

Fire Hydrants

Public Information Handout F-52 May 2011

Fire hydrants are made in many different shapes, sizes, and are painted different colors. The different colors do have specific meaning which are outlined in this handout. However, hydrants often go unnoticed until they are utilized for maintenance purposes, or needed in a moment's notice to provide the flow of water during fire emergencies. Regardless of shape, size, or color, all hydrants are an indispensable tool for the overall protection of lives and property, but they are of no use unless they are accessible and regularly maintained.

The International Fire Code (IFC) sets forth requirements for the location, required fire (water) flow, accessibility, clearance, physical protection, inspection, testing and maintenance of fire hydrants.

Hydrant Location

Where any portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet from a hydrant on a fire apparatus access road, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exception: For single family homes, duplexes, and private garages (R-3 and U) occupancies equipped throughout with an approved automatic sprinkler system, the distance may be up to 600 feet.

Obstruction

Unobstructed access to fire hydrants shall be maintained at all times. This includes the parking of vehicles. RCW 46.61.570(ii) prohibits the parking of vehicles within 15 feet of hydrants. Violators are subject to penalties of \$35.00 and/ or impoundment.

Clearance

A 3-foot clear space shall be maintained around the circumference of fire hydrants.

This is an important requirement, which helps ensure fire fighters have the necessary room to connect fire hoses and safely operate the hydrant during emergency conditions. Vegetation, trash, fences, or other obstructions placed too close to hydrants will hinder the emergency use of the hydrant.

Physical Protection



Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means of protection shall be in accordance with the following:

Posts

- 1. Constructed of steel not less than 4 inches in diameter and concrete filled.
- 2. Spaced not more than 4 feet between posts on center.
- 3. Set not less than 3 feet deep in a concrete footing of not less than a 15-inch diameter.
- 4. Set with the top of the posts not less than 3 feet above ground.
- 5. Located not less than 3 feet from the protected object.

Other Barriers

Physical barriers shall be a minimum of 36 inches in height and shall resist a force of 12,000 pounds applied 36 inches above the adjacent ground surface.

Public Hydrants





Public hydrants are primarily located in the right-of-way, on the side of public streets, or other public property. In the City of Bellevue and neighboring communities, the public hydrants are "SAFETY YELLOW", "ORANGE", "WHITE", or in some cases "BLUE" in color, and they are primarily maintained by the Bellevue Utilities Department or the Coal Creek Utility. If you're uncertain of who maintains the hydrants in your community, check with your local water department. See the "Water Departments" section in this handout for a list of phone numbers.

Private Hydrants

Private hydrants are typically located on private property. Consistent with nationally developed consensus standards, private hydrants are "SAFETY RED" in color to clearly distinguish them from public hydrants. Private hydrants are marked and maintained solely by the property owner. The maintenance, testing, and inspection of private hydrants must be performed only by a qualified inspector. (See "Qualified Inspector" below).



Inspection, Testing And Maintenance

Fire hydrant systems shall be subject to periodic tests as outlined below (Confidence Testing) to ensure they will work properly during an emergency. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective.

Confidence Testing

Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA 25 (Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems) at the following intervals:

 Private fire hydrants (all types): Inspection annually and after each operation; flow test and maintenance annually. Property owners with private hydrants are responsible to obtain annual, satisfactory inspection of their private hydrant(s) from a qualified inspector. "Qualified Inspector" is a "Certificate of Competency Holder" employed by a Washington State licensed sprinkler contractor or underground system contractor. See the following link for more information: <u>http://www.wsp.wa.gov/fire/</u> licreports.htm

- 2. Fire service main piping: Inspection of exposed, annually; flow test every 5 years.
- 3. Fire service main piping strainers: Inspection and maintenance after each use.

Inspection Reports

Inspection reports of private hydrants must be submitted to the Bellevue Fire Department within 5 working days of the date of inspection by the servicing inspector.

An approved inspection form can be obtained at the following link: http://fire.bellevuewa.gov/fireprevention/information/

Hydrant Markers

Nationally, the raised blue reflective markers have been installed in the right-of-way or fire apparatus access route to ensure hydrant locations are readily identifiable during the day or night by responding fire crews.



If you encounter missing blue hydrant markers, please contact the Bellevue Fire Department at: 425-452-6892.

Hydrant Use



No person may open, damage, interfere with, or otherwise use a fire hydrant, except in an approved manner as determined by the fire code official.

A "hydrant permit" is required to utilize a "BLUE" public hydrant. Contact the Bellevue Utilities Department for specific permit requirements and hydrant locations at: 425-452-2030.

"BLUE" hydrants are specifically designated hydrants in non-residential areas utilized by private contractors or companies to fill water trucks under permit within the City of Bellevue. If you observe contractor trucks connecting to hydrants in your neighborhood, please contact the Bellevue Utilities Department at: 425-452-7840 (24 hours)

Damage / Malfunction

- 1. If you encounter damage to a public hydrant, immediately contact the City of Bellevue Utilities Department at: 425-452-7840 (24 hours)
- Property owners, their agents and tenants with private hydrants shall immediately contact the Bellevue Fire Department at: 425-452-2050 (24 hours) in the event a private hydrant is damaged, malfunctions, or is otherwise "out of order." The term "Immediately" means not more than 48 hours after a problem is noticed or should have been noticed in the exercise of reasonable care.
- 3. Hydrants that are inoperable must be clearly marked or identified as "out-of-service."



Water Departments

- Beaux Arts (Water District 22) 425-454-8580
- Bellevue Utilities Department 425-452-7840
- Coal Creek 425-235-9200
- Hill Top (Water District 117) 425-747-4970
- Trails End (NE 42nd & 137th AVE NE) 425-881-0853