



FULTON COUNTY WATER DESIGN GUIDE

WATER REVIEW CHECK

Department of Public Works
11575 Maxwell Road
Alpharetta, Georgia 30009
Telephone: 404-612-3421
www.fultoncountyga.com

Project Name:

Project Number:

Date:

Reviewed By:

General

- _____ 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. 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 commonly 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.

Utility Plan

- _____8. Show location of all existing and proposed sanitary sewer, water lines, storm sewer, power and gas lines. Please review Fulton County detail 101 for underground utility location requirements. Power and gas lines 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 is on the opposite side.
- _____10. All water mains shall be minimum 6" 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. No new water meter or fire hydrant shall be placed at the same lot line or within 20' of the power transformers.
- _____13. Thrust blocking is to be shown at all fire hydrants, tees, plugs, and bend locations. Label all fittings anticipated on the water distribution system.
- _____14. Main line valves shall have a maximum distance of 800-feet between them and placed near a fire hydrant.
- _____15. Add water sampling stations at the end of the new water mains. Label this as a water sample pedestal. This sampling station shall be Water Plus 301-D Above Grade Sample Station 301D or equivalent.
- _____16. 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.
- _____17. In order 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 500-linear feet per lot served from that line, a separate 4" domestic water main shall be installed nominally in the same trench and above the fire suppression main with a 1' 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" domestic line shall end with a non-freeze hydrant mounted flush with the ground surface (Mueller 2-1/8" Flush Type Fire Hydrant or equivalent).

Water Tap Point

- _____18. For Residential Subdivisions: Add 5/8" chlorination tap with corporation cock near the tie-in point.

_____19. 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.

Water Service Line

_____20. Show individual water meters for the houses and double water meters for the townhomes.

_____21. All residential services are to have 1" Type K copper service with a polyethelene meter box (Model 1219-18-1MKF deep) with polyethelene lid (Model 1219-1-MKF deep).

_____22. A 6" P.V.C. 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" 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.

_____23. 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 meter are not to be set within 1-foot of the sidewalk, and must be maintained in grass areas near the lot lines.

_____24. Curb stops are to be Ford Angle Ball Service Valve BA21-444W-NL. The center of the curb stops are to be set 10" below grade. The shoulders are to be graded to finished grade prior to setting the water meter boxes.

_____25. Provide at least 10-feet of clearance from the water meter vault to an obstruction (fire hydrant, etc).

Fire Hydrants

_____26. Add a fire hydrant:
a. For residential subdivisions: 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

_____27. Fire hydrants are not to be located next to a drainage structure.

_____28. All fire hydrants shall be 3.5 foot bury hydrants with a maximum distance of 400 feet between each. 12" and larger water lines will require 4.5 foot bury hydrants. Fire hydrants should be located within ROW on property lines.

_____29. All fire hydrants shall have an isolation valve.

_____30. A factory mutual fire meter shall be installed on all systems having fire hydrants attached to them on private property and/or fire sprinkler systems.

- _____31. Fulton County can supply a 2", 4", 6" or 8" factory mutual meter to supply both the domestic flow and fire flow. For all systems that require a factory mutual meter, the following note shall be added to the Utility Plan: "A *Water Meter Certification* form shall be submitted and approved by Fulton County Public Works Water Resources Division prior to purchase of meter for fire line".
- _____32. If a flow test is required by the Fire Department for your project, Fulton County can provide the test for a fee.

Jack and Bore

- _____33. Add note to the bore: Jack and bore to be performed in accordance with Fulton County Standard Details 107 and 129.

Easements

- _____34. Water meter/water vault must be located inside of ROW (except for projects that need GDOT encroachment permit); or provide an easement which has to be dedicated to Fulton County prior to LDP approval.
- _____35. 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.
- _____36. 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.
- _____37. No surface water shall be impounded on a water easement.
- _____38. No other pipeline or utility shall be placed in a water easement without an encroachment agreement.

GDOT

- _____39. A City utility encroachment or Georgia D.O.T. encroachment permit will be required before the utilities 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.
- _____40. 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

- _____41. RPZ shall be used for customers with high hazard potential (contamination or health hazard):

- (1) Agriculture; where fertilizers, herbicides and pesticides are used
- (2) Cooling Systems/Boilers; where chemicals are used to protect the system from degradation
- (3) 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
- (4) Medical Facilities; including but not limited to, hospitals, medical buildings, dentists, veterinary buildings or facilities, nursing homes, clinics, and sanitariums
- (5) Mortuary; Morgues, mortuaries, and autopsy facilities
- (6) Carwashes
- (7) Printing Shops and Photography
- (8) Laundries and Dry Cleaning
- (9) Beauty Parlors, Hair Salons and Barber Shops
- (10) Laboratories, including dental and veterinary
- (11) Exterminating Companies
- (12) Lawn Care Companies / Nurseries
- (13) 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

- _____ 42. DC shall be used for customers with medium hazard potential (pollution or nuisance hazards):
- (1) Buildings; Apartments when service connection serves 15 or more units, hotels, mobile home parks, multistoried commercial offices, shopping centers
 - (2) Food Services; including but not limited to, food processing, dairies, cold storage, bottling plants and restaurants (high hazard where health hazard exists)
 - (3) Irrigation and Sprinkler Systems (high hazard where chemicals are injected)
 - (4) Schools and Colleges
 - (5) Industry, other than that listed under high hazards which pose no current, evaluated health threat
 - (6) Service Stations and Garages
 - (7) 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

- _____ 43. For all residential projects of 5 lots or more, and all commercial developments; please complete the “Request for Water and Sewer Utility Availability” Application (Attachment 3), and send it to Development Permitting Engineer for determination of adequate capacity.

Additional Considerations

- _____ 44. All water meter service lines and meter boxes will be set by the developer in residential developments.
- _____ 45. No waterlines shall be installed along or adjacent to unpaved roads that are not within public ROW.