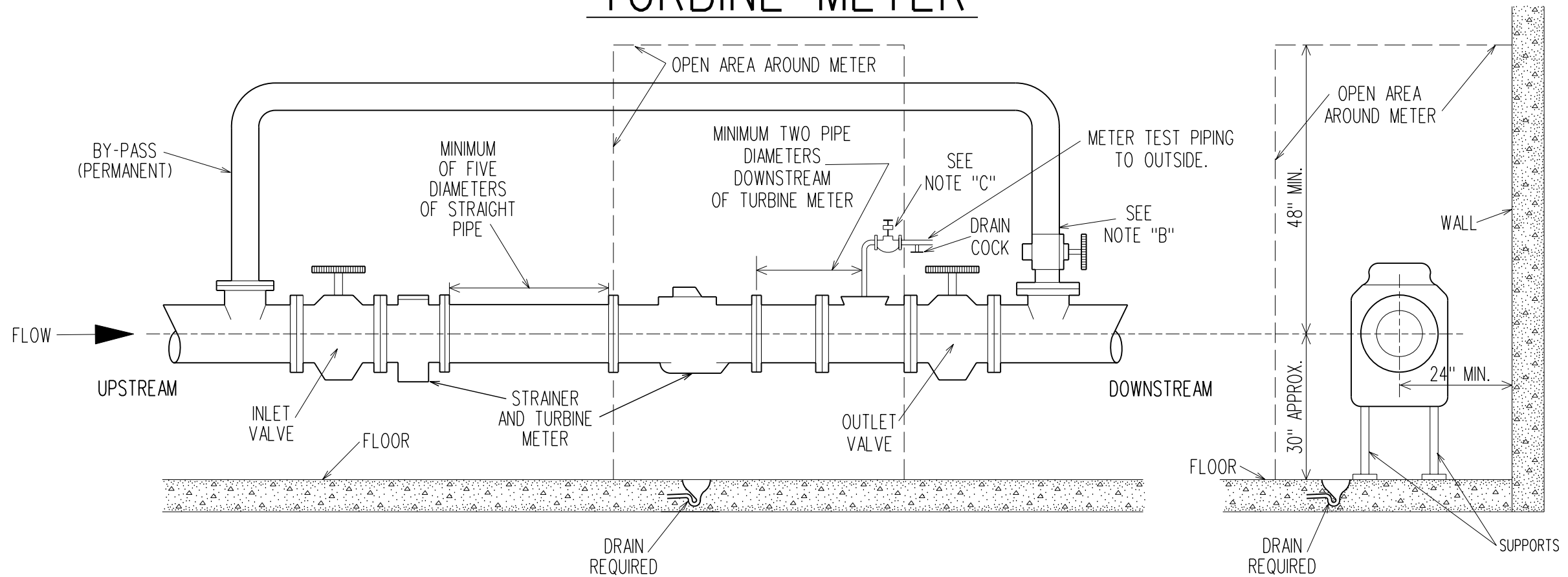


# TURBINE METER



PROPER INSTALLATION: The following installation guidelines will insure optimum field performance and reliability when installing a Badger Turbo meter.

1. A Strainer IS REQUIRED to insure optimum flow conditioning and protection for the Turbo meter measuring element.
2. Turbo meters, with a strainer, REQUIRE a minimum of five (5) pipe diameters of straight pipe upstream of the meter.
3. ONLY full-open gate valves should be used immediately upstream of the meter. Butterfly valves MUST be five (5) pipe diameters or more upstream of the meter. Full-open gate or butterfly valves can be used downstream.
4. DO NOT install pressure reducing devices or check valves upstream of the meter.
5. Unweighted check valves MUST be located at least three (3) pipe diameters downstream of the meter.
6. Pressure reducing devices and externally weighted check valves MUST be located at least five (5) pipe diameters downstream of the meter.

For more info see:  
[WWW.badgermeter.com](http://WWW.badgermeter.com)

Meter Size	Meter Lay Length	Turbine Meter-GPM	Max. Cont. Duty	Strainer Lay Length
2"	10"	3 - 250	200 GPM	7"
3"	12"	4 - 550	450 GPM	7"
4"	14"	8 - 1250	1000 GPM	9"
6"	18"	15 - 2500	2000 GPM	9"
8"	20"	20 - 4500	3000 GPM	14"
10"	26"	30 - 7000	5500 GPM	16"

NOTE "B" -----By-pass required, one size smaller allowed.

NOTE "C" -----2" Valve is 1/4 turn ball valve w/ drain cock after valve.

SPEC. NOTE -----Use standard companion flanges and valves.  
 -----NO insulation or covering on meters or flanges.  
 -----NO PVC piping allowed.

Rev 1/23/12 TLR

MADISON WATER UTILITY	
TURBINE METER	
DATE: 1/21/04	RECOMMENDED METER INSTALLATION