

SANITARY SEWER GENERAL NOTES (CONTINUED)

C. TESTING

1. A VISUAL INSPECTION, INCLUDING LAMPING, SHALL BE MADE OF ALL GRAVITY FLOW LINES; AND ALL OBSTRUCTIONS SHALL BE REMOVED. ANY SEWER SHOWING LESS THAN ONE-HALF THE CROSS SECTIONAL AREA OF THE PIPE BETWEEN ADJACENT MANHOLES OR OTHER UNDUE DEVIATION FROM LINE AND GRADE SHALL BE CONSIDERED AS UNSATISFACTORY AND SHALL BE REPAIRED BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION.
2. TESTING OF SANITARY SEWERS FOR ACCEPTABILITY SHALL BE CONDUCTED BY THE EXFILTRATION BY AIR TESTING TECHNIQUE. THE CONTRACTOR SHALL BE REQUIRED TO TEST ALL GRAVITY SEWER MAINS. ALL TESTING SHALL BE IN CONFORMANCE WITH ARTICLE 31-1.11 METHOD A, EXFILTRATION OF AIR UNDER PRESSURE, OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS. THE CITY REQUIRES THAT PRESSURE "HOLD" IN THE PIPE FOR DOUBLE THE TIME LIMIT LISTED IN THE STANDARD SPECIFICATIONS.
3. THE GRAVITY SEWER LINES (EXCLUDING SERVICE LATERALS) SHALL BE TESTED FOR EXCESS DEFLECTION BY PULLING A MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. TEST SHALL BE IN ACCORDANCE WITH ARTICLE 31-1.11 METHOD D, DEFLECTION FOR FLEXIBLE THERMOPLASTIC PIPE, OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.
4. THE OUTSIDE DIAMETER OF THE TEST MANDREL SHALL BE EQUAL TO NINETY-FIVE PERCENT (95%) OF THE ORIGINAL INSIDE DIAMETER OF THE PIPE BEING USED. THE INDIVIDUAL LINES TO BE TESTED SHALL BE SO TESTED NO SOONER THAN 30 DAYS AFTER THEY HAVE BEEN INSTALLED. WHEREVER POSSIBLE AND PRACTICAL THE TESTING SHALL INITIATE AT THE DOWNSTREAM LINES AND PROCEED TOWARDS THE UPSTREAM LINES.
5. WHERE DEFLECTION IS FOUND TO BE IN EXCESS OF 5% OF THE ORIGINAL PIPE DIAMETER, THE CONTRACTOR SHALL EXCAVATE TO THE POINT OF EXCESS DEFLECTION AND CAREFULLY COMPACT AROUND THE POINT WHERE EXCESS DEFLECTION WAS FOUND. THE LINE SHALL BE RETESTED FOR DEFLECTION. HOWEVER, SHOULD THE DEFLECTED PIPE FAIL TO RETURN TO THE ORIGINAL SIZE (INSIDE DIAMETER) AFTER THE CORRECTIVE MEASURES, THE LINE SHALL BE REPLACED. THE ENTIRE SYSTEM SHALL BE TESTED. DEFLECTION TESTING AND POSSIBLE REPAIR AND REPLACEMENT, AS STATED ABOVE, SHALL BE INCIDENTAL TO THE CONSTRUCTION OF SEWER PIPE; AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED. ANY REPAIRED SECTIONS WILL BE REQUIRED TO BE VIDEO INSPECTED AT CONTRACTORS COST.
6. LEAK TESTING FOR MANHOLES SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH ASTM C1244-93 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE PRESSURE (VACUUM) TEST". CONTRACTOR SHALL REPAIR OR REPLACE ANY LINE OR STRUCTURE WHICH FAILS ANY OF THE REQUIRED TESTS, AND RETEST. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER. CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF ANY TESTING TO BE PERFORMED. ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.

D. CONSTRUCTION

1. CONTRACTOR SHALL NOTIFY THE CITY OF BELLEVILLE OF THE DATE AND SCHEDULE OF CONSTRUCTION.
 2. PROPER DEWATERING OF THE SEWER TRENCH IS THE RESPONSIBILITY OF THE CONTRACTOR. DEWATERING INTO THE CITY'S SEWER SYSTEM IS STRICTLY FORBIDDEN.
 3. THE CITY OF BELLEVILLE REQUIRES THAT THE PERMITTEE RETAIN A QUALIFIED LICENSED PROFESSIONAL ENGINEER TO OBSERVE THE SEWER CONSTRUCTION PERIODICALLY, TO DETERMINE CONFORMANCE WITH PLANS AND SPECIFICATIONS.
 4. WHENEVER PIPE LAYING IS NOT ACTIVELY IN PROGRESS, OPEN ENDS OF ALL INSTALLED PIPE AND FITTINGS SHALL BE FITTED WITH A WATERTIGHT PLUG.
- E. ACCEPTANCE**
- PRIOR TO ACCEPTING THE SANITARY SEWERS, THE FOLLOWING ITEMS SHALL BE COMPLETED/SUBMITTED:
1. JET CLEAN, AIR, MANDREL, AND MANHOLE TESTS COMPLETED AND RESULTS SUBMITTED. THESE MUST BE SEALED BY A PROFESSIONAL ENGINEER.
 2. A NOTARIZED CERTIFICATION, TO BE DELIVERED TO THE OFFICE OF THE WASTEWATER SUPERINTENDENT, BY THE INSTALLING CONTRACTOR THAT HE/SHE HAS INSTALLED ALL THE SEWERS AND TREATMENT FACILITIES IN ACCORDANCE WITH THE PERMITS AND PLANS.
 3. SUBMISSION OF TWO (2) 25" X 36" AND THREE (3) 11" X 17" RECORD DRAWINGS (AS-BUILTS) SHOWING CONSTRUCTED MANHOLE INVERT ELEVATIONS, MANHOLE LOCATIONS, SERVICE LATERALS, TEE/WYE LOCATIONS REFERENCED TO DOWNSTREAM MANHOLE. SIZE AND TYPE OF PIPE SHALL ALSO BE ON THE DRAWINGS. ELECTRONIC FILE, CONTAINING AS-BUILT DRAWINGS ON STATE PLANE COORDINATES FOLLOWING AUTO CAD 2000 FORMAT WILL ALSO BE PROVIDED.
 4. UPON COMPLETION OF THE PROJECT AFTER ALL REQUIRED TESTING HAS BEEN DONE, A FINAL INSPECTION WILL BE MADE BY CITY PERSONNEL. THE FINAL INSPECTION WILL NOT BE CONDUCTED UNTIL "RECORD" PLANS ARE SUBMITTED. FINAL INSPECTION WILL BE MADE AT THE REQUESTS OF THE OWNER. DEFECTS NOTED MUST BE CORRECTED AND A REINSPECTION MADE BEFORE ACCEPTANCE. IMPROVEMENTS FOUND NOT AS DEPICTED ON THE SUBMITTED "RECORD" PLANS SHALL BE REJECTED.
 5. AFTER ALL DEFECTS, IF ANY WERE NOTED DURING FINAL INSPECTION, HAVE BEEN CORRECTED AND PRIOR TO ANY SEWER PERMITS BEING ISSUED, A MAINTENANCE BOND IN AN AMOUNT EQUAL TO FIFTY PERCENT (50%) OF THE CONSTRUCTION COST SHALL BE FILED WITH THE CITY CLERK. THE BOND SHALL BE FOR A PERIOD OF TWO (2) YEARS, COMMENCING ON THE DATE OF FINAL INSPECTION OR REINSPECTION IF NECESSARY, AND SHALL COVER ALL DEFECTS IN MATERIALS AND WORKMANSHIP. THE BOND SHALL BE BINDING ON THE DEVELOPER OR THE CONTRACTOR.
 6. ALL EASEMENTS GATHERED BY THE PERMITTEE(S), ACROSS PRIVATE PROPERTY THAT IS NOT CONTAINED WITHIN THEIR DEVELOPMENT, SHALL BE ASSIGNED/CONVEYED TO THE CITY OF BELLEVILLE BY THE PERMITTEE(S) FREE AND CLEAR OF ANY AND ALL LIENS AND ENCUMBRANCES WITHOUT COST TO THE CITY.
 7. AT THE TIME OF ACCEPTANCE OF THE SEWER EXTENSION, TITLE TO IT SHALL BE TRANSFERRED AND CONVEYED TO THE CITY OF BELLEVILLE, BY THE PERMITTEE(S) FREE AND CLEAR OF ANY AND ALL LIENS AND ENCUMBRANCES, WITHOUT COST THE CITY, AND UPON EXPIRATION OF THE PERMITTEE'S MAINTENANCE BOND (TWO (2) YEARS AFTER ACCEPTANCE OF THE SEWERS), THE CITY SHALL ASSUME ALL COSTS OF MAINTENANCE AND REPAIR OF SUCH EXTENSION.

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