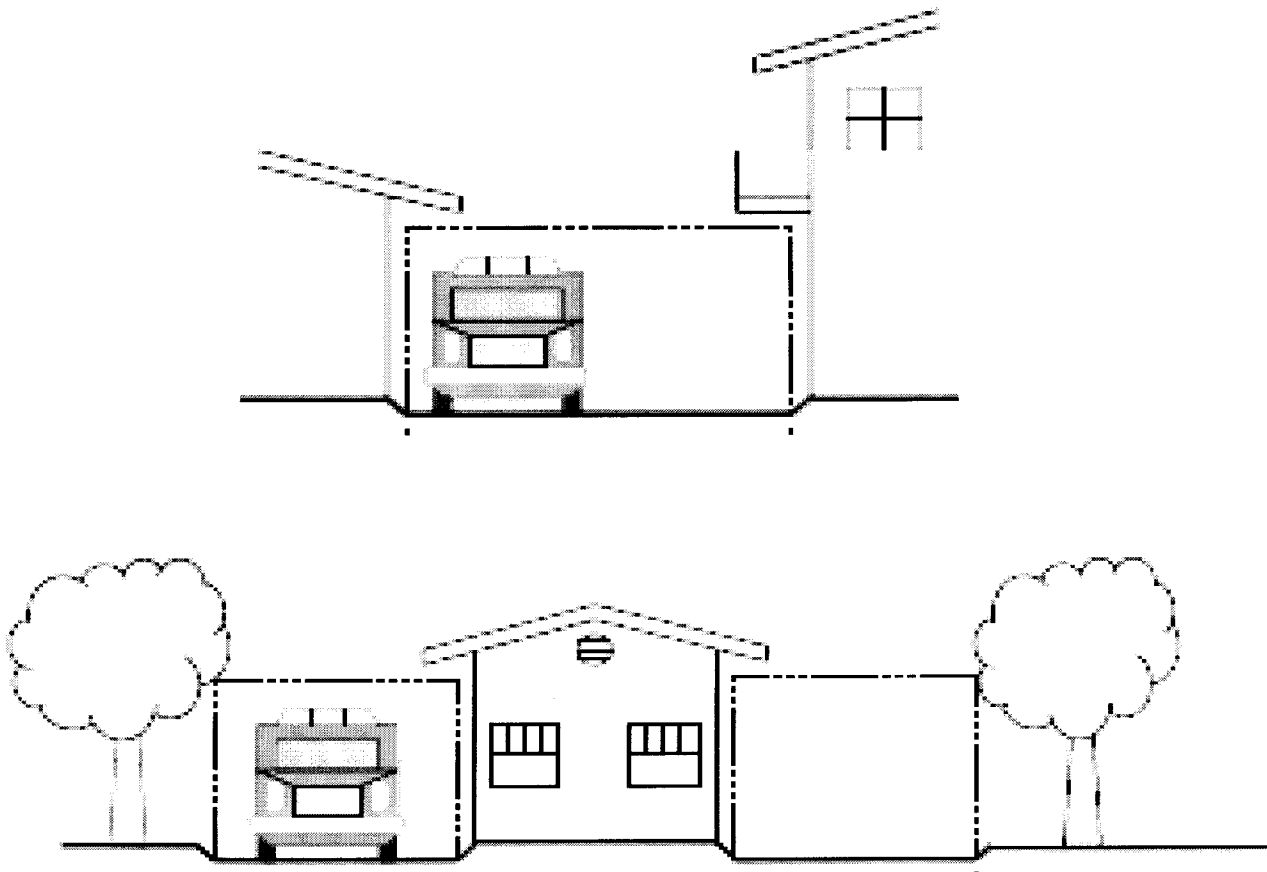


Parking permitted on both sides



* Different applications will require different access widths. Total roadway widths will vary depending on the fire lane width indicated by #5 above. Check with the Ontario Fire Department Fire Prevention Bureau for site-specific requirements.

Fire Apparatus Access Road Vertical Clearance



PROPER CLEARANCE PROVIDED

Eaves and vegetation are not to encroach upon the required height and width.