



## RESIDENTIAL FIRE SPRINKLER SYSTEMS

### Purpose

To describe the District policy/procedure for granting an ERU reduction for one-family dwellings where a residential fire sprinkler is required

### Highline Water District Policy

*"Where a 1" meter is requested to accommodate an automatic fire sprinkler for a one-family dwelling, the GFC for a 1" meter will be based on one ERU Unit, if the increase in meter size from ¾" to 1" is required solely to accommodate the automatic fire sprinkler. The Applicant shall provide documentation that a ¾" meter is adequate based on the plumbing fixture count, in accordance with the Uniform Plumbing Code."*

### Background

In fall 2010, several cities and fire agencies approached the District to reduce the potential economic impact for land use authorities adopting residential sprinkler system requirements for new construction. Their goal was to help minimize costs for upcoming changes in the residential construction code. At that time, the Cities of Burien, Normandy Park and Tukwila were considering code updates to require all new residential construction be equipped with fire sprinklers.

The District's General Facility Charge (GFC) is based on the size of the water meter and the equivalent ERU unit. For a ¾" meter, the ERU Unit is one (1); for a 1" meter the ERU Unit is two (2). Therefore, the GFC for a 1" meter is double the cost of a ¾" meter. The GFC is calculated per the approved ERU value at the time the meter is purchased (reference HWDC 6.04.060 – GFC Defined). A 1" meter is typically considered the minimum size meter to serve a combined domestic and residential fire sprinkler system.

In response, the District's Board of Commissioners adopted Resolution 10-11-3D and 14-2-19A modifying existing District Code Section 6.04.060. The policy is as described above. The measure improves the economic feasibility of fire sprinklers for one-family residences and helps to promote life safety.

### Documentation

In order to receive the reduction in connection charges, the Applicant must provide sufficient documentation demonstrating a ¾" meter is adequate for the residence and the sole reason to upsize to a 1" meter is to accommodate the automatic fire sprinkler system. Larger homes and/or properties with significant domestic demands typically are not eligible for the reduction. The maximum fixture count for a ¾" meter is 39. In no case will a reduction be granted for a property with a fixture count greater than 39.

The required documentation is a plumbing fixture count form (Water Meter Sizing Worksheet REF 416, pg. 2) developed in accordance with the Uniform Plumbing Code (Tables 610.3 and 610.4). The documentation MUST be reviewed, signed and approved by the City's Building Official to validate the proposed permitted project matches the documented fixture count. Upon approval, the form is to be returned to the District who will validate the eligibility for the reduction and update the Statement of Charges (if required).



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NAME: \_\_\_\_\_ CITY PERMIT #: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_

### ELIGIBILITY FOR 1" METER GENERAL FACILITY CHARGE (GFC) REDUCTION:

<b>WATER METER SIZING WORKSHEET</b>					
(Reference 2012 Uniform Plumbing Code – Table 610.3)					
FIXTURE TYPE	# OF FIXTURES	x	FIXTURE UNIT	=	TOTAL UNITS
Bathtub or combination Bath/Shower		x	4	=	
¾" Bathtub Fill Valve (Soaker Tubs)		x	10	=	
Shower (per head)		x	2	=	
Water Closet (Toilet)		x	2.5	=	
Bidet		x	1	=	
Lavatory (bathroom sink)		x	1	=	
Kitchen Sink (per faucet)		x	1.5	=	
Laundry Sink		x	1.5	=	
Dishwasher (Domestic)		x	1.5	=	
Bar Sinks		x	1	=	
Clothes Washer		x	4	=	
Hose Bibs (first)		x	2.5	=	
Hose Bibs (each additional after 1st)		x	1	=	
Lawn Sprinkler (each head)		x	1	=	
Other:		x		=	
<b>Total</b>					

APPROVED BY (City Official): \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_