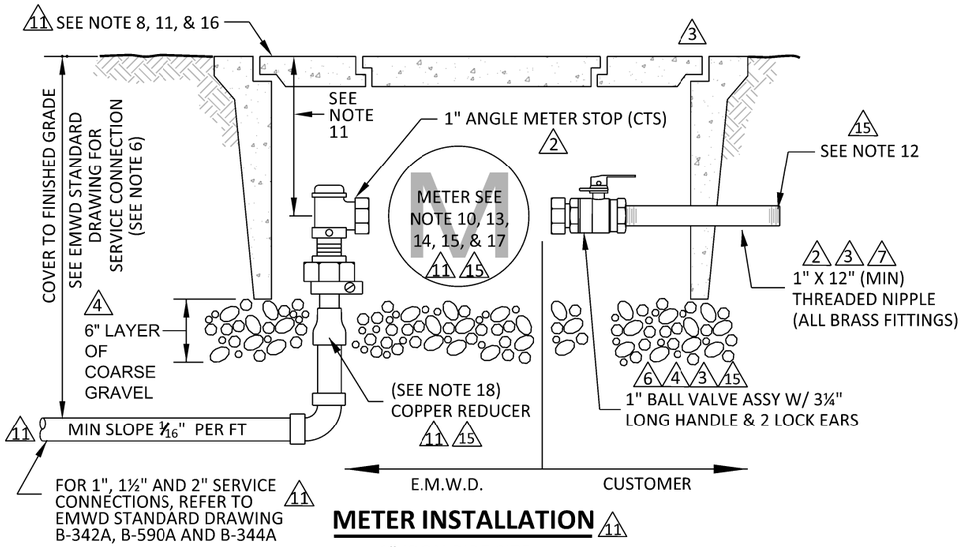
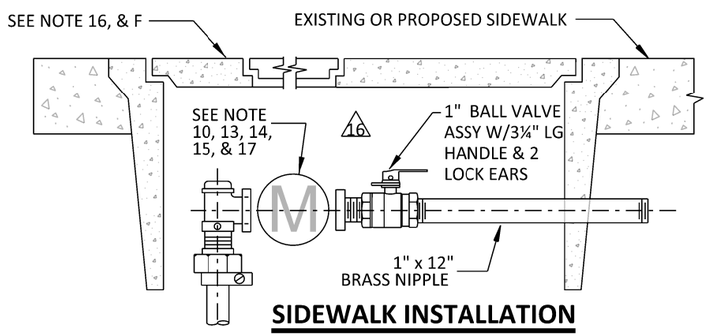


METER INSTALLATION 11

1" IRON PIPE SIZE
NOT TO SCALE

FLOW RATE TABLE 11 14 15

LATERAL SIZE	METER SIZE	FLOW RATE (GPM)	VELOCITY (ft/s)	APPLICATION	METER LENGTH
1" COPPER	1" MULTIJET	30	12.38	SINGLE FAMILY RESIDENTIAL UNITS	10¾"
1½" COPPER	1" MULTIJET	30	5.60	COMMERCIAL, INDUSTRIAL, & LANDSCAPE	10¾"



SIDEWALK INSTALLATION

NOT TO SCALE

NOTES: 2 9 11 13 15

1. ALL FITTINGS AND PIPING FROM THE ANGLE STOP VALVE TO THE BALL VALVE NIPPLE SHALL :
   A. BE MADE OF BRASS OR BRONZE;
   B. BE OF THE BANDED PATTERN;
   C. BE DESIGNED FOR A MIN OF 175 PSI (COLD) WATER WORKING PRESSURE.
   D. BE LEAD FREE.
2. PRESSURE TEST PER EMWD SPECIFICATIONS.
3. ALL BARE IRON AND STEEL SHALL BE COATED WITH CEMENT MORTAR AS PER THE FIELD ENGINEER.
4. ALTERNATE MATERIALS MAY BE USED UPON APPROVAL BY THE ENGINEER.
5. CORPORATION STOP, FITTINGS, AND SERVICE LINE WITHIN 3 FEET OF SADDLE SHALL BE PRIMED AND WRAPPED WITH APPROVED COAL-TAR RESIN TAPE.
6. ALL SERVICE PIPE AND TUBING SHALL BE LAID ON A POSITIVE SLOPE UP FROM THE WATER MAIN TO THE METER. NO DIPS OR POCKETS IN THE LINE WILL BE PERMITTED. 36" COVER SHALL BE AT GAS MAIN CROSSINGS.
7. THREAD NOTATION SHOWN THUS:
   IP = IRON PIPE THREAD;
   CS = CORPORATION STOP (MUELLER) THREAD;
   CT = COPPER SERVICE THREAD.
8. METER BOX SHALL BE EMWD APPROVED 13" x 24" COMPLETE WITH TWO PIECE COVER, LID, AND ONE (1) - 7" EXTENSION WITH KNOCKOUTS AND AMR/AMI ANTENNAPORT (SEE NOTE F FOR SIDEWALK INSTALLATION).
9. VALVE BOX SHALL BE EMWD APPROVED 12" DIA x 10" DEEP, COMPLETE WITH COVER.
10. WHEN METER IS FURNISHED BY OTHERS, USE 1" PVC NIPPLE CONSISTING OF (2) 1" MIP x S ADAPTER CL200. LOCK ANGLE METER STOP CLOSED WITH LEAD SEAL AND THREE-STRAND SEALING WIRE. REFER TO FLOW RATE TABLE FOR NIPPLE LENGTH.
11. METER PORT HOLES CENTER TO BE INSTALLED 10" BELOW TOP OF METER BOX.
12. SERVICES THAT REQUIRE BACKFLOW PROTECTION PER EMWD'S ADMIN CODE, SHALL BE PER B-597.
13. SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS. (SEE B-342A)
14. FOR SINGLE FAMILY RESIDENTIAL UNITS, ENGINEER TO VERIFY THE ADEQUACY OF THE SERVICE LATERAL SIZE TO ALLOW FOR OPERATION OF RESIDENTIAL FIRE SPRINKLER SYSTEM. FOR COMMERCIAL AND INDUSTRIAL APPLICATIONS, SERVICE LATERAL SIZE WILL BE BASED ON VELOCITIES BEING UNDER 10 FT/S.
15. SEE MANUFACTURER'S SPECIFICATIONS FOR METER INSTALLATION.
16. CONTRACTOR SHALL RETURN AFTER ROAD SHOULDER OR PARKWAY IS COMPLETE TO INSTALL METER BOX, AND SHALL BE RESPONSIBLE FOR COORDINATING WORK OF OTHER CONTRACTORS FOR SAFEGUARDING SERVICES UNTIL METER BOXES ARE SET.
17. JUMPER ASSEMBLY USED FOR THE CONSTRUCTION OF THE METER SERVICE SHALL BE MADE OF SCHEDULE 80 PVC AND HAVE ALL PVC FITTINGS SOLVENT WELDED MEET METER MANUFACTURES SPECIFICATIONS FOR METER INSTALLATION JUMPER TO BE PAINTED BLUE (POTABLE JUMPERS ARE NOT TO BE USED FOR RECYCLED WATER)
18. FOR 1" METER INSTALLATION, USE A 1½" X 1" OR 2" X 1" COPPER SWEAT REDUCER WITH A 1" METER ANGLE STOP. COPPER SERVICE LATERAL TO BE REDUCED TO 1" COPPER AFTER THE 90° TRANSITION.

PLACEMENT OF METER BOX

A. PLACE FRONT EDGE OF METER BOX 6" MAX BEHIND EXISTING OR PROPOSED 6' OR 8' SIDEWALKS.
B. WHEN PROPOSED OR EXISTING SIDEWALK IS 12' WIDE PLACE FRONT EDGE OF METER BOX 1.5' MAX BEHIND CURB USING APPROPRIATE METER BOX.
C. WHEN NO SIDEWALKS IS PROPOSED PLACE FRONT EDGE OF METER BOX 6.5' BEHIND CURB FACE.
D. WHEN NO CURBS ARE EXISTING OR TO BEING INSTALLED UPON COMPLETION OF THE WATER SYSTEM PLACE BACK EDGE OF METER BOX ON PROPERY LINE.
10 E. ADJOINING LOT METER BOXES SHALL BE PLACED TOGETHER AT PROPERTY LINE.
11 F. WHEN INSTALLED IN CONCRETE (SIDEWALK) USE EMWD APPROVED 17" x 30" METER BOX COMPLETE WITH COVER AND LID.
15 G. A MINIMUM 5' SEPARATION IS TO BE MAINTAINED BETWEEN THE SEWER LATERAL, WATER SERVICE AND RECYCLED WATER SERVICE.

REVISIONS					
NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE
15	4/6/22	GS	REVISED NOTES, METER DATA TABLE, REMOVED CONDUIT DETAIL, ADDED 1½" X 1" COPPER REDUCER	AGA	7/21/17
14	7/21/17	GS	REVISED METER DATA TABLE METER LENGTHS	AGA	7/21/17
13	12/9/16	GS	REVISED NOTE 3, 6, AMD LOGO	AGA	12/12/16
12	5/15/15	GS	REVISED METER DATA TABLE	AGA	5/15/15

REFERENCES: (SUPERCEDES B-341) ORIG DRAWN 3/85
FILE I.D.:
SCALE: NONE
DRAWN BY: KER

APPROVALS	INITIAL	DATE
DESIGN		
CONSTRUCTION		
INSPECTION		
OPERATIONS	ML	10/19/95
SUBMITTED	VJB	9/21/95

RECOMMENDED Joseph D. VanSickle 10/19/95
DIRECTOR OF ENGINEERING DATE

emwd EASTERN MUNICIPAL WATER DISTRICT

EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING

1" METER INSTALLATION 11

APPROVED G. Hoite Rugge 10/20/95
CHIEF ENGINEER DATE

B-591

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