



VERTICAL DOWN BEND

NOTES:

1. CONCRETE FOR GRAVITY ANCHOR BLOCK SHALL CONFORM TO SECTION XXX.
2. CONCRETE SHALL BE POURED AGAINST UNDISTURBED SOIL. IF THERE IS A POSSIBILITY OF THE ANCHOR BLOCK BEING DISTURBED AFTER CONSTRUCTION, ADDITIONAL MECHANICAL THRUST RESTRAINING DEVICES APPROVED BY UTILITY SHALL BE INSTALLED.
3. CONCRETE SHALL HAVE 3" MINIMUM CLEARANCE AROUND ALL JOINTS.
4. ALL REINFORCES STEEL SHALL BE #6 BAR.
5. FOR VERTICAL UP BEND, SEE THRUST BLOCK REQUIREMENTS PER STD. NO. W-140 & W-142.
6. FOR PIPED LARGER THAN 12 INCH DIAMETER, RESTRAINED JOINTS APPROVED BY UTILITY SHALL BE INSTALLED IN LIEU OF ANCHOR BLOCKS.
7. SIZING REQUIREMENTS ARE BASED UPON $1 \frac{1}{2}$ TIMES STATIC WATER PRESSURE, AND SOIL BEARING PRESSURE OF 2000PSI. DESIGN ENGINEER SHALL DETERMINE SIZES FOR OTHER SOIL BEARING VALUES.

GRAVITY ANCHOR BLOCK DETAIL

CITY OF MONTEREY PARK

PUBLIC WORKS DEPARTMENT - WATER DIVISION

STANDARD NO.

W-144

DRAWN	XX	DATE	XX/XX/XX	APPROVED WATER UTILITY MANAGER	<i>[Signature]</i>	DATE	12/10/24
REVISD	XX	XX/XX/XX		APPROVED CITY ENGINEER	<i>[Signature]</i>	DATE	10/11/24

SHEET 1 OF 2

Static Pressure – P.S.I.		60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
VERTICAL DOWN BENDS – Minimum Dimensions in feet																	
Pipe Dia.	Change in Slope																
6	1.5:1	Volume (C.F.)	16.8	17.6	20.2	22.7	25.2	27.7	30.2	32.8	35.3	37.8	40.3	42.9	45.4	47.9	50
	1.5:1	Depth (Ft.)	2.7	2.8	3.2	3.6	4.0	3.1	3.4	3.6	3.9	4.2	4.5	3.5	3.7	3.9	4.
	2:1	Volume (C.F.)	13.5	14.2	16.3	18.3	20.3	22.4	24.4	26.4	28.5	30.5	32.5	34.5	36.6	38.6	40.6
	2:1	Depth (Ft.)	3.4	3.6	2.6	2.9	3.3	3.6	3.9	4.2	3.2	3.4	3.6	3.8	4.1	4.3	4.5
8	1.5:1	Volume (C.F.)	29.9	31.4	35.8	40.3	44.8	49.3	53.8	58.3	62.7	67.2	71.7	76.2	80.7	85.1	89.6
	1.5:1	Depth (Ft.)	3.3	3.5	4.0	4.5	3.7	4.0	4.4	4.8	5.1	4.2	4.5	4.8	5.0	5.3	5.6
	2:1	Volume (C.F.)	24.1	25.3	28.9	32.5	36.1	39.7	43.4	47.0	50.6	54.2	57.8	61.4	65.0	68.6	72.3
	2:1	Depth (Ft.)	3.9	4.0	3.2	3.6	4.0	4.4	4.8	3.8	4.1	4.4	4.7	5.0	4.1	4.3	4.5
10	1.5:1	Volume (C.F.)	46.7	49.0	56.0	63.0	70.0	77.0	84.0	91.0	98.0	105.0	112.0	119.0	126.0	133.0	140.0
	1.5:1	Depth (Ft.)	3.8	4.0	4.6	5.1	4.4	4.8	5.3	5.7	4.8	5.2	5.5	5.9	5.0	5.3	5.6
	2:1	Volume (C.F.)	37.6	39.5	45.2	50.8	56.4	62.1	67.7	73.4	79.0	84.7	90.3	96.0	101.6	107.3	112.9
	2:1	Depth (Ft.)	4.2	4.4	3.7	4.1	4.6	5.1	4.2	4.6	4.9	5.3	5.6	4.7	5.0	5.3	5.6
12	1.5:1	Volume (C.F.)	67.2	70.6	80.7	90.7	100.8	110.9	121.0	131.1	141.2	151.2	161.3	171.4	181.5	191.6	201.6
	1.5:1	Depth (Ft.)	4.2	4.4	5.0	4.5	5.0	5.5	6.0	5.2	5.6	6.0	6.5	5.7	6.0	6.3	6.7
	2:1	Volume (C.F.)	54.2	56.9	65.0	73.2	81.3	89.4	97.5	105.7	113.8	121.9	130.1	138.2	146.3	154.4	162.6
	2:1	Depth (Ft.)	4.4	4.6	4.1	4.6	5.1	5.6	4.8	5.2	5.6	6.0	5.2	5.5	5.9	6.2	6.5

GRAVITY ANCHOR BLOCK DETAIL

CITY OF MONTEREY PARK

PUBLIC WORKS DEPARTMENT – WATER DIVISION

STANDARD NO.

W-144

DRAWN	BY	DATE	APPROVED WATER UTILITY MANAGER		DATE	12/10/24
	XX	XX/XX/XX				
REVISED	XX	XX/XX/XX	APPROVED CITY ENGINEER		DATE	12/11/24
CHANGED	XX	XX/XX/XX				

SHEET 2 OF 2