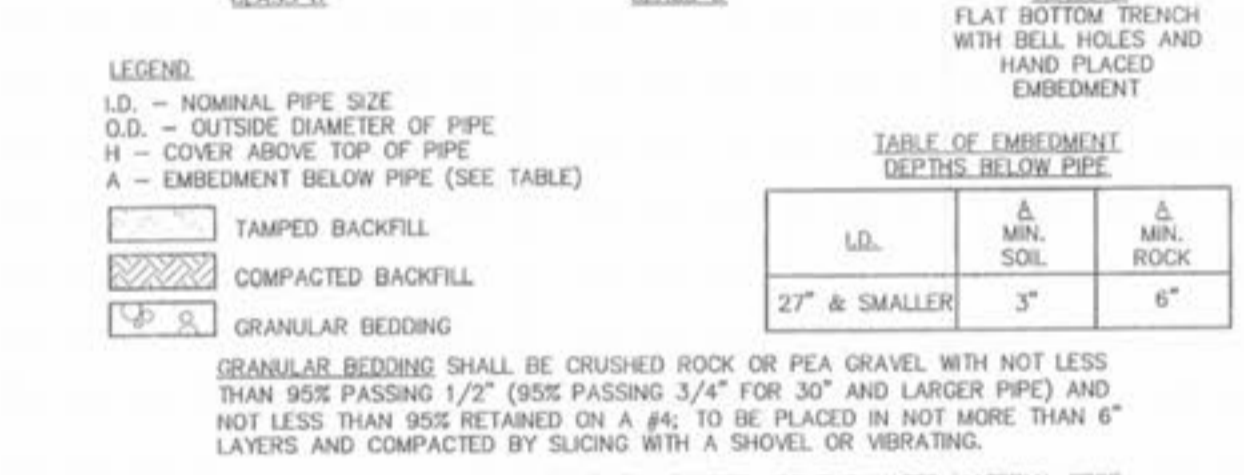
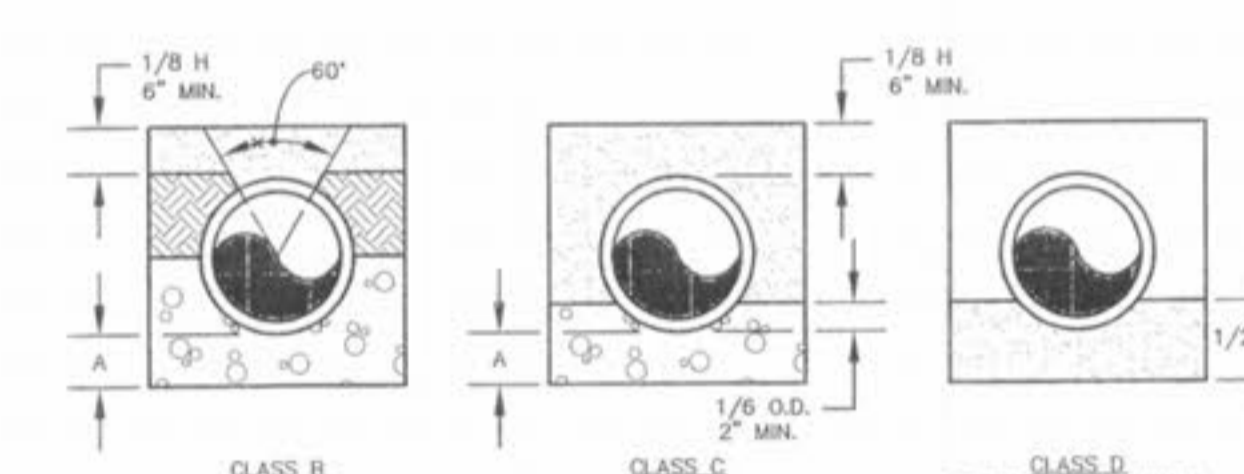
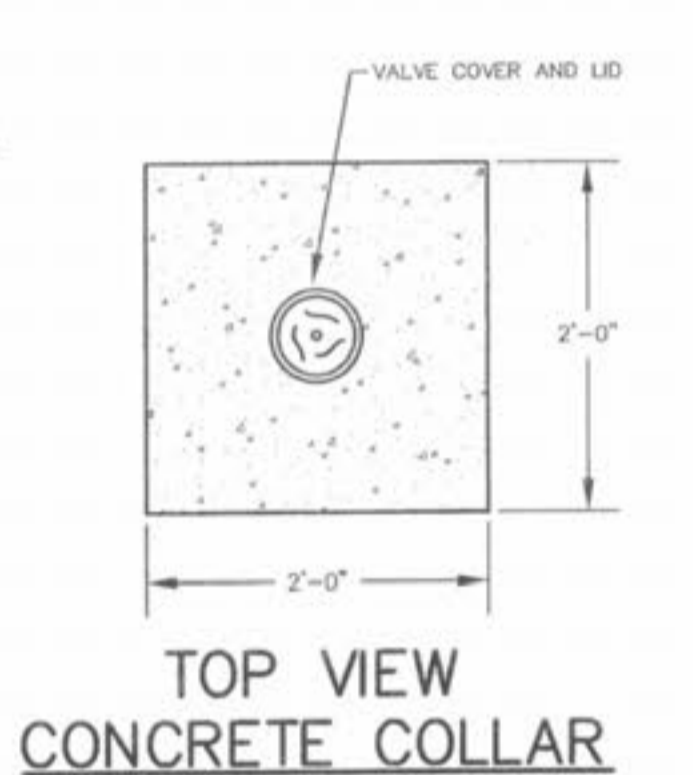
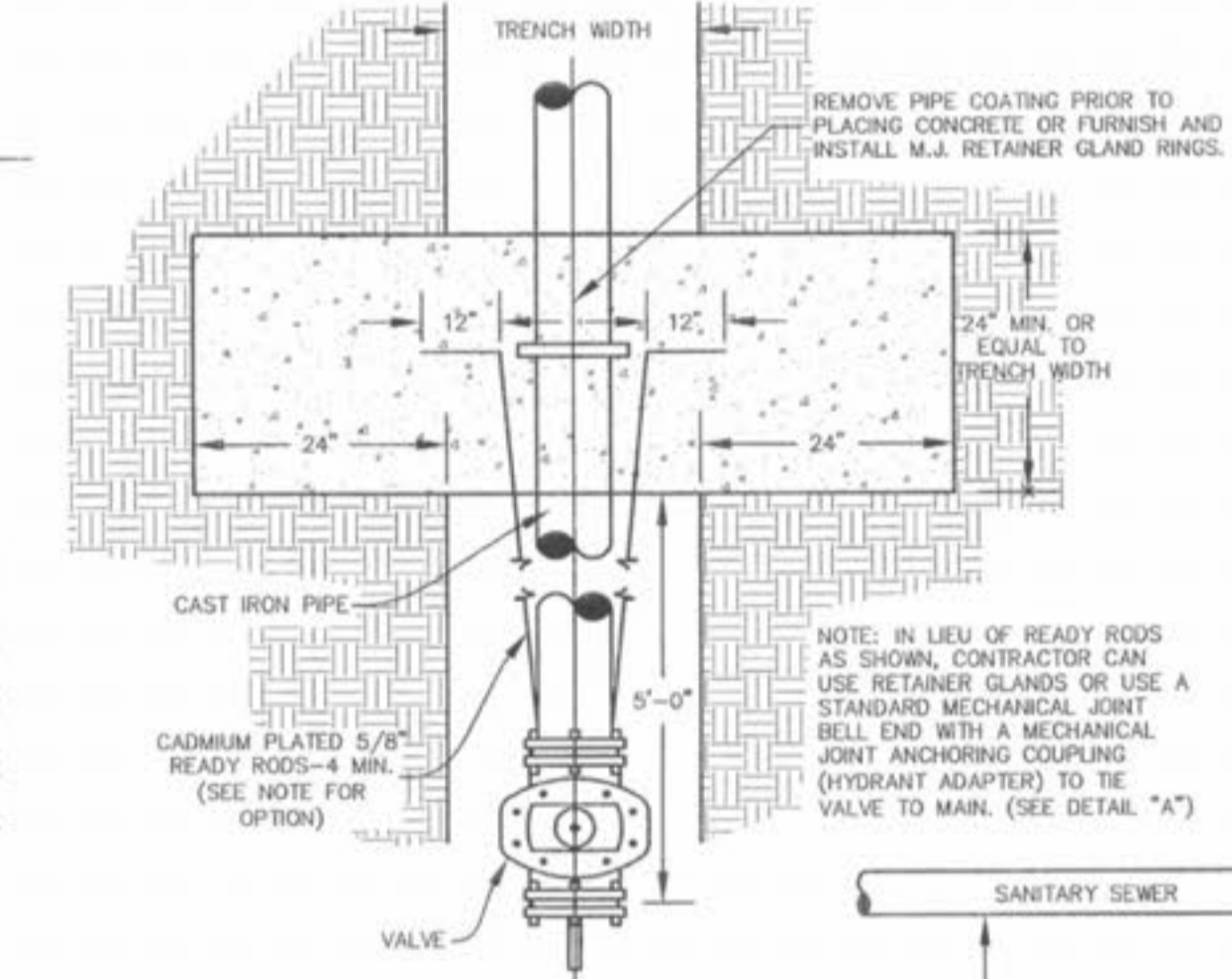
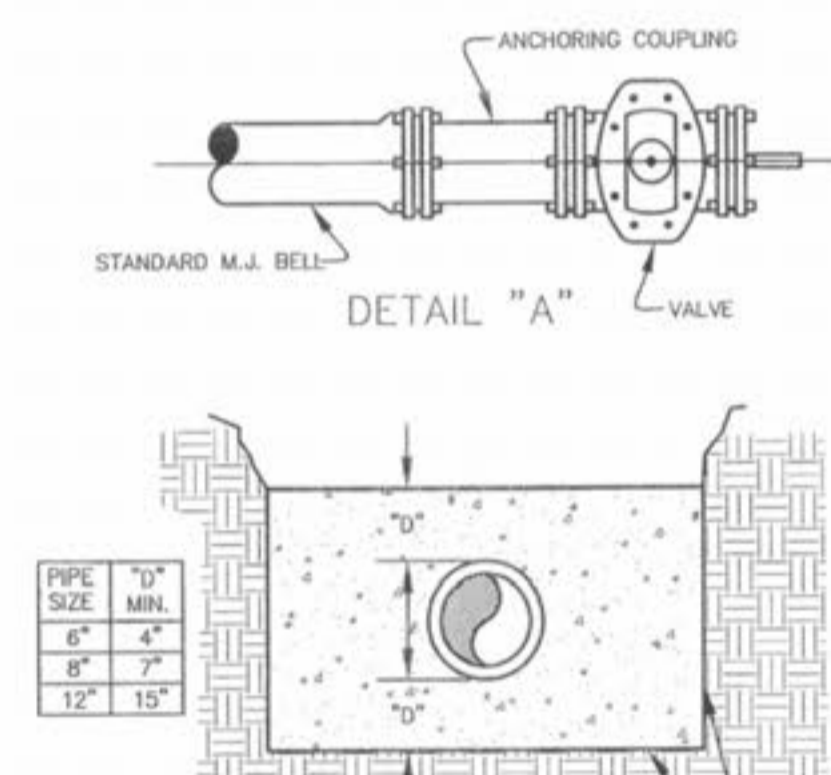
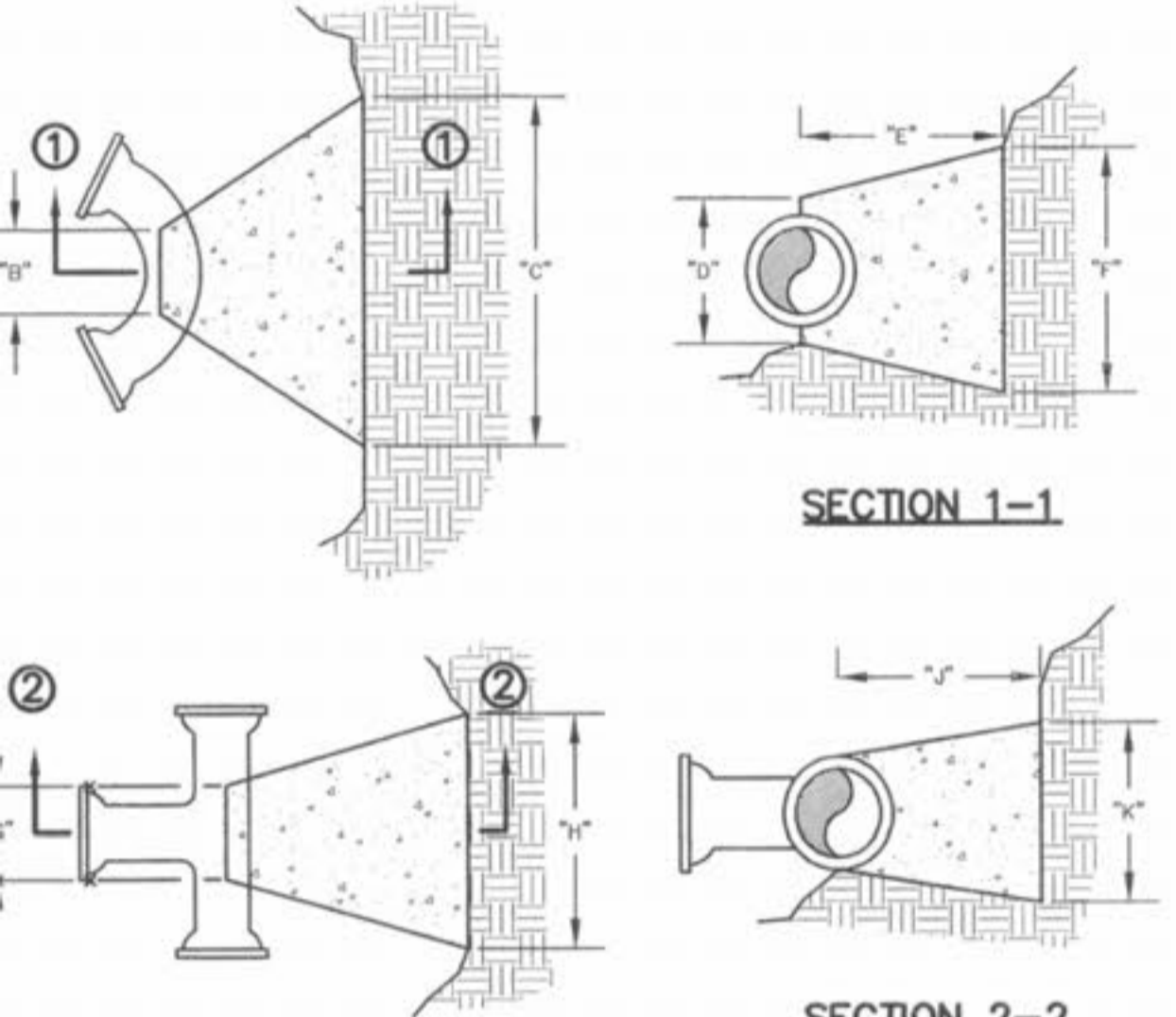


MANUAL AIR VALVE DETAIL
NOT TO SCALE

FLUSHING ASSEMBLY
NOT TO SCALE

WATER VALVE DETAIL
NOT TO SCALE

BLOW-OFF HYDRANT
NOT TO SCALE



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

BENDS	"8"	"10"	"12"	"14"	"16"
6"-11 1/4"	8"	15"	12"	24"	10"
6"-22 1/2"	8"	19"	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"	18"
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"

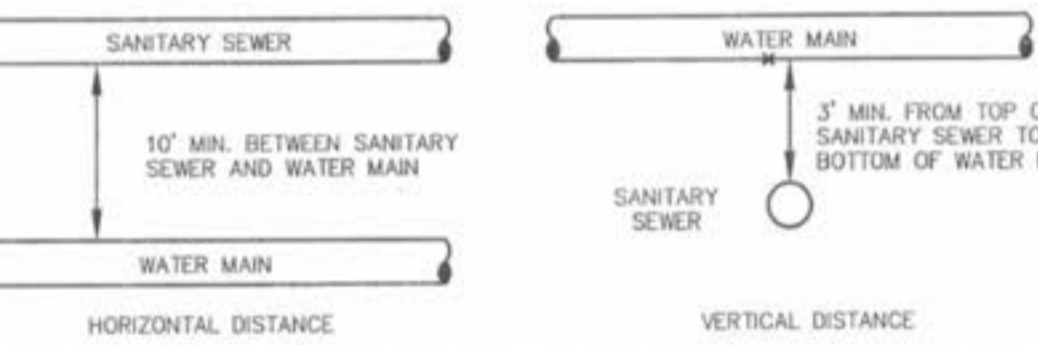
TEES	"6"	"8"	"10"	"12"	"14"	"16"
6"x6"x6"	12"	24"	24"	24"	18"	18"
6"x6"x8"	12"	24"	24"	24"	24"	18"
6"x8"x8"	12"	24"	24"	24"	24"	18"
6"x12"x8"	12"	24"	24"	24"	24"	18"
6"x12"x12"	12"	36"	24"	24"	36"	18"

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	17.9	

TEE x	6"	8"	12"	PLUG
6"	4.0	~	~	4.0
8"	4.0	5.0	~	5.0
12"	4.0	5.5	10.5	10.5

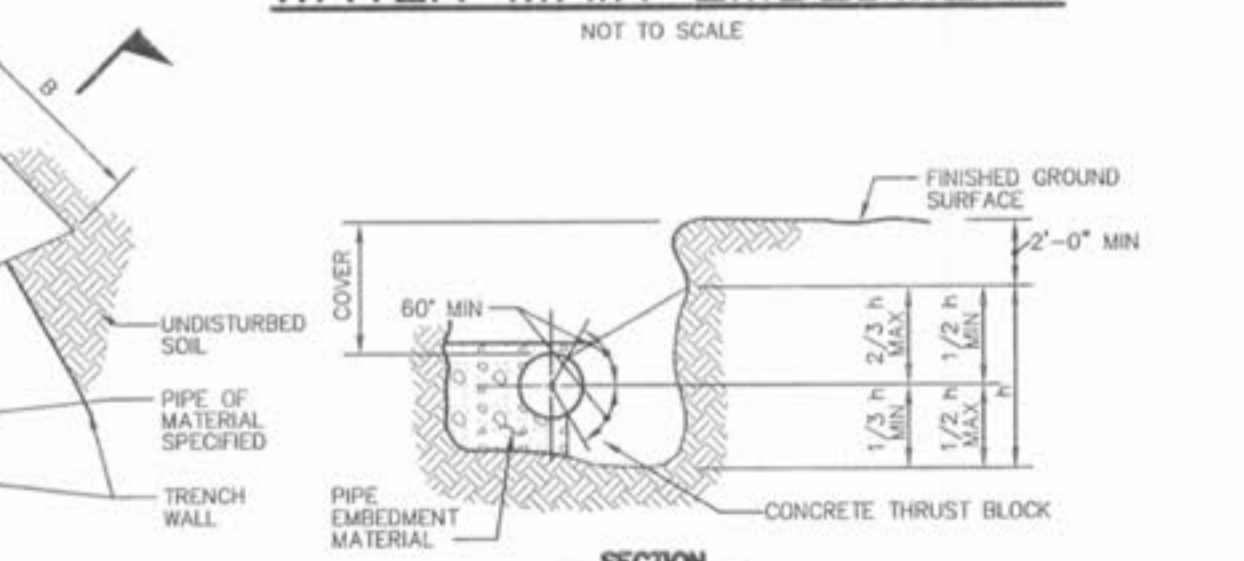
STRADDLE BLOCK DETAIL
NOT TO SCALE

TOP VIEW CONCRETE COLLAR
NOT TO SCALE



TYPICAL WATER AND SEWER SEPERATION
NOT TO SCALE

WATER MAIN EMBEDMENT
NOT TO SCALE

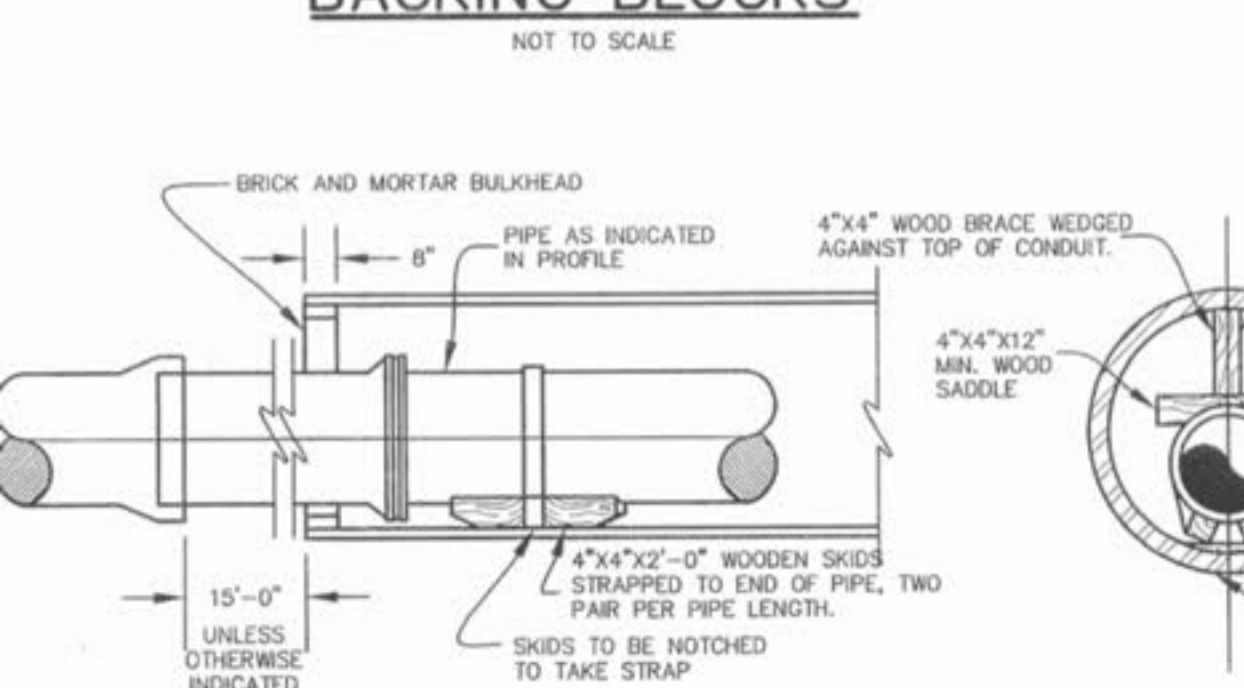


NOTES:
1. AREA OF BLOCK, A = Bxh. BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.
2. B = h - 1/2", EXCEPT WHERE TOP OF BLOCK IS WITHIN 2 FEET FROM GROUND SURFACE, THEN B = A/h.
3. MINIMUM BLOCK DIMENSION (B & h) SHALL BE AT LEAST OD OF PIPE OR 1 FOOT FOR PIPE OD 12" OR LESS.
4. THE BOTTOM OF THE BLOCK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

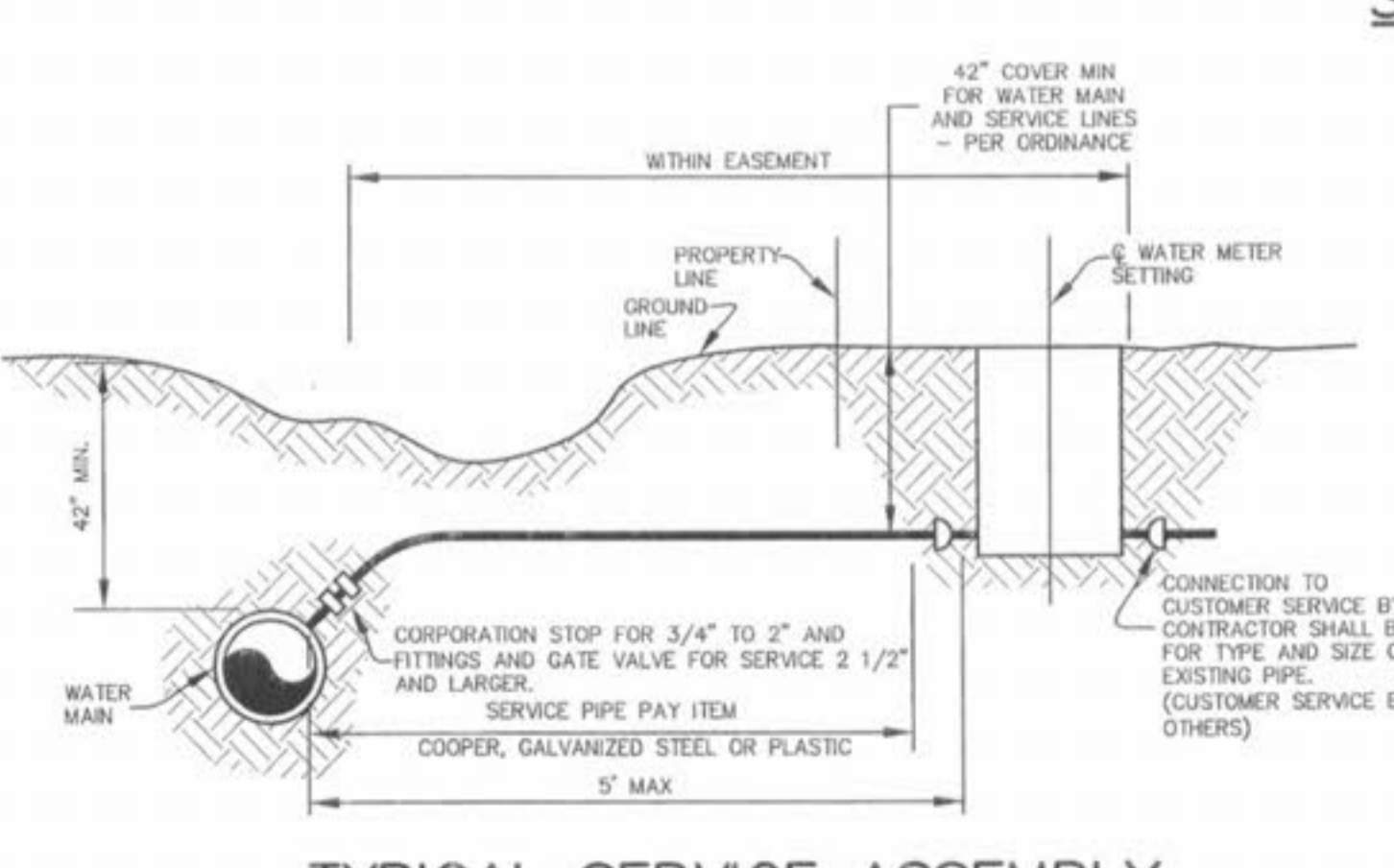
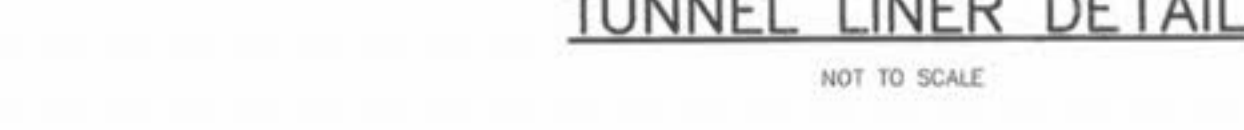
SIZE	BEND	THRUST AREA	B	H
16"	11 1/2"	4 SF	2'	2'
16"	22 1/2"	8 SF	2.8'	2.8'

CONCRETE THRUST BLOCKING
NOT TO SCALE

BACKING BLOCKS
NOT TO SCALE



TUNNEL LINER DETAIL
NOT TO SCALE



TYPICAL SERVICE ASSEMBLY
NOT TO SCALE

MAGNOLIA WATERLINE DETAILS 1

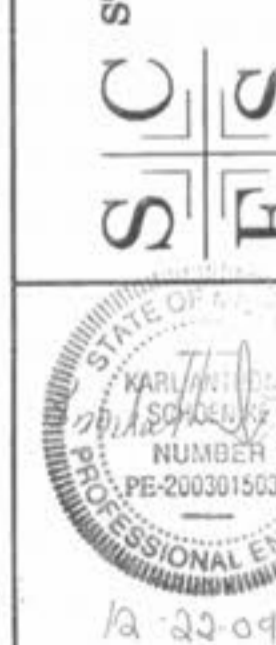
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