

UDC Changes
Article III
Sections 3.3.1-3.3.6

- Expected time frame in which the operation will occur.
- Additional information as may be required by City of Alpharetta staff to perform a proper review of the project and assure that the intent of the Soil and Erosion and Sediment Control Ordinance is met.

The Following Notes:

- The City of Alpharetta Engineering/Public Works Department reserves the right to require additional erosion and sedimentation control measures deemed necessary.
- The contractor shall implement all Best Management Practices for forestry as prescribed by the Georgia Forestry Commission and the U.S. Environment Protection Agency.
- No trees may be cut in buffer zones marked "undisturbed." Tree cutting shall be limited to the non-mechanical removal of pine (*Pinus* spp.) or yellow-poplar (*Liriodendron tulipifera*) trees with stump diameters greater than fifteen (15) inches; provided that a minimum of fifty (50) square feet of basal area remains in good condition in the buffer area at completion of the project. The non-mechanical removal of dead, diseased or insect infested trees is also allowed in this buffer (subject to verification by the City of Alpharetta Arborist).
- All buffers of state waters shall remain undisturbed except for haul road crossing points.
- Projects, which are restricted to a "Residential Thinning", must leave a minimum density of thirty (30) square feet of basal area throughout all areas not designated as buffers or logging decks. Trees to be preserved to meet this requirement must be identifiable both before and after the harvest either by species or by a continuous marking around the trunk at 4.5 feet and at .5 feet above the ground. These trees must be left in good condition with no injuries to the trunk, crown or root system, which would predispose them to disease or pest infestation.

All pine logging slash with stems larger than five (5) inches in diameter shall be chipped and returned to the site or removed from the site to reduce the possibility of insect infestation.

- Logging decks, temporary haul roads, skid trails and any other disturbed areas left idle for two to four weeks will be restored to their contours and established to temporary vegetation (DsD). These disturbed areas left idle for four weeks or more will be established to permanent vegetation (Ds3). All areas remaining at the end of the project will be established to permanent vegetation within two weeks.
- When hand planting, mulch (hay or straw) should be uniformly spread over seeded area within 24 hours of seeding.
- During unstable growing seasons, mulch will be used as a temporary cover (Ds1). On slopes that are 4:1 or steeper, mulch will be anchored.
- The City of Alpharetta Land Disturbance Permit must be displayed on site at all times during the project operation and in plain view from an adjacent county road or street.

Before any activity can begin an inspection must be performed for basal area confirmation, erosion control devices and buffer area delineation. At this time, the contractor must show a current City of Alpharetta business license or registration certificate. At completion of the project, a final inspection must be performed.

SECTION 3.3 - STORM WATER MANAGEMENT—GENERAL

3.3.1 General.

A. Introduction.

It is hereby determined that:

Land development projects and other land use conversions, and their associated changes to land cover, permanently alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, which in turn increase flooding, stream channel erosion, and sediment transport and deposition;

Land development projects and other land use conversions also contribute to increased nonpoint source pollution and degradation of receiving waters;

The impacts of post-development stormwater runoff quantity and quality can adversely affect public safety, public and private property, drinking water supplies, recreation, fish and other aquatic life, property values and other uses of lands and waters;

These adverse impacts can be controlled and minimized through the regulation of stormwater runoff quantity and quality from new development and redevelopment, by the use of both structural facilities as well as nonstructural measures, such as the conservation of open space and greenspace areas. The preservation and protection of natural area and greenspace for stormwater management benefits is encouraged through the use of incentives or "credits." The Georgia Greenspace Program provides a mechanism for the preservation and coordination of those greenspace areas which provide stormwater management quality and quantity benefits;

Localities in the State of Georgia are required to comply with a number of both State and Federal laws, regulations and permits which require a locality to address the impacts of post-development stormwater runoff quality and nonpoint source pollution;

Therefore, the City of Alpharetta has established this set of stormwater management policies to provide reasonable guidance for the regulation of post-development stormwater runoff for the purpose of protecting local water resources from degradation. It has determined that it is in the public interest to regulate post-development stormwater runoff discharges in order to control and minimize increases in stormwater runoff rates and volumes, post-construction soil erosion and sedimentation, stream channel erosion, and nonpoint source pollution associated with post-development stormwater runoff.

B. *Purpose and Intent.* The purpose of this ordinance is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and nonpoint source pollution associated with new development and redevelopment. It has been determined that proper management of post-development stormwater runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, environment and general welfare of the public, and protect water and aquatic resources. This ordinance seeks to meet that purpose through the following objectives:

1. Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources;
2. Require that new development and redevelopment maintain the pre-development hydrologic response in their post-development state as nearly as practicable in order to reduce flooding, streambank erosion, nonpoint source pollution and increases in stream temperature, and maintain the integrity of stream channels and aquatic habitats; to meet this purpose, where practicable, the use of on-site runoff reduction measures is encouraged, including but not limited to preservation of existing natural areas; bioretention areas; permeable pavement for parking; vegetated swales; cisterns; greenroofs; and underground detention.
3. Establish minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;
4. Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet the minimum post-development stormwater management standards;

5. Encourage the use of nonstructural stormwater management and stormwater better site design practices, such as the preservation of greenspace and other conservation areas, to the maximum extent practicable. Coordinate site design plans, which include greenspace, with the City's greenspace protection plan;
6. Establish provisions for the long-term responsibility for and maintenance of structural stormwater control facilities and nonstructural stormwater management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety; and,
7. Establish administrative procedures for the submission, review, approval and disapproval of stormwater management plans, and for the inspection of approved active projects, and long-term follow up.

C. *Applicability.*

1. This ordinance shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Subsection b below. These standards apply to any new development or redevelopment site that meets one or more of the following criteria:

- a. ~~New development that involves the creation of 5,000 square feet or more of impervious cover, or that involves other land development activities of one (1) acre or more; Runoff reduction and water quality shall be required for any new or redevelopment that includes the creation of 1,000 square feet of impervious area or more. Detention (including channel protection) shall be required for any new or redevelopment with an increase of 5,000 square feet of impervious area or more. The extent to which runoff reduction /water quality and detention must be provided (i.e. on new impervious area only, on disturbed area, or on entire site) is based on a tiered approach, and is specified in the City Stormwater Design Manual;~~
- b. ~~Development or redevelopment that involves land development activities of one acre or more; Redevelopment that includes the creation or addition of 5,000 square feet or more of impervious cover, or that involves other land development activity of one (1) acre or more;~~
- c. Any new development or redevelopment, regardless of size, that is defined by the City Engineer or designee to be a hotspot land use; or,
- d. Land development activities that are smaller than the minimum applicability criteria set forth in items ~~a and b~~ 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.

2. The following activities are exempt from this ordinance:

- a. Individual 'For-Sale' dwelling or duplex residential lots that are not part of a subdivision or phased development project;
- b. Additions or modifications to existing 'For-Sale' dwelling or duplex residential structures;
- c. Agricultural or silvicultural land management activities within areas zoned for these activities; and,
- d. Repairs to any stormwater management facility or practice deemed necessary by the City Engineer.

- D. *Stormwater Management Manual.* The City of Alpharetta will utilize the policy, criteria and information including technical specifications and standards in the latest edition of the Georgia Stormwater Management Manual and the City of Alpharetta Stormwater Management Design Manual, for the proper implementation of the requirements of this ordinance. The ~~Engineering~~ Public Works Department has developed a City Stormwater Management Design Manual to assist in the design and evaluation of stormwater management facilities and practices. The manual may be updated and expanded periodically, based on improvements in science, engineering, monitoring and

local maintenance experience. However, the failure to update the manual shall not relieve any applicant from the obligation to comply with the requirements of this ordinance, and shall not prevent the City Engineer from imposing the most current and effective practices. The manual may establish design standards for new development and redevelopment that includes the creation of less than 5,000 square feet of impervious cover or involves land development activity of less than one (1) acre.

E. *Effective Date.* This Ordinance shall become effective immediately upon adoption.

3.3.2 Definitions.

Accidental Discharge. A discharge prohibited by this ordinance which occurs by chance and without planning or thought prior to occurrence.

Agriculture Use. The establishment, cultivation, or harvesting of products of the field or orchard; the preparation and planting of pasture land; farm ponds; and the construction of farm buildings.

Applicant. A person submitting a post-development stormwater management application and plan for approval.

Best Management Practices or "BMPs". A wide range of management procedures, activities, and prohibitions on practices which control the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.

Buffer. With respect to a stream, a natural or enhanced vegetated area, lying adjacent to the stream.

Channel. A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

City of Alpharetta Separate Storm Sewer System. Any facility designed or used for collecting and/or conveying stormwater, including but not limited to any roads with drainage systems, highways, City streets, curbs, gutters, inlets, catch basins, piped storm drains, pumping facilities, structural stormwater controls, ditches, swales, natural and man-made or altered drainage channels, reservoirs, and other drainage structures, and which is State Waters or is: Owned or maintained by the City of Alpharetta; Not a combined sewer; and Not part of a publicly-owned treatment works.

Clean Water Act. The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Conservation Easement. An agreement between a land owner and the City of Alpharetta or other government agency or land trust that permanently protects open space or greenspace on the owner's land by limiting the amount and type of development that can take place, but continues to leave the remainder of the fee interest in private ownership.

Construction Activity. Activities subject to the Georgia Erosion and Sedimentation Control Act or NPDES General Construction Permits. These include construction projects resulting in land disturbance. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Detention. The temporary storage of stormwater runoff in a stormwater management facility for the purpose of controlling the peak discharge.

Detention Facility. A detention basin or structure designed for the detention of stormwater runoff and gradual release of stored water at controlled rates.

Developer. A person who undertakes land development activities.

Development. A land development or land development project.

Discharge. The release of treated or untreated water to the stormwater system.

Drainage Easement. An easement appurtenant or attached to a tract or parcel of land allowing the owner of adjacent tracts or other persons to discharge stormwater runoff onto the tract or parcel of land subject to the drainage easement.

Easement. An acquired legal right for a specific use of land owned by others.

Erosion and Sedimentation Control Plan. A plan that is designed to minimize the accelerated erosion and sediment runoff at a site during land disturbance activities.

Extended Detention. The detention of stormwater runoff for an extended period, typically 24 hours or greater.

Extreme Flood Protection. Measures taken to prevent adverse impacts from large low-frequency storm events with a return frequency of 100 years or more.

Flood or Flooding. A volume of surface water that is too great to be confined within the banks or walls of a conveyance or stream channel and that overflows onto adjacent lands; or a general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters; or the unusual and rapid accumulation or runoff of surface waters from any source.

Floodplain. Any land area susceptible to flooding, which would have at least a one percent probability of flooding occurrence in any calendar year based on the basin being fully developed as shown on the current land use plan; i.e., the regulatory flood.

Greenspace or Open Space. Permanently protected areas of the site that are preserved in a natural state.

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.

Hydrologic Soil Group (HSG). A Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from group A soils, with high permeability and little runoff produced, to group D soils, which have low permeability rates and produce much more runoff.

Illegal Connection. Either of the following:

Any pipe, open channel, drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the storm drain system including but not limited to any conveyances which allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system, regardless of whether such pipe, open channel, drain or conveyance has been previously allowed, permitted, or approved by an authorized enforcement agency; or

Any pipe, open channel, drain or conveyance connected to the City of Alpharetta separate storm sewer system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Illicit Discharge. Any direct or indirect non-stormwater discharge to the City of Alpharetta separate storm sewer system, except as exempted in Section 3.3.9.C. of this ordinance.

Impervious Cover. A surface composed of any material that significantly impedes or prevents the natural infiltration of water into soil. Impervious surfaces include, but are not limited to, rooftops, buildings, streets and roads, and any concrete or asphalt surface. Streets, parking areas, sidewalks, and other surfaces constructed with pervious paving and green roofs shall not be considered impervious cover for the purposes of this Section if it is a stormwater management practice with a recorded long-term maintenance agreement.

Industrial Activity. Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

Industrial Stormwater Permit. A National Pollutant Discharge Elimination System (NPDES) permit issued to an industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infiltration. The process of percolating stormwater runoff into the subsoil.

Inspection and Maintenance Agreement. A written agreement providing for the long-term inspection and maintenance of stormwater management facilities and practices on a site or with respect to a land development project, which when properly recorded in the deed records constitutes a restriction on the title to a site or other land involved in a land development project.

Jurisdictional Wetland. An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Land Development. Any land change, including, but not limited to, clearing, digging, grubbing, stripping, removal of vegetation, dredging, grading, excavating, transporting and filling of land, construction, paving, and any other installation of impervious cover.

Land Development Activities. Those actions or activities which comprise, facilitate or result in land development.

Land Development Project. A discrete land development undertaking.

Land Disturbance. Any land or vegetation change, including, but not limited to, clearing, grubbing, stripping, removal of vegetation, dredging, grading, excavating, transporting and filling of land, that do not involve construction, paving or any other installation of impervious cover.

Land Disturbance Activity. Those actions or activities which comprise, facilitate or result in land disturbance.

Maintenance. Any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purposes set forth in this Ordinance and to prevent structural failure of such facilities.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit. A permit issued by the Georgia EPD under authority delegated pursuant to 33 USC § 1342(b) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

New Development. A land development activity on a previously undeveloped site.

Non-perennial Stream. Any stream that is not classified as a perennial stream or that the City Engineer determines to be falsely classified as a perennial stream, beginning at: The location of a spring, seep, or groundwater outflow that sustains streamflow; or a point in the stream channel with a drainage area of 25 acres or more; or where evidence indicates the presence of a stream in a drainage area of other than 25 acres, the City of Alpharetta may require field studies to verify the existence of a stream.

Nonpoint Source Pollution. A form of water pollution that does not originate from a discrete point such as a sewage treatment plant or industrial discharge, but involves the transport of pollutants such as sediment, fertilizers, pesticides, heavy metals, oil, grease, bacteria, organic materials and other contaminants from land to surface water and groundwater via mechanisms such as precipitation, stormwater runoff, and leaching. Nonpoint source pollution is a by-product of land use practices such as agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Non-Stormwater Discharge. Any discharge to the storm drain system that is not composed entirely of stormwater.

Nonstructural Stormwater Management Practice or Nonstructural Practice. Any natural or planted vegetation or other nonstructural component of the stormwater management plan that provides for or enhances stormwater quantity and/or quality control or other stormwater management benefits, and includes, but is not limited to, riparian buffers, open and greenspace areas, overland flow filtration areas, natural depressions, and vegetated channels.

Off-Site Facility. A stormwater management facility located outside the boundaries of the site.

On-Site Facility. A stormwater management facility located within the boundaries of the site.

Overbank Flood Protection. Measures taken to prevent an increase in the frequency and magnitude of out-of-bank flooding (i.e. flow events that exceed the capacity of the channel and enter the floodplain), and that are intended to protect downstream properties from flooding for the 2-year through 25-year frequency storm events.

Owner. The legal or beneficial owner of a site, including but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm or corporation in control of the site.

Parcel. Any plot, lot or acreage shown as a unit on the latest county tax assessment records.

Perennial Stream. Means any stream which is designated and shown as a permanent stream on the 7.5-minute quadrangle maps of the U.S. Geological Survey, plus any stream which the Mayor and City Council may determine to be, and designate as, a flowing stream.

Permit. The permit issued by the City of Alpharetta to the applicant which is required for undertaking any land development activity.

Person. Except to the extent exempted from this ordinance, any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, city, county or other political subdivision of the State, any interstate body or any other legal entity.

Pollutant. Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; petroleum hydrocarbons; automotive fluids; cooking grease; detergents (biodegradable or otherwise); degreasers; chemicals; steam cleaning or laundry wastes; heated water; chlorinated water or chlorine (except as exempted above); non-hazardous liquid and solid wastes and yard wastes; bark and other fibrous material; refuse, rubbish, garbage, litter, or other discarded or abandoned objects and accumulations, so that same may cause or contribute to pollution; animal carcasses; silt; acids or alkalis; recreational vehicle wastes; dyes (without prior permission of the Department); floatables; pesticides, herbicides, and fertilizers; liquid and solid wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; concrete and cement; washing of fresh concrete for cleaning and/or finishing purposes or to expose aggregates; and noxious or offensive matter of any kind.

Pollution. The contamination or other alteration of any water's physical, chemical or biological properties by the addition of any constituent and includes but is not limited to, a change in temperature, taste, color, turbidity, or odor of such waters, or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety, welfare, or environment, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

Post-development. The time period, or the conditions that may reasonably be expected or anticipated to exist, after completion of the land development activity on a site as the context may require.

Pre-development. The time period, or the conditions that exist, on a site prior to the commencement of a land development project and at the time that plans for the land development of a site are approved by the plan approving authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being approved or permitted shall establish pre-development conditions.

Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Private. Property or facilities owned by individuals, corporations, and other organizations and not by city, state, or federal government.

Project. A land development project.

Protection Area, or Stream Protection Area. With respect to a stream, the combined areas of all required buffers and setbacks applicable to such stream.

Redevelopment. A land development project on a previously developed site, but excludes ordinary maintenance activities, remodeling of existing buildings, resurfacing of paved areas, and exterior changes or improvements which do not materially increase or concentrate stormwater runoff, or cause additional nonpoint source pollution.

Regional Stormwater Management Facility or Regional Facility. Stormwater management facilities designed to control stormwater runoff from multiple properties, where the owners or developers of the individual properties may assist in the financing of the facility, and the requirement for on-site controls is either eliminated or reduced.

Riparian. Belonging or related to the bank of a river, stream, lake, pond or impoundment.

Runoff. Stormwater runoff.

Runoff Reduction Measures. Preservation of an area's landscape features (vegetation, soils, and natural processes) that help manage and reduce stormwater runoff from a development or redevelopment site. Runoff reduction measures also include structurally engineered practices (such as bioretention areas, bioswales, pervious paving, greenroofs, greenwalls, stormwater street trees, and cisterns) that mimic natural processes to manage stormwater as close to its source as possible and reduce stormwater runoff from the site. In addition to stormwater management, runoff reduction measures can enhance site aesthetics, improve air quality, reduce urban heat island impacts, provide shading, create wildlife habitat, reduce energy consumption, reduce infrastructure costs, and increase property values.

Setback. With respect to a stream, the area extending beyond any buffer applicable to the stream.

Site. The parcel of land being developed, or the portion thereof on which the land development project is located.

State Waters. Any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface and subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State of Georgia which are not entirely confined and retained completely upon the property of a single person.

Stormwater Better Site Design. Nonstructural site design approaches and techniques that can reduce a site's impact on the watershed and can provide for nonstructural stormwater management. Stormwater better site design includes conserving and protecting natural areas and greenspace, reducing impervious cover and using natural features for stormwater management.

Stormwater Management. The collection, conveyance, storage, treatment and disposal of stormwater runoff in a manner intended to prevent increased flood damage, streambank channel erosion, habitat degradation and water quality degradation, and to enhance and promote the public health, safety and general welfare.

Stormwater Management Facility. Any infrastructure that controls or conveys stormwater runoff.

Stormwater Management Manual. The most recent update of the City of Alpharetta Stormwater Management Design Manual, combined with the latest edition of the Georgia Stormwater Management Manual.

Stormwater Management Measure. Any stormwater management facility or nonstructural stormwater practice.

Stormwater Management Plan. A document describing how existing runoff characteristics will be affected by a land development project and containing measures for complying with the provisions of this ordinance.

Stormwater Management System. The entire set of structural and nonstructural stormwater management facilities and practices that are used to capture, convey and control the quantity and quality of the stormwater runoff from a site.

Stormwater Retrofit. A stormwater management practice designed for a currently developed site that previously had either no stormwater management practice in place or a practice inadequate to meet the stormwater management requirements of the site.

Stormwater Runoff or Stormwater. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stream Bank. The sloping land that contains the stream channel and the normal flows of the stream.

Stream Channel. The portion of a watercourse that contains the base flow of the stream.

Structural Stormwater Control. A structural stormwater management facility or device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow of such runoff.

Subdivision. The division of a tract or parcel of land resulting in one or more new lots or building sites for the purpose, whether immediately or in the future, of sale, other transfer of ownership or land development, and includes divisions of land resulting from or made in connection with the layout or development of a new street or roadway or a change in an existing street or roadway.

Variance. The modification of the minimum stormwater management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this Ordinance.

Watershed. The land area that drains into a particular stream.

3.3.3 Permit procedures and requirements.

A. *Permit Application Requirements.* No owner or developer shall perform any land development activities without first meeting the requirements of this ordinance prior to commencing the proposed activity.

Unless specifically exempted by this ordinance, any owner or developer proposing a land development activity shall submit to the City of Alpharetta a permit application on a form provided by the Community Development Department for that purpose.

Unless otherwise exempted by this ordinance, a permit application shall be accompanied by the following items in order to be considered:

1. Stormwater preliminary plan and consultation meeting certification in accordance with Section 3.3.3.B.;
2. Stormwater management plan in accordance with Section 3.3.3.C.;
3. Inspection and maintenance agreement in accordance with Section 3.3.3.D., if applicable;
4. Performance bond in accordance with Section 3.3.3.E., if applicable; and,
5. Permit application and plan review fees in accordance with Section 3.3.3.F.

B. *Stormwater Preliminary Plan and Consultation Meeting.* Before any stormwater management permit application is submitted, the land owner or developer shall meet with the City Engineer for a consultation meeting on a preliminary plan for the post-development stormwater management system to be utilized in the proposed land development project. This consultation meeting shall take place at the time of the preliminary plat of subdivision or other early step in the development process. The purpose of this meeting is to discuss the post-development stormwater management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential ideas for stormwater management designs before the formal site design engineering is commenced.

To accomplish this goal the following information shall be included in the preliminary plan:

Existing conditions and proposed site layout sketch plans, which illustrate at a minimum: existing topography; location of floodplain/floodway boundaries; wetland delineations; lakes and ponds; perennial and non-perennial streams; stream buffers and setbacks; mapping of predominant soils from soil surveys (when available); boundaries of existing predominant vegetation; forest cover; locations of specimen trees; zoning buffers; location of existing and proposed roads and other impervious surfaces; preliminary

selection and location of proposed structural stormwater controls; location of existing and proposed conveyance systems such as grass channels, swales, and storm drains; flow paths; relationship of site to upstream and downstream properties and drainages; and preliminary location of proposed stream channel modifications, such as bridge or culvert crossings. Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.

Local watershed plans, the City greenspace protection plan (if applicable), and any relevant resource protection plans will be consulted in the discussion of the preliminary plan.

- C. *Stormwater Management Plan Requirements.* The stormwater management plan shall detail how post-development stormwater runoff will be controlled or managed and how the proposed project will meet the requirements of this ordinance, including the performance criteria set forth in Section 3.3.4 below.

This plan shall be in accordance with the criteria established in this Section and must be submitted with the stamp and signature of a Professional Engineer (PE) licensed in the state of Georgia, who must verify that the design of all stormwater management facilities and practices meet the submittal requirements outlined in the submittal checklist(s) found in the Stormwater Management Manual.

The stormwater management plan must ensure that the requirements and criteria in this ordinance are being complied with and that opportunities are being taken to minimize adverse post-development stormwater runoff impacts from the development. The plan shall consist of maps, narrative, and supporting design calculations (hydrologic and hydraulic) for the proposed stormwater management system. The plan shall include all of the information required in the Stormwater Management Site Plan checklist found in the Stormwater Management Manual. This includes:

1. Common address and legal description of site.
2. Vicinity Map.
3. Existing Conditions Hydrologic Analysis. The existing conditions hydrologic analysis for stormwater runoff rates, volumes, and velocities, which shall include: a topographic map of existing site conditions with the drainage basin boundaries indicated; acreage, soil types and land cover of areas for each subbasin affected by the project; all perennial and intermittent streams and other surface water features; all existing stormwater conveyances and structural control facilities; direction of flow and exits from the site; analysis of runoff provided by off-site areas upstream of the project site; and methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology. For redevelopment sites, predevelopment conditions shall be modeled using the established guidelines for the portion of the site undergoing land development activities. The redevelopment guidelines, including how the predevelopment conditions will be modeled for redevelopment sites, will be established in the stormwater management manual.
4. Post-Development Hydrologic Analysis. The post-development hydrologic analysis for stormwater runoff rates, volumes, and velocities, which shall include: a topographic map of developed site conditions with the post-development drainage basin boundaries indicated; total area of post-development impervious surfaces and other land cover areas for each subbasin affected by the project; pervious paved surfaces such as parking areas, sidewalks, and streets, and green roof areas shall be noted and included in #5. below, Stormwater Management System; calculations for determining the runoff volumes that need to be addressed for each subbasin for the development project to meet the post-development stormwater management performance criteria in Section 3.3.4; location and boundaries of proposed natural feature protection and conservation areas; documentation and calculations for any applicable site design credits that are being utilized; methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology. If the land development activity on a redevelopment site of 1-acre or more of disturbance constitutes more than 50 percent of the site area for the entire site, then the runoff reduction performance criteria-standard in Section 3.3.4 must be met for the stormwater runoff from the entire site, at today's standard. The existing conditions hydrologic analysis can take into account the existing

development when defining curve numbers and calculating existing runoff, except where a downstream property is negatively impacted by the current conditions (i.e. currently flooding from the existing runoff). In that instance, a forested condition must be used when defining curve numbers and calculating pre-development runoff.-

5. Stormwater Management System. The description, scaled drawings and design calculations for the proposed post-development stormwater management system, which shall include: A map and/or drawing or sketch of the stormwater management facilities, including the location of nonstructural site design features and the placement of existing and proposed structural stormwater controls, including design water surface elevations, storage volumes available from zero to maximum head, location of inlet and outlets, location of bypass and discharge systems, and all orifice/restrictor sizes; a narrative describing how the selected structural stormwater controls will be appropriate and effective; cross-section and profile drawings and design details for each of the structural stormwater controls in the system, including supporting calculations to show that the facility is designed according to the applicable design criteria; a hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms (including stage-storage or outlet rating curves, and inflow and outflow hydrographs); documentation and supporting calculations to show that the stormwater management system adequately meets the post-development stormwater management performance criteria in Section 3.3.4; drawings, design calculations, elevations and hydraulic grade lines for all existing and proposed stormwater conveyance elements including stormwater drains, pipes, culverts, catch basins, channels, swales and areas of overland flow; and where applicable, a narrative describing how the stormwater management system corresponds with any watershed protection plans and/or local greenspace protection plan.
6. Post-Development Downstream Analysis. A downstream peak flow analysis which includes the assumptions, results and supporting calculations to show safe passage of post-development design flows downstream. 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 channel or watercourse 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. In calculating runoff volumes and discharge rates, consideration may need to be given to any planned future upstream land use changes. The analysis shall be in accordance with the Stormwater Management Manual.
7. Construction-Phase Erosion and Sedimentation Control Plan. An erosion and sedimentation control plan in accordance with Section 3.1.1 *Soil Erosion and Sedimentation Control* or the NPDES Permit for Construction Activities. The plan shall also include information on the sequence/phasing of construction and temporary stabilization measures and temporary structures that will be converted into permanent stormwater controls.
8. Landscaping and Open Space Plan. A detailed landscaping and vegetation plan describing the woody and herbaceous vegetation that will be used within and adjacent to stormwater management facilities and practices. The landscaping plan must also include: the arrangement of planted areas, natural and greenspace areas and other landscaped features on the site plan; information necessary to construct the landscaping elements shown on the plan drawings; descriptions and standards for the methods, materials and vegetation that are to be used in the construction; density of plantings; descriptions of the stabilization and management techniques used to establish vegetation; and a description of who will be responsible for ongoing maintenance of vegetation for the stormwater management facility and what practices will be employed to ensure that adequate vegetative cover is preserved.
9. Operations and Maintenance Plan. Detailed description of ongoing operations and maintenance procedures for stormwater management facilities and practices to ensure their continued function as designed and constructed or preserved. These plans will identify the parts or components of a stormwater management facility or practice that need to be regularly or periodically inspected and maintained, and the equipment and skills or training necessary. The

plan shall include an inspection and maintenance schedule, maintenance tasks, responsible parties for maintenance, funding, access and safety issues. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.

10. **Maintenance Access Easements.** The applicant must ensure access from public right-of-way to stormwater management facilities and practices requiring regular maintenance at the site for the purpose of inspection and repair by securing all the maintenance access easements needed on a permanent basis. Such access shall be sufficient for all necessary equipment for maintenance activities. Upon final inspection and approval, a plat or document indicating that such easements exist shall be recorded and shall remain in effect even with the transfer of title of the property. The stormwater management manual establishes guidelines for easements and maintenance.
11. **Inspection and Maintenance Agreements.** Unless an on-site stormwater management facility or practice is dedicated to and accepted by the City of Alpharetta as provided in Section 3.3.3.D. below, the applicant must execute an easement and an inspection and maintenance agreement binding on all subsequent owners of land served by an on-site stormwater management facility or practice in accordance Section 3.3.3.D.
12. **Evidence of Acquisition of Applicable Local and Non-local Permits.** The applicant shall certify and provide documentation to the City Engineer that all other applicable environmental permits have been acquired for the site prior to approval of the stormwater management plan.

D. *Stormwater Management Inspection and Maintenance Agreements.*

1. General. Prior to the issuance of any permit for a land development activity requiring a stormwater management facility or practice hereunder and for which the City requires ongoing maintenance (as defined in the stormwater management manual), the applicant or owner of the site must, unless an on-site stormwater management facility or practice is dedicated to and accepted by the City, execute an inspection and maintenance agreement, and/or a conservation easement, if applicable, that shall be binding on all subsequent owners of the site.

The inspection and maintenance agreement, if applicable, must be approved by the City Engineer prior to plan approval, and recorded in the deed records upon final plat approval.

The inspection and maintenance agreement shall identify by name or official title the person(s) responsible for carrying out the inspection and maintenance. Responsibility for the operation and maintenance of the stormwater management facility or practice, unless assumed by a governmental agency, shall remain with the property owner and shall pass to any successor owner. If portions of the land are sold or otherwise transferred, legally binding arrangements shall be made to pass the inspection and maintenance responsibility to the appropriate successors in title. These arrangements shall designate for each portion of the site, the person to be permanently responsible for its inspection and maintenance.

As part of the inspection and maintenance agreement, a schedule shall be developed for when and how often routine inspection and maintenance will occur to ensure proper function of the stormwater management facility or practice. The agreement shall also include plans for annual inspections to ensure proper performance of the facility between scheduled maintenance and shall also include remedies for the default thereof.

In addition to enforcing the terms of the inspection and maintenance agreement, the City may also enforce all of the provisions for ongoing inspection and maintenance in Section 3.3.8 of this ordinance.

The City, in lieu of an inspection and maintenance agreement, may accept dedication of any existing or future stormwater management facility for maintenance, provided such facility meets all the requirements of this ordinance and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance. The City may refuse to accept dedication of any existing or future stormwater management facility if the

City Engineer determines that accepting the facility is not in the best interest of the City due to maintenance costs or other factors.

2. Special Operations and Maintenance Agreement for Homeowners' Associations or Other Associations

For all stormwater management practices required pursuant to this ordinance that are to be owned and maintained by a homeowners' association, property association, or similar entity, the required operations and maintenance agreement shall include all of the following provisions:

- a. Acknowledgement that operations and maintenance agreements run with the land and impose pro rata liability upon individual lot owners. The developer and association agree that the operations and maintenance agreement run with the land and shall be binding upon themselves, their respective successors and assigns, including individual lot owners within the Subdivision. Any liability imposed against an individual landowner shall be prorated in a per lot basis as determined by the fraction of lot(s) owned by the individual lot owner.
- b. The Developer, Association, their respective successors and assigns, including individual lot owners within the subdivision agree to regularly and routinely inspect, clean, and maintain the LID BMP, and otherwise keep in good repair, at their own cost and expense.
- c. The Developer, Association, their respective successors and assigns, including individual lot owners within the subdivision agree that they will reimburse the city for its cost and expenses incurred in the process of cleaning, maintaining, and/or repairing the BMPs pursuant to this agreement in the event the BMPs are failing and the city chooses to intervene.
- d. The Covenant of the Subdivision establishing the Association establishes that the Association is obligated to inspect, clean, maintain, and repair the BMPs; the Association has adopted the Operation and Maintenance Agreement as an obligation of the Association; and that a funding mechanism, such as an escrow account, is in place whereby individual lot owners within the subdivision pay a regular fee to the Association for the inspection, cleaning, maintenance, and repair of the stormwater management practice(s).
- e. Upon the initial sale of any lot within the Subdivision and prior to closing on such sale, the Developer shall give a copy of the Operation and Maintenance agreement to the potential buyer.

Both developer contribution and annual sinking funds shall fund the operations and maintenance escrow account. Prior to plat recordation, the developer shall pay into the escrow account an amount equal to 15 percent of the initial construction costs of the BMPs. A portion of the annual assessments of the association shall include an allocation into the escrow account. In the event the escrow account is not sufficient to fund ongoing maintenance or repayment of the City for emergency maintenance, the City may place a lien on the property.

- E. *Performance and Maintenance Bonds.* The Stormwater Management Manual may require performance and/or maintenance bonds for stormwater management facilities or practices and define the bond amounts.
- F. *Application Procedure.*
 1. Applications for land development permits shall be filed with the Community Development Department in accordance with Section 4.4.3 *Land Disturbance Permits*.
 2. Permit applications shall include the items set forth in Section 3.3.3.A. above (two copies of the stormwater management plan and the inspection maintenance agreement, if applicable, shall be included).

3. Upon a finding by the City Engineer that the permit application, stormwater management plan and inspection and maintenance agreement, if applicable, meet the requirements of this ordinance, the City Engineer will approve the plans. The land disturbance permit may then be issued by the Community Development Department, provided all other legal requirements for the issuance of such permit have been met.
 4. Notwithstanding the issuance of the permit, in conducting the land development project, the applicant or other responsible person shall be subject to the following requirements:
 - a. The applicant shall comply with all applicable requirements of the approved plan and this ordinance and shall certify that all land clearing, construction, land development and drainage will be done according to the approved plan;
 - b. The land development project shall be conducted only within the area specified in the approved plan;
 - c. The City shall be allowed to conduct periodic inspections of the project;
 - d. No changes may be made to an approved plan without review and written approval by the City; and,
 - e. Upon completion of the project, the applicant or other responsible person shall submit the engineer's report and certificate and as-built plans required by Section 3.3.5.B.
- G. *Modifications for Off-Site Facilities.* The stormwater management plan for each land development project shall provide for stormwater management measures located on the site of the project, unless provisions are made to manage stormwater by an off-site or regional facility. The off-site or regional facility must be located on property legally dedicated for the purpose, must be designed and adequately sized to provide a level of stormwater quantity and quality control that is equal to or greater than that which would be afforded by on-site practices and there must be a legally-obligated entity responsible for long-term operation and maintenance of the off-site or regional stormwater facility. In addition, on-site measures shall be implemented, where necessary, to protect upstream and downstream properties and drainage channels from the site to the off-site facility.

A stormwater management plan must be submitted to the City Engineer which shows the adequacy of the off-site or regional facility.

To be eligible for a modification, the applicant must demonstrate to the satisfaction of the City Engineer that the use of an off-site or regional facility will not result in the following impacts to upstream or downstream areas:

1. Increased threat of flood damage to public health, life, and property;
2. Deterioration of existing culverts, bridges, dams, and other structures;
3. Accelerated streambank or streambed erosion or siltation;
4. Degradation of in-stream biological functions or habitat; or
5. Water quality impairment in violation of State water quality standards, and/or violation of any state or federal regulations.

H. *Deed Recordation and Indications on Plat.* The approval of the permit shall require an enforceable restriction on property usage that runs with the land, such as plat, easements, recorded deed restrictions or protective covenants, to ensure that future development and redevelopment maintains the site consistent with the approved project plans. The location of all designated natural area for a site shall be recorded at the County Register of Deeds Office as "undisturbed natural area". Designated protected stream buffer boundaries must be specified on all surveys and recorded plats. The applicable maintenance agreement pertaining to every structural BMP shall be referenced on the final plat and shall be recorded with the County Register of Deeds Office upon final plat approval, and shall be provided to the Directors of Public Works and Community Development within 14 days following receipt of the recorded document.

I. *Fee-In-Lieu.* The purpose of the fee-in-lieu program is to allow parcels being redeveloped to reduce on-site stormwater management requirements by paying a fee to the City. For re-development projects, the owner or designee of the proposed development site shall have the option of paying an in-lieu fee to the City which will be used by the City to construct stormwater improvement measures off-site. All of the required detention (including channel protection) must be met onsite. A minimum of 75% of the runoff reduction/water quality treatment must be provided on-site. The remainder of the runoff reduction/water quality treatment may be met by a fee-in-lieu payment. The owner must demonstrate no increased downstream negative impacts where there are incised streambank conditions. Fee-in-Lieu funds will be applied to the construction of stormwater improvement projects in the same HUC-12 watershed. Program qualifications and details are provided in the Stormwater Management Manual.

3.3.4 Post-development stormwater management performance criteria.

The following performance criteria shall be applicable to all stormwater management plans, unless otherwise provided for in this ordinance: Where practicable, the use of on-site runoff reduction measures is encouraged in meeting these criteria in conjunction with traditional stormwater management measures and/or off-site mitigation.

- A. *Water Quality.* All stormwater runoff generated from a site shall be adequately treated before discharge. It will be presumed that a stormwater management system complies with this requirement if:
 - 1. It is sized to treat the prescribed water quality treatment volume from the site, as defined in the Georgia Stormwater Management Manual;
 - 2. Appropriate structural stormwater controls or nonstructural practices are selected, designed, constructed or preserved, and maintained according to the specific criteria in the Georgia Stormwater Management Manual; and,
 - 3. Runoff from hotspot land uses and activities identified by the ~~Engineering~~/Public Works Department are adequately treated and addressed through the use of appropriate structural stormwater controls, nonstructural practices and pollution prevention practices.
- B. *Stream Channel Protection.* 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. 24-hour extended detention storage of the 1-year, 24-hour return frequency storm event, this requirement may be adjusted or waived by the City Engineer for sites that discharge directly into larger streams, rivers, wetlands, or lakes, or to a man-made channel or conveyance system where the reduction in these flows will not have an impact on upstream or downstream streambank or channel integrity;
 - 3. Erosion prevention measures such as energy dissipation and velocity control.
- C. *Overbank Flooding Protection.* Downstream overbank flood and property protection shall be provided by controlling (attenuating) the post-development peak discharge rate to the pre-development rate for the 25-year, 24-hour return frequency storm event. If control of the 1-year, 24-hour storm under Section 3.3.4.B. is exempted, then peak discharge rate attenuation of the 2-year through the 25-year return frequency storm event must be provided. This requirement may be adjusted or waived by the City Engineer for sites where the post-development downstream analysis shows that uncontrolled post-development conditions will not increase downstream peak flows, or that meeting the requirement will cause greater peak flow downstream impacts than the uncontrolled post-development conditions.
- D. *Extreme Flooding Protection.* 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. This requirement may be adjusted or waived by the City Engineer for sites where the post-development downstream analysis shows that uncontrolled post-development conditions will not increase downstream peak flows, or that meeting the requirement will cause greater peak flow downstream impacts than the uncontrolled post-development conditions.

- E. *Structural Stormwater Controls.* All structural stormwater management facilities shall be selected and designed using the appropriate criteria from the Georgia Stormwater Management Manual. All structural stormwater controls must be designed appropriately to meet their intended function. For other structural stormwater controls not included in the Georgia Stormwater Management Manual, or for which pollutant removal rates have not been provided, the effectiveness and pollutant removal of the structural control must be documented through prior studies, literature reviews, or other means and receive approval from City Engineer before being included in the design of a stormwater management system. In addition, if hydrologic or topographic conditions, or land use activities warrant greater control than that provided by the minimum control requirements, the City Engineer may impose additional requirements deemed necessary to protect upstream and downstream properties and aquatic resources from damage due to increased volume, frequency, and rate of stormwater runoff or increased nonpoint source pollution loads created on the site in question.

Applicants shall consult the Georgia Stormwater Management Manual for guidance on the factors that determine site design feasibility when selecting and locating a structural stormwater control.

- F. *Stormwater Credits for Nonstructural Measures.* The use of one or more site design measures by the applicant may allow for a reduction in the water quality treatment volume required under Section 3.3.4.A. The applicant may, if approved by the City Engineer, take credit for the use of stormwater better site design practices and reduce the water quality volume requirement. For each potential credit, there is a minimum set of criteria and requirements which identify the conditions or circumstances under which the credit may be applied. The site design practices that qualify for this credit and the criteria and procedures for applying and calculating the credits are included in the Georgia Stormwater Management Manual.
- G. *Drainage System Guidelines.* Stormwater conveyance facilities, which may include but are not limited to culverts, stormwater drainage pipes, catch basins, drop inlets, junction boxes, headwalls, gutters, swales, channels, ditches, and energy dissipaters shall be provided when necessary for the protection of public right-of-way and private properties adjoining project sites and/or public rights-of-way. Stormwater conveyance facilities that are designed to carry runoff from more than one parcel, existing or proposed, shall meet the following requirements:
1. Methods to calculate stormwater flows shall be in accordance with the Stormwater Management Manual;
 2. All culverts, pipe systems and open channel flow systems shall be sized in accordance with the stormwater management plan using the methods included in the Stormwater Management Manual; and,
 3. Design and construction of stormwater conveyance facilities shall be in accordance with the criteria and specifications found in the Stormwater Management Manual.
- H. *Dam Design Guidelines.* Any land-disturbing activity that involves a site which proposes a dam shall comply with the Georgia Safe Dams Act and Rules for Dam Safety as applicable.
- I. *Runoff Reduction.* Runoff reduction practices shall be sized and designed to retain the first 1.0 inch of rainfall on the site to the maximum extent practicable. If the entire 1.0 inch of rainfall can be retained onsite using runoff reduction methods, the City may waive the water quality volume. If the entire 1.0 inch runoff reduction standard cannot be achieved, the remaining runoff from the 1.2-inch rainfall event must be treated by BMPs to remove at least 80% of the calculated average annual post-development TSS loading from the site per the Water Quality criteria.

3.3.5 Construction inspections of post-development stormwater management system.

- A. *Inspections to Ensure Plan Compliance During Construction.* Periodic inspections of the stormwater management system construction shall be conducted by ~~the City staff of the Engineering/Public Works Department~~ or conducted and certified by a professional engineer who has been approved by the ~~Engineering/Public Works Department~~City. Construction inspections shall utilize the approved stormwater management plan for establishing compliance.

All inspections shall be documented with written reports that contain the following information:

1. The date and location of the inspection;
2. Whether construction is in compliance with the approved stormwater management plan;
3. Variations from the approved construction specifications; and,
4. Any other variations or violations of the conditions of the approved stormwater management plan.

If any violations are found, the applicant shall be notified in writing of the nature of the violation and the required corrective actions.

- B. *Final Inspection and As Built Plans.* Upon completion of a project, and before a certificate of occupancy shall be granted, the applicant is responsible for certifying that the completed project is in accordance with the approved stormwater management plan. All applicants are required to submit actual "as built" plans for any stormwater management facilities or practices after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and practices and must be certified by a Professional Engineer. A final inspection by the ~~Engineering/Public Works Department~~City is required before the release of any performance securities can occur.

3.3.6 Stream buffer protection.

- A. *Findings and Purposes.*

1. *Findings.* Whereas, the ~~Engineering~~/Public Works Department of City of Alpharetta finds that buffers adjacent to streams provide numerous benefits including:
 - a. Protecting, restoring and maintaining the chemical, physical and biological integrity of streams and their water resources.
 - b. Removing pollutants delivered in urban stormwater.
 - c. Reducing erosion and controlling sedimentation.
 - d. Protecting and stabilizing stream banks.
 - e. Providing for infiltration of stormwater runoff.
 - f. Maintaining base flow of streams.
 - g. Contributing organic matter that is a source of food and energy for the aquatic ecosystem.
 - h. Providing tree canopy to shade streams and promote desirable aquatic habitat.
 - i. Providing riparian wildlife habitat.
 - j. Furnishing scenic value and recreational opportunity.
 - k. Providing opportunities for the protection and restoration of greenspace.
2. *Purposes.* The purpose of this Ordinance is to protect the public health, safety, environment and general welfare; to minimize public and private losses due to erosion, siltation and water pollution; and to maintain stream water quality by provisions designed to:

- a. Create buffer zones along the streams of the City for the protection of water resources; and,
 - b. Minimize land development within such buffers by establishing buffer zone requirements and by requiring authorization for any such activities.
- B. *Applicability.* This ordinance shall apply to all land development activity on property containing a stream protection area. These requirements are in addition to, and do not replace or supersede, any other applicable buffer requirements established under state law and approval or exemption from these requirements do not constitute approval or exemption from buffer requirements established under state law or from other applicable local, state or federal regulations.
- 1. *Grandfather Provisions.* This ordinance shall not apply to the following activities:
 - a. Work consisting of the repair or maintenance of any lawful use of land that is zoned and approved for such use on or before the effective date of this ordinance.
 - b. Existing development and on-going land disturbance activities including but not limited to existing agriculture, silviculture, landscaping, gardening and lawn maintenance, except that new development or land disturbance activities on such properties will be subject to all applicable buffer requirements.
 - c. Any land development activity that is under construction, fully approved for development, scheduled for permit approval or has been submitted for approval as of the effective date of this ordinance.
 - d. Land development activity that has not been submitted for approval, but that is part of a larger master development plan, such as for an office park or other phased development that has been previously approved within two years of the effective date of this ordinance.
 - e. Grandfathering provisions only apply to Section 3.3.6 Stream Buffer Protection.
 - 2. *Exemptions.* The following specific activities are exempt from this ordinance. After the effective date of this ordinance, it shall apply to new subdividing and platting activities. Any land development activity within a buffer established hereunder or any impervious cover within a setback established hereunder is prohibited unless a variance is granted pursuant to Section C below. Exemption of these activities does not constitute an exemption for any other activity proposed on a property.
 - a. Activities for the purpose of building one of the following:
 - (1) A stream crossing by a driveway, transportation route or utility line;
 - (2) Public water supply intake or public wastewater outfall structures;
 - (3) Intrusions necessary to provide access to a property;
 - (4) Public access facilities that must be on the water including boat ramps, docks, foot trails leading directly to the river, fishing platforms and overlooks;
 - (5) Unpaved foot trails and paths;
 - (6) 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;
 - (7) The City of Alpharetta Greenway system.
 - b. Public sewer line easements paralleling the creek, except that all easements (permanent and construction) and land disturbance should be at least 25 feet from the top of the bank. This includes such impervious cover as is necessary for the operation and maintenance of the utility, including but not limited to manholes, vents and valve structures. This exemption shall not be construed as allowing the construction of roads, bike paths or other

transportation routes in such easements, regardless of paving material, except for access for the uses specifically cited in Item a., above.

- c. Land development activities within a right-of-way existing at the time this ordinance takes effect or approved under the terms of this ordinance.
- d. Within an easement of any utility existing at the time this ordinance takes effect or approved under the terms of this ordinance, land disturbance activities and such impervious cover as is necessary for the operation and maintenance of the utility, including but not limited to manholes, vents and valve structures.
- e. Emergency work necessary to preserve life or property. However, when emergency work is performed under this Section, the person performing it shall report such work to the ~~Engineering~~ Public Works Department on the next business day after commencement of the work. Within ten (10) days thereafter, the person shall apply for a permit and perform such work within such time period as may be determined by the City Engineer to be reasonably necessary to correct any impairment such emergency work may have caused to the water conveyance capacity, stability or water quality of the protection area.
- f. Forestry and silviculture activities on land that is zoned for forestry, silvicultural or agricultural uses and are not incidental to other land development activity. If such activity results in land disturbance in the buffer that would otherwise be prohibited, then no other land-disturbing activity other than normal forest management practices will be allowed on the entire property for three years after the end of the activities that intruded on the buffer.

C. *Land Development Requirements.*

1. *Buffer and Setback Requirements.* All land development activity subject to this ordinance shall meet the following requirements:
 - a. An undisturbed natural vegetative buffer shall be maintained for 50 feet, measured horizontally, on both banks (as applicable) of a non-perennial stream as measured from the top of the stream bank. An additional setback shall be maintained for 25 feet, measured horizontally, beyond the undisturbed natural vegetative buffer, in which all impervious cover shall be prohibited. Grading, filling and earthmoving shall be minimized within the setback.
 - b. An undisturbed natural vegetative buffer shall be maintained for 100 feet, measured horizontally, on both banks (as applicable) of a perennial stream as measured from the top of the stream bank. An additional setback shall be maintained for 50 feet, measured horizontally, beyond the undisturbed natural vegetative buffer, in which all impervious cover shall be prohibited. Grading, filling and earthmoving shall be minimized within the setback. If approved by the City Engineer, the buffer requirement may be achieved by maintaining an average of width of 100 feet and a minimum distance of 50 feet from each side of the stream as measured horizontally from the top of the stream bank. If approved by the City Engineer, the setback may be achieved by restricting the construction of any impervious surface within an average setback of 150 feet on each side of the stream and a minimum distance of 75 feet as measured horizontally from the top of the stream bank. No averaging shall be allowed on the following:
 - (1) Big Creek.
 - (2) Foe Killer Creek.
 - (3) Any perennial stream within a seven (7) mile radius upstream of the Roswell water supply intake protected pursuant to Section 3.3.12.
 - c. No septic tanks or septic tank drain fields shall be permitted within the buffer or the setback.