



**NOTES:**

1. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATERMAINS AND SEWERS SHALL COMPLY WITH APPLICABLE SECTIONS OF THE CITY OF ST. CHARLES ENGINEERING GUIDE OR IEPA REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
2. CONTRACTOR MAY BEND WATER MAIN PIPE UNIFORMLY UNDER SEWERS WITHOUT USING FITTINGS, PROVIDED THAT JOINT DEFLECTION DOES NOT EXCEED 5 DEGREES PER JOINT FOR PIPE UNDER 14" IN DIAMETER AND 3 DEGREES PER JOINT FOR PIPE 14" AND OVER IN DIAMETER. IF FITTINGS ARE USED, CONTINUOUS STRAPPING WITH RODS, STRAPS, NUTS AND BOLTS BELOW NORMAL WATERMAIN DEPTH ARE REQUIRED, OR RETAINER GLANDS MAY BE USED IN LIEU OF STRAPPING. RETAINER GLANDS TO BE CLOW No. F-1058 OR APPROVED EQUAL.
3. ALL SANITARY SEWER (INCLUDING SERVICE) CROSSINGS WHERE THE WATER MAINS OR WATER SERVICES ARE LESS THAN 18" VERTICALLY ABOVE THE SEWER SHALL BE POLYVINYL CHLORIDE PRESSURE PIPE (SDR 26-160 PSI) AND SHALL CONFORM WITH THE LATEST REVISION OF ASTM D- 2241. JOINTS SHALL CONFORM TO ASTM D-3139 AND ELASTOMERIC GASKETS SHALL CONFORM TO ASTM F-477. THE SAME PIPE AND JOINT MATERIALS SHALL BE USED WHENEVER WATER MAIN CROSSES BELOW THE SEWER.
4. ALL STORM SEWER (INCLUDING SERVICE) CROSSINGS WHERE THE WATER MAINS ARE LESS THAN 18" VERTICALLY ABOVE THE SEWER SHALL BE REINFORCED CONCRETE PIPE, ASTM C-361, CLASS D-25, WITH BELL AND SPIGOT JOINTS AND RUBBER GASKETS, OR PVC SDR 26 AS SPECIFIED IN NOTE 3 ABOVE. THE SAME PIPE AND JOINT MATERIAL SHALL BE USED WHENEVER WATER MAIN CROSSES BELOW THE SEWER.
5. FOR NEW SEWER INSTALLATIONS CROSSING OVER WATER MAINS, THE ENTIRE RUN OF NEW SEWER SHALL BE WATER MAIN QUALITY PIPE, EXTENDING FROM STRUCTURE TO STRUCTURE ON EACH SIDE OF THE CROSSING.

NOT TO SCALE

**WATER MAIN  
CROSSING  
DETAIL**

DATE: 3-31-09