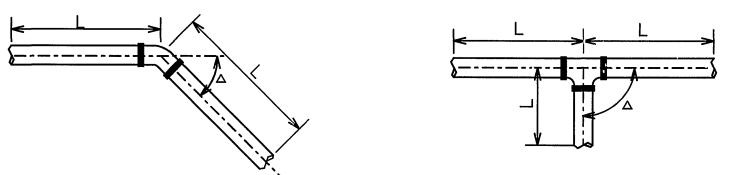
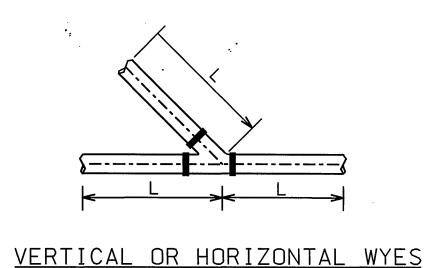
\$LEV002

PIPE	L = MINIMUM LENGTH OF RESTRAINED PIPE (FT)							
SIZE (IN.)	= 90°		<u> </u>		△= 22.5°		<u></u>	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
6	30	60	15	25	10	15	5	10
8	40	80	15	35	10	15	5	10
10	50	100	20	40	10	20	5	10
12	55	115	25	50	11	25	5	11
16	97	139	40	58	19	28	10	14



\$LEV005

VERTICAL OR HORIZONTAL TEES VERTICAL OR HORIZONTAL BENDS



\$LEV004

—IF DISTANCE IS LESS THAN EXISTING WATER MAIN-- RESTRAIN ALL NEW JOINTS WITHIN DISTANCE RESTRAIN ALL EXISTING JOINTS "L" FROM FITTING WITHIN DISTANCE "L" FROM FITTING $^{\Delta}$ NEW WATER MAIN-

CONNECTION TO EXISTING WATER MAIN

EXISTING WATER MAIN-

\$LEV007

\$LEV006

NOTE:

\$LEV008

DESIGN FEATURES RELATING TO CONSTRUCTION

OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED

NECESSARY BY THE DEPARTMENT

- 1. MECHANICAL JOINT RESTRAINING DEVICES SHALL BE EBAA IRON, INC. MEGALUG, WITH A WORKING PRESSURE OF 250 PSI AND A MINIMUM DESIGN SAFETY FACTOR OF 2.
- 2. THE RESTRAINED LENGTH OF WATER MAIN IS BASED ON THE FOLLOWING: AN INTERNAL PRESSURE OF 200 PSI, 3 FEET OF PIPE COVER, AND A SOIL TYPE CLASSIFICATION OF "MH'

PROJECT

\$LEV0I0

ROUTE

PROJECT

0720-080-299,C-501 ₁₀₍₈₎

- "L" RESTRAIN ALL JOINTS 3. PLUGS SHALL BE RESTRAINED BASED ON THE RESTRAINED LENGTH FOR 90° VERTICAL
 - 4. VALVES, TEES, AND WYES SHALL BE RESTRAINED BASED ON THE RESTRAINED LENGTH FOR 45° HORIZONTAL BENDS.

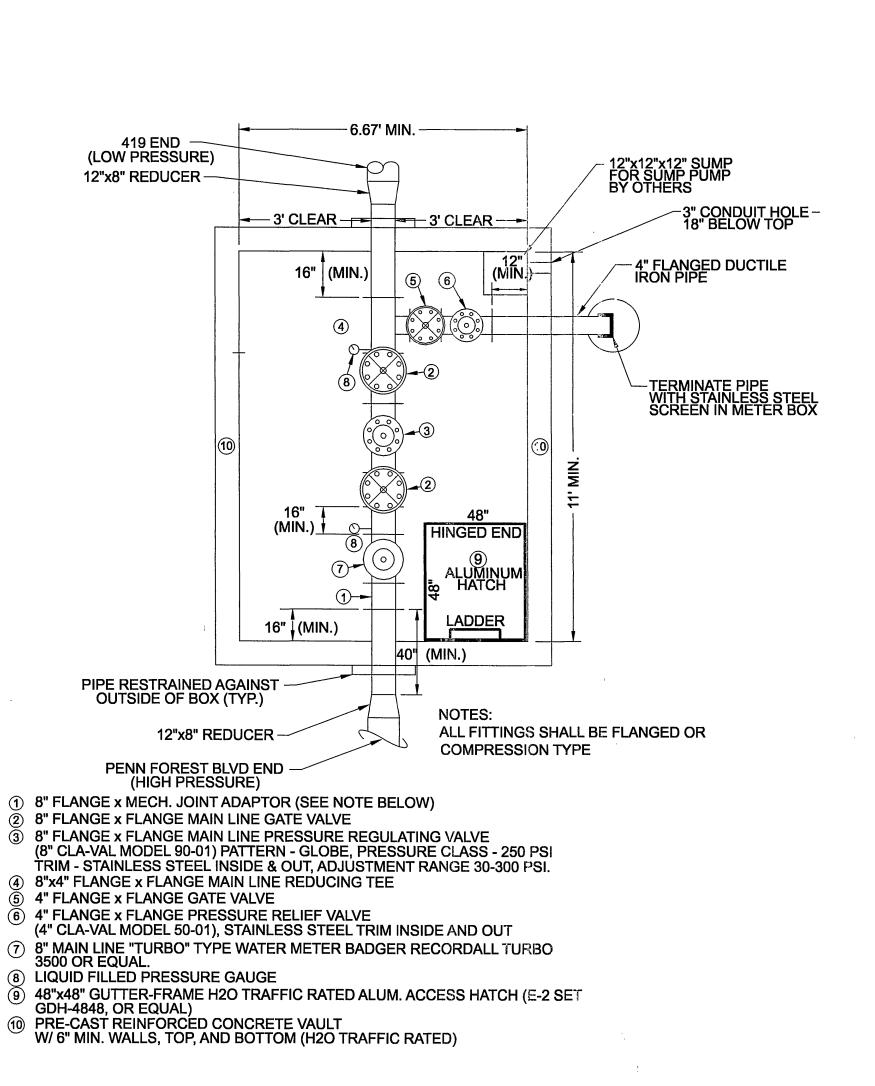
\$LEV009

FH₩A REGION

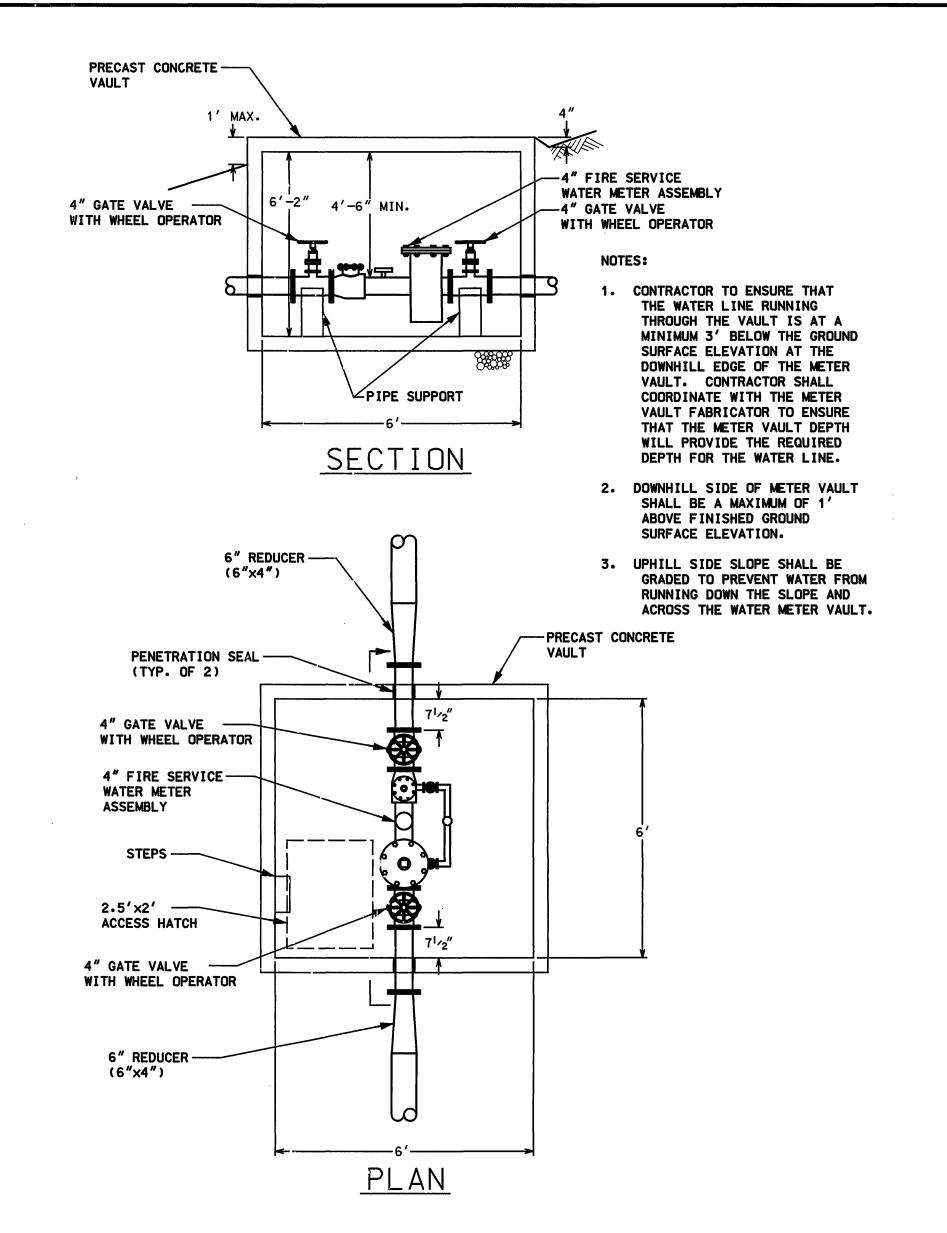
STATE

5. EXISTING WATER MAIN ADJACENT TO PROPOSED BENDS, WYES, VALVES, TEES, AND PLUGS SHALL BE UNCOVERED AND THE EXISTING JOINTS SHALL BE RESTRAINED FOR THE LENGTH INDICATED, IF THE EXISTING WATER MAIN WILL NOT ACCEPT THE MECHANICAL JOINT RESTRAINING MECHANISM, THE EXISTING WATER MAIN SHALL BE REPLACED WITH DUCTILE IRON WATER MAIN FOR THE LENGTH INDICATED.

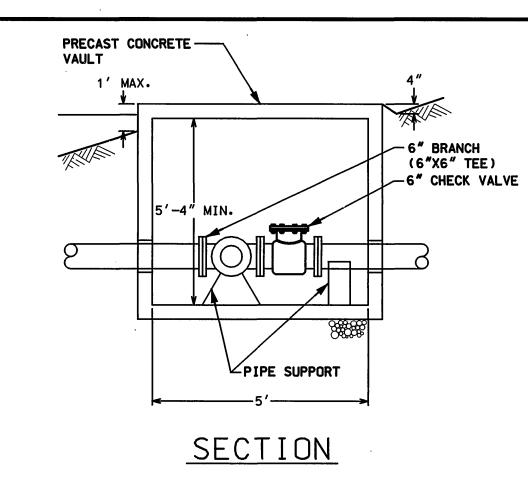
TYPICAL DETAILS AND CONSTRUCTION DATA - MECHANICAL JOINT RESTRAINING DEVICES NOT TO SCALE







WATER SERVICE VAULT NOT TO SCALE

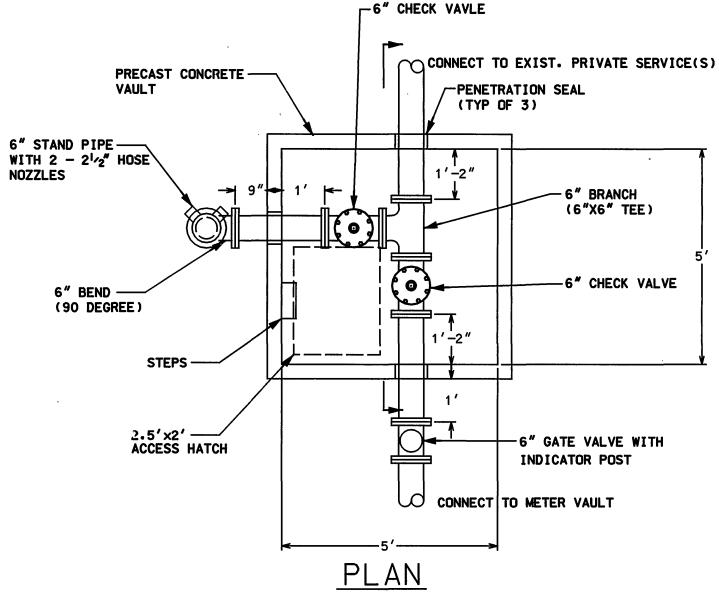


MINIMUM 3' BELOW THE GROUND SURFACE ELEVATION AT THE DOWNHILL EDGE OF THE METER SERVICE VAULT FABRICATOR TO ENSURE THAT THE FIRE SERVICE VAULT DEPTH WILL PROVIDE THE REQUIRED DEPTH FOR THE WATER LINE. 2. DOWNHILL SIDE OF FIRE SERVICE VAULT SHALL BE A MAXIMUM OF 1

1. CONTRACTOR TO ENSURE THAT THE WATER LINE RUNNING THROUGH THE VAULT IS AT A

ABOVE FINISHED GROUND SURFACE ELEVATION.

3. UPHILL SIDE OF SLOPE SHALL BE GRADED TO PREVENT WATER FROM RUNNING DOWN THE SLOPE AND ACROSS THE FIRE SERVICE VAULT.



PRIVATE FIRE SERVICE VAULT NOT TO SCALE

\$DGNLEV

0720-080-299

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