AFTER INSTALLATION
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INSPECTION.

BETHLEHEM TOWNSHIP SANITARY SEWER DEPARTMENT

# DEDUCTION WETER

METER SPECIFICATIONS
AND
INSTALLATION GUIDE

#### BETHLEHEM TOWNSHIP SANITARY SEWER DEPARTMENT DEDUCTION METER STANDARD SPECIFICATIONS

Meters which are installed for the purpose of measuring water use, which qualify for exclusion from the sanitary sewer system shall be referred to as a DEDUCTION METER.

Sewer rentals, charges, the requirements for wastewater measurement, and the provision for rental credits for wastewater not requiring sewage treatment shall be governed by Ordinance No. 01-94.

Application (FORM: FM-SSDM) for a Deduction Meter permit must be completed, and a permit obtained prior to installation by a property owner or a registered Bethlehem Township plumber.

The cost of the permit shall be Twenty-Five dollars (\$25.00). This fee is charged to offset the cost of the Deduction Meter, the meter inspection, a copy of the installation guidelines and, these specifications.

When available the Township will supply the applicant with a deduction meter, the meter remote, and the meter communication cable at Township cost plus a \$5.00 handling fee.

The following Rules and Regulations apply to the installation.

- 1. A deduction meter shall be installed only when the local water company primary usage meter or a Bethlehem Township primary usage meter installation is complete.
- 2. Deduction meters shall measure in cubic feet with registration occurring in 100 cubic foot increments.
- 3. The location of the deduction meter and the deduction meter remote is subject to the review and approval of the Township.
- 4. Sewer billing deductions will be given in 750 Gallon increments. Deductions will be given for the current reading cycle.
- 5. A deduction meter used for the measurement of domestic water shall be installed on only one (1) branch water supply line. The branch shall supply water for exterior use only. Under no condition shall exclusion be given for interior domestic use.
- 6. Applications involving non-domestic use exclusion for commercial, industrial, and institutional water uses, which qualify for exclusion from wastewater treatment need to submit three (3) sets of complete facility plans. Such applicants shall pay a fee of \$30.00 per hour for facility inspection and plan review.

- 7. The exterior branch shall remain completely visible for convenient inspection. The branch can not be concealed in ceilings, walls or floors.
- 8. Three (3) detailed layout plans must be submitted to the Township illustrating the following:
  - A. The meter size and location.
  - B. The exterior water supply branch showing the proposed location of the branch in the structure and all exterior supplies and uses. For all non-domestic water supplies, the plans must show all water supplies and wastewater lines and their uses.
  - C. The location of the remote.
  - D. The proposed meter setter configuration.
  - E. All existing and proposed shut-off valves, bleed valves, blow-out ports, and back-flow devices on the exterior branch supply.
- 9. Meters shall be installed on an approved meter setter. approved shut-off valves shall be required adjacent to both the inlet and outlet of the meter so service may be shut off without undue inconvenience to the owner whenever the meter must be removed.
- 10. Blow-out ports (valves) for inground sprinkler systems shall be installed after the deduction meter on an isolated tee connection. A check valve prohibiting the back-flow of water through the blow-out port (valve) must also be installed. The blow-out port assemble shall be installed after the meter's outlet gate valve. Prior to pressurizing the line both the inlet and outlet meter ball valves must be closed.
- 11. Drain (spigot) for inground sprinkler systems shall be installed before the deduction meter and after the inlet meter ball valve on an isolated tee connection. A check valve prohibiting blow-out through the drain spigot shall be installed.
- 12. An inspection will be conducted by a Representative of the Bethlehem Township Sanitary Sewer Department after the installation of a deduction water meter. The Township Representative will completely inspect the entire exterior water supply branch. If the complete installation meets all requirements, the meter shall be sealed and the initial reading will be taken.
- 13. Meter readings shall be retrieved by a Township Representative on a quarterly basis.

- 14. The deduction meter and the exterior branch supply shall be inspected, and tested a minimum of every five years. Upon completion the inspector shall re-seal and record the meter reading.
- 15. The property owner shall allow a Township Representative to enter the structure during reasonable hours to inspect the deduction meter. Failure of the property owner to allow said inspection will result in the disallowance of any sewer billing deduction for water use during the period from the last deduction meter reading taken preceding the attempted inspection to the deduction meter reading taken following the date on which inspection is allowed.
- 16. If an inspection reveals a faulty diversion meter, no credit for that quarter shall be given, and the meter will not be resealed. Readings will not be taken again until the meter is repaired or replaced and has passed a Township inspection. At that time the meter will then be sealed and the new reading will be recorded.
- 17. Meters are intended for measuring potable, cold water in one direction only.
- 18. Meters are to be installed in a horizontal pipeline with the register facing up. The meter face must be readily assessable for interior reading. When connecting to a vertical supply, an approved vertical to horizontal meter setter is required.
- 19. To insure unrestricted flows of water through the meter, the proper size and types of gasket must be used. Meter connections shall be sufficiently tightened to seal. Pipe sealant, tape or putty is not permitted on the meter spud threads.

### INSTALLATION GUIDELINES

- 1. Meter is intended for measuring potable, cold water in one direction only.
- Meter is to be installed in a horizontal pipeline with the register facing upward and readily accessible for reading.
- Suitable shut-off valves should be installed adjacent to both the inlet and outlet of the
  meter so service may be shut off without undue inconvenience to the customer whenever
  the meter must be removed.
- Clean and flush the service line thoroughly on the inlet side of the meter before installing the meter.
- 5. Remove the spud thread protectors and set the meter with the arrow on the meter pointed toward the outlet (customer's side).
- 6. To insure unrestricted flow of water through the meter, use the proper size and type of gaskets. Connections should only be sufficiently tightened to seal; do not over-tighten. Do not use pipe sealant, tape or putty on the meter spud threads.
- 7. After the meter is installed, shut the *outlet* shut-off valve. Open the inlet shut-off valve slowly until the meter is full of water and there are no leaks.
- 8. Open the outlet valve *slowly* until air is out of the meter and service line. Open a valve downstream of the meter *slowly* and insure that no foreign debris in the water obstructs the operation of the meter.

CAUTION: Introducing water too quickly into the meter will damage the meter's internal components. The meter and service line must be free of air before operating the meter at normal flow rates.

9. Install an electrical grounding strap around the meter for maintenance safety while repairing or removing meter.

NOTE: For additional details, refer to the Water Meter Installation & Operating Instructions or the American Water Works Association (AWWA) Manual M6.

If the meter to be installed requires the installation of a remote, follow the applicable installation guide.

# SAMPLE DEDUCT METER

APPROVED SETTERS AND PARTS

### STANDARD DEDUCT METER CONFIGURATION INTO RESIDENTIAL PLUMBING SYSTEM ADDRESS:



