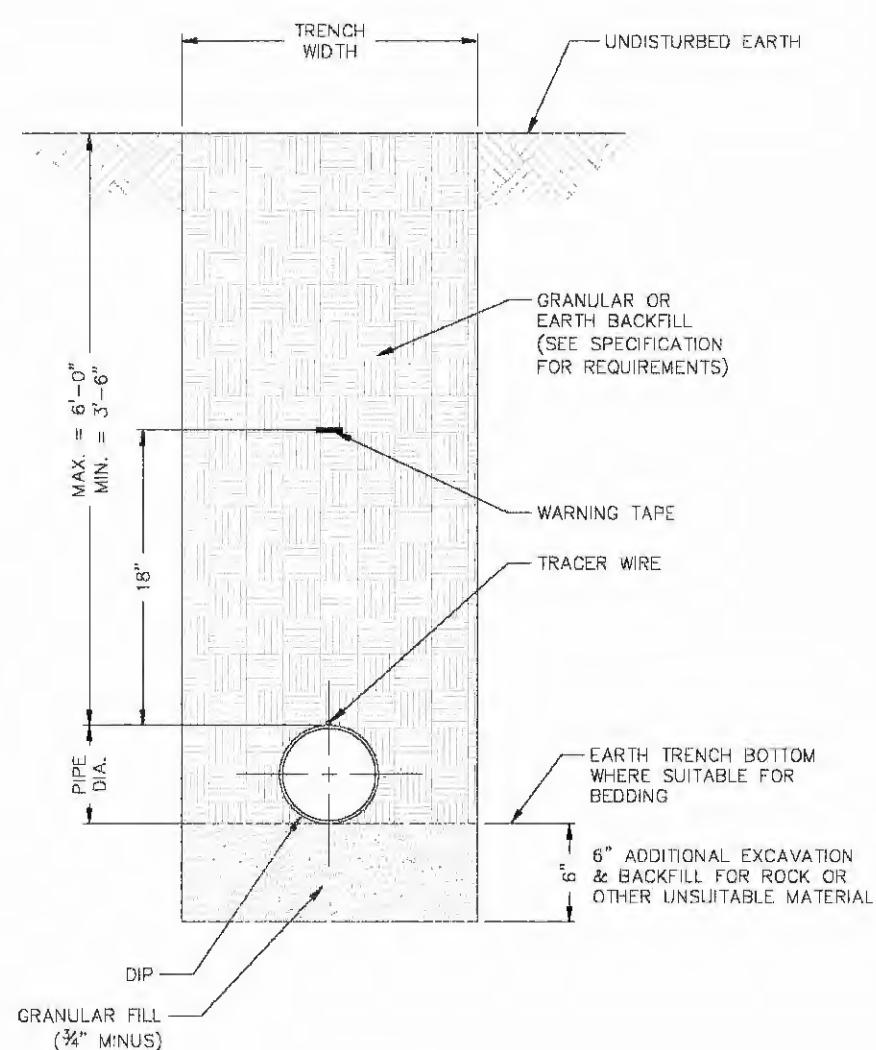


NOTES

1) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

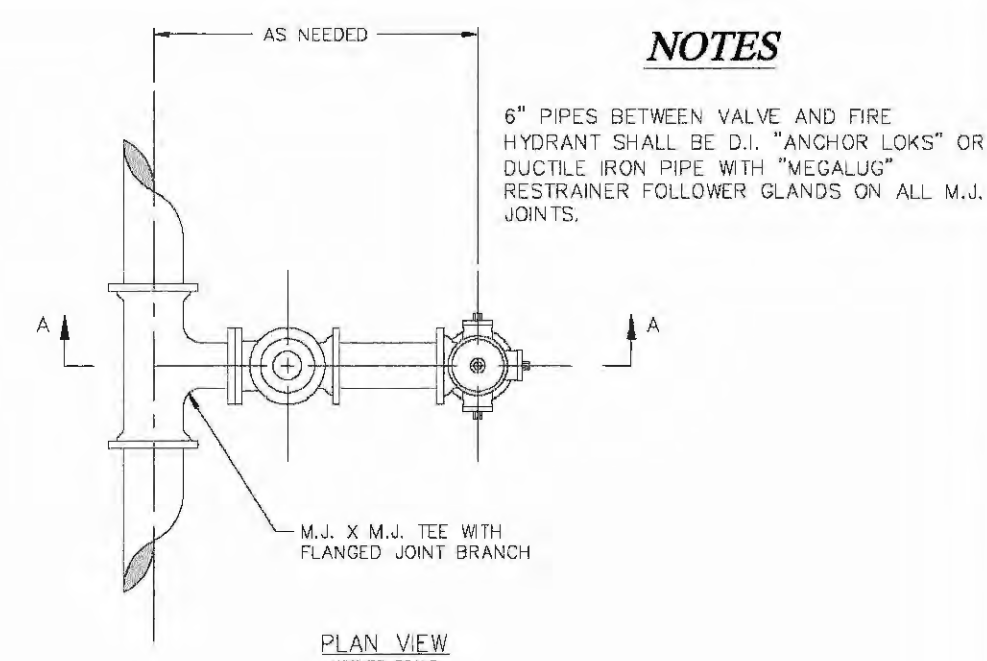
TYPICAL TRENCH SECTION FOR PVC PIPE
NOT TO SCALE
DETAIL "A"
PAGE 1 OF 2



NOTES

1) POLYWRAP REQUIRED FOR DUCTILE IRON PIPE
2) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

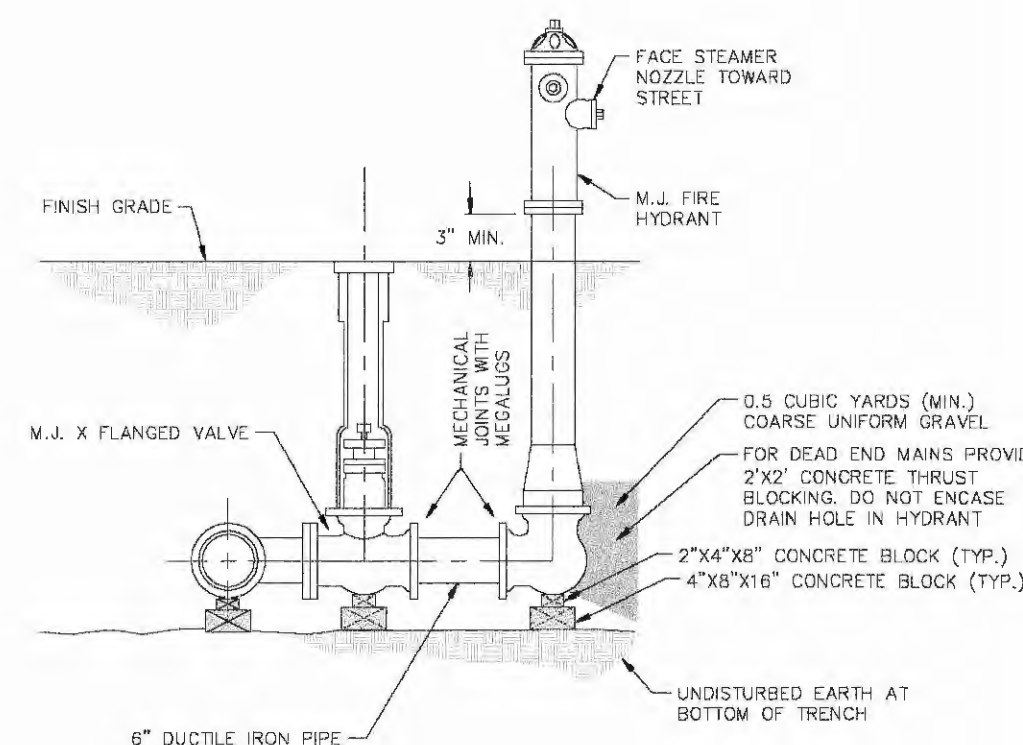
TYPICAL TRENCH SECTION FOR DUCTILE IRON PIPE
NOT TO SCALE
DETAIL "A"
PAGE 2 OF 2



NOTES

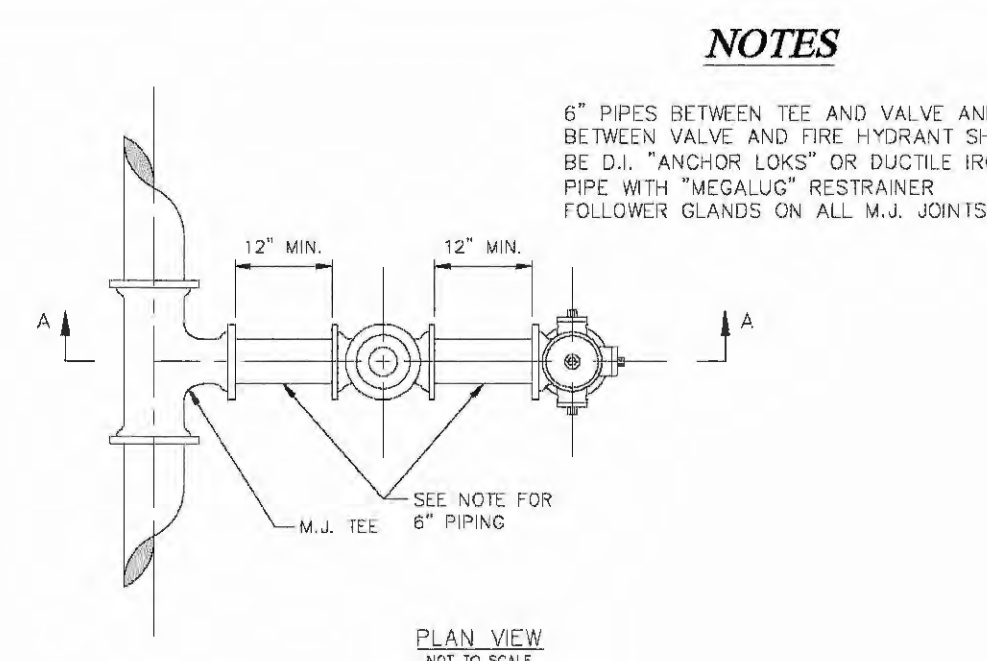
6" PIPES BETWEEN VALVE AND FIRE HYDRANT SHALL BE D.I. "ANCHOR LOCKS" OR DUCTILE IRON PIPE WITH "MEGALUG" RESTRAINER FOLLOWER GLANDS ON ALL M.J. JOINTS.

PLAN VIEW
NOT TO SCALE



SECTION "A-A"
NOT TO SCALE

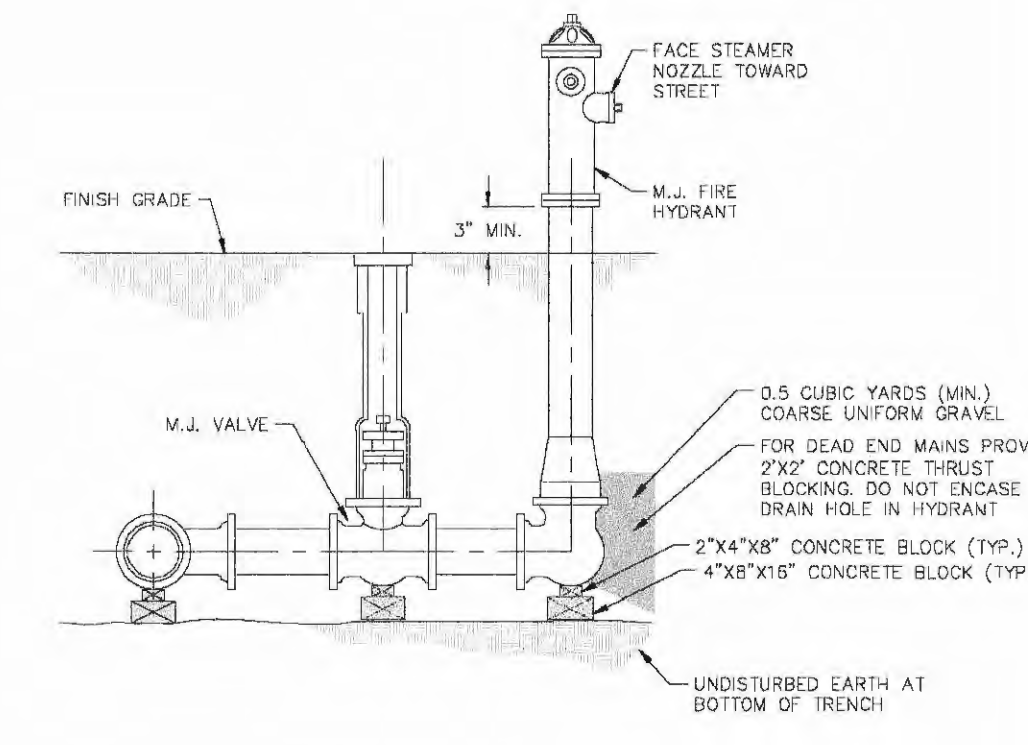
FIRE HYDRANT DETAIL
DETAIL "B"
PAGE 1 OF 3



NOTES

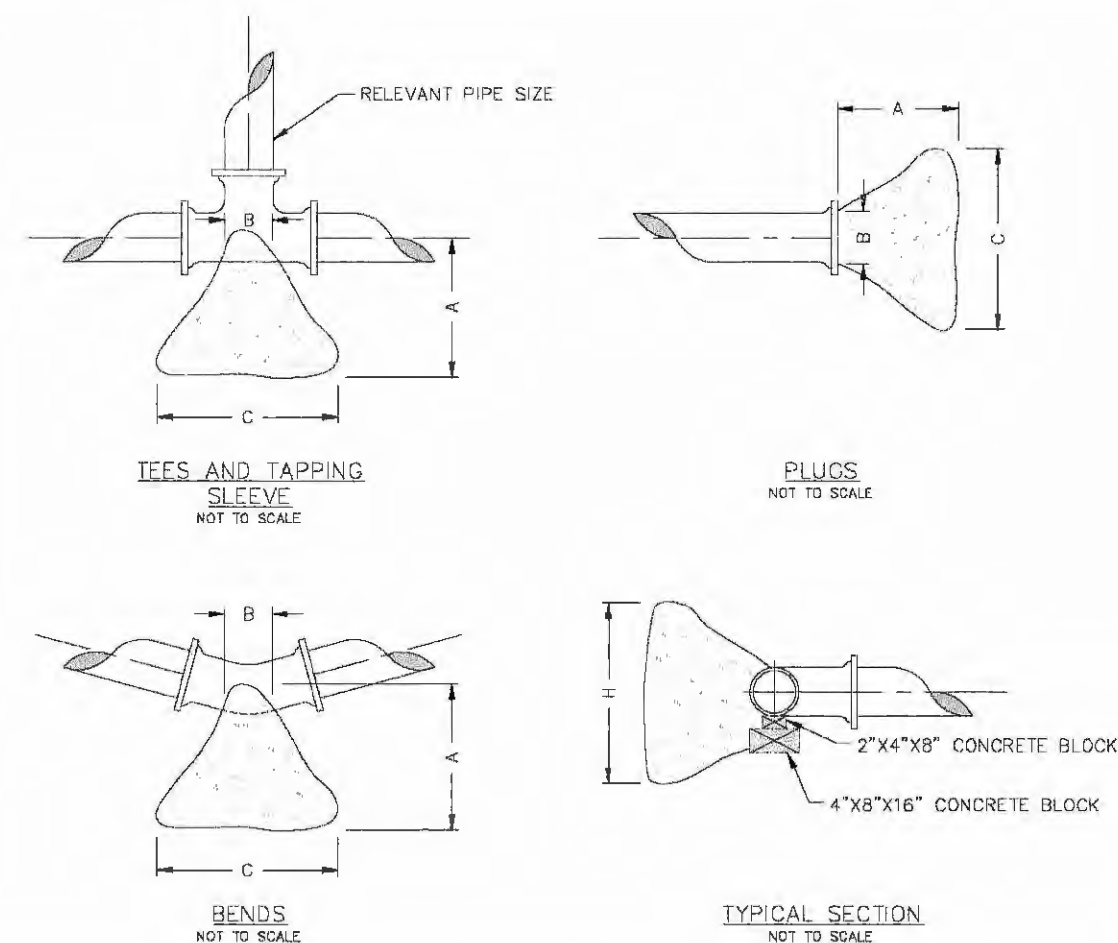
6" PIPES BETWEEN TEE AND VALVE AND BETWEEN VALVE AND FIRE HYDRANT SHALL BE D.I. "ANCHOR LOCKS" OR DUCTILE IRON PIPE WITH "MEGALUG" RESTRAINER FOLLOWER GLANDS ON ALL M.J. JOINTS.

PLAN VIEW
NOT TO SCALE



SECTION "A-A"
NOT TO SCALE

FIRE HYDRANT DETAIL
DETAIL "B"
PAGE 2 OF 3



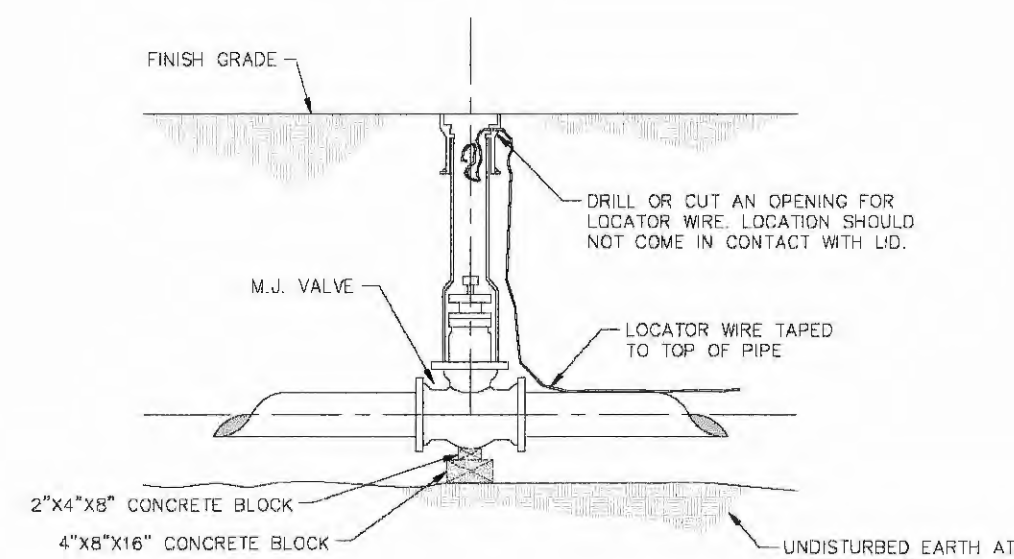
THRUST BLOCK DIMENSIONS - INCHES

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
4	14	4	24	12	26	15	18	12	12	12	12
6	16	6	36	18	36	24	30	18	24	12	12
8	20	8	36	30	42	36	36	24	24	18	12
10	20	10	48	36	66	36	36	28	24	18	18
12	24	12	68	36	82	42	52	36	40	24	18

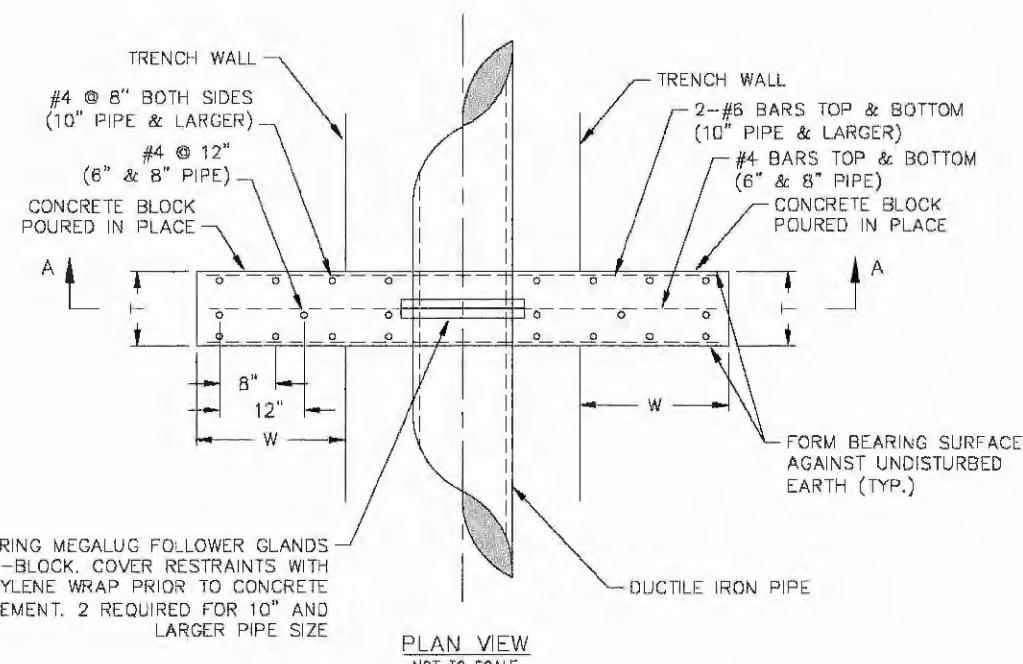
NOTE

FOR FITTINGS LARGER THAN 12", SPECIAL RESTRAINT DESIGNS ARE REQUIRED.

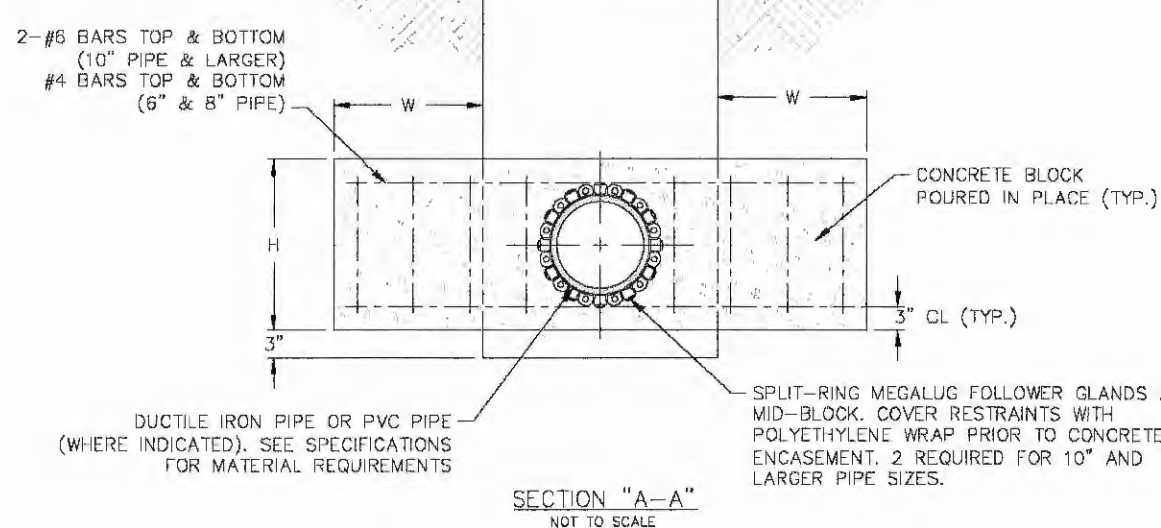
HORIZONTAL THRUST BLOCKING
DETAIL "C"



GATE VALVE DETAIL
NOT TO SCALE
DETAIL "D"



PLAN VIEW
NOT TO SCALE



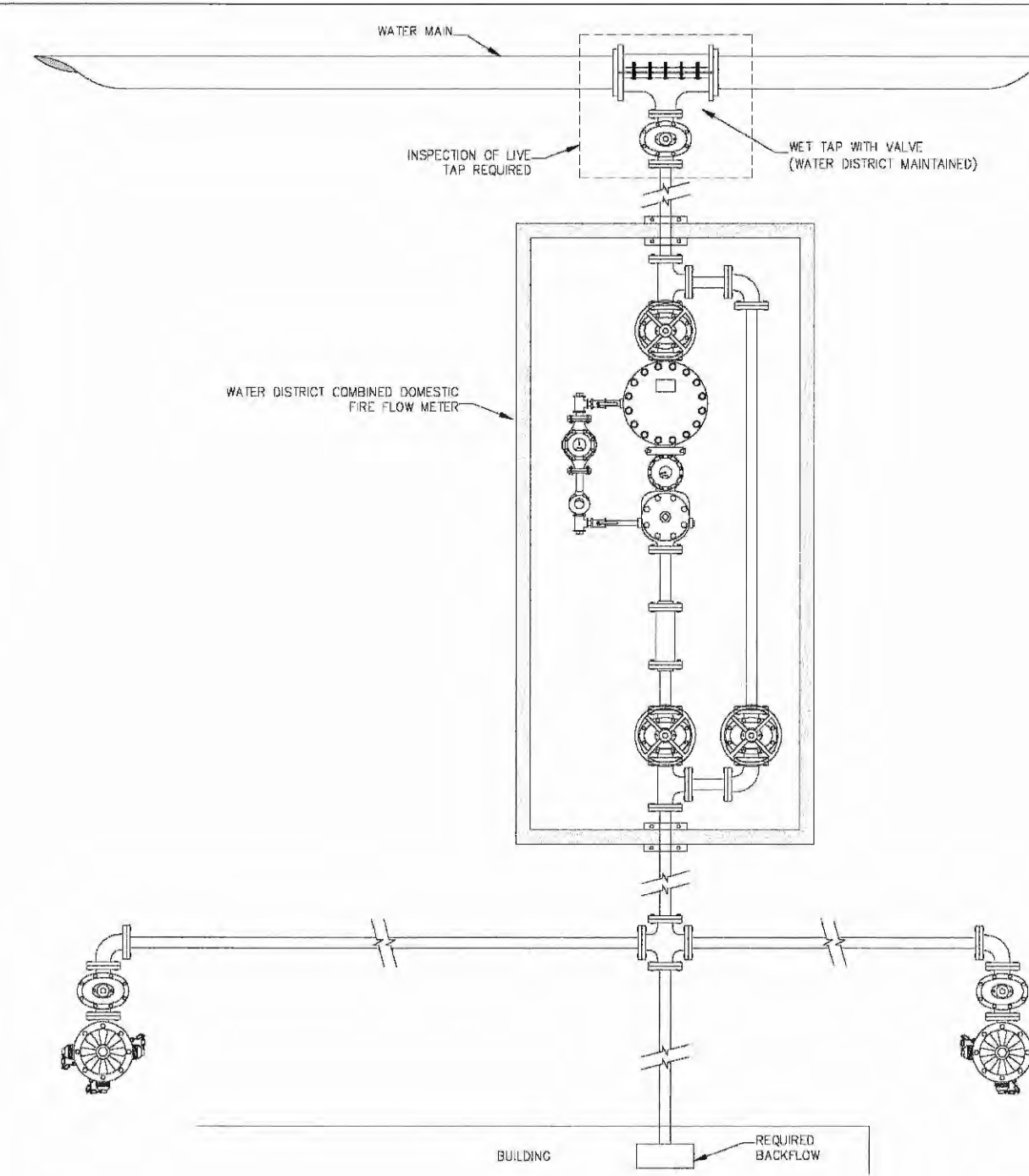
SECTION "A-A"
NOT TO SCALE

1) CONSTRUCT CROSS BLOCKS AT A MINIMUM OF 15' FROM CONNECTION POINT AND 5' FROM THE BELL END OF PIPE.

2) CROSS BLOCKS SHALL BE PRE-POURED PRIOR TO SHUTDOWN AND CONNECTIONS.

PIPE DIA. "D"	WIDTH TYP.	HEIGHT TYP.	THICKNESS "T"
4	12	12	12
6	24	24	12
8	24	24	12
10	30	30	16
12	36	36	18

CROSS BLOCK
DETAIL "E"



PLAN VIEW
NOT TO SCALE

TYPICAL LARGE COMMERCIAL SERVICE CONNECTION WITH COMBINED DOMESTIC & FIRE FLOW METER DETAIL "J"

APRIL 20, 2005
REV. 001 & 002

23

ENGINEERS SEAL DOES NOT APPLY TO DETAILS ON THIS SHEET.

PROJECT TITLE:
**ALTAIR AT THE PRESERVE
(FKA WINGHAVEN POINTE)**

Issue Date: 03/18/2016

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REVISIONS

DATE	DESCRIPTION	BY	APP'D
04/25/2016	DCSD & PHS02 COMMENTS		
05/16/2016	CITY REVIEW		
06/15/2016	CITY REVIEW & DCSD COMMENTS		
07/29/2016	CITY REVIEW		
08/04/2016	MODOT REVIEW		
08/29/2017	MODOT REVIEW		

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314-821-9600

WATER DETAILS

P+Z No. #9831.65.02

City No. #

Page No.

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