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# HYDRAULIC LOAD CALCULATION

Complete the following to determine City Water Service Pipe Size and Private Water Service Pipe Size requirements (see over for instruction)

**Table A - Fixture Hydraulic Load Calculation for Water Service Pipe Size:  
 Single Family Dwelling, Garden Suites or Duplexes**

Indicate all buildings or areas serviced by your metered water connection. Each meter connection requires a separate form.

Single Family Dwelling  Duplex  Secondary Suite  Garden Suite

Fixture or Device	Fixture Units (A)	Qty of Fixtures (B)	Load (A x B)
Bathroom Group - three fixtures only (1 toilet, 1 basin and 1 bathtub or 1 shower stall = 1 Bathroom group)	3.6		
Bathtub	1.4		
Clothes Washer	1.4		
Dishwasher	1.4		
Hose bibb – ½" (Outside Tap)	2.5		
Sink, bar	1		
Sink, Bathroom (Lavatory or Basin)	0.7		
Sink, kitchen	1.4		
Sink, laundry (1 or 2 compartments)	1.4		
Shower stall (1 shower valve)	1.4		
Water closet (Toilet)	2.2		
<b>Use TOTAL to determine Size Requirements in Tables B and C</b>		<b>TOTAL LOAD =</b>	

**Table B - Private Water Service Pipe (Private Property)**

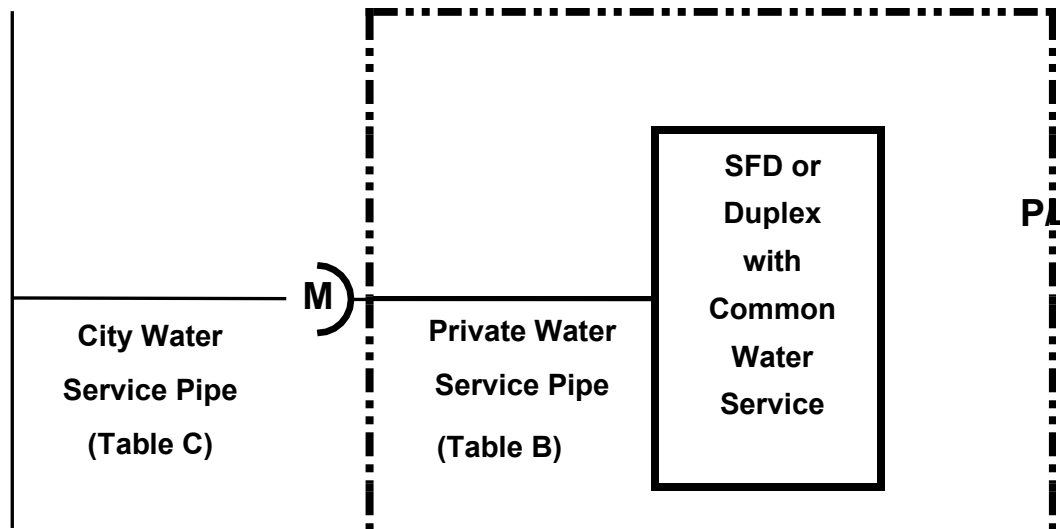
If existing size is under the proposed total load number, please select the proposed increased size under required.

MAX ALLOWED TOTAL LOAD	Required Pipe Size	Completed by Applicant	
		Existing	Required
7	½"	<input type="checkbox"/>	<input type="checkbox"/>
16	¾"	<input type="checkbox"/>	<input type="checkbox"/>
31	1"	<input type="checkbox"/>	<input type="checkbox"/>
57	1¼"	<input type="checkbox"/>	<input type="checkbox"/>

**Table C - City Water Service Pipe Size (Street to Property Line)**

MAX ALLOWED TOTAL LOAD	Required Pipe Size	Internal Use Only	
		Existing	Required
16.4	Existing ½" (meter size)	<input type="checkbox"/>	<input type="checkbox"/>
23.6	Existing ¾" (meter size)	<input type="checkbox"/>	<input type="checkbox"/>
21	New ¾"	<input type="checkbox"/>	<input type="checkbox"/>
43	1"	<input type="checkbox"/>	<input type="checkbox"/>
146	1½"	<input type="checkbox"/>	<input type="checkbox"/>

**Fixture Hydraulic Load Calculation**  
**Water Service Pipe and Meter Size — SFD and Duplexes**  
**Diagram 1**



**Sizing Procedure**

1. Determine TOTAL LOAD value by completing Table A
2. Determine Private Water Service Pipe Size requirements from Table B using TOTAL LOAD from Table A.
3. Determine City Water Service Pipe Size requirements from Table C using TOTAL LOAD from Table A.

Note:

- When completing Table A, include ALL fixture units serviced by a single meter connection. This might include plumbing fixture unit loads for accessory buildings or other features on the property.