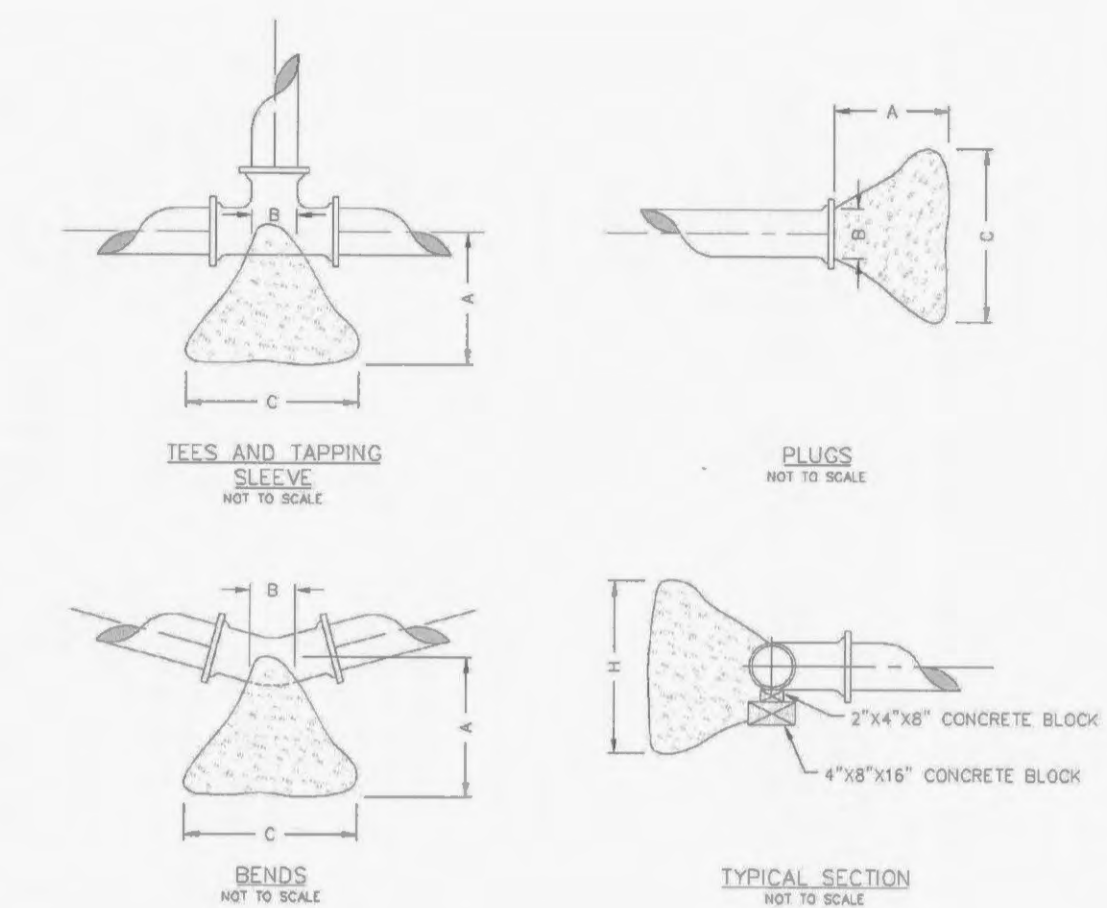
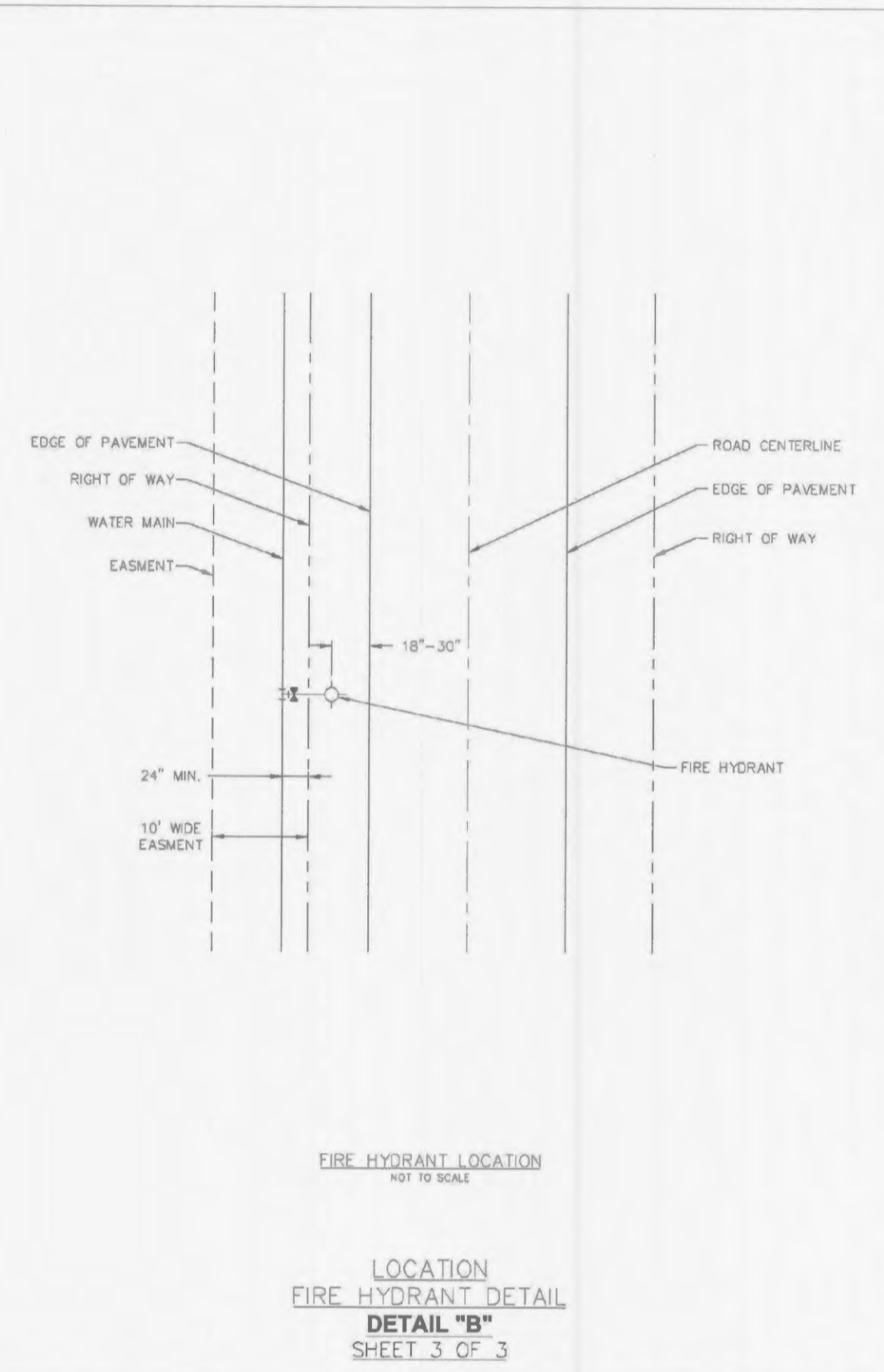
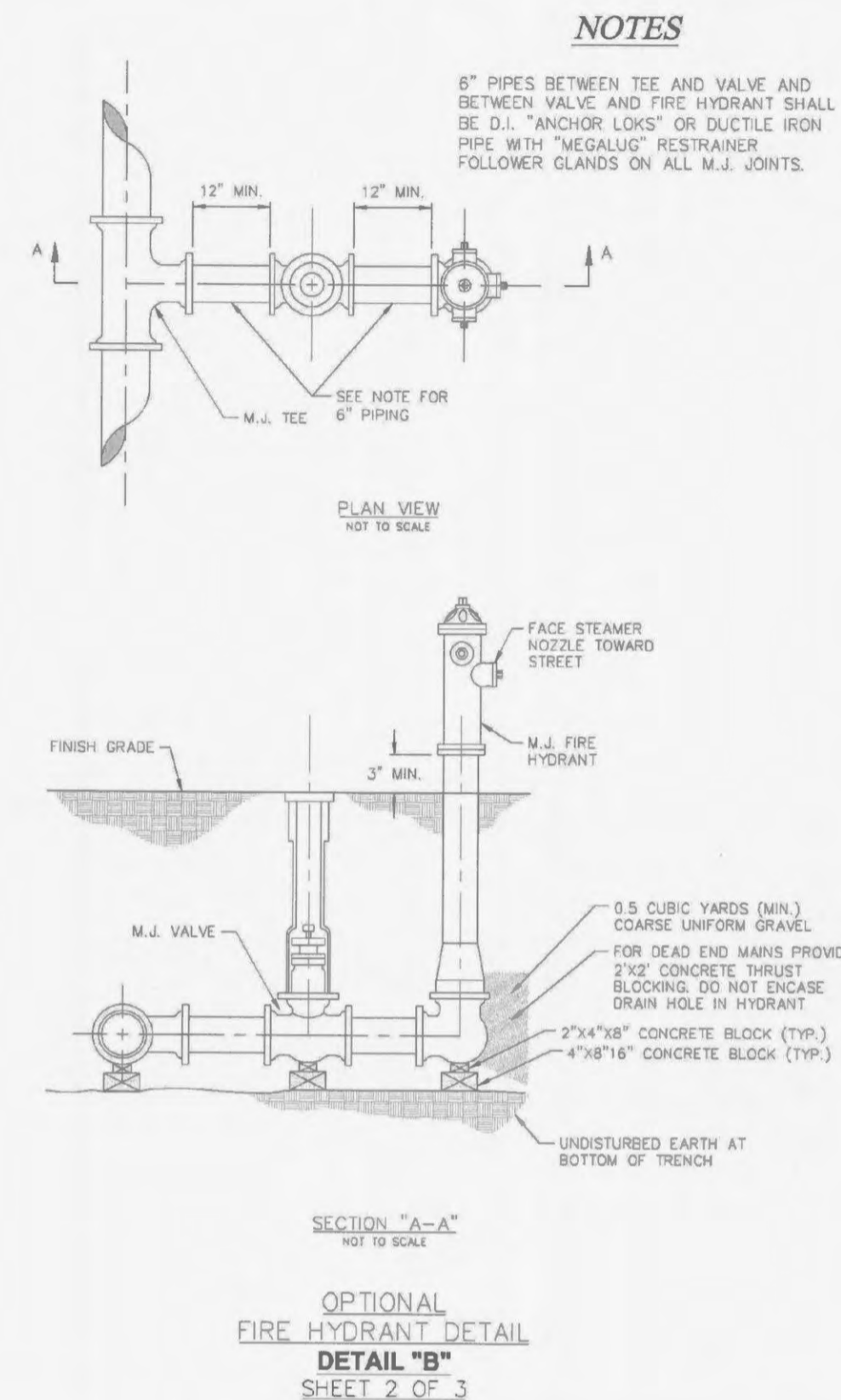


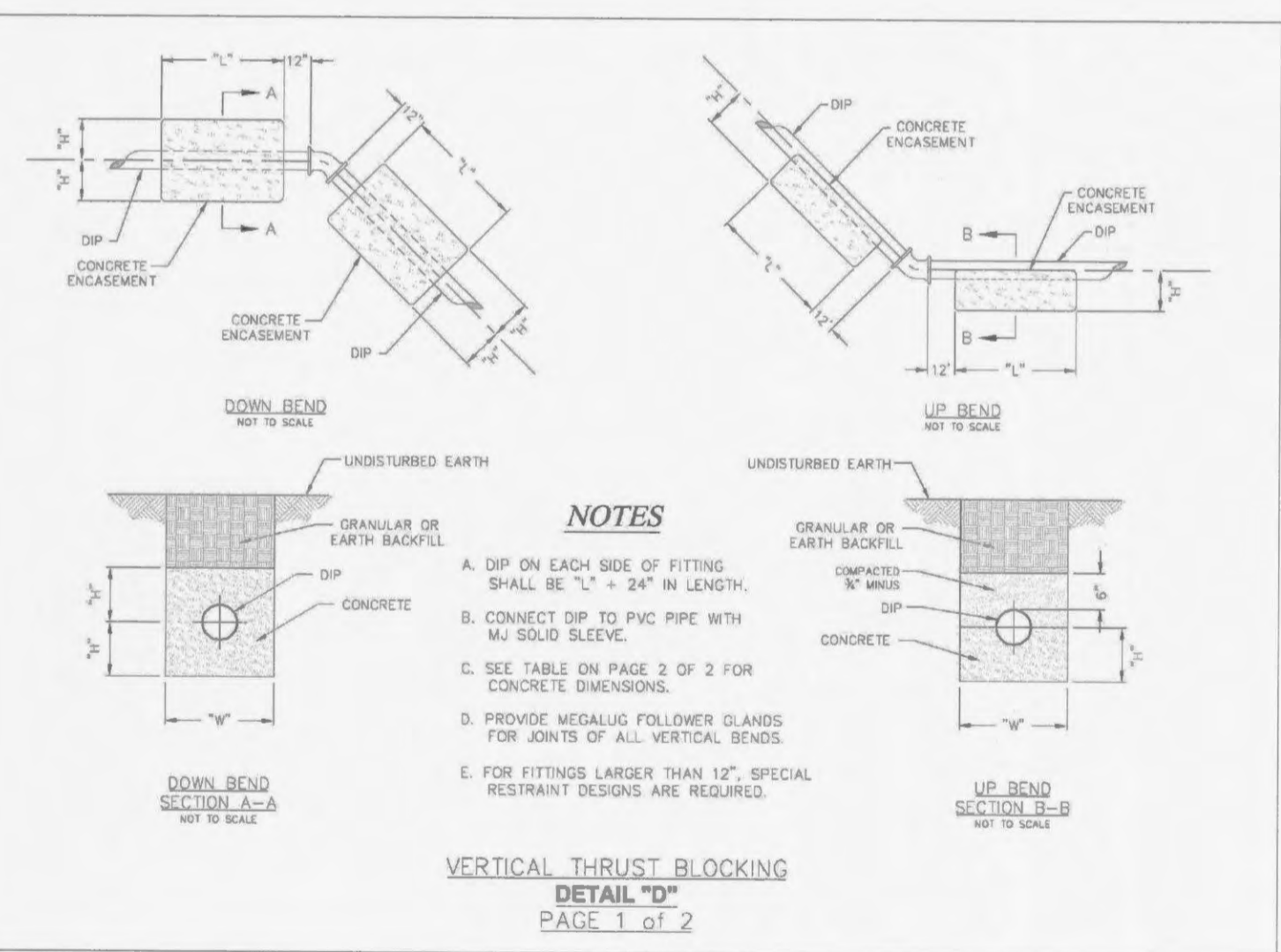
NOTES
SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.
TYPICAL TRENCH SECTION FOR PVC PIPE
NOT TO SCALE
DETAIL "A"
PAGE 1 OF 2



THRUST BLOCK DIMENSIONS - INCHES

PIPE DIA.	ALL FTGS.		TEE PLUG TAPPING		90 DEGREE BEND		45 DEGREE BEND		22-1/2 BEND		11-1/4 BEND	
	A	B	C	H	C	H	C	H	C	H	C	H
4	14	4	24	12	26	15	18	12	12	12	12	12
6	16	6	36	18	36	24	30	18	24	12	12	12
8	20	8	36	30	42	36	36	24	24	18	18	12
10	20	10	48	36	66	36	36	36	28	24	18	18
12	24	12	68	36	82	42	52	36	40	24	28	18

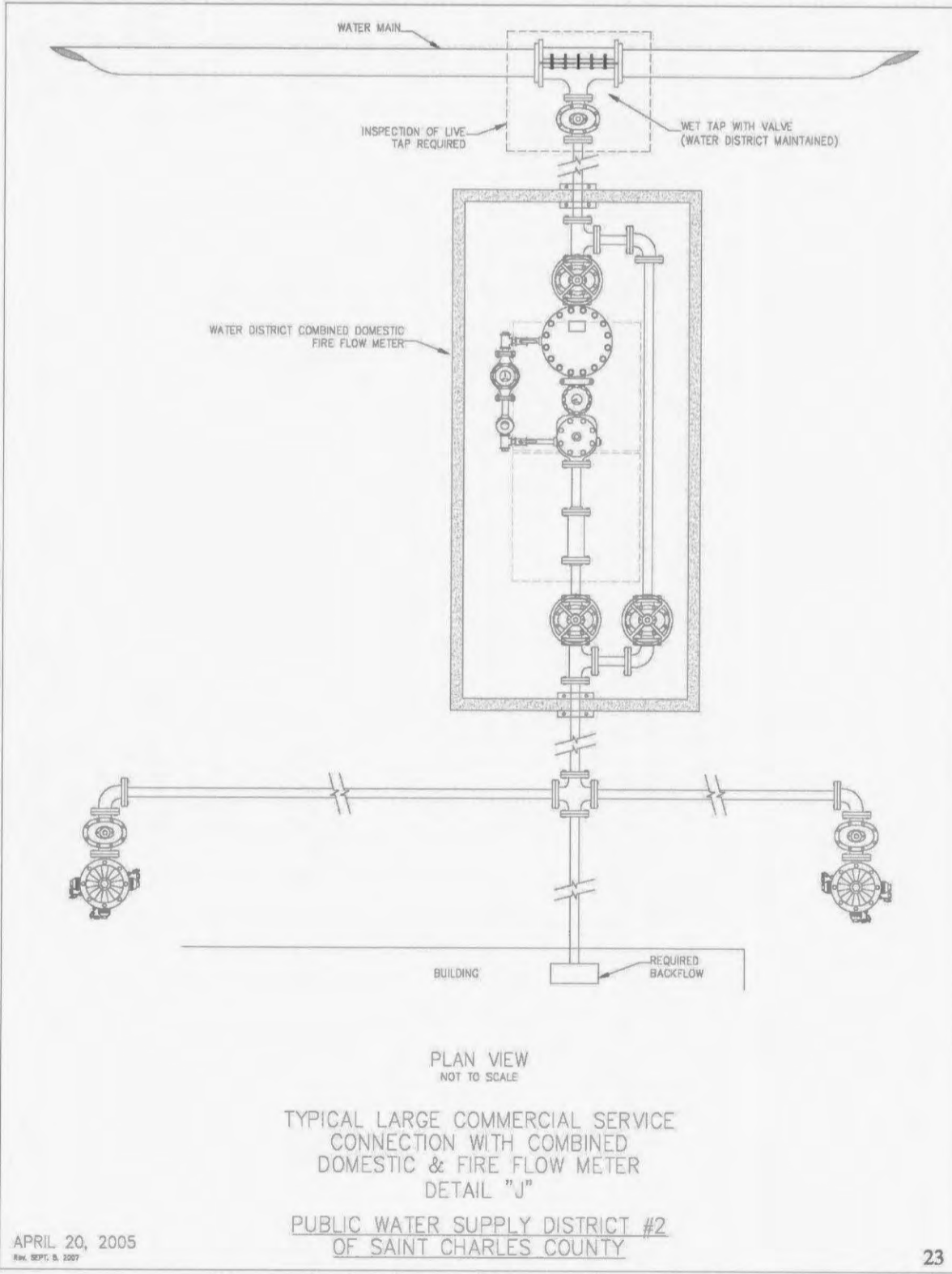
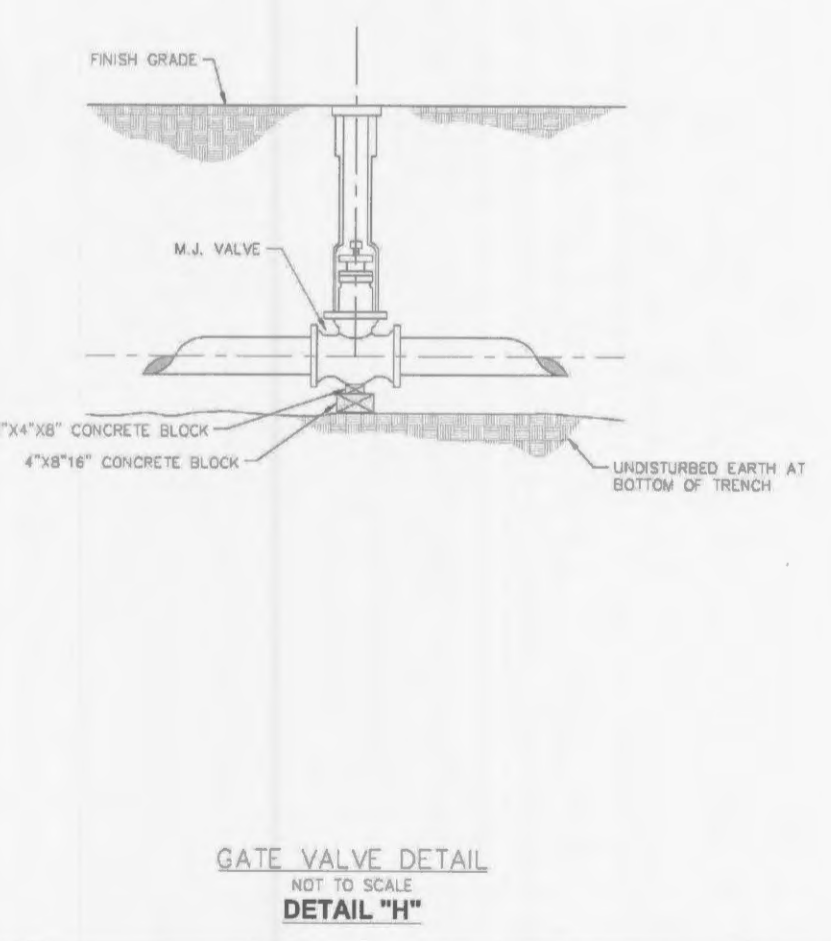
NOTE
FOR FITTINGS LARGER THAN 12" SPECIAL RESTRAINT DESIGNS ARE REQUIRED.
HORIZONTAL THRUST BLOCKING
DETAIL "C"



PIPE SIZE DEGREE BEND DOWN BENDS UP BENDS

PIPE SIZE	DEGREE BEND	DOWN BENDS			UP BENDS		
		W	H	L	W	H	L
4"	11 1/4°	18	12	18	12	12	12
	22 1/2°	18	18	24	12	12	12
	45°	18	18	30	12	12	18
6"	11 1/4°	24	18	18	12	12	12
	22 1/2°	24	18	24	12	12	12
	45°	24	18	48	12	12	18
8"	11 1/4°	24	18	24	12	12	18
	22 1/2°	24	18	42	12	12	24
	45°	24	18	48	18	12	24
10"	11 1/4°	30	24	24	18	18	18
	22 1/2°	30	24	42	18	18	24
	45°	30	24	72	18	18	36
12"	11 1/4°	30	24	30	18	18	18
	22 1/2°	30	24	54	18	18	30
	45°	30	36	72	24	18	36

DIMENSIONS FOR VERTICAL BENDS
(IN INCHES)
DETAIL "D"
PAGE 2 OF 2



No. Date Revision

-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE
MERCY CLINIC - WINGHAVEN BLVD.
2223 Technology Dr.
O'Fallon, Missouri 63366

Consulting Engineers
Z
HEIDEMAN ASSOCIATES, IN C.
A ZAK Company
13545 Barrett Parkway Drive
Suite 200
St. Louis, Missouri 63021
Contact: Dennis Pruitt
e-mail: dpruit@zakcompanies.com

NAME: MICHAEL J. VELLOFF
LICENSE NUMBER: E-2000161862
CORPORATE TITLE: CORPORATION AUTHORITY NUMBER: 00194
THE SEAL OF MICHAEL J. VELLOFF ON THIS DRAWING APPLIES ONLY TO THE CIVIL ENGINEERING WORK OF MICHAEL J. VELLOFF AND DOES NOT APPLY TO ANY OTHER WORK OR PROFESSIONAL SERVICES PROVIDED BY MICHAEL J. VELLOFF OR HIS EMPLOYER. THE SEAL OF MICHAEL J. VELLOFF IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM MICHAEL J. VELLOFF OR HIS EMPLOYER.



Developer / Owner Information
NAME: TEA PROPERTIES MISSOURI, LLC
ADDRESS: 600 WASHINGTON AVENUE, 15TH FLOOR
ST. LOUIS, MO 63101-1313
CONTACT: PHOENIX & A. MURPHY, CO SANDBERG
PHOENIX & A. MURPHY, P.C.
PHONE: (314) 446-4264
FAX: (314) 241-7604
E-MAIL: emurphy@sandberghphoenix.com

DATE: 2012-10-05
SCALE: NOTED
Mercy
1510-153209-0521
P.W.S.D. No. 2 Water Details

P+Z No. 9831.62
Approved Sept. 6, 2012
Page No.
C14