



FULTON COUNTY WATER DESIGN GUIDE – WATER REVIEW CHECKLIST

Department of Public Works
11575 Maxwell Road
Alpharetta, Georgia 3009
Telephone: 404-612-3421
www.fultoncountyga.gov

Project Name: _____

Project Number: _____

Date: _____ Reviewed By: _____

(UPDATED: JUNE 2023)

General Comments

- ___1. Provide Fulton County Project Name and Project Number, and site address on all water and sewer related sheets (Cover, Utility Plans, Profiles and Details).
- ___2. Cover sheet shall contain the note: Water services provided by Fulton County or indicate who is responsible for providing water service.
- ___3. Add Fulton County Standard Water Notes. Please see Sewer and Water Notes Form at the following link: <https://www.fultoncountyga.gov/services/water-services/development-permitting/permitting-process>
If there is a conflict between Fulton County Notes and the General Notes, then priority shall be given to Fulton County Notes.
- ___4. Please utilize Fulton County's standard utility details. A list of the most used water details can be found at the following link: <http://www.fultoncountyga.gov/fcwr-developer-information/fcwr-standard-details> Provide the following standard details 101, 102, 132, 133, 711, 806, 814, and 816 where applicable. Please include any additional Fulton County details you consider applicable for this project.
- ___5. Add all road names on the overall utility plan of the entire property and if the water line that serves the site is within the ROW of an existing roadway, the speed limit must be shown. The term "variable right-of-way" or similar shall not be used. If ROW varies, show approximate dimensions in areas of interest.
- ___6. All proposed or upgraded water system structures must be designed according to the latest Fulton County Standard Details.

- ___7. For resubmittals, the engineer must submit written responses to the each of the specific review comments along with the revised plans. These comments are valid for ninety (90) days. If after the 90-days period, the reviewer has not received amended drawings with written responses, the submitted construction plans will be discarded, and a new submittal (including payment of the review fee) will be required.

Utility Plans

- ___8. Show location of all existing and proposed sanitary sewer, water lines, storm sewer, power, and lines. Please review Fulton County detail 101 for underground utility location requirements. Power and gas line locations should be based on (sketch) drawings prepared by utility.
- ___9. Proposed water mains shall be shown on the North or West side of the road unless there is an existing main on the opposite side.
- ___10. All water mains shall be minimum 6 inches class 51 DIP or better.
- ___11. A minimum of eighteen 18 inches of vertical clearance between water lines and other utilities crossing must be obtained. A minimum of ten 10 feet (edge-to-edge) of horizontal clearance between pipes and structures must be obtained. When local conditions prevent a horizontal separation of 10 feet, parallel installation of water mains shall conform to State regulations.
- ___12. When local conditions prevent a horizontal separation of 10 feet between a Fulton water main and a stormwater pipe, a variance shall be obtained by the PW Director. The following conditions shall be obtained:
- a. Minimum 10 feet separation between water and sewer mains. The sewer line shall be at least 18 inches deeper than the water main.
 - b. Minimum 5 feet horizontal separation (from wall to wall) between stormwater line and water line. The stormwater pipe needs to be at least 18 inches deeper (from wall to wall) than the water main.
- ___13. When water line is under the road, it needs to be a minimum 5 feet from the edge of the ROW.
- ___14. No new water meter or fire hydrant shall be placed at the same lot line or within 20 feet of the power transformers.
- ___15. Thrust blocking is to be shown at all fire hydrants, tees, plugs, and bend locations. Label all fittings anticipated on the water distribution system.
- ___16. Main line valves shall have a maximum distance of 800 feet between them and placed near a fire hydrant. Each main line water valve shall have 6x6 concrete marker.
- ___17. When requested by Fulton County, install a water sampling station at the end of the new water main.
- ___18. If storm sewer mains cross Fulton County water mains, please provide a profile sketch or other information to document vertical separation on the utility sheet.

- ___19. To maximize freshness of domestic water, please do one of the following:
- a. Any cul-de-sac or dead-end road with less than 8 service connections shall be looped or a flushing station installed (flushing station shall have a dedicated storm water system, cannot be open flushed to the street or ground).
 - b. Where the total length of a dead-end line exceeds 50-linear feet per lot served from that line, a separate 4 inches domestic water main shall be installed nominally in the same trench and above the fire suppression main with a 1-foot separation. All water meters shall be installed on the domestic water main, and all fire hydrants shall be installed on the fire suppression main. A flushing station shall be installed at the end of the fire suppression main. The 4 inches domestic line shall end with a non-freeze hydrant mounted flush with the ground surface (Mueller 2-1/8-inch Flush Type Fire Hydrant or equivalent).

Water Tap Point

- ___20. Minimum size for a pipe crossing under a road is 8 inches DIP. Developer is responsible for bringing the pipe up to the meter side, and Fulton County staff will install meter and meter vault after all fees have been paid.
- ___21. For Residential Subdivisions: Add 5/8-inch chlorination taps with corporation cock near the tie-in point.
- ___22. Add the following note to the tap: Tap to existing water line to be performed in accordance with Fulton County Standard Details 122, 123, and 127.
- ___23. Show individual water meters for the houses and double water meters for the townhomes.
- ___24. All residential services are to have 1 inch Type K copper service with a polyethylene meter box (Model 1219-18-1MKF deep) with polyethylene lid (Model 1219-1-MKF deep).
- ___25. A 6 inches PVC conduit shall be used to access all lots on opposite sides of the street, except in cul-de-sacs. Conduit across the road, for installation of water services, is to be installed by the developer prior to paving. Material for conduit shall be 6 inches PVC pipe or approved alternate and is to be installed with a minimum of 4 feet below final grade. No split connection allowed. Two water lines may use the same conduit.
- ___26. Water meters are to be installed 1-foot inside the right-of-way limits. If water meters conflict with the sidewalk, move the meter 1-foot outside the right-of-way limits, and install the meters in utility easements. Water meters are not to be set within 1-foot of the sidewalk and must be maintained in grass areas near the lot lines.
- ___27. The shoulders are to be graded to finished grade prior to setting the water meter boxes.
- ___28. Provide at least 10-feet of clearance from the water meter vault to an obstruction (fire hydrant, etc.).

Fire Hydrants

- ___29. Add a fire hydrant:
 - a. For residential subdivision: at the subdivision entrance
 - b. At the dead-end termination of new water main or an auto flushing fixture shall be installed
 - c. A maximum distance 400 feet between each
- ___30. Fire hydrants are not to be located next to a drainage structure.
- ___31. All fire hydrants shall be 4.5 feet bury hydrants with a maximum distance of 400 feet between each. Fire hydrants should be located within ROW on property lines.
- ___32. All fire hydrants shall have an isolation valve, and a shock collar.
- ___33. An FM Approved Fire Service Meter shall be required to be installed on all systems having fire hydrants attached to them on private property and/or fire sprinkler systems as required by the local Fire Department.
- ___34. Separate fire line and domestic meters, vaults, and backflow preventors required.
- ___35. Water meters 3-inches and larger shall have a valve installed between the meter vault and backflow preventer (outside the water meter vault).
- ___36. If a flow test is required by the Fire Department for your project, Fulton County can provide the test for a fee.

Jake and Bore

- ___37. Add note to the bore: Jack and Bore to be performed in accordance with Fulton County Standard Details 107 and 129.

Easements

- ___38. Water meter/water vault must be located inside of ROW (except for projects that need GDOT encroachment permit); or provide an easement which must be dedicated to Fulton County prior to the construction permit approval. For residential meters outside the ROW (smaller than 1-1/2 inches); provide a 10 feet easement around service line and a 5 feet radius easement around each meter. For meters 2 inches or larger provide a 10 feet radius easement beyond the vault.
- ___39. For commercial projects, all offsite and onsite water easements documents must be reviewed and approved by the Fulton County Department of Water Resources before a permit can be issued. The easement document package must be completed and sent to the Development Permitting Engineer for initial review. Construction permits will not be issued until the easement package has been reviewed and approved by the Land Division.
- ___40. All easements shall allow adequate room to construct the water main and appurtenances. Permanent easements shall be a minimum of 20 feet wide, 10 feet on each side of the line; except that when the depth of the water main exceeds 10 feet the required water easement width shall increase such that the easement

width is at least twice the depth from the ground surface to bottom of the pipe.

- ___ 41. No retaining wall, building, pole, sign, or other vertical structure shall be constructed in water easements, including vehicular access easements around structures, without approval from the Department of Public Works.
- ___ 42. No surface water shall be impounded on a water easement.
- ___ 43. Utilities and systems, publicly or privately owned and maintained, shall NOT be designed, installed or permitted to run within a water and/or sewer easement except for perpendicular crossings.
- ___ 44. All utilities and systems crossing existing or proposed water easements shall have permanent markers designating the existence and type of utility or system placed at the locations where the utility or system crosses the water easement boundaries.
- ___ 45. Utilities and systems not regulated by the Georgia Public Service Commission (PSC) shall be considered privately owned and maintained. The PSC regulates Natural Gas, Electrical and Telecommunications utilities.
- ___ 46. All privately owned utilities and systems encroaching into existing or proposed water easements shall be required to provide a Fulton County standard Encroachment and indemnification Agreement. Examples of privately owned utilities include but are not limited to: storm sewer piping maintained by the HOA, irrigation system piping, private water and sewer piping, cable TV, internet coax or fiber, control wiring, etc.

GDOT

- ___ 47. A City utility encroachment or Georgia D.O.T. encroachment permit will be required before the utility's construction will be allowed within the ROW. For all planned encroachment of state routes, please ensure the surveyor identifies all existing utility elevations and locations along the length of your project site on all state routes. The surveyor should obtain data from ROW limit to ROW limit.
- ___ 48. Provide to Fulton County Development Permitting Engineer all information required for state encroachment permit. Fulton County files for the permit but it is developer's responsibility to provide accurate, correct information for permit, and to periodically check with Fulton County permitting as to status.

Backflow Preventers

- ___ 49. RPZ shall be used for customers with high hazard potential (contamination or health hazard):
 - a. Agriculture: where fertilizers, herbicides and pesticides are used
 - b. (Cooling Systems/Boilers, where chemicals are used to protect the system from Degradation
 - c. Industry; including but not limited to, plating facilities, chemical manufacturing, dye

- plants, oil and gas production, storage or transmission properties, paper and paper products plants, battery plants, automobile part manufacturing, metal manufacturing, cleaning, processing, and fabricating, cloth and fabric treatment or manufacturing
- d. Medical Facilities; including but not limited to, hospitals, medical buildings, dentists, veterinary buildings or facilities, nursing homes, clinics, and sanitariums
- e. Mortuary; Morgues, mortuaries, and autopsy facilities
- f. Carwashes
- g. Printing Shops and Photography
- h. Laundries and Dry Cleaning
- i. Beauty Parlors, Hair Salons, and Barber Shops
- j. Laboratories, including dental and veterinary
- k. Exterminating Companies
- l. Lawn Care Companies / Nurseries
- m. All customer properties where a well (active or inactive) exists and a violation of the requirements of Fulton County Code of Ordinances Chapter 34 Health and Sanitation, Article IV Drinking Water Supply exist or where water is provided for any other service (Irrigation, etc.) by any other source including pumping from surface water, reuse water, etc.

- ___50. DC shall be used for customers with medium hazard potential (pollution or nuisance hazards):
- a. Buildings: Apartments when service connection serves 15 or more units, hotels, mobile home parks, multistoried commercial offices, shopping centers
 - b. Food Services: including but not limited to, food processing, dairies, cold storage, bottling plants and restaurants (high hazard where health hazard exists)
 - c. Irrigation and Sprinkler Systems (high hazard where chemicals are injected)
 - d. Schools and Colleges
 - e. Industry, other than that listed under high hazards which pose no current, evaluated health threat
 - f. Service Station and Garages
 - g. Residential or commercial properties where a well (active or inactive) exists and no violation exist of the requirements of Fulton County Code of Ordinances Chapter 34 Health and Sanitation, Article IV Drinking Water Supply.

Flow Calculations

- ___51. For all residential projects of 5 lots or more, and all commercial developments; please complete the "Certificate of Water and Sewer Utility Availability" and send it to Development Permitting Engineer for determination of adequate capacity. Link to form:
<https://www.fultoncountyga.gov/services/water-services/development-permitting/permitting-process>

Additional Considerations

- ___52. All water meter service lines and meter boxes will be set by the developer in residential developments.
- ___53. No waterlines shall be installed along or adjacent to unpaved roads that are not within public ROW.