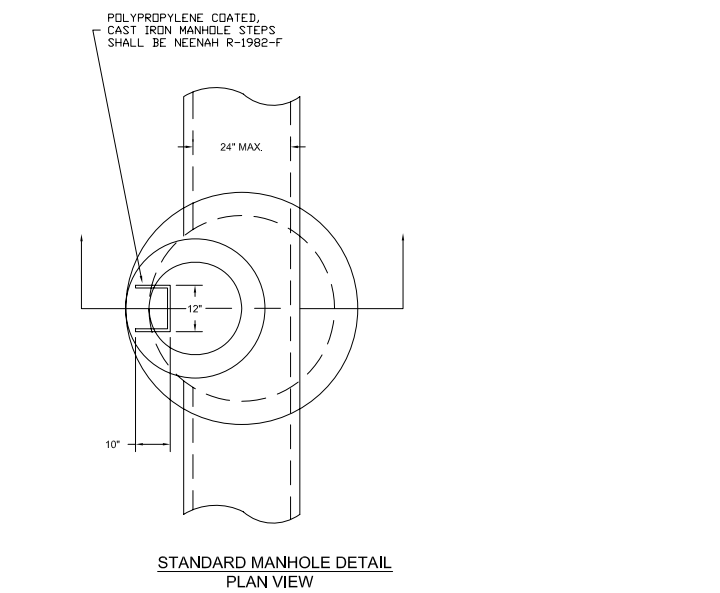
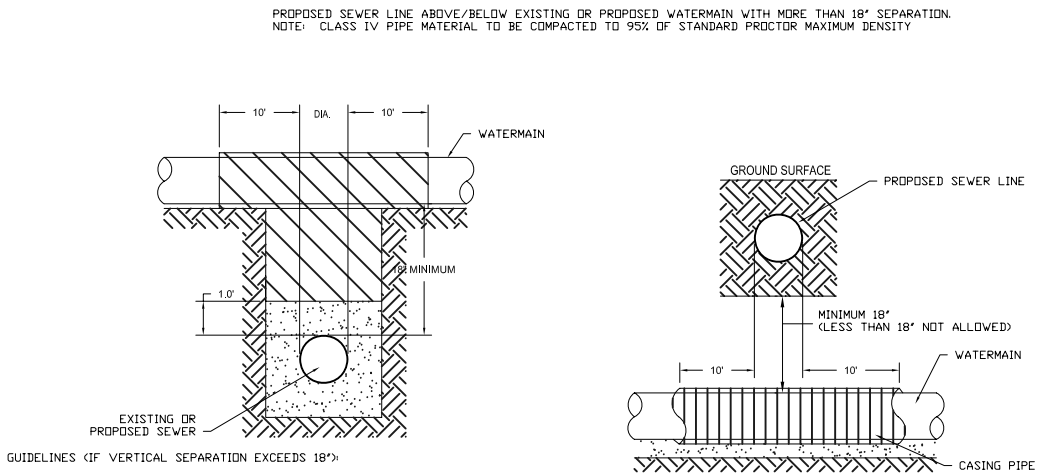


GENERAL NOTES:

- 1) AN UPPER COMPRESSION BAND (TYPE 304 STAINLESS STEEL, 1-1/4" WIDE, ADJUSTABLE SLOT AND STAINLESS STEEL ANCHOR BOLTS) PER ASTM A240.
- 2) A RUBBER SLEEVE (45 ± 5 HARDNESS, 3/16" THICK, CAPABLE OF 2 INCHES VERTICAL MOVEMENT WITHOUT STRETCHING MATERIAL) SPACERS FOR MOTARED RECESS TO RECEIVE SLEEVE; DOUBLE CORRUGATIONS BETWEEN COMPRESSION BANDS; PER ASTM C923.
- 3) A BOTTOM COMPRESSION BAND (TYPE 304 STAINLESS STEEL, 1" WIDE, SAME AS UPPER BAND). STRETCHING MATERIAL; SPACERS FOR MOTARED RECESS TO RECEIVE SLEEVE; DOUBLE CORRUGATIONS BETWEEN COMPRESSION BANDS; ASTM A 240.

* INSTALL SEALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ENSURE SURFACE TO RECEIVE SLEEVE IS CIRCULAR, CLEAN, REASONABLY SMOOTH AND FREE OF LOOSE MATERIAL AND VOIDS. WHEN SURFACE IS ROUGH OR IRREGULAR, CORRECT WITH APPROVED LOW-SHRINK MORTAR. FILL ALL MINOR IRREGULARITIES WITH BUTYL RUBBER SEALANT. PLACE RUBBER SLEEVE IN POSITION AROUND MANHOLE AND TIGHTEN STAINLESS STEEL BANDS TO PROVIDE WATERTIGHT SEAL.

* PROVIDE CHIMNEY SEAL EXTENSION WHEN SINGLE CHIMNEY SEAL CANNOT REACH CORBEL SECTION. SEAL THE EXTENSION ON CORBEL CASTING WITH LOWER BOTTOM BAND; OVERLAP WITH UPPER SEAL TO PROVIDE CONTINUOUS SEAL FROM RIM TO CORBEL. PROVIDE BUTYL RUBBER SEALANT UNDER LOWER STEEL BAND.



B) SANITARY MANHOLE AND SEWER INSTALLATION

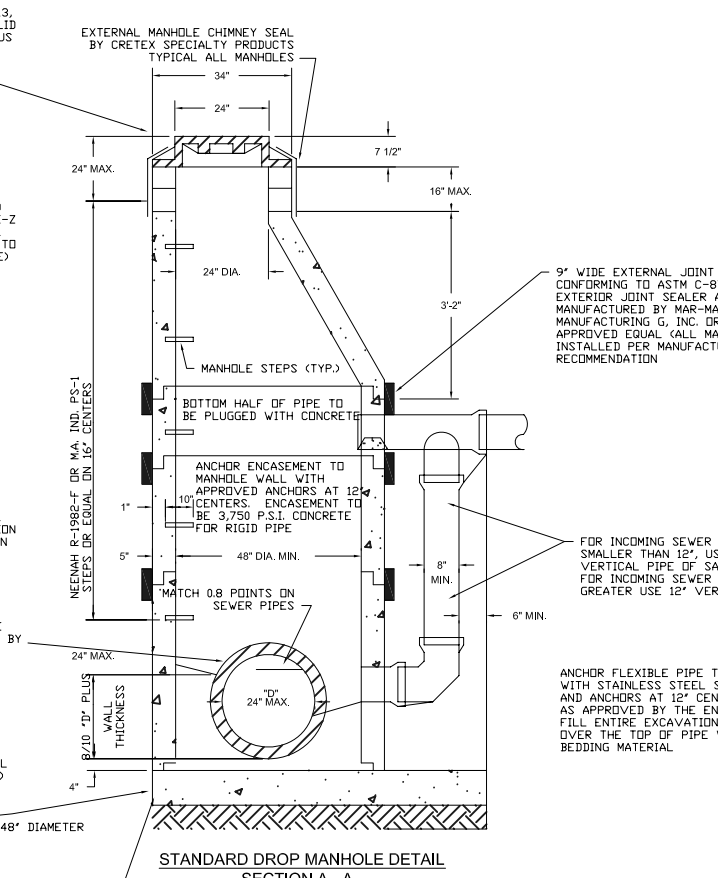
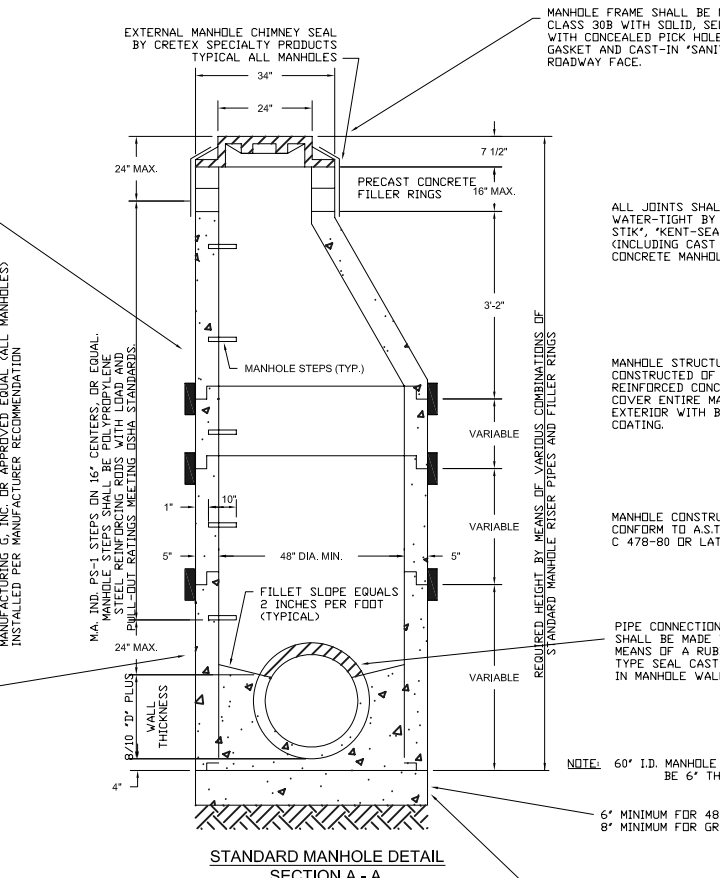
- 1) CASTINGS
 - a.) SET MANHOLE FRAMES AND LIDS 18" BELOW GRADE IN CULTIVATED AREAS AND PLACE A 16" LONG, 4" X 4" WELDMANIZED PIPE FENCE POST PAINTED BRIGHT RED IN GROUND NEAR MANHOLE WITH 12" OF POST EXPOSED. IN NON-CULTIVATED AREAS, SET CASTING TOP FLUSH WITH GROUND SURFACE.
 - b.) IN STREETS AND ALLEYS WITH AN ESTABLISHED GRADE, PROVIDE A MAXIMUM OF 16" BETWEEN TOP OF CONE AND UNDERSIDE OF MANHOLE CASTING RING FOR ADJUSTMENT TO GRADE; WITH CASTING TOP AT FINISHED GRADE.
 - c.) SET CASTINGS ON BITUMASTIC BEDS.
 - d.) SET CASTINGS TO FINISHED DESIGNATED ELEVATIONS.
- 2) IN STREET AND ALLEYS THE TRENCHBACKFILL SHALL BE CLASS II AGGREGATE, GRADATION (CA-7) ACCORDING TO I.D.I.T. 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION', ARTICLE 704.01 (LATEST REVISION); MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 6" IN THICKNESS AND COMPACTED IN A MANNER APPROVED BY THE ENGINEER.

GUIDELINES (IF VERTICAL SEPARATION EXCEEDS 18")

- 1) OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EACH SIDE OF SEWER.
- 2) IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
- 3) POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATERMAIN
- 4) PROVIDE ADEQUATE SUPPORT FOR EXISTING WATERMAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

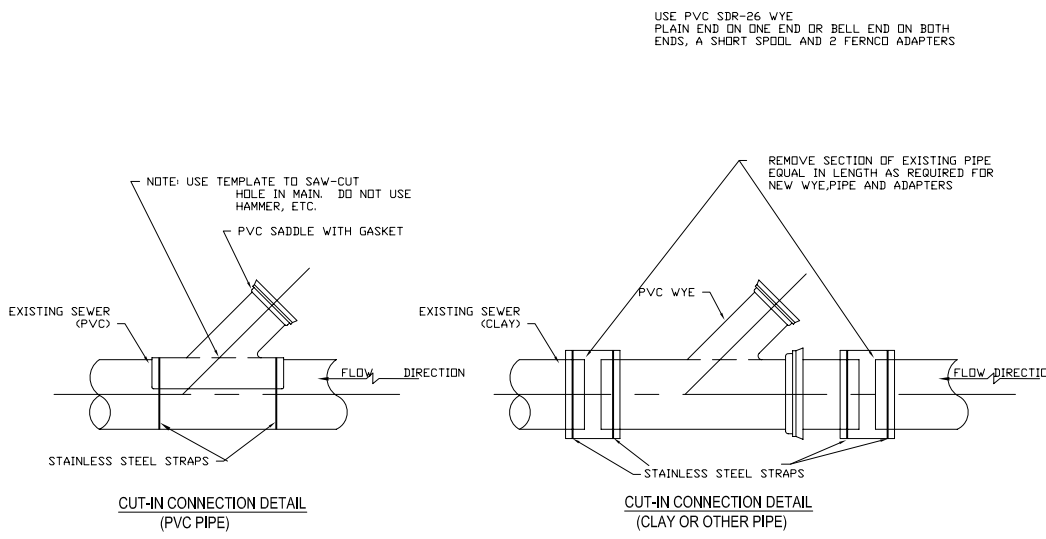
FOR OTHER CROSSING DETAILS SEE IEPA STANDARDS ON PAGES 155, 156, 157, 158 AND 159 OF THE STANDARDS SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS (4TH EDITION)

WATER AND SEWER SEPARATION REQUIREMENTS (VERTICAL SEPARATION)



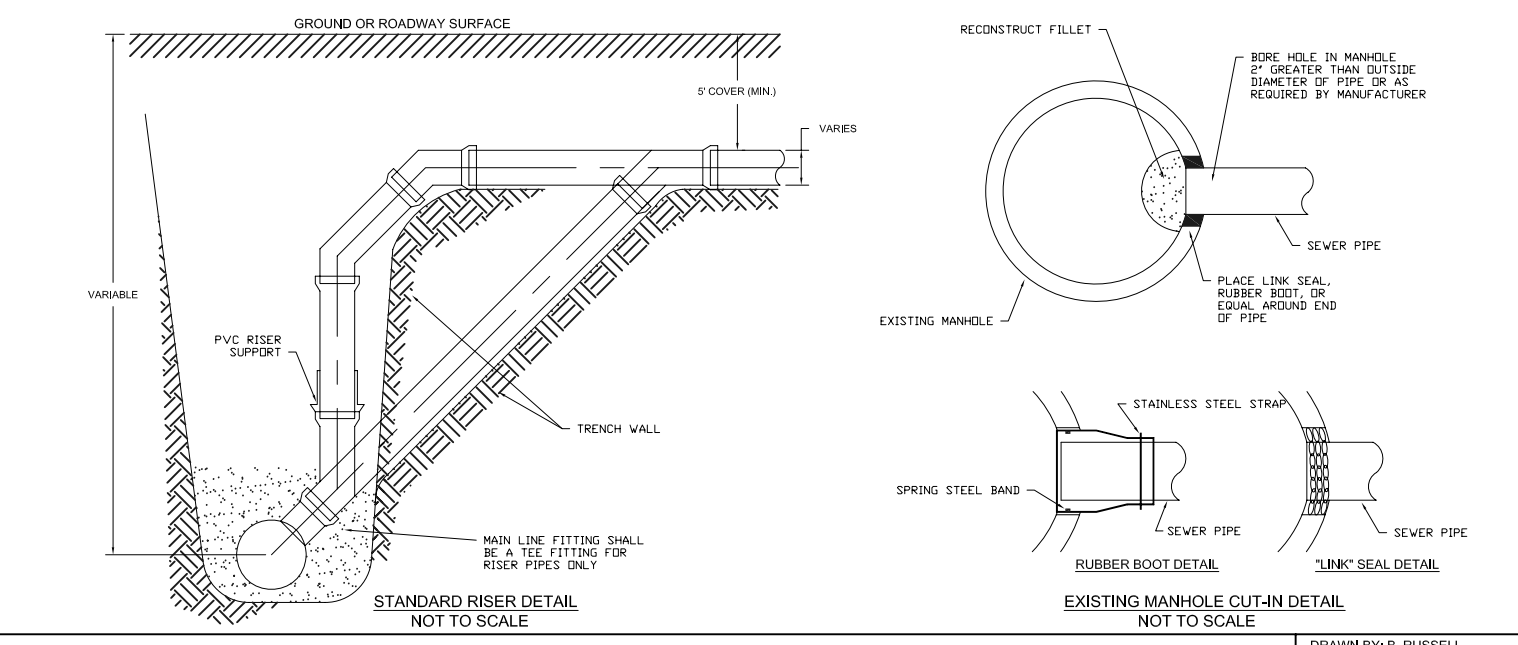
C) QUALITY ASSURANCE OF SANITARY MANHOLES

- 1) ALL NEW MANHOLES TO BE TESTED WITH VACUUM TESTER AS FOLLOWS:
 - a.) PLUG ALL INCOMING AND OUTGOING SEWER AND SERVICE LINES AND RESTRAINING PLUGS.
 - b.) REMOVE LID AND PLACE VACUUM TESTER HEAD ON FRAME.
 - c.) DRAW VACUUM OF 10" Hg.
 - d.) TIME FOR VACUUM TO DROP TO 9" Hg SHALL NOT BE LESS THAN 40, 50, OR 60 SECONDS FOR MANHOLE DIAMETERS OF 48", 60" AND 72" RESPECTIVELY.
 - e.) MANHOLES THAT FAIL SHALL BE SEALED AND RETESTED BY CONTRACTOR AT NO ADDITIONAL COMPENSATION UNTIL MANHOLE IS ABLE TO PASS TEST.
- 2) ALL SEWER LINES MUST BE MANDREL TESTED AND LOWER PRESSURE TESTED
- 3) CONSULT SEWER ORDINANCE FOR ADDITIONAL INFORMATION



CLASS "A" CONCRETE BASE ON UNDISTURBED EARTH SOIL OR FIRM STABILIZED BASE (CONCRETE BASE TO BE POURED, PRECAST, OR MONOLITHIC CONSTRUCTION) (SEE NOTE)

ANCHOR FLEXIBLE PIPE TO WALL WITH STAINLESS STEEL STRAPS AND ANCHORS AT 12" CENTERS AS APPROVED BY THE ENGINEER. FILL ENTIRE EXCAVATION ONE FOOT (1') OVER THE TOP OF PIPE WITH BEDDING MATERIAL.



CITY OF ROCHELLE, ILLINOIS - SANITARY SEWER STANDARDS

DRAWN BY: B. RUSSELL
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