

Village of Millersport, Water Department Water Tap Permit Guidelines, Requirements and Specifications

APPENDIX B

WATER TAP PERMIT INFORMATION AND INSTRUCTIONS

Water Service Line Tapping Saddle and Inspection (may not apply to all)

Water Line Installation and Inspection

The Millersport Water Department requires an inspection by a representative of the Millersport Water Department. The inspection shall take place during the installation of the water service line. Testing shall take place upon the completion of the water service line. Inspections require a minimum of 48 hours notice to schedule the water line inspection.

Water service lines shall be snaked in the ditch at a minimum depth of 42 inches. The water service line shall be Driscopipe 5100 SDR 9, ASTM D2737 or equal. Non-seamed stainless steel insert stiffeners shall be used for all compression and packed joint fittings. No couplings are allowed between the service curb valve and the water meter. The water service line shall enter the residence on the front corner opposite of the garage. Water service lines are not permitted to enter into or through crawl spaces. It shall have a service side shut-off as well as a house side shut-off within 12 inches of the meter yoke or meter spud. The water service line shall be sleeved into the foundation by a Sch. 40 PVC 1 ½ times the outside diameter of the water service line and extending outside the foundation wall 3 foot from the outside of the basement wall. The water service line shall be sealed on both ends of the sleeve. The water service line shall be sleeved wherever it crosses a driveway or sidewalk. The water service line shall be fully visible and pressurized to the angle stop inside the structure during inspection.

An EPA approved backflow prevention device is required on all commercial services. Check with the Water Department at (740) 467-2374 for specific requirements and approved devices.

The water service box shall be a 2 ½ inches, size 94E, service box as manufactured by Bingham & Taylor, No.4901, or equal as shown on the Standard Drawing W-18. Installations of service boxes are not permitted in the driveway or sidewalk and shall be relocated without couplings. Service boxes are to be set vertical over the service curb valve so that a key can be placed on the service curb valve easily and fully opens and closes properly. Service boxes shall be marked with a 4 inch x 4 inch post by the builder or developer until final grade and inspection have occurred. If the Water Department personnel are called out to locate a buried curb box that has been covered due to

construction, there will be a service trip charge (each trip) of \$25.00 to locate the service box.

If any of these items are not completed at the time of the inspection there will be an additional service trip charge (each trip) of \$25.00 and for each subsequent inspection.

The meter yoke or meter spuds shall be installed by the builder. The water meter and remote meter reading unit and wiring shall be installed by the Water Department. Water meter installations require a minimum of 48 hours notice to schedule the water meter installation. If the water meter yoke or spuds are not completed at the time of the appointment there will be an additional service trip charge (each trip) of \$25.00 and for each subsequent appointment.

Upon the completion of the water meter installation, the water shall remain off until the Water Department has received official notification from the Village Office that the builder/owner has requested the water service to begin. Should the Water Department discover that a water meter bypass jumper and/or hose bib connection has been installed or used, and/or the water service turned on for any reason, a fine of \$500.00 will be charged to the builder/owner.

All repaired or replaced water service line installations shall be inspected by the Water Department prior to acceptance. Failure to request an inspection or to correct noted deficiencies prior to reuse of the water service may cause the service to be discontinued, and/or service line disconnected from the water system, and/or further penalties imposed. There will be an inspection charge of \$50.00 for this and each subsequent inspection.

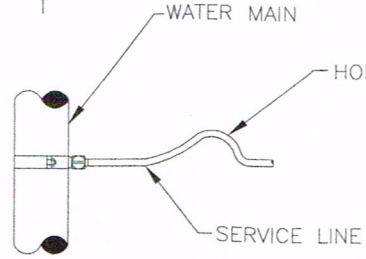
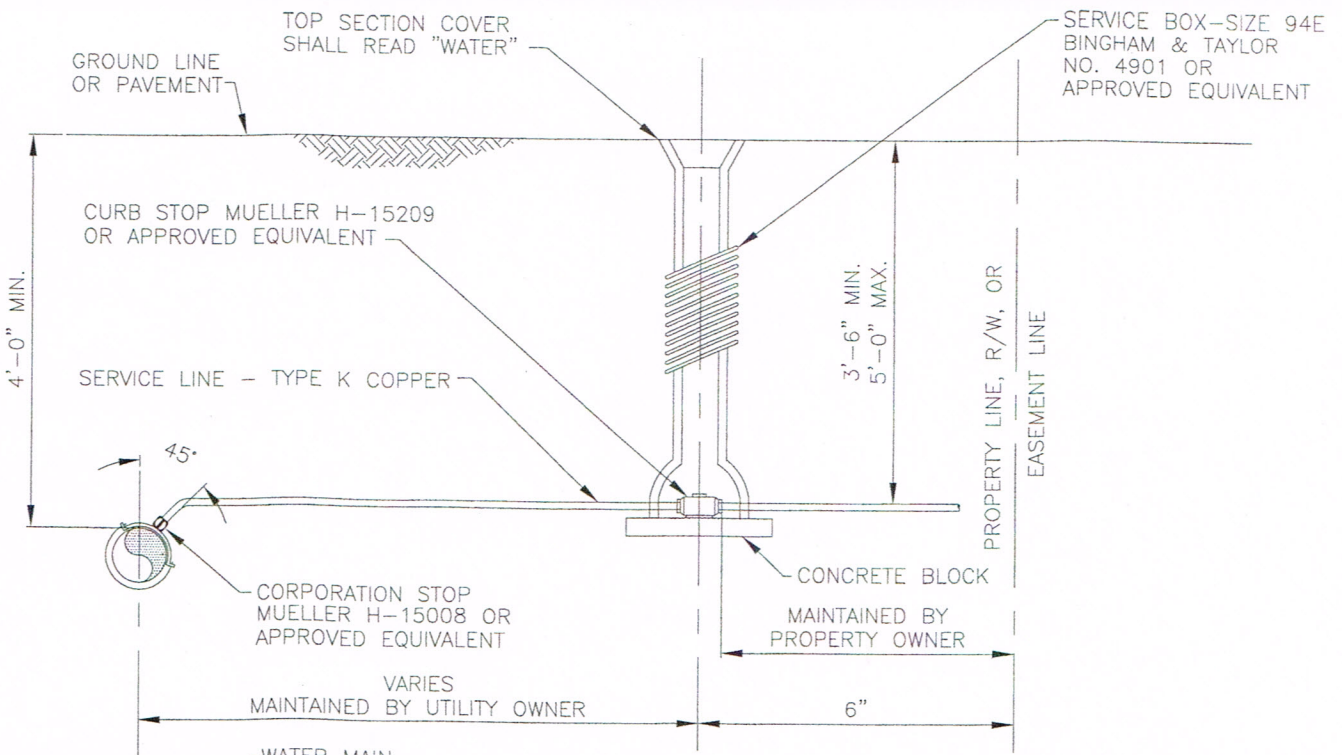
Use the following addresses and phone numbers to contact the Village Hall or Water Department:

Millersport Village Hall
P.O. Box 536
2245 Refugee Street
Millersport, OH 43046

Office Hours - Monday - Friday (9 am to 5 pm)
Phone Number - (740) 467-2333
Fax Number - (740) 467-2548
e-mail - office@millersportohio.com

Millersport Water Plant
2205 Refugee Street
Millersport, OH 43046

Office Hours - Monday - Friday (7 am to 3:30 pm)
Phone Number - (740) 467-2374
e-mail address - waterdept@millersportohio.com




SINGLE OR DOUBLE CLAMP SHALL:
 - PROVIDE FULL SUPPORT AROUND THE CIRCUMFERENCE OF THE PIPE.
 - HAVE SUFFICIENT BEARING AREA TO NOT DISTORT THE PIPE WHEN TIGHTENED.
 - NOT HAVE LUGS OR RIDGES WHICH MAY DIG INTO PIPE

NOTES:

1. THE WATER SERVICE LINE SHALL BE A SINGLE PIECE OF PIPE WITHOUT JOINTS, COUPLING OR UNIONS BETWEEN:
 - A. THE CORPORATION STOP AND CURB STOP
 - B. THE CURB STOP AND THE METER SETTING
2. THE WATER SERVICE LINE SHALL BE BEDDED USING TYPE A BACKFILL. SEE NOTES ON W-1 FOR DEFINITION OF TYPE A BACKFILL.
3. AT THE TIME BUILDING CONSTRUCTION, SITE GRADING AND LANDSCAPING IS COMPLETED, THE VALVE BOX OVER THE CURB STOP SHALL:
 - A. BE SET VERTICALLY OVER THE CURB STOP SO THAT A KEY CAN BE PLACED ON THE CURB STOP AND THE CURB STOP EASILY OPERATES TO THE FULLY OPEN AND CLOSED POSITIONS,
 - B. HAVE THE TOP SET AT THE FINISHED GRADE,
 - C. BE UNBROKEN.
4. ALL NEW WATER SERVICE INSTALLATIONS AND ALL REPAIRED OR REPLACED WATER SERVICE INSTALLATIONS SHALL BE INSPECTED PRIOR TO ACCEPTANCE OR TRANSFER OF OWNERSHIP. FAILURE TO REQUEST AN INSPECTION OR TO CORRECT THE NOTED DEFICIENCIES PRIOR TO OCCUPYING A BUILDING OR CHANGING OWNERSHIP MAY CAUSE THE SERVICE TO BE DISCONTINUED, THE SERVICE LINE TO BE DISCONNECTED FROM THE WATER SYSTEM, AND/OR PENALTIES TO BE IMPOSED, ALL AS PROVIDED IN THE CURRENT WATER REGULATIONS.
5. NO TAP SHALL BE MADE INTO ANY WATERLINE UNTIL ALL PERMITS HAVE BEEN OBTAINED, ALL LEGAL FEES PAID, AND THE PROPER DEPARTMENT NOTIFIED 2 DAYS PRIOR TO BEGINNING WORK.

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 154 MILL STREET - GAHANNA, OHIO 43220
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REGISTERED ENGINEER

STANDARD WATER SERVICE

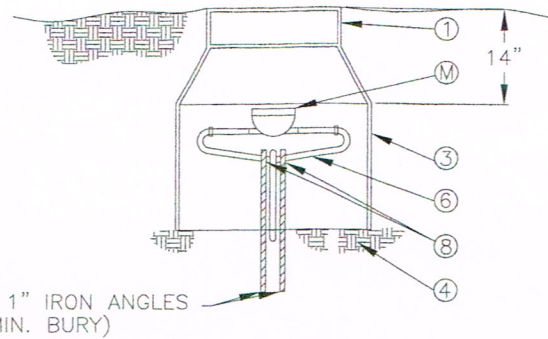
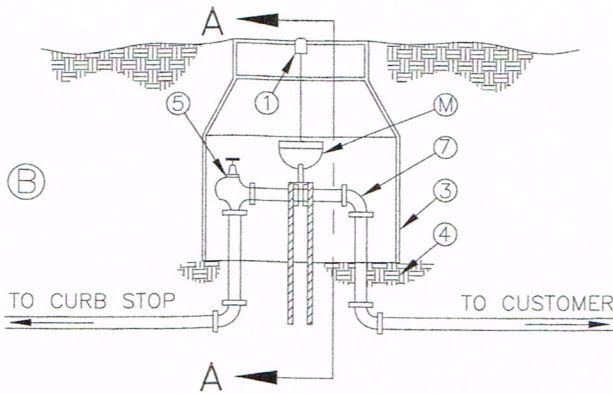
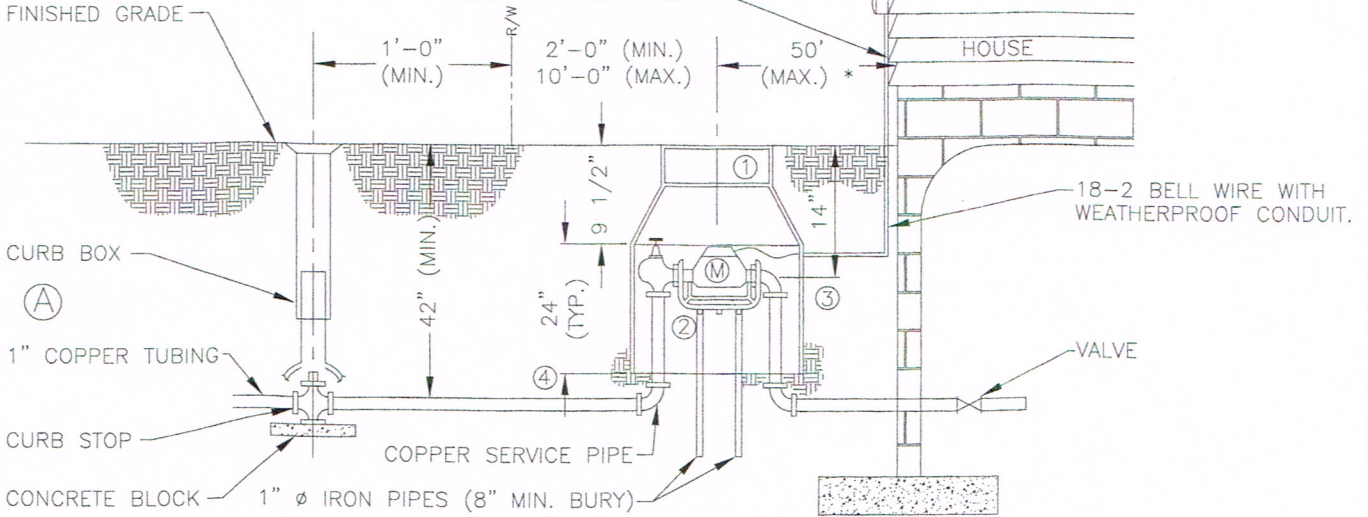
VILLAGE OF MILLERSPORT	
STANDARD CONSTRUCTION DWG.	
REVISED: 02/2006	DRAWING NO. W-18

NOTE:

- IF GREATER THAN 50', USE POST MOUNTED REMOTE WITH POST 3' TO 5' FROM METER PIT.

REMOTE DIAL SHALL BE PLACED 5'-0" ABOVE FINISHED GROUND.

CORROSION RESISTANT WALL CLAMPS AS DIRECTED.



SECTION A-A

NOTE:

REMOTE AND METER INSTALLATION SHALL BE INSPECTED AND APPROVED BY THE UTILITY OWNER. EXTERIOR METER REMOTE SHALL BE INSTALLED ON THE FRONT OF THE HOUSE FACING THE STREET OR WITHIN 1' OF A FRONT CORNER OF THE HOUSE.

- (A) ALTERNATE METER BOX INSTALLATION
- (B) ALTERNATE METER BOX INSTALLATION
- (M) 5/8", 3/4", OR 1" METER
- (1) FROSTPROOF, SINGLE-LID METER BOX COVER, FORD WABASH NO. W3 OR APPROVED EQUIVALENT.
- (2) METER INLET YOKE WITH COMPRESSION INLET VALVE, PACK JOINTS, & SUPPORT PRONGS; FORD NO. 501, 503, 504.
- (3) 20" I.D. VIKING ENVIRONMENTAL RIB BOX, 20" I.D. HANCOR PLASTIC METER BOX, OR APPROVED EQUIVALENT
- (4) BACKFILL COMPACTED PRIOR TO SETTING.
- (5) INLET VALVE, FORD INVERTED KEY VALVE, AVT-IW, OR APPROVED EQUIVALENT.
- (6) METER SETTING, FORD COPPERHORN WITH MALE SWIVELS, OR APPROVED EQUIVALENT.
- (7) 90° COUPLING, FEMALE FITTING x PACK JOINT, FORD L-14-33, OR APPROVED EQUIVALENT.
- (8) CLAMP METER INLET AND OUTLET PIPES TO IRON ANGLES. TO ALLOW CLEARANCE FOR METER, IRON ANGLES SHALL EXTEND NO MORE THAN 1" ABOVE THE PIPES.



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REGISTERED ENGINEER

TYPICAL METER BOX 5/8" TRU 1" METERS

VILLAGE OF MILLERSPORT

STANDARD
CONSTRUCTION DWG.

REVISED:
02/2006

DRAWING NO.
W-21.1

METER SIZE SELECTION

POSITIVE DISPLACEMENT METERS

5/8" METERS

DESIGNED TO BE CONNECTED TO 1/2" PIPE SERVICE AND BUILDING PIPING. THEY ARE MOSTLY USED FOR VERY SMALL HOMES AND BUSINESSES.

DEMAND FLOW RATE: 1/8 TO 20 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 10 gpm.

5/8" X 3/4" METERS

HAVE THE SAME INTERNAL MEASURING PARTS AS A 5/8" METER, BUT THE CONNECTIONS ARE SET UP FOR CONNECTION TO 3/4" SERVICE AND BUILDING PIPING. THE DEMAND FLOW RATE AND MAXIMUM RECOMMENDED CONTINUOUS USE RATE ARE ABOUT THE SAME AS A 5/8" METER.

3/4" METER

FOR LARGER RESIDENCES, APARTMENTS AND BUSINESSES. IN GENERAL THEY SHOULD BE CONSIDERED WHERE THE WATER SERVICE AND CONNECTING BUILDING PIPING IS 1" PIPE SIZE.

DEMAND FLOW RATE: 1/4 TO 30 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 15 gpm.

1" METER

GENERALLY USED FOR VERY LARGE HOMES, BUSINESSES SUCH AS BEAUTY PARLORS, MEDIUM-SIZE PUBLIC BUILDINGS, AND ANY BUILDINGS HAVING A FEW DIRECT-FLUSH TOILETS. THEY SHOULD ALSO BE CONSIDERED FOR CONNECTIONS THAT SERVE RELATIVELY LARGE LAWN SPRINKLER SYSTEMS.

DEMAND FLOW RATE: 3/8 TO 50 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 25 gpm.

1 1/2" METER

MEDIUM SIZED HOTELS AND MOTELS, APARTMENT BUILDINGS, LARGER PUBLIC BUILDINGS, SMALL INDUSTRIES.

DEMAND FLOW RATE: 5/8 TO 100 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 50 gpm.

2" METER

LARGE HOTELS, APARTMENT BUILDINGS, PUBLIC BUILDINGS, AND INDUSTRIAL BUILDINGS.

DEMAND FLOW RATE: 1 1/4 TO 160 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 80 gpm.

TURBINE METERS

2" METER

SMALL HOSPITALS, LARGE HOTELS AND APARTMENT COMPLEXES, PROCESSING PLANTS, IRRIGATION CONNECTIONS.
DEMAND FLOW RATE: 3 TO 300 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 1000 gpm.

3" METER

VERY LARGE HOTELS, LARGE INDUSTRIAL PLANTS, IRRIGATION.
DEMAND FLOW RATE: 4.3 TO 450 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 350 gpm.

4" METER

LARGE INDUSTRIAL AND PROCESSING PLANTS, IRRIGATION, LARGE INSTITUTIONS AND HOSPITALS, DISCHARGE FROM MEDIUM SIZE WATER WELLS.

DEMAND FLOW RATE: 25 TO 1000 gpm
MAXIMUM RECOMMENDED CONTINUOUS USE: 1000 gpm.

6" METER

LARGE INDUSTRIAL AND PROCESSING PLANTS, IRRIGATION, WELL PUMP DISCHARGE.

DEMAND FLOW RATE: 25 TO 2500 gpm.
MAXIMUM RECOMMENDED CONTINUOUS USE: 1000 gpm.

TYPES OF METERS USED FOR DOMESTIC METERING

POSITIVE DISPLACEMENT (PD) METERS MEASURE FLOW WITH A NUTATING DISC OR PISTON. THEY ARE QUITE ACCURATE OVER A WIDE RANGE OF FLOW, BUT ARE NOT INTENDED TO OPERATE AT HIGH RATES FOR AN EXTENDED PERIOD OF TIME. THEY ARE GENERALLY INSTALLED ON RESIDENTIAL WATER SERVICES AND OTHER APPLICATIONS WHERE THERE MAY BE FREQUENT LOW FLOW CONDITIONS.

NUTATING DISC METERS MUST BE USED ONLY ON COMPLETELY CLEAN WATER. ANY SUSPENDED MATTER IN THE WATER MAY DAMAGE OR STOP THE METER. PISTON METERS CAN GENERALLY BE OPERATED WITH LIMITED AMOUNTS OF SUSPENDED MATTER IN THE WATER.

ALTHOUGH PD METERS WILL OPERATE ON THEIR SIDE OR IN A VERTICAL POSITION, THEY WILL WEAR MORE QUICKLY, SO METER MANUFACTURERS RECOMMEND THAT THEY ONLY BE INSTALLED IN A HORIZONTAL POSITION.

TURBINE (TUR) METERS ARE SPECIFIED WHERE LOW FLOW IS OF LITTLE CONCERN AND HIGHER VOLUMES OF WATER ARE USED. THEY HAVE A HIGHER CAPACITY THAN PD METERS OF THE SAME SIZE, AND CAN PASS REASONABLE AMOUNTS OF SAND AND SEDIMENT WITHOUT DAMAGE.

FOR OPTIMUM ACCURACY, TURBINE METERS MUST BE INSTALLED HORIZONTALLY AND THERE MUST BE STRAIGHT PIPE EQUAL TO 5 PIPE DIAMETERS AHEAD OF THE METER AND 2 TIMES THE DIAMETER AFTER THE METER.

COMPOUND METERS ARE REALLY TWO METERS IN ONE UNIT. A SMALL PD METER MEASURES LOW FLOWS, AND AN AUTOMATIC VALVE SWITCHES THE FLOW TO A TURBINE METER FOR HIGH FLOW RATES.



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TYPICAL METER BOX 5/8" TRU 1" METERS

VILLAGE OF MILLERSPORT

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SMALL METER DIMENSIONS AND INSTALLATION

METERS IN SIZES FROM $\frac{5}{8}$ " TO 1" HAVE MALE THREAD ENDS, THE LAYING LENGTH OF THE METER AND THE THREAD SIZES ARE SHOWN BELOW:

METER DIMENSIONS

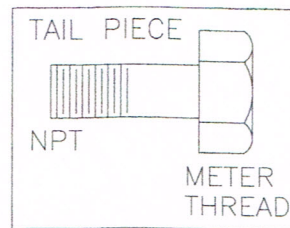
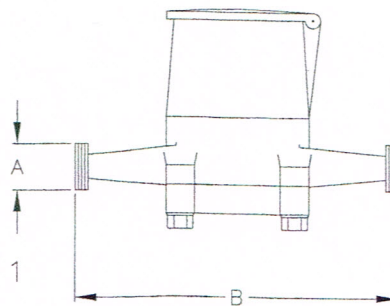
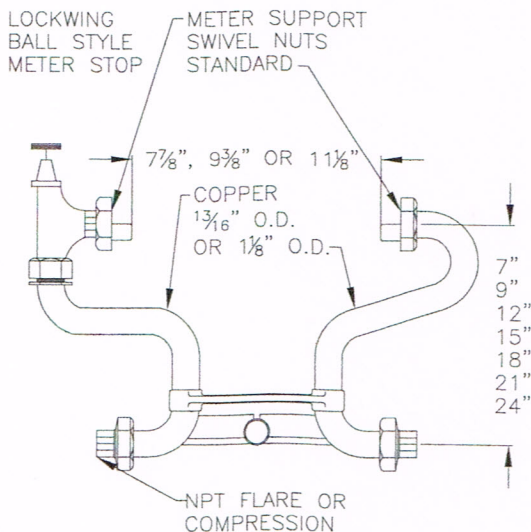
METER SIZE	$\frac{5}{8}$	$\frac{5}{8}$ X $\frac{3}{4}$	$\frac{3}{4}$ SL	$\frac{3}{4}$	
A-METER THREADS	$\frac{3}{4}$ "	1"	1"	1"	$1\frac{1}{4}$ "
B-LAYING LENGTH	$7\frac{1}{2}$ "	$7\frac{1}{2}$ "	$7\frac{1}{2}$ "	9"	$10\frac{3}{4}$ "

SMALL METERS ARE MOST OFTEN INSTALLED USING METER COUPLINGS. THE DIMENSIONS OF STANDARD, STRAIGHT METER COUPLINGS ARE SHOWN BELOW:

METER SIZE	$\frac{5}{8}$	$\frac{5}{8}$ X $\frac{3}{4}$	$\frac{3}{4}$	1	
SWIVEL NUT SIZE	$\frac{3}{4}$ "	1"	1"	$1\frac{1}{4}$ "	
TAILPIECE THREAD SIZE (NPT)	$\frac{1}{2}$ "	$\frac{3}{4}$ "	$\frac{3}{4}$ "	1"	
TAILPIECE LENGTH	$2\frac{3}{8}$ "	$2\frac{1}{2}$ "	$2\frac{1}{2}$ "	$2\frac{5}{8}$ "	

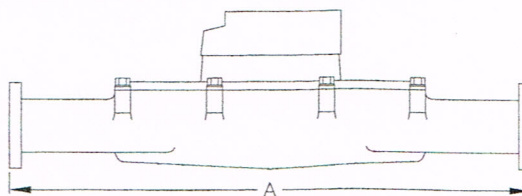
SMALL METERS MAY ALSO BE INSTALLED USING A "METER SETTER". ONE TYPICAL TYPE IS SHOWN BELOW:

AVAILABLE WITH A WIDE VARIETY OF END CONNECTIONS FOR PIPE AND TUBING.



LARGE METER DIMENSIONS AND INSTALLATION

MOST $1\frac{1}{2}$ " AND 2" PD METERS COME WITH FLANGED ENDS, BUT THEY ARE ALSO AVAILABLE WITH FEMALE PIPE THREAD ENDS OF THE SAME SIZE AS THE METER DESIGNATION.



LAYING LENGTH OF SMALL FLANGED METERS:


SIZE	LAYING LENGTH (A)
$1\frac{1}{2}$ " PD	13"
2" PD	17"
2" TUR	10"

METER REGISTRATION

METERS ARE AVAILABLE WITH REGISTERS THAT READ IN EITHER GALLONS OR CUBIC FEET. IN GENERAL, THE TYPE TO USE SHOULD BE THE SAME AS EXISTING METERS IN THE SAME WATER SYSTEM. IF THERE IS NO PRECEDENT, IT IS USUALLY BEST TO SELECT METERS IN GALLONS.

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TYPICAL METER BOX

5/8" TRU 1" METERS

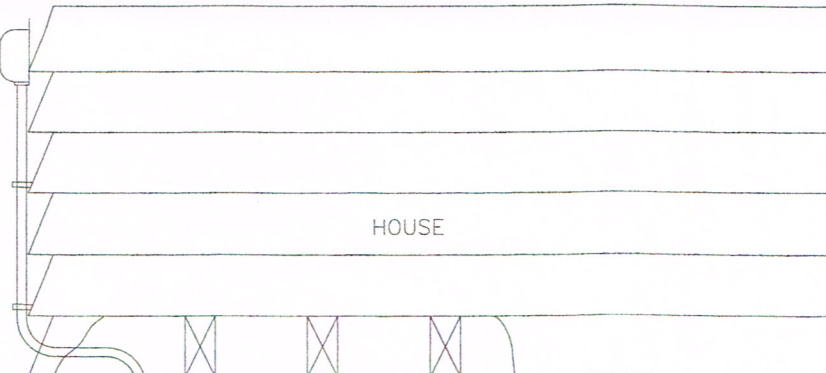
VILLAGE OF MILLERSPORT

STANDARD CONSTRUCTION DWG.

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EXTERIOR WATER METER REGISTER SEE W-23

NOTE: ABB METER AND REMOTE READER TO BE PURCHASED FROM MUNICIPALITY



WATER SERVICE LINE, 3/4" SHOWN, TO UTILITY CURB STOP, TO BE INSPECTED PRIOR TO BACKFILLING

48" COVER (MIN.)

3'-0" (MAX.)

SEAL

METER CONECTOR FITTINGS (SEE DETAIL)

3/4" COUPLING OR ADAPTER

3/4" COUPLING OR ADAPTER

GATE VALVE

3/4" STOP (OR ANGLE STOP) VALVE AND WASTE DRAIN (THREADED ENDS)

7 1/2" FOR 5/8" X 3/4" METER

1" FEMALE COUPLING NUT

2 5/8"

1" PIPE THREADS

3/4" PIPE THREADS

NOTES

1. COMPLETE REGISTER INSTALLATION SHALL BE INSPECTED AND APPROVED BY THE DISTRICT.
2. NO METER BYPASSES ARE PERMITTED.

METER CONECTOR FITTINGS (5/8" X 3/4" METER)



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REGISTERED ENGINEER

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TYPICAL WATER METER (BASEMENT INSTALLATION)

VILLAGE OF MILLERSPORT

STANDARD CONSTRUCTION DWG.

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DRAWING NO. W-22

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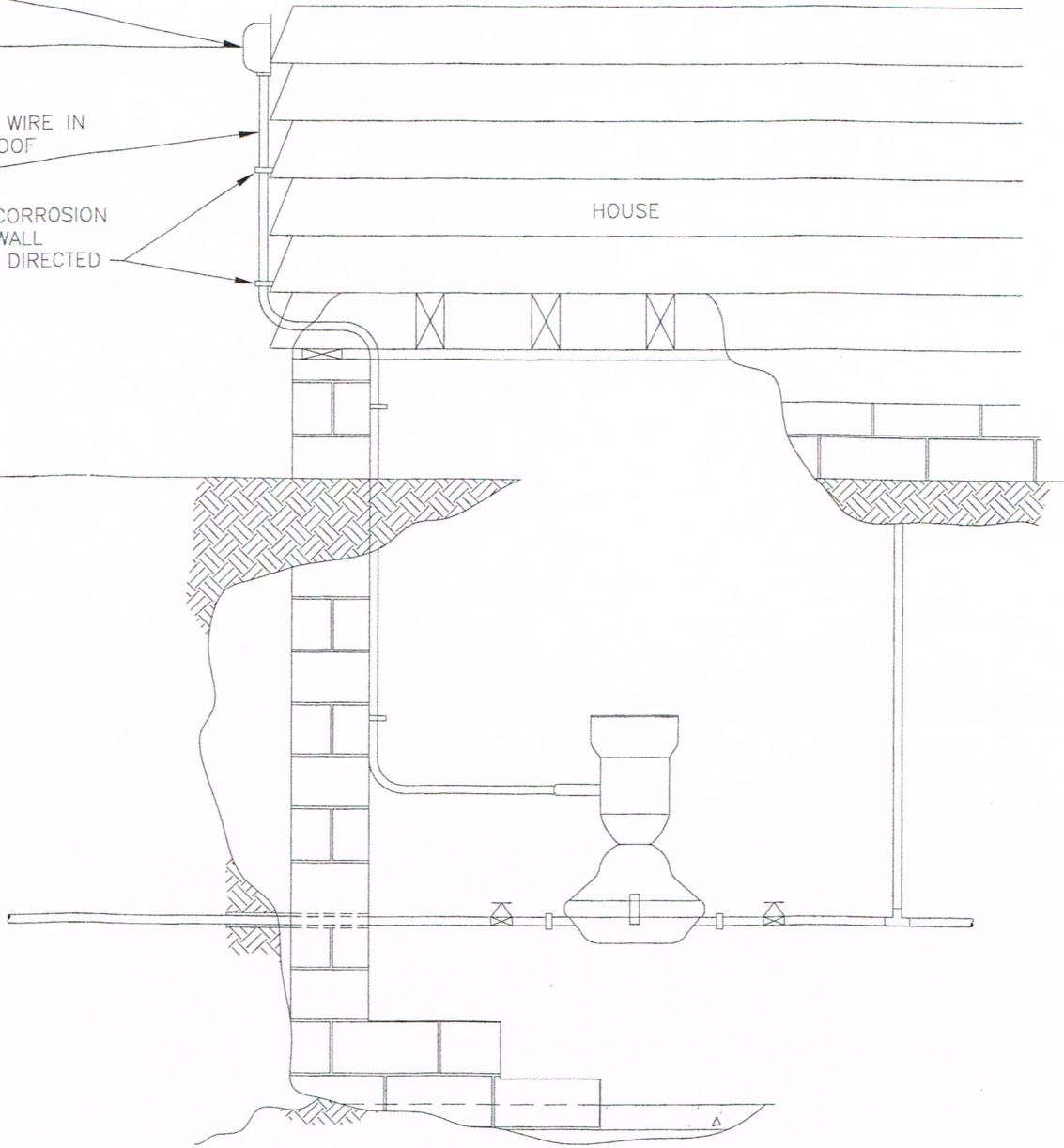
☉ DIAL TO BE 5'
ABOVE FINISHED
GRADE

18-2 BELL WIRE IN
WEATHERPROOF
CONDUIT

STANDARD CORROSION
RESISTANT WALL
CLAMPS AS DIRECTED

54" - 72"

HOUSE



NOTES

1. COMPLETE REGISTER INSTALLATION SHALL BE INSPECTED AND APPROVED BY THE UTILITY OWNER.
2. EXTERIOR METER SHALL BE INSTALLED ON THE FRONT OF THE HOUSE FACING THE STREET OR WITHIN 1'-0" OF A CORNER FACING THE STREET.
3. ALL CONDUIT AND PIPING SHALL BE PROPERLY SUPPORTED.



ENGINEERS

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REGISTERED ENGINEER

EXTERIOR WATER METER REGISTER (BASEMENT METER)

VILLAGE OF MILLERSPORT

STANDARD
CONSTRUCTION DWG.

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02/2006

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W-23

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