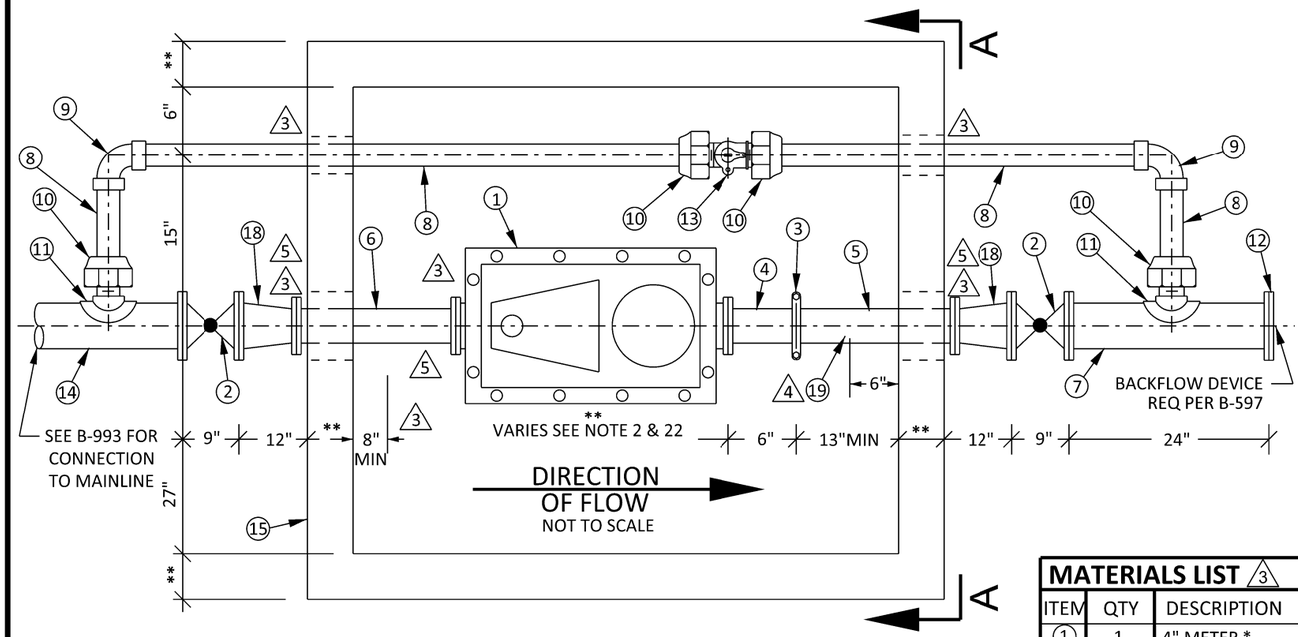
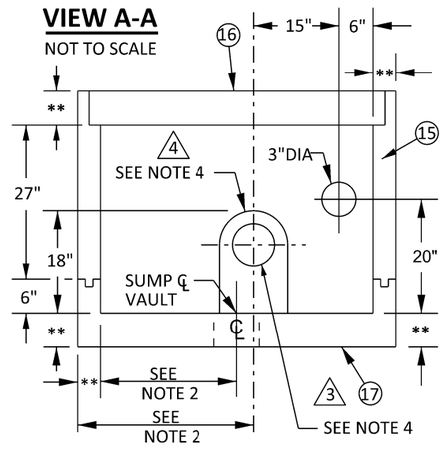


3 NOTE: ALL MATERIALS SHALL MATCH THE SERVICE LATERAL PIPELINE SIZE EXCLUDING BYPASS LINE.



MATERIALS LIST 3

	ITEM	QTY	DESCRIPTION
	1	1	4" METER *
	2	2	6" OR 8" RESILIENT SEAT GATE VALVE FxF
4	3	1	VICTAULIC COUPLING
4	4	1	FLG x VICTAULIC NIPPLE
4	5	1	FLG x VICTAULIC NIPPLE (MIN. LENGTH EQUALS (3) THREE X PIPE DIAM.)
4	6	1	F x F SPOOL (MIN. LENGTH EQUALS (3) THREE X PIPE DIAM.)
	7	1	6"X24" OR 8"X24" FLANGED SPOOL
	8	15'+/-	15'+/-2" COPPER TUBING TYPE K
	9	2	2"x90 DEG COPPER SWEAT ELL
	10	4	2" COPPER SWxIPM ADAPTER, (CORP STOP W/PVC)
	11	2	2-1/2"x4" SERVICE SADDLE W/2-1/2"x2"BRASS
			RED BUSHING, (2" SERVICE CLAMP W/PVC)
	12	1	BLIND FLANGE (IF REQUIRED)
	13	1	2" BRASS CURB STOP
	14	LF	6" OR 8" PIPE
1	15	1	UTILITY BOX/VAULT **
	16	1	TORSION SPRING 2-PC LID:
			PARKWAY OR TRAFFIC COVER (ALUMINUM),
			ROADWAY APPLIC. TO MEET AASHTO H-20 DIRECT
			TRAFFIC RATING (STEEL).
	17	1	PRECAST CONCRETE BASE W/8" SUMP ****
4	18	2	FLANGED REDUCER (SEE METER SPEC. FOR METER FLANGE SIZE)
3	19	1	(IP) COUPLING AND PLUG (SEE NOTE 15)

PLACEMENT OF METER VAULT 4

A. PLACE FRONT EDGE OF VAULT 6" BEHIND EXISTING OR PROPOSED 6' OR 8' SIDEWALKS.
B. WHEN PROPOSED OR EXISTING SIDEWALK IS 12' WIDE, PLACE FRONT EDGE OF VAULT 1.5' BEHIND CURB USING APPROPRIATE BOX.
C. WHEN NO SIDEWALK IS PROPOSED, PLACE FRONT EDGE OF VAULT 6.5' BEHIND CURB.
D. WHEN NO CURBS ARE EXISTING OR TO BE INSTALLED UPON COMPLETION OF THE WATER SYSTEM, PLACE BACK EDGE OF VAULT ON PROPERTY LINE.
E. WHEN INSTALLED IN CONCRETE (SIDEWALK), USE COVER ASSEMBLY THAT AVOIDS TRIPPING HAZARDS, AND WHICH INCLUDES READING LID.
F. A MINIMUM 5' SEPARATION IS TO BE MAINTAINED BETWEEN THE SEWER LATERAL, WATER SERVICE, AND RECYCLED WATER SERVICE.

FLOW RATE TABLE 3 4

FUTURE METER SIZE	FLOW RATE (GPM)	LATERAL SIZE	VELOCITY (FT/S)	METER LENGTH
4" OMNI C2	800	6"	8.2	20"
4" OMNI T2	1000	6"	10.2	23"
4" OCTAVE	1000	6"	10.2	14"
4" OMNI C2	800	8"	4.8	20"
4" OMNI T2	1000	8"	5.9	23"
4" OCTAVE	1000	8"	5.9	14"

NOTES: 2 3 4

* 1. METER SUPPORT AS REQUIRED.
** 2. METER DIMENSIONS MAY VARY. CONTRACTOR SHALL VERIFY METER DIMS & SUPPLY UTILITY BOX WITH SPECIFIED CLEARANCE, WALL THICKNESS PER MANUFACTURER SPECIFICATION.
3. IF VAULT IS PLACED IN DIRT/LANDSCAPE, PLACE TOP 4" ABOVE GRADE AND GRADE AWAY FROM VAULT TO PREVENT WATER FROM ENTERING.
4. PROVIDE A MINIMUM 4" CLEARANCE BETWEEN PIPE AND KNOCKOUT HOLE WITH A MINIMUM OF 6" CLEARANCE ABOVE THE VAULT FLOOR.
5. ALL MATERIALS PER EMWD APPROVED MATERIAL LIST.
6. METER TYPE SHALL BE APPROVED BY DEVELOPMENT SERVICES OR METER SERVICES.
7. METER REGISTERS TO BE IN CUBIC FEET.
8. PRESSURE TEST PER EMWD SPECIFICATIONS.
9. POTABLE SERVICE LATERAL HORIZ & VERT ALIGNMENT MUST MEET DDW SEPARATION REQUIREMENTS WHEN RECYCLED WATER IS EXISTING OR PROPOSED.
10. READ HOLES ARE TO BE INSTALLED PER B-976.
11. A FLANGED REDUCER SHALL BE INSTALLED AT EACH RSGV TO ACCOMODATE A 4" METER CONNECTION.
**** 12. CONCRETE VAULT BASE IS TO BE INCLUDED WITH VAULT.
13. STEEL VAULT LIDS TO BE PRIMED & PAINTED EMWD APPROVED TAN.
14. 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.
15. ALL SERVICE PIPE SHALL BE LAID ON A CONSTANT SLOPE UP FROM THE WATER MAIN TO THE METER. NO DIPS OR POCKETS IN THE LINE WILL BE PERMITED. 36" COVER SHALL BE MAINTAINED AT GAS MAIN CROSSINGS.
16. TEST PORT (COUPLING & PLUG) SHALL BE 2" (IP).
17. VALVE CAN AND CAP SHALL BE INSTALLED PER B-668.
18. SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS. (SEE FLOW RATE TABLE).
19. CONTRACTOR SHALL RETURN AFTER ROAD SHOULDER OR PARKWAY IS COMPLETE TO INSTALL METER VAULT, AND SHALL BE RESPONSIBLE FOR COORDINATING WORK OF OTHER CONTRACTORS FOR SAFEGUARDING SERVICES UNTIL METER VAULT IS SET.
20. UPON EMWD APPROVAL, VAULT DEPTHS GREATER THAN 5 FT SHALL INSTALL LADDER PER B-519 OR B-520. ("DANGER" PERMITTED CONFINED SPACE DO NOT ENTER) SHALL BE PAINTED ON THE VAULT LID PER EMWD SPECIFICATIONS.
21. DEPTH OF METER SHALL BE 5 FT. MAX. FROM VAULT LID TO TOP OF METER.
22. JUMPER ASSEMBLY FOR THE CONSTRUCTION OF THE METER SERVICE SHALL BE MADE OF BRASS AND MEET METER MANUFACTURES SPECIFICATIONS FOR METER INSTALLATION. THE TOTAL LANE LENGTH SHALL ACCOMMODATE THE METER AND ANY REQUIRED GASKETS OR SEALS. JUMPER ASSEMBLY TO BE PAINTED BLUE (POTABLE WATER JUMPERS ARE NOT TO BE USED FOR RECYCLED WATER).
23. WHEN VAULT IS PLACED IN HIGH LOAD OR TRAFFIC PRONE AREAS, VAULT AND LID SHALL BE ABLE TO WITHSTAND H-20 VEHICULAR LOADS.
24. VAULT LIDS SHALL HAVE SPRING ASSIST FOR BOTH LIDS.
25. SERVICES THAT REQUIRE BACKFLOW PROTECTION PER EMWD'S ADMIN CODE, SHALL BE PER B-597.

REVISIONS

NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE
4	4/6/22	GS	REVISED TITLE BLOCK, FONT, LOGO, METER FLOW RATE, NOTES TABLE, MATERIAL LIST, ADDED REDUCER, PLACEMENT NOTES MATERIAL LIST, REDUCER, REMOVED STRAINER	AGA	4/6/22
3	6/19/15	GS	ADDED FLOW RATE TABLE, TEST PORT, B-976 REFERENCE TO NOTE 5, MATERIAL LIST, AND NOTES 11, 12, 13, 14, 15, & 16.	AGA	6/19/15

REFERENCES: SUPERCEDES B-492
FILE I.D.:
SCALE: NONE
DRAWN BY: SKD

APPROVALS

	INITIAL	DATE
DESIGN	JVS	12/9/85
CONSTRUCTION	JDA	
INSPECTION		
OPERATIONS	DWH	
SUBMITTED	LM	2/10/86

RECOMMENDED _____ DIRECTOR OF ENGINEERING DATE

emwd EASTERN MUNICIPAL WATER DISTRICT

EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING

4" METER INSTALLATION

APPROVED James H. Bunts, Jr. 2/12/86
ASSISTANT GENERAL MANAGER DATE

B-634 4