GWINNETT COUNTY

BOARD OF COMMISSIONERS

LAWRENCEVILLE, GEORGIA

ORDINANCE ENTITLED: AMENDMENT TO CERTAIN PROVISIONS OF THE UNIFIED DEVELOPMENT ORDINANCE CONCERNING STORMWATER MANAGEMENT

ADOPTION DATE: March 19, 2019

At the regular meeting of the Gwinnett County Board of Commissioners held in the Justice and Administration Center, Auditorium, 75 Langley Drive, Lawrenceville, Georgia.

| | Present | Vote |
|-----------------------------|---------|------|
| Charlotte J. Nash, Chairman | Yes | Aye |
| Jace Brooks, District 1 | Yes | Aye |
| Ben Ku, District 2 | Yes | Aye |
| Tommy Hunter, District 3 | Yes | Aye |
| Marlene Fosque, District 4 | Yes | Aye |

On motion of <u>Commissioner Ku</u>, which carried <u>5-0</u>, the Unified Development Ordinance of Gwinnett County, Title 2 Land Use & Zoning is hereby amended.

A RESOLUTION TO AMEND THE UNIFIED DEVELOPMENT ORDINANCE

WHEREAS, pursuant to Article IX, Section II, Paragraphs I, III and IV of the Georgia Constitution, the County is authorized to enact laws and exercise powers to regulate zoning and development for the benefit of the citizens of unincorporated Gwinnett County; and

WHEREAS, the State of Georgia has issued to Gwinnett County, a Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System (NPDES) Permit (hereafter "the Permit") to operate its storm sewer system and the adoption of the Gwinnett County Stormwater Management Manual enabled the County to continue to comply with the Permit, and

WHEREAS, the Unified Development Ordinance sets forth the standards that govern development in the County, including standards governing stormwater management; and

WHEREAS, amendments to the Unified Development Ordinance are necessary to ensure that standards in the Gwinnett County Stormwater Management Manual are applied to all future development and redevelopment in the County; and

WHEREAS, the Board of Commissioners finds that it is in the best interest of Gwinnett County to adopt the recommended amendments to the Unified Development Ordinance;

NOW, THEREFORE, BE IT ORDAINED that the Unified Development Ordinance of Gwinnett County, is hereby amended as set forth in **Exhibit A** which is attached hereto.

BE IT FURTHER RESOLVED that all regulations or parts of the same in conflict with this Resolution are hereby rescinded to the extent of said conflict.

GWINNETT COUNTY BOARD OF COMMISSIONERS

By:

∜SeaJ

Charlotte J. Nash Chairman

Date Signed:

ATTEST:

Rv.

Diane Kemp, County Clerk

APPROVED AS TO FORM:

Melanie/F. Wilson, Senior Assistant County Attorney

Exhibit A

The definition of "County Standards" in Section 110-40 is deleted in its entirety and replaced with a new definition of County Standard in Section 110-40 to read as follows:

County Standards: The county ordinances, standard drawings, Gwinnett County Stormwater Management Manual, Gwinnett County Department of Water Resources Water Main Design and Sanitary Sewer Design and Construction Standards and Specifications, Traffic Calming Design Guide, and any other standards, specifications, and regulations that govern development permitting, and all procedures, rules and policies pertaining thereto as these may be updated or amended from time to time.

The definition of "CPESC" in Section 110-40 is deleted in its entirety and replaced with a new definition of CPESC in Section 110-40 to read as follows:

CPESC: Certified Professional in Erosion and Sediment Control with current certification by EnviroCert, Inc. which is also referred to as CPESSC or CPESC, Inc.

The definition of "Erosion, Sedimentation and Pollution Control Plan" in Section 110-40 is deleted in its entirety and replaced with a new definition of Erosion, Sedimentation and Pollution Control Plan in Section 110-40 to read as follows:

Erosion, Sedimentation and Pollution Control Plan: A plan for the control of soil erosion and sedimentation resulting from a land-disturbing activity required by the Official Code of Georgia Annotated, Section 12-7-1 et seq, the *Erosion and Sediment Control Act*, which includes, as a minimum, protections at least as stringent as the State General Permit, best management practices, and requirements of this ordinance, also known as the "plan".

The definition of "Freeboard" in Section 110-40 is deleted in its entirety and replaced with a new definition of Freeboard in Section 110-40 to read as follows:

Freeboard: The distance between the maximum water surface elevation and the top of a stormwater detention structure.

The definition of "Hotspot" in Section 110-40 is deleted in its entirety and replaced with a new definition of Hotspot in Section 110-40 to read as follows:

Hotspot: An area where the use of the land has the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater or to violate water quality standards.

The definition of "Mitigation Plan" in Section 110-40 is deleted in its entirety and replaced with a new definition of Mitigation Plan in Section 110-40 to read as follows:

Mitigation Plan: A written document developed based on the criteria in the Gwinnett County Stream Buffer Mitigation Bank procedures guide, a chapter of the Gwinnett County Stormwater Management Manual, and supplemented with graphics (including as-built drawings), that describes in detail the implemented mitigation site, the goals established for the project, how it was implemented, how it will be monitored, the amount of mitigation in the site (credits, acres, etc.), and the criteria by which its success will be determined.

The definition of "Redevelopment" in Section 110-40 is deleted in its entirety and replaced with a new definition of Redevelopment in Section 110-40 to read as follows:

Redevelopment: Development on a previously developed site; but excludes ordinary maintenance activities, remodeling of existing building interiors, resurfacing of paved areas, and exterior building changes or improvements which do not materially increase or concentrate stormwater runoff, or cause additional nonpoint source pollution.

The definition of "Stormwater Infrastructure Improvements" in Section 110-40 is deleted in its entirety and replaced with a new definition of Stormwater Infrastructure Improvements in Section 110-40 to read as follows:

Stormwater Infrastructure Improvements: Those facilities and structures intended to control and direct the passage of stormwater and other surface water flows from and across a property; including, but not limited to, swales and ditches, cross drains and other piping systems, catch basins, stormwater management facilities, and velocity dissipation devices.

The definition of "Utility" in Section 110-40 is deleted in its entirety and replaced with a new definition of Utility in Section 110-40 to read as follows:

Utility: A public or private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, stormwater systems and railroads or other utilities identified by the county.

The definition of "Design Professional" in Section 110-50.1 is deleted in its entirety and replaced with a new definition of Design Professional in Section 110-50.1 to read as follows:

Design Professional: A professional licensed by the State of Georgia in the field of: engineering, architecture, landscape architecture, forestry, geology, or land surveying or a person that is a Certified Professional in Erosion and Sediment Control (CPESC) with a current certification by EnviroCert, Inc.

The definition of "Final Stabilization" in Section 110-50.1 is deleted in its entirety and replaced with a new definition of Final Stabilization in Section 110-50.1 to read as follows:

Final Stabilization: All soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures, 100 percent of the soil surface is uniformly covered in permanent vegetation with a density of 70 percent or greater, or equivalent permanent stabilization measures (such as the use of rip rap, gabions, permanent mulches or geotextiles) have been used. Permanent vegetation shall consist of: planted trees, shrubs, perennial vines appropriate for the time of year and region; or a crop of annual vegetation and a seeding of target crop perennials appropriate for the region as defined in the Manual. Final stabilization applies to each phase of construction.

The definition of "Stormwater Structure" in Section 110-50 .1 is deleted in its entirety and replaced with a new definition of Stormwater Structure in Section 110-50.1 to read as follows:

Stormwater Structure: A device composed of a virtually non-erodible material such as concrete, steel, plastic or other such material that conveys water from one place to another by intercepting the flow and carrying it to a release point for stormwater management, drainage control, or flood control purposes.

The definition of "Trout Streams" in Section 110-50.2 is deleted in its entirety and replaced with a new definition of Trout Streams in Section 110-50.2 to read as follows:

Trout Streams: All streams or portions of streams within the watershed as designated by the Game and Fish Division of the Georgia Department of Natural Resources under the provisions of the Official Code of Georgia Annotated, Section 12-5-20 et seq, the Georgia Water Quality Control Act, and in the Georgia Rules and Regulations Water Quality Control, Chapter 391-3-6. Streams designated as primary trout waters are defined as water supporting a self-sustaining population of rainbow, brown or brook trout. Streams designated as secondary trout waters are those in which there is no evidence of natural trout reproduction, but are capable of supporting trout throughout the year. First order trout waters are streams into which no other streams flow except springs.

The definition of "Development" in Section 110-50.3 is deleted in its entirety and replaced with a new definition of Development in Section 110-50.3 to read as follows:

Development: All activities associated with man-made changes to improved or unimproved real estate and the conversion of land or the expansion or replacement of an existing use to any new use intended for human operation, occupancy or habitation, other than for agricultural purposes devoted strictly to the cultivation of the land, dairying or animal husbandry. Such activities include but are not limited to buildings or other structures, mining, dredging, filling, clearing, grubbing, grading, paving, any other installation of impervious cover, excavation or drilling operations, storage of equipment or materials, water or sewer mains, stormwater management facilities, sidewalks or other structures permanently placed on or in the property.

Section 320-10.1C is deleted in its entirety and replaced with a new section to read as follows:

Section 320-10.1C List of what is required to be shown.

The Concept Plan shall contain the following:

- 1. Approximate total acreage.
- 2. Proposed total number of lots and minimum lot size.
- 3. Size and location of adjoining existing streets or access drives and proposed right-ofway, roadways, access drives, and adjoining sidewalks.
- 4. For multifamily and non-residential site developments (not subdivisions), the approximate location and arrangement of buildings, parking areas, and other improvements including stormwater management areas, and all required buffers.
- 5. Topography with contour intervals no greater than 10 feet.
- 6. Proposed method of sewage disposal (expressed as a note).
- 7. Boundary lines of the overall property showing bearings and distances along all lines and the bearings and distance to an existing street intersection or other recognized permanent landmark. The source of said boundary information shall be indicated.
- 8. All contiguous property under the ownership or control of the developer, except those lands of a dissimilar zoning category specifically approved to be excluded by the Department. Areas not planned at the time of the submittal shall be shown as "Future Development".
- 9. Authorization statement on Concept Plan to read as follows:

I hereby submit this Concept Plan as authorized agent/owner of all property shown thereon, and certify that all contiguous property under my ownership or control is included within the boundaries of this Concept Plan, as required by the Unified Development Ordinance.

Signature of Authorized Agent/Owner Date

- 10. Location sketch (vicinity map).
- 11. Location and size (in acres) of lakes, ponds, wetlands and floodplains and the source of the information.
- 12. Required recreation areas and other public areas to be dedicated to the public or held in common ownership by a homeowner association or other similar entity.
- 13. Existing zoning of the property and adjoining properties.
- 14. Land lot and district.
- 15. Subdivider's name, local, and permanent (if different) address and phone number.
- 16. Name of company or person who prepared plan.
- 17. Boundaries of the Chattahoochee River Corridor and Chattahoochee River Tributary Protection Areas, if applicable to the property.

- 18. General development data (in tabular form) for individual multifamily or non- residential site developments, such as number of residential units, number of gross square feet of non-residential floor area by building, number of parking spaces, number of stories, etc.
- 19. General development data (in tabular form) for single-family developments, such as minimum lot size, floor area, and all relevant conditions of zoning.
- 20. Location of public utilities.
- 21. Signature block to read as follows:

Department of Planning and Development

| This Concept Pl | lan has been re | eviewed and | l app | roved : | for general | compliance | with | Gwinnett |
|-----------------|-----------------|-------------|-------|---------|-------------|-------------|------|----------|
| County Unified | Development | Ordinance | and | other | applicable | regulations | of | Gwinnett |
| County, Georgia | • | | | | | | | |
| | | | _ | | | | | |
| Director, | | Date | | | | | | |

Section 320-10.2 F is deleted in its entirety and replaced with a new section to read as follows:

Section 320-10.2 F Location of stormwater management facilities and BMP's. If these facilities are proposed for inclusion in required common area calculations, detailed design plans of these facilities shall be required.

Section 320-20.2 A is deleted in its entirety and replaced with a new section to read as follows:

Section 320-20.2 A The plan shall be prepared on a closed boundary survey of the property. The items listed in Section 320-20.1.A (1 through 9) above and the following additional items shall be shown on the Specimen Tree Concept Plan:

- 1. Dripline or critical root zone of each specimen tree (whichever is greater) and tree save areas.
- 2. Building footprint.
- 3. Driveways.
- 4. Parking Lot(s).
- 5. Utility lines and easements (both existing and proposed).
- 6. Limits of disturbance.
- 7. Stormwater management areas.
- 8. Existing or abandoned well(s).

Section 320-50.1 C is deleted in its entirety and replaced with a new section to read as follows:

Section 320-50.1 C Stormwater drainage construction data prepared in accordance with the requirements of Chapter 800 of this UDO and the Gwinnett County Stormwater Systems and Facilities Installation Standards and Specifications.

- 1. Location and size of all proposed drainage improvements, and all proposed drainage easements to be located outside street right-of-way lines.
- 2. Profiles of all storm drainage pipes and slope of receiving channels. Hydraulic grade line is to be shown on all pipes (except roof drains) for the required design flow. On storm drainage profiles a pipe chart will be shown which will include
- 3. Pipe numbers, pipe size, pipe material, pipe slope, pipe length, contributing drainage area, design flow, design storm frequency, runoff coefficient and velocity. On all pipes, the hydraulic grade line shall be shown. Profiles of all open channels and ditches including the design flow normal depth and velocity. On storm drainage profiles an open channel chart will be shown which will include open channel numbers, conveyance size, lining material, length, channel slope, contributing drainage area, design flow, design storm frequency, runoff coefficient and velocity for the required design flow.
- 4. Acreage of drainage areas and Hydrological study used in determining size of structures, including map of all contributing drainage basins and acreages.

Section 320-50.1 D is deleted in its entirety and replaced with a new section to read as follows:

Section 320-50.1 D Sewage disposal plans prepared in accordance with the requirements of the current Water Main and Sanitary Sewer Design and Construction Standards and Specifications.

- 1. Sanitary Sewer Plans, including the profiles and other information as may be required by Department of Water Resources.
- 2. For projects proposed to be served by on-site sewage disposal systems, location and extent of septic tank, drain field and attendant structures, and other information required by the Environmental Health Section.

Section 320-50.1 K is deleted in its entirety and replaced with a new section to read as follows:

Section 320-50.1 K Water System Plans prepared in accordance with the requirements of the Water Main and Sanitary Sewer Design and Construction Standards and Specifications.

- 1. Water Main Extension plans, if any, are to be designed in accordance with the current Water Main Specifications.
- Private Water System Plans, if any, indicating proposed devices, water main size and location, with fire hydrants, on the site. The distance and direction to all other fire hydrants within 500 feet of the site or buildings along existing streets or other access drives shall also be indicated.

Section 320-50.2 C is deleted in its entirety and replaced with a new section to read as follows:

Section 320-50.2 C Stormwater drainage construction data prepared in accordance with the requirements of Chapter 800 of this UDO and the Gwinnett County Stormwater Management Manual.

- Location and size of all proposed drainage structures, including stormwater
 management facilities, catch basins, grates, headwalls, pipes and any extensions thereof,
 energy dissipators, improved channels, and all proposed drainage easements to be
 located outside street right-of-way lines.
- 2. Profiles of all storm drainage pipes and slope of receiving channels. On storm drainage profiles a pipe chart will be shown which will include pipe numbers, pipe size, pipe material, pipe slope, pipe length, contributing drainage area, design flow, design storm frequency, runoff coefficient all pipes for the required design flow.
- Profiles of all open channels and ditches including Manning's' 25-year storm normal depth and velocity. On storm drainage profiles, an open channel chart will be shown which will include open channel numbers, conveyance size, lining material, and length, channel slope, contributing drainage area, design storm frequency, runoff coefficient and velocity.
- 4. Hydrological study used in determining size of structures, including map of all contributing drainage basins and acreage.

Section 320-70.4 is deleted in its entirety and replaced with a new section to read as follows:

Section 320-70.4 Embankment layering shall be consistent with the Gwinnett Stormwater Management Manual.

Section 320-70.5 is deleted in its entirety and replaced with a new section to read as follows:

Section 320-70.5 Maximum Slopes.

- A. The maximum slopes for cut or fill shall be 2:1(two feet of horizontal run for each foot of rise or fall), except 1) for earthen dam embankments, 2) for rock cuts, 3) where certified by a professional engineer or 4) as discussed in Subsection 320-70.5B below.
- B. Earthen embankments shall be 3:1 maximum unless a modification application is approved. The intent of the earthen dam embankment slope regulation is to provide for public safety, soil stability, and dam maintenance considerations. The depth of cut referred to herein shall be the maximum cut or fill that shall be allowed to occur in any one section of cut or fill. The slope of cut or fill shall be uniform throughout for each section of cut or fill unless benching is approved by the County.
- C. Maximum slopes shall otherwise be consistent with the Gwinnett County Stormwater Management Manual.

Section 320-70.6 is deleted in its entirety and replaced with a new section to read as follows:

Section 320-70.6 Special conditions for soil with low shearing resistance and cohesion shall be required as specified in the Gwinnett County Stormwater Management Manual.

Section 320-110.3Q is deleted in its entirety and replaced with a new section to read as follows:

Section 320-110.3Q Location and size of all drainage pipe, the location and size of all stormwater management facilities, the location and size of all public sanitary sewer lines and manholes and the location, dimensions, and purpose of any easements, including construction or slope easements if required.

Section 320-120.4Q is deleted in its entirety and replaced with a new section to read as follows:

Section 320-120-4Q Location and size of all drainage pipe, location and extent of stormwater management facilities, the location and size of all public water mains and fire hydrants, the location and size of all public sanitary sewer lines and manholes and the location, dimensions, and purpose of any easements, including construction or slope easements if required.

Section 320-120.7H is deleted in its entirety and replaced with a new section to read as follows:

Section 320-120.7H Residential Drainage Plan (RDP) or Study (RDS): On any Final Plat containing a lot for which a Residential Drainage Plan (RDP) or Residential Drainage Study (RDS is required, the following statements shall be included, as applicable:

A Residential Drainage Plan (RDP) [or Residential Drainage Study (RDS)] must be approved by the Stormwater Plan Review Section of the Department of Planning and Development prior to issuance of a Building Permit on those lots labeled "RDP" or "RDS" respectively.

A Residential Drainage Study (RDS) must be conducted by the builder's design professional and approved by the Building Permits Section prior to issuance of a Certificate of Occupancy on those lots so noted on the Final Plat.

Section 320-140.2D is deleted in its entirety and replaced with a new section to read as follows:

Section 320-140.2D A lot upon which is located all or a part of a stormwater management facility.

Section 320-140.6B is deleted in its entirety and replaced with a new section to read as follows:

Section 320-140.6 B A list of what is required to be shown. Residential Drainage Plans shall show the following as applicable:

- 1. Boundary lines of the lot, giving distances to the nearest one-tenth of a foot and bearings to the nearest minute.
- 2. Location and names of all abutting streets or other rights-of-way.
- 3. The outline of all buildings, driveways, parking areas, swimming pools, recreational courts, patios, accessory structures and other improvements existing or proposed on the property, and dimensions of buildings and distances between all structures and the nearest property lines as required to locate the major improvements on the lot.
- 4. All easements, public water or sewer facilities traversing or located on the property, and septic tank drain field.
- 5. Subdivision name, lot designation, land lot, and district.
- 6. North arrow and scale.
- 7. Contour lines based on sea level datum. These shall be drawn at intervals of not more than two feet, and shall be based on a field survey. Proposed grading of the lot shall be shown along with the finished floor elevation of the lowest habitable floor of the house.
- 8. Stormwater features, including swales, pipes, stormwater management facilities and other structures, all drainage easements (DE), and directions of flow.
- 9. Floodplain features, including the limits of the flood hazard area, 100-year flood high water elevation, origin of the floodplain data, and any proposed modifications to the floodplain limits.
- Sedimentation and erosion control measures to be taken or placed on the lot during construction.
- 11. Names, address, and telephone number of the owner and person who prepared the RDP.
- 12. Seal, registration number, and date of expiration of the authorized registered professional who prepared the drainage improvements or modifications shown on the RDP.

Section 320-140.7A is deleted in its entirety and replaced with a new section to read as follows:

Section 320-140.7A A Residential Drainage Study (RDS) shall be conducted by the developer's or builder's authorized registered professional prior to issuance of a Certificate of Occupancy on those lots so noted on the Final Plat. The requirements for a RDS contained herein shall also apply to lots that formerly required SSED (Site Study – Engineering Division) approval. The grading and construction of the lot shall be field verified by the developer's or builder's authorized registered professional as being in conformance with grading plans and stormwater management studies approved for the subdivision. A Certificate of Occupancy shall not be issued for the structure until a written certification has been received from the developer's or the builder's authorized registered professional stating that the provisions or improvements required by the Residential Drainage Plan or as a result of the Residential Drainage Study have been field verified.

Section 320-140.9D is deleted in its entirety and replaced with a new section to read as follows:

Section 320-140.9D List of what is required to be shown:

- 1. Boundary lines of the lot with distances and bearings.
- 2. Location and names of all abutting streets or other street rights-of-way.
- 3. Minimum required front building setback lines with dimensions.
- 4. Minimum required 5-foot accessory structure setback from side and rear property lines.
- 5. Self-closing and self-latching gate equipped with a locking device.
- 6. Pump, equipment structures and decking.
- 7. Septic tank and drain field (if applicable).
- 8. Height, type and location of required pool fencing.
- 9. The approximate outline of all buildings, driveways, swimming pools, recreational courts, patios, accessory structures and other improvements, existing or proposed, on the property, and dimensions of buildings and distances between all structures and the nearest property lines.
- 10.Location and dimensions of any water, sewer, drainage or other easements, stormwater management facilities, septic tank, and septic tank drain field located on the lot.
- 11. Subdivision name, lot, and block designation.
- 12. North arrow and scale.
- 13. The 100-year floodplain limits, any applicable stream buffers or other special building setback lines.
- 14. Any other applicable requirements of the Zoning Resolution or conditions of zoning approval.

Section 330-20.1A is deleted in its entirety and replaced with a new section to read as follows:

Section 330-20.1A Development Activities Authorized

A development permit shall be issued to authorize all activities associated with the land development process, including clearing and grubbing, grading, and the construction of such improvements as streets, surface parking areas and drives, stormwater drainage facilities, sidewalks, or other structures permanently placed on or in the property except for buildings and other structures requiring the issuance of a building permit. Sanitary sewer and water system improvements shall be authorized solely by the Water and Sewer Plan Review Section of the Department of Planning and Development and will require the issuance of a utility construction permit prior to commencement of installation.

Section 340-50.6B is deleted in its entirety and replaced with a new section to read as follows:

Section 340-50.6B All of the stormwater drainage and management facilities, water and sewer utilities, private utilities (power, gas, cable, etc.), street base and curbing construction required for approval of the Final Plat have been properly installed and completed and, for those required improvements not yet completed (grassing, required landscaping, sidewalks, etc.) a performance bond shall have been filed by the subdivider with the Development Performance and Maintenance Agreement.

Section 340-80 is deleted in its entirety and replaced with a new section to read as follows:

Section 340-80 Water and Sewer As-Built Plan Review Process

All constructed improvements, including but not limited to the extension, replacement, or new installation of any portion of the water distribution system or sanitary sewer system, shall be submitted for review and approval by the Stormwater, Water and Sewer Plan Review Section of the Department. The design and construction of such improvements shall comply with the current policy and procedures of the Gwinnett County Department of Water Resources and in accordance to the following documents as applicable: The Sanitary Sewer Installation Regulations and Specifications, also known as the Sanitary Sewer Standards Manual and the DWRSSS; The Sanitary Sewer Pump Station and Force Main Design and Construction Standards for Developer Installed Systems; The Water Main Design and Sanitary Sewer Design and Construction Standards and Specifications and the Gwinnett County Backflow Prevention Manual.

Section 340-90.2B is deleted in its entirety and replaced with a new section to read as follows:

Section 340-90.2B Record drawings of all stormwater management facilities.

Section 340-90.2D is deleted in its entirety and replaced with a new section to read as follows:

Section 340-90.2D An "as-built" hydrology study for the project with the actual parameters from the record drawing of the stormwater management facilities.

A record drawing of the sanitary sewer facilities shall also be prepared and submitted to the Water and Sewer Plan Review Section of the Department of Planning and Development for review and approval. If the owner is a corporation, the documents shall be executed by the President, or Vice-President, be affixed by a corporate seal, and either the corporate secretary shall attest to the signature and affix the corporate seal, or a Certificate of Corporate Resolution shall also be submitted.

Section 350-20.1D is deleted in its entirety and replaced with a new section to read as follows:

Section 350-20.1D Installation of storm drainage pipe, detention or other storm water facilities. Installation of storm drainage pipe, detention, or other stormwater management facilities require a pre-construction conference before commencement.

Section 350-40.2 is deleted in its entirety and replaced with a new section to read as follows:

Section 350-40.2 Submission Requirements.

Upon completion of the project as authorized for construction by the development permit, the

owner shall file a Certificate of Development Conformance with the Director along with record drawings of all stormwater management facilities and modifications to the limits of the 100-year floodplain (if any). An "as-built" hydrology study for the project with the actual parameters from the record drawing of the detention facilities. A record drawing of the sanitary sewer facilities shall also be prepared, separately or included with the above, and submitted to the Water and Sewer Plan Review Section of the Department of Planning and Development in accordance with their regulations. The Certificate of Development Conformance shall be in a form as required by the Director and shall be accompanied by a Development Performance and Maintenance Agreement completed in draft form. If the owner is a corporation, the documents shall be signed by the President or Vice President, be affixed by the corporate seal, and either the corporate secretary shall attest to the signature and affix the corporate seal, or a Certificate of Corporate Resolution shall also be submitted.

Section 360-10.1 is deleted in its entirety and replaced with a new section to read as follows:

Section 360-10.1 Department to Maintain Standard Drawings on File

The Department shall maintain on file for consultation and distribution a set of Standard Drawings illustrating details of construction and design of streets, stormwater management facilities, site improvements and other elements related to the development of land in accordance with this UDO and under the jurisdiction of the Department.

Section 360-60.2 is deleted in its entirety and replaced with a new section to read as follows:

Section 360-60.2 Stormwater Management Facilities

The creation of an unbuildable lot for the exclusive purpose of providing and maintaining a stormwater management facility is authorized, provided that such a lot meets the requirements set forth in Section 800-70 of this UDO and under the jurisdiction of the Department.

Section 400-20.4 is deleted in its entirety and replaced with a new section to read as follows:

Section 400-20.4 The construction of single-family residences, when such construction disturbs less than one acre and is not a part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and not otherwise exempted under this paragraph; provided, however, that construction of any such residence shall conform to the minimum requirements set forth in Sections 400-30.1, 400-30.2, and 400-30.3 of this UDO, O.C.G.A. § 12-7-6, and this paragraph. For single-family residence construction covered by the provisions of this paragraph, there shall be a buffer zone between the residence and any state waters classified as trout streams pursuant to O.C.G.A. § 12-5-20 et seq. In any such buffer zone, no land disturbing activity shall be constructed between the residence and the point where vegetation has been wrested by normal stream flow or wave action from the banks of the trout waters. For primary trout waters, the buffer zone shall be at least 50 horizontal feet, and no variance to a smaller buffer shall be granted. For secondary trout waters, the buffer zone shall be at least 50 horizontal feet, but the Director of the Environmental Protection Division may

grant variances to no less than 25 feet. Regardless of whether a trout stream is primary or secondary, for first order trout waters, which are streams into which no other streams flow except for springs, the buffer shall be at least 25 horizontal feet, and no variance to a smaller buffer shall be granted. The general provision and minimum requirements of 400-30.1 and the minimum requirements of Sections 400-30.2 and 400-30.3 of this UDO, O.C.G.A. § 12-7-6(b) and the buffer zones provided by this section shall be enforced by the Department.

Section 400-20.5 is deleted in its entirety and replaced with a new section to read as follows:

Section 400-20.5 Agricultural operations as defined in O.C.G.A. § 1-3-3 to include raising, harvesting or storing of products of the field or orchard; feeding, breeding or managing livestock or poultry; producing or storing feed for use in the production of livestock, including, but not limited to, cattle, calves, swine, hogs, goats, sheep and rabbits or chicken, hens, and turkeys; producing plants, trees, fowl, or animals; the production of aqua culture, horticultural, dairy, livestock, poultry, eggs and apiarian products; and farm buildings and farm ponds.

Section 400-30.30 is deleted in its entirety and replaced with a new section to read as follows:

Section 400-30.30 Except as provided in Subsection P of this section, there is established a 25foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director of the Environmental Protection Division determines to allow a variance that is at least as protective of natural resources and the environment, where otherwise allowed by the Director of the Environmental Protection Division pursuant to O.C.G.A. § 12-2-8, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications, and are implemented; or along any ephemeral stream. As used in this paragraph, the term "ephemeral stream" means a stream: that under normal circumstances has water flowing only during and for a short duration after precipitation events; that has the channel located above the ground-water table year-round; for which ground water is not a source of water; and for which runoff from precipitation is the primary source of water flow. Unless exempted as along an ephemeral stream, the buffers of at least 25 feet established pursuant to O.C.G.A. § 12-5-440 shall remain in force unless a variance is granted by the Director of the Environmental Protection Division as provided in this paragraph. The following requirements shall apply to any such buffer:

- No land-disturbing activities shall be conducted within a buffer and it shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed.
- 2. Once the final stabilization of the construction site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.

- 3. Exception: Any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.
- 4. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented:
 - a. Stream crossings for water lines; or,
 - b. Stream crossings for sewer lines; and,
 - c. Prior to action by the Director of the Environmental Protection Division, buffer variance requests along state waters with drainage areas greater than 20 acres shall be reviewed for approval or denial by the director using the same buffer variance criteria as adopted by the Board of the Georgia Department of Natural Resources.

Section 400-30.3 P is deleted in its entirety and replaced with a new section to read as follows:

Section 400-30.P There is established a 50-foot buffer as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any state waters classified as "trout streams" pursuant to O.C.G.A. § 12-5-20 et seq, except where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute or less shall have a 25-foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources providing for notice to the Environmental Protection Division or the County of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for measuring the volume of water discharged by the stream. Any such pipe must stop short of the downstream landowner's property, and the landowner must comply with the buffer requirement for any adjacent trout streams. The Director of the Environmental Protection Division may grant a variance from such buffer to allow landdisturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to any such buffer:

- 1. No land-disturbing activities shall be conducted within a buffer and it shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed.
- 2. Once the final stabilization of the construction site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to

- protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.
- 3. Exception: Any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and,
- 4. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented:
 - a. Stream crossings for water lines; or,
 - b. Stream crossings for sewer lines.

Section 500-10.4C is deleted in its entirety and replaced with a new section to read as follows:

Section 500-10.4C Variance Procedures

Variance requests from the requirements of this Section 500-10 shall be submitted on an application form as prescribed by the Director of the Department of Planning and Development or the Director's designee, along with such fees as shall be established by the Board of Commissioners. The Director of the Department of Planning and Development or the Director's designee shall coordinate the review of each variance request with all other affected County departments and shall forward such comments or recommendations as may be received to the Board of Construction Adjustments and Appeals for action in their normal course of business. This section describes how to apply for a variance from this chapter, however any activity within a state waters' buffer must meet State requirements. Variances may be granted in accordance with the following provisions:

- 1. The Board of Construction Adjustments and Appeals shall grant no variance from any provision of this UDO without first conducting a public hearing on the application for variance and authorizing the granting of the variance by an affirmative vote of the Board of Construction Adjustments and Appeals. The Department of Planning and Development shall give public notice of each such public hearing in the local organ of Gwinnett County at least once a week for two consecutive weeks before it is heard. The Department of Planning and Development shall require that the applicant post a sign giving notice of the proposed variance and the public hearing at least 15 days prior to the date of the hearing. The sign shall be of a size and posted in right-of-way.
- 2. No application or reapplication for a variance affecting the same stream segment on a property shall be heard within 12 months from the date of last action by the Board of Construction Adjustments and Appeals unless such 12- month period is waived by the Board of Construction Adjustments and Appeals, and in no case may such application

or reapplication be reconsidered in less than six months from the date of last action by the Board of Construction Adjustments and Appeals.

- 3. Variances will not be considered when, following adoption of this UDO, actions of any property owner of a given property have created conditions of a hardship on that property. Variances will be considered only in the following cases:
 - a. The applicant provides evidence that impacts to the buffer have been avoided or minimized to the fullest extent practicable.
 - b. The project involves the construction or repair of a structure that, by its nature, must be located within the buffer. Such structures include dams and detention/retention ponds.
 - c. Paved recreational foot trails and viewing areas, providing that impacts to the buffer are minimal; or
 - d. The proposed land-disturbing activity within the buffer will receive a permit from the United States Army Corps of Engineers (USACE) under Section 404 of the Federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, and the Corps of Engineers has received a mitigation plan to be implemented as a condition of such a permit. In addition, land-disturbing activities in the buffer that are outside the USACE's jurisdiction must be mitigated.
 - e. The buffer intrusion is mitigated using the procedure established in the Gwinnett County Stormwater Management Manual.
 - f. A valid and complete application for rezoning of the property is submitted prior to the effective date of this UDO and approval of the rezoning by the Board of Commissioners occurs after the effective date of this UDO, and the variance request is consistent with the intent of this UDO factoring into account the property owner's reliance on standards in effect at the time of the rezoning.
- 4. At a minimum, a variance request shall include the following information:
 - a. A site map that includes locations of all streams, wetlands, floodplain boundaries and other natural features, as determined by field survey;
 - b. A description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property;
 - c. A dated site plan that shows the locations of all existing and proposed structures and other impervious cover, the limits of all existing and proposed land disturbance, both inside and outside the buffer and setback. The exact area of the buffer to be affected shall be accurately and clearly indicated;
 - d. Documentation that impacts to the buffer have been avoided or minimized to the fullest extent practicable;
 - e. A calculation of the total area and length of the proposed intrusion;
 - f. A stormwater management site plan, if applicable;

- g. Proposed mitigation, if any, for the intrusion. If no mitigation is proposed, the request must include an explanation of why none is being proposed;
- h. A description of the project, with details of the buffer disturbance, including estimated length of time for the disturbance and justification for why the disturbance is necessary;
- i. Any other reasonable information related to the project that the Department of Planning and Development may deem necessary to effectively evaluate the variance request;
- j. A copy of the permit application, supporting documentation, and proposed mitigation plan as submitted to the United States Army Corps of Engineers under Section 404 of the Federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, if applicable;
- k. A copy of the permit application, supporting documentation, and proposed mitigation plan as submitted to the Georgia Environmental Protection Division for a variance from the state waters' buffer; and
- I. A buffer mitigation plan in accordance with the procedure outlined in the Gwinnett County Stormwater Management Manual.
- 5. The following factors will be considered in determining whether to issue a variance:
 - a. The shape, size, topography, slope, soils, vegetation and other physical characteristics of the property.
 - b. The locations of all streams on the property, including along property boundaries as determined from field inspection.
 - c. The location and extent of the proposed buffer or setback intrusion.
 - d. Whether alternative designs are possible which require less intrusion or no intrusion.
 - e. The long-term and construction water-quality impacts of the proposed variance.
 - f. Whether issuance of the variance is at least as protective of natural resources and the environment.
 - g. The value of mitigation activities as calculated in accordance with the Gwinnett County Stormwater Management Manual.
- 6. Administrative variances may be considered for projects which have water quality impacts which have been determined equal to or less than 0.1 units for the entire project site or development area.

Section 610-30.3B is deleted in its entirety and replaced with a new section to read as follows:

Section 610-30-3B The encroachment of ditches, swales, storm water conveyance facilities, stormwater management facilities, sediment basins, sanitary sewer conveyance facilities, similar facilities, and any associated easements, into a construction buffer shall not be authorized except that necessary access and utility crossings (e.g., stormwater or sanitary sewer pipes), and natural bottom detention ponds (sediment basins must be located outside of

the construction buffer) and their appurtenant structures which require no grading and removal of trees, may encroach upon the construction buffer.

Section 620-20.5 is deleted in its entirety and replaced with a new section to read as follows:

Section 620-20.5 Encroachments into Landscape Strips

Required Landscape Strips shall not be encroached upon by parking spaces, driveway surfaces or stormwater management facilities except that driveway crossings and sidewalks may traverse such strip as near to a perpendicular alignment as practical. Ground signs, walls and the two foot by eight foot concrete pad used for benches and trash receptacles in Overlay Districts may be located in such strip.

Section 630-30.3 is deleted in its entirety and replaced with a new section to read as follows:

Section 630-30.3 Easement Exclusion

Properties possessing natural gas, petroleum or electric power transmission easements, or major sanitary sewer main (greater than 8 inches in diameter) or water main (greater than 16 inches in diameter) distribution easements, may exclude the land area contained in the easement from the total acreage of the property in fulfilling the Tree Density Standard provided that no improvements (e.g., parking lots, tennis courts, driveways, greenways, stormwater management facilities, etc.) are proposed within the easement. If any improvements are proposed within the easement, then the land area so used within the easement for the improvements, plus an additional 10-feet of land area surrounding the improvements, shall be included in the total acreage of the property to fulfill the Tree Density Standard.

Section 700-50.1A is deleted in its entirety and replaced with a new section to read as follows:

Section 700-50.1A Requests for variances from the requirements of Chapter 700 shall be submitted to the Department. All such requests shall be heard and decided in accordance with the procedures outlined in the Gwinnett County Stormwater Management Manual and as set forth by the O.C.G.A. § 5-4-1 when certiorari shall lie. At a minimum, such procedures shall include notice to all affected parties and the opportunity to be heard.

Section 700-50.2A is deleted in its entirety and replaced with a new section to read as follows:

Section 700-50.2A In passing upon variance applications for relief from the provisions of Chapter 700, all technical evaluations, all relevant factors, all standards specified in other sections of this Chapter, and the items listed in the Gwinnett County Stormwater Management Manual.

Section 700-50.2B is deleted in its entirety and replaced with a new section to read as follows:

Section 700-50.2B Upon consideration of the factors listed in the Stormwater Systems and Facilities Installation Standards and Specifications and the stated purposes of Chapter 700, such conditions to the granting of a variance as the Board of Construction Adjustments and Appeals deems necessary or appropriate, consistent with the purposes of this Sections may be attached to the variance.

Section 800-10.5 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-10.5 Rational Method Runoff Coefficients and SCS Curve Number calculations used for analysis of pre- and post-development conditions shall be consistent with those shown in the Gwinnett County Stormwater Management Manual.

Section 800-20.1 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-20.1 The purpose of Stormwater Management Documentation is to support the development of the project site using Best Management Practices and diligent engineering. The report must follow the guidelines set forth in the Gwinnett County Stormwater Management Manual and is required for all developments. The report shall be certified by a qualified registered professional registered in the State of Georgia.

Section 800-20.3 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-20.3 For the purposes of these regulations, the words "downstream" and "analysis" shall have the following meanings. The analysis of downstream conditions in the report shall address each and every point or area along the project site's boundaries at which runoff will exit the property. The analysis shall focus on the portion of the drainage way "immediately" downstream from the project. This area shall extend downstream from the project to a point in the drainage basin where the project area is 10 percent of the total basin area. The analysis shall be in accordance with the Gwinnett County Stormwater Management Manual.

Section 800-20.5 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-20.5 Where detention for a proposed project is provided in a regional detention facility that was permitted prior to January 1, 2001, the developer shall provide a copy of the original study that met the regulations at the time the facility was permitted. If the approved study cannot be found, then the authorized registered professional shall provide a recreated study. The project shall be exempt from restudy and any modifications required meeting regulations effective after January 1, 2001, provided the proposed project is in keeping with the intent of the original stormwater management report and the stormwater treatment facility is properly maintained to provide the original design volume.

Section 800-20.7 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-20.7 All design related to stormwater shall be in accordance with the Gwinnett County Stormwater Management Manual.

Section 800-30.1 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-30.1 All projects, unless exempt pursuant to Section 800-30.3 below, that meet one or more of the following criteria, shall provide water quality treatment based on the modeled Total Suspended Solids (TSS) load of the project for post construction conditions. The determination of the TSS load shall be in accordance with the Gwinnett County Stormwater Management Manual.

- A. New development that involves the creation of 5,000 square feet or more of impervious cover.
- B. New development that involves land-disturbing activities of 1 acre or more.
- C. Land development activities that are smaller than the minimum applicability criteria set forth in Subsection 800-30.1.A. above, if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.
- D. Utility projects such as electrical, gas, water and sanitary sewer line installations that do not require stormwater treatment.
- E. Activities to restore and enhance stream bank stability, vegetation, water quality and/or aquatic habitat, so long as native vegetation and bioengineering techniques are used.

Section 800-40.4 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-40.4 All stormwater treatment facility hydrologic and hydraulic analysis and design calculations shall be certified by the qualified registered professional. The design shall be in accordance with the Gwinnett County Stormwater Management Manual.

Section 800-40.6 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-40.6 The hydrologic methodology used for any given project shall conform to the Gwinnett County Stormwater Management Manual.

Section 800-40.7 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-40.7 Runoff coefficients and runoff Curve Numbers used for pre- and post-development conditions shall be consistent with those shown in the Gwinnett County Stormwater Management Manual.

Section 800-50.1 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-50.1 Because of the variables that may be associated with the choice of an outlet device for any given condition, the design consultant is responsible for the appropriate selection of the device which is consistent with the current policies and procedures of the Department and in accordance with the following documents as applicable: The Gwinnett County Stormwater Management Manual; The UDO Standard Drawings. Variations to the outlet device are subject to the review and approval process of the Department.

Section 800-50.3 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-50.3 Orifices shall not be smaller than 3 inches in diameter. An orifice smaller than 15 inches in diameter shall be protected by a trash rack. A trash rack protecting an orifice shall have a surface area of at least 10 square feet. Design shall be in accordance with the Gwinnett County Stormwater Management Manual. No opening in the trash rack shall have an area more than one-half the size of the area of the orifice being protected. Two-stage trash racks, or screens having progressively smaller openings placed in series, are suggested. To facilitate outlet operation, curved or inclined trash racks designed to allow debris to rise with the water level are preferred. In all cases, trash racks shall be either hinged or removable to facilitate maintenance operations.

Section 800-70.13 is deleted in its entirety and replaced with a new section to read as follows:

800-70.13 Stormwater treatment facilities shall be constructed in accordance with plans reviewed and approved by the Department, and shall be in place and inspected prior to the initiation of other improvements. If the stormwater treatment facility is planned to be a lake, temporary stormwater treatment facilities shall be provided and shall remain in place until such time as the lake has become effective in providing stormwater management. The construction shall be in accordance with the Gwinnett County Stormwater Management Manual.

Section 800-70.17 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-70.17 The detention methodology used for a parking lot stormwater treatment facility design shall conform to the Gwinnett County Stormwater Management Manual. Parking lot stormwater treatment areas shall be located so as to restrict ponding to areas other than parking spaces near buildings, and to not encroach upon entrance drives. Any parking lot used for stormwater treatment facilities shall generally be of one of the following:

A. Depressed areas of pavement at drop inlet locations.

- B. Ponding areas along sections of raised curbing. The curbing in these areas is usually higher than a standard curbed section.
- C. Alternative surfaces with storage capacity, as approved by the Department.

Section 800-70.18 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-70.18 The detention methodology used for underground or rooftop stormwater treatment facility design shall conform to the Gwinnett County Stormwater Systems and Facilities Installation Standards and Specifications. In the case of rooftop stormwater treatment, permissible structural loads and weatherproofing shall be governed by the Georgia State Building Code as may be amended by the County.

Section 800-90 is deleted in its entirety and replaced with a new section to read as follows:

Section 800-90.1 Stormwater management for redevelopment projects must follow the guidelines set forth in the Gwinnett County Stormwater Management Manual. The standards within this section apply to all Redevelopment sites that meet one or more of the following criteria:

- A. Redevelopment that includes the creation, addition, or replacement of 5,000 square feet or more of impervious cover.
- B. Redevelopment that involves land-disturbing activity of 1 acre or more.
- C. Redevelopment, regardless of size, that is defined by the Director or designee to be a hotspot land use.
- D. Land development activities that are smaller than the minimum applicability criteria set forth in item (a) above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.

Section 800-90.2 The purpose of a stormwater management analysis is to support the Redevelopment of the project site using Best Management Practices and diligent engineering. The report must follow the guidelines set forth in the Gwinnett County Stormwater Management Manual and is required for all redevelopment projects. The analysis shall be certified by a qualified registered professional in the State of Georgia. The analysis shall be in accordance with the criteria specified in Section 800-20.

Section 800-90.3 Water quality treatment of stormwater runoff for the purposes of water quality shall be in accordance with the criteria specified in the Gwinnett County Management Manual under the following conditions:

A. Water quality treatment must be met for the entire site when the disturbed area is more than 50 percent of the property.

B. Water quality treatment must be met for the improvements on the site only when the disturbed area is less than 50 percent of the property.

Section 800-90.4 Channel protection and stormwater treatment for a redeveloped project site shall be provided in accordance with the criteria specified in the Gwinnett County Stormwater Management Manual under the following conditions:

- A. Protection of stream channels from bank and bed erosion and degradation shall be provided by using all of the following three approaches:
 - 1. Preservation, restoration and/or reforestation (with native vegetation) of the applicable stream buffer.
 - 2. Erosion prevention measures such as energy dissipation and velocity control.
 - 3. 24-hour extended detention storage of the one-year, 24-hour return frequency storm event (channel protection volume).
- B. Downstream overbank flood and property protection shall be provided by controlling (attenuating) the post-development peak discharge rate to the forested condition rate for the 25-year, 24-hour return frequency storm event.
- C. Extreme flood and public safety protection shall be provided by controlling and safely conveying the 100-year, 24-hour return frequency storm event such that flooding is not exacerbated.

Section 800-90.5 Existing stormwater treatment facilities used for a redevelopment project must meet one of the following criteria:

- A. Where water quality treatment for a proposed redevelopment is to be provided in an existing detention facility, water quality treatment must be provided for the original project area. A modification to the 25-year detention requirement may be granted for the purpose of retrofitting the detention facility to meet current water quality regulations. Granting a modification will meet the intent and purpose of these regulations when:
 - 1. The detention requirements of the current regulations are provided in the facility for the 1-year, 2-year, 5-year and 10-year storm. For a retrofitted facility, the volume of the 1-year storm shall be based on the original project area being detained instead of the total area draining to the facility.
 - 2. The water quality requirements of the current regulations are provided for the original project area in the facility.
 - 3. The 25-year ponding limits create a hardship if no modification is granted.
 - 4. The outlet structure meets the requirements of the current regulations.

- B. Where water quality is treated in a regional stormwater treatment facility approved between April 27, 1999, and January 1, 2001, all lots within the treated area shall either conform to the original permit requirements and water quality regulations at the time of approval or conform to the current water quality regulations. A volume verification confirming facility maintenance in accordance with the original design shall be certified by an authorized registered professional and submitted to the Department for review and approval.
- C. Where stormwater detention is treated in a regional detention facility approved before April 27, 1999, all lots within the treated area shall conform to current water quality and channel protection regulations. A volume verification confirming facility maintenance in accordance with the original design shall be certified by an authorized registered professional and submitted to the Department for review and approval.

Section 800-100.1 A.is deleted in its entirety and replaced with a new section to read as follows:

Section 800-100.1 Gwinnett County Department of Transportation should reference the Gwinnett County Stormwater Management Manual to determine stormwater management requirements for each project.

- A. If such requirements are ascertained to be infeasible to implement in certain site development or transportation projects due to one or more of the factors listed below, a Determination of Infeasibility Report shall be submitted to the Department of Planning and Development for review, along with the associated set of proposed plans. Factors affecting infeasibility include:
 - 1. Additional cost of 10 percent or greater of the total project costs, including right of way acquisition, construction, and utility relocation costs.
 - 2. Project delay of 180 days or greater due to implementation of post-construction controls.
 - 3. Loss of habitat for endangered or threatened species.
 - 4. Significant damage to a cultural resource, such as a historical site, archaeological site, or cemetery.
 - 5. Significant damage to a community resource, such as a park, wildlife refuge, trail, or school.
 - 6. Implementation would result in the displacement of a residence or business.
 - 7. Implementation would result in the violation of a State or Federal law, regulation, or standard.

Section 810-10.2 is deleted in its entirety and replaced with a new section to read as follows:

Section 810-10.2 Design Criteria - General

All stormwater conveyance systems design calculations shall be certified by the authorized registered professional (refer to Section 800-20):

- A. Methods to calculate stormwater flows shall be in accordance with the Gwinnett County Stormwater Management Manual.
- B. All portions of a stormwater conveyance system shall be analyzed using the same methodology.
- C. Run-off coefficients used for the Rational Method and runoff Curve Numbers used for the SCS Method shall be consistent with those shown in the Gwinnett County Stormwater Management Manual.

Section 810-10.3 is deleted in its entirety and replaced with a new section to read as follows:

Section 810-10.3 Design Criteria — Conveyance Systems

Conveyance system design is to be in accordance with the methods contained in the Gwinnett County Stormwater Management Manual. The 100-year ponding limits at and upstream of the culvert shall be shown on the Development Plans and on the Final Plat (if applicable).

Section 900-70.2 H is deleted in its entirety and replaced with a new section to read as follows:

Section 900-70.2 H Provisions to drain low points

Provisions shall be made to drain low points in the road construction when the final paving is delayed. A break in the berm section is required when the curbing has not been constructed. Drainage under the curb to side slopes after installation is required, using minimum four inch diameter pipe sections. Vegetated or stabilized swales should be considered for managing road construction runoff. Swales shall be constructed in accordance with the Gwinnett County Stormwater Management Manual.

The Table of Contents for the Appendices for Section 2 Drawings shall be amended by deleting Drainage Structures and Drainage Pipes and Ditches and replacing with the following:

600: Reserved 700: Reserved

Appendix 2.0 Standard Drawings in Section 2.0 delete pages 2.38 through 2.76