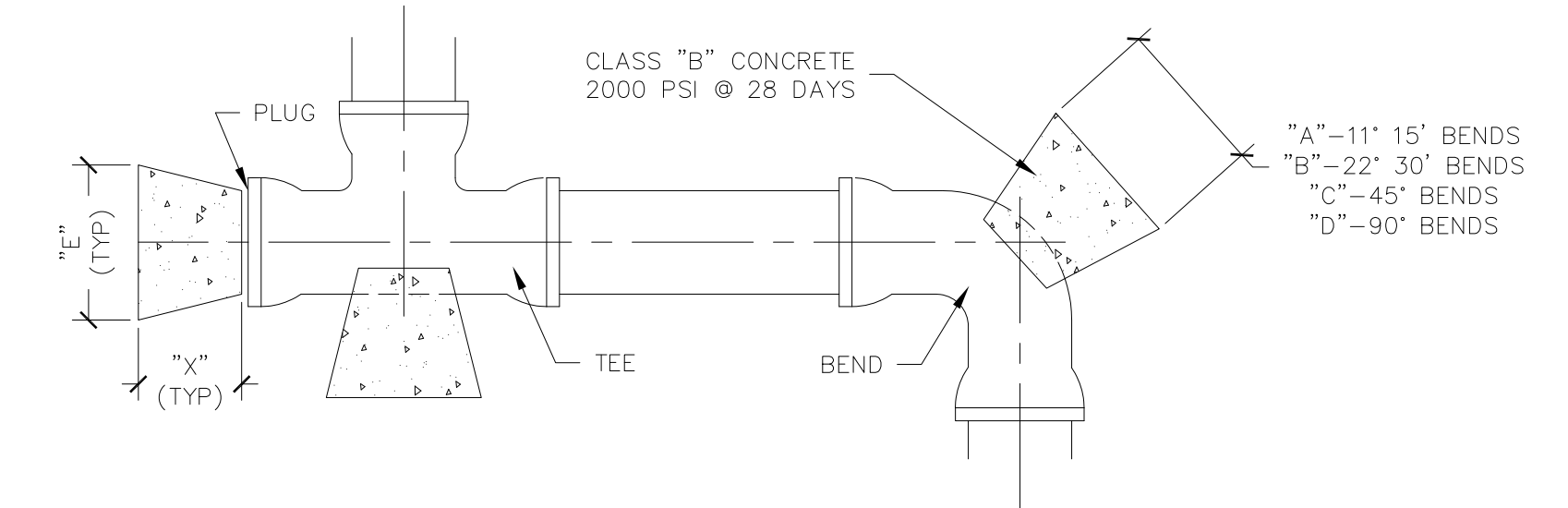


W5 WATER MAIN LOWERING
NOT TO SCALE



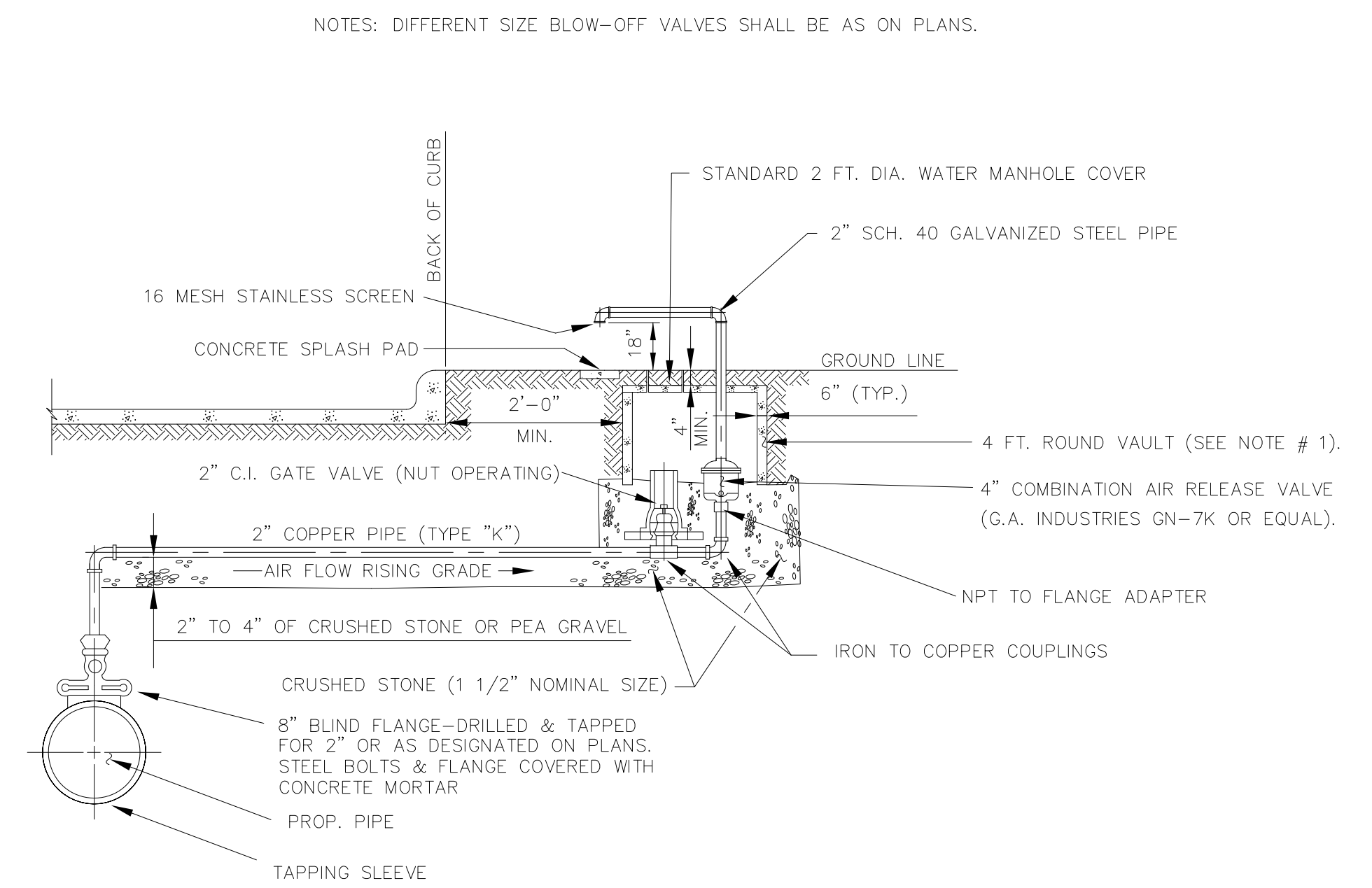
* DIMENSION "X" MAY VARY IF NECESSARY TO PROVIDE BEARING AGAINST UNDISTURBED TRENCH WALL.

PIPE SIZE	"X" DIM. FT.	11'-15'			22'-30'			45'			90'			TEE & PLUGS		
		"A"	MIN. AREA	MIN. VOL.	"B"	MIN. AREA	MIN. VOL.	"C"	MIN. AREA	MIN. VOL.	"D"	MIN. AREA	MIN. VOL.	"E"	MIN. AREA	MIN. VOL.
4"	1.00	1.50	2.25	0.10	1.50	2.25	0.10	1.50	2.25	0.10	1.50	2.25	0.10	1.50	2.25	0.10
6"	1.50	1.50	2.25	0.15	1.50	2.25	0.15	1.50	2.25	0.15	1.50	2.25	0.15	1.50	2.25	0.15
8"	1.50	1.75	3.20	0.20	1.75	3.20	0.20	1.75	3.20	0.20	1.75	3.20	0.20	1.75	3.20	0.20
10"	1.50	2.00	4.00	0.25	2.00	4.00	0.25	2.00	4.00	0.25	2.00	4.00	0.25	2.00	4.00	0.25
12"	1.50	2.25	5.00	0.30	2.25	5.00	0.30	2.25	5.00	0.30	2.25	5.00	0.30	2.25	5.00	0.30
16"	2.00	2.50	6.30	0.45	2.50	8.00	0.45	2.80	8.00	0.60	3.75	14.10	1.00	3.20	10.00	0.75
20"	2.00	2.75	7.80	0.60	2.75	12.50	0.60	3.50	12.50	0.90	4.75	22.60	1.70	4.00	16.00	1.20
24"	2.00	3.10	9.30	0.75	3.20	18.20	0.80	4.30	18.20	1.40	5.75	33.00	2.45	4.80	23.00	1.75
30"	2.50	3.50	12.30	1.10	3.80	27.00	1.30	5.20	27.00	2.50	6.80	46.00	3.40	5.90	35.00	2.60
36"	2.50	3.90	15.40	1.50	4.50	40.00	1.90	6.30	40.00	3.70	7.90	63.00	5.10	7.10	51.00	3.75
42"	3.00	4.30	18.50	2.00	5.25	55.00	3.00	7.40	55.00	5.10	9.00	81.00	7.90	8.30	69.00	5.25
48"	3.00	4.70	21.80	2.50	6.00	72.00	4.00	8.50	72.00	6.70	10.80	116.00	10.40	9.50	90.00	8.25
54"	4.00	5.00	25.00	3.70	6.75	92.00	6.70	9.60	92.00	10.00	13.00	169.00	16.00	10.70	115.00	12.00

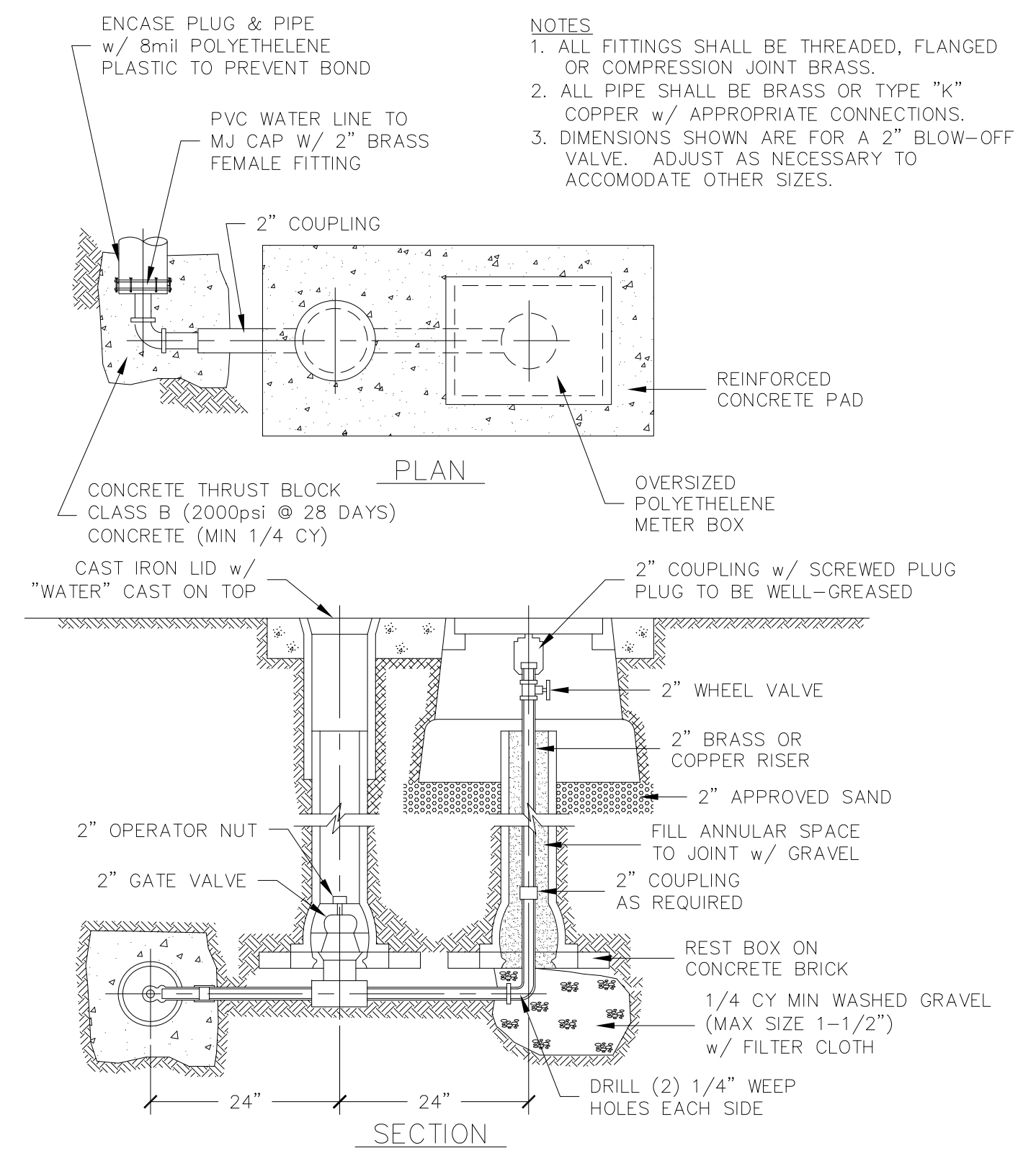
- NOTES:
1. MINIMUM AREAS SHOWN ARE IN SQUARE FEET.
 2. MINIMUM VOLUMES SHOWN ARE IN CUBIC YARDS. IF, IN THE OPINION OF THE CITY, THE UNDISTURBED TRENCH WALL DOES NOT EXHIBIT ADEQUATE SOIL BEARING CHARACTERISTICS, THE VOLUME OF CONCRETE SHOWN IN THE TABLE SHALL BE INCREASED. THE ADJUSTED QUANTITIES MUST BE APPROVED BY THE CITY ENGINEER. ON CITY CONTRACT PROJECTS, THERE SHALL BE NO ADDITIONAL COMPENSATION FOR THESE LARGER THRUST BLOCKS.
 3. VERTICAL DIMENSIONS OF ALL BLOCK BEARING AREAS SHALL BE IDENTICAL TO THE HORIZONTAL DIMENSIONS SHOWN.
 4. THRUST BLOCKING SHALL BE CONSIDERED SUBSIDIARY TO THE COST OF INSTALLING THE PIPE.

W6 HORIZONTAL BLOCKING
NOT TO SCALE

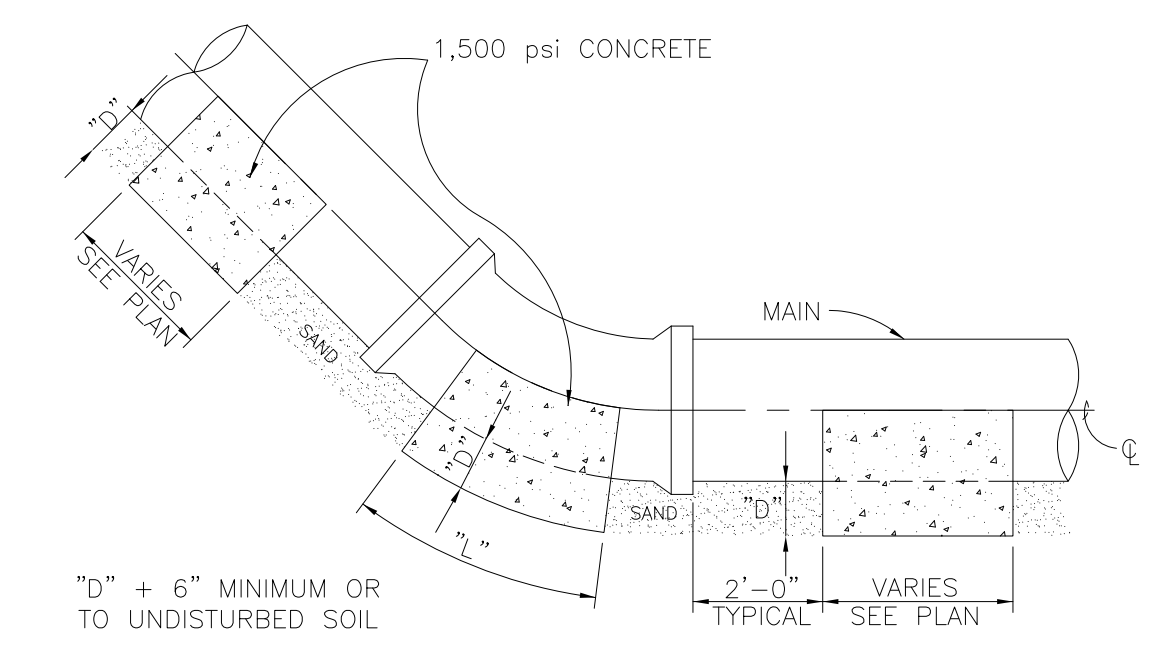
- NOTES:
1. 4 FT ROUND VAULT SIDE WALL SHALL BE PRECAST REINFORCED CONCRETE PIPE. TONGUE AND GROOVE DESIGN TYPE, MEETING THE REQUIREMENTS OF A.S.T.M.-C-76 (CLASS III), OR EQUAL WITH RAM-NEK PLASTIC SEAL JOINT SEALER, OR POURED IN PLACE CLASS "A" (3000 PSI @ 28 DAYS) REINFORCED CONCRETE. WALL SHALL BE REINFORCED WITH #4 BARS SPACED 6" C/C HORIZONTALLY AND 6" VERTICALLY.
 2. JOINTS ARE TO BE NPT, FLANGED OR COMPRESSION JOINTS NO SWEATED OR SOLDER JOINTS WILL BE ALLOWED.



W7 2" AIR RELEASE VALVE
NOT TO SCALE



W8 BLOW-OFF VALVE
NOT TO SCALE



PIPE SIZE	11' - 15'		22' - 30'		45'		90'	
	L	MAX. VOL.	L	MAX. VOL.	L	MAX. VOL.	L	MAX. VOL.
6"	0.42	0.02	0.45	0.02	0.50	0.02	1.00	0.04
8"	0.42	0.02	0.45	0.02	0.80	0.04	1.40	0.06
10"	0.42	0.03	0.58	0.03	1.15	0.06	2.03	0.11
12"	0.42	0.04	0.73	0.05	1.43	0.09	2.53	0.17
16"	0.42	0.08	0.74	0.14	1.48	0.27	2.61	0.48
18"	0.66	0.14	1.30	0.28				
20"	0.77	0.18	1.53	0.36				
18"	0.88	0.18	1.74	0.37				
20"	1.03	0.24	2.04	0.38				
18"	1.05	0.22	2.03	0.43				
20"	1.20	0.28	2.38	0.56				

SEE PLAN SHEET FOR BLOCKING

W9 CONCRETE CRADLE
RETAINER GLANDS SHALL BE USED ON ALL FITTINGS



101 MAIN STREET
HASLET, TX 76052
(817)439-5931
WWW.HASLET.ORG



Know what's below.
Call before you dig.
@least 48 hours prior

CITY OF HASLET
CONSTRUCTION STANDARDS
WATER - BLOCKING, LOWERING,
AIR RELEASE, BLOW-OFF VALVE

CERTIFICATION:
THIS CITY OF HASLET SHEET IS AUTHORIZED FOR USE ON THIS PROJECT BY AUTHORITY OF THE CITY ENGINEER. BY INCLUDING THIS SHEET IN THE CONSTRUCTION SET OF DRAWINGS, THE ENGINEER OF RECORD FOR THE PROJECT IS ALSO CERTIFYING THAT THE CONTENT OF THE DETAILS AND NOTES HAVE NOT BEEN ALTERED FROM THAT RECEIVED FROM THE CITY OF HASLET.

DRAWN: CAD

APPROVED: TNA

DATE: DEC. 2016

SHEET NUMBER

W2