WATER METER PIT SPECIFICATIONS:

1. DIMENSIONS: See Attached Drawings.
2. COMPOUND METER SPECIFICATIONS: See Attached Drawings.
3. TURBINE METER SPECIFICATIONS: See Attached Drawings.
4. Specifications for new pits: Meter pits shall conform to the attached diagrams and tables.
5. (a) 'Material'. The meter pit shall be constructed of reinforced poured concrete thoroughly puddled in place. The concrete shall conform to Section 611 of Wisconsin standard specifications, as shown on the plans and as specified.
   (b) 'Waterproof Juncture'. The junctions of the floors, walls and roof shall be made waterproof by the use of water stops or keyed joints. Conduit or similar connections within the pit shall be waterproof. Meter pit shall be 100% water proof. Rubberized membrane shall be required on the entire exterior of the structure. Refer to Section 516 of the Wisconsin standard specs.
   (c) 'Reinforcement'. The deck or pit roof shall be reinforced with steel bars to insure strength and durability.
   (d) 'Manhole and Catch Basin'. To be located as shown on attached drawing.
   (e) 'Manhole Covers'. An approved watertight cast iron manhole frame and bolt down cover with a gasket.
   (f) If a sump pump is required, the contractor will install electric and provide sump pump and drainage.
   (g) Armored and explosion proof light switchs and lights shall be installed.

METER INSTALLATION

1. A Strainer is REQUIRED to insure optimum flow conditioning and protection for the Badger Series meter-measuring element, supplied by the Madison Water Utility.
2. Badger meters, with a strainer, REQUIRE a minimum of five (5) pipe diameters of straight pipe up stream of meter.
3. ONLY full-open gate valves should be used immediately upstream of the meter, and valves SHALL be located at least five (5) pipe diameters or more upstream of meter. Full open gate valves or butterfly valves (16" or larger) may be used downstream.
4. DO NOT install pressure-reducing valves downstream of the meter.
5. A check valve must be installed downstream of the meter to prevent surging or backflow. A spring or weighted check valve may be used, as necessary.
6. Weighted check valves SHALL be located at least three (3) pipe diameters downstream of the meter.
7. Pressure reducing devices and externally weighted check valves SHALL be located at least five (5) pipe diameters downstream of meter.
8. All nuts and bolts shall be 304 stainless steel.

METER PIT MAINTENANCE:

1. The water CUSTOMER shall be responsible for the maintenance and upkeep of the meter pit.
2. All pits shall be maintained in a clean, dry and safe condition.
3. If the pit has water problems the owner shall cause a sump pump to be installed, if power is not available a sump pit shall be constructed with a standpipe.
4. All pipes and plumbing shall be maintained in a safe functional condition.
5. Steps must be maintained so as to provide safe access.
6. Owner shall be responsible for entire cost to pump out flooded pit.

NOTES:

1. A bypass is required, may be one size smaller than meter.
2. Standard companion valves and flanges shall be used.
3. No insulation or covering on meters and valves.
4. No PVC piping allowed.
5. Waterproofing shall be required on exterior of structure, including all penetrations into the vault.
6. All piping shall be supported from the floor or walls as necessary with rust proof metal. No brick, wood or concrete blocking will be allowed.
7. Water meter pit is the responsibility of the customer.
8. Meter and strainer shall be installed per manufacturerer's instructions. Refer to meter detail sheets for additional information. Meter and strainer to be provided by the Madison Water Utility and installed by the contractor.
9. Size of valves shall not be smaller than the size of the meter.
10. When a check valve is installed proper expansion protection shall be installed.
11. Backfill structure evenly on all sides with suitable material approved by the Engineer.

CITY OF MADISON
WATER UTILITY

For more info see:
www.badgermeter.com

WATER METER PIT CONSTRUCTION NOTES