

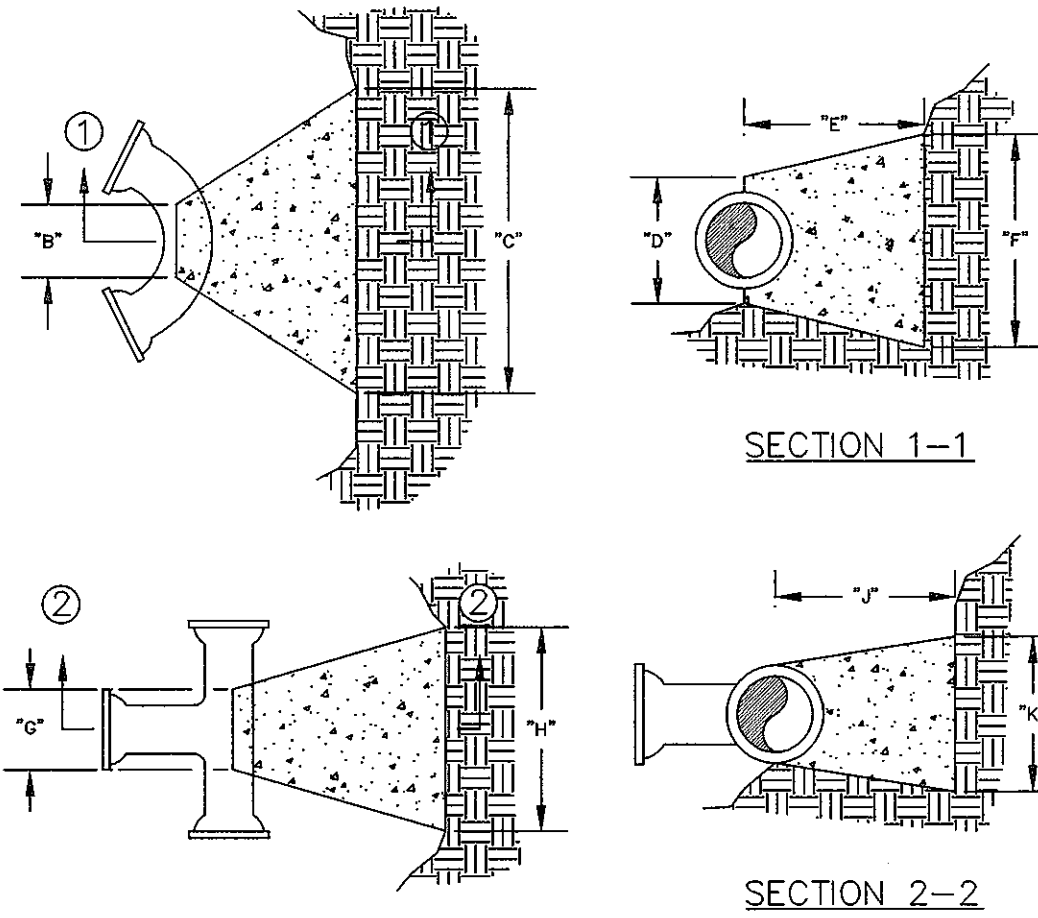
BENDS	"B"	"C"	"D"	"E"	"F"
6"-11 1/4"	8"	15"	12"	24"	10"
6"-22 1/2"	8"	19"	12"	24"	13"
6"-45"	8"	30"	12"	24"	18"
6"-90"	8"	30"	12"	24"	28"
8"-11 1/4"	8"	20"	12"	24"	10"
8"-22 1/2"	8"	22"	12"	24"	16"
8"-45"	8"	31"	12"	24"	24"
8"-90"	8"	38"	12"	24"	36"
12"-11 1/4"	8"	30"	12"	24"	15"
12"-22 1/2"	8"	35"	12"	24"	23"
12"-45"	8"	40"	12"	24"	31"
12"-90"	8"	60"	12"	24"	52"
16"-11 1/4"	16"	20"	24"	24"	28"
16"-22 1/2"	16"	29"	24"	24"	39"
16"-45"	16"	50"	24"	24"	59"
16"-90"	16"	91"	24"	24"	60"
20"-11 1/4"	16"	34"	24"	24"	28"
20"-22 1/2"	16"	48"	24"	24"	39"
20"-45"	16"	74"	24"	24"	51"
20"-90"	16"	136"	24"	24"	60"
24"-11 1/4"	16"	40"	28"	28"	40"
24"-22 1/2"	16"	56"	28"	28"	56"
24"-45"	16"	101"	28"	28"	60"
24"-90"	16"	186"	28"	28"	60"
30"-11 1/4"	16"	48"	34"	30"	48"
30"-22 1/2"	16"	79"	34"	30"	60"
30"-45"	16"	154"	34"	30"	60"
30"-90"	16"	285"	34"	30"	60"

TEES	"A"	"B"	"C"	"D"	"E"
6"x8"x8"	12"	24"	24"	18"	18"
8"x8"x8"	12"	24"	24"	27"	27"
12"x12"x8"	12"	24"	24"	18"	18"
12"x12"x12"	12"	24"	24"	27"	27"
24"x24"x16"	16"	31"	28"	15"	15"
24"x24"x24"	16"	31"	28"	24"	24"

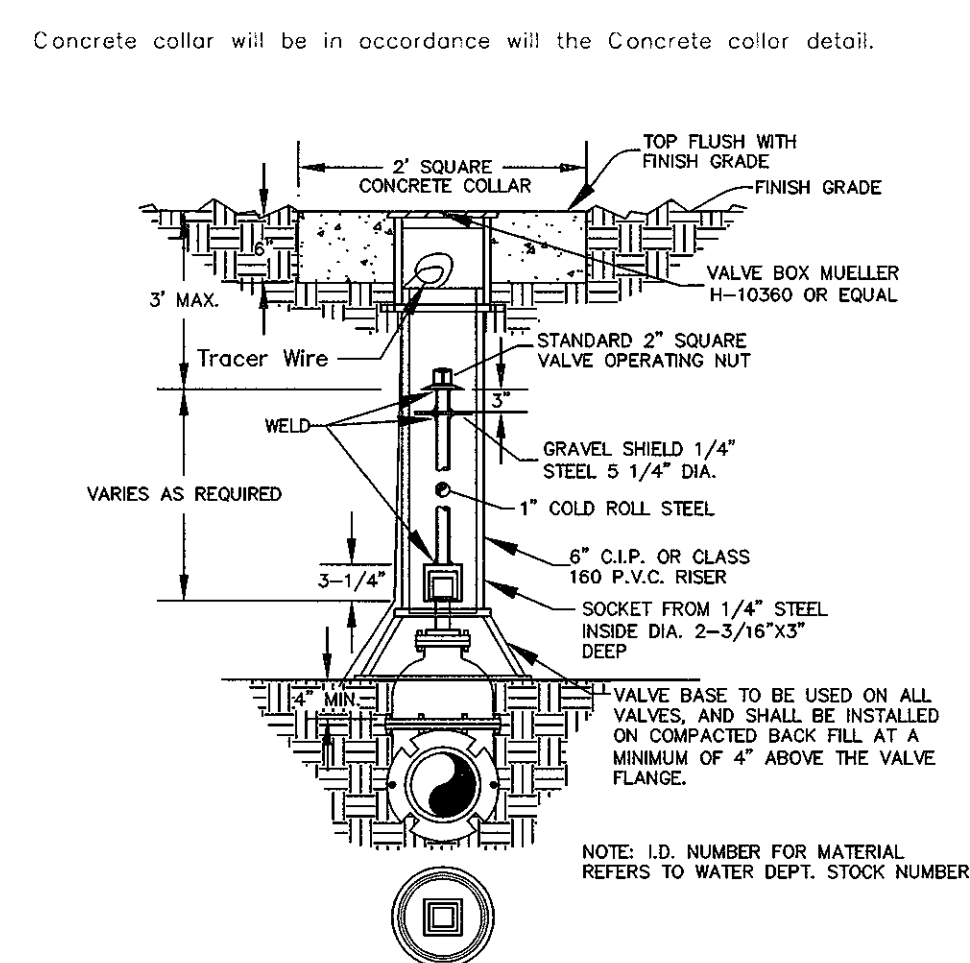
NOTES:
 1. 2 1/2" x 4" FITTINGS EQUIVALENT TO 6" FITTINGS.
 2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR TEES.
 3. "L" = TOTAL LENGTH OF FITTING MINUS CLEARANCE FOR BELLS.

INTERNAL WATER PRESSURE 6" through 12"=200 psi
 INTERNAL WATER PRESSURE 16" through 30"=210 psi
 BEARING PRESSURE OF SOIL=2000 psi

BACKING BLOCKS
 NOT TO SCALE

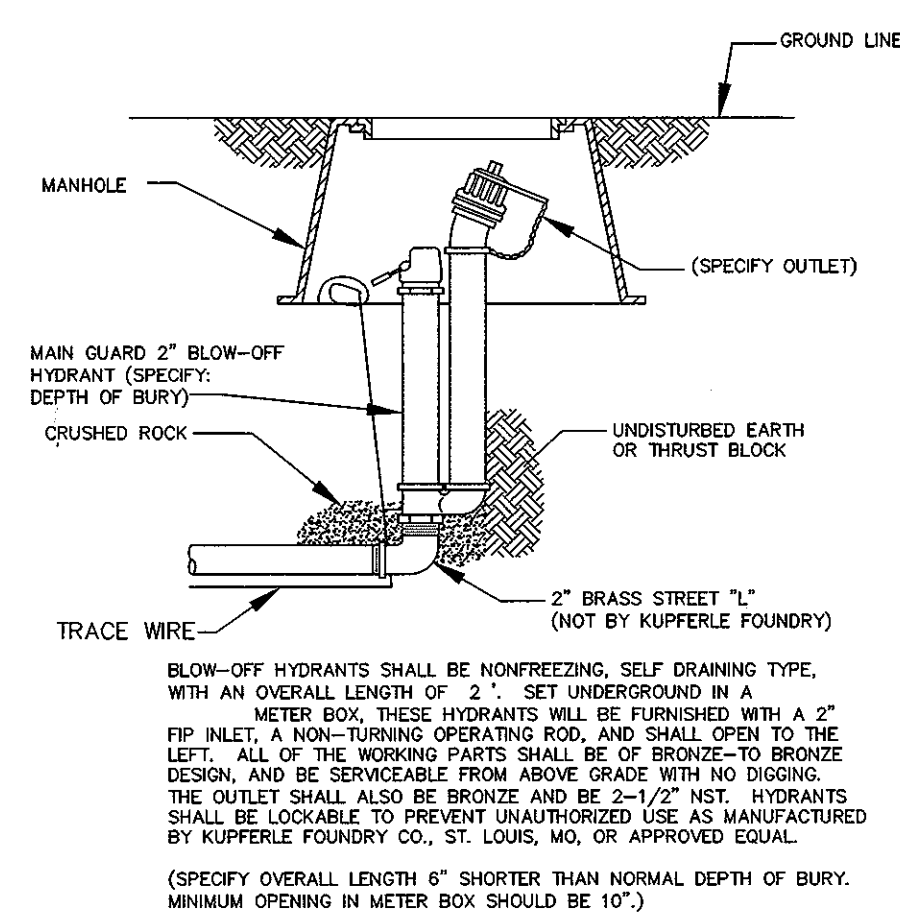


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 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI
**BACKING BLOCK
 DETAILS AND LOCATIONS**



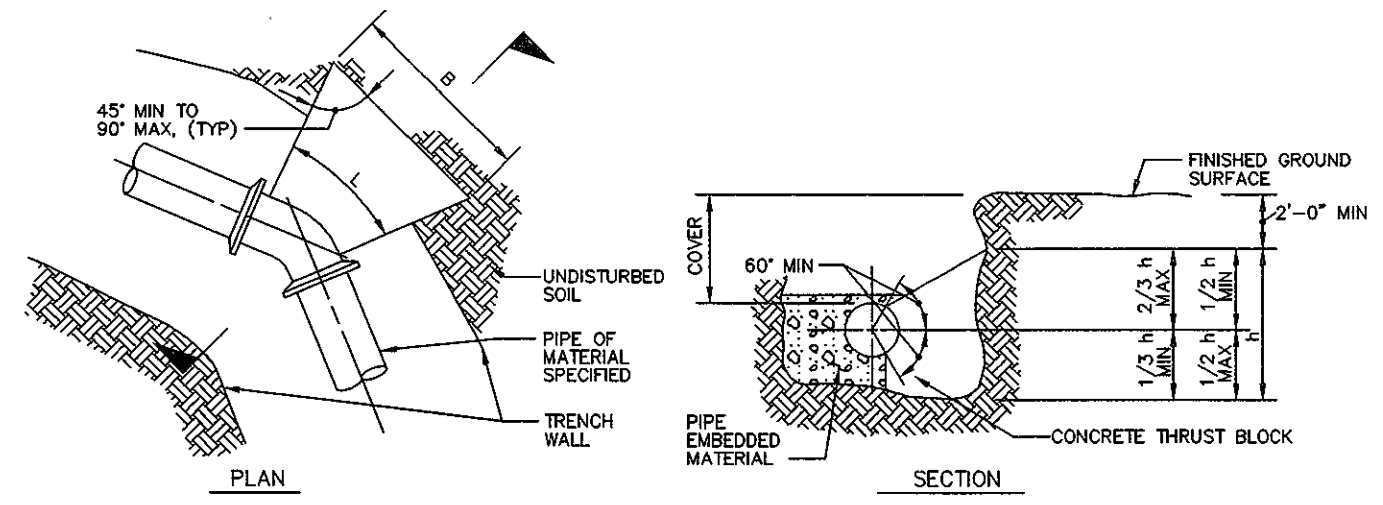
WATER VALVE DETAIL
 NOT TO SCALE

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**WATER
 VALVE DETAIL**



BLOW-OFF HYDRANT
 NOT TO SCALE

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**BLOW-OFF
 HYDRANT DETAIL**

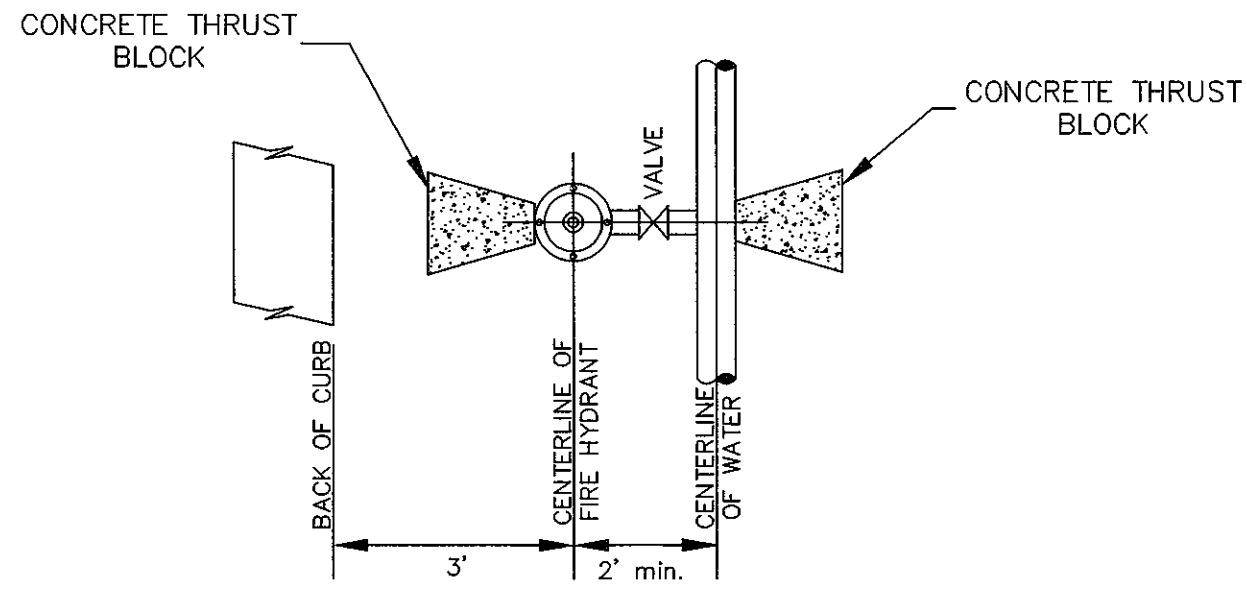


- NOTES:
 1. AREA OF BLOCK, A = 8th BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.
 2. B = H = 4" EXCEPT WHERE TOP OF BLOCK IS WITHIN 6" OF GROUND SURFACE, THEN B = A/2.
 3. MINIMUM BLOCK DIMENSION (B & H) SHALL BE AT LEAST 30" OF PIPE OR 1 FOOT FOR PIPE 12" OR LESS.
 4. THE BOTTOM OF THE BLOCK SHALL 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.

CONCRETE THRUST BLOCKING
 NOT TO SCALE

SIZE	BEND	THRUST AREA	B	H
16"	11 1/2"	4 SF	2"	2"
16"	45"	8 SF	2.8"	2.8"

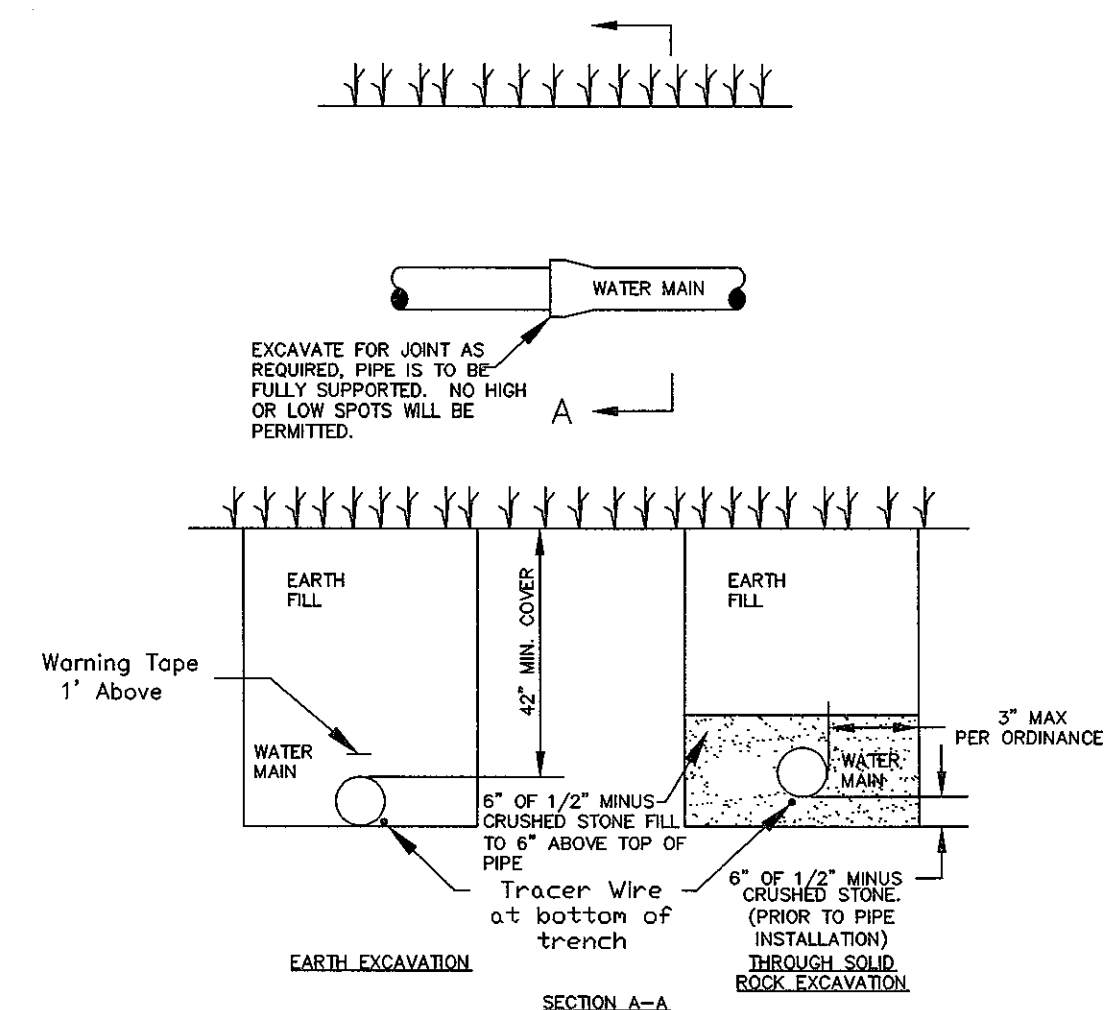
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 O'FALLON, MISSOURI
**CONCRETE THRUST
 BLOCKING DETAILS**



CONFIGURATION
 ALL FIRE HYDRANTS SHALL BE 3' OFF BACK OF CURB
 ALL WATER MAINS SHALL BE A MIN. OF 5' OFF BACK OF CURB

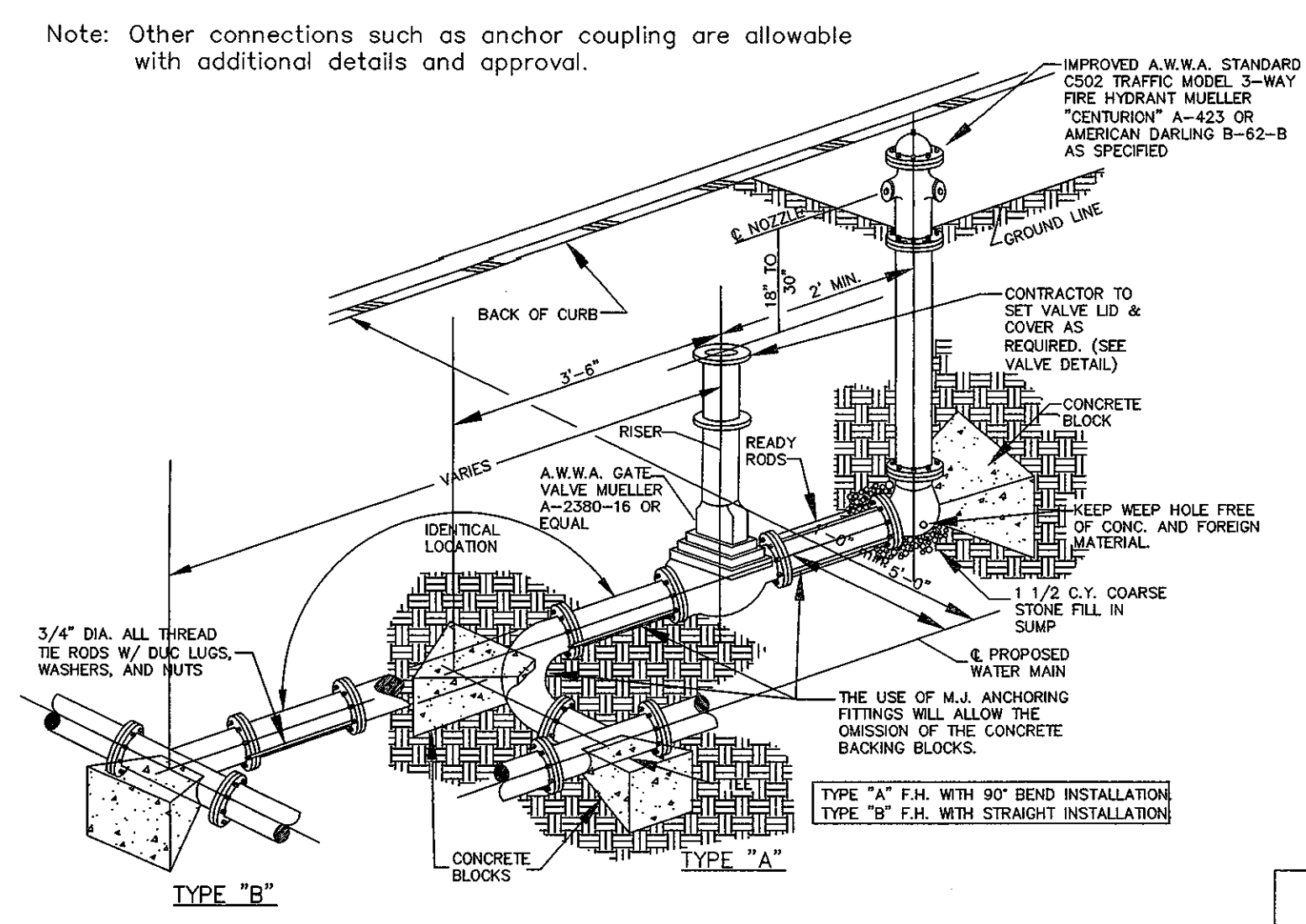
TYPICAL WATER MAIN AND FIRE HYDRANT LOCATIONS
 NOT TO SCALE

CITY OF O'FALLON
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**WATER MAIN
 FIRE HYDRANT DETAIL**



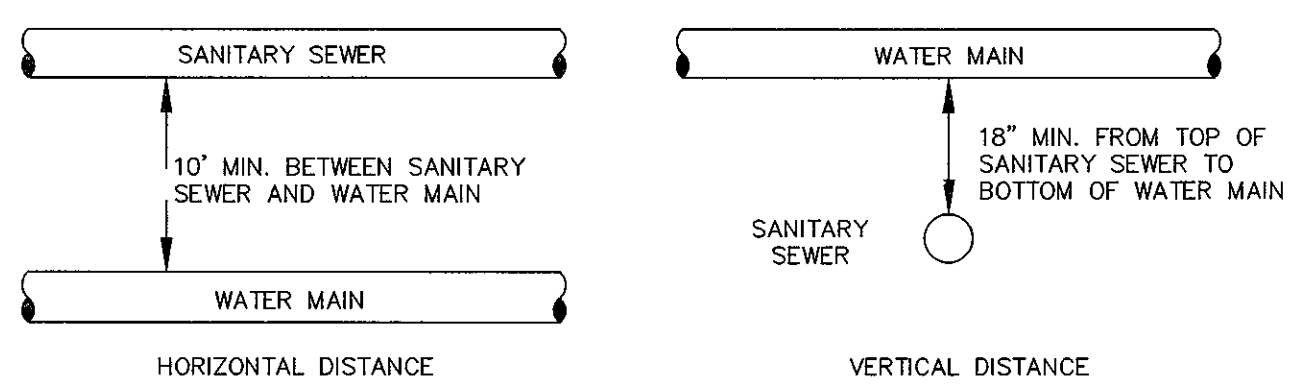
**TYPICAL WATER MAIN
 INSTALLATION DETAILS**
 NOT TO SCALE

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 O'FALLON, MISSOURI
**WATER MAIN
 INSTALLATION DETAIL**



FIRE HYDRANT DETAIL
 NOT TO SCALE

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 O'FALLON, MISSOURI
**FIRE HYDRANT
 DETAILS**



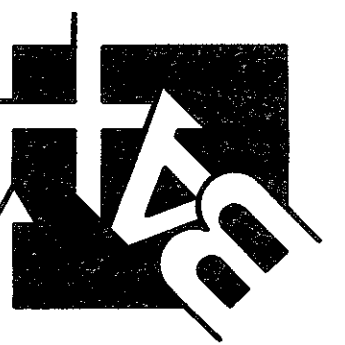
TYPICAL WATER AND SEWER SEPARATION
 NOT TO SCALE

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**WATER AND SEWER
 SEPARATION DETAIL**

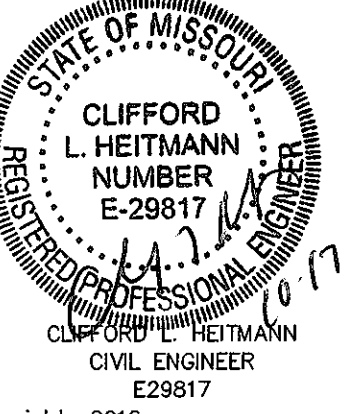
PROJECT TITLE:

VILLAS OF CAPRI

ENGINEERING
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 221 Point West Blvd.
 St. Charles, MO 63301
 636-938-5562
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REVISIONS

DATE	CITY COMMENTS
09/01/16	CITY COMMENTS
09/30/16	CITY COMMENTS
10/17/16	CITY COMMENTS

Developer / Owner:
 Twenty Seven Hundred Forty-365 Group, L.L.C.
 429 North Main Street
 O'Fallon, MO 63366
 636-240-0930

REFERENCE DETAILS

P+Z No. #04-16.03
 March 3, 2016
 City No. #

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ENGINEERS SEAL DOES NOT APPLY TO CITY OF O'FALLON DETAILS ON THIS SHEET.