Research Request Summary
This Research Request Summary is a response to a request from a local government agency in Washington State for research and information filed with John Carpita, Public Works Consultant for the Municipal Research and Services Center (MRSC).

On occasion, it is necessary to post these requests to appropriate APWA National infoNOW communities and/or a cross section of Washington State city and county public works officials and special districts to gather sample documents or best practices. John summarizes these responses for the benefit of the inquiring party. As many of these responses are of general interest and, invariably, people who respond want copies of the information, he also posts the responses on the Forum web page of the Washington State American Public Works Association Chapter for the benefit of the greater Washington State public works community.

You can email John at jcarpita@mrsc.org with information requests or suggestions for research of use to the Washington State public works community. If your agency or company has done research or gathered information of general interest, please send it to John for possible posting on this Forum page.

Research Request Statement
Does your water department charge a monthly/yearly fee for a fire service (sprinkler) connection?
Do you require the installation of a meter to detect use of fire service (sprinkler) connection?

Jeff D. Cameron, P.E.
Public Works Director
City of Longview
jeff.cameron@ci.longview.wa.us

Does your water department charge a monthly/yearly fee for a fire service (sprinkler) connection? Yes – currently $9.82 per month, for either fire sprinklers or private fire hydrant connections; we do not charge consumption fees for system testing or fire suppression.
Do you require the installation of a meter to detect use of fire service (sprinkler) connection? Yes – Either a meter or a detector check valve.

Rob Andreotti [Robert@ci.puyallup.wa.us]
The City of Puyallup does not currently charge or meter fire service systems.

Eddie Low [Eddie.Low@ci.bothell.wa.us]
Yes for both questions. It is part of permit applications and review of these new connections.
The City of Ellensburg does charge for fire service connections – it can be found in the Ellensburg Municipal Code. (Below is an excerpt from the code)

### 9.91.400 Water utility rate schedules.

F. Private Fire Protection W-300.

1. Availability. This rate schedule is available inside the city to any water user connected to the municipal water system for the use of fire protection only.
2. Character of Service. Service shall be through a nonmetered connection and shall be separately piped within the premises for the purpose of fire protection only, and shall require installation of a detector device.
3. Rate. The daily rate shall be based on the diameter of pipe connecting the fire protection to the city main.

| W-300 * | Private Fire Service | $0.14 | $0.16 | $0.17 | $0.18 | *Dollars/day/1inch diameter of connection pipe |

The City of Shelton does charge a base "meter" fee for fire lines. This is new with our recent comp plan update and revision to our rate structure. We do not meter these connections but as these connections require periodic inspection by our operations staff, it was determined in the comp plan update that a base fee was necessary to cover those costs. As mentioned, we do not meter these connections but will be updating our standards to require detector assemblies so that any unauthorized usages can be caught and dealt with appropriately.

Brown, Dave [dbrown@ci.yakima.wa.us]
We do charge a fee for a fire service connection when it enters the building, usually a sprinkler system. We do have a few privately owned fire hydrants where we charge a fee. We do not require a detect meter, we rely on the system flow sensor. We make the assumption if there is flow and the sensor detects it they is an alarm and they could not have an alarm going off if they made an unauthorized connection.

Challis Stringer [pubwks@langleywa.org]
Langley does not charge a monthly or yearly fee for a fire service sprinkler connection. in addition we do not install a meter on the fire sprinkler connection.

John Woodcock [jw@ci.bonney-lake.wa.us]
No on both questions, attached are our details addressing this issue.
The City does not charge a monthly/annual fee. (Although the City may soon consider it)
The City requires a meter to detect use.

John, the city of Yelm does not charge a fee for a fire sprinkler system. The city of Yelm does not require a meter on a fire service line.

Does your water department charge a monthly/yearly fee for a fire service (sprinkler) connection? NO.
Do you require the installation of a meter to detect use of fire service (sprinkler) connection? We are now – a low flow detector.

**13.04.270 Fire protection service – Standby charges.**
The monthly rate for water supplied for the purpose of building sprinkler systems and fire hydrants on private property shall be as follows:

<table>
<thead>
<tr>
<th>Size of Service (in inches)</th>
<th>Monthly Charge (per connection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 or less</td>
<td>$3.00</td>
</tr>
<tr>
<td>3</td>
<td>5.00</td>
</tr>
<tr>
<td>4</td>
<td>7.00</td>
</tr>
<tr>
<td>6</td>
<td>9.00</td>
</tr>
<tr>
<td>8</td>
<td>11.00</td>
</tr>
<tr>
<td>10</td>
<td>13.00</td>
</tr>
<tr>
<td>12</td>
<td>15.00</td>
</tr>
<tr>
<td>Fire hydrant</td>
<td>12.00 (per hydrant)</td>
</tr>
</tbody>
</table>

(Ord. 1038 § 3, 1990; Ord. 666 § 27, 1982).
Mark Dorsey [mdorsey@cityofportorchard.us]
The City does not charge a fire service connection fee (aka standby fee)
The City does not require the installation of a “meter” to detect fire sprinkler use......but for commercial, the DDCV assembly does detect improper use (stealing of water)...and residential sprinklers are N/A as they are flow-through systems

Gary Harer [gharer@cityofml.com]
City of Moses Lake
The City of Moses Lake requires a double check detector assembly but does bill for the usage for fire sprinkler systems.

Bob Bandarra
Superintendent of Operations
City of Bellingham
BBandarra@cob.org
The answer to both questions is yes. We do require a meter to detect use of a fire service to assure the fire system is not inadvertently tapped for water use and we have an annual charge of $125. We have approximately 600 fire meters in the system.

C. King Fitch [ckf@fridayharbor.org]
No and No for the Town of Friday Harbor, but the developer does have to pay all installation costs and cover the cost of inspection by a Town hired PE to inspect the installation just like a water main extension.

Abdoul Gafour [Agafour@Rentonwa.gov]
Responding to your questions,
1) Does your water department charge a monthly/yearly fee for a fire service (sprinkler) connection?
Yes, Renton charges a monthly base-fee for the fire sprinkler service based on the actual size of the sprinkler stub and backflow prevention assembly installed for the building’s sprinkler system. A copy of the City’s 2012 water rate for fire sprinkler service is attached.

2) Do you require the installation of a meter to detect use of fire service (sprinkler) connection?
Yes, we require the installation of a “detector” by-pass meter, typically one-inch in size, on all backflow prevention assemblies installed in conjunction with the fire sprinkler system. The backflow assemblies vary in sizes but the by-pass meter on them typically remains as a 3/4-inch. See attached Renton standard detail.

The by-pass meter is not used to “detect” water used during a fire since the water will flow “unmetered” through the main assembly. The by-pass meter is mainly used to detect any “unauthorized” use of water from the sprinkler system, or to detect a leak downstream of the assembly, which will cause water to go through the by-pass meter but not through the main assembly. The main assembly will only open when there is large demand for water, such as in the case of a fire in the building.

For residential homes with fire sprinkler systems, which typically use a common 1-inch water meter for both domestic and for fire sprinkler needs, we do not charge a separate or additional fire sprinkler meter base charge.
WATER UTILITY

The city’s water utility provides a clean, safe and reliable water supply and distribution system.

2012 Monthly Water Utility Rates

<table>
<thead>
<tr>
<th>Size of Service</th>
<th>Basic Charge</th>
<th>Charge for Irrigation</th>
<th>Fire Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>$15.96</td>
<td>$9.60</td>
<td>$5.69</td>
</tr>
<tr>
<td>1&quot;</td>
<td>$33.06</td>
<td>$17.16</td>
<td>$6.36</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>$61.07</td>
<td>$29.29</td>
<td>$8.17</td>
</tr>
<tr>
<td>2&quot;</td>
<td>$95.71</td>
<td>$44.86</td>
<td>$21.58</td>
</tr>
<tr>
<td>3&quot;</td>
<td>$196.65</td>
<td>$94.94</td>
<td>$26.55</td>
</tr>
<tr>
<td>4&quot;</td>
<td>$300.00</td>
<td>$141.18</td>
<td>$38.15</td>
</tr>
<tr>
<td>6&quot;</td>
<td>$585.24</td>
<td>$267.40</td>
<td>$51.38</td>
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<td>8&quot;</td>
<td>$1,145.52</td>
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<tr>
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<td>$1,707.60</td>
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<tr>
<td>12&quot;</td>
<td>$2,485.13</td>
<td>$1,086.53</td>
<td></td>
</tr>
</tbody>
</table>

Commodity Rates (100 cf = 748 gallons)

Single-Family:
- Less than 500 cf/month: $2.30/100 cf
- 500-1,000 cf/month: $3.08/100 cf
- Over 1000 cf/month: $3.90/100 cf

Multi-family: $2.98/100 cf

Non-residential: $3.16/100 cf

Private irrigation: $5.06/100 cf

City irrigation: $3.56/100 cf

Outside City Limits - Rates for customers outside City limits are 1.5 times the above.

Water Utility Services:
- Operates and maintains the water system that provides a reliable, high quality water supply to over 64,000 residents. The water system consists of eight wells, one spring, 305 miles of water mains, 18 pumping stations, ten reservoirs and elevated tanks, two treatment facilities and 17,295 metered connections.
- Designs, constructs and inspects new infrastructure.
- Reviews projects for compliance with city codes.
- Assures compliance with state and federal regulations.
- Implements aquifer protection, water conservation and cross-connection control program.
ALL DETECTOR DOUBLE CHECK VALVE ASSEMBLIES SHALL INCLUDE RESIDENT SEATED SHUTOFF VALVES AND TEST COCKS AND CAPS AND APPROVED CROSS-CONNECTION CONTROL ASSEMBLIES PER D.B.S.H.S. LATEST APPROVED LIST.

U PRECAST CONCRETE VAULT WITH 2 - 3'x3' HINGED STEEL PLATE COVER, DIMENSION 4'-8" x 7'-0" x 7'-0"
UTILITY VAULT CO. 577-LA OR EQUAL

CONCRETE SUPPORT PADS OR ADJUSTABLE PIPE SUPPORTS.

NOTE:
INSTALL GALVANIZED LADDER FOR ACCESS.

AFTER FIELD INSTALLATION, MAIN DDCVA AND BY-PASS DDCVA MUST BE TESTED SATISFACTORY BY A DEPT. OF HEALTH CERTIFIED BACKFLOW ASSEMBLY TESTER. TEST REPORT TO BE SUBMITTED TO CITY OF RENTON WATER UTILITY ENGINEERING DEPT.

PRIOR TO ACTIVATION OF NEW LINE, INSTALL 3/4" FLARE TEST COCKS WITH 1/2" FLARE CAPS.