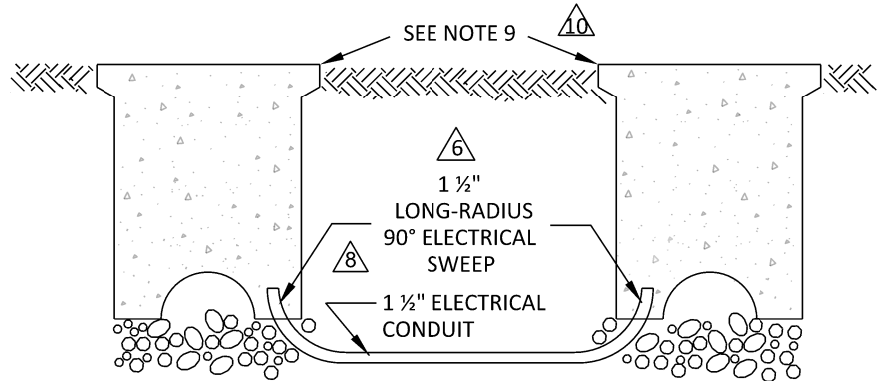


COPPER TUBE INSTALLATION
1" IRON PIPE SIZE

FLOW RATE TABLE

FUTURE 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 1/2"	SEE NOTE 11	10 3/4"



GENERAL NOTES

1. ALL FITTINGS BETWEEN AND INCLUDING THE CORPORATION STOP AND GATE 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-PIECE COVER AND LID WITH AMR/AMI ANTENNA PORT PER METER STANDARD DRAWING.
9. INSTALL 1/2" PVC SCH. 40 ELECTRICAL CONDUIT BETWEEN ALL METER BOXES & STUBBED INSIDE, THAT ARE LOCATED NEAR PL WITHIN 10' OF EACH OTHER. TAPE END OF SWEEPS PREVENTING DEBRIS FROM ENTERING CONDUIT.
10. SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS.
11. 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.

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 6" BEHIND CURB USING APPROPRIATE METER BOX (SEE NOTE 9).
- C. WHEN NO SIDEWALK IS PROPOSED PLACE FRONT EDGE OF METER BOX 6.5' BEHIND CURB FACE.
- D. UPON COMPLETION OF THE WATER SYSTEM, WHEN NO CURBS ARE EXISTING NOR WILL BE INSTALLED, PLACE BACK EDGE OF METER BOX ON PROPERTY LINE.
- D. UPON COMPLETION OF THE WATER SYSTEM, WHEN NO CURBS ARE EXISTING
- E. A MINIMUM 5' SEPARATION IS TO BE BETWEEN SEWER LATERAL AND WATER SERVICE.
- F. WHEN INSTALLED IN CONCRETE (SIDEWALK) SEE METER STANDARD DRAWING FOR METER BOX INSTALLATION SPECIFICATIONS.

REVISIONS				APPROVALS			
NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE	INITIAL	DATE
12	12/9/16	GS	REVISED NOTE 6 AND LOGO	AGA	12/21/16		
11	5/15/15	GS	REVISED METER DATA TABLE	AGA	5/15/15		
10	4/1/14	GS	ADDED NOTE F, 12, CORRECTED FONT, ADDED NOTE REFERENCE	AGA	10/23/14		
9	7/19/13	GS	ADDED NOTE 11, 12, FLOW RATE TABLE, AND REVISED NAME	AGA	7/19/13	ML	10/19/95
8	4-19-12	GS	ADDED ELECTRICAL CONDUIT	SMM	4/20/12	VJB	9/21/95



**EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING**

1" COPPER SERVICE CONNECTION

REFERENCES:	SCALE: NONE	RECOMMENDED	Joseph D. Van Sickle	10/19/95
FILE I.D.: \kauai\eng\std dwgs\B-590A.dgn	DRAWN BY: KER	DIRECTOR OF ENGINEERING	DATE	DATE

APPROVED	G. Hooite Rugge	10/20/95	B-590A
CHIEF ENGINEER	DATE	DATE	