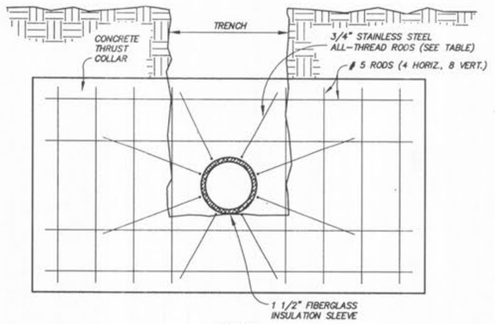
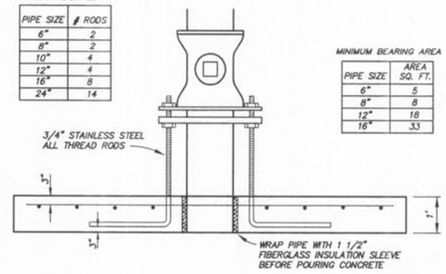


SECTION

MINIMUM # OF ALL-THREAD RODS REQUIRED

PIPE SIZE	# RODS
6"	2
8"	2
10"	4
12"	4
16"	8
24"	14



MINIMUM BEARING AREA

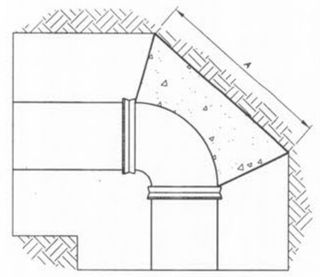
PIPE SIZE	AREA SQ. FT.
6"	5
8"	8
12"	18
16"	33

PLAN

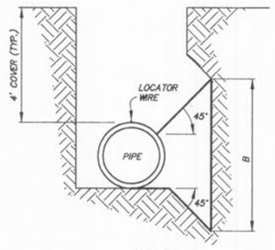
NOTES:
1. THE #5 REBAR ARE NOT REQUIRED FOR 6" PIPE.

THRUST COLLAR DETAIL

NOT TO SCALE



PLAN



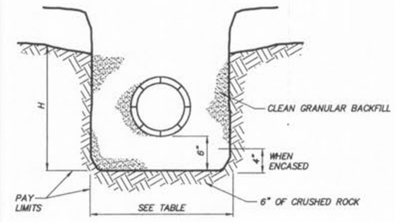
SECTION

PIPE SIZE	11 1/4° BEND		22 1/2° BEND		45° BEND		90° BEND		TEE	
	A	B	A	B	A	B	A	B	A	B
4" & 6"	1'-0"	0'-6"	1'-3"	0'-9"	1'-6"	1'-0"	2'-0"	1'-6"	2'-6"	1'-9"
8"	1'-0"	0'-9"	1'-6"	1'-0"	2'-0"	1'-6"	2'-9"	2'-0"	3'-3"	2'-3"
12"	1'-6"	1'-0"	2'-3"	1'-6"	3'-0"	2'-0"	4'-0"	2'-9"	5'-0"	3'-3"
16"	2'-0"	1'-6"	3'-0"	2'-0"	4'-0"	2'-9"	5'-6"	3'-9"	6'-0"	4'-0"

THRUST BLOCK DETAIL

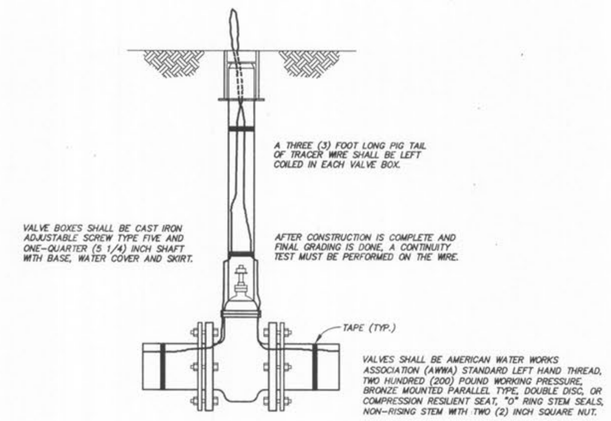
NOT TO SCALE

PIPE DIA.	TRENCH WIDTH PAY LIMITS
≤ 6"	PIPE DIA. + 18"
8"-10"	PIPE DIA. + 10"
12"-36"	PIPE DIA. + 12"



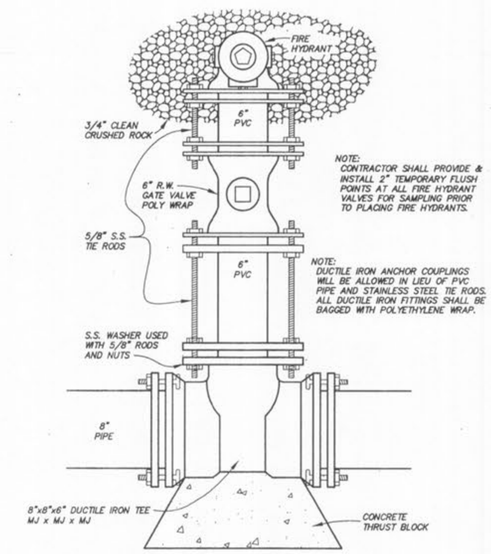
ROCK CUT

NOT TO SCALE



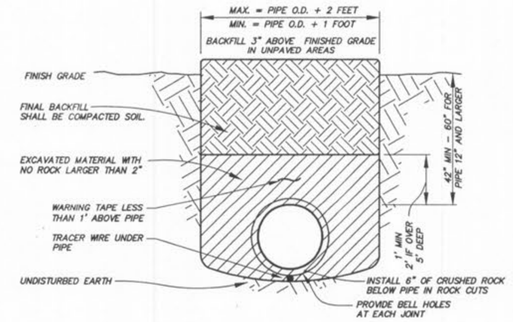
WATER VALVE

NOT TO SCALE



FIRE HYDRANT DETAIL

NOT TO SCALE



① PVC WATER PIPE EMBEDMENT DETAIL

NOT TO SCALE

REVISION NOTES:
1. REVISED WATER PIPE EMBEDMENT DETAIL.

PLANNING & DEVELOPMENT #1804.08 APPROVED AUGUST 6, 2009

WATERLINE DETAILS

WOODBURY PLACE

ST. CHARLES COUNTY, O'FALLON, MISSOURI

STATE OF MISSOURI — MATTHEW AARON KRIETE — NUMBER PE-2007002811 — PROFESSIONAL ENGINEER — 1/18/10

MATTHEW A. KRIETE
PROFESSIONAL ENGINEER
PE-2007002811

Surveyed:
Drawn: CH
Checked: TOC/MK

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

Revised
① 19 JAN 2010

Scale	Date	Job	Sheet
AS SHOWN	DECEMBER 7, 2009	11354	C118

F:\CURRENTDRAWINGS\JES\11354\COVER & DETAILS.DWG 1/19/2010