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# Conditions of Construction Requirements for Firefighter Safety, Fire Department Access and Emergency Water Supply

This guide is intended to aid with the application of the Oregon Fire Code in all areas served by the Canby Fire District.



## NOTE TO USER

#### AUTHORITY AND SCOPE

The Canby Fire District administers and enforces the current edition of Oregon Fire Code under the authority granted by ORS 476.030. The Oregon Fire Code is the International Fire Code, as published and copyrighted by the International Code Council, which has been amended and adopted by the Oregon State Fire Marshal.

The Canby Fire District has prepared this guide to provide good faith guidance to building officials, contractors, architects, business owners, and the public on local interpretations and practices in compliance with the Oregon Fire Code. The intent is to clarify aspects of the code that are vague or non-specific by addressing selected issues under normal conditions. The requirements of this guide shall not be construed as altering any existing code, law or regulation which may require fire protection features not covered or alluded to in these requirements, nor shall they waive any requirements of any code, law, or regulation. The reader is cautioned that the guidance detailed in this guide may or may not apply to their specific situation, and that Canby Fire District retains final authority to determine compliance.



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## FIRE APPARATUS ACCESS

Fire apparatus access roads shall be in accordance with all applicable requirements of the Oregon Fire Code and this Guide. Access shall consist of roadways, public and private streets, fire lanes, parking lot lanes or a combination thereof. (OFC Ch.2)

#### FIRE APPARATUS ACCESS ROAD EXCEPTION FOR AUTOMATIC SPRINKLER PROTECTION:

When buildings are completely protected with an approved automatic fire sprinkler system installed in accordance with OFC Section 903.3.1.1, 903.3.1.2 or 903.3.1.3. The requirements for fire apparatus access may be modified as approved by the fire code official. (OFC 503.1.1)

**ADDITIONAL ACCESS:** The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access. (OFC 503.1.2)

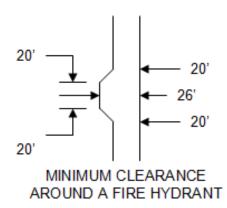
**<u>FIRE APPARATUS ACCESS ROAD WIDTH AND VERTICAL CLEARANCE</u>**: Fire apparatus access roads shall have an unobstructed driving surface width of not less than 26 feet, exclusive of shoulders, and an unobstructed vertical clearance of not less than 13 feet 6 inches. (OFC D103.1).

*Note:* When serving two or less dwelling units or Group U accessory buildings, the driving surface may be reduced to 12 feet, although the unobstructed width shall be 20 feet. Turning radius for curves and turnarounds on 12 feet wide roads shall comply with the inside turning radius and outside turning radius of 25 feet and 45 feet respectively. (OFC 503.2.4 & D103.3 exception)

#### FIRE APPARATUS ACCESS ROADS WITH FIRE HYDRANTS:

Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet within 20 feet of the hydrant, exclusive of shoulders, to provide a staging area for apparatus on the access road. See Appendix D for exceptions. (OFC D103.1)

**SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an allweather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load or gross wheel position weight) and 75,000 pounds live load (gross vehicle weight). Documentation from a registered engineer that the final construction is in accordance with the requirements of the Fire Code and this Guide may be requested. (OFC 503.2.3 & D102.1)



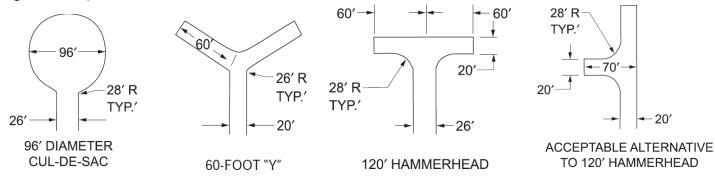
**TURNING RADIUS**: The required turning radius of a fire apparatus access road shall be sufficient to accommodate the current Canby Fire District apparatus. For more information, see our website at: <u>www.canbyfire.org/construction</u>.

#### FIRE APPARATUS ACCESS ROAD DISTANCE FROM BUILDINGS AND TURNAROUNDS:

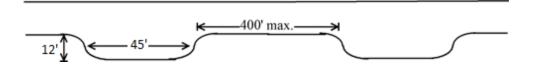
Access roads shall be within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. When the building is equipped throughout with an approved automatic sprinkler system, access roads shall be within 250 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building as measured by an approved route around the exterior of the building or facility. (OFC 503.1.1)

An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 300 feet. (503.2.5 & D103.4)

**DEAD END ROADS AND TURNAROUNDS**: Dead end fire apparatus access roads in excess of 300 feet in length shall be provided with an approved turnaround. Diagrams of approved turnarounds are shown below: (OFC 503.2.5, D103.4 & Figure D103.1)



**TURNOUTS**: When a fire apparatus access road exceeds 400 feet in length, turnouts 12 feet wide and 45 feet long shall be provided in addition to the required road width and shall be placed no more than 400 feet apart, unless otherwise approved by the fire code official. These distances may be adjusted based on visibility and sight distances. (OFC 503.2.2)



**BRIDGES AND ELEVATED SURFACES**: Private bridges shall be designed and constructed in accordance with the State of Oregon Department of Transportation and the American Association of State Highway and Transportation Officials (AASHTO) HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. A building permit shall be obtained for the construction of the bridge if required by the building official of the jurisdiction where the bridge is to be built. The design engineer shall prepare a special inspection and structural observation program for approval by the building official. The design engineer shall give, in writing, final approval of the bridge to Canby Fire District after construction is completed. Maintenance of the bridge shall be the responsibility of the party or parties that use the bridge for access to their property. Canby Fire District may at any time, for due cause, ask that a registered engineer inspect the bridge for structural stability and soundness at the expense of the property owner(s) the bridge serves. Vehicle load limits shall be posted at both entrances to bridges when required by the *fire code official*. (OFC 503.2.6)

**<u>GRADE</u>**: The grade of a fire apparatus access road shall not exceed 15% for non-sprinklered properties. When approved fire sprinklers are installed and topographical conditions will not allow a lesser grade, a maximum grade of 18% will be allowed. (OFC 503.2.7 & D103.2)

ANGLES OF APPROACH AND DEPARTURE: Intersections and turnarounds shall be as level as possible with the exception of crowning for water run-off which can include slopes up to 5% maximum. Grades on stop-controlled approaches to intersections shall not exceed 5% for an approach distance of not less than 50 feet. (OFC 503.2.8, D103.2 and D103.3.2)

**<u>OBSTRUCTION OF FIRE APPARATUS ACCESS</u>**: Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in OFC Section 503.2.1 shall be maintained at all times. Traffic calming devices shall be prohibited unless approved by the *fire code official*. (OFC 503.4 & OFC 503.4.1).

**NO PARKING SIGNS**: Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds. Roads 26 feet wide or less shall be posted on both sides as a fire lane. Roads more than 26 feet wide to 34 feet wide shall be posted on one side as a fire lane. Signs shall read "FIRE LANE NO PARKING TOW-AWAY ZONE" and shall be posted every 50 feet and installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (OFC 503.3) <u>See Example</u>.



**<u>PAINTED CURBS</u>**: Where required, fire apparatus access roadway curbs shall be painted red and marked "FIRE LANE NO PARKING" at a maximum of 20-foot intervals. Lettering shall have a stroke of not less than 1 inch wide by 6 inches high. Lettering shall be of contrasting colors. (OFC 503.3)

FIRE LANE	NO PARKING

**GATES**: Gates securing fire apparatus roads shall comply with all the following:

- Where a single gate is provided, the gate width shall be not less than 26 feet unobstructed.
- Where no turning movement is required within 30 feet of either side of the gate, the minimum width may be reduced to 20 feet in width.
- Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 20 ft wide.
- Gates serving one- or two- family dwellings shall be a minimum of 13.6 feet in width.
- Gates shall be set back at least 30 feet from the intersecting roadway.
- Gates shall be of the swinging or sliding type.
- The construction of gates shall be of materials that allow manual operation by one person.
- Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key to the lock is installed at the gate location. Methods of locking shall be approved by the *fire code official*.
- Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- Electric gates shall be equipped with a means for operation by fire department personnel that has been approved by the fire code official.
- Electric gate operators 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 F2200.
- Bollards are an approved alternate if they can be readily removed by one person, and they shall not be locked with a padlock or chain unless agreed to by Fire Code Official in writing, for extenuating circumstances.

**COMMERCIAL PREMISES IDENTIFICATION:** New and existing **commercial** buildings shall have approved address numbers, building numbers, or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property, including monument signs. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. The numbers shall be a minimum of 12 inches high with a minimum stroke width of 2 inches. Where required, address identification shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure(s). OFC 505.1 *as required by Fire Code Official*.

**RESIDENTIAL PREMISES IDENTIFICATION:** New and existing **residential** buildings shall have approved address numbers, building numbers, or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property, including monument signs. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 6 inches high with a minimum stroke width of 1 inch. Where required by the *fire code official*, address identification shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure(s). (OFC 505.1)

ADDITIONAL ACCESS ROADS – COMMERCIAL & INDUSTRIAL DEVELOPMENTS: Buildings exceeding 30-feet or three stories in height shall have at least two separate means of fire apparatus access.

Buildings having a gross area of more than 62,000 square feet shall have at least two separate means of fire apparatus access. Buildings having a gross building area of up to 124,000 square feet may have a single fire apparatus access road provided all buildings served by the single access road are equipped throughout with an approved automatic sprinkler system.

### ADDITIONAL ACCESS ROADS - MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS:

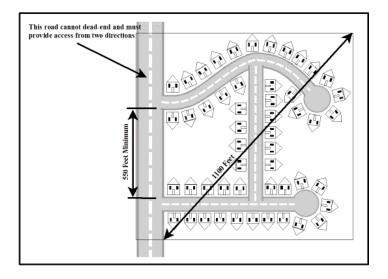
Multiple- family residential projects having more than 50 dwelling units shall be equipped throughout with two separate means of fire apparatus access. Projects having no more than 99 dwelling units may have a single fire apparatus access road provided all buildings, including non-residential occupancies, are equipped throughout with an approved automatic sprinkler system and appropriately sized fire department connection.

#### Note: For buildings exceeding three stories or 30-feet in height OFC Appendix D104 supersedes D106.

Multiple-family residential projects exceeding 100 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

**ADDITIONAL ACCESS ROADS – ONE- OR TWO-FAMILY RESIDENTIAL:** Development of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads. Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system, single access will be allowed. (OFC D107)

**MULTIPLE ACCESS ROADS SEPARATION:** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. (OFC D104.3, D106.3 & D107.2)



**<u>AERIAL FIRE APPARATUS ACCESS ROADS</u>**: Buildings or portions of buildings or facilities exceeding 30-feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with *approved* fire apparatus access roads capable of accommodating fire department aerial apparatus.

An aerial fire apparatus road is not required where the bottom of the eave of a sloped roof or the top of the parapet for a flat roof is not more than 30 feet (9144 mm) above grade measured to the point a ground ladder would be placed during emergency operations. (OFC D105.1)

Note: Aerial apparatus access roads are required where the fire department cannot reach the roof or upper stories with ground ladders. In order to use ground ladders only, there must be a minimum of two (2) separate ladder access points along the roof eave line or top of parapet which do not exceed 30 feet from the ground, regardless of the measurement of grade plane.

If the measurement, 30 feet to the roof eave line or top of parapet, is very close or in question, applicants may be asked to show the minimum two ladder points, and a ladder placement diagram, on their plan set.

#### AERIAL FIRE APPARATUS ACCESS ROADS – REQUIREMENTS:

- Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet exclusive of shoulders or parking, in the immediate vicinity of any building or portion of building more than 30 feet in height that will accommodate aerial operations. (D105.2)
- The side of the building on which the aerial apparatus access road is positioned shall be approved by the fire code official.
- At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet and a maximum of 30 feet from the building and shall be positioned parallel to one entire side of the building, a *dominant* side, or no less than 60 feet on a *dominant* side, required for operational purposes. (D105.3)
  - The Dominant side shall be defined as the side (or a side) of the building where aerial equipment will have maximum access to the building.
- The portions of aerial fire apparatus roads used for aerial operations shall be as flat as possible and shall not exceed 6% slopes in any direction for lengths up to 60 feet. (D105.5)
- Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway or be located within 10 feet of an aerial ladder extended from the fire apparatus access road to the roof of the building or portion thereof. (D105.4 & D105.6)
  - If 60 feet on a dominant side of the building is provided for Aerial Fire Apparatus Access, consideration must still be given that there will not be overhead utility or power lines within 10 feet of where an aerial fire apparatus ladder could be placed during firefighting operations. This could result in a need to provide greater

than 60 feet to provide the 10-foot safety buffer.

*Note:* For one- and two-family dwellings, an aerial fire apparatus access road will not be required when the vertical distance between the point a ground ladder would be placed during emergency operations and the highest roof surface is less than 30 feet or if provided with an approved fire sprinkler system per 903.3.1.3.

ALTERNATE TO AERIAL FIRE APPARATUS ROADS: Buildings complying with the following conditions will be exempt from the requirements of aerial fire apparatus access roads (D105.7):

- 1. The building is equipped with an approved automatic sprinkler system.
- There are no combustible concealed attic spaces. Note: For NFPA 13R sprinklers systems to meet this condition the sprinkler system shall comply with one of the four (4) options indicated in <u>OFC 903.3.1.2.3 # 3</u> (items 3.1 through 3.4), <u>regardless</u> of the height of the roof assembly. The selected option must be indicated on the plan submittal.
- 3. All stairway exit enclosures shall have a fire-resistance rating of not less than 2 hours.
- 4. The roof is essentially flat, having a slope four units vertical in 12 units horizontal (33.3-percent) or less.
- 5. Approved access is provided to the roof from all stairways. In buildings without an occupied roof, access to the roof from the top story shall be permitted to be by an alternating tread device, a ship's ladder or a permanent ladder that is constructed of noncombustible material <u>and</u> is a minimum of 30 inches between handrails; has a rise and run <u>of the stair or ladder</u> of 12 inches maximum and 4 inches minimum, and has handrails provided on both sides through a roof hatch or trap door not less than 36 inches (762 mm) wide and 8 feet (2438 mm) long (1011.12 Exception and 1011.12.2 Exception)

Notes: 1. A construction guide for ships ladders or permanent ladders meeting the requirements of OSSC 1011.12 - Exception and where an alternate may be permitted can be found at: Construction Requirements meeting 1011.12 - Exception.

2. Where guards are required in conjunction with meeting the Alternate to Aerial Fire Apparatus Roads, by OSSC 1011.13 and 1015.7, the Exception to 1015.7, regarding the use of fall arrest anchorage, shall NOT apply. Firefighters will generally not be able to utilize such anchors during firefighting operations and therefore require the guards for roof access. Section 1015.7 shall be met, and the guards shall be installed in accordance with section 1015.

6. Building requiring standpipes are equipped with at least one standpipe that terminates on the roof. *Note: The stairwell(s) with standpipes which extend to the non-occupied roof must be equipped with a ship's ladder or permanent ladder meeting the 1011.12 - Exception* 

## FIREFIGHTING WATER SUPPLIES

**COMMERCIAL BUILDINGS – REQUIRED FIRE FLOW:** The minimum available fire-flow and flow duration for buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses, shall be as specified in OFC Tables B105.1(2) and B105.2. A reduction in required fire-flow from the tabular value, table B105.1(2), of up to 75% is allowed when providing an approved fire sprinkler system. In no case shall the resulting fire-flow be less than 1000 gpm at 20 psi residual when providing an NFPA 13 sprinkler system, or 1500 gpm at 20 psi residual when providing an NFPA 13 sprinkler system. (OFC Appendix B)

#### TABLE B105.2 REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

AUTOMATIC SPRINKLER SYSTEM (Design Standard)		
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the International Fire Code	$25\%$ of the value in Table $B105.1(2)^{\rm a}$	Duration in Table $B105.1(2)$ at the reduced flow rate
Section 903.3.1.2 of the International Fire Code	25% of the value in Table B105.1(2) $^{\rm b}$	Duration in Table $B105.1(2)$ at the reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m.

a. The reduced fire flow shall be not less than 1,000 gallons per minute.

b. The reduced fire flow shall be not less than 1,500 gallons per minute.

Note: When a project is intending on using existing, or proposed new, City of Canby public fire hydrants, information regarding the fire flow of subject hydrants shall be obtained by the applicant and included in plan submittals.

<u>ONE - AND TWO - FAMILY RESIDENTIAL - REQUIRED FIRE FLOW</u>: The minimum available fire flow for one and two-family dwellings, Group R-3 and R-4 buildings and townhouses, not exceeding 3,600 square feet shall be 1,000 gpm at 20 psi residual for duration of 1-hour. For one and two-family dwellings exceeding 3,600 square feet, the required fire flow shall be as specified in OFC Appendix B, Table B105.1(2) for the duration at the required flow rate.

The minimum available fire flow for one and two-family dwellings, Group R-3 and R-4 buildings and townhouses, not exceeding 3,600 square feet and provided with an approved automatic sprinkler system, NFPA 13D system or greater, shall be 500 gpm at 20 psi residual for a duration of 30 minutes. Greater than 3600 square feet and provided with an approved automatic sprinkler system, NFPA 13D system or greater, shall be ½ the value of table B105.1(2) at 20 psi residual pressure for a minimum of 1 hour.

For areas designated as "Wildland Urban Interface Zones" the minimum available fire flow shall be 1,750 gpm at 20 psi residual.

**<u>RURAL BUILDINGS - REQUIRED FIRE FLOW</u>:** Required fire flow for rural and suburban areas in which adequate and reliable water supply systems do not exist shall be calculated in accordance with National Fire Protection Association Standard 1142. (OFC B107.1)

*Note:* Structures protected by an automatic fire sprinkler system are not required to have a water supply other than that required to supply the fire sprinkler system.

#### ACCESS AND FIREFIGHTING WATER SUPPLY DURING CONSTRUCTION: Approved fire

apparatus access roadways and an approved water supply for fire protection, either temporary or permanent, shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (OFC 3312)

**FOUR AND FIVE STORY WOOD FRAME STRUCTURES PRE-FIRE PLAN**: Four and five story wood frame structures require a pre-fire protection plan. An approved pre-fire protection plan will be required prior to the permit being issued (see OFC Chapter 33).

<u>OCCUPANCY DURING CONSTRUCTION SAFETY PLAN (OSP)</u>: Where a location will remain occupied during construction or tenant improvement work, this includes both residential and non-residential occupancies, an Occupancy Safety Plan (OSP) will be required. This plan shall take into account maintaining a safe environment for the building occupants, addressing impairments of fire protection equipment, maintaining egress components, etc. See OFC chapter 33 and section 901.7.

#### FIRE HYDRANTS

Fire hydrants shall be installed at the entry or entries of buildings and locations of the other hydrants will be outside the collapse area of the structure, when possible.

Hydrants shall be installed 300 feet from center to center for emergency fire operations. A blue ground reflector will be affixed to the center of the roadway for optimal visibility for all hydrants as soon as they are put in service. Lastly, curb in front of hydrant will be painted red and stenciled No Parking Fire Lane extending 10' from both sides of hydrant.

Public hydrants need to be installed if the water lines are updated around the project, Hydrants need to be installed per coordination with Canby Fire for distance and fire ground operations analysis. Hydrants for Public and private per the Canby Utility specifications.

Underground fire line improvements shall be flushed and hydrotested at 200psi for 2 hours.

Fully fire sprinklered including all overhangs with dust collection system duct work will be protected with fire sprinkler heads to ensure suppression per Oregon Fire Code Chapter 22.

#### Fire Department Connections (FDC)

A combination FDC head for Storz and screwed shall be used. Fire department connection (FDC) shall be within 50 feet of a hydrant dedicated to the FDC. Exposed FDC piping shall be painted red, and either metal or brass caps shall be used, instead of plastic caps for better security for the FDC head. 12" X 18" FDC sign shall be affixed to street side of FDC depicting address that the FDC serves. 5-inch Storz connection shall be incorporated into all new FDC's, or on a separate riser, when approved by fire code official.



(Example of the FDC connection – pipe size to be determined by design)

3' around hydrants and FDC's shall be clear and absent of vegetation, or vegetation shall be low growing to not block visibility from the street of the Hydrants, FDC's, or addressing.

PDF of approved final prints of the project for our Pre-Fire Plan program.

The building will be fully Fire Sprinklered including overhangs, dust collection.

NFPA 704 placards for hazards that need to be identified in the exterior of the building.

Fire sprinkler riser and fire alarm room doors will be labeled with 8 inch labels. "Fire Sprinkler Riser Room" "FACP"

Fire sprinkler dry systems will trip test showing water under 60 seconds for acceptance at the most remote area.

Fire Lanes painted red on curb with - No Parking Fire Lane in white - and signage per Oregon Fire Code

Fire Extinguishers will have 3-d signage mounted for easy visibility determined by CFD during usually at the height of the exit signage throughout. Extinguishers at 75 feet of travel, a extinguisher at the Entry way next to the alarm panel, and AED, and safety committee info for the rapid response team.

NFPA references for the application and installation of all systems.

Certificate of Occupancy will be approved by Canby Fire District after a complete walk through, inspection, and review for compliance.

#### **CONSIDERATIONS FOR PLACING FIRE HYDRANTS SHALL BE AS FOLLOWS:**

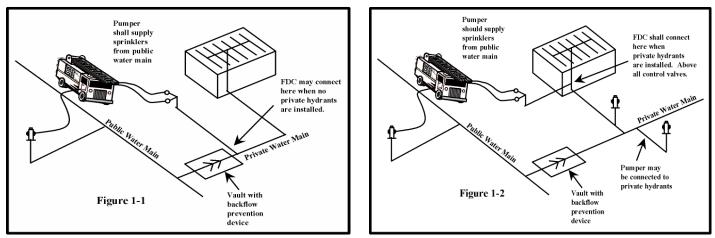
- Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants, if approved by the fire code official during construction review. Applicants may be required to obtain an access easement when requesting to use hydrants on adjacent properties.
- Hydrants that are separated from the subject building by railroad tracks or roads shall not contribute to the required number of hydrants, unless approved by the fire code official.
- Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets may be considered when approved by the fire code official. Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the fire code official.
- When evaluating the placement of hydrants at apartment or industrial complexes, the first hydrant(s) to be placed shall be at the primary access and any secondary access to the site. After these hydrants have been placed, other hydrants shall be sited to meet the above requirements for spacing and minimum number of hydrants.

**FIRE HYDRANT DISTANCE FROM A FIRE APPARATUS ACCESS ROAD**: Fire hydrants shall be provided along required fire apparatus access roads and adjacent public streets.

**<u>CLEAR SPACE AROUND FIRE HYDRANTS</u>**: A 3-foot clear space shall be provided around the circumference of fire hydrants. (OFC 507.5.5) *Note, <u>ORS 881.550(16)</u>* prohibits parking within 10 feet (3048 mm) of a fire hydrant.

**PHYSICAL PROTECTION:** Where fire hydrants are subject to impact by a motor vehicle, guard posts, bollards or other approved means of protection shall be provided. (OFC 507.5.6 & OFC 312)

**<u>FIRE DEPARTMENT CONNECTIONS</u>**: A fire hydrant shall be located within **300** feet of a fire department connection (FDC) or as approved. Fire hydrants and FDC's shall be located on the same side of the fire apparatus access roadway or drive aisle. (OFC 507.5.1.1 Exception, OFC 912 & NFPA 13)



#### ADDITIONAL RESOURCES

**<u>KEY BOX</u>**: Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the *fire code official* is authorized to require a key box to be installed in an *approved* location. (OFC 506.1)

**KnoxBox:** The *fire code official* has approved the use of a KnoxBox as the access key box for use in the Canby Fire District. A KnoxBox, Knox padlock, or Knox key switch for gate access may be required. (OFC 506.1). For more information contact the Canby Fire District at 503-263-4281.

When required, detail the KnoxBox location on the plans near the front entry, mounted at about 6 ft. above ground level. Also, indicate on the plans that a "Lock Box" permit will be obtained from the Canby Fire District.

**REQUESTING A PRELIMINARY LIFE SAFETY MEETING**: Request a Life Safety preliminary meeting. If your property has complex building code or fire code issues, you may need a Life Safety preliminary meeting. Contact 503-263-4281.

**EMERGENCY RESPONDER RADIO COVERAGE:** Emergency responder radio coverage must be provided in buildings and locations as listed. For NEW buildings see OFC510.1. For Existing buildings see510.2. For a helpful checklist see OA510.1.1 and a <u>OSSC-FORM 918-ERRC</u> shall be submitted, <u>with parts I and II completed</u>, at the time of initial permit application, even if the intent is to test out of this requirement.