City of Phoenix
PLANNING & DEVELOPMENT DEPARTMENT

Self-Certification Program
Commercial Water Meter/Drainage Fixture Unit Worksheet

In order to determine the required water meter, water supply line size and impact fees for sewer, the following information must be provided and completed by the applicant.
(If using an existing water meter, provide Water and Sewer Service Information Request Form and complete this worksheet)

Address of Project: _____

1) **Total number of new and existing water supply fixture units:** (2024 UPC Table 610.3, Appendix A Table A-2.1) (2024 IPC Table E103.3(2)). Attach additional sheets if necessary)

TYPE OF FIXTURE	NUMBER EXISTING FIXTURES	NUMBER OF NEW FIXTURES		WATER FIXTURE UNIT VALUE		TOTAL FIXTURE UNITS
Water Closet (Flush Valve)			X		=	
Water Closet (Flush Tank)			X		=	
Urinal			X		=	
Lavatory			X		=	
Drinking Fountain			X		=	
Sink/Dishwasher			X		=	
Hose Bibb			X		=	
Other (Specify)			X		=	
Other (Specify)			X		=	
Other (Specify)			X		=	
				Total Water Supply Fixture Units		

2) **Total number of drainage fixture units:** (2024 UPC Table 702.1) (2024 IPC Table 709.1). Attach additional sheets if necessary)

TYPE OF FXTURE	NUMBER EXISTING FIXTURES	NUMBER OF NEW FIXTURES		DRAINAGE FIXTURE UNIT VALUE		TOTAL FIXTURE UNITS
Water Closet (Flush Valve)			X		=	
Water Closet (Flush Tank)			X		=	
Urinal			X		=	
Lavatory			X		=	
Shower			X		=	
Sink/Dishwasher			X		=	
Floor Sink			X		=	
Other (Specify)			X		=	
Other (Specify)			X		=	
Other (Specify)			X		=	
				Total Drainage Fixture Units		

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Commercial Water Meter / Drainage Fixture Unit Worksheet

1) Converting the water supply fixture units to gallons per minute and determining the total water use

Total water supply fixture units = _____ System is predominately ____ Flush Tank ____ Flush Valve
Converted water demand in GPM (2024 UPC Chart A-2.1) (2024 IPC Table E103.3(3) = ____ GPM
Additional water usage (landscape irrigation, cooling towers, process equipment, etc.) = ____ GPM

Total water demand in GPM (add previous two GPM values) = ____ GPM

2) Calculating the Water Pressure available for design purposes:

Base Water Pressure at Service Tap:	psi
Water meter loss (_____ inch): (2024 UPC Appendix A Chart A 1.2 or manufacturer's specifications)	psi
Special Equipment: (Deduct all pressure losses caused by special equipment such as a backflow preventer, water filter, or water softener. Pressure loss data shall be obtained from the manufacturer of such equipment.	psi
Elevation Difference: (Where the highest water supply outlet is located above the source of supply, multiply the difference in elevation in feet by 0.43. The result is the loss in static pressure in psi.)	psi
Residual pressure required for plumbing fixtures: The available residual pressure shall not be less than 20 psi for flush valve fixtures. The available residual pressure shall not be less than 8 psi for flush tank fixtures.	psi
Adjusted Water Pressure: (The amount of pressure available for the domestic water supply system)	psi

3) Determine the total developed length of piping in the domestic water supply system and calculate the maximum allowable pressure loss per 100 feet of piping.

Pipe Length (Tap to Meter)	ft.	
Pipe Length (Meter to farthest fixture)	ft.	
Vertical length	ft.	
Equivalent length of fittings (assume 25%)	ft.	
Total Developed Length	ft.	
Maximum Allowable Pressure Loss = (Adjusted Water Pressure / Total Developed Length) x 100	psi/100 ft.	

4) Summary of required water meter, supply piping sizing and drainage fixture units.

Water Meter Size: _____ (Per DSD Technical Guideline for Water Meter Sizing)
☐ New ☐ Existing
Supply Line Size: _____ (Per 2024 UPC Table 610.4, Appendix A 2.1; Per Figure E103.3(3))
Drainage Fixture Units: _____ (from table above. For multifamily, provide the number of drainage fixture units per building. Attach additional sheets if needed.