

**CORVALLIS FIRE DEPARTMENT
DEPARTMENTAL OPERATING GUIDELINES**

**D.O.G. 11.2.2
DATE: 02/15/1996
REV: 11/06/2003**

FIRE HYDRANTS

PURPOSE

To identify hydrant type, color coding, and standard installation.

UFC, SECTION 903.4.2, 1997 ed.

The location, number, and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be provided on the public street or on the site of the premises or both to be protected as required and approved by the Chief. Fire hydrants shall be accessible to the Fire Department apparatus by roads meeting the requirements of the UFC Section 902.2, 1997 ed.

HISTORY - FIRE HYDRANT THREADS

Prior to March, 1995, the dry fire hydrant barrel specified by the City of Corvallis was provided with two 2½ inch outlets with National Standard Threads and a 4-inch outlet with Pacific Coast threads.

CURRENT STANDARD - FIRE HYDRANT THREADS (NFPA 1963)

After March, 1995, the dry fire hydrant barrel specified by the City of Corvallis is provided with two 2½ inch outlets and a 4½ inch outlet. In conformance with the national standard NFPA 1963, all outlets are specified with National Standard Threads. See attached City of Corvallis Public Works fire hydrant specifications and Standard Detail 303 - Fire Hydrant Setting.

STORZ ADAPTER

To eliminate the need of carrying additional adapters on responding Corvallis Fire Department equipment, and to facilitate a quick connection, a 5-inch Storz adapter with National Standard Threads shall be installed on the 4½ inch outlet. The adapter shall be constructed of high-strength aluminum alloy, have a Teflon coating on the seat and threads, and use a rubber gasket and set screws to secure it in place. The adapter shall be provided with an aluminum alloy pressure cap. The cap shall be attached to the hydrant barrel or Storz adapter with a cable to prevent loss or theft of the cap.

COLOR CODING/STORZ ADAPTER CAP

To provide additional visibility and to identify flow volume, the Storz adapter cap shall be identified by an adhesive-backed reflective circular trim. This reflective trim strip will encircle the cable anchor point located in the center of the pressure cap. The reflective trim shall be attached by the Fire Department after new hydrants have been accepted by the City Engineering Division. On retrofitted hydrants, the reflective trim will be attached by the Fire Department after the inspection/flush is performed by the Fire Department.

The color of the adhesive trim shall indicate the available flow volume of the water supply system as identified in NFPA 291, "Fire Flow Testing and Marking of Fire Hydrants" (shown below):

| <u>Trim</u> | <u>Flow (GPM) @ 20 psi Residual</u> |
|-------------|-------------------------------------|
| Blue | 1,500 or greater |
| Green | 1,000 - 1,499 |
| Orange | 500 - 999 |
| Red | Less than 500 |

FITTING EXISTING HYDRANTS WITH STORZ ADAPTERS

Beginning in 1996, the City has undertaken a long-range plan to fit existing hydrants with Storz adapters. Hydrants serving commercial districts and high life hazard occupancies will be given priority in the scheduling process. The City's goal is to complete retrofit on all existing hydrants in the water system within ten years through a capital improvement project.

PRIVATE HYDRANTS

When on-site fire hydrants are required, City policy encourages the installation to be part of the public system. In those rare cases where the hydrants are private, they shall be identified by having the hydrant barrel/s painted red.

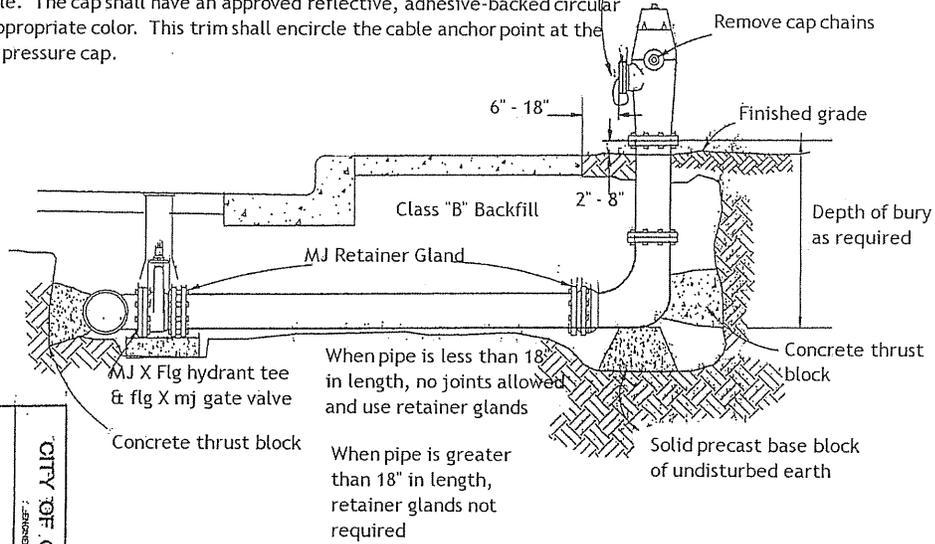
PRIVATE HYDRANTS - MAINTENANCE

The owners of developments provided with private water mains and hydrants are responsible for the maintenance and semi-annual testing of the hydrants in conformance with the NFPA 24, Section 4-3.6. The semi-annual test shall be documented on a tag and signed by the qualified individual performing the testing. This inspection tag shall be attached to one of the main shut-off valves on the double backflow preventer.

Dan Campbell, Fire Chief

Next scheduled review: November, 2006

Note: Pumper nozzle shall have a 4 1/2 inch outlet with National Standard Threads. Install a 5-inch high-strength aluminum alloy, teflon-coated Storz adapter with rubber gasket and set screw to secure it in place. The adapter shall be provided with an approved aluminum alloy pressure cap attached to the hydrant barrel with an approved cable. The cap shall have an approved reflective, adhesive-backed circular trim of the appropriate color. This trim shall encircle the cable anchor point at the center of the pressure cap.



Note: Extensions required for hydrants set too low shall be supplied by the party furnishing the hydrant (owner or contractor). All such extensions shall be installed to the manufacturer's specifications by the contractor at the contractor's expense

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|---|-------------|---------------------|
| DATE: 7/98 | SCALE: NONE | STANDARD DETAIL NO. |
| APPROV: LEONARD L. SMITH, PE | | 303 |
| CITY OF GORVALLIS ENGINEERING DIVISION | | |
| FIRE HYDRANT SETTING | | |