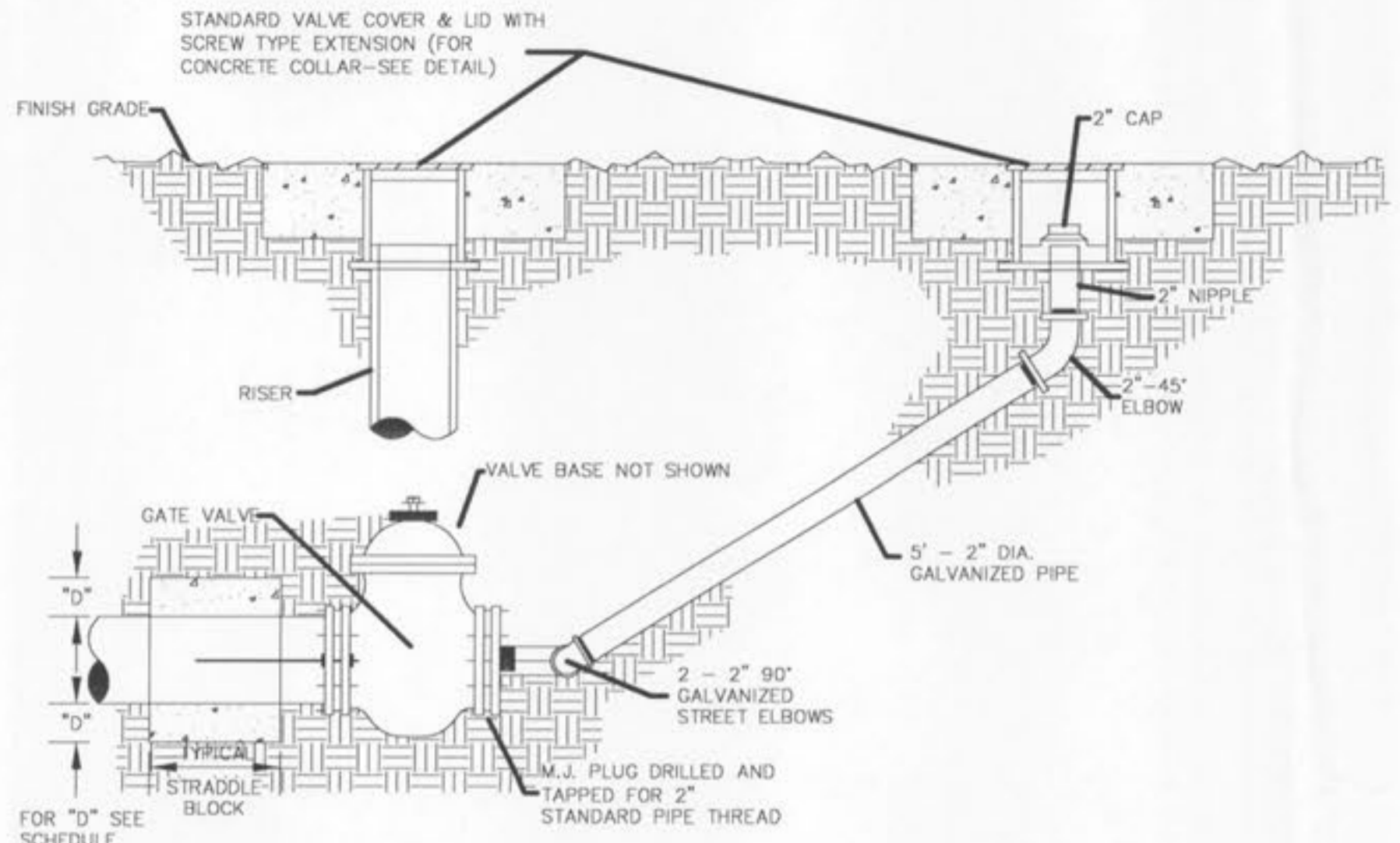
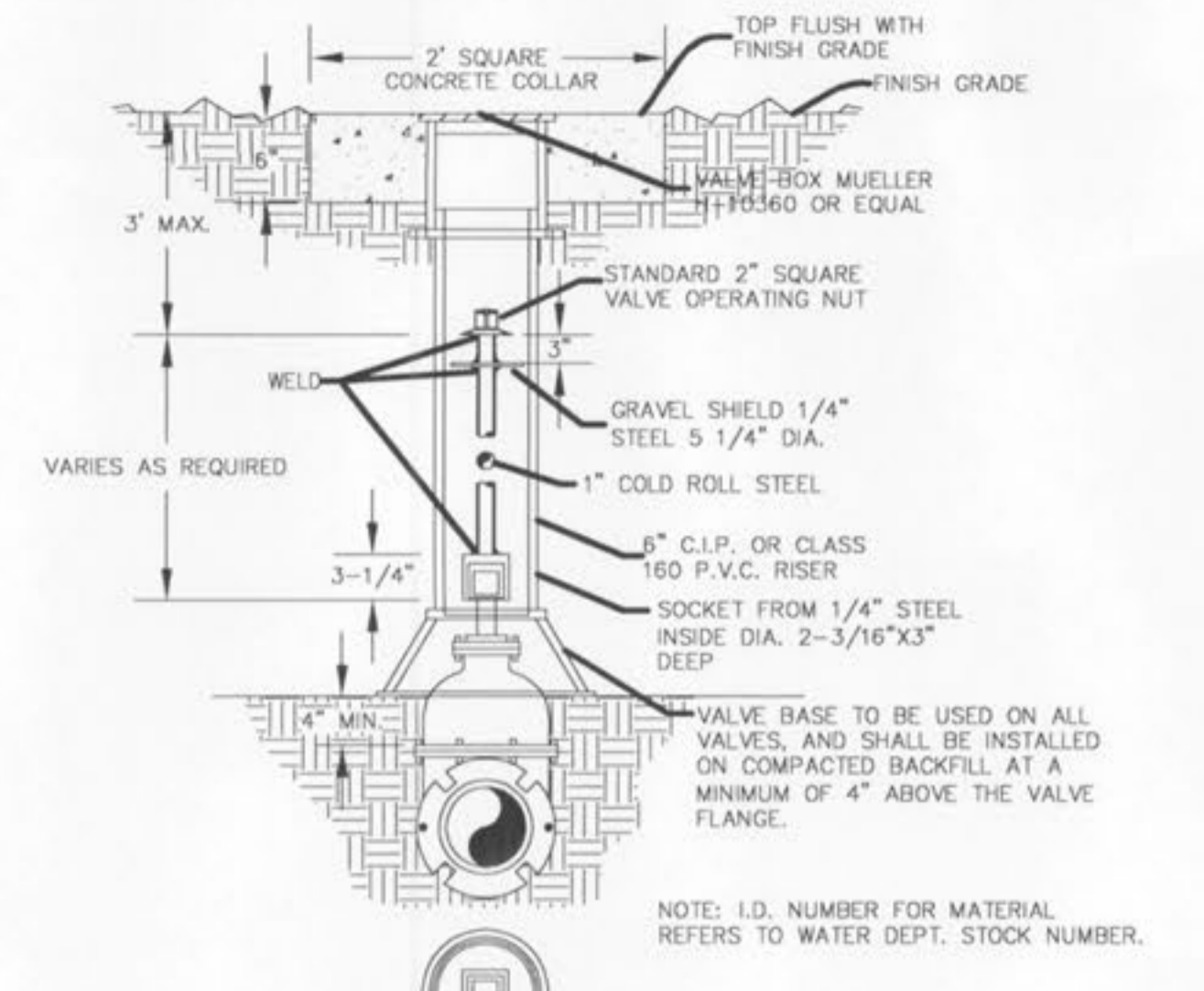


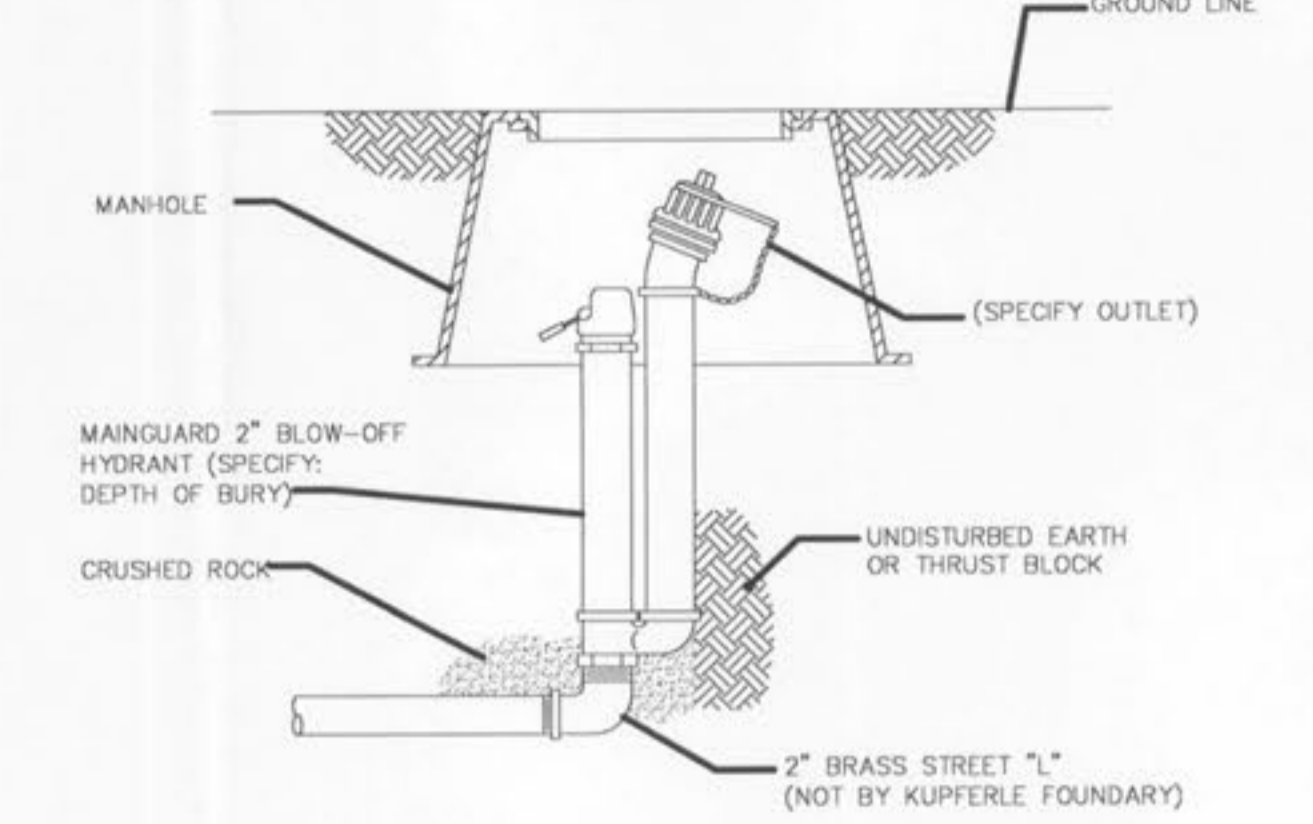
MANUAL AIR VALVE DETAIL
NOT TO SCALE



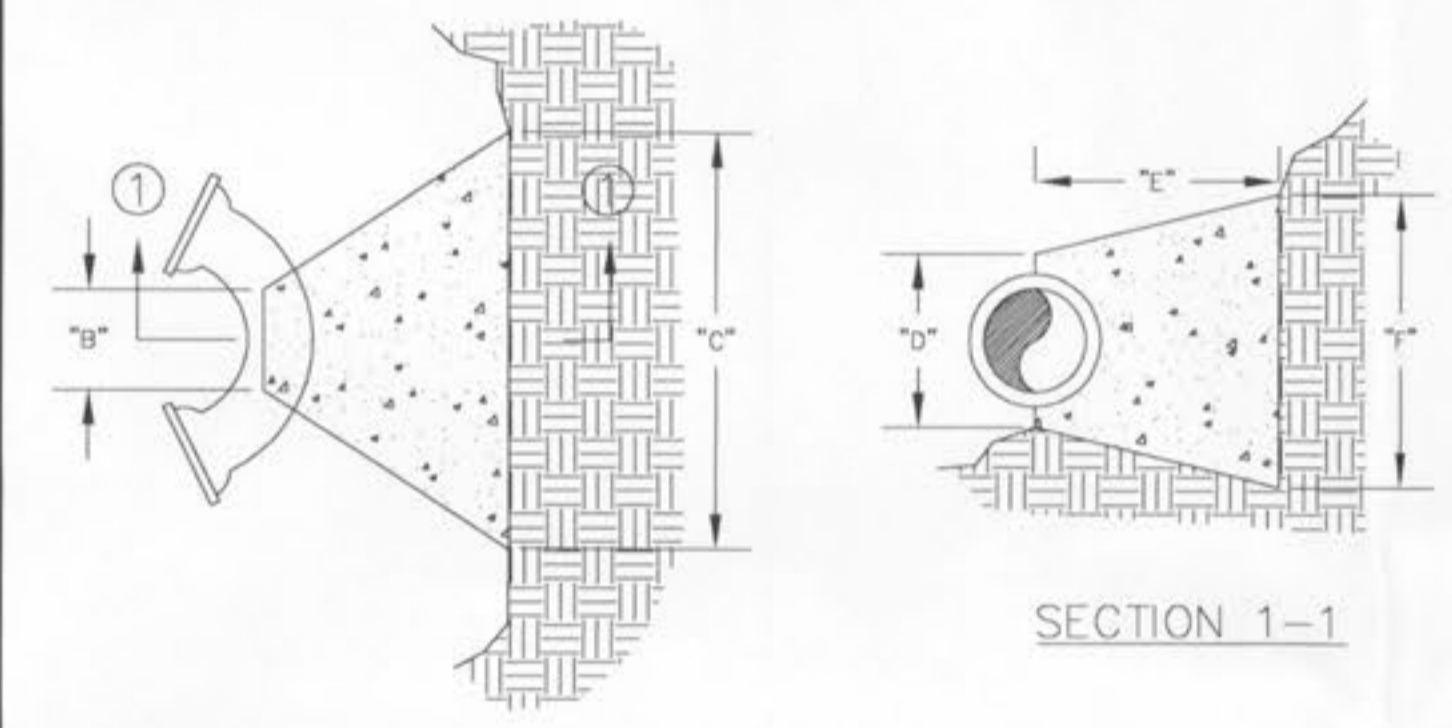
FLUSHING ASSEMBLY
NOT TO SCALE



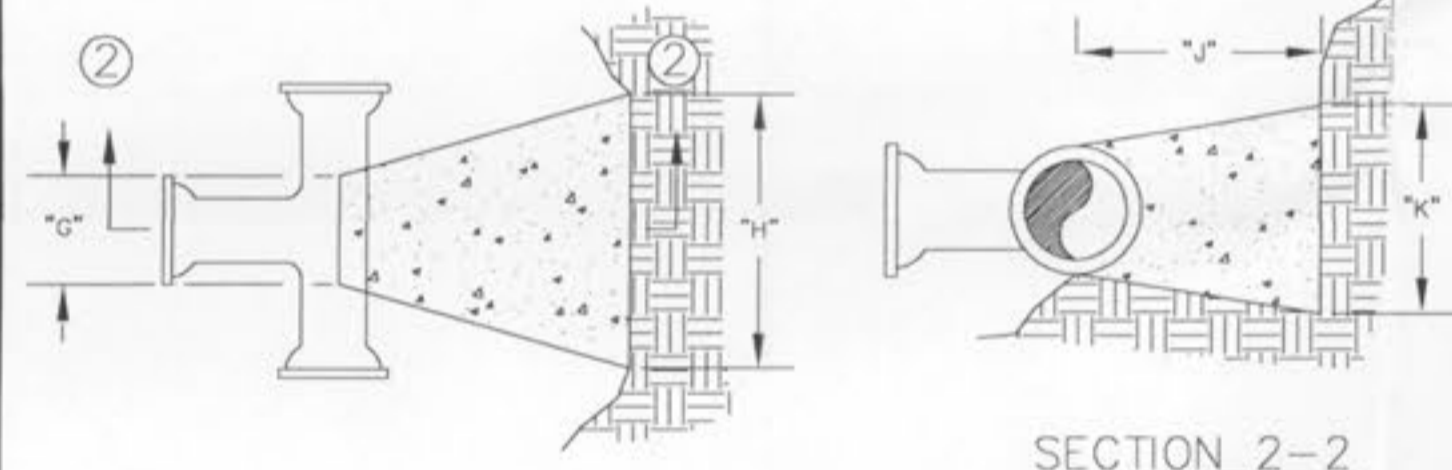
WATER VALVE DETAIL
NOT TO SCALE



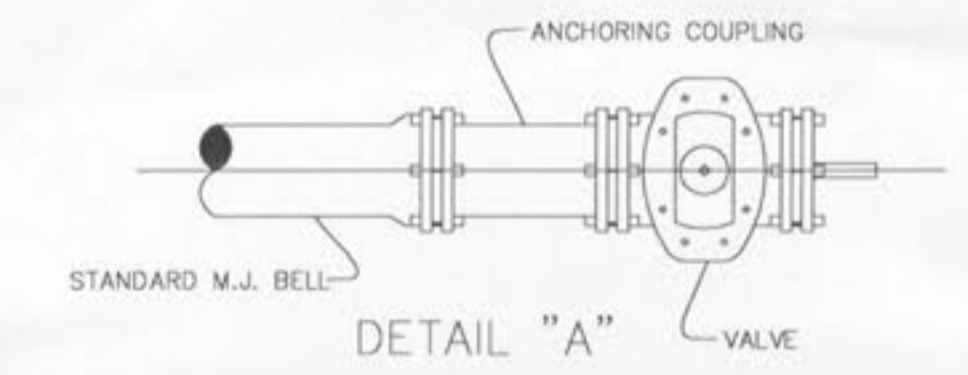
BLOW-OFF HYDRANT
NOT TO SCALE



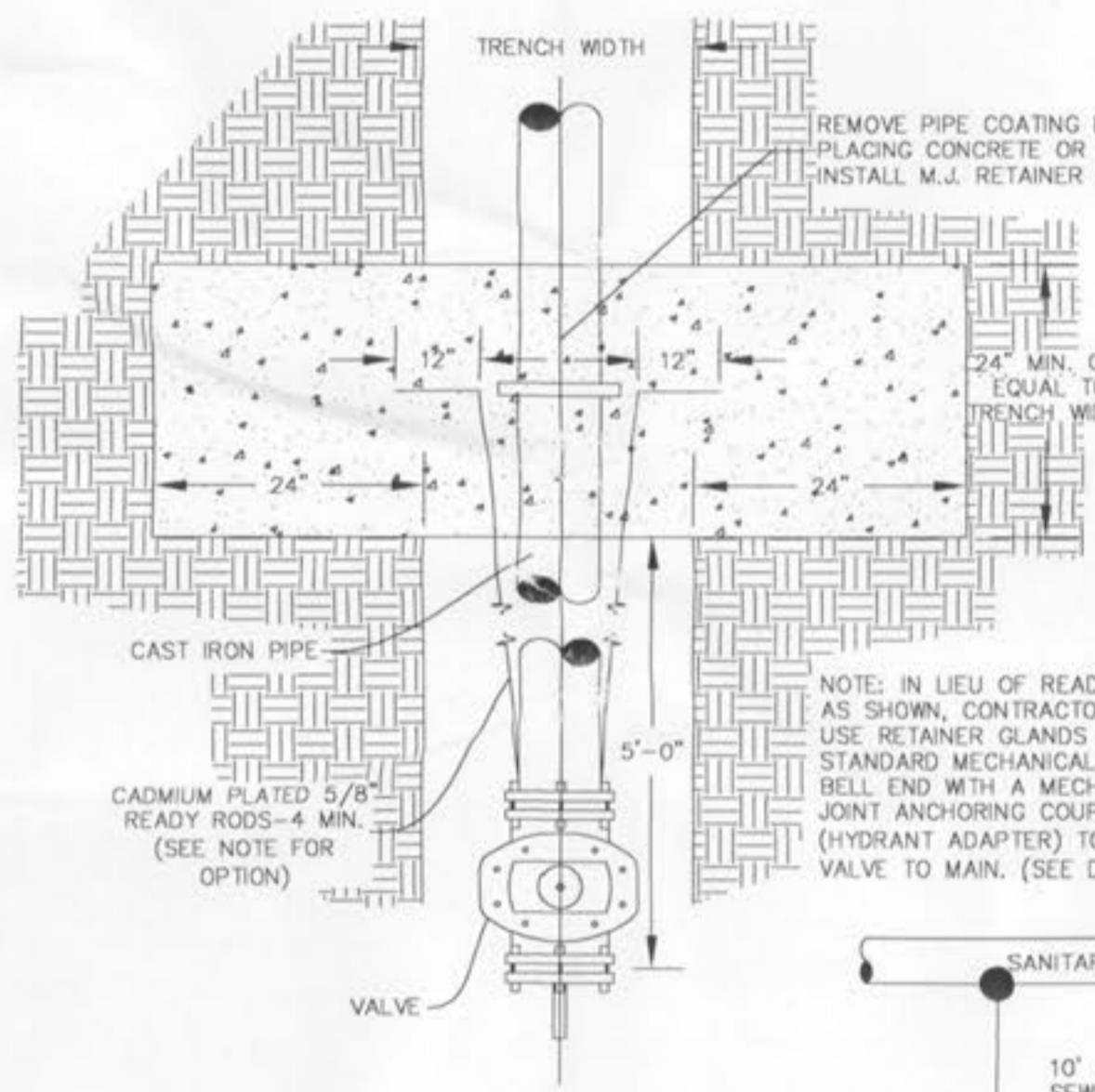
SECTION 1-1



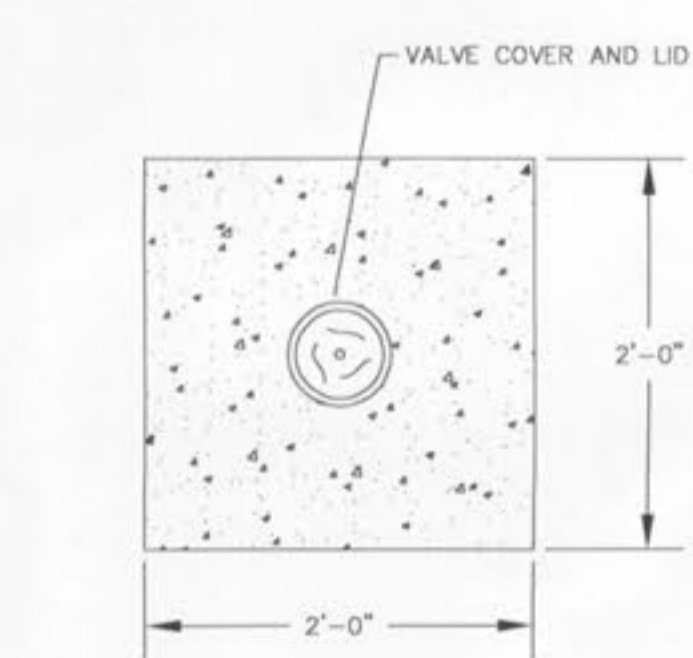
SECTION 2-2



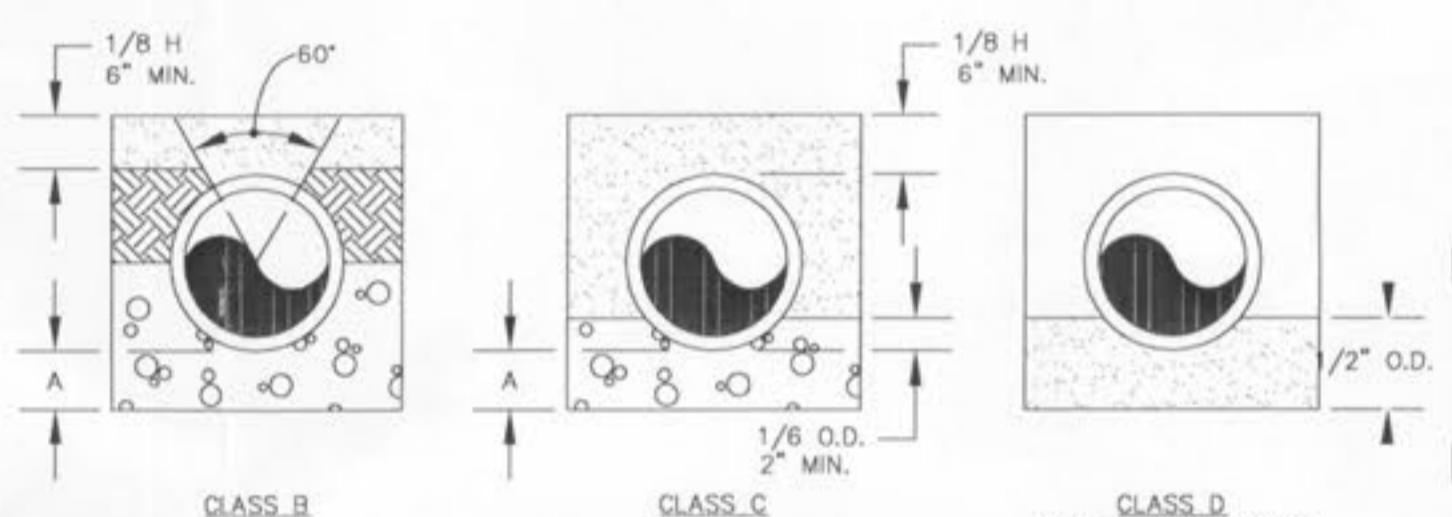
DETAIL "A"



STRADDLE BLOCK DETAIL
NOT TO SCALE



TOP VIEW CONCRETE COLLAR
NOT TO SCALE



LEGEND
O.D. - NOMINAL PIPE SIZE
H - COVER ABOVE TOP OF PIPE
A - EMBEDMENT BELOW PIPE (SEE TABLE)

TABLE OF EMBEDMENT DEPTHS BELOW PIPE		
I.D.	A MIN. SOIL	A MIN. ROCK
27" & SMALLER	3"	6"

BENDS	"B"	"C"	"D"	"E"	"F"
6"-11 1/4"	8"	15"	12"	24"	10"
6"-22 1/2"	8"	18"	12"	24"	13"
6"-45"	8"	30"	12"	24"	14"
6"-90"	8"	30"	12"	24"	27"
8"-11 1/4"	8"	20"	12"	24"	10"
8"-22 1/2"	8"	22"	12"	24"	17"
8"-45"	8"	30"	12"	24"	24"
8"-90"	8"	38"	12"	24"	36"
12"-11 1/4"	8"	30"	12"	24"	15"
12"-22 1/2"	8"	35"	12"	24"	25"
12"-45"	8"	40"	12"	24"	40"
12"-90"	8"	60"	12"	24"	52"

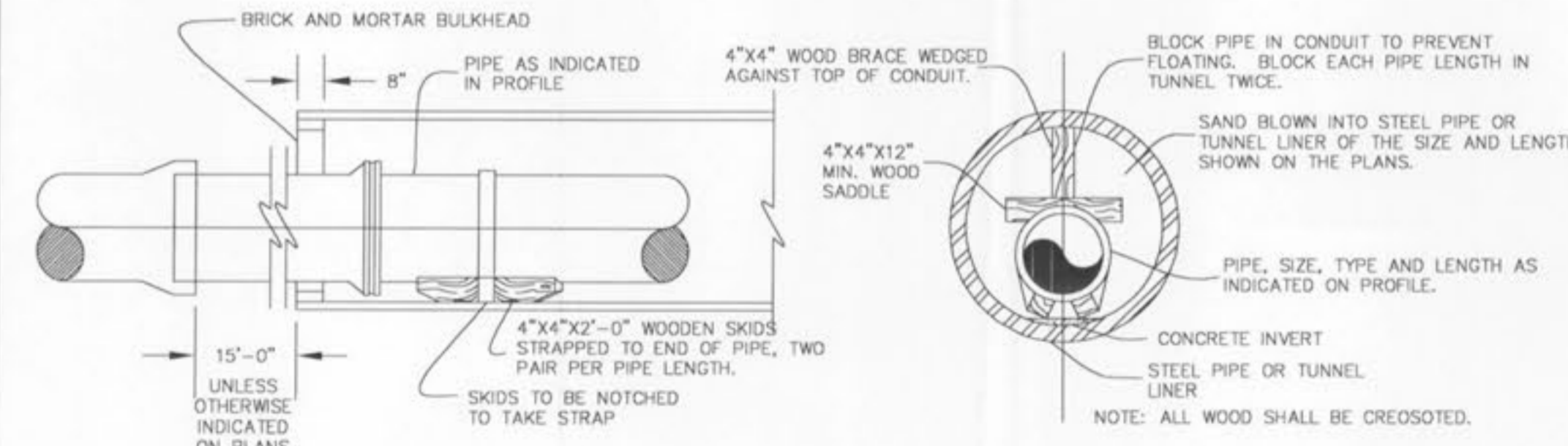
TEES				
"G"	"H"	"J"	"K"	"L"
6"x6"x6"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	24"
12"x12"x6"	12"	24"	24"	18"
12"x12"x8"	12"	24"	24"	24"
12"x12"x12"	12"	36"	24"	36"

CUBIC FEET OF CONCRETE REQUIRED				
BEND	11 1/4"	22 1/2"	45"	90"
6"	1.7	2.4	3.5	5.5
8"	2.1	3.1	5.0	8.5
12"	3.7	5.9	9.7	17.5

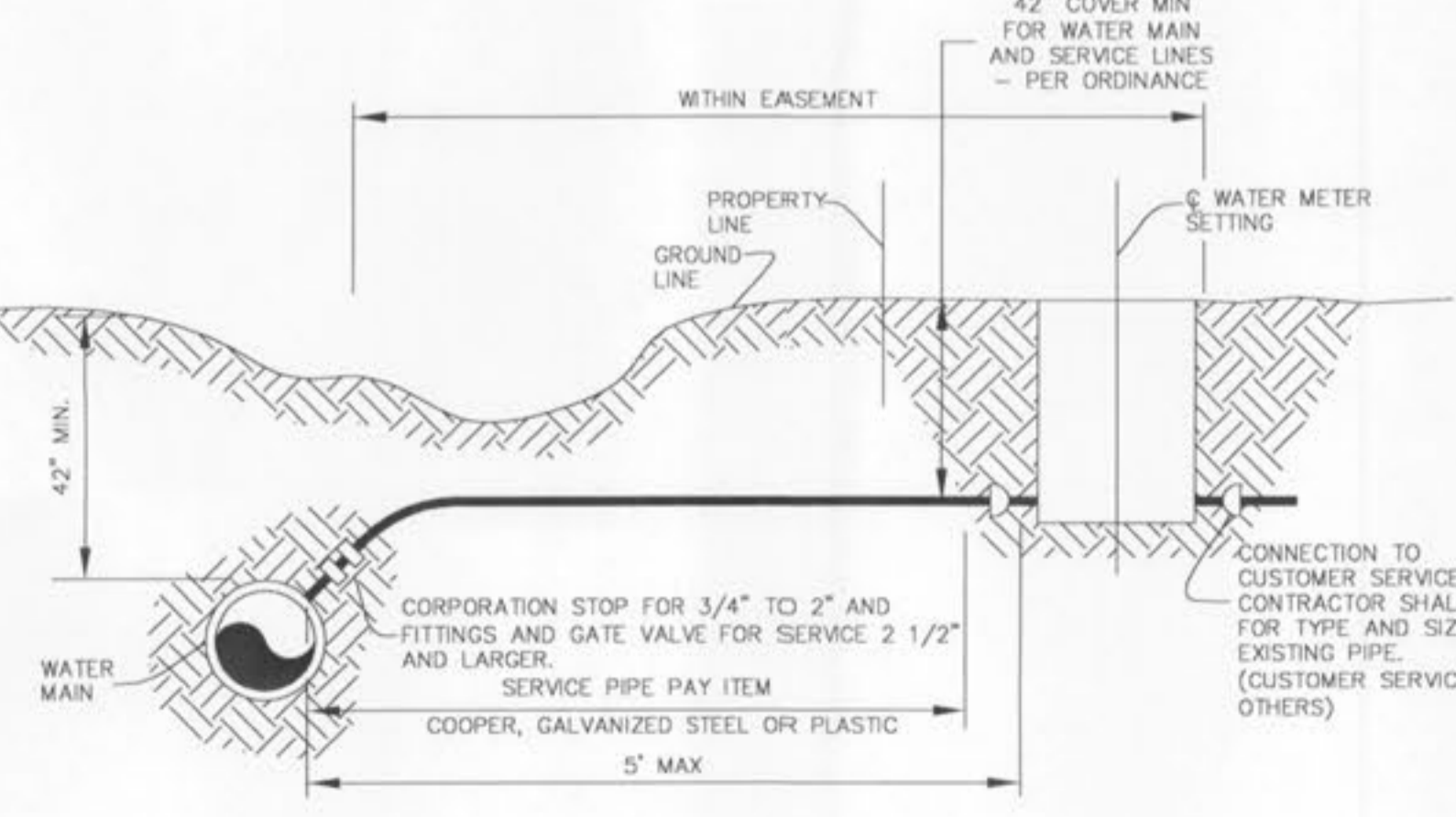
TEE X				
"G"	"H"	"J"	"K"	"L"
6"	4.0	~	~	4.0
8"	4.0	5.0	~	5.0
12"	4.0	5.5	10.5	10.5

NOTES:
1. 2" & 4" FITTINGS EQUIVALENT TO 6" FITTINGS.
2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR TEES.

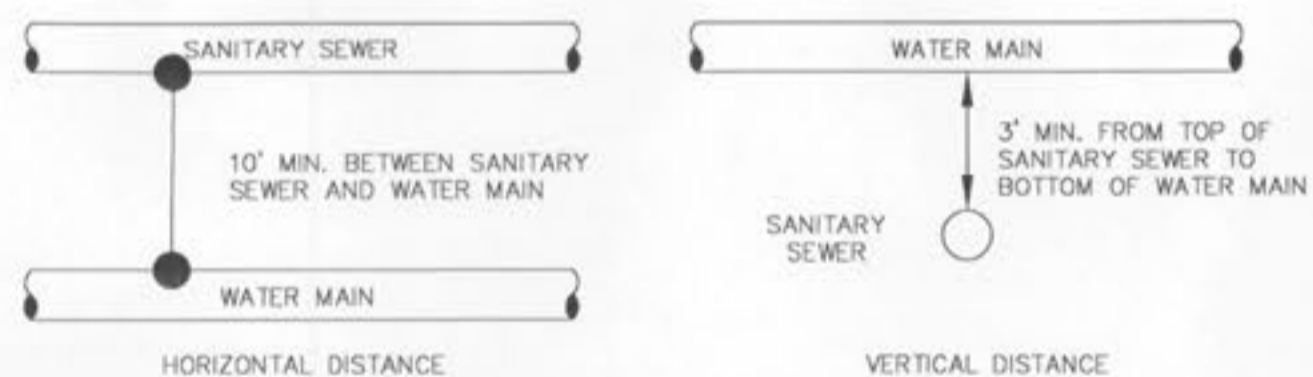
BACKING BLOCKS
NOT TO SCALE



TUNNEL LINER DETAIL
NOT TO SCALE

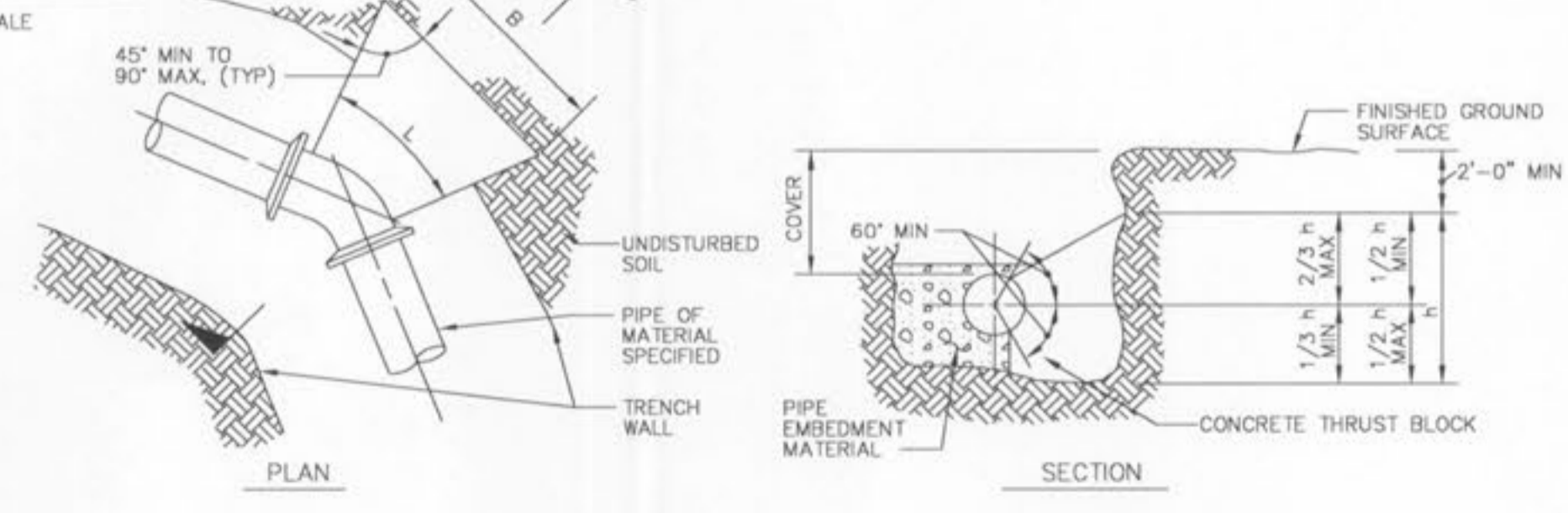


TYPICAL SERVICE ASSEMBLY
NOT TO SCALE



TYPICAL WATER AND SEWER SEPARATION
NOT TO SCALE

WATER MAIN EMBEDMENT
NOT TO SCALE



CONCRETE THRUST BLOCKING
NOT TO SCALE

- NOTES:
- AREA OF BLOCK, A = Bxh. BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.
 - B = h = \sqrt{A} , EXCEPT WHERE TOP OF BLOCK IS WITHIN 2 FEET FROM GROUND SURFACE, THEN B = A/h.
 - MINIMUM BLOCK DIMENSION (B & h) SHALL BE AT LEAST OD OF PIPE OR 1 FOOT FOR PIPE OD 12" OR LESS.
 - THE BOTTOM OF THE BLOCK SHALL EXTEND AT LEAST TO THE BOTTOM OF THE TRENCH IN ALL CASES.
 - L = FITTING LENGTH MINUS CLEARANCE FOR BELLS.
 - DETAIL IS SHOWN FOR CAST IRON PIPE; DETAIL IS SIMILAR FOR OTHER TYPES OF PIPE.
 - DIMENSIONS FOR THRUST BLOCKS FOR FIRE HYDRANT ASSEMBLY ARE SHOWN FIRE HYDRANT ASSEMBLY DETAIL.

SIZE	BEND	THRUST AREA	B	H
16"	11 1/2"	4 SF	2'	2'
16"	22 1/2"	8 SF	2.8'	2.8'

REVISIONS

1	DATE	BY	DESCRIPTION
2			
3			
4			

DEVELOPER OWNER: R3 DEVELOPMENT, LLC
7800 HIGHWAY N
OFALLON, MO 63366
(636) 561-3948

THE HEIGHTS
1609 HIGHWAY 79
OFALLON, MO 63366

WATER DETAILS

DESIGNED BY: JCB
DRAWN BY: JCB
CHECKED BY: MB
DATE: 10/03/05
Job Number: 05-143
Sheet Number: C10.6

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