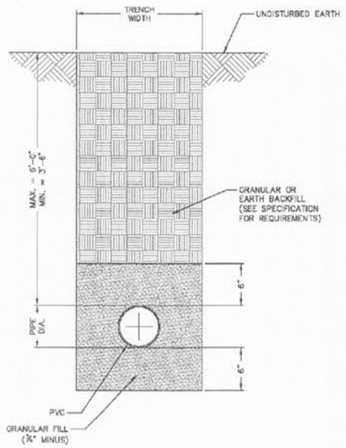
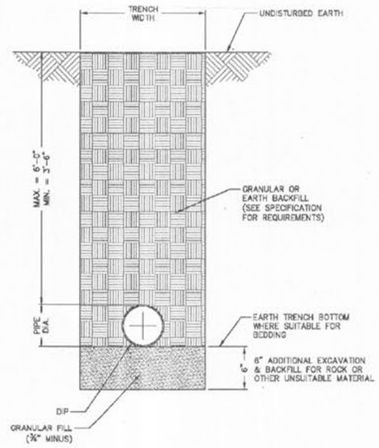


NOTES

SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

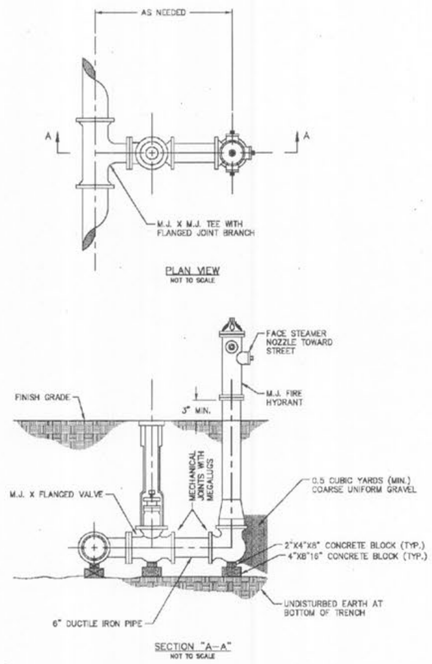
TYPICAL TRENCH SECTION
FOR PVC PIPE
NOT TO SCALE
DETAIL "A"
PAGE 1 OF 2



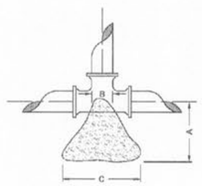
NOTES

SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

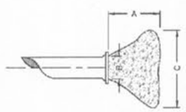
TYPICAL TRENCH SECTION
FOR DUCTILE IRON PIPE
NOT TO SCALE
DETAIL "A"
PAGE 2 OF 2



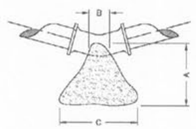
STANDARD
FIRE HYDRANT DETAIL
DETAIL "B"
SHEET 1 OF 3
SHEET 2 OF 3 AND SHEET 3 OF 3 NOT REQUIRED



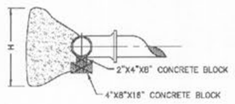
TEES AND TAPPING SLEEVE
NOT TO SCALE



PLUGS
NOT TO SCALE



BENDS
NOT TO SCALE



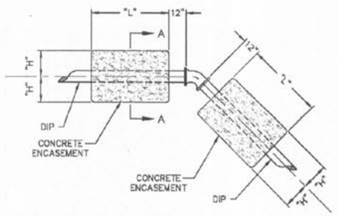
TYPICAL SECTION
NOT TO SCALE

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

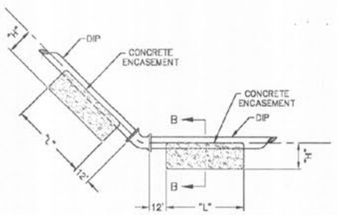
NOTE

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

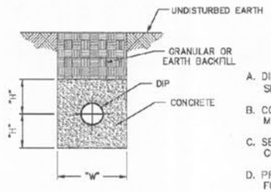
HORIZONTAL THRUST BLOCKING
DETAIL "C"



DOWN BEND
NOT TO SCALE



UP BEND
NOT TO SCALE



DOWN BEND
SECTION A-A
NOT TO SCALE

NOTES

A. DIP ON EACH SIDE OF FITTING SHALL BE "L" + 24" IN LENGTH.

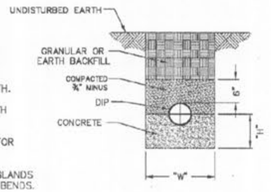
B. CONNECT DIP TO PVC PIPE WITH MJ SOLID SLEEVE.

C. SEE TABLE ON PAGE 2 OF 2 FOR CONCRETE DIMENSIONS.

D. PROVIDE MEGALUG FOLLOWER GLANDS FOR JOINTS OF ALL VERTICAL BENDS.

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

VERTICAL THRUST BLOCKING
DETAIL "D"
PAGE 1 of 2



UP BEND
SECTION B-B
NOT TO SCALE

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

PLANNING & DEVELOPMENT #1709.03 APPROVED JANUARY 7, 2010

STATE OF MISSOURI
MATTHEW AARON KRIETE
NUMBER PE-2007002811
PROFESSIONAL ENGINEER
6/4/10

WATER LINE DETAILS

HILLMANN PLACE

ST. CHARLES COUNTY, O'FALLON, MISSOURI

Surveyed: –
Drawn: BR
Checked: MK

Engineering Surveys & Services
1113 Fay Street
Columbia, Missouri
573 - 449 - 2646
Missouri Engineering Corporation # 2004005018

Revised

MATTHEW A. KRIETE
PROFESSIONAL ENGINEER
PE-2007002811

Scale	Date	Job	Sheet
AS SHOWN	JUNE 4, 2010	11481	C119

F:\CURRENT\DRAWINGS\JES\11481\COVER & DETAILS.DWG 5/4/2010