



DEPARTMENT OF WATER AND SEWER
 1526 East Forrest Ave. Suite 400
 East Point, Georgia 30344
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 www.eastpointcity.org

WASTEWATER REVIEW CHECKLIST

Project Name: _____ Tax ID #: _____

Project Number: _____ Date: _____

Reviewed By: _____ Telephone: _____

Please address all items marked with an "X"

NOTICE: ANY DEVIATIONS FROM THESE CITY STANDARDS SHALL BE PREAPPROVED BY THE DEPARTMENT OF WATER AND SEWER.

General Requirements

Include the following general notes on the plan:

- A. All wastewater pipe construction shown on these plans must conform to Fulton County's Standards and specifications, including Sanitary Sewer Regulations latest copy.
- B. All wastewater easements must be dressed and grassed to control erosion prior to acceptance. Trees shall not be planted in the permanent easement area.
- C. As-built drawings and maintenance bond(s) must be submitted are required prior to inspection and acceptance including the CCTV inspection CD and CAD files.
- D. Neoprene couplings with stainless steel bands and shear rings are required for joining different types of sanitary sewer pipes concrete required where applicable.
- E. Pools shall not drain into wastewater pipe systems.
- F. Low pressure air testing required for all wastewater pipe systems. This test must meet all requirements as outlined in ASTM C82880 or current revision. An East Point Inspector must be present during testing.
- G. Issuance of this permit does not in any way imply that wastewater taps for building permits will be issued. Contact the Department of Water & Sewer Department for further information.
- H. Contractor to field verifies the locations and invert elevations of wastewater pipes for a connection to existing wastewater systems.
- I. Notify inspector 24-hours prior to construction.
- J. For all projects utilizing individual onsite waste water systems design and provisions shall be in conformance with Fulton County Health Department regulations.
- K. Eight inch (8") or larger pipe lines shall be TV inspected. A DVD and written inspection log certified by a Georgia Registered Engineer shall be provided when as-builts are submitted.
- L. Maximum distance between manholes is 400 feet.
- M. USF 7635 Box required for cleanouts in paved area.
- N. Compaction of the back fill of all trenches shall be compacted to 95% of the proctor density. Backfill material shall be free from roots, stumps, or other foreign debris, and shall be placed at or near optimum

moisture. Correction of any trench settlement within a year from the date of approval will be the responsibility of the contractor.

O. Sanitary sewer laterals should be marked with 4"x4" post with min. 4' 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.

P. All required off site easements shall be dedicated to City of East Point prior to LDP permitting. All public onsite easements for other than single-family residential projects shall be dedicated to City of East as part of the as-built approval.

Q. For all projects containing PVC wastewater pipes, also include the following notes: (see attached condition for PVC).

1. Pipe shall be ASTM3034, SDR35 in 12.5 foot laying lengths with elastomeric sealed joints in accordance with ASTM D3212.
2. 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 flap shovel". The width of the ditch at the top of the pipe shall be a maximum of 3 feet.
3. Initial backfill: After bedding, complete initial backfill with #57 stone. If no rock is encountered, initial backfill shall extend to a height 6" above of the top of the pipe, otherwise initial backfill shall extend to 12" above the top of the pipe.
4. Fittings for lateral connections shall be 45° WYES and bends. Provide PVC pipe stoppers for each lateral. Provide special water tight connections at manholes and transitions to ductile iron pipe as recommended by the pipe manufacturer.
5. 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.

Wastewater Design Requirements

- ___ 1. Developer shall network gravity pipeline through site to serve upstream property owners. This will be at the Developer's expense. Also, proposed depths in excess of 24' shall be pre-approved by the Engineering Section of the Water & Sewer Department.
- ___ 2. Plan and profile of all existing and proposed wastewater pipes showing all utility with crossings
- ___ 3. Manhole inverts shall have a minimum 2/10 of a foot (.20') drop across the manhole.
- ___ 4. Minimum slopes for wastewater pipes are as follows:
 - 0.7% on 8" lines
 - 0.5% on 10" lines
 - 0.4% on 12" lines
 - 0.3% on 15" lines
 - 0.25% on 18" lines
 - 21" & larger sizes, maintain 2 feet/sec. at 1/4 capacity
- ___ 5. D.I.P. wastewater is required where line:
 - a. Is under less than 4 feet of cover in unpaved areas
 - b. Is under less than 6 feet of cover in paved areas
 - c. Crosses over storm sewer or under within 1 foot
 - d. Is in a fill area
 - e. Is under/ has more than 20' (feet), 20 feet of cover minimum class 51 D.I.P. will be required.

f. D.I.P. may be required for other conditions

- ___ 6. State size, material type, percent grade, and length of all pipes
- ___ 7. Water Resources utility encroachment or D.O.T. encroachment permit required before L.D.P. will be issued
Contact East Point Water Resources and GADOT
- ___ 8. An outside drop is required at a manhole when the following conditions exist:

INCOMING PIPE SIZE (inches)	DROP (in inches)
8"	27"
10"	27"
12"	30"
15"	39"
18"	41"

- ___ 9. Where an outside drop exceeds ten (10) feet, provide an intermediate cleanout (a tee section).
- ___ 10. Different size pipes require the crest crown of each to be aligned.
- ___ 11. Maximum distance between manholes is 400 feet.
- ___ 12. Concrete collars on waste water pipe lines are required when the slope is greater than 20 percent of conditions.
- ___ 13. Provide safety platforms within manholes, in excess of 16' deep. Spacing shall be:

MANHOLE DEPTH (feet)	PLATFORM SPACING (feet)
16'	8' (1 platform)
17-23'	1 platform spaced in center of manhole depth
24'	8' (2 platforms)

Manholes in excess of 24' shall be pre-approved by the Engineering Section, on an individual basis, and shall have platforms spaced every 8 to 10 feet.

- ___ 14. For all wastewater pipes above the ground, wrapped and coated steal pipe or D.I.P. shall be used. All pipe shall be encased in steel and field welded.
- ___ 15. For combined drainage and wastewater pipe easements, the width shall be 30' (feet). Provide additional 5' of combined easement when any pipe is 48" or larger. The wastewater smaller pipes shall be 10' (feet) from one side, while the drainage pipe will be 10' (feet) from the other side. All fences or other barriers crossing the Wastewater easement will be installed with a 12' (feet) locked double gate so that East Point can have access.
- ___ 16. Provide reflection angles for all manholes. Minimum angle between influent and effluent waste water line at a man hole is 90 degrees.
- ___ 17. Laterals shall be provided for each lot, building, and unit (townhomes/condos). Laterals to serve a single lot or building may extend a maximum of 125 linear feet, off site. Laterals must be 6" pipe at a minimum 1% slope and indicated by station number or numbers. All laterals from street wastewater lines must extend at least ten feet behind the back of curbing.
- ___ 18. When laterals connect to manholes indicate invert in elevation on wastewater profiles.
- ___ 19. If laterals cross storm sewer show location on storm sewer profile.

- ___20. Provide the following wastewater Fulton County details: 202, 575,576, 650, 650A, 651, 651A, 651B, 652, 652A, 652B, 653, 654, 670, 671, 903, 903A, 905, 906, 907, and 909, where applicable.
- ___21. Provide 5- foot contour internal topographic mapping from aerial or other sources for a minimum of 400 feet beyond the project boundary survey.
- ___22. Extend wastewater pipelines to serve adjacent properties for future development, as per sanitary sewer wastewater regulations.
- ___23. No more than 4 connections are allowed per manhole. Provide 12" minimum between pipe penetrations.
- ___24. All service lines connecting to an existing wastewater line will be made with manholes.
- ___25. When specifying FL STD DH 202, provide calculations for 25-year storm stamped and sealed by a Georgia registered engineer. Concrete collars required at ends of aerial wastewater crossing. Provide structural calculations of flood resistance, certified stamped and signed by a Georgia Registered Engineer. Design and 100year water depths and velocities structural design, footing design including scour.
- ___26. Riprap shall be placed for the full width of the excavation at all creeks crossings where wastewater pipe lines cross and shall extend to the top of bank.
- ___27. All manholes outside of roadways and right of ways shall be two feet aboveground. If a man hole is in a flood plain or high water area, they shall have tight covers and extend above the ten year floodplain level: clearly indicate and provide details. Manholes flush with the ground may be allowed, on a pre-approved basis.
- ___28. Grease trap, oil interceptor, pretreatment, etc., required.
- ___29. Profile all existing wastewater lines in above which construction will occur. Existing wastewater lines will be T.V. inspected over which construction occurs for as-built approval.
- ___30. If wastewater pipes are to be constructed adjacent to rivers and other waterways (may require state waters buffer variance), the location of the waterway shall be certified by a registered Land Surveyor. Offset distance from the top of bank of the creek shall be provided to all manholes. All creek banks within ten feet of the centerline of the pipe shall be reinforced with riprap per Fulton County Standards.
- ___31. Gravity Flow Design Calculations shall include the following, and are to be submitted with construction plans, prior to approval. This calculation report shall have the seal and signature of a Georgia Registered Engineer.

a. A population projection of the area served and proper sizing to include sub-basins.

b. Minimum 2 fps flowing one half full on pipes, 18" and smaller. (Minimum pipe size is 8"). Pipes larger than 18" shall be based upon 2 fps flowing two thirds full.

c. Peaking factors (see attached sheet, using 100 GPD per person.)

d. Use "Proposed Land Use" Chart below for residential commercial projects. (In GPD)
 PROPOSED LAND USE:

Office	_____ (175)	Church	_____	Seats(5)	_____
Retail Sales	_____ SF(.1)	Hospital	_____	Beds(200)	_____
Apts.(1 or 2 Bdrms)	_____	Units(240)	_____	Nursing Homes	_____
Singlefamily	_____	Lots(240)	_____	Elderly Housing	_____
Industrial	_____	Employees(25)	_____	Laundry	_____
Restaurant	_____	Seats(55)	_____	Schools	_____
Fast Foods	_____	Seats (30)	_____	Hotel/Motel	_____
Warehouse	_____	(25)	_____	Rooms(100)	_____
		Other	_____		_____

TOTAL PROPERTY REQUIREMENT _____ (GPD)

For carwashes, the Developer shall provide manufacturer specifications to verify flow calculations.

e. Provide calculations verifying pipe slopes in excess of 30% will not cause flooding conditions within downstream man holes (energy gradient).