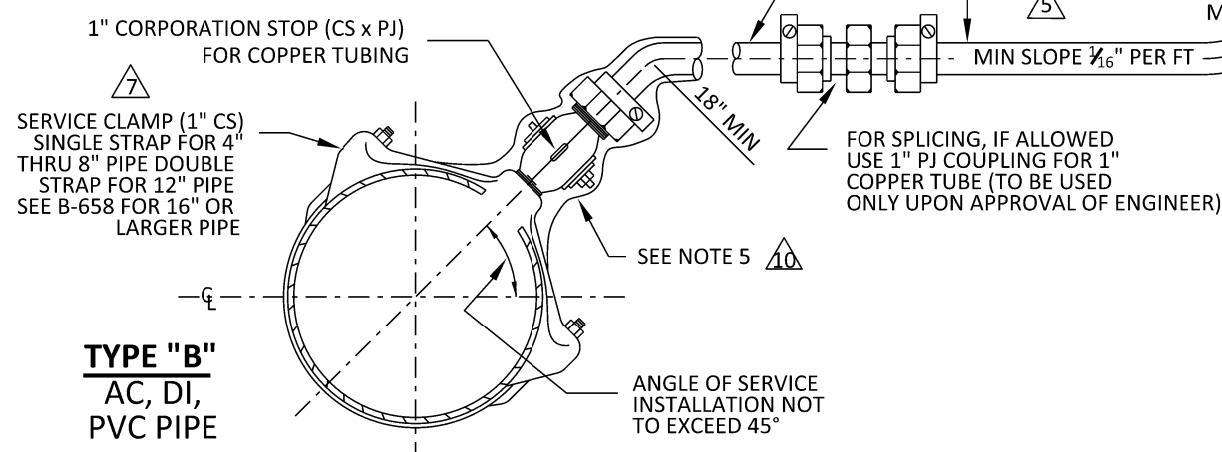
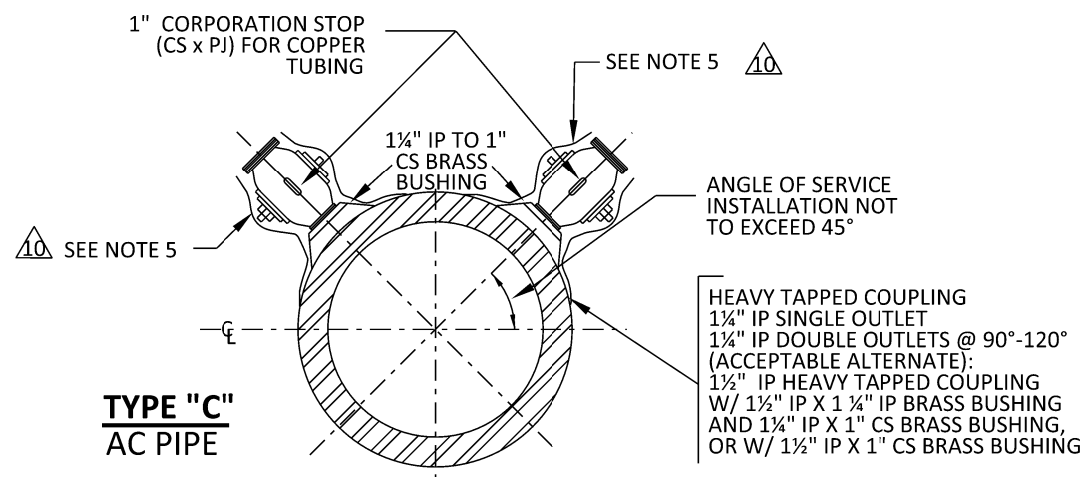


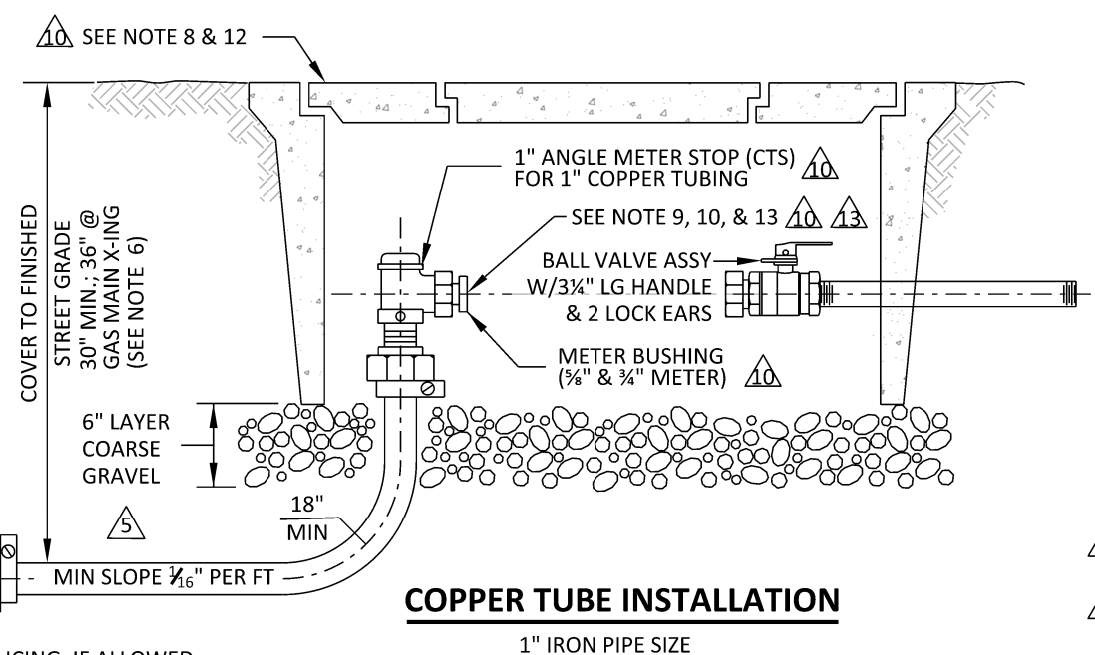
**TYPE "A"**  
STEEL PIPE



**TYPE "B"**  
AC, DI,  
PVC PIPE



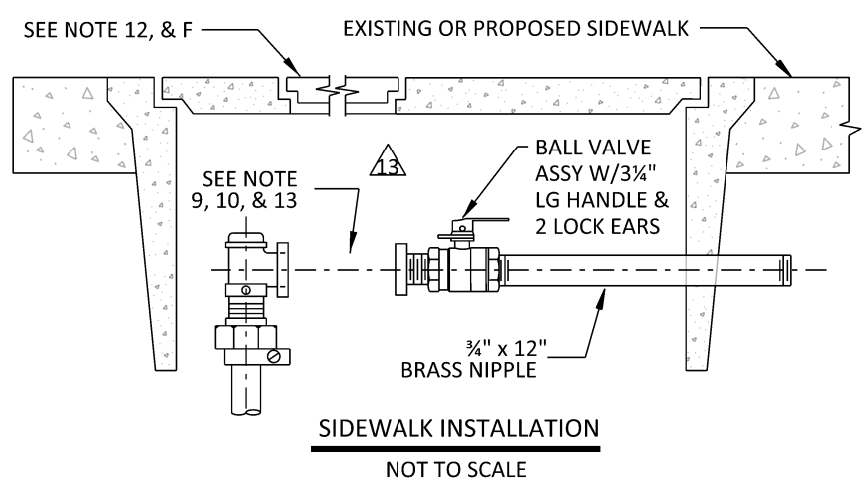
**TYPE "C"**  
AC PIPE



**COPPER TUBE INSTALLATION**  
1" IRON PIPE SIZE

**FLOW RATE TABLE**

METER SIZE	FLOW RATE (GPM)	EMWD STD DWG	LATERAL SIZE	VELOCITY (FT/S)	METER LENGTH
5/8" MULTI-JET	15	B-590	1"	6.19	7 1/2"
3/4" MULTI-JET	20	B-590	1"	8.25	7 1/2"
1" MULTI-JET	30	B-591	1"	SEE NOTE 11	10 3/4"



**SIDEWALK INSTALLATION**  
NOT TO SCALE

**NOTES:**

1. ALL FITTINGS INCLUDING, BUT NOT LIMITED TO, THE CORPORATION STOP AND ANGLE STOP VALVE 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.
2. PRESSURE TEST PER EMWD SPECIFICATIONS.
3. ALL BARE IRON STEEL SHALL BE COATED WITH CEMENT MORTAR PER EMWD SPECIFICATIONS.
4. ALL LISTED MATERIALS TO BE PER EMWD APPROVED MATERIAL LIST.
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 ;
  - PJ = PACK JOINT
8. METER BOX SHALL BE EMWD APPROVED COMPLETE WITH TWO-PEICE COVER AND LID WITH AMR/AMI ANTENNA PORT PER METER STANDARD DRAWING.
9. SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS.
10. 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 SIZES WILL BE BASED ON VELOCITIES BEING UNDER 10 FTS.
12. 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.
13. 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 )
14. SERVICES THAT REQUIRE BACKFLOW PROTECTION PER EMWD'S ADMIN CODE, SHALL BE PER B-597.

**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 PROPERTY LINE.
- E. ADJOINING LOT METER BOXES SHALL BE PLACED TOGETHER AT PROPERTY LINE.
- F. WHEN INSTALLED IN CONCRETE (SIDEWALK) USE EMWD APPROVED 17" x 30" METER BOX COMPLETE WITH COVER AND LID.
- G. A MINIMUM 5' SEPARATION IS TO BE MAINTAINED BETWEEN THE SEWER LATERAL, WATER SERVICE AND RECYCLED WATER SERVICE.

REVISIONS				APPROVALS			
NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE	INITIAL	DATE
13	4/6/22	GS	REVISED FLOW RATE TABLE, NOTES, LOGO, TEXT, ADDED	AGA	4/6/22	DESIGN	
			SIDEWALK INSTALLATION, BALL VALVE, CALLOUTS, AND REMOVED CONDUIT DETAIL			CONSTRUCTION	
						INSPECTION	
12/9/16	GS	REVISED NOTE 6 AND LOGO	AGA	12/12/16	ML	10/19/95	
5/15/15	GS	REVISED METER DATA TABLE	AGA	5/15/15	VJB	9/21/95	

REFERENCES: SCALE: NONE  
 FILE I.D.: DRAWN BY: KER

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



EASTERN MUNICIPAL WATER DISTRICT  
**STANDARD DRAWING**

1" COPPER SERVICE CONNECTION

APPROVED *G. Hooite Rugge* 10/20/95  
 CHIEF ENGINEER DATE

**B-590A**