

ARTICLE 9 STORM DRAINAGE AND UTILITIES

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Section 901. Easements.

Where a subdivision or land development is traversed by a watercourse, drainage way, channel or stream, there shall be provided a stormwater or drainage easement of minimum 20 feet in width. Easements for storm pipes shall be a minimum of 20 feet wide (narrower if approved by the Appropriate City Department Head) and all easements shall be provided for all drainage facilities as approved by the same. Where easements are needed for utility locations, they shall be provided by the subdivider or land developer to the appropriate utility provider. Easements having a minimum width of 15 feet (narrower if approved by the Appropriate City Department Head) shall be provided, where required for utility lines and underground mains and cables. Where easements are needed for public water and/or sanitary sewer lines, they shall be provided as determined appropriate by the Appropriate City Department Head but shall be no less than 20 feet wide (unless approved by the Appropriate City Department Head). All easements required pursuant to this Section shall be shown on the preliminary plat if required, final plat if required, and land development plans.

Section 902. Storm Drainage System.

No land shall be platted and no land shall be developed except in accordance with Sec 26-104, "Stormwater Management Standards," of the Bainbridge City Code. In addition, storm drainage in subdivisions and land developments shall meet the following requirements to the extent they are not inconsistent with Sec. 26-104 of the Bainbridge City Code.

The storm drains along with catch basins and manholes shall be installed in compliance with the plans and specifications, and as indicated herein.

1. Except as provided in these regulations, every subdivision or land development shall be served by storm drainage facilities, including drains, sewers, catch basins, culverts and other facilities as required by standards and specifications of the Appropriate City Department Head) .
2. All drainage facilities shall be so designed to serve the entire drainage area in which these facilities are located. All street drains serving lots in the subdivision shall be installed by the subdivider.
3. Cross drains or culverts under roads shall be designed for the 50 year rainfall event (the Appropriate City Department Head) may require the 100 year rainfall event in some locations). The culvert will be constructed of reinforced concrete and will comply with Georgia D.O.T. specifications. Culvert ends will be treated with a flared end section or headwall. Cross drains or culverts under residential driveways will be designed for the ditch capacity (usually the 25 year rainfall event-the Appropriate City Department Head)

may require the 100 year rainfall event in some locations). The culvert will be constructed of reinforced concrete, bituminous coated corrugated metal, or polyethylene and meet Georgia D.O.T. specifications. Culvert ends will be treated with a 6:1 Safety End Section per GDOT Detail No. 1122.

4. Catch Basins, GDOT detail no. 1034, will be placed at sag or low points in vertical curves on roads with curb and gutter. GDOT detail no. 1033 catch basins will be placed where curb capacity of a 25 year rainfall event exceeds one-half (1/2) of a lane width. The pipe network between catch basins will be reinforced concrete pipe meeting GDOT specifications and will be sized for the 25 year rainfall event (minimum).
5. Ditches will be sized for a 25 year rainfall event (the Appropriate City Department Head may require the 100 year rainfall event in some locations). The side slope of the ditch will have a minimum slope of 3:1 on grassed ditches. The maximum velocity allowed in a grassed ditch is five (5) feet per second during 25 year rainfall events. Ditches with side slopes steeper than 3:1 or with water velocities exceeding five (5) feet per second will be paved with concrete.
6. The management of stormwater leaving the subdivision or development will be in compliance with the City Ordinance #585, "Stormwater Management Ordinance."

A. Downstream over bank flood protection shall be provided by controlling the post-development peak discharge rate to the predevelopment rate for the two (2) year through 25 year return frequency storm event.

B. Extreme flood protection shall be provided by controlling and/or safely conveying the 100 year return frequency storm event such that flooding is not exacerbated.

C. A downstream hydrologic analysis shall be performed and a copy provided to the City along with the engineering report to determine if there are any additional impacts in terms of peak flow increase or downstream flooding. This analysis shall be performed at the outlet of the site and downstream at each tributary junction to the point(s) in the conveyance system where the area of the portion of the site draining into the system is less than or equal to 10% of the total drainage area above that point.

D. Design of the stormwater retention or detention facilities and control flow release device shall be designed according to the recognized engineering standards subject to the approval of the Appropriate City Department Head.

E. The plan and calculations (including the as built plan) shall be done, sealed, and signed by a state registered professional engineer.

F. If the retention facility is designed for temporary storage of stormwater runoff of a maximum water or undercut depth of more than four (4) feet or a bank slope greater than two (2) horizontal to one (1) vertical, permanent fencing of at least four (4) feet in height shall be required around the facility. The fencing shall be designed, installed, and maintained to allow the free flow of runoff into the facility. The fencing shall include a gate sufficiently sized to permit entrance of equipment necessary to allow periodic maintenance activities.

7. The construction plans and final plat will designate the limits of the 100 year flood plain as designated by FEMA flood plain maps. The construction plans and final plat will also designate any 100 year flood plain areas created by the development.
8. Base flood elevation data and a Letter of Map Revision (LOMR) shall be provided for

subdivisions greater than 50 lots or five (5) acres, whichever is less, that occurs within a FEMA Flood Insurance Rate Map or Flood Hazard Boundary Map Zone A (no base flood elevation determined).

9. Notwithstanding the above controls, the Administrative Officer may refuse to issue a building permit on any lot or lots where the land is subject to flooding or where, in the opinion of the Appropriate City Department Head, the elevations of the property are such that a building could not be properly maintained on the lot.

Section 903. Storm Drainage System Maintenance.

The city shall not maintain, repair, resurface, rebuild, or otherwise improve storm drainage facilities within utility or drainage easements. A private maintenance covenant recorded with the County Clerk of the Superior Court shall be required for any storm drainage facilities within utility or drainage easements. The covenant shall set out the distribution of expenses, remedies for non-compliance with the terms of the agreement, rights to the use of easements, and other pertinent considerations. The Covenant shall specifically include the following terms:

- (a) The Covenant shall establish minimum annual assessments in an amount adequate to defray costs of ordinary maintenance and procedures for approval of additional needed assessments. The Covenant shall also specify that the funds from such assessments will be held by a homeowners or property owners association in cases of a subdivision of seven (7) lots or more.
- (b) The Covenant shall include a periodic maintenance schedule.
- (c) The Covenant for maintenance shall be enforceable by any property owner served by the storm drainage facilities.
- (d) The Covenant shall establish a formula for assessing maintenance and repair costs equitably to property owners served by the storm drainage facilities.
- (e) The Covenant shall run with the land.
- (f) The Governing Body may, at its discretion, as a condition of approving storm drainage facilities, require a performance bond and/or maintenance bond be submitted by the subdivider and held by a homeowners or property owners association, to be drawn from by the homeowners or property owners association as maintenance and repair needs may arise. Alternatively, where such association does not exist, the Governing Body may require that the subdivider pay an amount of money as recommended by the Appropriate City Department Head) into an escrow account or other suitable account for the maintenance and repair of the storm drainage facilities.

Section 904. Specifications for Final Plats with Storm Drainage Systems.

No final plat involving storm drainage facilities shall be approved by the Appropriate City Department Head for recording unless and until it shall contain the following on the face of the plat:

- (a) "Covenants. Private covenants have been recorded in deed book _____ page _____ in the land records of the Clerk of Superior Court, Decatur County, Georgia."
- (b) "WARNING, the City of Bainbridge has no responsibility to build, improve, maintain, or otherwise service storm drainage facilities located within utility or drainage easements shown on this plat."

- (c) "Grant of Easement. The utility and drainage easement(s) shown on this plat are hereby granted and said grant of rights shall be liberally construed to provide all necessary authority to the City of Bainbridge and/or to public or private utility companies serving the subdivision, for the installation and maintenance of utilities, including, but not limited to, electric lines, gas lines, telephone lines, water lines, sewer lines, cable television lines, and fiber optic cables, together with the right to trim interfering trees and brush, together with a perpetual right of ingress and egress for installation, maintenance, and replacement of such lines.

Signature of Property Owner"

Section 905. Storm Drainage System: Lot Purchaser Acknowledgement.

Prior to the sale or as a condition of the closing of a real estate transaction involving any lot served by storm drainage facilities in the city, the subdivider or seller of said lot shall execute a notarized purchaser's acknowledgement of drainage facility maintenance responsibilities as set forth below. A copy of the purchaser's acknowledgement shall be retained by the purchaser and shall be required to be submitted as a condition of a building permit for a principal building on said lot:

"Purchaser's Acknowledgement of Drainage Facility Maintenance Responsibility.

(I) (We) have read the Declaration of Covenant which pertains to the lot that is the subject of this real estate transaction _____ (insert address or attach legal description). (I) (We) understand that the Declaration of Covenant applies to the lot that (I am) (we are) purchasing and requires (me) (us) to provide a specified percentage or amount of the financing for the construction and maintenance of drainage facilities serving the lot which (I am) (we are) purchasing, and that owners of other lots in this plat may sue for and recover those costs which this covenant requires (me) (us) to pay, plus their damages resulting from (my) (our) refusal to contribute, plus reasonable attorneys fees. (I) (we) further understand that the City has no obligation to assist with the maintenance and improvement of the drainage facilities within any utility or drainage easements for the drainage facilities serving the lot in question. I (we) understand that a copy of this purchaser's acknowledgement shall be required as a condition of the issuance of a building permit for a principal building on the lot (I am) (we are) purchasing.

Purchaser"

Section 906. Water System.

All subdivisions must be served with City water. All water mains shall be installed along with a service connection for each lot or land development and be in operating condition prior to final plat approval if required and paving installation. All pipes, valves, and other components shall conform to City specifications and regulations and must be approved by the Appropriate City Department Head and the Department of Natural Resources Environmental Protection Division (See Article 2, Section 207).

CONDITIONS OF THE EXTENSION OF WATER SERVICE OUTSIDE THE CITY LIMITS:

The extension of water service outside the city limits is allowable subject to conditions. *The conditions must be agreed to in writing in a form acceptable to the City prior to the consideration of the extension of the water. Furthermore, the City shall require a development bond or letter of credit equal to the amount of all proposed infrastructure improvements redeemable upon compliance with all applicable city regulations.* The conditions of the extension of water service outside the city limits are as follows: the extension of water service outside the city limits must be feasible for the City; the property owner must agree to annex the property when it becomes contiguous to the city (made in a covenant transferable with the property); the total cost of the extension is the responsibility of the person receiving the extension; any development utilizing the water shall conform to *all* City regulations *before* annexation (if not currently contiguous to the city); and no extension of water service will be made to any property outside the City that is annexable at the time of extension, until it is annexed.

Section 907. Fire Hydrants.

Fire hydrants shall be located and set in accordance with City specifications. Fire hydrants shall be required for all nonresidential land developments and all residential subdivisions. Fire hydrants with appropriate water pressure at appropriate intervals throughout the subdivision or land development shall be provided by the subdivider or land developer as required by the City Public Safety Department. Fire hydrants shall be located no more than 500 feet apart and within 250 feet of any principal dwelling. Hydrants, fittings, valves and fire department connections shall be approved by the Public Safety Department. Public Safety Department connections shall be not less than 18 inches or more than 36 inches above the level of the adjoining ground or paving. The thread of such connections shall be uniform with that used by the Public Safety Department. To eliminate repavement of streets, all underground utilities for fire hydrants, together with the fire hydrants themselves, and all other supply improvements shall be installed before any final paving of a street within the right-of-way shared by such underground utilities.

Section 908. Sanitary Sewerage System.

The subdivider or land developer shall provide sanitary sewer services to each lot within the bounds of the subdivision, or to the land development. All street sewers serving lots in the subdivision shall be installed by the subdivider. The design and installation must be approved by the Appropriate City Department Head and the Department of Natural Resources Environmental Protection Division (See Article 2, Section 207). Furthermore, it shall be constructed in accordance with the City's master sewer plan. In such cases where it is not feasible to provide gravity flow sewerage, the subdivider or land developer must pump the sewerage to the city's sewerage system after obtaining approval of the project's location and design.

A formula may be developed by the Appropriate City Department Head to provide for a sharing of the costs of other sewer facilities needed to serve the subdivision or land development when certain of the required sewer facilities are necessary to serve other subdivisions or land developments in the same drainage basin. Otherwise, the subdivider or developer must pay a sewer assessment which will allow the City to extend sewer under an approved assessment program. Said assessment will assess the material cost of the extension with the City providing the labor cost. The assessment will be five (5) years at an interest rate which equals prime at the time of the assessment.

In the case of a minor subdivision, when a public sanitary sewer is not accessible, an alternate method of sewage disposal for each lot or the land development may be used when in

compliance with the provisions of this ordinance (See Section 517).

Section 909. Utilities.

The gas and electric systems and any other underground utility system, when it is provided in a subdivision or land development, shall be installed along with service connections before any paving of streets. All utility facilities, including but not limited to gas, electric power, telephone, and cable television, shall be located underground throughout the subdivision or land development. Whenever existing utility facilities serving lots within the subdivision or the land development are located above ground outside existing public roads and rights-of-way, they shall be removed and placed underground.