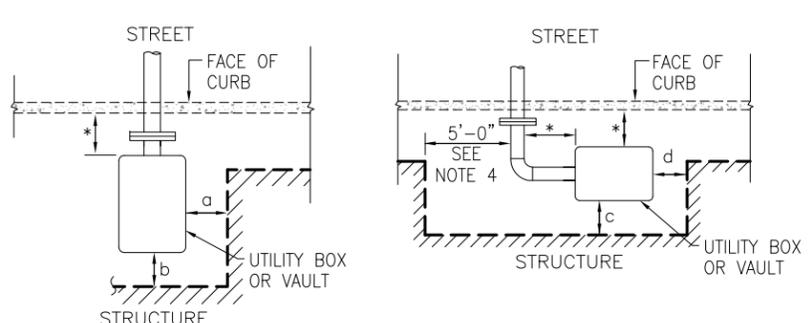


MINIMUM SERVICE LINE AND METER BOX CLEARANCES FROM DRIVEWAYS

NTS



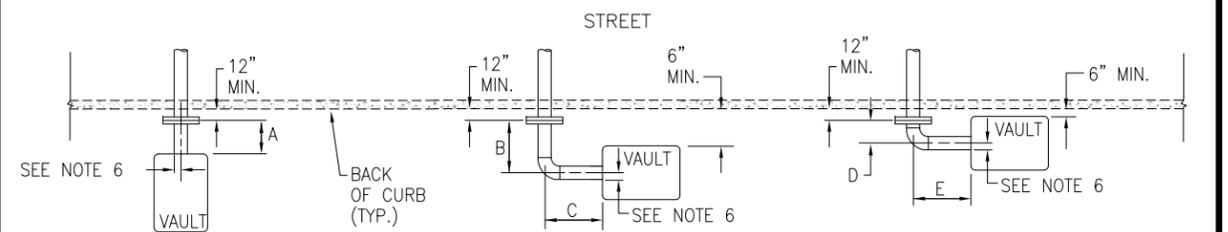
DISTRICT FACILITY	MINIMUM CLEARANCE [FEET]			
	a	b	c	d
BOX FOR METER, DETECTOR CHECK VALVE, OR AIR VALVE 2" IN DIAMETER OR SMALLER	1.0	1.0	1.0	1.0
VAULT FOR A METER, DETECTOR CHECK VALVE, OR AIR VALVE GREATER THAN 2" IN DIAMETER	2.0	4.0	2.0	4.0

THE DIMENSIONS DO NOT ACCOUNT FOR ANY DOWNSTREAM DEVICES SUCH AS BACKFLOW PREVENTION DEVICES, FIRE LINE POST INDICATORS, ETC. ADDITIONAL SPACE MAY BE REQUIRED FOR THESE DEVICES.

MINIMUM CLEARANCES BETWEEN METER BOXES/VAULTS AND ANY HORIZONTAL PROJECTION OF A STRUCTURE (INCLUDING ANY FOUNDATION, WALL OR PROJECTION) THAT IS WITHIN 23'-0" IN HEIGHT ABOVE FINISHED GRADE AT THE UTILITY BOX OR VAULT

METER AND VAULT MINIMUM CLEARANCES FROM STRUCTURES

NTS



SERVICE LINE SIZE	MINIMUM DIMENSION [INCHES]				
	A	B**	C	D**	E
4	27	29	16	6	33
6	31	35	21	9	40
8	34	40	24	12	46
10	38	46	28	15	53
12	41	51	32	18	59

[SEGMENTS A, B, AND E INCLUDE VERTICAL OFFSETS]

MINIMUM DIMENSIONS FOR VAULT INSTALLATIONS

NTS

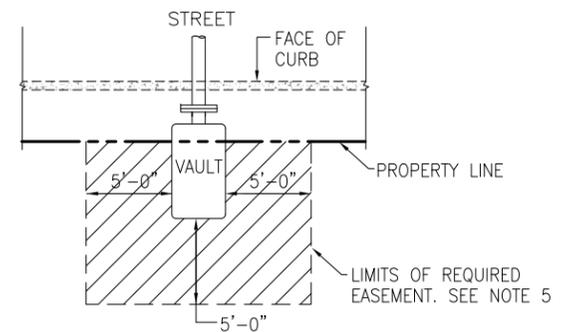
NOTES:

- DISTRICT REQUIRES A MINIMUM 5'-0" CLEARANCE FROM THE EDGE OF DISTRICT APPURTENANCES (SUCH AS FIRE HYDRANTS, SERVICE LINES, DETECTOR CHECKS, VAULTS, BLOWOFF ASSEMBLIES AND AIR VALVE LINES) AND THE EDGE OF DRIVEWAYS EXCEPT WHERE OTHERWISE NOTED HEREON. CLEARANCE SHALL BE FROM CENTERLINE OF SERVICE LINE FOR SERVICE LINES 2" IN DIAMETER OR SMALLER AND FROM THE EDGE OF SERVICE LINE FOR SERVICE LINES GREATER THAN 2" IN DIAMETER.
- IN MULTIFAMILY RESIDENTIAL DEVELOPMENTS WITH THE DRIVEWAY CONFIGURATION SHOWN, WATER SERVICE LINES UP TO 2" IN DIAMETER MAY BE LOCATED SO THAT THE METER BOX IS 1'-0" CLEAR FROM THE EDGE OF DRIVEWAY. METER BOX MUST BE PROTECTED BY A RAISED CURB AS SHOWN.
- IN MULTIFAMILY RESIDENTIAL DEVELOPMENTS WITH 6" VERTICAL CURB AND THE DRIVEWAY CONFIGURATION SHOWN, THE CENTERLINE OF WATER SERVICE LINES UP TO 2" IN DIAMETER MAY BE LOCATED NO LESS THAN MINIMUM 2'-0" FROM THE EDGE OF THE DRIVEWAY.
- A MINIMUM 5'-0" HORIZONTAL CLEARANCE IS REQUIRED BETWEEN SERVICE LINES AND ANY HORIZONTAL PROJECTION OF A STRUCTURE (INCLUDING ANY FOUNDATION, WALL OR PROJECTION) THAT IS WITHIN 23'-0" IN HEIGHT ABOVE FINISHED GRADE AT THE SERVICE LINE.
- A 5'-0" EASEMENT IS REQUIRED AROUND ANY PART OF A DISTRICT FACILITY WHICH IS LOCATED OUTSIDE THE PUBLIC RIGHT-OF-WAY OR OUTSIDE OF A PUBLIC UTILITY EASEMENT ABUTTING THE PUBLIC RIGHT-OF-WAY. THIS EASEMENT AREA SHALL BE FREE OF CONFLICTING UTILITIES AND TREES.
- CENTERLINE OF VAULT FOR FIRE SERVICE IS IN LINE WITH THE SERVICE LINE CENTERLINE. CENTERLINE OF VAULT FOR DOMESTIC WATER SERVICE IS OFFSET 1'-0" FROM THE SERVICE LINE CENTERLINE.
- THE CLEARANCES AND LOCATIONS OF AIR RELEASE AND AIR AND VACUUM RELEASE VALVE LINES AND BOXES SHALL CONFORM TO CLEARANCES AND LOCATIONS OF SERVICE LINES AND METER BOXES/VAULTS SHOWN HEREON.

* FOR METER BOX LOCATION RELATIVE TO CURB AND SIDEWALK, SEE STANDARD DRAWINGS S-1-08 THROUGH S-8-08 AND S-10-08. FOR VAULT LOCATION RELATIVE TO CURB AND SERVICE LINES, SEE "MINIMUM DIMENSIONS FOR VAULT INSTALLATIONS" DETAIL ON THIS DRAWING.

** DEPENDING ON VAULT SIZE AND OFFSET, DIMENSIONS 'B' OR 'D' MAY NEED TO BE LARGER TO ACCOMMODATE A MINIMUM 6" CLEARANCE BETWEEN THE EDGE OF VAULT AND THE BACK OF CURB.

*** THE METER LOCATION SHOWN IN THIS DETAIL APPLIES ONLY WHEN THE METER IS ADJACENT TO A DRIVEWAY NO LONGER THAN 5'-0".



CLEARANCE AND EASEMENT REQUIREMENTS

NTS

APPROVED *Albert Chavez* 12/15/2008
ENGINEERING MANAGER DATE

NO.	DATE	REVISION	BY	APP.	DIV. MGR.	EHS
0	12-08	NEW STD. DWG.	RMF	LJA	CHECKED	LJA
					DESIGNED	ACWD
					DRAWN	RMF

ACWD
ALAMEDA COUNTY WATER DISTRICT
43885 SOUTH GRIMMER BOULEVARD
P.O. BOX 5110
FREMONT, CA 94537-5110
(510) 668-4200

STANDARD DRAWING
CLEARANCE REQUIREMENTS FOR METER, VAULT AND OTHER FACILITY INSTALLATIONS

DATE: DEC. 2008	REV. 0
SCALE: NONE	
DWG. NO. CL-5-08	