

FULTON COUNTY SEWER AND WATER NOTES

Department of Water Resources - Development Permitting 11575 Maxwell Road, Alpharetta, Georgia 30009 404-612-3421

Fulton County requires the following Sewer and Water notes to be included in all projects that involved connection to the Fulton County's sanitary sewer and/or potable water systems respectively. If there is a conflict between Fulton County Notes and the General Notes, then priority shall be given to Fulton County Notes.

Sanitary Sewer Notes

- 1. All wastewater pipe construction shown on these plans must conform to Fulton County's Standards and Specifications, including Sanitary Sewer Regulations latest copy.
- 2. No sanitary sewer shall be accepted by the County without an as-built drawing showing the horizontal and vertical alignment of the sewer system, the location of all manholes, sewer connections, piping materials, required easement limits and junctions, and property lines.
- 3. Contractor must field verify the location and elevation of all known and unknown underground utilities.
- 4. All temporary and permanent wastewater easements must be dressed and grassed to control erosion prior to acceptance. Trees shall not be planted in the permanent easement area, or within 10-feet of a Fulton County sewer main.
- As-built drawings and maintenance bond(s) must be submitted and are required prior to inspection and acceptance. Digital as-built will be required. Note that digital as-builts will be required at the completion of the project. Please see:

 http://www.fultoncountyga.gov/images/stories/WR/Development/CAD Standards.pdf
 for the requirements. Maintenance bonds are due at final approval of the as-builts.
- 6. Neoprene couplings with stainless steel bands and shear rings are required for joining different types of sanitary sewer pipes.
- 7. Pools shall not drain into wastewater pipe systems. Pools shall drain into an approved individual onsite wastewater management system.
- 8. Low pressure air testing required for all wastewater pipe systems. This test must meet all requirements as outlined in UNI-B-06 or current revision. A Fulton County Inspector must be present during testing.
- 9. Contractor shall field verify the locations and invert elevations of wastewater pipes for a connection to existing wastewater systems.
- 10. Contractor is to cut and remove the pipe only upon final approval by the Fulton County Inspector.
- 11. All wastewater lines and laterals with less than one-foot of clearance to another utility line shall be constructed with a concrete saddle to maintain separation.
- 12. No fill shall be placed on a sanitary sewer easement without approval by the Director of PW. All sanitary manholes must extend to the ground surface.
- 13. For all projects utilizing individual onsite wastewater management systems design and provisions shall be in conformance with Fulton County Department of Health and Wellness regulations.

- 14. Eight-inches (8") or larger pipe lines shall be TV inspected. A virus free portable storage drive (USB Flash Drive) and written inspection log in compliance with NASSCO requirements and certified by a Georgia Registered Engineer or Registered Land Surveyor shall be provided when asbuilts are submitted. All videos shall include PACP and MACP completed forms. A copy of the operator's current NASSCO certification shall be submitted.
- 15. USF 7635 Box required for wastewater cleanouts in paved area per Fulton County Standard Detail 709.
- 16. Compaction of the back fill of all trenches shall be compacted to at least 90% Standard Proctor density. Backfill material shall be free from roots, stumps, or other foreign debris, and shall be placed at or near optimum moisture content. Correction of any trench settlement within a year from the date of approval will be the responsibility of the contractor. Compaction of the back fill of all trenches located under pavement shall be compacted to at least 95% Standard Proctor density.
- 17. Sanitary sewer laterals should be marked with 4"x4"post with min. 4-feet above ground. The top 1' should be painted green. Each lateral is to be brought to the ground surface in accordance with Fulton County Standard 909.
- 18. All required off site easements shall be dedicated to Fulton County prior to Utility permitting. All public on- site easements for other than single family residential projects that will be final platted shall be dedicated to Fulton County prior to Water Resources permit approval.
- 19. For residential projects where onsite sanitary sewer easements are to be dedicated to Fulton County, the following applies: Sanitary sewer easement inside property line to be shown in final plat for recording.
- 20. For all projects containing PVC wastewater pipes, also include the following notes: (see attached condition for PVC).
 - a. Pipe shall be ASTM D3034, SDR35 in 12.5 foot laying lengths with elastomeric sealed joints in accordance with ASTM D3212.
 - b. Pipe bedding shall be #57, sharp, angular, crushed stone. Bedding shall extend a minimum of 4" below the pipe and extend to the top of the pipe. The bedding shall be compacted by "slicing with a flat shovel". The width of the ditch must be in accordance with OSHA Safety Standards.
 - c. Initial backfill: After bedding, complete initial backfill with #57 stone. If no rock is encountered, initial backfill shall extend to a height 611 above of the top of the pipe, otherwise initial backfill shall extend to 12" above the top of the pipe.
 - d. Fittings for lateral connections shall be 45° WYES and bends. Provide PVC pipe stoppers for each lateral. Provide special watertight connections at manholes and transitions to ductile iron pipe as recommended by the pipe manufacturer.
 - e. After installation, a deflection test is required. Initial deflection shall be limited to 3% of the undeflected diameter. A second test shall be made at least 8 months after the installation but before final acceptance. At that time deflection shall be limited to 5% of the undeflected diameter.
- 21. All manholes located within a paved area shall have concentric cone sections and flange down frames and covers. All manholes located within an unpaved area shall have eccentric cone sections with bolt down flange up frame and covers, or hinged cast in place lockable covers. All manholes located within a flood prone area shall have eccentric cone sections with bolt down gasketed flange up frame and covers. Raise top of manholes in landscape areas to 0.5-feet above grade.

- 22. Issuance of this permit does not in any way imply that wastewater taps for building permits will be issued. Contact the Department of Public Works, Water Resources Division at (404) 612-7400 for further information.
- 23. Any changes to the sewer drawings must be approved by Fulton County.
- 24. Notify Fulton County Inspector 24-hours prior to construction.

Water Notes

- 1. All public water lines shall be marked with a continuous Electronic Marking System (EMS) Caution Tape, at a maximum burial depth of 2-feet directly above the water line located below the tape (3M Pathmarking Tape Model #80 6116 16220 7613).
- 2. Water valve markers shall be placed at all locations where water valves are not in the streets. Water valves that are in the street will be clearly marked with a V suck out on the curb.
- 3. All temporary and permanent water easements must be dressed and grassed to control erosion prior to acceptance. No trees will be allowed to be planted in utility easements or within 10-feet of a public water main.
- As-built drawings and maintenance bond(s) must be submitted and are required prior to inspection and acceptance. Digital as-built will be required. Note that digital as-builts will be required at the completion of the project. Please see:

 http://www.fultoncountyga.gov/images/stories/WR/Development/CAD Standards.pdf for the requirements. Maintenance bonds are due at final approval of the as-builts.
- All construction methods and materials used in the Fulton County Water System must be made of Ductile Iron, and comply in respect to ANS/AWWAA21.111/CIII-85 Standard Specifications. Plans that do not meet the specifications in all respects will not be accepted. All lines should be Class 51, or greater (when requested by the County). All service lines should be Type "K" copper.
- 6. Contractor is responsible to verify the location and depth of the existing water lines prior to construction.
- 7. Required 18-inch vertical separation between proposed water lines and other existing and proposed utilities lines shall be verified during construction.
- 8. If existing water service line is to be removed and abandoned, the service shall be removed back to the corporation stop and capped at the water main line in the presence of the inspector. Other existing and abandoned water service structures will be removed in the presence of the inspector.
- 9. Water meter boxes are to have 1-inch Type "K" Copper service line. The service line must be continuous from the main to the water meter and shall have a minimum cover of 48". All joints shall be flared. The service line shall connect to the main line with a direct tap with a corporation cock with a minimum of 18" between taps.
- 10. Water meter box shall be a polyethelene meter box (Model 1219-18-IMKF deep) with polyethelene lid (Model 1219-1-MKF deep). Lid for stretch yoke box shall be DFW Model 6514-1-MKF deep with oblong knock out and ½-inch recess for meter antennae with a ferrous magnet in the lid and a plastic locking mechanism.
- 11. For residential subdivisions: No individual meters are to be placed in a concrete sidewalk or driveway. Meters must be maintained in grass areas.
- 12. The contractor shall install cast iron water meter boxes and 1" type "k" copper service lines for all services including cul-de-sacs.
- 13. Lot lines will be clearly identified and marked on top of curbs before the water main is installed.

- 14. Conduit across the road, for installation of water services, is to be installed by the developer prior to paving. Material for conduit shall be PVC pipe or approved alternate and is to be installed 3-feet below final grade.
- 15. A 6" P.V.C. conduit will be used to access all lots on opposite sides of the street, except in cu l-desacs. Inspector must be notified 24 hours before construction begins.
- 16. Thrust blocking will be used at all bends, plugs, tees, and fire hydrants.
- 17. Fire hydrants shown in the radius of a curve shall be field adjusted so that the actual installation of fire hydrants will be outside of curve radius.
- 18. All sampling stations and automatic flushing stations installed within a development shall be metered and the sampling station shall be owned and maintained by the HOA.All lines 6" diameter or greater must be pressure tested at 250 psi for a minimum of two (2) hours.
- 19. Water taps, service lines, and meter boxes in residential subdivisions will be installed by the developer per current Fulton County specifications.
- 20. All required off site easements shall be dedicated to Fulton County prior to Utility permitting. All public on- site easements for other than single family residential projects that will be final platted shall be dedicated to Fulton County prior to Water Resources permit approval.
- 21. For residential projects where onsite water easements are to be dedicated to Fulton County, the following applies: Water easement inside property line to be shown in final plat for recording.
- 22. Any changes to the water drawings must be approved by Fulton County.
- 23. Notify Fulton County Inspector 24-hours prior to construction.