

**LEGEND**  
 I.D. - NOMINAL PIPE SIZE  
 O.D. - OUTSIDE DIAMETER OF PIPE  
 H - COVER ABOVE TOP OF PIPE  
 A - EMBEDDED BELOW PIPE (SEE TABLE)

**TABLE OF EMBEDDED DEPTHS BELOW PIPE**

I.D.	MIN. SOIL	MIN. ROCK
27" & SMALLER	3"	6"

GRANULAR BEDDING SHALL BE CRUSHED ROCK OR PEA GRAVEL WITH NOT LESS THAN 85% PASSING 1/2" (95% PASSING 3/4" FOR 30" AND LARGER PIPE) AND NOT LESS THAN 85% RETAINED ON A #4 TO BE PLACED IN NOT MORE THAN 8" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL OR VIBRATING.

COMPACTED BACK FILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, PLACED IN UNIFORM LAYERS NOT MORE THAN 6" THICK, COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. D698, OR GRADED AGGREGATE. GRANULAR BACK FILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF COMPACTED BACK FILL.

TAMPED BACK FILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, HAND PLACED IN UNIFORM LAYERS NOT MORE THAN 6" THICK AND TAMPED AROUND CONDUIT PIPE. GRANULAR BACK FILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF TAMPED BACK FILL.

TRENCH BACK FILL SHALL BE AS REQUIRED IN THE "LAYING AND BACK FILL" SECTION OF THE DETAILED SPECIFICATIONS.

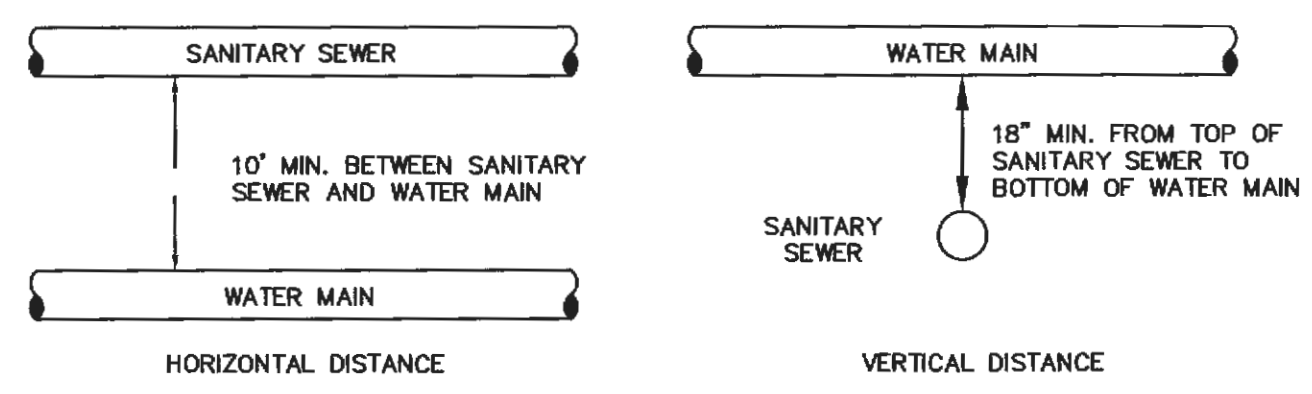
EMBED THE TYPE OF EMBEDDED TO BE USED SHALL BE AS SPECIFIED IN THE PLANS AND SPECIFICATIONS.

TRACER WIRE REQUIRED ON ALL WATER MAINS

**WATER MAIN EMBEDDED**  
NOT TO SCALE

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O'FALLON, MISSOURI

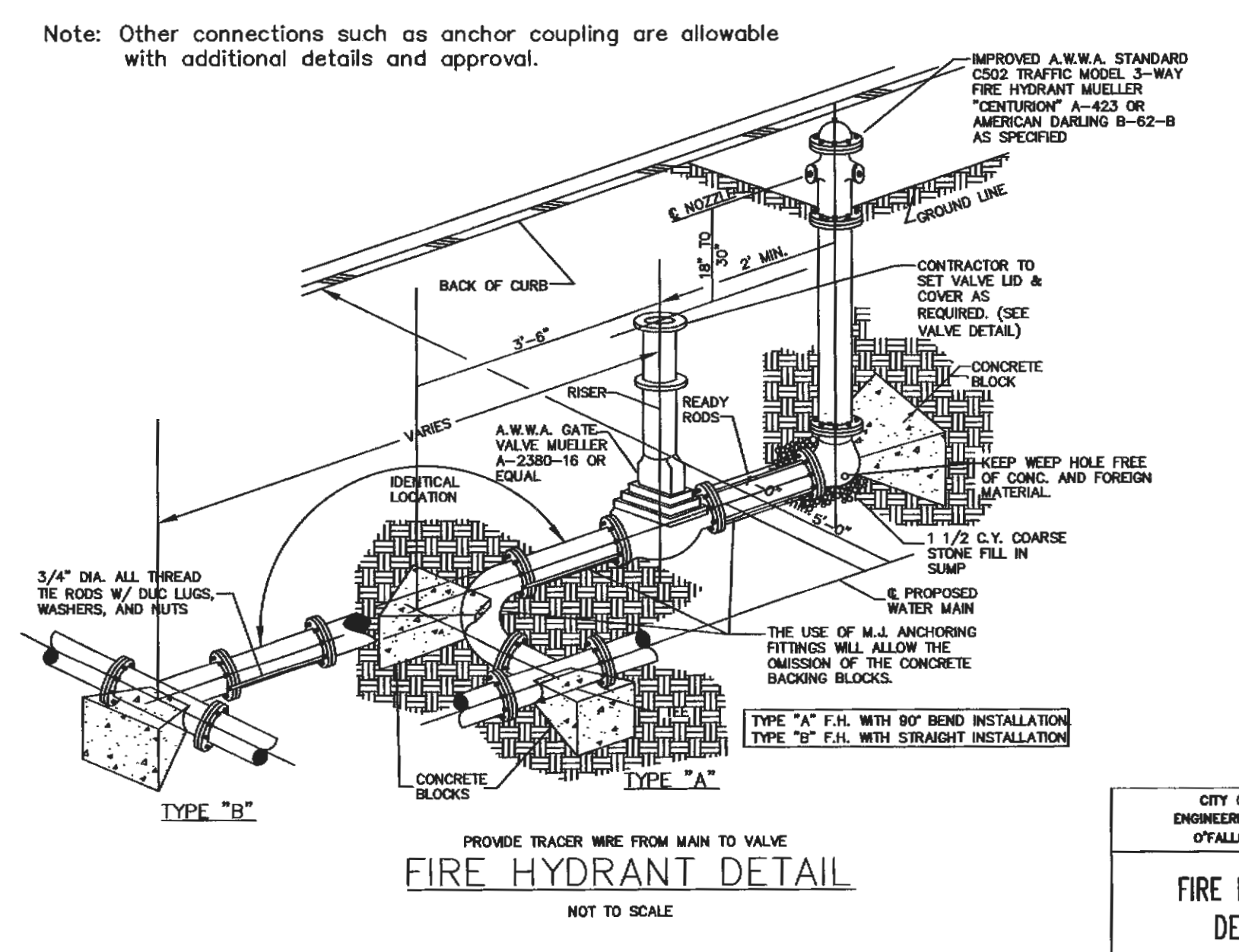
**WATER MAIN EMBEDDED**



**TYPICAL WATER AND SEWER SEPARATION**  
NOT TO SCALE

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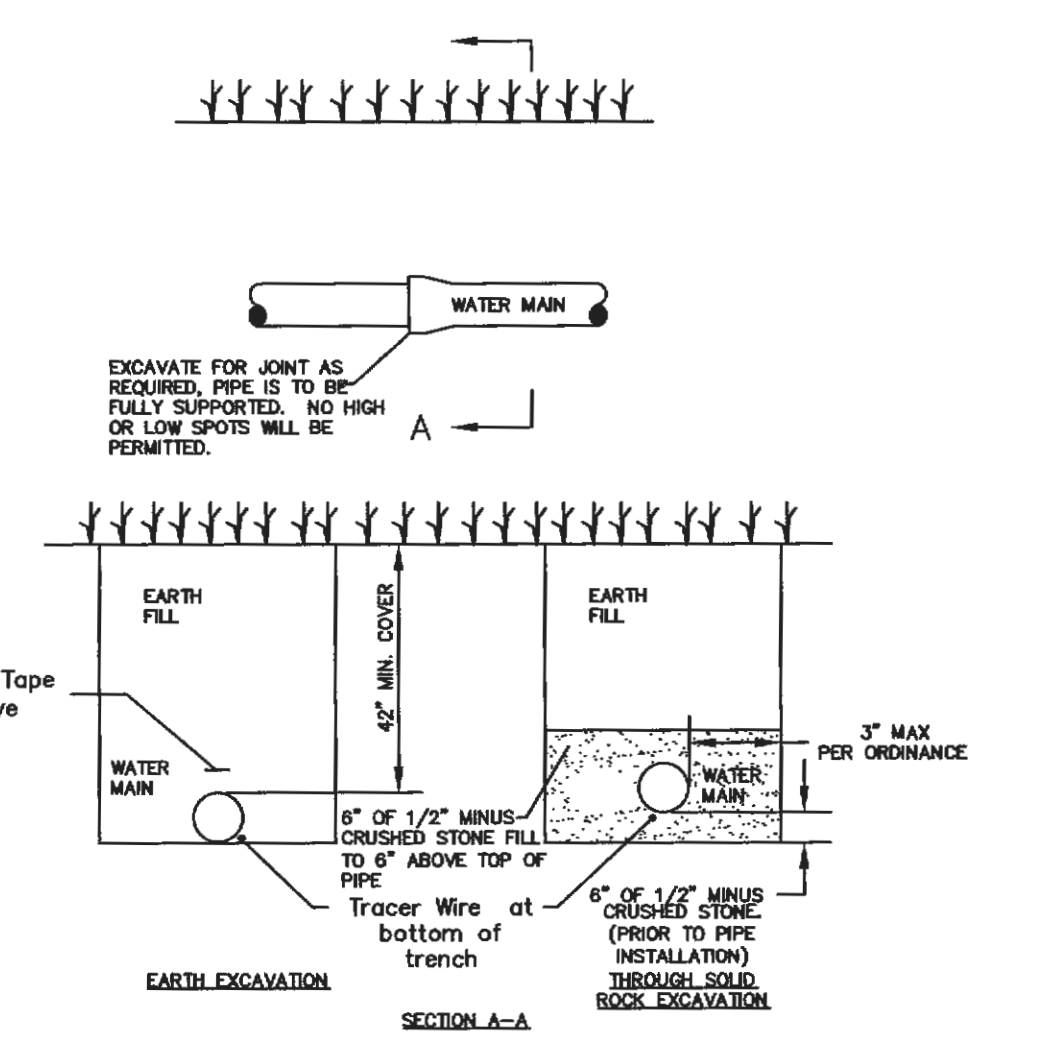
**WATER AND SEWER SEPARATION DETAIL**



**FIRE HYDRANT DETAIL**  
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**FIRE HYDRANT DETAILS**



**TYPICAL WATER MAIN INSTALLATION DETAILS**  
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**WATER MAIN INSTALLATION DETAIL**

Ductile Iron Pipe installation shall follow the Ductile Iron Research Association (DIPRA) guide line.  
 The Installation of PVC Pipe shall follow the Uni-Bell PVC Pipe Association Handbook of PVC Design and Construction.

