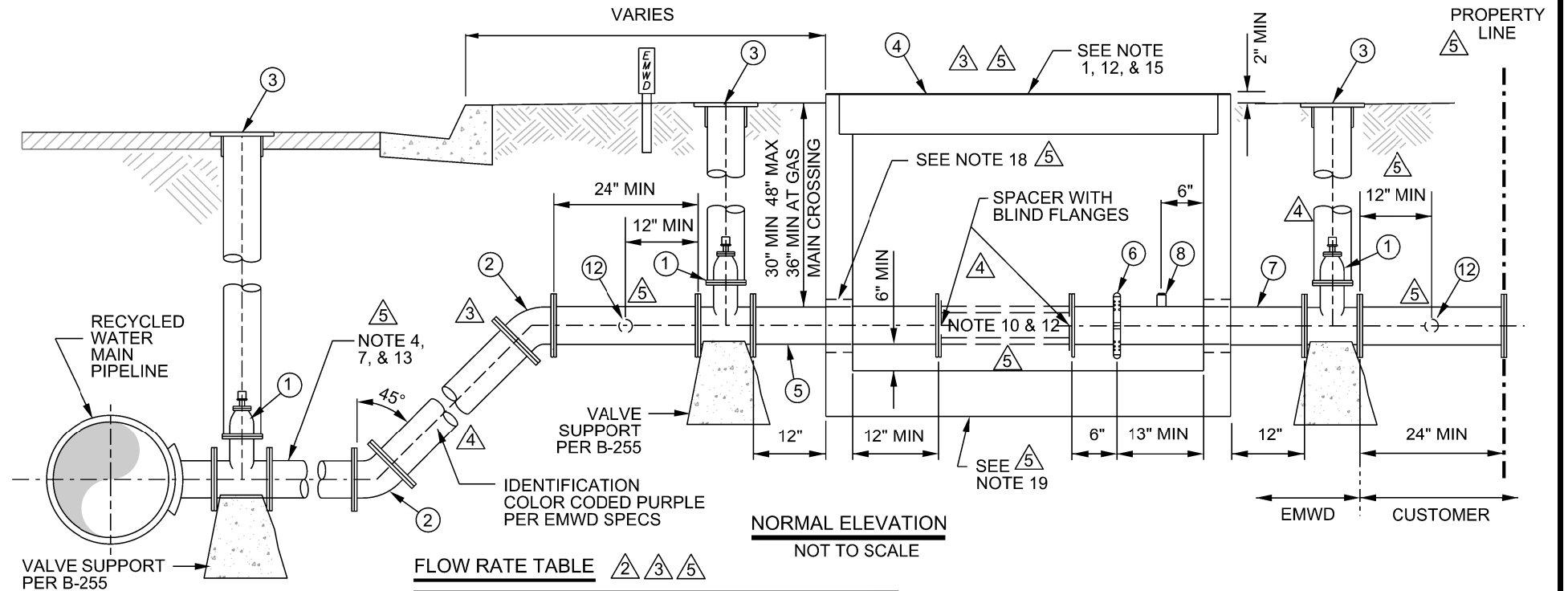


**NOTES** 2 3 4 5

- RISER CAP, METER BOX/VAULT, AND LIDS TO BE PAINTED PURPLE PER EMWD SPECIFICATIONS.
- ALL 2" PIPE AND FITTINGS SHALL:
  - BE MADE OF BRASS OR BRONZE;
  - BE OF THE BANDED PATTERN;
  - BE DESIGNED FOR A MIN OF 175 PSI (COLD) WATER WORKING PRESSURE.
- PRESSURE TEST PER EMWD SPECIFICATIONS.
- ALL BARE IRON AND STEEL SHALL BE COATED WITH CEMENT MORTAR AS PER THE FIELD ENGINEER.
- VALVES AND OTHER APPURTENANCES AND FITTINGS AT THE PIPELINE SHALL BE PRIMED, AND WRAPPED WITH PROTECTO-WRAP NO. 200 OR 300 TAR RESIN TAPE. BOLTS AND NUTS SHALL BE PROTECTED USING ZINC CAPS ANODES IN ACCORDANCE WITH SECTION 15089.
- SERVICE LATERAL HORIZ & VERT ALIGNMENT MUST MEET DHS SEPARATION REQUIREMENTS. ALL PIPING AND RELATED COMPONENTS SHALL BE IDENTIFIED FOR RECYCLED WATER USE PER DEPARTMENT OF HEALTH REQUIREMENTS AND EMWD SPECIFICATIONS. WARNING TAPE AND LOCATOR WIRE PER EMWD SPECIFICATIONS.
- 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.
- THREAD NOTATION THUS:
  - IP = IRON PIPE THREAD;
  - CS = CORPORATION STOP (MUELLER) THREAD;
  - PJ = PACK JOINT
  - CTS = COPPER TUBE SIZE
  - CTS A.S. = COPPER TUBE SIZE ANGLE STOP
- VALVE BOX SHALL BE EMWD APPROVED 8" DIA x 10" DEEP, COMPLETE WITH COVER AND ONE (1) - 6" EXTENSION.
- SPACER ASSEMBLY SHALL NOT HAVE THE ABILITY TO CONVEY FLUIDS, SHALL BE AFIXED AND NON - ADJUSTABLE. (NO SPOOLS ALLOWED) SPACER ASSEMBLY LENGTH PER METER MANUFACTURES SPECIFICATION.
- WHEN METER IS FURNISHED BY OTHERS, ANGLE METER STOP SHALL BE LOCKED CLOSED WITH LEAD SEAL AND THREE-STRAND SEALING WIRE.
- METER DIMENSIONS MAY VARY, METER INSTALLATION SHALL BE PER METER MANUFACTURER SPECIFICATIONS AND EMWD STANDARDS AND SPECIFICATIONS. USE APPLICABLE EMWD METER STANDARD DRAWING FOR METER AND METER BOX/VAULT INSTALLATION.
- ALL MATERIALS SHALL BE PER EMWD APPROVED MATERIALS LIST.
- RESTRAIN OR WELD ALL JOINTS PER EMWD SPECIFICATIONS.
- METER BOX/VAULT TO BE INSTALLED DURING CONSTRUCTION OF WATER SERVICE/MAINLINE CONSTRUCTION.
- TEST PORT (COUPLING & PLUG) SHALL BE 2" (IP) FOR 6" & SMALLER METERS, 4" (IP) FOR 8" METER, & 6" (IP) FOR 12" & LARGER METERS
- DEPTH OF METER SHALL BE 5 FT. MAX. FROM VAULT LID TO TOP OF METER.
- PROVIDE A MINIMUM 4" CLEARANCE BETWEEN PIPE AND KNOCKOUT HOLE WITH A MINIMUM OF 6" CLEARANCE ABOVE THE VAULT FLOOR.
- BASE IS INCLUDED WITH VAULT.
- READ HOLES ARE TO BE POSITIONED OVER METER REGISTER PER B-976.
- SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS.

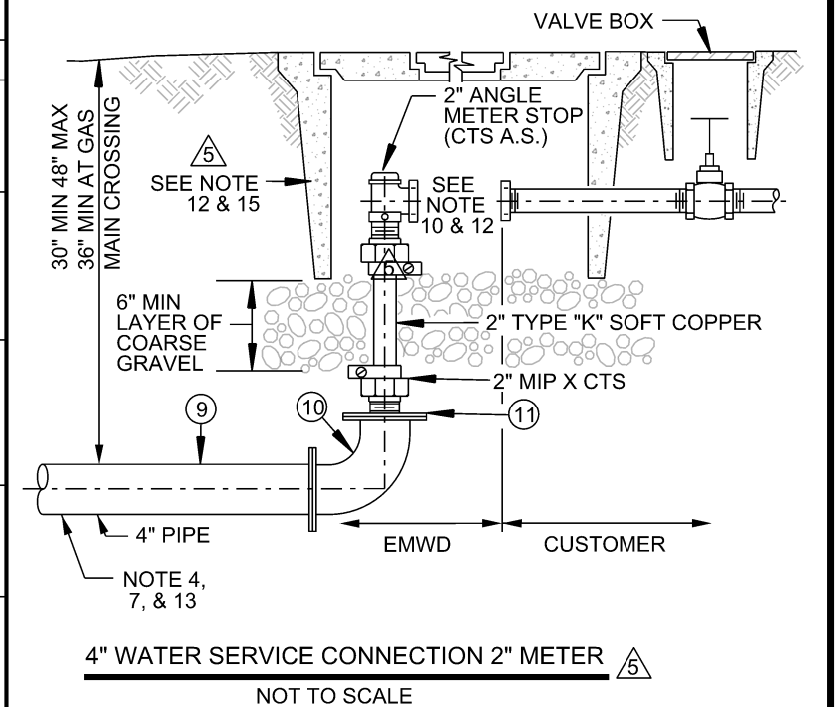


**MATERIALS LIST** 2 3 4 5

- RESILIENT SEAT GATE VALVE PER APPLICABLE METER BOX DETAIL
- 45° DEG. ELBOW (IF REQUIRED)
- RISER AND CAP DETAIL PER EMWD B-668
- METER VAULT PER METER STANDARD DRAWING & EMWD APPROVED MATERIAL LIST
- 24" FLANGED SPOOL, SIZE PER APPLICABLE METER DETAIL
- VICTAULIC COUPLING
- 30" FLANGED SPOOL WITH VICTAULIC COUPLING & TEST PORT, SIZE PER APPLICABLE METER DETAIL
- (IP) COUPLING & PLUG (SEE NOTE 16)
- PIPE (SEE NOTE 13)
- 90° ELBOW
- 4" X 2" COMPANION FLANGE
- METER BYPASS CONNECTION (REFER TO THE APPROPRIATE METER STANDARD DRAWING FOR METER INSTALLATION SPECIFICATIONS)

**FLOW RATE TABLE** 2 3 4 5

FUTURE METER SIZE	FLOW RATE (GPM)	EMWD STD DWG	LATERAL SIZE	VELOCITY (FT/S)	METER LENGTH
1½" OMNI R2	150	PB-10	4"	3.18	13"
2" MASTER	120	PB-10	4"	2.5	17"
2" OMNI C2	160	PB-10	4"	3.3	15¼"
2" OMNI R2	200	PB-10	4"	4.2	17"
3" OMNI C2	400	PB-13	4"	8.4	17"
3" OMNI T2	500	PB-13	4"	10.6	19"
3" OMNI C2	400	PB-13	6"	4.1	17"
3" OMNI T2	500	PB-13	6"	5.1	19"
4" OMNI C2	800	PB-14	6"	8.2	20"
4" OMNI T2	1000	PB-14	6"	10.2	23"
4" OMNI C2	800	PB-14	8"	4.7	20"
4" OMNI T2	1000	PB-14	8"	5.9	23"
6" OMNI C2	1600	PB-15	8"	9.5	24"
6" OMNI C2	1600	PB-15	12"	4.5	24"
6" OMNI T2	2000	PB-15	12"	5.6	27"
8" OMNI C2	2700	PB-16	12"	7.5	30¾"
8" OMNI T2	3500	PB-16	12"	9.8	30¾"
8" OMNI C2	2700	PB-16	18"	3.4	30¾"
8" OMNI T2	3500	PB-16	18"	4.5	30¾"



REVISIONS					
NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE
5	5/15/15	GS	ADDED 2" CONNECTION, REVISED TABLE, NOTES, AND MATERIALS	AGA	5/15/15
4	7/8/11	GS	REVISED DESIGN, MATERIAL LIST & ADDED NOTES	SMAM	7/11/11
3	8/9/07	RE	REVISED DESIGN, MATERIAL LIST AND NOTES,	JM	8/9/07
2	5/5/05	CM	REVISED DESIGN, MATERIAL LIST AND NOTES,	VB	5/13/05

APPROVALS		
	INITIAL	DATE
DESIGN	REL	7/13/88
CONSTRUCTION		
INSPECTION		
OPERATIONS	JDA	7/13/88
SUBMITTED	JVS	7/13/88



EASTERN MUNICIPAL WATER DISTRICT  
**STANDARD DRAWING**

**4" & LARGER RECYCLED SERVICE CONNECTION**

REFERENCES:	SCALE: NONE
FILE I.D.: \kawaii\eng\std dwg\PB-1.dgn	DRAWN BY: GS

**RECOMMENDED** *Joseph D. Van Sickle* 7/13/88  
DIRECTOR OF ENGINEERING DATE

**APPROVED** *Alan E. Beingsosner* 7/14/88  
DIRECTOR OF MAINTENANCE DATE

**PB-1**

