

**AN ORDINANCE TO AMEND THE CITY OF SANDY SPRINGS CODE OF
ORDINANCES TO ADD A NEW CHAPTER TO BE NUMBERED 103
ENTITLED DEVELOPMENT REGULATIONS**

WHEREAS, the Mayor and City Council of the City of Sandy Springs find that from time to time it is necessary to amend sections of the Code of Ordinance to correct, clarify, and update the provisions of the Ordinances; and

WHEREAS, the Mayor and City Council desire to establish policies that provide the maximum protection of the general welfare, health, morals, and safety of the residents of the city; and

WHEREAS, regulations and policies pertaining to land development are outlined in the Code of the City of Sandy Springs; and

WHEREAS, the Mayor and City Council find it necessary to clarify provisions relating to land development in the Code of Ordinances; and

NOW, THEREFORE, in order to accomplish the foregoing, the Mayor and City Council of the City, pursuant to their authority, do hereby Adopt Chapter 103, Development Regulations to read as follows:

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ARTICLE 1

AUTHORITY, TITLE, PURPOSE AND INTENT

1.1 AUTHORITY AND TITLE

1.1.1 This Ordinance is adopted under the authority of the Constitution of the State of Georgia and laws enacted pursuant thereto.

1.1.2 This Ordinance shall be known as "The City of Sandy Springs Development Ordinance " and may be referred to generally as "The Development Ordinance," or, as used herein, "this Ordinance."

1.2 PURPOSE

1.2.1 This Ordinance is intended to serve the following purposes:

- a. To protect and promote the public health, safety, and general welfare.
- b. To provide a system for the subdividing of lands and the accurate recording of land titles.
- c. To provide assurance that, lots shown on recorded subdivision plats are usable by the purchasers for their intended and permitted functions.
- d. To encourage economically sound and orderly land development in accordance with the policies and objectives of the Comprehensive Plan.
- e. To assure the provision of required streets, utilities, and other facilities and services to new land developments in conformance with public improvement policies of the city.
- f. To assure adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in new land developments.
- g. To assure the provision of needed open spaces and public facility sites in new land developments through the dedication or reservation for purchase of land for public purposes.
- h. To assure equitable review and approval of all subdivision and site plans by providing uniform procedures and standards for the developer.

1.3 INTENT AND APPLICATION

This Ordinance applies to and provide guidance for the development of any lands within the city, whether the development involves the subdivision of land for sale to individual users or pertains only to the construction of buildings or other improvements on a single parcel.

ARTICLE 2

ADOPTION AND AMENDMENT

2.1 EFFECTIVE DATE

- 2.1.1 This Ordinance shall be in full force and effect on September 16, 2008 following the adoption by the Mayor and City Council and shall apply to any Land Disturbance Permit for which an application is received after the effective date of this Ordinance.
- 2.1.2 Any subdivision or other project for which a valid and complete application for a Land Disturbance Permit shall have been received prior to the effective date of this Ordinance shall be considered "grandfathered" and, at the developer's option, may proceed to completion and building permits may be issued under the Subdivision Regulations of the City of Sandy Springs which were in place prior to the effective date of this Ordinance provided that the Land Disturbance Permit is or can be issued within 90 calendar days of said effective date and all time frames associated with said permit are observed. Any project for which a Land Disturbance Permit cannot be issued within 90 calendar days from the effective date of this Ordinance shall proceed in accordance with this Development Ordinance.
- 2.1.3 Any subdivision or other project for which a Land Disturbance Permit has been issued prior to the effective date of this Ordinance shall be considered "grandfathered" and, at the developer's option, may proceed to completion and building permits may be issued under the terms of said permit and the Subdivision Regulations of the City of Sandy Springs which were in place prior to said effective date.
- 2.1.4 Any subdivision or other project for which a modified or conditional Land Disturbance Permit may have been issued, i.e. any permit which may have been issued for clearing and grubbing or grading only purposes, etc... prior to the effective date of this Ordinance shall be brought into conformance with this Ordinance prior to issuance of any other Land Disturbance Permit or permit modification that would authorize additional work on the project. Administrative modifications in accordance with Article 3 shall be granted as necessary and appropriate where full compliance is not feasible or cannot reasonably be achieved because of the stage of development, limitations imposed by the site, or design parameters.
- 2.1.5 Nothing in this Ordinance shall be construed to affect the validity of any Building permit lawfully issued prior to the effective date of this Ordinance.

2.2 AMENDMENTS

- 2.2.1 This Ordinance may be amended from time-to-time by resolution of the Mayor and City Council. Such amendments shall be effective as of their date of adoption unless otherwise stated in the adopting resolution.
- 2.2.2 Any subdivision or other project for which a valid and complete application for a Land Disturbance Permit shall have been received prior to the adoption of an amendment to this Ordinance may, at the developer's option, proceed to completion and building permits may be issued as though no amendment had been approved, provided that the Land Disturbance Permit is or can be issued within 90 calendar days of said amendment and all time frames associated with said permit are observed. Any project for which a Land Disturbance Permit cannot be issued within 90 calendar days from the effective date of this Ordinance shall proceed in accordance with the amended development Ordinance.
- 2.2.3 Any subdivision or other project for which a Land Disturbance Permit has been issued prior to the adoption of an amendment to this Ordinance may, at the developer's option, proceed to completion and building permits may be issued as though no amendment had been approved.
- 2.2.4 Any subdivision or other project for which a modified or conditional Land Disturbance Permit may have been issued, a modified or conditional Land Disturbance Permit may be one that is issued to cover

clearing, clearing and grubbing or other minor land disturbing activities prior to the adoption of an amendment to this Ordinance shall be brought into conformance with the amendment prior to issuance of any other Land Disturbance Permit or permit modification that would authorize additional work on the project Permit. Administrative modifications in accordance with Article 3 shall be granted as necessary and appropriate where full compliance is not feasible or cannot reasonably be achieved because of the stage of development, limitations imposed by the site, or design parameters.

2.2.5 No amendment to this Ordinance shall be construed to affect the validity of any Building permit lawfully issued prior to the adoption of said amendment.

2.3 SEVERABILITY

If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be unconstitutional or void, the validity of the remaining portions of this Ordinance shall not be affected thereby, it being the intent of the Mayor and City Council in adopting this Ordinance that no portion thereof or provision of the Ordinance contained herein shall become inoperative or fail by reason of the unconstitutionality or invalidity of any section, subsection, sentence, clause, phrase, or provisions of this Ordinance.

2.4 CONFLICTING ORDINANCE

All Ordinances or parts of Ordinances of the Code of Laws of the City of Sandy Springs, State, in conflict with this Ordinance shall be and the same are hereby repealed in their portions so in conflict. Provided, however, that it is not the intent of this Ordinance to repeal or affect any Law of the State of Georgia, or any Code or Ordinance of the City of Sandy Springs adopted as a requirement of a state law, in which case the most restrictive requirement shall control.

ARTICLE 3

ADMINISTRATION, APPEAL, AND VIOLATIONS

3.1 ADMINISTRATION

3.1.1 Administration of the Development Ordinance

This Development Ordinance shall be administered, interpreted, and enforced by the Director of Community Development except where specifically noted otherwise. It is the intent of this Ordinance that the requirements provided in Article 11 and Article 12 shall be interpreted by the Public Works Director and any modifications to these Articles shall only be made with the approval of the Public Works Director or other governing body authorized to approve waivers or variances to this Ordinance. All other ordinances or regulations referenced herein, such as the fire prevention and life safety codes, building and other technical codes, regulations, and ordinances, shall be administered by the directors of the departments responsible for such ordinances, as established by the Mayor and City Council. Prior to the initiation of any application pursuant to this Development Ordinance, the Director is authorized to require the applicant to supply information such information and documentation, and complete such applications and checklists, as deemed reasonably necessary to insure compliance with the terms and conditions of this Development Ordinance.

3.1.2 Work in Violation of this Ordinance

In any case in which activities are undertaken in violation of this Ordinance, not in compliance with the provisions of a permit issued under the authorization of this Ordinance, or without authorization of a

permit which would otherwise be required, the Director is hereby authorized to suspend or invalidate such permits, order that all unauthorized or improper work be stopped, direct correction of deficiencies, issue summonses to any court of competent jurisdiction, or take any other legal or administrative action appropriate to the severity of the violation and degree of threat to the public health, safety, and welfare.

3.1.3 Ordinance to be Published

It shall be the duty and responsibility of the Director to maintain an accurate and up-to-date compilation of this Development Ordinance and all amendments and pertinent attachments thereto, and to publish said compilation and make it available to the public at a cost as established by the Mayor and City Council.

3.1.4 Modifications

Modification of the design standards set forth in this Development Ordinance and defined in Articles 11 and 12 may be authorized by the Public Works Director, or Article 13 by the Director of Community Development, in specific cases when, in his/her opinion, undue hardship may result from strict compliance; provided any such determination shall be based fundamentally on the fact that unusual topographical or other exceptional conditions require such modification, or that the granting of the modification will not adversely affect the general public welfare or nullify the intent of this Ordinance. Any such modification granted by the Director shall be made in writing to the applicant and also made a part of the Department's records. Application for any modifications shall be filed in writing on a form provided by the Department with necessary supporting documents with the Director by the applicant and shall explain in detail the reasons and facts supporting the application.

3.2 APPEALS AND VARIANCES TO THIS ORDINANCE

3.2.1 Appeals

All appeals shall be pursuant to Article XXII of the City of Sandy Springs Zoning Ordinance.

3.2.2 Variance

Variance requests to the requirements of this Ordinance shall be submitted on an application form as prescribed by the Director, along with such fees as shall be established by the Mayor and City Council. The Director shall coordinate the review of each variance request with all other affected city departments and shall summarize such comments or recommendations as may be received to the Board of Zoning Appeals for action in their normal course of business.

3.2.3 Judicial Review

Any person aggrieved by a decision or order of the city, after exhausting his administrative remedies, shall have the right to appeal by application for writ of certiorari to Superior Court. Any appeal of a decision of the city shall be made within 30 calendar days of the decision.

3.3 VIOLATIONS ENFORCEMENT AND PENALTIES

Any action or inaction that violates the provisions of this Ordinance or the requirements of an approved plan or permit shall be subject to the enforcement actions or penalties outlined herein. Any such action or inaction that is continuous with respect to time is deemed to be a public nuisance and also may be abated by injunctive or other equitable relief. The imposition of any of the enforcement actions or penalties described herein shall not prevent such equitable relief.

3.3.1 Enforcement Procedures

The following are the enforcement procedures authorized by this ordinance:

a. Notices of Violation Enforcement

1. Enforcement actions may begin with the issuance of a written Notice of Violation to the owner or responsible person by the director. The notice may be delivered personally or sent by first class mail. The Notice of Violation shall contain at least the following information:
 - i. The name and address of the owner or responsible person; and,
 - ii. The location or address of the site upon which the violation is occurring; and,
 - iii. A description of the nature of the violation; and,
 - iv. A description of the remedial actions or measures necessary to bring an action or inaction into compliance with a permit, approved plan or this Ordinance; and,
 - v. The deadline or completion date of any such remedial actions or measures; and,
 - vi. A statement of the penalty or penalties that maybe assessed against the owner or responsible person to whom the Notice of Violation is directed.
2. In the event the owner or responsible person fails to correct the violations after the deadline contained in the Notice of Violation, the director is authorized to take or impose any one or more of the additional actions contained herein.

b. Stop Work Orders

The Director is authorized to issue Stop Work Orders to an owner or responsible person. Stop Work Orders are effective immediately and shall remain in effect until the necessary corrective actions or remedial measures as set forth in the Notice of Violation have occurred. Stop Work Orders may be withdrawn or modified by the Director in order to enable an owner or responsible person to take necessary remedial actions or measures to correct the violations. When it is deemed necessary for the protection of the safety, health or welfare of the general public an immediate stop work order may be issued without the issuance of a Notice of Violation. I such cases the stop work order shall define the necessary corrective actions or remedial measures as would have been provided in the Notice of Violation.

c. Refusal to Issue Certificates of Occupancy or Completion

The Director is authorized to refuse to issue Certificates of Occupancy or Completion for the building or other improvements constructed or being constructed on a site until the owner or responsible person has taken the remedial actions or measures as set forth in the Notice of Violation or has otherwise corrected the violations described therein.

d. Suspension, Revocation, or Modification of Permit

The Director is authorized to suspend, revoke or modify a permit that was issued authorizing land disturbing activities or development. The Director is authorized to reinstate a suspended, revoked or modified permit after the owner or responsible person has taken the remedial actions or measures

stated in the Notice of Violation or have otherwise corrected the violations described therein. The Director is also authorized to reinstate such permit, which may include conditions as the director may deem necessary, to enable the owner or responsible person to take the necessary remedial actions or measures to correct the violations.

e. Refusal to Approve Final Subdivision Plats

The Director is authorized to refuse to approve Final Plats until the owner or responsible person has taken the remedial actions or measures set forth in the Notice of Violation or have otherwise corrected the violations described therein.

f. Issuance of Citations or Summons to Court

The Director is authorized to issue a citation or summons to the owner or responsible person requiring such person to appear in a court of jurisdiction of violating any provision of this competent jurisdiction to answer violations of said charges.

ARTICLE 4

DEFINITIONS

4.1 USE OF WORDS AND INTERPRETATION

4.1.1 For the purposes of this Ordinance, the following shall apply to the use of all words:

- a. When appropriate to the context, words used in the singular shall include the plural, and the plural the singular; words used in the present tense shall include the future tense, and vice versa.
- b. Words in the masculine gender shall include the feminine.
- c. The word "shall" is mandatory and not discretionary.
- d. The word "may" is permissive.
- e. Use of the word "and" is inclusive and requires that all of the component phrases so connected must be present or fulfilled for sufficiency.
- f. Use of the word "or" is not exclusive (as in "either ... or"), and requires that at least one of the component phrases so connected must be present or fulfilled for sufficiency. The word "or" may allow more than one component phrase to be present or fulfilled, as is implied by the common term "and/or."

4.1.2 The following shall control the interpretation of words and phrases as used in this Ordinance:

- a. Words and phrases defined in this article shall be interpreted as defined herein.
- b. Words or phrases not defined herein shall be interpreted as defined in the city Zoning Ordinance, the city's Soil Erosion and Sediment Control Ordinance, Buffer, Landscape, and Tree Ordinance, or other city ordinance, as applicable to the use of the word within the context of this Ordinance.

4.2 DEFINITIONS OF WORDS AND PHRASES

Certain words or phrases in this Ordinance are defined for their use herein as follows:

AASHTO – means the American Association of State Highway Transportation Officials.

Alley or Service Drive - A minor permanent, public service-way which is used primarily for vehicular service access to the back or the side for properties otherwise abutting on a street.

Access Improvement - Any improvement or facility that is planned and designed to provide service or access for a particular project and which is necessary for the use and convenience of the occupants or users of the project and is not a System Improvement. A Project Access Improvement includes but is not limited to: pedestrian access improvements; site driveways; new streets; median cuts; right turn lanes, left turn lanes, acceleration lanes, and deceleration lanes made necessary to serve site driveways or new streets leading to or from the project; traffic control measures made necessary to serve site driveways or new streets; intersection improvements whose primary purpose at the time of construction is to provide access to the Project; and, necessary right-of-way dedications required for any Project Access Improvement.

Applicant - A person, either the owner or the bona fide representative of the owner of land or structures governed by this Ordinance, who seeks authority to use, develop, construct upon or otherwise enjoy the use of property through any of the procedures established under this Ordinance.

Arterial - A Principal Arterial, Major Arterial, or Minor Arterial street as defined and designated in the Comprehensive Plan of the city.

"As-Built" Survey - See Public Record Drawing.

Base Flood - See Sandy Springs Flood Plain Ordinance

Base Flood Elevation - See Sandy Springs Flood Plain Ordinance

Bike Paths – These paths serve to separate bicycle riders from vehicle and pedestrian traffic. Bike paths can meander through wooded areas, traverse the edge of open areas, and may (in many instances) parallel existing roadways or walks.

Block - A piece or parcel, or several parcels of land comprising an area entirely surrounded by public streets, other than alleys.

Buffer:

- a. Stream Buffer: An area along the course of any conveyance which is determined to be a stream, as defined in the stream buffer regulations, which is to be maintained in an undisturbed and natural condition.
- b. Zoning Buffer: See Zoning Ordinance

Buildable Lot of Record – A lot that has been lawfully divided under the ordinances or regulations in place at the time of filing and appears on a deed or plat recorded in the official records of the Clerk of the Superior Court.

Building Setback Line - A line across a lot parallel to a street right-of-way or other property line establishing the minimum open space to be provided between any principal building and the street or other property line. All building setback lines shall be at least as restrictive as the corresponding minimum yard setbacks required in the Zoning Ordinance or as approved by the Mayor and City Council or other governing board.

Caliper - The standard for trunk measurements of nursery stocks. Caliper of the trunk shall be taken 6 inches above the ground for up to and including 4-inch caliper size and 12 inches above the ground for larger sizes.

Certificate of Development Conformance - Final approval issued by the Department for completion of land development activities for a subdivision or project for which a Development Permit was issued.

City - City of Sandy Springs, Georgia

City Arborist - The agent(s) of the city having the primary responsibilities of administration and enforcement of the Tree Preservation Ordinance.

Clearing - The removal of trees or other vegetation, but not including grubbing activities.

Collector - A through street having the primary function of connecting subdivisions or other areas to Arterial streets or other major thoroughfares, or functioning as a central route within a subdivision channeling traffic from the local streets to an abutting major thoroughfare or another Collector street. For the purposes of this Ordinance, a central but non-through route within a subdivision or other project will be considered as a Collector, if the Average Daily Traffic generated by the development on the route will exceed 4000 trips.

Completed Application - An application shall be deemed complete when all application or reviews fees have been paid, application forms completed and all necessary documentation has been submitted in order to determine compliance with this Ordinance and all other codes and ordinances adopted by the city.

Comprehensive Plan - A plan summarizing and illustrating the adopted goals and objectives of the city regarding the future location and character of anticipated land uses, transportation, and other public facilities in the city. The term "Comprehensive Plan" includes component or functional plans for the city, including but not limited to a plan for land use (i.e., Land Use Plan) or a plan for transportation facilities, and includes the classification of streets and thoroughfares as shown on the adopted Long Range Road Classification Map.

Conceptual Plan - A drawing which shows the overall concept (e.g., a conceptual plan) of a proposed development, and which may include lots and streets in a subdivision or the general location of buildings and improvements for a multi-family or non-residential project. As it relates to the platting process a conceptual plan shall include a drawing in sufficient detail to indicate its workability and feasibility, but is not in final form for recording, pursuant to this Ordinance. The conceptual plan is the first stage in securing a Land Disturbance Permit.

Condominium - A form of property ownership in which the buildings or portions of the buildings, whether residential or non-residential in use, are owned by individuals separate from the lands which surround the buildings, said lands held in common ownership by the owners of the several buildings.

County - Fulton County, Georgia.

Critical Root Zone - The area of tree roots within the crown drip-line. This zone is generally defined as a circle with a radius extending from a tree's trunk to a point no less than the furthest crown drip-line. Disturbances within this zone will directly affect a tree's chance for survival.

Crosswalk - A right-of-way dedicated to public use, four feet or more in width that crosses a street and furnishes a specific area for pedestrian movements at an intersection.

Crown Drip Line - A vertical line extending down to the ground from the end of a tree's longest branches.

Cul-de-Sac - A street having one end open to traffic and being permanently terminated by a vehicular turnaround. For the purpose of designation, a cul-de-sac street shall be interpreted to begin at the intersection

of two or more streets nearest to the vehicular turnaround.

Department - The Department of Community Development for the city of Sandy Springs

Developer - Any person, individual, firm, partnership, association, corporation, estate, trust, or any other group or combination acting as a unit who directs the undertaking or purposes to undertake development activities as herein defined, whether the development involves the subdivision of the land for sale to individual users, the construction of buildings or other improvements on a single land ownership, or both.

Development - All activities associated with 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. Such activities include land disturbance (clearing and grubbing the land of vegetation and stumps, and grading) and the construction of improvements such as but not limited to streets, driveways or parking areas, water or sewer mains, storm water drainage facilities, sidewalks or other structures permanently placed on or in the property.

Where appropriate to the context, the term "development" also may be used to denote specific subdivision or project which is a single entity or intended to be constructed as in interrelated whole, whether simultaneously or in phases.

Development Agreement - A written contract between the city and a property owner or developer, that specifies the System Improvements to be provided by the developer for a specific project.

Development Plans - The detailed and professional plans showing the layout and design, site work and construction activities proposed for a project (other than architectural building plans) and including the Preliminary Plat or Site Plan (as applicable), Grading Plan, Tree Preservation/Replacement Plan, Erosion and Sediment Control Plan, Buffer and Landscape Plan, and construction drawings for streets, storm water drainage facilities, sanitary sewers, water supply facilities, and other site improvements.

Director - The Director of the Department of Community Development or his/her designee, except where specifically noted otherwise.

Drainage Improvements - Those facilities and structures intended to control and direct the passage of storm waters 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, detention ponds, and velocity dissipation devices.

Driveway - A vehicular access way in private ownership, other than a Private Street, which provides access primarily to only one property or project, or to no more than 3 single-family detached residences.

Easement - Recorded authorization for a specified purpose by a property owner for the use of any designated part of the real property by another entity.

Erosion and Sedimentation Control Ordinance - The ordinance adopted by the city that regulates soil erosion and its transportation to the city's lakes, rivers, and streams (latest revision).

Excavation - Any manmade cavity or depression in the earth's surface, including its sides, walls, or faces, formed by earth removal and producing unsupported earth conditions as results of the excavation. If installed forms or similar structures reduce the depth to width relationship, an excavation may become a trench.

Fee Simple - A form of property ownership in which the buildings and surrounding lands are owned by the same person.

Federal Emergency Management Agency (FEMA) - See Sandy Springs Flood Plain Ordinance

Final Plat - A finished drawing of a subdivision showing completely and accurately all legal and boundary information and certifications required by this Ordinance. Certification for recording and ratification of the Director's approval by the Mayor and City Council is required.

Fire Marshal's Office - A section of the Fire Department charged with the responsibility of enforcing the city's Fire Prevention and Protection Code, the Standard Fire Prevention Code, the National Fire Prevention Code and Georgia Accessibility Code.

Freeboard - The distance between the base flood elevation and the top of a storm water detention structure.

GDOT - The Department of Transportation of the State of Georgia.

Grading - The movement, removal or addition of earth on site by the use of mechanical equipment.

Grubbing - The removal of stumps or roots from a property.

Fulton County Health Department - The Environmental Health Services Division of the Georgia Department of Human Resources for Fulton County, Georgia.

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 storm water or to violate water quality standards.

Impervious Surface - Any paved, hardened or structural surface, including but not limited to, buildings, dams, decks, driveways, parking areas, patios, streets, swimming pools, tennis courts, walkways, and other structures.

Land Disturbing Activity - Any activity which may result in soil erosion from water or wind and movement of sediments into state water or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land but not including agricultural practices as described in the city's Soil Erosion and Sedimentation Control Ordinance.

Land Disturbance Permit - Any permit issued by the city that authorizes land disturbing activities on a site or portion of a site.

Lot - The basic lawful unit of land, identifiable by a single deed established by plat, subdivision, or as otherwise permitted by law, to be separately owned, used, developed or built upon. In determining the area and dimensions of a lot, no part of the right-of-way of a road or crosswalk may be included.

Lot, Corner - A lot abutting upon two or more streets at their intersection.

Lot, Double / Multiple Frontage - A lot other than a corner lot abutting upon two or more streets that may or may not intersect at that lot.

Lot, Minimum Lot Size - The smallest permissible lot area established by the zoning ordinance or conditions of zoning.

Major Intersection - The intersection of two or more public streets in which at least one of the streets is an arterial or collector as designated by the Comprehensive Plan.

Major Thoroughfare - Any public street, existing or proposed, which is shown in the Comprehensive plan as an arterial or collector.

Mayor and City Council – The Mayor and City Council of Sandy Springs, Georgia

Mean Sea Level - See Sandy Springs Flood Plain Ordinance

Minor Plat – A finished drawing of a subdivision of no more than 3 lots that, at the time of subdivision, does not necessarily, but may involve a Land Disturbance Permit, new streets, the extension of a utility or other municipal facility and depicts all legal and engineering information required by this Ordinance.

MUTCD – means the Manual for Uniform Traffic Control Devices, latest edition.

OSHA - means the U.S. Department of Labor, Occupational Safety and Health Administration, or successor agency.

Owner - A person having a majority fee simple interest in real property, or a majority interest through any other form of ownership.

Pedestrian Way - A right-of-way within a block dedicated to public use, intended primarily for pedestrians and from which motor propelled vehicles are excluded.

Person - An individual, firm, partnership, corporation, joint venture, association, social club, fraternal organization, estate, trust, business trust, receiver, syndicate, or other group or combination acting singly or collectively for a common purpose, and the duly authorized agents thereof.

Planning Commission -the City of Sandy Springs Planning Commission,
as per Zoning Ordinance

Plat - A map indicating the subdivision, re-subdivision, or recombination of land.

Preliminary Plat - *See "Conceptual Plan".*

Project - A principal building or structure, or group of buildings or structures, planned and designed as an interdependent unit together with all accessory uses or structures, utilities, drainage, access, and circulation facilities, whether built in whole or in phases. Examples include: a principal building on a lot, a residential subdivision, a multi-family development, a shopping center or an office park.

Public Record Drawing - A survey or other drawing based on a field survey which shows existing features or components and horizontal or vertical information (grades or location of improvements).

Public Works Director - The Director of the Department of Public Works or his/her designee, except where specifically noted otherwise.

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 storm water runoff, or cause additional non point source pollution.

Residential Site Plan - A drawing showing lot information and all improvements, as outlined in Article 10.

Responsible Party -In the context of enforcement procedures, a person (as defined above) who is alleged to have committed, caused, continued or created a violation of the terms, requirements, regulations, or provisions of this Ordinance whether as a direct act, through lack of action or neglect, or at the direction of or on behalf of others. A responsible party may be the owner of a premises where a violation has occurred; an occupant

whether through ownership, lease or other tenancy; a contractor, builder or developer; an agent of or person otherwise acting on behalf of the aforementioned parties; or other person acting in violation of this Ordinance.

Road - See "Street, Public".

Roadway - The paved portion of a street from back of curb to back of curb (or edge to edge of pavement for streets not having curbs) but excluding driveway aprons, bridges, and large single and multi-cell culverts which in a hydrologic sense can be considered to function as abridge.

Sheet Flow - Diffused water running overland to a defined watercourse.

Site Work - Development activity to prepare a property for construction of buildings or finished structures, including clearing, grubbing, grading, and installation of soil sedimentation and erosion control facilities.

Sketch Plan - See Concept Plan.

Standard Details – Illustrative minimum standards for land development activities authorized under this Ordinance or other codes of the city. These standards shall not supersede more restrictive or prudent design requirements or good engineering practices as applied to specific situations on a case-by-case basis. All construction shall meet or exceed the standards established in these development Ordinance and/or those adopted by the state department of transportation.

Street, Private - An access way similar to and having the same function as a public street, providing access to more than one property, but held in private ownership(as distinct from a "driveway").

Street, Public -A right-of-way dedicated to and accepted by the city for vehicular traffic over which the city may hold a prescriptive easement for public access, and including designated and numbered U. S. and State Highways. For the purposes of this Ordinance, the term "public street" shall be limited to those which afford or could afford a direct means of vehicular access to abutting property, and exclude limited access roadways which abut a property but from which direct access may not be allowed under any circumstances.

Street, Local Nonresidential - A surface street intended primarily to provide local access to adjacent existing or planned commercial or industrial development and not for through traffic.

Street, Local Residential - A surface street intended primarily to provide local access to adjacent residential development and not for through traffic.

Street, Marginal Access - A local street which is parallel to and adjacent to a major thoroughfare and which provides access to adjacent properties and protection from through traffic.

Stub-out Street – A street having one end open to traffic and being temporarily terminated at the other. Stub-outs generally do not have, but may be required to have, a temporary vehicular turn-around. This temporary termination is to provide connectivity to future developments and may be constructed without curb and gutter provided such stub-out street meets the standards of the fire department.

Sub-divider - Any person, individual, firm partnership, association, corporation, estate, trust, or any other group or combination acting as a unit dividing or proposing to divide land so as to constitute a subdivision as herein defined, including an agent of the sub-divider.

Subdivision - Any division or re-division of a lot, tract or parcel, regardless of its existing or future use, into 2 or more lots, tracts or parcel. The term, "subdivision" shall mean the act or process of dividing property. Lots that do not abut or are not directly across a public street from other sub-divided lots shall be considered a separate distinct sub-division with a separate name.

Where appropriate to the context, the term "subdivision" also may be used in reference to the aggregate of all lots held in common ownership at the time of division.

Subdivision Entrance – A public street, or publicly approved private street, that provides access to subdivided lots.

Supervisory Personnel --_Any person who has the responsibility for layout, oversight, superintending, directing, or controlling an excavation or trench.

System Improvement - Any improvement or facility such as streets, bridges, or rights-of-ways identified on the Long Range Road Classification Map (i.e. "the System"),and any traffic control measures, landscaping or other features to same, that is included in the Comprehensive Plan and which is further designed to provide service to the community at large.

Thoroughfare – See “Major Thoroughfare”.

Tie Point - The point of reference for a boundary survey. Said point of reference shall be an established, monumented position which can be identified or relocated from maps, plats, or other documents on public record.

Trails, Pedestrian or others – Extended and usually continuous strips of land established independently of other routes of travel and dedicated, through ownership or easement, to recreational travel including hiking, horseback riding etc...

Trench - A narrow excavation made below the surface of the ground. In general, the depth is greater than the width, but the width of the trench is not greater than 15 feet.

Watercourse - A channel with a defined bed and banks, including lakes, ponds and marshes.

Wetlands – Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. The ecological parameters for designating wetlands include hydric-soils, hydrophytes vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation.

ARTICLE 5 DEDICATION AND TRANSFER OF LANDS

5.1 DEDICATION OF PUBLIC LANDS AND FACILITIES

5.1.1 No land dedicated as a public street or other public purpose shall be opened or accepted as a public street or for any other public purpose, and no subdivision of land shall be made, nor subdivision plat, nor part thereof, shall be recorded before obtaining final approval from the City of Sandy Springs Department of Community Development. Said approval shall be entered in writing on the Final Plat by the Director. The Director is hereby authorized to accept such dedications of lands and public facilities on behalf of the city and to cause such dedications to be recorded by the Clerk of Superior Court of Fulton County, subject to ratification by the Mayor and City Council.

5.2 TRANSFER OF LAND OWNERSHIP

5.2.1 The city shall not recognize any transfer of title to land in the city by any person, firm, partnership,

association, corporation, estate, trust, developer, sub-divider or any other owner or agent and no building permit may be issued on said land, unless:

- a. Legal access to said land is provided to a public or private street approved under the terms of this Ordinance; and any of the following conditions are met,
- b. Said land existed as a single parcel of ownership, recorded as such in its entirety and present boundaries with the Clerk of Superior Court of Fulton County prior to the 2007 Development/Subdivision Regulations and at the time of recording was in compliance with the zoning and/or subdivision regulations in effect at that time; or,
- c. Said land is shown in its entirety and present boundaries on a Final Plat as approved (under this or any previous applicable ordinances or regulations) and duly recorded with the Clerk of Superior Court of Fulton County; or,
- d. Said land is shown in its entirety and present boundaries on a plat authorized by the Director and recorded with the Clerk of Superior Court of Fulton County pursuant to the Ordinances governing Subdivision Exemptions contained herein; or,
- e. Said land is an aggregation of properties for land assembly purposes, and no building permit will be requested prior to the filing of an application for an issuance of a Land Disturbance permit, pursuant to this Ordinance.

5.2.2 No person, firm, partnership, association, corporation, estate, trust, developer, sub-divider or any other owner or agent shall transfer title to any property by reference to, exhibition of, or any other use of any map of plat illustrating the subdivision of land without a Final Plat of said land showing said property first having been duly approved under the procedures of this Ordinance or any previously applicable Ordinances or regulations and recorded with the Clerk to Superior Court of Fulton County.

5.2.3 The divisions of property by court order, including but not limited to judgments of foreclosure or consolidation and disbursement of existing lots by deed or other recorded instruments, shall not be considered a subdivision for purposes of, and shall not obviate the necessity for compliance with, this Ordinance.

ARTICLE 6

PERMITS REQUIRED FOR DEVELOPMENT OR CONSTRUCTION

6.1 AUTHORIZATION REQUIRED FOR LAND DISTURBANCE OR DEVELOPMENT ACTIVITIES

6.1.1 Permit Required; Exemptions

No disturbance of the land, including clearing, grubbing, or grading activities, shall commence or proceed except in accordance with the provisions of this Development Ordinance, unless specifically exempted by state law or local ordinance.

6.1.2 Plan Review and Approval

Any commercial or residential builder or developer of land within the city shall first submit to the Department of Community Development such plans, plats, construction drawings, or reports as may be required by this Ordinance and Section 105-46 of the Code of the City of Sandy Springs and shall have been granted a permit consistent with the aforementioned Ordinance and approved by the Department of

Community Development prior to the initiation of construction or development activities. Approval of plans by city officials or employees shall not imply nor transfer acceptance of responsibility for the application of the principles of engineering, architecture, landscape architecture, or any other profession, from the professional corporation or individual under whose hand or supervision the plans were prepared and sealed. Article 10 of this Ordinance and Section 105-46 of the Code of the City of Sandy Springs details the elements of the required plans.

Any developer of land within the city shall first submit to the Department of Community Development such plans, plats, construction drawings, or reports as may be required by this Ordinance and shall have been granted a permit consistent with this Ordinance and approved by the Department of Community Development prior to the initiation of development activities. Approval of plans by city officials or employees shall not imply nor transfer acceptance of responsibility for the application of the principles of engineering, architecture, landscape architecture, or any other profession, from the professional corporation or individual under whose hand or supervision the plans were prepared and sealed. Article 10 of this Ordinance details the elements of the required plans.

a. Time limitations

An application for a permit for any proposed work shall be deemed to be abandoned six (6) months after the date of filing for the permit, unless before than a permit has been issued, or the permit application is still under review by the Land Development Division. One or more extensions of time for periods of not more than ninety (90) days each may be allowed by the Building Official for the application provided the extension is requested in writing and justifiable cause is demonstrated.

6.1.3 Approvals Required by Outside Agencies

a. Chattahoochee River Corridor Certificate

If any portion of a property included within a proposed project is located within 2,000 feet of the bank of the Chattahoochee River, the project shall first obtain a Certificate authorizing the development under the provisions of the Chattahoochee River Corridor before any clearing, grading, or construction activity may be granted a permit by the Department or any other agency. All permits issued by the city pursuant to such authorization shall be consistent with the requirements and provisions of the Certificate. Any violation of the provisions of the Chattahoochee River Corridor Certificate shall be considered as a violation of this Development Ordinance, and shall be subject to the enforcement and penalty provisions hereunder.

6.1.4 Interdepartmental Review and Approval

The Department shall not issue a permit for any development activities until the plans, plats, or construction drawings, as applicable, have been approved by such other departments as may have authority or jurisdiction over said activities in whole or in part.

6.1.5 Activities Limited to Permit Authorization

Development activities shall be limited to those as authorized by the applicable permit and as may be further restricted by conditions of approval pertaining thereto attached by the Department or other department or agency as may have authority or jurisdiction over said activities in whole or in part.

6.1.6 Developer's Responsibility for Compliance

No permit shall be interpreted to relieve any developer or sub-divider of the responsibility of maintaining full compliance with all codes, ordinances, and other regulations of the city except as amended by an approved modification, variance, or other relief granted through applicable formal appeal procedures for a specific property or application. Any permit issued in error or in contradiction to the provisions of an adopted code, ordinance, or regulation of the city shall be considered to have been null and void upon its issuance.

The developer or sub-divider shall be responsible for ensuring that all applicable external agencies are notified of the proposed work and that all necessary approvals have been obtained prior to commencing any activity covered by those approvals.

6.2 LAND DISTURBANCE PERMITS

6.2.1 General

The following permits covering portions of the land development process may be issued in accordance with the requirements of this Ordinance

6.2.2 Land Disturbance Permit

a. Development Activities Authorized

A Land Disturbance 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, storm water drainage facilities, sidewalks, or other structures permanently placed on or in the property except for buildings or other structures requiring the issuance of a building permit. Water and sanitary sewer system improvements shall be authorized by the utility provider; however, the location and land disturbing activities associated with those facilities may be reviewed and permitted by the city to ensure compliance with applicable tree protection, stream buffer, zoning buffers or other city standards which may be affected by the construction of these utilities. Utility locations which violate any city code or ordinance shall not be permitted without a variance or modification being issued by the city.

b. Permit Approval

A Land Disturbance Permit may be issued at the developer's request following approval of all other development plans and documents and payment applicable fees required to be submitted under Article 5 and Article 7 of this Ordinance. Approvals of water and sanitary sewer plans by the appropriate utility as well as approval from the state department of transportation or other external agencies may be required prior to the issuance of a Land Disturbance Permit.

c. Expiration of Land Disturbance Permit Application

An application submitted for a Land Disturbance Permit shall expire after 180 calendar days from the date of filing, unless such application has been pursued in good faith or a permit has been issued. The Director is authorized to grant a maximum of two extensions of time not exceeding 90 calendar days each. The extension shall be requested in writing and justifiable cause demonstrated.

d. Expiration of Land Disturbance Permits

A Land Disturbance Permit shall remain valid for the duration of the project subject to the following

time restrictions:

- i. Land Disturbance Permits shall expire 180 calendar days from the date of issuance if no inspection has been requested; or,
- ii. If 180 calendar days elapses between inspection requests.

The Director is authorized to grant, in writing, a maximum of two extensions of time, for periods not more than 180 calendar days each. The extension shall be requested in writing and justifiable cause demonstrated.

e. Lapse in Construction Activity

For the purposes of this Ordinance, a lapse in or suspension of development activity, as authorized by a Land Disturbance Permit, as a direct result of action or inaction on the part of the city which is completely beyond the control of the developer, shall not be considered as a lapse in activity causing the development permit to expire. The 180 calendar days within which development activity must begin shall exclude any such time period during which the activity is prohibited or has been caused to lapse by said City's action or inaction. Any action or inaction on the part of the developer which results in a suspension of development activity shall be counted toward the twelve month time period.

f. Posting of Permits and Noise Ordinance On-Site

The Land Disturbance Permit, along with the approved plans and construction noise hours, must be maintained on site until all work as proposed and approved is completed. The permit and construction noise hours shall be posted as follows:

- i. POSTING OF PERMIT - Work requiring a permit shall not commence until the permit holder or his/her agent posts the permit card in a conspicuous place on the premises. The permit shall be protected from the weather and located at a prominent location within five feet of a right of way at approximately five feet above grade, parallel to and facing the street within the right of way and prominently visible from the right of way. The permit shall be located such that the Building Official or the Building Official's representative shall be able to conveniently and safely access the permit and make the required entries thereon. This permit card shall be maintained in such position by the permit holder until the certificate of occupancy or completion is issued by the building official.
- ii. POSTING OF WORK HOURS - Work requiring a permit shall not commence until the permit holder or his/her agent posts notice of the allowable work hours that are stipulated within the Sandy Springs Noise Ordinance. The allowable work hours notice shall be prominently posted at all primary points of construction access to the site, at the permit posting location in a position readily visible without opening any enclosure and within any enclosure containing permit materials, and at all primary points of construction access to the interior of any building within which construction activity occurs. The allowable work hours notices shall be located prominently at eye level. The allowable work hour notices shall be maintained in such positions by the permit holder until the certificate of occupancy or completion is issued by the building official.

g. Tampering with Permits

Unauthorized tampering or modification of a permit, permit drawings or permit card shall be deemed a violation of this Ordinance.

6.2.3 Trenching Permits

a. Prohibition

No individual, partnership, corporation, or other entity of any kind whatsoever shall engage in any excavation or trenching except in the compliance with the provisions of this Article and in compliance with any applicable laws of the State of Georgia or of the United States or any rules and regulations of the U.S. Department of Labor, Occupational Safety and Health Administration, or any other state or federal governmental entity or department promulgating rules and regulations applicable to excavating and trenching.

b. Adoption of Federal Regulations

All safety and health regulations adopted by OSHA with regard to excavating and trenching operations, particularly Part 1926, Sub part P-Excavations, Trenching, and Shoring, Section 1926.650, 1926.651, 1926.652, 1926.653 of the Code of Federal Regulations, as the same now exist or may be hereafter amended are adopted as a part of this Article the same as if quoted verbatim herein.

c. Permit Required

No excavation or trenching shall be performed until a permit or authorization for same has been obtained from the City in accordance with this Ordinance. Any applicant will be required to acknowledge receipt and understanding of safety requirements before any permit will be issued. All such permits shall be posted in accordance with Article 6.2.2.(f)(i)(ii).

No permit or authorization shall be issued unless an authorized agent of the applicant holds a certificate.

d. Certificate Required

No equipment operator or supervisory personnel shall participate in any excavation or trenching or in any way work in an excavation or trench unless such person holds a valid certificate evidencing satisfactory completion of a required educational program on safe trench/excavation practices. No other person shall participate in or work in any excavation or trenching site unless a certificate holder is present at the excavation or trench site where work is being performed.

e. Inspection

The City shall periodically inspect trench/excavation sites. Such inspectors shall, among other things, verify the presence of the required permit, verify existence of required certificates, and verify compliance to OSHA safety standards herein above adopted. The inspectors may operate pursuant to a contract between the City and a third-party entity.

f. Violations

In addition to other penalties that may be assessed under this Ordinance, the following penalties may be imposed for violations of this section:

- i. Violations of this article may result in revocation or suspension of any permit issued hereunder as herein above set out.

- ii. A notice of violation shall be issued for any deficiency. Upon receipt of such notice, the deficiency shall be corrected immediately.
- iii. All excavating and trenching work upon any job site shall cease immediately when there is trench activity by any person not a certificate holder and/or when the deficiencies cannot be corrected immediately and/or when such work is being done without a permit.
- iv. If deficiencies identified in a notice of violation are not corrected, the building permit, Land Disturbance Permit or any other permit issued by the city may be suspended or revoked for due cause upon the conditions herein identified for revocation of permit.
- v. Flagrant and/or repeated violations shall be reported by the city to OSHA for action by that agency.

6.2.4 Retaining Wall Permits

a. Additional Requirements

In addition to the requirements of this section all retaining walls shall comply with the provisions of Article 13 of this Ordinance.

b. Height Requirements

A retaining wall permit shall be issued for all retaining walls 4 feet in height or greater. A site plan shall be submitted with the application that shows the proposed location of the retaining wall relative to the residence, the property boundaries, setback lines, septic tank and septic tank drain field (if any), any easements on the site, and erosion and sediment control measures and shall comply with all requirements of the Zoning Resolution.

c. Certification by Professional Engineer

In addition to the requirements for a wall 4 feet in height or a greater, any walls more than 6 feet in height shall include a design signed and sealed by a qualified, professional engineer registered in the State of Georgia.

d. Standard for Measurement of Wall Height

The height of the wall shall be measured from the grade level at the front of the wall to the grade level at the back of the wall at the same section. For walls that are not a constant height the largest of these measurements shall be used to determine the height of the wall.

6.2.5 Right-of-Way Encroachment/Utility Permits

No person or company shall perform construction work in the street right-of-way without a permit issued by the city Public Works Department in accordance with the city code of ordinances. Such permit is posted at the construction site at all times. Such construction must conform to the construction/maintenance guidelines and specifications of the city and/or the state department of transportation.

6.2.6 Tree Removal Permits

A tree removal permit may be required for any activity which may result in the removal, damage or

destruction of any tree as defined in the Tree Conservation Ordinance.

6.2.7 Groundwater Well & Septic Permits

No person or company shall install or perform construction of groundwater wells or septic systems without prior approval from the Fulton County Department of Health & Wellness and completion of a pre-construction meeting with the City of Sandy Springs.

6.3 BUILDING PERMITS

6.3.1 Applicable Codes

Building permits for all structures or interior finishes are issued after meeting the applicable requirements of the fire prevention and life safety codes, and the various health, water, sewer, and provisions of Sandy Springs Overlay District, building codes of the city or utility providers, as well as the provisions of any Certificate approved under the Chatahoochee River Corridor, if applicable and the provisions of this Ordinance.

6.3.2 Sanitary Sewage Disposal

a. Septic Systems

For any structure for which on-site sewage disposal (septic systems) will be provided, a permit issued by the Fulton County Health and Wellness Department shall be required prior to issuance of a building permit. Said permit may first require approval by the Fulton County Health and Wellness Department of a plan showing the location of the sewage disposal system and other site improvements, in accordance with their regulations.

b. Connection to Public Sanitary Sewer

Any structure which requires a connection to or modification of the existing sanitary sewer system shall require approval from Fulton County prior to the issuance of a building permit.

6.3.3 Potable Water Supply

For any structure for which a connection to the potable water system is required shall provide proof of payment of all applicable fees to the water provider.

6.3.4 Single-Family and Duplex Residences

a. A building permit for a single or two-family residence may be issued after the recording of a Final Plat or after the lot upon which the building is to be located has otherwise become a buildable lot of record or as a model home permit as provided for in Section 6.3.9.

b. The approval by the Department of a residential site plan may be required prior to issuance of the building permit, as noted and conditioned on the Final Plat or as may be required for compliance with the Chatahoochee River Corridor. For such lots, a Certificate of Occupancy shall not be issued until conformance to the site plan has been field verified by the Department. A certified foundation survey prepared by Registered Land Surveyor may be required where, in the opinion of the Director, the foundation may encroach in any setback or buffer.

c. For single or two-family residences where land disturbing activities exceed 1.0 acre a Land

Disturbance Permit may be issued in accordance with the provisions of Section 6.2.2 of this Ordinance prior to the issuance of a building permit.

6.3.5 Swimming Pools

Issuance of a building permit for a swimming pool as an accessory use to a single or two-family residence, whether to be issued at the same time as or subsequent to the permitting or construction of the house or duplex, shall first require approval of a Swimming Pool Site Plan. The plan shall show the proposed location of the swimming pool and enclosing fence relative to the residence, the property boundaries, setback lines, septic tank and septic tank drain field (if any), and any easements on the site, and shall comply with all requirements of the Zoning Ordinance and Swimming Pool Code. An administrative permit is required. A Certificate of Occupancy or a Certificate of Completion shall not be issued until conformance to the Swimming Pool Site Plan and all applicable building codes has been field verified by the Department. Additionally, all permitted swimming pools must conform to the swimming pool discharge policy.

6.3.6 Multi-Family and Nonresidential Structures

- a. Issuance of a building permit for any principal building other than a single-family detached or duplex residence (and associated accessory structure) shall first require issuance of a Land Disturbance Permit for the building site, and the building permit shall be consistent with said Land Disturbance Permit.
- b. Building plans must be reviewed and approved by the Department prior to permitting for all structures.
- c. Fulton County approval may be required prior to the issuance of a building permit for construction activities involving, food service, commercial swimming pools, dumpster pads, hotels or motels, grease traps, etc ...

6.3.7 Demolition Permits

Demolition permits may be required for the partial or complete demolition of the interior or exterior of any structure within the city. Pursuant to the State of Georgia's asbestos Safety Act an asbestos survey shall be required.

6.3.8 Expiration of Building Permits

A building permit shall remain valid for the time period specified in the building codes as adopted by the city.

6.3.9 Issuance of Building Permits Prior to Final Plat

Building permits shall only be issued on buildable lots of record, as defined in this Ordinance, except under special circumstances limited to and as specifically described in this Section.

a. Single-family Residential Model Homes

In single-family detached and duplex residential subdivision, after approval of the conceptual plan the sub-divider may be allowed one building permit for each 15 lots located in the proposed subdivision provided the sub-divider provides an Agreement to Install Improvements form and a cash surety equal to 125% of the cost of the remaining infrastructure improvements, based on written estimates by the

design professional for the project. No more than 10 building permits for model homes will be allowed in any one subdivision. For lots where model homes are proposed the following conditions must be met prior to the issuance of the building permits:

- i. The lots shall be located within 300 feet of an active fire hydrant; and
- ii. Sanitary sewer and water service for these lots shall be installed and approved by the governing regulatory authority; and,
- iii. The lots shall have a minimum 20 foot wide fire access road extending from a paved public street to within 100 feet of the proposed structure.

A Certificate of Occupancy shall not be issued for the completed model home until the Final Plat encompassing the model home building lots has been approved and recorded, without the express approval of the Director.

b. Non-Residential Subdivisions

Building permits may be issued by the Department on the basis of an approved Preliminary Plat/Conceptual Plan and after a Land Disturbance Permit has been approved reflecting the site plan and construction drawings for specific buildings and associated site improvements. Issuance of the building permits shall be conditioned on the following:

- (1) An approved surety shall have been received in a form acceptable to the City Attorney, drawn in favor of the city and in an amount not less than 125 percent of the cost of completing all public improvements as authorized and required by the Land Disturbance Permit; and,
- (2) The performance bond or other approved surety shall not exceed an aggregate total for all required public improvements of \$12,000 per acre for the total acreage included within the subdivision or portion of the subdivision wherein the improvements are proposed, except by approval of the Mayor and Council. For any project whose remaining work exceeds an amount equal to the \$12,000 per acre, provided herein, shall be not substantially complete and not eligible for building permits ; and,
- (3) Fire Marshal Division approval shall be required prior to issuance of any building permit, which may include approval of acceptable access and water under pressure for combustible construction; and,
- (4) Approval of the Fulton County Health and Wellness Department for on-site sewage disposal or the Fulton County Sewer Department for a building to be served by public sewer shall be required prior to issuance of any building permit; and,
- (5) Construction of the required public improvements shall proceed concurrently with construction of the buildings; and,
- (6) No Certificate of Occupancy shall be approved for any structure within the subdivision prior to recording of the Final Plat without the express approval of the Director; and,
- (7) The Director shall have found that the public interest is best served and that a public purpose is involved in the acceptance of the surety.

c. Fee-Simple Townhouse Subdivisions

A building permit may be issued on a buildable lot of record established for each building (containing any number of townhouse dwelling units) through recording of a Final Plat following completion of all required public improvements. Upon completion of the buildings, the Final Plat shall be rerecorded to establish individual lots for the townhouse units, based on their actual locations, prior to issuance of Certificates of Occupancy.

ARTICLE 7

PROCEDURES

7.1 REVIEW PROCEDURES

7.1.1 General Requirements

- a. Any sub-divider of land within the incorporated limits of the city shall submit to the Department of Community Development a minor or conceptual/preliminary plat of the proposed subdivision conforming to all requirements set forth in this Ordinance and any other applicable county, state and federal regulations. Once the conceptual/preliminary plat is approved, a final plat must be filed which conforms to requirements set forth in this Ordinance.
- b. All final plats, replats and minor plats shall have the consent of the owners of all affected lots shown on said plat. Replats or new plats showing modifications to common areas shall require the consent of owners of all lots shown in the original final plat.
- c. Proposals for the subdivision, combination, or recombination of lawful previously platted lots or parcels, or portions thereof, shall be in compliance with the city zoning ordinance, as amended and/or approved conditions of zoning.
- d. Where a proposed lot fronts an existing public street, the sub-divider shall improve the street along the lot's frontage to the applicable standards of this Ordinance and any standard details as determined by the Director.
- e. All slope, drainage and utility easements, as well as necessary right-of-way on an existing public street, paved or unpaved, shall be dedicated by the sub-divider at no cost to the city.
- f. Each proposed lot shall comply with the requirements of the health department, whose certification of approval shall accompany the submission of the final plat.

7.1.2 Conformance to the City Comprehensive Plan

- a. All proposed subdivisions shall conform to the Cities Zoning Ordinance and this Ordinance.
- b. The Director shall not approve plats when such planned features, as specified by the Comprehensive Plan, are not incorporated into the plat.

7.1.3 Determination of Completeness

- a. All applications shall be complete before acceptance for review and decision-making. A determination of completeness is a determination that all required documents and plans have been submitted in sufficient number and detail to determine compliance with the applicable city ordinances, and that all fees have been paid. A determination of completeness is not a determination

of compliance with substantive standards and criteria.

- b. The Director shall determine, within five (5) business days of receipt of an application, whether the application is complete.
- c. If the Director determines that the application is not complete, the Director shall send notice to the applicant identifying the deficiencies. Until the applicant corrects the deficiencies, no further action shall be taken for processing the application. If the applicant fails to correct the deficiencies within 180 calendar days, the application shall be deemed withdrawn, and fees shall be forfeited.
- d. If the Director determines that the application is complete, the application shall be processed for review and action in accordance with the procedural requirements set forth in this Ordinance.

7.1.4 Pre-Application Conference

Whenever any subdivision of a tract of land is proposed to be made, whether for residential or nonresidential development, the sub-divider is encouraged to present to the Department preliminary documents and graphic exhibits to permit early evaluation of the sub-divider's intentions and coordination with the Zoning Ordinance, Metropolitan River Protection Act, Stormwater Management Ordinance etc., and to inform and provide the sub-divider with the necessary ordinances in order to properly accomplish the proposed project.

7.1.5 Minor Plat Approval (3 lots or less)

a. Applicability

A subdivision of land may be reviewed under the provisions of a minor plat when all of the following are true:

- i. The subdivision contains 3 lots or less; and,
- ii. The subdivision does not require the extension of utilities or other municipal facilities; and,
- iii. No new streets or roads are required.

b. Application

Application for minor plat approval shall be submitted to the Department of Community Development using an application form and in a number of copies to be determined by the Director

c. Determination of Completeness

The Director shall make a determination of completeness as set forth in Section 7.1.3. When an application for development plan has been determined to be complete, the application and all accompanying information shall be distributed to all required reviewers.

d. Plan Requirements

The minor plat shall be in compliance with the requirements for minor plats found in Article 10 .1.

e. Compliance with Codes and Ordinances

- i. A minor plat may be exempt from the standard plat review process; however, a minor plat is

not exempt from the design and construction standards contained in this Ordinance and other city codes and ordinances. Upon submittal of the minor plat application the Director shall determine what, if any, additional reports, construction drawings or information may be required to ensure compliance with all applicable ordinances and Regulations.

- ii. The sub-divider shall be responsible for compliance with all codes, Ordinances, regulations, and zoning requirements and for the satisfaction of all of the noted and written comments provided by the city.

f. Review Comments

The city shall indicate on a review copy of the drawings or in a written memorandum all comments related to compliance of the development plans with this Ordinance, principles of good design, the Zoning Ordinance, conditions of zoning approval, and the Ordinances of other City departments as appropriate. The Director shall have final staff authority to determine the applicability of any and all comments under this Development Ordinance, with the exception of Articles 11 and 12 which shall be at the discretion of the Public Works Director, the Zoning Resolution or conditions of zoning approval.

g. Minor Plat Approval

Final approval by the Director shall not be shown on the plat until all requirements of this, and other applicable City Ordinances have been met.

Once the Department has approved the minor plat the Director shall certify by his/her signature on the original of the plat. The plat shall not be deemed approved until it has been signed by the Director and by a duly authorized representative of the Health Department.

h. Recording of the Minor Plat

Once the Minor Plat has been so certified, the plat will be considered approved and the Director shall authorize it to be recorded with the Clerk of the Superior Court. The sub-divider shall provide the Department with an appropriate number of copies of the recorded plat, as determined by the Director. Deeds to lands dedicated to the city in fee simple shall be recorded simultaneously with the plat.

i. Amendments to a Minor Plat

Each lot created under the provisions of a minor plat shall not subsequently be re-subdivided pursuant to the provisions of a minor plat. Such re-subdivision shall be accomplished only through the procedures contained herein for a plat that does not meet the requirements of a minor plat.

7.1.6 Conceptual Plan/Preliminary Plat Approval

a. Application

Application for Conceptual Plan/Preliminary Plat approval shall be submitted to the Department of Community Development using an application form and in a number of copies to be determined by the Director

b. Plan Requirements

The conceptual plan/preliminary plat shall be in compliance with the requirements for Conceptual Plans / Preliminary Plats found in Article 10.1.

c. Expiration of Conceptual Plan/Preliminary Plat

A conceptual plan/preliminary plat shall remain valid for a period as follows or for as long as construction activity is continuous and at least 25 percent of the land area within the plan has received final plat approval:

- i. 2 years for subdivisions of 50 lots or less
- ii. 3 years for subdivisions of more than 50, but less than 300 lots
- iii. 4 years for subdivisions of more than 300 lots

If the Conceptual Plan/Preliminary Plat Approval expires, a new application shall be submitted and shall be subject to the rules and regulations and Ordinances in effect at the time of such submission.

d. Unbuildable lots

The Director may not approve any Conceptual Plan/Preliminary Plat whereon is shown a lot which would present particularly unusual difficulties for construction of a building, which would clearly require a variance to be reasonably usable, or which is otherwise "unbuildable" because of its unusability, whether due to the presence of floodplain, unusual configuration, lack of public utilities or for any other reason. A Residential Site Plan may be required to be filed as a part of the Conceptual Plan/Preliminary Plat approval to substantiate the buildability of any such difficult or unusual lot.

7.1.7 Development Plan Approval for All Applications

a. Land Disturbance Permit Required

No developer shall proceed with any land disturbing activity, including clearing, grading or grubbing, before obtaining a Land Disturbance Permit from the city.

b. Application Requirements

An application for development plan approval and issuance of a Land Disturbance Permit shall be submitted to the Department of Community Development using an application form and in a number of copies as determined by the Director. The development plans may encompass a portion of a property included within an approved Conceptual Plan/Preliminary Plat. The application shall include the construction drawings and other related engineering data as required in Article 10 and all application fees. For subdivisions the plans shall also include the conceptual plan/preliminary plat, when required by this Ordinance. All construction drawings and other engineering data shall be prepared and signed and sealed by a Professional Engineer currently registered in the State of Georgia, in accordance with provisions of Georgia Law. Portions of the plans may be prepared and signed and sealed by other registered professionals as provided for in Georgia Law.

c. Determination of Completeness

The Director shall make a determination of completeness as set forth in Section 7.1.3. When an application for development plan has been determined to be complete, the application and all accompanying information shall be distributed to all required reviewers.

d. Review Comments

The city shall indicate on a review copy of the drawings or in a written memorandum all comments related to compliance of the development plans with this Ordinance, principles of good design, the Zoning Ordinance, conditions of zoning approval, and the Ordinances of other City departments as appropriate. The Director shall have final staff authority to determine the applicability of any and all comments under this Development Ordinance (with the exception of Articles 11 and 12 which shall be at the discretion of the Public Works Director), the Zoning Ordinance or conditions of zoning approval.

e. Compliance with Codes , Ordinances and Regulations

The sub-divider shall be responsible for compliance with all codes, Ordinances, regulations, and zoning requirements and for the satisfaction of all of the noted and written comments provided by the city.

f. Deeds of Dedication

Deeds to lands dedicated to the city in fee simple, shall be submitted to the Director for recording prior to the issuance of a Land Disturbance Permit. When the project involves the subdivision of land the deeds may be submitted prior to approval of the final plat.

g. Appeals

Should an applicant disagree with the findings or final review comments of the city, concluding that factual or interpretive errors have been made, the applicant may appeal the decision in accordance with Section 3.2.1 of this Ordinance.

h. Plan Approval

When the Director has determined that the development plans are in compliance with all applicable City Ordinances and zoning requirements and approval has been received from all affected city departments, he/she shall sign and date the development plans to indicate the plans compliance. A development plan may be approved with conditions which may be noted on the approved plans or the permit. Copies of the approved development plans shall be provided to the applicant and at least one copy shall be retained by the Department for its records.

i. Permit Issuance

Following the above approval by all affected city departments, a Land Disturbance Permit may be issued at the developer's request to begin construction activities based on the approved development plans.

7.1.8 Final Plat Approval

a. Application

When the provisions of this Ordinance have been complied with, the sub-divider may submit to the Department an application for Final Plat approval, using an application form and in a number of copies as determined by the Director. The final plat shall comply with the requirements for final plat submittal in Article 10.

b. Review Comments

The Director shall indicate on a review copy of the plat or in a written memorandum all comments related to compliance of the Final Plat with this Ordinance, the Zoning Ordinance, conditions of zoning approval, and the ordinances of other city departments. The Director shall have final staff authority to determine the applicability of any and all comments under this Development Ordinance, the Zoning Resolution or conditions of zoning approval, with the exception of Articles 11 and 12 which shall be under the authority of the Public Works Director.

c. Unbuildable Lots

The Director may not approve any Final Plat whereon is shown or by which is otherwise created a lot which would present particularly severe and unusual difficulties for construction of a building, which would clearly require a variance to be reasonably usable, or which is otherwise "unbuildable" due to the presence of floodplain, unusual configuration, lack of Fulton County Health Department approval, or for any other justified reason.

d. Lots Which Require Additional Information

Lots which would appear to be buildable under certain circumstances and would require further study or additional information before a building permit could be issued, but which present problems or unusual difficulties which can reasonably be addressed or overcome by the lot owner, may be included in the Plat with the appropriate notation of the steps necessary to allow issuance of a building permit.

e. Compliance with Codes, Ordinances and Regulations

The sub-divider shall be responsible for compliance with all codes, ordinances, regulations, and zoning requirements and for the satisfaction of all of the comments of the Director.

f. Final Plat Approval

Final approval by the Director shall not be shown on the Final Plat until all requirements of this, and other applicable city ordinances have been met, all improvements required under the Land Disturbance Permit have been substantially completed and the Final Plat requirements provided for in Article 10 have been completed. A project may be deemed substantially complete following the installation of the stormwater management facilities, water and sanitary sewer service, curb and gutter, base and binder installation or other items as may be required by the Director.

Once the Department has approved the Final Plat the Director shall certify by his/her signature on the original of the plat. The Final Plat shall not be deemed approved until it has been signed by the Director and by a duly authorized representative of the Health Department.

g. Recording of the Final Plat

Once the Final Plat has been so certified, the final plat will be considered approved and the Director shall authorize it to be recorded with the Clerk of the Superior Court of Fulton County. The sub-divider shall provide the Department with an appropriate number of copies of the recorded plat, as determined by the Director. Deeds to lands dedicated to the city in fee simple, or to Property Owner Associations for park or recreational use, shall be recorded simultaneously with the Final Plat.

h. Ratification by Mayor and City Council

Periodically, but no less often than once each month, the Director shall submit a listing of all approved Final Plats to the Mayor and City Council for ratification of acceptance of all dedications.

7.1.9 Performance Sureties

- a. When deemed appropriate by the Director a performance surety may be required prior to approval of development conformance for those improvements not yet completed. A performance surety meeting the following requirements shall be filed by the applicant:
 - i. Be conditioned upon the faithful performance by the sub-divider or developer of all work required to complete all improvements and installations for the development, or approved portion thereof, in compliance with this Ordinance within a specified time and,
 - ii. Be payable to, and for the indemnification of, the city; and,
 - iii. Be in an amount equal to 125 percent of the cost of construction of the required improvements not yet completed, as calculated by the Director on the basis of yearly contract prices or City contracts, where available. When contract prices are not available the Director may use cost estimates from any source deemed reasonable by the Director to approximate the cost of the proposed work; and,
 - iv. Where a surety is acceptable it shall be issued by a company entered and licensed to do business in the State of Georgia; and,
 - v. Be in a form acceptable to the Director or the City Attorney and may be submitted in the following formats:
 - 1. Cash, to be deposited in an escrow account
 - 2. Cashiers check or money order
- b. If the applicant fails to complete the work as stated in the surety agreement within the stated timeframe the city may call the surety and use the proceeds to complete the work.
- c. Additional surety funds may be required for work that is completed within the right-of-way, city easement or other city property under a Right-of-Way / Utility permit.

7.1.10 Maintenance Sureties

- a. A maintenance surety shall be filed by the sub-divider or developer to ensure the viability of the infrastructure improvements. The maintenance surety shall be valid for a period of not less than 15 months and shall comply with the following requirements:
 - i. Be payable to, and for the indemnification of, the city; and,
 - ii. Be in an amount as calculated by the Director on the basis of yearly contract prices or City contracts, where available. When contract prices are not available the Director may use cost estimates from any source deemed reasonable by the Director to approximate the cost of the work; and,
 - iii. Where a surety is acceptable it shall be issued by a company entered and licensed to do business in the State of Georgia; and,

- iv. Be in a form acceptable to the Director or the City Attorney and may be submitted in the following formats:
 - 1. Cash, to be deposited in an escrow account
 - 2. Cashiers check or money order
- b. Repairs shall be made by the contractor or developer for any deficiencies identified within the surety period or the city may call the sureties and use to the proceeds to complete the repairs.
- c. Additional surety funds may be required for work that is completed within the right-of-way, city easement or other city property under a Right-of-Way / Utility permit.

7.2 INITIATION OF DEVELOPMENT ACTIVITIES

7.2.1 Initial Activities Required

Following the issuance of any permit authorizing land disturbance of a site:

a. Pre-Construction Meeting

A pre-construction meeting shall be scheduled with the land development inspector assigned to the project prior to commencing any construction activities on the site. The developer shall provide the inspector a minimum of 24-hour notice to schedule the meeting.

b. Installation of Initial Erosion and Sediment Control Measures

- i. Required erosion control measures must be installed where practical by the developer and inspected and approved by the Department prior to actual grading or removal of vegetation. All control measures shall be in place as soon after the commencement of activities as possible and in coordination with the progress of the project.
- ii. Soil sedimentation facilities must be installed and operational prior to major grading operations.

c. Staking of Undisturbed Areas

Areas required to be undisturbed by the Zoning Resolution, conditions of zoning approval, Metropolitan River Protection Act or other ordinance or regulation shall be designated by survey stakes, flags, or other appropriate markings and shall be inspected and approved by the Department of Development prior to the commencement of any clearing or grading activities.

7.2.2 Tree Protection Areas

Prior to the initiation of land disturbance activities and throughout the clearing and grading process the following must be accomplished for a designated tree protection area in accordance with any approved Buffer and Landscape Plan or Tree preservation/Replacement Plan for the property:

- a. For those trees which are not to be removed, all protective fencing, staking, and any tree protection area signs shall be in place. These barriers must be maintained throughout the land disturbance process and should not be removed until landscaping is begun.

- b. The tree protection areas shall not be utilized for storage of earth and other materials resulting from or used during the development process.
- c. Construction site activities such as parking, materials storage, concrete washout, burning, etc. shall be arranged to prevent disturbances within the tree protection areas.

7.2.3 Land Disturbance Inspections

It shall be the responsibility of the developer or contractor to notify the city at least 24 hours prior to commencement of activity for each of the following phases as authorized by any permit for site work or development. Inspections shall be made by the Department and passed prior to continuation of further activity or proceeding into new phases.

- a. Clearing or clearing and grubbing of the site or any portion included under the permit.
- b. Grading. Installation of slope stakes and street grade stakes may be required. Compaction tests may be required by the city in accordance with the requirements in Article 11.
- c. Installation of storm drainage pipe, detention, or other storm water facilities.
- d. Installation of sanitary sewer and appurtenances. Notification shall be made by the contractor or developer to the appropriate utility provider. Approval from the utility provider may be required prior to commencement of further development activities.
- e. Curbing of roadways. Inspection should be requested before the forms have been set (if used). Roadway width will be spot checked by string line between curb stakes.
- f. Water. Notification shall be made by the contractor or developer to the appropriate utility provider. Approval from the utility provider may be required prior to commencement of further development activities.
- g. Sub-base or sub-grade of streets. After compaction, the sub-grade will be string-lined for depth and crown. The sub-grade shall be roll tested and shall pass with no movement, to the satisfaction of the Department.
- h. Street base. The base will be string-lined for depth and crown, and shall pass a roll test with no movement to the satisfaction of the Department.
- i. Paving. A Department inspector shall be on site during the paving process to check consistency, depth, and workmanship, as applicable. For asphalt paving, the temperature of the material may be spot-checked, and the roadways will be cored after completion to check thickness. Cores shall typically be located every 300 feet on alternating sides of the street and at the center of cul-de-sacs where no landscape island is present. When landscape islands are present in the cul-de-sac a core will be taken at a location identified by the land development inspector.
- j. Sidewalks. Inspection should be requested after the forms have been set but prior to setting concrete or other materials as may be required.
- k. Erosion and Sediment Control. During all stages of construction erosion and sediment control measures shall be inspected. The applicant is responsible for continued maintenance of all E&S measures and may be subject to inspection at any time.

- I. Additional inspections may be required prior to approval of the Final Plat or issuance of a certificate of occupancy as may be deemed necessary to ensure compliance with the Land Disturbance Permit. Contact the land disturbance inspector to determine additional inspection requirements.

7.2.4 Responsibility for Quality and Design

The completion of inspections by city officials or employees and authorization for work continuation shall not transfer responsibility for the quality of the work performed or materials used from the contractor or developer, nor imply or transfer acceptance of responsibility for project design or engineering from the professional corporation or individual under whose hand or supervision the plans were prepared.

7.2.6 Stabilization for Erosion Control

If for any reason a Land Disturbance Permit expires after construction activities have commenced, the developer shall be responsible for stabilizing the site for erosion control, under the direction of the Department.

7.3 ASSIGNMENT OF NAMES AND ADDRESS

7.3.1 Address numbers.

All residential, commercial, office, industrial and other tracts of land in the City on which a principal building is or will be located are required to be issued an address by the department or its successor department. Each such address shall be posted by the owner on or about the tract in accordance with the following guidelines:

(1) Except as permitted in subsection 7.3.1 (f) of this article, all addresses shall contain (in addition to the roadway name) numbers only. Alphanumeric or lettered addresses shall not be permitted. Each address shall conform to the following rules:

- a. For non-single family residential properties, all principal buildings shall have affixed to the building the address number(s) directly over or on the main entrance door(s). Such address numbers shall be at least six inches and not more than twelve inches in height and shall be of a color which contrasts with the surrounding surface so as to be readily identifiable without obstruction from the edge of the roadway. Each building letter shall be prominently displayed on each side of said building that is visible from the main access or parking area serving the project or complex in which the building is located. Such building letter shall be at least 12 inches in height and shall be of a color which contrasts with the surrounding surface so as to be readily identifiable without obstruction from the edge of the roadway.)

Non-single family residential properties shall have only one address assigned for each principal building. Once a systematic pattern of addresses has been established by the department, it shall be maintained for the entire project. Alternatively, such non-single family residential developments shall seek approval from the department of names of internal streets within the development, in which case the department shall assign addresses on such internal streets. Non-single family residential developments (including apartments, townhouses and condominiums) shall have building addresses (and letters for multiple buildings) for the principal building(s) and numbers for each individual unit as approved by the department. Condominiums and/or town homes to be occupied by independent owners may be assigned individual addresses. Unit numbers shall be assigned based upon a system whereby the first digit represents the building floor.

b. For non-residential properties, all principal buildings shall have affixed to the building or structure the address number directly over or on the main entrance door(s). Such address numbers shall be at least six inches and no more than twelve inches in height and shall be of a color that contrasts with the surrounding surface so as to be readily identifiable without obstruction from the edge of the roadway. Each building letter shall be prominently displayed on each side of said building that is visible from the main access or parking area serving the development in which the building is located. Such building letter shall be at least twelve inches in height and shall be of a color which contrasts with the surrounding surface so as to be readily identifiable without obstruction from the edge of the roadway.

Non-residential properties shall have only one address and shall be assigned a building letter for each principal building and individual suite numbers by the department. Letters shall not be used to distinguish between individual suites. Once a systematic pattern of addresses has been established by the department, it shall be maintained for the entire project. Alternatively, such non-residential developments shall seek approval of names of internal streets within the development, in which case the department shall assign addresses on such internal streets.

c. For all commercial, office, industrial or multi-family residential developments that contain multiple addresses and/or building numbers, the range of addresses and/or building numbers shall also be posted on the main sign or identification monument at the main entrance and shall be readily identifiable from the edge of the roadway. Directions to other buildings within such a development shall be clearly posted at each internal roadway intersection. For multi-family residential developments, directional signs indicating the location of individual units shall be placed on each floor at the primary point of ingress and egress (e.g., at the elevator or main stairwell).

d. For all commercial, office, industrial or multi-family residential developments any entrance way or principal building that is not readily visible from the roadway, address numbers shall also be posted at the main entrance or driveway to the principal building. Such address numbers shall be at least six inches and not more than twelve inches in height and shall be of a color which contrasts with the surrounding surface so as to be readily identifiable without obstruction from the edge of the roadway. (2000 International Fire Code, Section 505).

e. For properties whose primary access is different from their lot frontage, address number shall be assigned and posted from the access point.

f. Each single family dwelling shall have its address number posted on a mailbox or addressing post located at or near the main entrance or vehicle access point to the property. Such address numbers shall have a minimum stroke height of three inches and shall be of a color that contrasts with the surrounding surface so as to be readily identifiable without obstruction from the edge of the roadway.

g. Notwithstanding any other provisions in this article, all properties shall be identified by a property number of a minimum size as identified in this section. All permanent free-standing signs shall display the street number assigned to the principal parcel. These street numbers shall have a minimum height of six inches. The address shall be visible from both directions of approach and be placed on a contrasting background.

h. If access to any principal building is by way of a roadway different from the principal building's address roadway, the address number shall be posted on the address roadway. In such cases, the address roadway and address number shall also be posted on each entrance roadway at the intersection of the access point and the entrance roadway.

i. Each roadway, including state and federal highways, shall contain address numbers that are consistently sequenced throughout its length.

j. Address numbers shall be assigned such that, traveling from lower address numbers to higher address numbers, odd-numbered addresses are on the right side of the roadway and even-numbered addresses are on the left side of the roadway.

k. Each property owner shall keep all address numbers in good repair and shall not allow such numbers to be obscured as viewed from the roadway.

l. To the extent not in conflict with the provisions of this article, Sandy Springs shall follow the guidelines set forth in the *Proposed Property Numbering System for Metropolitan Atlanta promulgated by the Atlanta Region Metropolitan Planning Commission (1963)*, except for internal cul-de-sacs. Cul-de-sacs shall be addressed in three digit numbers (100, 110, etc). Internal cul-de-sacs shall comply with the remaining provisions of this section and this article.

m. The property owner shall have the responsibility of ensuring compliance with the requirements of this section, regardless of whether the premises are leased or owner-occupied.

7.3.2 Subdivisions and other new developments.

(a) All project names for and roadway names and addresses within subdivisions and other new developments shall be reviewed and approved by the department during the minor subdivision plat or land disturbance permit (LDP) approval process. Prior to the release of a LDP, all street names must be approved for use within the subdivision. Once a project name has been approved, it shall not be changed without written permission by the director of the department. For continuity, the LDP number assigned to the project, regardless of the project name used at the time of submittal, must appear on the face of all referenced documents, including, but not limited to, all LDP drawings, studies, plans and plats.

(b) Each application for a land disturbance permit for a multi-family development shall include a concept plan identifying all proposed roadways with the proposed names for said roadways. Any subsequent request for roadway name or address changes by the subdivider or developer will require submission of a new preliminary plat (or concept plan, as applicable) for review by the department.

(c) Once an LDP is approved, no lot number, street name or address shall be changed by the re-recording of a plat without the prior expressed written consent of the department. No application for a permit on said lot thus affected will be considered until approved by the department. Each request submitted for the re-recording of a plat shall be charged a processing fee as established by the Mayor and Council.

7.3.3 Exceptions.

When the Director finds that adherence to the address numbering standards, set forth in this article would pose a threat to public safety, deviations from the standard address numbering policies and procedures may be allowed.

7.3.4 Project names.

No new project name may be recorded, used or posted unless and until approved by the Department. Duplication of project names is prohibited. The use of a project name that is a homonym, sounds like or may otherwise be confused with a project name that is already in use within the City is prohibited.

7.3.5 Roadway names.

No new roadway name may be posted or used in an address unless and until approved by the Department.

- (1) Roadway names must be reserved for use prior to the release of the land disturbance permit or minor plat.
- (2) Roadway names, once approved, shall be held in reservation for use by the owner/developer for a period not to exceed 36-months.

7.3.6 Standards for roadway names.

- (a) Duplication of roadway names is prohibited. No roadway name shall contain a number (e.g., 5th Street), and, except for suffixes, there shall be no punctuation or abbreviation allowed in any roadway name.
- (b) The use of the same roadway name that is already in use within the City is prohibited.
- (c) The use of a roadway name that is a homonym, sounds like or may otherwise be confused with a roadway name that is already in use within the City is prohibited. Duplicate names with different suffixes should be limited within the same project whenever possible, subject to the review and approval of the Department.
- (d) Each roadway, regardless of length, shall have only one name designation throughout its length. Each new roadway that is in alignment with an existing roadway shall bear the same name as said existing roadway.
- (e) No roadway name, including spaces between words and suffix, may be more than 12 characters in length.
- (f) To the greatest extent feasible, roadways that cross into other jurisdictions shall be named and addressed consistently with the names and addresses assigned by such other jurisdictions.
- (g) Street signs, including street name signs, must be installed before any building permits are issued within a development, except that a bond may be offered per the department's policies to cover the costs of the signage and temporary signs erected to release building permits. Permanent signs must be installed prior to the release of any certificate of occupancy within the development.

7.3.7 Private roadway naming.

The following Ordinance and procedures are established for the mandatory and voluntary naming of private roadways, easements and drives.

- (1) A private roadway, easement or drive serving residential properties shall be required to be named and addressed if there are more than two principal buildings that are not part of a single tract of land which derive access from such private roadway, easement or drive.
- (2) If a private roadway, easement or drive requires naming pursuant to subsection (a), above, a petition, containing the signatures of at least 90 percent of the owners of all real property along such private roadway, easement or drive, must be submitted to the department. In addition to a request for approval, the petition shall include the proposed name for the private roadway, easement or drive that

is acceptable to the petitioners. The proposed name shall conform to the other requirements of this article. The petition shall be accompanied by a general location map and the land lot(s), district, and section within which such private roadway, easement or drive is located.

(3) Upon approval of a name for the private roadway, easement or drive, and prior to the issuance of any building permits or additional permits the petitioners, shall cause a roadway sign conforming to the City's standards to be erected and maintained at each intersection of such private roadway, easement or drive and any adjacent a public right-of-way. Maintenance of such roadway signs and private roadways, easements or drives shall be the responsibility of the owners of the real property situated along such private roadways, easements or drives; the City shall have no responsibility for the erection and/or maintenance of these items.

(4) In the event that the owners of the real property situated along a private roadway, easement or drive that requires a name, as set forth above, fail to initiate, respond to or participate in the naming procedure set forth above, the Department, after due notice and a minimum 30-day grace period, shall recommend to the Mayor and Council a name and address numbers for the private roadway, easement or drive and all real property located thereon. The property owners along such private roadway, easement or drive shall be responsible for the erection and maintenance of roadway signs, as set forth in subsection (3), above.

7.3.8 Changing of existing roadway names and addresses.

(a) In any instance where the Mayor and Council, upon recommendation of the director of the department, determines that an existing road name may pose a threat to the public health, safety or welfare, the Mayor and Council on its own motion may change such roadway name after notice is given and a public hearing is held.

(1) Notice of the proposed change and hearing date shall be given at least 25 days, but no more than 45 days, prior to the scheduled date of the Mayor and Council hearing on the proposed change.

(2) The department shall post a sign at approximately one mile intervals throughout the length of the roadway for which a name change is proposed and shall give notice by regular mail to the owners (according to the tax records of Sandy Springs) of each property which bears an address on the roadway for which a name change is proposed.

(3) Such signs and notices shall contain the time, date, place and purpose of the hearing, as well as a statement of the beginning and ending points of the segment of the roadway for which the name change is proposed. Notice shall not be considered inadequate if the signs are removed or mail is not delivered.

(b) Where the Mayor and Council, upon recommendation from the director of the department, determines that the existing address numbering on a particular roadway poses a threat to the public health, safety or welfare, the Mayor and Council may change such address numbering after notice.

(1) Notice of the change shall be given by regular mail to the owners (according to the tax records of the City) of each property that bears an address on the roadway for which an address numbering change will occur.

(2) Such notice shall contain the existing full address, the new address, the reason for the change, and the effective date of the change.

(3) The effective date shall be no less than 30 or no more than 60 days following the date on which

the matter is scheduled for decision by the Mayor and Council. Notice shall not be considered inadequate if mail is not delivered.

(c) When no more than ten percent of the existing addresses along a public or private roadway are deemed to pose a threat to the public health, safety or welfare, the Director may approve the change of such address numbering after notice is given by regular mail to the owners (according to the tax records of the City) of each property that bears an address on the roadway for which an address numbering change will occur.

(1) Such notice shall contain the existing full address, the new address, the reason for the change, and the effective date of the change.

(2) These changes shall be considered effective at the time of the approval by the director, and shall be presented for ratification to the Mayor and Council at the next regularly scheduled meeting.

(3) The effective date shall be no less than 30 or no more than 60 days following the date on which the matter is scheduled for decision by the Mayor and Council. Notice shall not be considered inadequate if mail is not delivered.

(d) No name of any commercial, office, industrial or residential development or subdivision shall be changed unless a request for such a change is first submitted to and approved by the department. In determining the acceptability of such a name change, the department shall seek to avoid confusion from similarly named developments.

7.3.9 Roadway and thoroughfare designation suffixes.

Any suffix accepted within the standards of the United States Postal Service, reflected in part in the lists provided by the National Emergency Number Association (NENA), shall be acceptable for naming roadways and thoroughfares within the City. The following are examples of the most commonly used permitted suffixes in the naming of private and public roadways:

- (1) Avenue (to be abbreviated "Ave")
- (2) Bend (to be abbreviated "Bnd")
- (3) Boulevard (to be abbreviated "Blvd")
- (4) Circle (to be abbreviated "Cir")
- (5) Court (to be abbreviated "Ct")
- (6) Cove (to be abbreviated "Cv")
- (7) Drive (to be abbreviated "Dr")
- (8) Grove (to be abbreviated "Grv")
- (9) Hall (no abbreviation)
- (10) Highway (to be abbreviated "Hwy")
- (11) Hill (to be abbreviated "Hl")
- (12) Lane (to be abbreviated "Ln")
- (13) Loop (no abbreviation)
- (14) Parkway (to be abbreviated ("Pkwy"))
- (15) Pass (no abbreviation)
- (16) Place (to be abbreviated ("Pl"))
- (17) Point (to be abbreviated "Pt")
- (18) Ridge (to be abbreviated "Rdg")
- (19) Road (to be abbreviated "Rd")
- (20) Square (to be abbreviated "Sq")
- (21) Street (to be abbreviated "St")
- (22) Terrace (to be abbreviated "Ter")

- (23) Trace (to be abbreviated "Trce")
- (24) Trail (to be abbreviated "Trl")
- (25) View (to be abbreviated "Vw")
- (26) Walk (no abbreviation)
- (27) Way (no abbreviation)

7.3.10 Street signs.

Signs shall be installed in conformance to the standards established in Section 11.13 of this Ordinance

ARTICLE 8

FEES

8.1 FEES

- 8.1.1 Application filing and permit fees shall be as may be established from time-to-time by the Mayor and City Council.
- 8.1.2 Application filing and Permit fees, if any, shall be submitted as a prerequisite to issuance of the permit, conceptual approval or minor or final plat approval or any other approvals required by the city. Non-payment as a result of submission of a check having insufficient funds on account, or for any other reason, shall cause the permit to be voided and re-issuance subject to penalty as may be established by the Mayor and City Council.
- 8.1.3 Application fees, if any, shall be submitted with the application and upon acceptance of said submission for review and consideration shall not be refundable. Failure to pay a required application fee shall cause the application to be returned to the applicant without acceptance for review or consideration by the City.
- 8.1.4 Following the approval of development plans, and prior to authorization to begin construction, the developer shall pay to the city such required inspection, curb cut, or other fees as may be established from time-to-time by the Mayor and City Council. Such fees shall not be refundable following issuance of a Development Permit, except upon approval of the Mayor and City Council.
- 8.1.5 Any application or permit fees paid to the city shall be forfeited up the expiration of the application or any permit issued by the city.
- 8.1.6 Prior to approval of a Final Plat or Certificate of Occupancy, the developer shall provide to the Department such recording fees and performance and/or maintenance bonds as shall be required by this Ordinance or established from time-to-time by the Mayor and City Council.

ARTICLE 9

GENERAL REQUIREMENTS

9.1 SUITABILITY OF THE LAND

- 9.1.1 Unsuitable Land May Not Be Developed

Land subject to flooding, improper drainage or erosion, and any land deemed to be unsuitable for

development due to steep slope, unsuitable soils or subsurface conditions, etc., shall not be subjected to development for any uses as may continue such conditions or increase danger to health, safety, life, or property, unless steps are taken to eliminate or abate these conditions.

9.1.2 Unsuitable Land Must Be Included in Buildable Lots

a. Land within a proposed subdivision or development which is unsuitable for development shall be incorporated into the buildable lots as excess land, established as a conservation area, common area or legally disposed of in a manner which would prevent the potential sale or transfer of the lot as potentially buildable lot of record. Lots which do not comply with the requirements of the Zoning Ordinance are prohibited.

b. Exceptions:

(1) Signage and landscape features - The creation of an un-buildable lot in a proposed subdivision for the exclusive purpose of subdivision identification signage or subdivision entrance landscape features is authorized only under the following circumstances (modification applications from the circumstances of this exception shall not be accepted):

- (a) The lot shall be located at an entrance to the subdivision as an "island" in the right-of-way of a local or minor collector street; and,
- (b) A mandatory homeowner's association shall be required for the subdivision for ownership and maintenance of the lot as common area; and,
- (c) The lot shall meet the requirements of the Zoning Ordinance or as may be approved by a zoning variance; and,
- (d) Right-of-way of a minimum width of eleven (11) feet from back of curb shall be provided adjacent to the perimeter of the lot.
- (e) Landscape plantings within the right-of-way shall comply with Section 11.9.6 of this Ordinance.

(2) Storm Water Management Facilities - The creation of an un-buildable lot for the exclusive purpose of providing and maintaining a storm water management facility is authorized.

9.2 OFFERS OF LAND DEDICATION

9.2.1 Land not suitable for Public Use

Whenever a developer proposes the dedication of land to public use, and the Director or the appropriate agency finds that such land is neither required nor is it suitable for public use, the Director shall require the rearrangement of lots to include such land in private ownership.

9.3 ZONING AND OTHER ORDINANCE

9.3.1 Discrepancy in Codes

Whenever there is a discrepancy between minimum standards or dimensions required herein and those contained in zoning Ordinance, building codes, or other official regulations or resolutions, the most restrictive shall apply. In those instances where the required right-of-way width or roadway improvements

for a specific project have been established as a condition of zoning approval, the requirements of the zoning condition shall control, whether more or less restrictive than the requirements of this Ordinance.

9.4 REQUIRED PUBLIC IMPROVEMENTS

9.4.1 General Requirements

Every developer of lands within the jurisdiction of this Ordinance shall provide access-improvements as required by this Ordinance and other pertinent Codes, ordinances, and regulations of the city. Said improvements and associated lands shall be provided at no cost to the city, and shall be dedicated or otherwise transferred, as required, to the public in perpetuity and without covenant or reservation, except as otherwise provided herein.

9.5 LOTS

9.5.1 Lots shall at least conform to requirements of the Zoning Ordinance.

9.5.2 Double frontage and reverse frontage lots shall be required for residential subdivisions along major thoroughfares where internal access can be provided. A no-access easement of at least ten feet in width, across which there shall be no right of access, shall be provided along the line of lots abutting such a traffic artery. When located along a major thoroughfare, the no-access easement shall be planted and/or screened as required by the Buffer, Landscape, and Tree Ordinance.

9.5.3 The size, shape, arrangement and orientation of every lot shall be subject to the approval of the Director for the type of development and use contemplated.

9.5.4 Proposed internal lot lines shall not be curved.

9.5.5 Lots not served by public sewer or community sanitary sewage system and/or public water shall meet the minimum dimension and area requirements of the county health department.

9.5.6 The creation of remnant lots that are below the minimum standards shall be prohibited unless such lots are designated as common area or stormwater management area on the final plat and maintained by the Homeowners' Association or some other entity approved by the Director.

9.5.7 Each lot shall have direct access to an abutting, existing public street or to a street contained within the proposed subdivision. A connection through an approved private drive may be permitted by the Director.

9.5.8 When subdividing land adjacent to or surrounding an existing proposed lake the lots abutting the lake shall be drawn to the center of the lake, except when the lake is proposed for recreational or stormwater management purposes and will be contained on an individual lot of record and maintained by the Homeowners Association.

9.6 SURVEY MONUMENTS

9.6.1 At least 2 permanent monuments shall be accurately set and established to tie with the city GIS monuments or as required by the Director.

9.6.2 The monuments shall consist of a permanent material such as steel, concrete, iron or stone. The monuments shall be set so that the top shall be 6 inches above the ground level, unless otherwise approved by the Director.

9.6.3 The accurate location, material and size of all existing monuments shall be shown on the final plat, as well as the future location of monuments to be placed after street improvements have been completed.

9.7 STANDARD DRAWINGS

9.7.1 The department shall maintain on file for consultation and distribution a set of Standard Drawings illustrating details of construction and design of streets, storm water drainage facilities, site improvements and other elements related to the development of land in accordance with this Ordinance and under the jurisdiction of the department. Where no standard drawing has been developed by the city the drawings established by the state Department of Transportation shall be used.

9.7.2 The Standard Drawings shall illustrate minimum acceptable standards for land development activities authorized under this Ordinance, but shall not supersede more restrictive prudent design requirements or good engineering practices applied to specific situations on a case-by-case basis.

9.7.3 The Standard Drawings shall be treated as though a part of this Ordinance for application to the minimum standards for design and construction of improvements required herein and subject to the modification and appeal provisions of Article 3.

9.7.4 Open Space

Open space provided in projects located in the CHATAHOOCHEE RIVER CORRIDOR shall meet the following requirements:

a. Open Space shall be Natural and Undisturbed

Open space shall be permanent and shall remain in its natural state, undisturbed and unoccupied by any structures or impervious surfaces to include septic tanks and septic tank drain fields and except for approved access or utility crossings. Pedestrian access in open space shall be subject to the review and approval of the director. Buffers, floodplains and wetlands may be utilized as open space.

b. Ownership Requirements

Open space provided in a development shall be owned and maintained by the property owner, or in the case of a subdivision, by a property owner's association. The association shall be established by the developer prior to or concurrent with the recording of the Final Plat of the subdivision. The association bylaws shall include the following provisions:

- (1) Automatic (mandatory) membership of all purchasers of lots therein and their successors; and,
- (2) Conditions and timing of transferring control of the association from the developer to the lot owners shall be specified which shall not exceed four (4) years from the date of recording of the Final Plat of the subdivision; and,
- (3) Responsibility for maintenance, insurance and taxes; and,
- (4) Sharing of the costs of maintenance among the lot owners with shares defined by the association bylaws; and,
- (5) Authority to place liens on the real property of members who fail to pay their dues or assessments; and,

- (6) Prohibition on the dissolution of the association without the approval of the Mayor and Council.

c. Maintenance

The property owner, or the property owner's association, shall be responsible for the maintenance of open space. Open space shall be kept in reasonable order and condition and shall be maintained free from refuse, junk and debris.

9.8 WETLANDS

9.8.1 National Wetland Inventory Maps

The National Wetland Inventory Maps, prepared by the United States Fish and Wildlife Service, show the general locations of wetlands and should be consulted by persons contemplating activities in or near wetland areas. These maps should be used as a guide only. Field verification is required to determine the existence or absence of any jurisdictional waters.

9.8.2 Plans

Design professionals, after consulting the National Wetland Inventory maps and conducting appropriate field studies, shall indicate wetlands or jurisdictional waters on plans required for Land Disturbance Permit applications.

9.8.3 Design Professional Statement

Prior to the issuance of a Land Disturbance Permit, the design professional who prepared the required plans accompanying the permit application, shall add a statement to the plan sheet indicating land disturbance and the statement shall read as follows:

Wetland Certification:

The design professional, whose seal appears hereon, certifies the following: 1) the National Wetland Inventory maps have been consulted and appropriate field studies have been conducted; and, 2) the appropriate plan sheet [] DOES / [] DOES NOT (mark appropriate box) indicate wetlands as shown on the maps; and, 3) if wetlands are indicated, the land owner or developer has been advised that land disturbance of protected wetlands or jurisdictional waters shall not occur unless the appropriate federal wetlands alteration ("Section 404") permit has been obtained.

9.8.4 ACOE Coordination

The issuance of Land Disturbance Permits by the city may be coordinated with the US Army Corps of Engineers Section 404 permitting process. If the "wetland certification" above indicates the presence of wetlands or jurisdictional water as shown on the NWI generalized wetlands maps or by field study, a Land Disturbance Permit which identifies alterations of designated wetlands or jurisdictional waters may not be issued by the city until a Section 404 Permit or Letter of Permission is obtained from the US Army Corps of Engineers.

9.9 FLOOD PLAIN

9.9.1 The Flood Damage Prevention Ordinance shall govern the development of any applicable parcel with the

city.

ARTICLE 10

PLAN AND PLAT SPECIFICATIONS

10.1 CONCEPTUAL PLAN / PRELIMINARY PLAT SPECIFICATIONS

The following paragraphs outline the required elements of both the required and optional plans and plats mentioned throughout this Ordinance, and especially in Articles 6 and 7.

10.1.1 Application

The Conceptual Plan / Preliminary Plat for a subdivision or site development shall be clearly and legibly drawn at a scale of not less than 100 feet to one inch. Sheet size shall not exceed 30 inches by 42 inches, provided, however, a scale of 200 feet to one inch may be used to avoid sheets in excess of 30 inches by 42 inches. The Director may approve other scales and sheet sizes as deemed appropriate.

10.1.2 Conceptual Plan / Preliminary Plat Checklist
Refer to check list

10.2 SUBDIVISION DEVELOPMENT PLANS

10.2.1 Application

An application for a Land Disturbance Permit for a subdivision shall consist of the Conceptual Plan or Preliminary Plat, a certified boundary survey, associated slope or construction easements (if any), and such other Development Plans as may be required by this Ordinance.

10.2.2 Conformance to Conceptual Plan/Preliminary Plat

The Development Plans shall generally conform to the Conceptual Plan/Preliminary Plat, and may constitute only that portion of the approved Conceptual Plan/Preliminary Plat which the sub-divider proposes to construct at one time as a single unit, provided that such portion conforms to the requirements of this Ordinance

10.2.3 Scale

The Development Plans shall be clearly and legibly drawn at a scale of not less than 100 feet to one inch. Sheet size shall not exceed 30 inches by 42 inches. Plan and Profile sheets shall have a horizontal scale of no less than 100 feet to one inch and a vertical scale of no less than 10 feet to one inch.

10.2.4 Certified Boundary Survey

- a. The development plans shall be based on a certified boundary survey delineating the entirety of the property contained within the Conceptual Plan/Preliminary Plat, and tied to a point of reference (tie point) with the same degree of accuracy as the boundary survey itself. The survey shall have an accuracy of no less than 1 in 10,000, and shall meet all requirements of Georgia Law regarding the recording of maps and plats.
- b. Each development plan shall be drawn on, accompanied by, or referenced to a boundary survey which shall at least meet the requirements of 10.2.4, above.

10.2.5 Development Plan Checklist

The development plans shall contain the following:
Refer to check list

10.2.6 Certificate of Development Plan Approval

Each Site Plan shall carry the following certificate printed or stamped thereon:

All requirements of the city Sandy Springs Development Ordinance relative to the preparation and submission of a Land Disturbance Permit application having been fulfilled, and said application and all supporting plans and data having been reviewed and approved by all affected city departments as required under their respective and applicable ordinances, approval is hereby granted of this Site Plan and all other development plans associated with this project subject to all further provisions of said Development and other City Ordinances.

Director Date
Community Development Department

10.2.7 Encroachments

Where construction is proposed on adjacent property, an encroachment agreement or easement shall be submitted to the Department prior to the issuance of a Land Disturbance Permit.

10.2.8 Public Notice – Drainage

Every Site Plan shall contain the following statement:

- a. Note: The City of Sandy Springs assumes no responsibility for overflow or erosion of natural or artificial drains beyond the extent of the street right-of-way, or for the extension of culverts beyond the point shown on the approved and recorded plan. The city does not assume the responsibility for the maintenance of pipes in drainage easements beyond the City right-of-way.
- b. NOTE: Stream Buffers are to remain in a natural and undisturbed condition.
- c. NOTE: Structures are not allowed in drainage easements.

10.3 FINAL PLAT SPECIFICATIONS

10.3.1 Sheet Size

The Final Plat shall be clearly and legibly drawn in black ink on tracing cloth or other permanent reproducible material. The scale of the Final Plat shall be 100 feet to one inch (1" equals 100') or larger. Sheet size shall not exceed 30 inches by 42 inches.

10.3.2 Certified Boundary Survey

The Final Plat shall be based on a certified boundary survey delineating the entirety of the property contained within the Final Plat, and tied to a point of reference (tie point) with the same degree of accuracy as the boundary survey itself. The survey shall have an accuracy of no less than 1 in 10,000, and shall meet all requirements of Georgia Law regarding the recording of maps and plats.

10.3.3 Conformance with Conceptual Plan/Preliminary Plat

The Final Plat shall substantially conform to the Preliminary Plat and it may constitute only that portion of the approved Preliminary Plat which the sub-divider proposes to record at any one time, provided that such portion conforms to the requirements of this Ordinance, and said portion is not inconsistent with the public health, safety, or welfare. Any substantial deviation from the Preliminary Plat shall require revision and re-approval of the Preliminary Plat.

10.3.4 Final Plat Checklist

The Final Plat shall contain the following information:
Refer to Check list

10.3.5 Dedication of Lands to the City

If any lands are shown as the Final Plat for dedication to the city other than street rights-of-way or easements, a Warranty Deed transferring title to said land in fee simple, in a form acceptable to the Director, shall be submitted with the Final Plat application.

10.3.6 Dedication of Lands to Property Owners Association

If any lands are shown on the Final Plat for dedication to a Property Owners Association in order to meet minimum park or open space requirements of this Ordinance, a copy of the deed of transfer for such dedication and a copy of the instrument of incorporation of the Property Owners Association shall be submitted with the Final Plat application.

10.4 RESIDENTIAL SITE PLAN

10.4.1 Scale

Residential Site Plans shall be drawn to scale and may be shown on a certified boundary survey of the lot or any other drawing showing the information required below. The Department may accept a Residential Site Plan drawn to the same scale as shown on the Final Plat where sufficient detail can be shown to support an adequate review and approval.

10.4.2 Accuracy

It is not the intent of the Department that the Residential Site Plan be prepared by a registered surveyor or engineer, but may be done by the individual proposing the improvements on the lot. It is the intent, however, to receive a drawing with sufficient readability and accuracy to ensure that the proposed improvements will be constructed on the lot in conformance with the requirements of this Ordinance, the Zoning Resolution, or other ordinances, as applicable.

10.4.3 Residential Site Plan Checklist

Residential Site Plans shall show the following as applicable:
refer to check list

10.4.4 Chattahoochee River Corridor

If a lot is located in the Chattahoochee River Corridor, a Certificate of Occupancy shall not be issued for the structure or other improvements until conformance to the provisions or other requirements of the Residential Site Plan have been field verified by a survey prepared by the builder's surveyor and submitted to the Department of Planning & Development.

10.6 SITE DEVELOPMENT PLANS

10.6.1 Application

An application for a development permit for a multi-family or nonresidential site shall consist of the Site Plan, a certified boundary survey or Final Plat reference, Erosion, Sediment and Pollution Control Plan, Grading Plan, Utility Plan, Profile sheets, details, associated slope or construction easements (if any), and such other Development Plans as may be required by this Ordinance.

10.6.2 Conformance to Conceptual Plan/Preliminary Plat

The Development Plans shall generally conform to the Conceptual Plan/Preliminary Plat, if any, and may constitute only that portion of the approved Conceptual Plan which the developer proposed to construct at one time as a single unit, provided that such portion conforms to the requirements of this Ordinance and all setbacks, maximum density, and other zoning restrictions. If no Conceptual Plan was approved on the property, the Development Plans shall include the entire property being developed having the same zoning category.

10.6.3 Scale

The Development Plans shall be clearly and legibly drawn at an engineering scale convenient to illustrate the details of the project. Sheet size shall not exceed 30 inches by 42 inches. Plan and Profile sheets, if any, shall have a horizontal scale of no less than 100 feet to one inch and a vertical scale of no less than 10 feet to one inch.

10.6.4 Project Boundary Data

- a. The Site Plan shall be based on the boundaries of a lot as recorded on a Final Subdivision Plat or on a certified boundary survey delineating the entirety of the property contained within the project, and tied to a point of reference (tie point) with the same degree of accuracy as the boundary survey itself. The survey shall have an accuracy of no less than 1 in 10,000, and shall meet all requirements of Georgia Law regarding the recording of maps and plats.
- b. Each Site Plan shall be drawn on, accompanied by, or referenced to a boundary survey which shall at least meet the requirements of 10.6.4.a. above.

10.6.5 Site Development Plan Checklist

The development plans shall contain sufficient data to determine sufficient regulatory compliance with all city codes and ordinances. The submittal shall be in compliance with the minimum information required under Sections 10.2.5, 10.2.6, 10.2.7 and 10.2.8 of this Ordinance.

10.6.6 Certificate of Development Plans Approval

Each Site Plan shall carry the following certificate printed or stamped thereon:

All requirements of the City of Sandy Springs Development Ordinance relative to the preparation and submission of a Land Disturbance Permit application having been fulfilled, and said application and all supporting plans and data having been reviewed and approved by all affected city departments as required under their respective and applicable ordinances, approval is hereby granted of this Site Plan and all other development plans associated with this project subject to all further provisions of said Development and other City Ordinances.

Director Date
Community Development Department

10.7 TREE PRESERVATION/REPLACEMENT PLAN SPECIFICATIONS

10.7.1 A Tree Preservation/Replacement Plan shall be required only under the circumstances described in the Tree Conservation Ordinance.

10.7.2 Tree Preservation/Replacement Plans shall be prepared in accordance with the specifications contained in the Tree Conservation Ordinance. At the developer's option, the plan may be combined with other plans such as a general landscaping plan for the project.

10.8 BUFFER AND LANDSCAPE PLAN SPECIFICATIONS

10.8.1 A Buffer and Landscape Plan shall be required as described in the Tree Conservation Ordinance.

10.8.2 The Buffer and Landscape Plans shall be prepared in accordance with the specifications contained in the Tree Conservation Ordinance. At the developer's option, the plan may be combined with other plans such as a general landscaping plan for the project.

ARTICLE 11

STREET DESIGN AND CONSTRUCTION REQUIREMENTS

11.2 GENERAL

11.1.1 General Requirements

- a. The sections enumerated in this article are guidelines, and are intended to be benchmark indicators of what standards could be acceptable. They are further intended to allow alternate designs which could produce results similar to these performance standards and similar protection to the public. The objective of these performance standards is not to suggest a single methodological standard of acceptance exclusive of all others. Rather they establish what would otherwise be allowed in the absence of an acceptable alternative.
- b. All new streets proposed to be constructed in a subdivision or other development, whether to be public or private, shall be designed and constructed to the standards contained in this Ordinance and in accordance with the classification of said street.

- c. Streets, whether existing or new, shall be constructed or improved under those circumstances and to the standards as established in this Ordinance. Roadway improvements shall be in accordance with the street classifications as shown on the Long-Range Road Classification Map of the Comprehensive Plan, or the Zoning Ordinance, as applicable, or as otherwise required by the Public Works Director.

11.1.2 Compliance with Comprehensive Plan or Overlay Districts

In cases where the city has developed alternate design criteria in the comprehensive plan or for specific areas covered under an overlay district, those design requirements shall be used in lieu of those provided herein.

11.2 SPECIFICATIONS

Unless otherwise specifically set forth herein, all of the materials, methods of construction, and workmanship for the work covered in reference to street construction shall conform to the latest specifications of GDOT.

11.3 ACCESS

11.3.1 Arrangement of Lots

When land is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged and designed so as to allow for the opening of future streets and to provide access to those areas not presently served by streets.

11.3.2 Access to Adjacent Properties

No subdivision or development shall be designed so as to completely eliminate street access to adjoining parcels of land. Every development shall be designed to facilitate access to adjoining properties which are developed or anticipated to be developed in a manner substantially similar to the subject property. Locations of inter-parcel access shall be as required by and subject to the approval of the Department.

Interparcel Access Easement

For any office or retail sales or services use, the property owner shall grant an access easement as described in this Chapter to each adjoining property that is zoned or used for an office or retail sales or services use. The purpose of the easement is to facilitate movement of customers and their vehicles from establishment to establishment (lot to lot) without generating additional turning movements on a public street. When required by this Chapter, interparcel access easements shall be recorded in the office of the Clerk of Superior Court, Fulton County, and reference to deed book and copy of such recorded easement provided to the Director.

Access Easement Provisions

The interparcel access easement shall permit automobile access from the adjoining property to driveways and parking areas intended for customer or tenant use; but parking spaces may be restricted to use by the owner's customers and tenants only.

Upon the availability of access to driveways and parking areas of the adjoining lot, the pavement or other surfacing of the owner's driveways and parking areas shall be extended to the point of access on

the property line.

Location of Interparcel Connections

The location of vehicular connections across a property line should be mutually determined and constructed by both property owners. In the case of coordination problems or any factors preventing construction of an inter-parcel connection, the Public Works Director shall determine the location of connection to be constructed by property owners.

Relief

Where the proposed land use is such that adverse impact of the required easement on the use of the property would outweigh the reduced impact on the public street provided by the reciprocal easements, the Public Works Director may waive the requirement for access easements, in whole or in part, administratively.

11.3.3 Vehicular Access to Lots

Any lot required to provide minimum frontage by the zoning district in which the lot is located shall provide vehicular access directly from a public street along the frontage or along any other property line which abuts a public street, except as provided in Section 11.3.5.

11.3.4 Private Streets

Private streets, as may be approved under the provisions of the Zoning Ordinance, shall be constructed to the roadway construction standards of the city, as contained herein. The private roads shall be maintained by a mandatory homeowners association and documents of incorporation shall be submitted to the Director of Community Development for review and approval prior to the recording of the final plat. The private streets shall be clearly designated on the final plat.

11.3.5 Vehicular Access Easements

Vehicular access may be provided from a public street indirectly via easement in any one or more of the following circumstances:

- a. The property is not required to provide a minimum frontage by the applicable zoning district, provided that the easement shall be in a location and the access driveway shall have a width and alignment acceptable to the Fire Department and the Department.
- b. The property is a buildable lot of record, as defined herein, but does not meet the minimum frontage requirement of the applicable zoning district. The property must be served by an exclusive access easement which shall be limited to the provision of access to only one principal use or structure.
- c. The access easement serves a single-family residence on a lot which is otherwise a buildable lot of record, and which is sharing a common driveway with no more than two other single-family residences.
- d. The access easement was lawfully established as such under the code, or Ordinances of the city prior to the adoption of this Development Ordinance.
- e. The access easement coincides with a private roadway approved under the code, ordinances, or regulations of the city. All new private roadways must be constructed to the roadway standards of

this Ordinance, and their ownership and maintenance responsibility by private party(s). The access easement width shall be the same as required for right-of-way on a similarly classified public road, i.e. the easement on a local street within a residential subdivision shall be the same width as the right-of-way for a public, local residential street.

- f. The access easement serves a buildable lot of record which meets the minimum frontage requirements of the Zoning Ordinance, but at which point the access is not achieved.

11.3.6 Maximum Number of Lots with a Single Entrance

A maximum number of 200 residential dwelling units shall be allowed to be constructed with only one street outlet to an existing public street. If a second access to an existing public road is not available or, in the opinion of the Public Works Director, could induce non-residential traffic through the development, a single entrance may be allowed if designed with a traffic signal and/or sufficient right-of-way and improvements to provide a protected left-turn lane, subject to the approval of the Public Works Department.

11.3.7 Gated Access

Gated access must be developed in accordance with the following minimum requirements:

**TABLE 11.3-1
SETBACKS DISTANCES FOR GATED ACCESS**

INBOUND PEAK HOUR TRIPS	SINGLE FAMILY RESIDENTIAL EQUIVALENT	DISTANCE FROM GATE TO EDGE OF PAVEMENT (FEET)
1 to 25	1 to 30	30'[1]
26 to 45	31 to 55	40'
46 to 55	56 to 75	60'
56 to 65	76 to 90	80'
66 to 75	91 to 105	100'
Over 75	106+	[2]

[1] If gated access under consideration for a street whose primary access is to a roadway classified as a collector or higher, 40 feet may be required.

[2] Distance from the gate to the edge of pavement should be studied and submitted by the applicant.

- a) Gates shall not be located within the public right-of-way and must be provide vehicular storage distance from the edge of pavement as shown in Table 11.3-1. Additionally, any gated access serving a non-residential use, more than 3 single family residential units, a multi-family residential use, or located on a collector or higher order road shall provide a minimum clear turnaround distance of 20 feet between the vehicular storage and the gate.
- b) Minimum gate width must equal the required road width plus the width of any utility easements

present. Where gates are provided with a center support post a minimum clear width of 20 feet shall be provided on either side unless otherwise approved by the Fire Marshal.

- c) Gates shall not be located within the public right-of-way and must be set back a sufficient distance from the public right-of-way to provide for adequate stacking distance, turnaround and emergency vehicle access as required by the city.
- d) Gate width and placement must be reviewed by, and are subject to approval by the Fire Marshal's Office and the Public Works Department.
- e) Arrangements for access through the gate for emergency service vehicles must be reviewed by, and are subject to approval by the Fire Marshal's Office. Emergency service vehicles include, but are not limited to, fire suppression equipment, medical emergency vehicles, and law enforcement vehicles. Necessary arrangements may include Knox-fire boxes for keyed/keyless entry, keypad code entry, occupant telephone authorized entry, and/or automatic gate opening upon power disconnect.
- f) Arrangements for access through the gate for non-emergency service vehicles must be reviewed by, and are subject to approval by, the Public Works Department. Non-emergency public service vehicles include, but are not limited to, mail delivery, garbage pickup, public utility meter reading, and public utility maintenance and inspection vehicles. Necessary arrangements may include, but are not limited to: access easements for refuse collection vehicles and appropriate utility easements for public utility development and maintenance.
- g) Gates may not restrict access to any public right-of-way or publicly owned property within the proposed development.
- h) The city must be properly indemnified against any liability resulting from the proposed development including damage from or broken utilities, fines associated with damaged or broken utilities. This indemnification shall be evidenced by:
 - 1) The Release and Indemnity Agreement placed on the plat.
 - 2) A separate Release and Indemnity Agreement executed by the developer.
 - 3) A clause in each deed of conveyance by the developer for each lot in the subdivision acknowledging the release and indemnity agreement.
 - 4) Assumption of liability of the Release and Indemnity Agreement by the Homeowners' Association.
 - 5) Assumption of liability of the release and indemnity agreement in the Protective Covenants, which shall become part of the covenants of the subdivision. The developer's liability shall end three years after the last lot has been sold by the developer, provided that there are then no pending or threatened claims against the developer, the city or the Homeowners' Association. All language for liability agreements and covenants shall read as required by the city attorney's office.
 - 6) The developer shall grant such easements to the appropriate governing authority or Utility Company as is necessary for public purposes regarding said community.
- i) The following standards shall be used by the city when considering any request for gated

communities:

- 1) The number of units in the development shall not be excessive as identified on the Future Land Use Map of the city Comprehensive Plan.
- 2) The developer must demonstrate adequate provision for perpetual maintenance of the private road and any other infrastructure associated with the development, including but not limited to a note on the plat and a clause in each deed of conveyance by the developer for each lot in the subdivision acknowledging the perpetual maintenance of the private road (and other private infrastructure) by the Homeowners' Association.
- 3) The developer must demonstrate an adequate strategy for necessary emergency access.
- 4) The private road and gate must not unreasonably impede the logical future development of public roads in the vicinity of the project.
- 5) The private road and gate must not unreasonably restrict public access to sites of cultural, historical, or natural significance.
- 6) The private road and gate must not unreasonably restrict previously established pedestrian access.
- 7) The establishment of gated communities must not have unreasonable negative effects on the health and welfare of the community or the good order of the city.
- 8) Gates may be denied based on traffic conditions, interconnectivity needs and when not in compliance with adopted guidelines.

11.3.8 Access Improvements

When property that abuts upon an existing or proposed city road is to be developed or redeveloped and the city street will provide access to the property, access improvements to the city road (deceleration lanes, turn lanes, etc.) shall be provided by the developer as required in Section 11.4.

11.3.9 Documentation Required for Alternative Designs

In the event that an alternative is suggested by the applicant, studies and reports conducted by professionals currently certified in the State of Georgia will be required to be submitted to and approved by the Department. These studies and reports must clearly relate to the desired results and purposes expressed or implied in the applicable performance standard. Once an alternative has been approved by the Department, it shall become a required standard applicable to the specific approved permit only.

11.4 DRIVEWAYS INTERSECTIONS AND ACCESS IMPROVEMENTS

11.4.1 Angle and Improvements

Driveways shall generally be at right angles and shall not be at an angle of less than 85 degrees for roadways classified as Arterial or Collectors and 80 degrees for all other roadway classifications unless approved by the Department. This requirement may be waived by the Public Works Director where the driveway access is to a sub-standard road (i.e. dirt or gravel) or a rural road section. Driveways providing access to parking lots which contain six (6) or more spaces shall be paved in accordance with the parking lot requirements of the Zoning Ordinance.

11.4.2 Driveway Design Standards

- a) Driveways provide access to property and are a service to the traveling public. However, vehicles entering or leaving driveways may disrupt the flow of traffic on streets and cause accidents, thereby infringing on the rights of the public to travel the roadway. All driveways should be restricted to locations where movements into and out of them can occur in a safe and orderly manner.
- b) Because of their simple appearance, driveways often do not receive sufficient design consideration. At the least, driveways should always be designed to eliminate or minimize opposite lane encroachment while entering and exiting property.
- c) All driveways are to be designed and constructed with sidewalk transitions as appropriate. Cross slope shall not exceed 2% in area where sidewalk is present or is planned to be installed according to an approved sidewalk master plan, comprehensive plan or project approved by Mayor and City Council.
- d) All driveways are to be considered low volume intersections and to comply with minimum Intersection/Corner Sight Distance requirements of this Ordinance.
- e) All driveways shall slope up from the edge of road a minimum of 6 inches within the right-of-way to ensure that stormwater surface flow is maintained within the right-of-way. This requirement may be waived by the Public Works Director in road sections that drain away from the gutter line, i.e. the high side of super-elevated curves.
- f) No catch basins will be allowed within access/driveway radii (turning radii).
- g) Where a driveway is constructed at a location that has or should have a ditch along the roadside for the purpose of collecting, channeling, and controlling storm water runoff the driveway shall be constructed with a culvert designed to conduct stormwater beneath the driveway in accordance with the following:
 - i. Concrete or other type of culvert approved by Public Works Department;
 - ii. Sized to accommodate the 25-year storm, as a minimum, with a minimum pipe size of 24 inches. Larger storm events may be required as specified in Article 13;
 - iii. Provided with flared-end sections or headwalls at the inlet and outlet;
 - iv. Of sufficient length to accommodate a minimum of 2-foot shoulders at each end of the driveway with a maximum side slope of 2:1 to the bottom of the ditch line; and,
 - v. Installed in a ditch of minimum 2-foot wide flat bottom with sides sloped at a grade no greater than 2:1 stabilized with acceptable vegetation.

11.4.3 Residential Driveway Standards

Residential driveways provide a primary means of access to single-family, detached residential uses and shall conform to the following standards along collector and arterial roadways:

- a) Width - Minimum 14 feet, Maximum 18 feet within the right-of-way
- b) Radii or flare - Minimum 5 feet

- c) The curb cut shall not encroach on the radius of the curb at a street corner.
- d) In no case shall the edge of the curb cut be less than 5 feet from the side property line, as measured along the right-of-way.
- e) Length - A minimum of 25 feet or to the edge of the city or state right-of-way, whichever is greater, shall be paved with a treated hardened surface. Rural residential driveways may be constructed with an asphalt pavement section, if approved by the Public Works Department. This requirement may be waived by the Public Works Director where the driveway access is to a sub-standard road (i.e. dirt or gravel) or a rural road section.
- f) Not more than two curb cuts shall be permitted on any one street frontage classified as a local street. When two cuts are permitted there shall be a safety zone of not less than 10 feet, as measured along the curblines, between the inside edges of the driveways.
- g) Not more than one private curb cut may be located on any one street frontage for any one dwelling where the street is classified as a Collector or higher order street. If a lot has access to more than one frontage, it may not have any private curb cuts on a street that is classified as a Collector or higher order street. If both frontages are classified as Collector or higher order streets, then the curb cut may be on the frontage with the lowest classification, or as designated by the Public Works Department.
- h) Multiple lot (subdivision) development – For developments of two (2) or more adjoining lots, driveways shall be located outside of building setbacks and zoning buffers on all lots abutting the exterior of the project site. For lots interior to the project site (not adjacent to exterior lot lines, setbacks or zoning buffers), driveways may be located within side setbacks.

11.4.4 Non-Residential Driveway Standards

Non-residential driveways (other than single-family detached uses) shall provide uninterrupted ingress/egress to and from the site and shall conform to the following standards:

- a) The minimum distance required is measured perpendicular from the street right-of-way line at the ingress/egress point to the nearest edge of any interior service drive or parking space with direct access to such. The length of the uninterrupted ingress/egress is determined by the maximum peak hour volume of the facility in which the driveway is provided and as shown in the table below. The developer shall provide this information.

**TABLE 11.4-1
UNINTERRUPTED INGRESS/EGRESS DISTANCES**

MAXIMUM PEAK HOUR VOLUME	UNINTERRUPTED INGRESS/EGRESS (FT)
UP TO 50 VEHICLES	25
50 TO 200 VEHICLES	50
201 VEHICLES AND UP	100

- b) Non-residential driveways shall not be designed or marked to allow more than one lane of traffic to exit onto a street simultaneously, unless such driveway is channelized in accordance with traffic engineering design principles as applicable when designing

channelized street intersections.

- c) Width (measured from edge of pavement to edge of pavement):

**TABLE 11.4-2
NON-RESIDENTIAL DRIVEWAY WIDTH**

ENTRANCE CONFIGURATI ON	MINIMUM WIDTH (FT)	MAXIMUM WIDTH (FT)
One Way	15 ⁽¹⁾	18 ⁽¹⁾
Two Way	24	36 ⁽²⁾

Notes:

(1) Where no other access is provided a minimum width of 20 feet shall be required.

(2) Additional width may be approved by the Public Works Director based on an approved engineering design.

- d) Entrance radii shall be based on the road classification at the proposed entrance location and shall conform to the requirements set forth in Section 11.8.4 of this Ordinance.
- e) Composition – Within the right-of-way the driveway and access improvements shall meet or exceed the same specification as the connecting public roadway.
- f) Drainage - Consistent with existing drainage plan of the connecting public roadway unless other improvements are required for safety, hydrological and environmental considerations.
- g) Driveway designs other than as provided within this Ordinance, i.e., median divided or additional lanes, are subject to consideration of the Public Works Department.

11.4.5 Access Limitations for Development Adjacent to Thoroughfares

- a) All access points and driveways adjacent to thoroughfares may be subject to further restriction and consideration as may be deemed necessary by the GDOT and/or the city to ensure safe, functional design and efficient operation of the thoroughfares.
- b) Access to all residential lots shall be from interior subdivision streets or roads where possible. Exceptions are subject to approval from the Public Works Director. Subdivisions of three or less lots may be exempted upon approval by the Public Works Director with proper consideration of safety, hydrological, and environmental concerns.
- c) If the closest intersection is or is likely to be signalized, traffic movements to and from any driveway within 250 feet of an intersection with (as measured from the point of tangency) a collector or an arterial shall be limited to right turns only.

11.4.6 Median Openings

- a) No median opening shall be spaced at a distance less than 660 feet for urban roadways or 1320 feet for rural roads from any other median opening (measured from centerline to centerline)

unless specifically approved by the Public Works Department.

- b) Other factors will also be considered, such as distance to other median openings, adjacent land use, expected traffic volumes, and the resulting volume of U-turns that are likely to occur without the median opening. Meeting the spacing criteria is not, in itself, an indication that median openings will be allowed.
- c) All median openings shall include full width storage and taper length in accordance with Table 11.4-7 and 11.4-8 unless otherwise acceptable to Public Works Department based on a traffic study. Increased storage and transition lengths may be required to eliminate disruption of through-traffic flow. Provide a minimum 12 foot pavement width, excluding curb and gutter.

11.4.7 Spacing of Signalized Intersections

No signalized intersection shall be spaced at a distance less than 1000 feet for urban roadways or 1320 feet for rural roads from any other signalized intersection (measured from centerline to centerline) unless specifically approved by the Public Works Department.

11.4.8 Auxiliary Lanes (Turn Lanes and Deceleration Lanes)

- a) Improvements Required
 - 1) When property that abuts upon an existing or proposed city road is to be developed or redeveloped and the city road will provide access to the property, access improvements to the city road (deceleration lanes, turn lanes, etc.) shall be provided by the developer.
 - 2) When any auxiliary turn lane that extends beyond the applicant property frontage, the applicant will be responsible for acquiring the necessary rights of way and easements in order to accomplish the necessary frontage improvements.

b) Deceleration Lane

A deceleration lane shall be constructed at no cost to the city at each project driveway or subdivision street entrance, as applicable, that meets either the Average Daily Traffic (ADT) or right turning volumes shown in the following table. Passing lane sections fall under the criteria for two or more lanes. The Public Works Director may require the construction of a deceleration lane even when the conditions in Table 11.4-4 are not met, if roadway or field conditions indicate that the safety of the general public would be improved.

**Table 11.4-4
Minimum Volumes Requiring Deceleration Lanes**

•	2 Lanes on Main Road		>2 Lanes on Main Road	
	35-40 mph	>40 mph	35-40 mph	>40 mph
Main Roadway ADT	8,000	4,000	12,000	10,000
Daily Right Turning Volume	150	75	150	75
Peak Hour Right Turning Volume	15	7	15	7

Deceleration lanes required by this section shall meet the following requirements:

- 1) Deceleration lanes shall have a pavement width of 12 feet (exclusive of curb and gutter) and shall meet the following standards for storage and taper length:

**TABLE 11.4-5
DECELERATION LANE STORAGE AND TAPER LENGTHS**

POSTED SPEED LIMIT (MPH)	FULL WIDTH STORAGE (FT)	TAPER (FT)
35	100	50
40	150	50
45	175	100
50	225	100

- 2) Additional right-of-way to accommodate the deceleration lane and an 11 foot shoulder shall be dedicated by the developer to the city at no cost. Associated drainage improvements as deemed necessary by the construction of the deceleration lane shall also be required.
- 3) Other access improvements may be required by the Public Works Department in order to ensure adequate site access, pedestrian access, convenience and safety to the motoring public.
- 4) The pavement specifications for deceleration lanes must comply with the GDOT Standard Specifications of Roads and Bridges, except as approved by the Public Works Director.

c) Medians

In the event a street has an existing or proposed median, the opening will be reviewed in accordance with Section 11.4.6 of this Ordinance.

d) Left Turn Lanes

Left turn lanes must be constructed at no cost to the city if either the ADT or left turning volumes shown in the following table are met. Passing lane sections fall under the criteria for two or more lanes. The Public Works Director may also require the addition of a right turn lane, even when the conditions in the following table are not met, if roadway geometry or field conditions indicate that the safety of the traveling public would be improved.

**Table 11.4-6
Minimum Volumes Requiring Left Turn Lanes**

	2 Lanes on Main Road		>2 Lanes on Main Road	
	35-40 mph	>40 mph	35-40 mph	>40 mph
Main Roadway ADT	6,000	4,000	10,000	8,000
Daily Left Turning Volume	300	200	300	200
Peak Hour Left Turning Volume	30	20	30	20

Left turn lanes required by this section shall meet the following requirements:

- 1) The design of left turn lanes should consider the intended function and the characteristics of the roadway. In many cases, it is necessary to widen the existing roadway to introduce the left turn lane. Left turn lanes shall be constructed at no cost to the city.
- 2) When the roadway has a median that is at least 20 feet wide, the left turn lane can be developed out of the median, avoiding the need for transitions. If a proposed driveway aligns across the main street with another driveway, and the proposed driveway must provide a left turn lane and left turn storage, then adequate storage and tapers must also be provided for the driveway across the main street.
- 3) The basic design elements of left turn lanes are illustrated in the following table. This example shows symmetrical widening, which basically requires the through traffic on each side to shift by one half of the lane width. Some circumstances may dictate that all widening be achieved on one side, which requires a full lane shift for through traffic on the side where the additional width is developed.

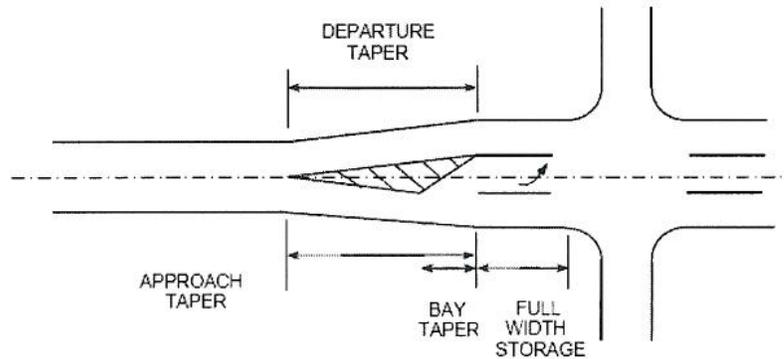


Figure 11.4-1: Design Elements of Left Turn Lanes

Table 11.4-7
Minimum Design Elements of Left Turn Lanes

POSTED SPEED LIMIT (MPH)	APPROACH TAPER (FT)		BAY TAPER (FT)	FULL WIDTH STORAGE (FT)
	6' SHIFT	12' SHIFT		
35	125	180	50	See Table 11.4-8
40	160	250	50	See Table 11.4-8
45	270	320	100	See Table 11.4-8
50	300	540	100	See Table 11.4-8
55	330	600	100	See Table 11.4-8

- 4) The required length of full-width storage is based on the peak hour traffic volumes. This should be determined in the traffic study. The amount of storage is dependent on the type of traffic control in effect. For signalized intersections, the storage should be sufficient to

accommodate the 95th percentile peak hour queue. At yield-controlled intersections, the storage is based on the number of vehicles as designated in Table 11.4-8.

**Table 11.4-8
Left Turn Storage Requirements**

PEAK HOUR LEFT TURN VOLUME	EQUIVALENT NEIGHBORHOOD SIZE (#OF LOTS)	• SPEED LIMIT OF ROAD			
		35 MPH	40 MPH	45 MPH	55 MPH
		QUEUE FEET	QUEUE FEET	QUEUE FEET	QUEUE FEET
30 to 36	80 to 104	95	95	95	95
37 to 84	105 to 268	115	115	115	115
85 to 100	269 to 325	135	135	135	135
101 to 125	326 to 417	135	135	155	175
126 to 150	418 to 511	155	155	175	190
151 to 175	512 to 607	175	175	190	210
176 to 200	608 to 704	190	190	210	210

e) Relocation of Utilities

The Developer shall be responsible for the relocation of public or private utilities and drainage structures as may be occasioned by the required project access improvements.

11.4.9 Left Turning Control Radii

The path of the inside wheels during left turns is important for the design of median openings and intersections with dual left turn lanes. The following radii shall be used for the design of entrance improvements.

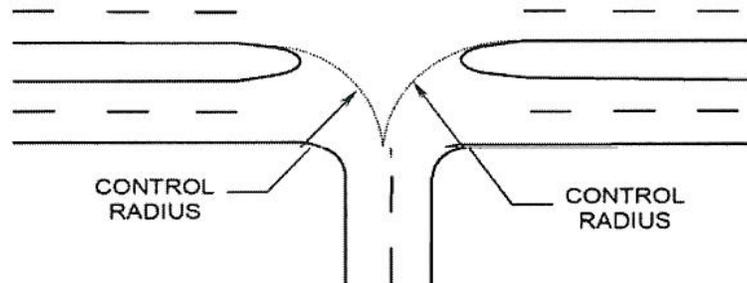


Figure 11.4-2: Left Turning Control Radius

**Table 11.4-9
Left Turning Control Radius**

DRIVEWAY USE	CONTROL RADIUS (FT)
Residential	40
Commercial	50

11.4.10 Corner Sight Distance

All driveways shall provide adequate corner sight distance in accordance with the standards established for an intersection as set forth in Section 11.8.6.

11.4.11 Separation and Spacing

All driveways except those serving residential units on individual lots shall be recommended to meet the following criteria:

- a) Spacing requirements, associated with the construction of new driveways, are provided in the following Table 11.4-10. Driveways should be separated from any other facility, which accesses a city roadway, whether it is another driveway or a public street. Minimum spacing requirements also apply to driveways on the opposite side of undivided roadways.

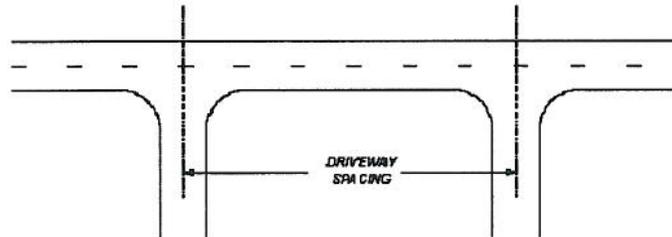


Figure 11.4-3: Spacing Criteria for Driveways

Table 11.4-10
Driveway Spacing Criteria

POSTED SPEED (MPH)	MINIMUM DRIVEWAY SPACING (FT) ⁽¹⁾
25	200
30	250
35	300
40	300
45	300
50	300
55	350

Notes: (1) Requirements for the length of right and left turn lanes, as shown in Table 11.4-5 and Table 11.4-7, may increase the minimum allowable spacing shown in Table 11.4-10.

b) Spacing of One-Way Driveways

Figure 11.4-4 shows a typical layout of one-way driveways. The spacing criteria presented in Table 11.4-10 does not apply to the distance between the two one-way driveways (driveway pair). A driveway pair must be separated from another driveway pair by the distance as shown in Table 11.4-10. A driveway pair must also be separated from an adjacent two-way driveway in accordance with the spacing criteria in Table 11.4-10.

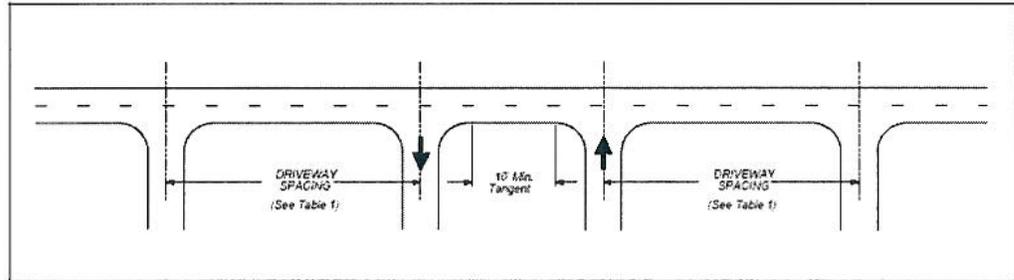


Figure 11.4-4: Spacing Criteria for One-Way Driveways

c) Placement of Driveways

Not only must driveways be spaced from other driveways as provided above, they must also be located a minimum distance from the property line. The radius return must be a minimum of 5' from the property line.

When driveways are to be jointly used by two or more property owners, the property line separation requirements given in the above paragraph can be waived. However, a joint use agreement signed by the affected property owners must be provided to the Public Works Department. Either property owner may apply for the driveway permit.

d) Driveway Spacing

Driveways should align with other driveways located on the opposite side of the roadway. If offset driveways cannot be avoided, the same driveway spacing criteria as given in Table 11.4-10 should be provided, to provide space for left turns. Figure 11.4-5 shows how the spacing is measured for locating offset driveways on undivided roadways. Spacing is from center to center.

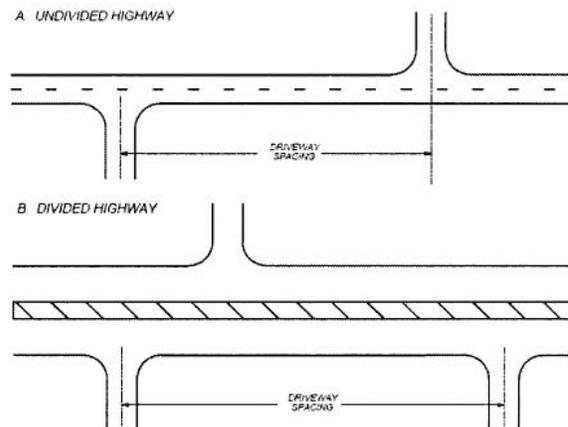


Figure 11.4-5: Spacing of Offset Driveways

If the city roadway involved is a divided facility and the driveways do not align with a median crossover, the driveway spacing would only apply to the adjacent driveway located on the same side of the roadway as shown above in Figure 11.4-5.

- e) Maximum number of driveways serving a single project: one (1) for each full 200' of property frontage. This is not meant to be a spacing standard but only an expression of the maximum number of driveways that are permitted serving a single project.

11.4.12 Raised Islands

Raised islands associated with entrance improvements shall be designed in accordance with the standards provided in Section 11.8.5.

11.4.13 Right-In, Right-Out Driveways

- a) Raised islands are also typically used to channelize the movements at a driveway where only right turns are allowed. The raised island is an effective means of preventing left turns. All right-in, right-out islands must have a radius that is 70 feet, or a compound curve that approximates 70 feet.
- b) Right-in, right-out driveways are not intended for truck traffic, so the exit and entrance lanes must be 12' in width as measured from face of curb to face of curb. The island must be constructed from mountable curb (3" vertical, 45 degree face, 3" flat) to accommodate emergency vehicles. The edge of the island should be offset 18" to 24" from the edge of the travel lane.

11.4.14 Pavement Design

- a) All construction, within the right of way, of surfaces intended for travel by motorized Vehicles shall be paved. The pavement specification of auxiliary lanes on city roadways shall be the GDOT Standard Specifications for Construction of Roads and Bridges, or as designated in city standards, whichever is more restrictive.
- b) New developments are required to widen the road along their frontage to a uniform lane width of twelve feet. If the widened area is two feet or less in width, a concrete sub-base should be provided per the current standards. The developer must then either pave the entire width of the road, or mill to the centerline and pave to match the existing road. Transitions shall be milled a minimum of 25 feet. Any deviation from this standard requires a waiver from the Public Works Director.

11.4.15 Pedestrian Considerations

When driveways are constructed in areas where pedestrian activity is not prohibited, the design should adequately provide for pedestrian movement and interaction with vehicular traffic. Pedestrian features that should be considered include sidewalks, crosswalks, traffic control features, and curb ramps are required. The Americans with Disabilities Act Accessibility Guidelines must be utilized where pedestrian traffic is expected.

11.4.16 Traffic Impact Studies

Any proposed site plan or subdivision plan which would be expected to generate over 300 trips in the peak hour of the traffic generator or the peak hour on the adjacent street shall submit a traffic impact study. Table 14.4-11 lists the specific thresholds to require a study.

**TABLE 11.4-11
DEVELOPMENT THRESHOLDS FOR TRAFFIC IMPACT STUDY**

Residential	300 units
Office	175,000 square feet
Commercial	90,000 square feet
Hotel	350 rooms
Industrial	300,000 square feet
Mixed-Use or other uses not listed	300 peak hour trips

Traffic impact studies should be organized as follows:

- a) **Introduction:** This would include land use, site, and study boundaries; existing and proposed site uses; existing and proposed uses in the vicinity of the site; and the existing and proposed roadways and intersections. All of these sections should have maps as appropriate.
- b) **Existing Traffic Volumes:** This would involve the collection of peak hour turn movement volumes at the adjacent and impacted intersections as designated by the Public Works Department. Traffic engineering consultants should coordinate with the Public Works Department prior to commissioning studies so that all the intersections can be identified in advance.
- c) **Trip Distribution:** Develop trip distribution in conformance with the guidelines set forth in the Trip Generation Handbook and provide a figure and a verbal description of the methodology.
- d) **Trip Generation:** All trip generation should be calculated using the most recent edition of ITE’s Trip Generation Manual. The methodology used for the trip generation, as well as the pass-by and internal capture reductions, should conform to the guidelines set forth in ITE’s Trip Generation Handbook. Maximum pass-by and internal capture reductions will conform to those set by GRТА and ARC with the DRI process. Provide justification for any trip reductions due to alternate modes. Provide a figure showing the site-generated a.m., p.m., and any other peak volumes on the same map.
- e) **Proposed Traffic Volumes:** Provide a figure showing the existing plus the site-generated a.m., p.m., and any other peak volumes on the same map. Include any background growth factors as appropriate. A chart and figure must be provided showing proposed traffic volumes with and without background growth rates.
- f) **Capacity Analysis:** Provide existing and proposed levels of service for the roadways and intersections in the study area.
- g) **Recommendations:** Provide a list of all proposed improvements, provide sketches, and justify whether they are project or system improvements.
- h) Appendices should be provided containing all the calculations and traffic data in the formats specified in below. Appendices may be provided in electronic format only (no hard copy required) on a CD-ROM labeled appropriately for the study.

11.5 GENERAL LAYOUT REQUIREMENTS

11.5.1 Conformance

The arrangement, character, extent, width, grade, and location of all streets shall conform at a minimum to the Comprehensive Plan and this Ordinance.

11.5.2 Local Streets and Collectors

Local streets shall be laid out so that their use by through traffic will be discouraged. Collectors shall be provided to channel through traffic movements within a development, where appropriate to the design and a major thoroughfare is not proposed by the Comprehensive Plan. Collectors also may be provided as central routes within large residential subdivisions, where appropriate to the design, based on project traffic demands exceeding 4,000 trips per day (ADT).

11.5.3 Cul-de-sac Streets

a) Maximum Length Without an Approved Turnaround

Dead end streets more than 150 feet in length, as measured from the centerline of the intersecting street to the end of the improved access road, shall provide a cul-de-sac turnaround. Alternative turnarounds may be provided as approved by the Fire Marshal and the Public Works Director.

b) Minimum Street Length

The minimum street length for a cul-de-sac street shall be 50 feet.

c) Maximum Design length

Cul-de-sac streets may be no more than 600 feet in length. Additional length necessitated by topography or property configuration may be approved by the Public Works Director.

d) Measurement of Cul-de-Sac Length

The length of a cul-de-sac street shall be measured along the centerline from the point of tangency of the entrance radius to the point of curvature for the cul-de-sac radius return.

e) Eyebrow Cul-de-Sacs

Eyebrow cul-de-sac (half cul-de-sacs) will be allowed only at "right-angled" intersections having an interior angle between 80 degrees and 100 degrees.

f) Conformance to Standard Drawings

Cul-de-sacs shall conform to the layout and dimensional requirements as shown in the Standard Drawings.

g) Cul-de-Sacs with Landscape Islands

Non-standard cul-de-sacs will be evaluated individually and may be constructed with a landscaped island (subject to approval by the Fire Marshal and the Public Works Director) to be maintained by the Home-Owners Association in perpetuity.

h) Minimum Cul-de-Sac Radius

Minimum cul-de-sac radii shall be 50 feet.

11.5.4 Other Dead End Streets

- a) A dead end street shall be provided to the boundary of a subdivision where necessary to provide access to a land-locked abutting property, for planned continuity of future circulation, for improved access for public safety vehicles, or for the extension of public water or other utilities to neighboring lands. Such dead end streets shall be designed so as to allow their reasonable extension, and shall be located so as to be reasonably incorporated into a street design for the neighboring property. The stub street requirement may be waived by the Public Works Director, provided the Fire Marshall concurs.
- b) In residential subdivisions, a dead end ("stub") street required, under this section, to provide access to an abutting property may be exempted from construction of roadway improvements and public utilities under the following circumstances:
- 1) No lot within the proposed subdivision will gain access from the "stub" street; and,
 - 2) A Concept Plan has not been submitted or approved on the neighboring tract; and,
 - 3) The "stub" street shall be fully designed as part of the Development Plans. However, the right-of-way shall only be cleared and rough graded in accordance with the approved plans, and all disturbed areas grassed; and,
 - 4) Connections for future extension of all public utilities shall be constructed as part of the subdivision. Curb returns shall be constructed as part of the subdivision. Curb returns shall be provided to the future "stub" street roadway location, and curb and gutter shall be installed across the roadway stub at the right-of-way line (extended); and,
 - 5) The right-of-way for the "stub" street shall be dedicated as part of the Final Plat. Slope easements or construction easements, if required by the street design, shall be shown on the Final Plat.
- c) Dead end streets on abutting property shall be extended into a proposed subdivision and incorporated into the street design of the development. This requirement may be modified by the Director in cases of serious topographical hardship or dissimilar zoning which would create unacceptable land use conflicts between the two developments. This modification may be conditioned on the provision of easements necessary for the extension of public utilities, the provision of cul-de-sac or other permanent turnaround on the dead end street, or the removal of the dead end street back to its nearest intersection.
- d) Where a dead end street (other than a cul-de-sac) serves more than three lots, the developer shall be required to provide a temporary vehicular turnaround within the right-of-way. This requirement may be waived if extension of the dead end street is approved and under construction prior to its inclusion in a Final Plat.
- e) Where a street dead ends at the property boundary and the street exceeds the maximum cul-de-sac length a permanent cul-de-sac shall be required. In this situation, right-of-way to the property boundary shall be required, but the pavement shall not be extended to the property boundary beyond the edge of the paved cul-de-sac turnaround.

11.5.5 Service Roads

- a) Where a development borders on or contains a railroad right-of-way, or limited access highway right-of-way or major thoroughfare, a public street may be required to be constructed and dedicated within the development approximately parallel to and on each side of such right-of-way.
- b) All driveways along designated thoroughfares with existing or planned service roads shall provide access to such service roads. To gain temporary direct access to the thoroughfare, the developer shall construct the section of the service road adjacent to the development. The service road section shall be located where planned. Any right-of-way not previously dedicated shall be dedicated prior to consideration of a temporary driveway approval providing direct access to the thoroughfare.

11.5.6 Half-Streets

Half-streets (new boundary streets having one-half of the minimum required right-of-way or pavement width) shall not be allowed nor access to same be permitted should it exist.

11.5.7 Reserve Strips

Land in private ownership adjacent to public rights-of-way which could control or are intended to control access to streets, alleys, or public lands shall not be permitted unless their control is given to the City under ownership, dedication, or easement conditions approved by the City Attorney or acceptable to the Public Works Director. No development shall be designed so as to deny access to abutting properties.

11.5.8 Alleys

Alleys shall not be provided except where the developer produces evidence satisfactory to the Public Works Director of the need for same. In the event the Public Works Director approves a design which proposes alleys, the alley shall be constructed as though it were a local street pursuant to the standards contained in this Ordinance.

11.5.9 Street Jogs

Streets shall be aligned as per driveways as shown on table 11.4-10.

11.5.10 Traffic Calming

Where residential streets are longer than 600 feet, traffic calming devices may be incorporated as required by the Public Works Director. The design of all measures shall comply with the applicable standards for the construction of such measures.

11.5.11 Bike Lanes

When required, the developer shall dedicate sufficient right-of-way to the city, or applicable entity, and install the necessary pavement and other improvements for the construction of bicycle lanes in locations as may be required by the Director. Bicycle lanes shall be a minimum of 5 feet in width as measured from the edge of pavement, not including curb and gutter, and constructed in accordance with the AASHTO Guide for the Development of Bicycle Facilities, latest edition, and the Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.

11.5.12 Bus Shelters

When required, the developer shall provide bus shelters within or adjacent to the right-of-way which are in compliance with the design standards of the local transit authority and as approved by the city. The Public Works Director may require the construction of turnout areas or widened shoulders to accommodate the loading and unloading of passengers.

11.6 MINIMUM RIGHT-OF-WAY AND STREET IMPROVEMENTS

11.6.1 Right-of-Way and Pavement Widths

- a) Minimum right-of-ways for new street construction shall be as shown on the following table or per the City of Sandy Springs Right of Way Plan unless otherwise approved by the Public Works Director.

**TABLE 11.6-1
MINIMUM RIGHT-OF-WAY PER STREET CLASSIFICATION**

STREET CLASSIFICATION	MINIMUM RIGHT-OF-WAY (FT)	AS MEASURED FROM CENTERLINE (FT)
Collector	80	40
Non-Residential Local	60	30
Residential Local	50	25

- b) Additional street right-of-way width may be required to be dedicated at intersections or other locations fronting the property where turning lanes, storage lanes, medians, realignments, sidewalks, utilities or other necessary improvements are required and minimum right-of-way standards would be inadequate to accommodate the improvements.
- c) A minimum of 10-foot travel lanes are required on all streets, except for alleys where the principal structure may also be served by a higher classification street. Roadway widths and lane assignments are typically based upon the functional classification of said roadway, but in no case shall those widths be less than shown in the following table, unless otherwise approved by the Public Works Director:

**TABLE 11.6-2
MINIMUM PAVEMENT WIDTHS**

STREET CLASSIFICATION	MINIMUM LANE WIDTH (FT) (1), (2) (3)
Principal and Minor Arterial	12
Collector	12
Residential Local	10

Non-Residential Local	12
Alley	16

Notes:

- (1) Lane widths exclude curb and gutter.
- (2) Additional pavement width may be required in areas where bicycle lanes are to be installed.
- (3) Alley is expressed as total width.

- d) Median divided roadways may be required with left-turn bays and median breaks in lieu of center two (2) way left turn lanes.
- e) Existing streets shall be continued at the same or greater width, but in no case shall it be less than the required width provided herein. Where street widths change an appropriate transition shall be provided as approved by the Public Works Director.

11.6.2 Street Rights-of-Way

a) Dedication of Street Right-of-Way

Right-of-Way for all public streets, existing and proposed, shall be dedicated in accordance with the street classifications as shown on the Long-Range Road Classification Map of the Comprehensive Plan and in accordance with this Ordinance. Right-of-way dedications shall be made prior to the approval of a final plat or, where a final plat is not involved, prior to the issuance of a Land Disturbance Permit, unless otherwise approved by the Public Works Director.

b) Right-of-Way for Projects Adjacent to Comprehensive Plan Projects

If a new street or thoroughfare is proposed by the Comprehensive Plan or the State of Georgia to adjoin or traverse the property, permits shall not be issued until the Department has submitted the project to the Mayor and City Council for review in order to seek a determination if the city should acquire the right-of-way or if a study of alternate routes should be undertaken. The review period by the city shall not exceed 90 days from the date of permit application. If, after the 90 day review, the Mayor and City Council is unable to reach a decision, there shall not be any further delay of a requested permit for this situation

c) Right-of-Way for Projects Adjacent to Funded Roadway Projects

If a new street or thoroughfare is funded by the city or the State of Georgia to adjoin or traverse the property, the proposed road right-of-way shall be incorporated into the development plans of the property in accordance with this Ordinance. The right-of-way requirements contained in this Ordinance shall govern except where there exists clearly defined plans of GDOT or the city, which require additional right-of-way. In that case, the greater right-of-way requirements shall govern.

d) Right-of-Way for Projects Adjacent to Designed Roadway Projects

Any development with property fronting on an existing city road for which there exists clearly defined plans by GDOT or the city, may be required to provide road improvements associated with the defined plans or, in lieu of the design and construction, at the discretion of the Mayor and City Council, the developer may be required escrow the dollar equivalency of required improvements (including curbing, utility relocation, and drainage structures), as estimated by the

developer and verified by the Public Works Department. These funds shall be deposited in the appropriate road construction account prior to the approval of development improvements or within 30 days of city award of a construction contract, whichever occurs first.

e) Dedication of Minimum Required Right-of-Way for Abutting Streets

On any existing street that abuts a property and does not meet the right-of-way requirements as established in this Ordinance, one-half of the required width of right-of-way shall be dedicated to the city as measured from the centerline of the roadway prior to the issuance of a Land Disturbance Permit for that property.

f) Location of the Right-of-Way

Except where it can be shown to be in the best interest of the safety, health and welfare of the general public or specifically approved by the Public Works Department the location of the right-of-way shall be located as follows:

- 1) The right-of-way shall be parallel the back of curb or be mitered at intersections to provide adequate area for utilities, sidewalk, sight distance and maintenance of the right-of-way.
- 2) Right-of-way shall be located a minimum of 11 feet from the back-of-curb or one-foot from the back of sidewalk, whichever is greater, to prevent interference or encroachment by fencing, walls, hedges and other planting or structures that may be placed on the adjacent property line at a later date.

g) Right-of-Way Setback Adjacent to Residentially Zoned Property

The right-of-way for new public streets or the easement/common area for new private streets must be located a minimum of 50 feet from any peripheral property line adjoining residentially zoned property unless interparcel access is required. This setback shall comply with the provisions of Section 11.6.7 for Reserve Strips.

h) Minimum Right-of-Way Miters

When right-of-way miters are required at intersections to provide area for adequate utility location and maintenance, the miters shall comply with the following minimum standards, the miter distances shall be measured along the right-of-way from the point of intersection of the two rights-of-way if they were extended:

- 1) Twenty (20) foot miters (minimum) shall be provided at the right-of-way intersection of any major thoroughfare.
- 2) Ten (10) foot miters (minimum) shall be provided at the right-of-way intersection of any local roads.

11.6.3 Sub-Standard Streets

a) Ingress/Egress

All subdivisions and developments shall provide at least one means of ingress/egress from an improved road as determined by the Public Works Director. This condition may be waived in

areas where the size of the lot or other conditions of zoning permit the development of single-family residential units to utilize a sub-standard street.

b) Substandard Street Improvements

In the event that a development which is not permitted to access sub-standard streets through a right or condition of zoning has access to a sub-standard street (i.e., a dirt or gravel road), the following project access improvements shall be required:

- 1) If the abutting substandard street provides access to the development and is dirt or gravel, the street shall be upgraded by the developer to a paved roadway from the project entrance to the nearest standard paved road along the route of access.
- 2) Off-site project access improvements, shall at a minimum, result in a full-section roadway meeting the requirements of a Local Residential roadway at minimum. In cases where the internal roadways have been designated as a higher classification the off-site improvements shall be designed to meet the standards of the higher classified road. Responsibilities shall be as follows:
 - i. The Developer shall design the road and provide the labor, equipment, and materials required for roadway improvements and necessary drainage and utility improvements. Where a rural road section has been approved the drainage improvements shall include all necessary drainage swales.
 - ii. All right-of-way required for these off-site improvements shall be acquired by the developer at no expense to the city. If the developer is unable to acquire the right-of-way, the Public Works Department may initiate acquisition proceedings, at the expense of the developer, after authorization by the Mayor and City Council.

11.6.4 Improvements Along State Highways

For any development which abuts a state highway or other right-of-way controlled by the State of Georgia, improvements to the roadway and the location and design of any street or driveway providing access from the state highway shall comply with the standards and requirements of GDOT or the City of Sandy Springs Public Works Department, with the more restrictive requirements controlling. The proposed access or improvements shall be required to have been approved and permitted by GDOT and incorporated into the construction drawings for the project prior to issuance of a Land Disturbance Permit by the Department.

11.7 ROADWAY DESIGN

11.7.1 Street Grades and Design Speeds

a) Minimum Grade

Minimum grade for all local streets shall be 1.5%. Minimum grades for all collector and arterial streets shall conform to GDOT practice.

Minimum grades of less than 1.5% on a local street may be approved by the Department, based on adequate engineering designs, where at least 1.5% cannot reasonably be achieved due to topographical limitations imposed by the land. In such cases, a Record Drawing and such computations as necessary shall be provided after construction to establish that the street will

drain in accordance with this Ordinance. Street sections where unacceptable pooling, excessive spread at catch basins, or other hazardous conditions occur shall be reconstructed or otherwise improved to eliminate such conditions.

b) Maximum Grade and Design Speed

Minimum vehicle design speeds and maximum grades allowable in the city by street classification shall be as shown in the following table.

**TABLE 11.7-1
MINIMUM DESIGN SPEEDS AND MAXIMUM GRADES**

STREET CLASSIFICATION	MAXIMUM GRADE ⁽¹⁾	MINIMUM DESIGN SPEED (MPH)
Collector	10%	40
Non-Residential Local	12%	30
Residential Local	14% ⁽²⁾	25

Notes:

- (1) Maximum grade in excess of those listed above may be approved by the Public Works Director in order to address topographical safety, hydrological, and environmental concerns.
- (2) Grades between 12% and 14% shall be limited to a maximum length of 150 feet. The distance shall be measured as the tangent length between points of curvature.

c) Maximum Grade for Cul-de-sac

Maximum grade on any cul-de-sac turnaround shall be 6%.

d) Roadway Cross Slope

The standard roadway cross slope is 2% down from crown to gutter line or edge of pavement. In areas where pavement width is being added to an existing street, the additional pavement shall match the cross slope of the existing roadway.

11.7.2 Vertical Street Alignment

a) Requirements for Vertical Curves

All changes in street profile grades having algebraic difference greater than 1% shall be connected by a parabolic curve having a minimum length (L) equal to the product of the algebraic difference between the grades in percent (A) and the design constant (K) assigned to the street according to its category (i.e., $L=KA$).

b) Required K Values

TABLE 11.7-2

CONSTANT (K) VALUES FOR VERTICAL CURVES

STREET CLASSIFICATION	CREST CURVES	SAG CURVES
Collector	44	64
Non-Residential Local	19	37
Local Residential	12	26

c) Minimum Vertical Curve Length

The minimum length of vertical curve required for safe stopping sight distance shall be calculated using AASHTO “Policy on Geometric Design of Highways and Streets”, latest edition.

11.7.3 Horizontal Street Alignment

a) Minimum Horizontal Curves and Superelevation

All new streets shall adhere to the following standards governing horizontal curvature and super elevation:

**TABLE 11.7-3
HORIZONTAL CURVES**

STREET CLASSIFICATION	MINIMUM RADIUS (FT)	MAXIMUM SUPERELEVATION
Collector	560	0.04
Non-Residential Local	150	Normal Crown
Local	120	Normal Crown

Notes:

(1) No super elevation will be allowed on Collectors internal to residential subdivisions.

b) Calculation of Super-elevation

Super-elevation for horizontal curves shall be calculated utilizing the following formula:

$$R = v^2 / (15 (e + f)) \text{ where:}$$

R = minimum radius curve

v = vehicle design speed (MPH)

e = rate of super-elevation (decimal of a foot rise per foot roadway)

f = side friction factor

Vehicle Design Speed (v)	30	40	50	60
Side Friction Factor (f)	0.16	0.15	0.14	0.12

c) Super-elevation When Widening Existing Streets

Widening section along existing streets shall be designed reflecting existing curvature and super elevation, if any, unless the existing street has been included in a specific design by the City or GDOT which calls for different standards, in which case the project will be coordinated with the overall design.

d) Super elevation Runoff

Roadway edge curves shall be provided for tangent run out (bringing edge from a normal crown to centerline elevation) and super elevation runoff (from the end of tangent run out to the point of design super elevation) in accordance with design standards of GDOT or other professional engineering standards.

e) Tangents and Compound Curves

Between reverse horizontal curves there shall be not less than the minimum centerline tangents shown in Table 11.7-4 unless otherwise specified by GDOT. Compound radii curves are prohibited. At least the "desirable" length shall be provided unless hardship conditions of topography or property configuration will not allow lengths greater than those shown as "minimum." For compound circular curves that cannot be avoided, the ratio of the flatter radius to the sharper radius shall not exceed 1.5 to 1.

**TABLE 11.7-4
TANGENTS**

STREET CLASSIFICATION	MINIMUM TANGENT LENGTH (FT)
Collector	100
Non-Residential Local	75
Local	50

11.7.4 Horizontal and Vertical Clearances

a) Horizontal Clearances

1) Shoulder Width

A shoulder of no less than 11 feet from the back of curb or edge of pavement, appropriately graded and having gentle slopes of not more than 0.5 inch per foot and rounded cross-sectional design shall be maintained along all streets. Beyond the shoulder but within the right-of-way, slopes shall not exceed one foot of rise for each two feet of horizontal distance on a cut slope, and one foot of fall for each three feet of horizontal distance on a fill slope.

2) Clear Zone

Experience has shown that motorists occasionally run off the roadway and providing a

traversable recovery area can lesson serious injury. AASHTO publishes a Roadside Design Guide that should be used as a reference when designing driveways.

The following table provides the clear zone distances as contained in the Roadside Design Guide. Driveways must be designed so that all areas within the roadway right-of-way have clear zones as defined in the following table.

**Table 11.7-5
Clear Zone Distances**

(From AASHTO 2002 Roadside Design Guide)

DESIGN SPEED	DESIGN ADT	FILL SLOPES			CUT SLOPES		
		6:1 or Flatter	5:1 to 4:1	3:1	3:1	5:1 to 4:1	6:1 or Flatter
40 or Less	Under 750	7-10	7-10	**	7-10	7-10	7-10
	750-1500	10-12	12-14	**	10-12	10-12	10-12
	1500-6000	12-14	14-16	**	12-14	12-14	12-14
	Over 6000	14-16	16-18	**	14-16	14-16	14-16
45-50	Under 750	10-12	12-14	**	8-10	8-10	10-12
	750-1500	12-14	16-20	**	10-12	12-14	14-16
	1500-6000	16-18	20-26	**	12-14	14-16	16-18
	Over 6000	18-20	24-28	**	14-16	18-20	20-22
55	Under 750	12-14	14-18	**	8-10	10-12	10-12
	750-1500	16-18	20-24	**	10-12	14-16	16-18
	1500-6000	20-22	24-30	**	14-16	16-18	20-22
	Over 6000	22-24	26-32*	**	16-18	20-22	22-24
60	Under 750	16-18	20-24	**	10-12	12-14	14-16
	750-1500	20-24	26-32*	**	12-14	16-18	20-22
	1500-6000	26-30	32-40*	**	14-18	18-22	24-26
	Over 6000	30-32*	36-44*	**	20-22	24-26	26-28
65-70	Under 750	18-20	20-26	**	10-12	14-16	14-16
	750-1500	24-26	28-36*	**	12-16	18-20	20-22
	1500-6000	28-32*	34-42*	**	16-20	22-24	26-28
	Over 6000	30-34*	38-46*	**	22-24	26-30	28-30

Notes:

* Clear zones may be limited to 30'

** Fixed objects should not be present in the vicinity of the toe of these slopes. The width of the recovery zones should consider a number of factors including right of way availability, economic factors, safety needs, and accident history.

All areas located within the clear zones should remain clear of obstructions such as bridge abutments, poles, trees, etc. If obstructions are unavoidable, the design should include appropriate protection such as break-away design, guardrail installation, safety end treatments on culverts, etc. The Roadway Design Guide includes a table for horizontal curve adjustments, where the clear zone correction factor is applied to the outside of curves only. Curves flatter than a 2860 foot radius do not require an adjusted clear zone.

3) Increased Clear Zone in Certain Locations

At selected locations, such as the outside of a sharp curve, a wider clear zone with greater horizontal clearances to any roadside obstruction may be required.

4) Removal of Obstructions

The Public Works Department, in accordance with Georgia Law 32-6-51 and this Development Ordinance, is authorized to remove or direct the removal of any sign, signal, device, or other structure erected, placed, or maintained on the right-of-way of a public road which because of its nature, construction, or operation, constitutes a danger to, or interferes with the vision of, drivers of motor vehicles.

b) Vertical Clearances

Vertical clearance for all overhead obstructions shall be at least 16 feet over the entire roadway width.

Additional clearance may be required for obstructions over railroads, state or federal roadways or other transportation routes.

11.8 STREET INTERSECTIONS

11.8.1 Angle of Intersection

The angle of roadway intersections shall be consistent with the requirements for driveways as set for in Section 11.4.1.

11.8.2 Intersection Approaches: Horizontal Alignment

- a) New local streets which approach an intersection with a street in a category higher than itself on a horizontal curve having a centerline radius less than 240 feet shall provide a tangent section of roadway at least 30 feet long. Collectors approaching an intersection with a major thoroughfare on a horizontal curve having a centerline radius of less than 550 feet shall also provide the 30 foot tangent section. The tangent length shall be measured along the centerline of the street, from the right-of-way line of the intersecting street, extended, to the point of tangency with the centerline of the curve section.
- b) New major thoroughfares shall provide tangent sections at intersections with streets in equal or higher categories as needed to provide adequate stopping distances at their design speeds.

11.8.3 Intersection Approaches: Vertical Alignment

a) Approach Landings Internal to Residential Subdivisions

For approaches to intersections internal to a residential subdivision, a leveling of the street at a grade not exceeding 5 percent shall be provided for a distance of not less than 50 feet as measured from the back of curb of the intersecting.

b) Approach Landings at Local Streets

For new street intersections with local streets, a leveling of the street at a grade not exceeding 3 percent shall be provided for a distance of not less than 50 feet as measured from the back of curb

of the intersecting street.

c) Approach Landings at Collectors or Arterials

As a street approaches an intersection with a collector or arterial, there shall be a suitable leveling of the street at a grade not exceeding 2 percent and for a distance not less than the following minimums:

**TABLE 11.8-1
APPROACH DISTANCES AT MAJOR INTERSECTIONS**

APPROACHING STREET CLASSIFICATION	MINIMUM APPROACH TANGENT ⁽¹⁾
Principal or Minor Arterial	100'
Collector	75'
Local (residential and non-residential)	50'

Notes:

(1) Distance of the approach is measured from edge of pavement of the intersecting street to the point of curvature in the approaching street.

11.8.4 Intersection Radii

- a) Intersection radii for roadways as measured at back of curb and for the right-of-way lines shall be as follows. The minimum roadway radii for the intersection of local and non-residential local streets is 25 feet. For all other roadway classifications the minimum roadway radii is 40 feet. When a local or residential collector intersects a higher classification of roadway, the radii shall be a minimum of 40 feet. Larger radii may be required for streets intersecting at an angle of less than 90° or when vehicle and operating circumstances dictate. As approved by the Public Works Director, the radii can be reduced a maximum of five feet for the following reasons:
 - 1) Separation from street, or
 - 2) Removal of obstruction
- b) Intersecting right-of-way lines may be joined by an arc having the minimum radius shown, or by a miter which cuts across the right-of-way lines connecting the points where the required radius would have otherwise been tangent. Miters shall be measured as provided in Section 11.6.2.h.

11.8.5 Islands

- a) Islands in street intersections shall conform to the design requirements of the standard drawings. In no case shall anything in an island extend more than 3 feet above the street grade within the right-of-way, except traffic regulatory devices and other infrastructure erected or approved by the city. No island shall be approved which contains less than 100 square feet for median islands or 50 square feet for corner islands.
- b) Islands with the right-of-way or access easements shall be constructed with mountable curb sections per GDOT specifications, unless otherwise approved by the Public Works Director.
- c) Islands are an important form of intersection channelization that is often needed to prohibit undesirable movements, define the paths of allowed movements, and provide a refuge area for

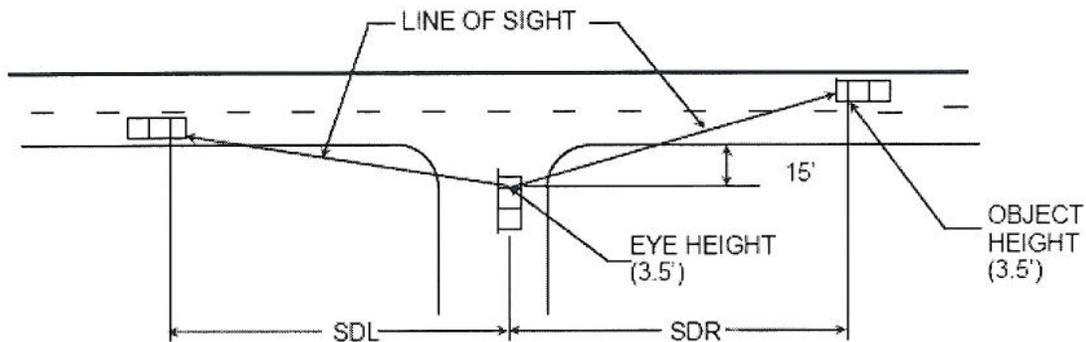
pedestrians. Any location where two outbound lanes are proposed for a driveway at an un-signalized location, the right line must be for right-out only movement, and separated from the other lane by a raised island.

- d) Painted lines are an effective means to direct the paths of vehicular movement. However, raised islands are more effective during times when visibility is reduced. When islands are to serve as pedestrian refuge areas, they should be constructed as raised islands. All sign posts to be placed within concrete area must have hole through pavement structure. The hole may be either formed, drilled or sawed.
- e) When multiple crosswalks are required to pass through islands, the required size may exceed the 100 square feet mentioned above. The additional area may be required to install wheelchair ramps. As an alternate to ramps, the pedestrian travel way can be "slotted" through the island, remaining on the grade of the roadway.
- f) Raised islands should be offset from the edge of the adjacent travel lane on all sides. The amount of offset shall be a minimum of 18" as measured from the edge of the travel lane to the face of the curb. When raised islands are adjacent to roadways with posted speed limits of 50 MPH or greater, the island shall be offset from the edge of the roadway by a minimum distance of 10'.

11.8.6 Intersection Corner Sight Distance

- a) Intersections shall be designed with adequate corner sight distance. Where necessary, back slopes shall be flattened and horizontal or vertical curves lengthened to provide the minimum required sight distance.
- b) The minimum corner sight distance requirement may be calculated using AASHTO "Policy on Geometric Design of Highways and Streets," Chapter 9 (Intersections), latest edition. Intersection sight distance is determined with an assumed height of driver's eye of 3.5 feet and an assumed height of object of 3.5 feet when measuring in the vertical plane. When measuring in the horizontal plane, the intersection sight distance is determined with an assumed driver's eye location from a point 4' offset from the centerline and 15' from the edge of closest travel lane to a point along the centerline of the closest oncoming travel lane. When measuring in either plane, the line of sight must remain in the proposed standard dedicated ROW:

**TABLE 11.8-2
MINIMUM CORNER SIGHT DISTANCE**



DESIGN	SIGHT DISTANCE (FT) ⁽¹⁾
--------	------------------------------------

SPEED (MPH)	2-LANE	3 AND 4 LANES		5 AND 6 LANES	
	SDL=SDR	SDL	SDR	SDL	SDR
25	280	n/a	n/a	n/a	n/a
30	335	350	375	400	420
35	390	410	440	465	490
40	445	470	500	530	560
45	500	530	560	595	630
50	555	590	625	660	700
55	610	650	685	730	770

Notes:

- (1) SDL refers to “Sight Distance to the Left” and SDR refers to “Sight Distance to the Right”
- (2) Minimum corner sight distance for stopped passenger vehicles turning onto a roadway with no median and grades of 3-percent or less. Distances shall be adjusted for entering roadways with different design characteristics.

11.8.7 Obstructing Visibility at Intersections

On any corner lot, within an area formed by the lot lines on the street sides of such lot and a line (miter) joining points on such lot lines located at a distance of 20 feet from the point of their intersection, the following shall apply:

- a) There shall be no fence or wall or hedge higher than three feet.
- b) There shall be no obstruction to vision, other than a post or column or tree (except standards erected by city) exceeding one foot in greatest cross-sectional dimension, between a height of three feet and a height of 15 feet above the established grade of either of the intersecting streets.
- c) The Public Works Director may required additional restrictions based on the horizontal or vertical curvature of the roadway or any unique design features of the intersection.

11.8.8 Turning Lanes at Intersections

Left turning lanes shall be provided on all new internal project streets, classified as a collector or higher, intersecting a major thoroughfare, and may be required in other locations to meet traffic demand and safe operations. Right turning lanes may be required to meet traffic demands or safety concerns. When provided, turning lanes shall meet the criteria for turn lanes in Sections 11.4.6 and 11.4.7.

11.9 STREET CONSTRUCTION

11.9.1 Sub-grade Preparation for all Streets

Street construction shall be done in accordance to GDOT or the City of Sandy Springs Public Works Department., with the more restrictive requirements controlling.

- a) Preparation

Sub-grade preparation shall be in accordance with GDOT specifications and this Ordinance.

- b) Unsuitable Material

If any sections of the sub-grade are composed of topsoil, organic, or other unsuitable or unstable material, such material shall be removed and replaced with suitable material and then thoroughly compacted as specified for fill or stabilized with stone or a geo-textile or geo-grid as approved by the Director.

c) Compaction

Fill shall be placed in uniform, horizontal layers not more than 6" thick (loose measurement). Moisture content shall be adjusted as necessary to compact material to 100% maximum laboratory dry density as determined by AASHTO method T-99.

d) Utility Installation

After the earthwork has been completed, all storm drainage, water, and sanitary sewer utilities have been installed within the right-of-way as appropriate, and the backfill in all such ditches thoroughly compacted, the sub-grade shall be brought to the lines, grades, and typical roadway section shown on the plans.

e) Compaction Testing

Utility trenches cut in the sub-grade shall be backfilled as specified herein. Compaction tests at the rate of one per 150 feet of trench may be required to verify compaction.

f) Proof-roll

The sub-grade must pass roll testing with a fully loaded dump truck prior to placement of the base material. With the approval of the Department, a geo-textile or grid may be used to stabilize a sub-grade that does not pass proof rolling.

g) Use of Roads as Construction Roads

When the street is to be used for construction traffic before the paving work is completed, a layer of stone (except crusher run) shall be laid as a traffic surface. This material shall not be used as a part of the base material. It may be worked into the sub-grade, or it shall be removed before the base course is set up for paving.

h) Temporary Drainage

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. After installation, drainage under the curb to side slopes is required, using minimum 4 inch diameter pipe sections.

11.9.2 Base Preparation for all Streets

a) Crushed Stone Base

- 1) Base preparation shall be in accordance with GDOT specifications and this Ordinance
- 2) Base course thickness shall be in accordance with Section 11.9.3 of this Ordinance.
- 3) Lay one course to a maximum depth of 8 inches. If the required depth exceeds 8 inches

construct 2 or more courses of equal thickness. Moisture content shall be adjusted as necessary to compact material to 100% maximum laboratory dry density as determined by AASHTO method T-180.

b) Prime Coat

- 1) If a delay in paving is reasonably expected by the Developer or the city, the base shall be primed with 0.25 gallon of R.C. 70 per square yard the same day it is compacted, and cured for 7 days prior to paving.
- 2) Prime coats may also be required for cement or lime stabilized bases or sub-bases, regardless of pavement thickness.
- 3) Prime coats shall not be applied to a wet surface, in air temperatures less than 40 degrees F in the shade or if rain is imminent.

c) Soil Cement Base

- 1) If the base material (resident soil) is unsatisfactory to the city then a soil cement mix design with engineer test results acceptable to the city. The design must come from a geo-technical firm with the results certified by a Professional Engineer registered in the State of Georgia. The tests required for the design are ASTM D558 or AASHTO T134 or ASTM D559 and/or 560 or ASHTO T135 and 136.
- 2) The minimum base course shall consist of at least 6 inches of suitable soil (high mica content not suitable) stabilized with 10 percent of Portland Cement by volume (approximately 42.3 pounds per sq. yd.). Where the grade of the street is 5 percent or greater, a single surface treatment course must be applied before the binder.

11.9.3 Paving Standards for all Streets

a) Asphalt Streets

- 1) Asphalt paving installation shall be in accordance with GDOT specifications and this Ordinance. Asphalt paving shall not be installed directly on the sub-grade. A graded aggregate base shall be installed in accordance with these and GDOT specifications for all asphalt paving sections.
- 2) All pavement sections shall be designed by a qualified, registered professional engineer based on the 20 year projected traffic loads for that section. The minimum acceptable pavement sections shall be defined as follows:

**Table 11.9-1
MINIMUM CONSTRUCTION STANDARDS⁽¹⁾**

STREET CLASSIFICATION	BASE	BINDER	TOPPING 9.5 mm-Type II or 12.5 mm
Principal and Minor Arterials	12" GAB	6" ⁽²⁾	1½"

Collectors	12" GAB	6" ⁽²⁾	1½"
Non-residential Local	8" GAB	3" 19mm	1½"
Residential Local and Alleys	8" GAB	1½" 19 mm	1½"

NOTES:

(1) Unless otherwise specified by Public Works Department or GDOT.

(2) Binder Course shall consist of 4" 25 mm Superpave base and 2" of 19 mm Superpave binder.

b) Concrete Streets

On residential streets 5 inches of 3500 psi concrete is to be applied on a stabilized and compacted sub-grade with 6 inches of compacted GAB, or 7 inches on all other streets. The design and construction of the street shall comply with GDOT standards. Use of concrete streets requires the approval of the Public Works Director.

11.9.4 Local Residential-Rural Streets

Where allowed Local Residential-Rural Streets do not require curb and gutter. The road base shall be extended 1 foot beyond the edge of pavement, and the shoulders shall extend 8 feet from the edge of pavement to a standard ditch section on each side (see Standard Drawings). Otherwise, the roadway shall comply with the standards for new residential subdivision streets, above.

11.10 CURB AND GUTTER

11.10.1 General Requirements

a) Curb and Gutter Required

All new streets and access improvements shall be provided with curb and gutter except where approved for a rural road section by the Public Works Department. All areas approved for use of the rural road section shall provide appropriate roadside drainage facilities designed in accordance with the Georgia Stormwater Management Manual as adopted by the city.. All gutters shall drain smoothly with no areas of ponding.

b) Alternative Curb and Gutter Design

Alternative curbing designs such as rolled back or vertical curbing without a gutter may be approved by the Public Works Director when such designs are deemed appropriate for the type of development proposed.

11.10.2 Local and Collector Road Curbing

Local and collector road curbing shall meet the following requirements:

a. Concrete shall be Class "A" (as defined by GDOT) and have a minimum strength of 3,000 PSI at 28 days.

b. Typical minimum section shall be 6" x 24" X 12"(GDOT 24" Type II).

- c. Vertical curbing only, except where specific approval has been granted by the Public Works Director for an alternate curb design.

11.10.3 Arterial Curbing

Arterial curbing shall meet the following requirements:

- a. Concrete shall be Class "A" (as defined by GDOT) and have a minimum strength of 3,000 PSI at 28 days.
- b. Typical minimum section shall be 8" X 30" X 14" (GDOT 30" Type II).
- c. Vertical curbing only, except where mountable has been specified and approved by the Public Works Director

11.10.4 Construction Methods:

- a. Curb and gutter shall be set true to line and grade, horizontal be field staked, and finished to the section shown on the plans. Along the frontage of a road which the city or GDOT has identified for resurfacing within 1 year of the new construction, the grade of the new gutter shall be placed 1" above the project access improvement pavement grade in areas where drainage will not be adversely affected.
- b. Line and grade shall be set by developer's engineer or surveyor on grade less than 2% and over 12%, and within 100 feet in both directions from all low points.
- c. One-half inch expansion joints or pre-molded bituminous expansion joint material shall be provided at all structures and radius points and at intervals not to exceed 250 feet in the remainder of the curb and gutter.
- d. Inferior workmanship or unprofessional construction methods resulting in unacceptable curb and gutter will be cause for rejection of the finished work.
- e. Disturbed areas along all curbing shall be backfilled, stabilized, and grassed.

11.11 SIDEWALKS AND MULTI-USE TRAILS

Sidewalks and curb ramps shall be constructed in all new development or redevelopment along all abutting or internal streets, existing or new, private or public for a length equal to the distance of the required road improvements. Whenever a discrepancy occurs between the design and construction standards of this section and any state or federal regulation, then the most restrictive shall apply.

When required by the Public Works Director or by a zoning overlay wider sidewalks or multi-use trails shall be installed by the developer.

11.11.1 Sidewalk Installation & Timing

Sidewalks shall be installed as follows:

- a. All applicants are required to install sidewalk along all roadway frontages of their properties that are part of the sidewalk master plan network. This includes all Land Disturbance Permits and

Building Permits issued along a network roadway. Any permit issued for renovation in the City's zoning overlay district that meets the threshold amount specified in the zoning ordinance and is a part of the master plan network will be required to install sidewalk along all property frontages.

- b. If a development is within the project limits of a designed and funded capital improvement project that will install sidewalk or streetscape, the developer may pay in lieu of building the required sidewalk, per section 11.6.2.d. All Certificates of Occupancy will be temporary until project closeout.
- c. The following permits and activities will require installation of sidewalk outside the master plan network:
 - 1) Land disturbance permit
 - 2) Subdivision of property that creates a new street (public or private)
 - 3) Non-residential subdivision plat or non-residential combination plat

11.11.2 Sidewalk Design & Construction Standards

Sidewalks shall be constructed in accordance with the requirements of this section. The Public Works Director is authorized to grant modifications upon specific application due to topographic or drainage difficulty as well as alternative design proposals after receiving a recommendation from the Public Works Department.

a. Width

- 1) Sidewalks shall be at least 5 feet wide on new internal subdivision streets. Sidewalks shall be at least 5 feet wide on abutting external streets.
- 2) Multi-use trails shall have a minimum width of 10 feet.
- 3) If the street is part of an approved sidewalk, pathway or transportation plan then the width and location of the sidewalk shall conform to the requirements of the approved plan.

b. Shoulder

Sidewalk and multi-use trails shall be provided with a minimum graded shoulder width of 2 feet. When required to support alternative uses, i.e. equestrian, mountain bikes, etc..., a 5 foot graded shoulder may be required.

c. Transitions

Where new sidewalks tie in to existing sidewalks of a different width or where the proposed sidewalk must change width then the transition shall be made in a gradual manner at a rate of 5:1. Where this transition is made to tie in to an existing sidewalk at a property boundary the full width sidewalk shall extend along the entire length of the project site.

d. Non Compliant Sidewalks

In all areas where the condition or design of the sidewalk does not conform to this Ordinance or is deemed unsatisfactory, the existing sidewalk shall be removed and replaced in

conformance with this Ordinance.

e. Landscape Strips

- 1) Sidewalks shall be located at least 2 feet from the back of curb except in conservation subdivisions or subdivisions in which street trees are provided (bridges excepted). Sidewalks in conservation subdivisions or in subdivisions in which street trees are provided shall be located at least 5 feet from the back of curb (bridges excepted). Where no curb exists, or if road improvements are proposed for installation by the city, sidewalks, including appropriate drainage facilities, shall be constructed in a location acceptable to the Public Works Department.
- 2) In areas where a setback from the curb cannot be provided due to unusual site conditions the Public Works Department may approve the installation of the sidewalk at the back of curb. In these areas the sidewalk width may be increased to allow a minimum of 4 feet of clearance from any portion of an obstruction that must be located adjacent to the roadway, i.e. mailboxes, etc...

f. Meandering Sidewalks

Meandering sidewalks may be approved by the Public Works Director where necessary to avoid obstructions in the right-of-way that may otherwise be too costly to relocate or in compliance with the standard details.

g. Cross Slope

Sidewalks shall be constructed with a maximum cross slope of 2%. Sidewalks shall not exceed this cross slope at driveway crossings.

h. Material

- 1) Sidewalks shall be constructed of concrete at least 4 inches thick. Concrete shall be Class "B" (as defined by GDOT) with a minimum strength of 3,000 PSI at 28 days.
- 2) Alternate materials may be required in special overlay or historic districts.

i. Final Stabilization

Disturbed areas resulting from sidewalk construction shall be backfilled, stabilized, and grassed or landscaped.

j. GDOT Controlled Roads.

Sidewalks located in the right-of-way of roads under the jurisdiction of GDOT shall be constructed in accordance with GDOT design and construction standards.

11.11.3 Sidewalk Curb Ramp Design & Construction Standards

- 1) Intersection radius curb ramps shall be provided at street intersections. Straight ramps may be provided at intersections of curbed driveways and at streets without sidewalks.
- 2) All curb ramps shall be provided with detectable warning strips that comply with state and

ADA specifications.

11.11.4 Damage Repair

Damage to sidewalks and ramps caused by construction or development activity shall be repaired at no cost to the city within 30 days or prior to issuance of a Certificate of Occupancy, whichever is earlier.

11.12 MAILBOXES

General Requirements

11.12.1 All mailboxes, whether installed on public or private streets, shall comply with the United States Postal Services standards for the construction of mailboxes.

11.12.2 The property owner shall be responsible for the maintenance and repair of the curbside mailbox.

11.12.3 Lateral placement of the mailbox shall be no more than 6" from the face of the curb or edge of pavement if no curb and gutter is present) as defined by USPS installation requirements. In no case shall the face of the mailbox extend out over the face of the curb or edge of pavement if no curb and gutter is present.

11.12.4 All monument-type or brick, stone, or masonry veneered mailboxes must be constructed with a hollow core. Concrete block construction is prohibited.

11.12.5 The location and installation of cluster box units shall be approved by the Public Works Director prior to installing the units.

11.13 TRAFFIC CONTROL DEVICES

11.13.1 Traffic Control Devices

Street signs, traffic control signs, and devices such as striping and signalization, shall be provided by the developer at no cost to the city. All devices shall be installed prior to the approval of a final plat, or where no final plat is required, prior to the issuance of a certificate of occupancy.

11.13.2 Signing

- a) All signing and pavement marking must be designed and installed in conformance with the latest edition of the Manual on Uniform Traffic Control Devices.
- b) All sign posts to be placed within concrete area must have 6" wide diameter space through substructure. The traffic control signs must be installed per the most recent edition of the Manual on Uniform Traffic Control Devices (MUTCD) with relation to the installation height, size, distance from curb, etc. In general, signs should be installed at least seven feet but no more than ten feet from the ground to the bottom of the sign, and at least two feet from the face of curb to the closest edge of the sign, or as required by the MUTCD.
- c) The signs shall be new die cut anodized aluminum (at least .080 inches thick) with a corner radius no smaller than 1½ inches and installed on a single square post with standard hardware. This post should be installed to break-away standards with a slip base. The face of the sign shall be Type III

(High-Intensity) sheeting or better. If the road intersects a state route, all warning signs, red series regulatory signs, including Stop, Yield, and Do Not Enter signs shall be fabricated from Type VI (Wide Angle Prismatic) reflective sheeting. No two signs shall be mounted on the same post. Should the applicant wish to use decorative poles, a custom sign permit will need to be applied for in the Public Works Department.

- d) As part of the Land Disturbance Permit Process, the Department of Community Development will identify the number and location of signs. The minimum sign installation shall conform to the standards established below.
- e) The applicant will be responsible for maintaining the signs from installation to final inspection. The city reserves the right to replace stop or yield signs if they have been down for more than 12 hours, to replace any regulatory signs if they have been down for more than 7 days, and to replace any other signs if they have been down for more than 14 days. This will be done at the cost to the applicant of two hundred and fifty dollars (\$250.00) per sign.
- f) The sign inspection shall be done by the Department of Community Development prior to acceptance of the final plat or as established by the Director of Community Development. The signs shall be included in the right of way surety at the same time as the pavement at a cost of one hundred dollars (\$100.00) per sign or as established by the Director of Community Development. If the city needs to replace any signs at the time of the final inspection, the value would be forfeited.
- g) The following signs shall be installed in all new subdivisions as applicable. Additional signs may be required by the Public Works Director.

1) STOP Signs (R1-1)

The STOP sign shall be installed on the right side of the approach to which it applies. Stop lines, when used to supplement a STOP sign, should be located at the point where the road user should stop. Where there is a marked crosswalk at the intersection, the STOP sign should be installed in advance of the crosswalk line nearest to the approaching traffic.

STOP signs should be installed in a manner that minimizes the numbers of vehicles having to stop. In most cases, the street carrying the lowest volume of traffic should be stopped. A STOP sign should not be installed on the major street unless justified by a traffic engineering study as recommended by the MUTCD. If two streets with relatively equal volumes and/or characteristics intersect, typically the direction that conflicts the most with established pedestrian crossing activity or school walking routes or the direction that has the longest distance of uninterrupted flow approaching the intersection should be stopped.

No all-way stops may be installed in a new subdivision without the permission of the Public Works Director.

2) Yield Sign (R1-2)

Yield signs shall be installed when there are right turns at an intersection that are channelized apart from the through and/or left turn movements with a striped or raised island. In addition, yield signs should be installed on each approach of a roundabout.

3) Speed Limit Sign (R2-1)

Speed Limit signs shall indicate a 25 mph speed limit for streets internal to residential subdivisions, unless it is a non-residential local or collector road for the development, and then it should be no higher than 35 mph. For neighborhood settings, only one speed limit sign shall be installed at each project entrance or at the points of change from one speed limit to another. This sign should be installed no less than 100 feet from the entrance of the subdivision, but no greater than 500 feet from the entrance.

4) Street Name Sign (D3-1)

Ground-mounted street name signs shall be installed at every intersection and shall conform to MUTCD, latest edition. Overhead street name signs shall be installed where a subdivision street intersects at any traffic signal. Street name signs for public roads shall be green and street name signs for private roads shall be blue. The letters must be white with a height of at least 8-inch upper-case letters and at least 6-inch lower-case letters. The Letters should be in "Standard Highway Series E(M)" font or as approved by the Public Works Department. The street name sign shall be a combination of lower-case letters with initial uppercase letters. If the street has no outlet, a "No Outlet" legend should be put on the end of the street name sign blade closest to the main road. The "No Outlet" legend should have at least 3 inch high all-capital black letters on a yellow field that is no more than eight inches wide.

The street name sign should be constructed on flat blades and not extruded blades. They may be either riveted back-to-back or two-sided at the applicant's preference.

5) Roundabout Sign

Roundabouts must be signed and marked per GDOT standards. This includes yield signs for every approach, as well as an advance roundabout sign as established by the Public Works Department. The pavement marking shall include yield lines and channelization islands for each approach.

6) Stop Ahead Sign (W3-1) & Yield Ahead Sign (W3-2)

The Stop Ahead and Yield Ahead signs shall be installed on an approach to a primary traffic control device that is not visible for at least 250 feet. Please refer to Section Tables 2C.29 in the MUTCD for additional information.

7) Playground Sign (W15-1)

Playground signs shall be installed on any vehicular approach to an amenities area.

11.13.3 Sign Information and Sizes

All signs shall be of the sizes as designated in the following table. This table also included the appropriate reference sections of the MUTCD which explain the proper use and installation of each of the signs previously designated.

**Table 11.13-1
Sign Information and Sizes**

SIGN	MUTCD SECTIONS (2003 Ed.)	SIZE
------	---------------------------	------

Stop (R1-1)	2B.04 to 2B.07	30" x 30"
Yield (R1-2)	2B.08 to 2B.10	36" x 36" x 36"
Speed Limit (R2-1)	2B.13; 2B.18	24" x 30"
Roundabout and Simple Alignment Warning Signs	Review Section 2C	30" x 30"
Stop Ahead (W3-1a) and Yield Ahead (W3-2a)	2C.29	36" x 36"
Playground Ahead (W15-1)	2C.42	30" x 30"
Street Name (D3-1)	2D.38	Varies

11.13.4 Conformance with MUTCD

All traffic signals and signs shall conform to the Manual on Uniform Traffic Control Devices or this Ordinance (no decorative traffic control devices will be allowed without approval of the Public Works Director).

11.13.5 Striping Requirements

Any street with a speed limit of 35 mph or greater that is impacted by the construction of a development shall be restriped. A stop bar and 50 feet of double yellow centerline will be required to supplement every stop sign impacted by the development. Striping shall be accomplished in accordance with GDOT standards and the Manual on Uniform Traffic Control Devices.

Pavement markings are required to separate lanes of travel and should be used along all edges of pavement. The following guidelines are provided for designing and installing pavement markings for driveways:

- All pavement markings installed within the public right-of-way on asphalt surfaces shall be thermoplastic material;
- Lane lines are generally 5" (white); lane lines are not required where curb and gutter has been provided;
- Stop lines should be 24" (white);
- Center lines should be 5" double yellow;
- Deceleration and left turn lanes should have turn arrows (Type 2) spaced every 100' and "ONLY" legends between every pair of Type 2 Arrows;
- Crosswalks should use the current GDOT standard.

11.14 STREET LIGHTS

11.14.1 A lighting plan, drawn to scale, shall be provided for all city roads where street lights are proposed. At a minimum the lighting plan shall included the following:

Street lights shall be provided by the developer in all new subdivisions which propose the construction of a new street to be dedicated to the city or which propose lot access to existing city streets.

a. Layout Design and Payment for Installation

The applicable power company shall design a lighting layout and submit to the Public Works Department for approval. Upon approval, the developer shall pay the power company for all costs associated with the installation. Proof of payment shall be provided prior to the approval of the final plat.

b. Fixtures

All fixtures and poles shall meet the requirements of the city and all maintenance shall be the responsibility of the power provider. Fixtures shall be mounted a minimum of 16 feet above the ground and each fixture shall have appropriate arm length to illuminate the street. The city, in addition to other requirements, may require a light to be located at street intersections within the development.

In order to provide a uniform and lighting standard, the following bulb and fixture types shall be used for providing streetlights and pedestrian lighting in the City.

- Two lane residential roads: 150 Watt High Pressure Sodium Cobra Head fixture
- Two lane collector roads and residential areas with safety and/or visibility issues: 250 Watt High Pressure Sodium Cobra Head fixture
- Over two lane roads: 400 Watt High Pressure Sodium Flood Way fixture
- Pedestrian lighting: 175 Watt High Pressure Sodium bulb, (Standard Overlay or PCID District Pole)

Alternate bulb types may be approved by the Public Works Director.

c. Monthly Utility Costs

The developer shall pay the monthly operation costs of said streetlights until such time as one-half of the units are occupied and the maintenance bond, if required, has expired, unless waived by the Public Works Director due to unusual circumstances.

d. Design Criteria

Street lighting design criteria for all residential streets shall conform to the design standards given in Section 20 of Illuminated Engineering Society Handbook latest edition.

e. Lighting for Developments other than Subdivisions

For all developments outside of the right-of-way where site lighting is required, those sites shall conform to the Outdoor Lighting Regulations in the city Zoning Ordinance.

11.14.2 Street Lighting for Residential Streets

a. Recommended Illumination

The recommended illumination for all residential streets shall be 0.5 horizontal foot-candles or 0.5 lumens per square foot of the roadway pavement when the illuminating source is at its lowest output.

b. Minimum Illumination

The lowest foot-candle value at any point on the road pavement shall not be less than one sixth of the average value, i.e. maximum to minimum ratio of 6:1.

c. Luminary Light Distribution

The classification of luminary light distribution shall be IES distribution type MS III.

d. Mounting Height

The following mounting heights with reference to output of lamp and type of lighting pattern is recommended:

Vertical light distribution M = medium
 Vertical light control S = semi cut off or cut off
 Lateral light distribution Type III

**TABLE 11.14-1
 STREET LIGHT MOUNTING HEIGHT**

LAMP	OUTPUT	IES	TYP. MOUNTING HEIGHT
150 Watt HPS	14500 Lumens	Type III Long	29 feet ⁽¹⁾
150 Watt HPS	14500 Lumens	Type III	16 feet

Notes:

(1) 29 foot mounting height shall only be used in areas with existing overhead wiring.

e. Luminary Spacing

The spacing of the luminary shall be governed by factors such as location of utility poles, block lengths, property lines and geometric configurations of the terrain features.

f. Mounting Poles

- 1) The mounting poles shall be as per latest regulations and standards of national electric code, the national electric safety code, the American National Standards Institute and NEMA. The basic design criteria required is resistance to 100 mph winds including 1.3 gust factor.
- 2) All poles shall be black fiberglass or as recommended by the utility company.
- 3) The pole top shall have a top tenon of three inches o.d. so as to fit a slip fitter.
- 4) The poles shall have hand hole 4"x12" opening with an aluminum cover fitted to 2 SS pentahead screws. The center of handhold opening shall be approximately 24 inches from ground level.

g. Luminaries

Luminaries shall be fitted with built in ballast and photoelectric control and shall conform to meet all the requirements of latest regulations and standards of EEI and NEMA depending upon the lamp load and type and circuit voltage.

h. Wiring and Cabling

All wiring and cabling shall conform to the appropriate utility company's specifications.

11.15 REFERENCE

American Association of State Highway and Transportation Officials. (2003). *A Policy on Geometric Design of Highways and Streets*. Washington, DC.

American Association of State Highway and Transportation Officials. (2006). *Roadside Design Guide*. Washington, DC.

Federal Highway Administration. (2001). *Highway Design Handbook for Older Drivers and Pedestrians* (FHWA Publication No. FHWA-RD-01-103). Washington, DC.

Federal Highway Administration. (2003). *Manual on Uniform Traffic Control Devices for Streets and Highways*. Washington, DC.

Georgia Department of Transportation. (2001). *Standard Specifications Construction of Transportation Systems*. Atlanta, GA.

Institute of Transportation Engineers. (2002) *Transportation and Land Development* (ISBN No: 0-935403-68-X). Washington, DC.

ARTICLE 12

UTILITIES AND EASEMENTS

12.1 PLACEMENT OF UTILITIES

12.1.1 Location of Utilities

All authorized public underground utilities shall be located within the right-of-way of a public street or within an easement designated for such use. Within public street right-of-way, placement of the various authorized utilities (power, gas, cable TV, water and sewer) shall conform to the specific locations designated for such use by the city, as illustrated in the Standard Drawings.

12.1.2 Private Utilities Within the Right-of-Way

No other underground utilities, such as private lawn sprinkler systems, yard lighting, etc., shall be installed within a public right-of-way or easement except by authorization of the Public Works Department. Such authorization, if issued, shall require the applicant to assume all repair costs of the applicant's facilities should they be damaged during the course of installation, maintenance or repair of any of the public utilities authorized to occupy said right-of-way or easement.

12.1.3 Underground Installation of New Utilities

Within all new subdivisions utility systems, including water, sewerage, gas, telephone, cable television and electric, along with component parts, structures, appendages and materials, shall be installed underground in a manner approved by the applicable utility provider and in accordance with all City ordinances. Above-ground utility systems will not be permitted, except where certain appurtenances and accessories must be installed above-ground for servicing.

12.1.4 Service from Existing Overhead Utilities

Lots that abut existing easements or public rights-of-way where overhead utility supply lines and service connections have previously been installed may be supplied with service from those overhead lines, but the service connections from the overhead lines shall be installed underground. Should a road widening or an extension of service, or other such condition occur as a result of the subdivision and necessitate the replacement or relocation of such utilities, such replacements or relocation shall be underground.

12.1.5 Compliance with Other Regulations

Any utility work required in conjunction with a authorized Land Disturbance permit that must be completed within the right-of-way, a city easement or on other city property shall comply with the requirements of any city ordinance or policy regarding the installation of utilities on said property. Any installations performed within the state owned right-of-way or property shall comply with any applicable rules, regulation and guidelines developed for that use by the state.

12.1.6 Utilities Located Outside of the Right-of—Way

When, in the course of development, it becomes necessary to construct utilities outside of the right-of-way said development shall conform to this and other applicable ordinances and regulations. Any permanent or temporary easements required for the construction shall be obtained in accordance with this Ordinance. The easement area shall be returned to a condition that is equal to or better than the condition that existed prior to construction.

12.1.7 Utilities Crossing Building Setbacks, Zoning Buffers and Stream Buffers

All utility lines/connections are permitted only to cross building setbacks zoning buffers and stream buffers within twenty-five (25) degrees of perpendicular. This is to include, but is not limited to water lines, sewer lines and electric lines not under the jurisdiction of the Public Service Commission or the Federal Energy Regulatory Commission.

12.2 UNDERGROUND UTILITIES

12.2.1 All water and sanitary sewer utilities and storm drain facilities within the roadway shall be installed and the ditches backfilled and thoroughly compacted before any pavement or base is installed.

12.2.2 Once the base has been placed, proof-rolled and approved for paving all further installation of utilities under the roadway shall be bored or other wise comply with Section 12.7, Street Cuts.

12.2.3 All utility manholes and valve boxes shall be brought flush to the finished grade within the roadway section.

12.3 WATER SYSTEM AND FIRE HYDRANTS

- 12.3.1 The developer shall install or have installed a system of water mains connected to a public water supply system in accordance with these requirements and those of the authority having jurisdiction to provide water service within the city, herein referred to as the water authority.
- 12.3.2 All water mains, fire hydrants and appurtenances shall be designed in accordance with the policies, standards, plans and specifications of the city and the water authority.
- 12.3.3 Water mains and appurtenances shall be installed after installation of the curbs and gutters and before paving, or as approved by the city and the water authority.
- 12.3.4 Fire hydrants shall conform to AWWA C502-85 for dry-barrel fire hydrants and the following requirements:
 - a) Hydrants shall be traffic type with safety flange that allows the valve to remain closed when the hydrant is broken or damaged above or near grade level.
 - b) The design of hydrant shall be of the compression type with main valves and "O" ring seal between the operating nut and the bonnet.
 - c) Hydrant color shall be silver.
 - d) Hydrant inlet shall be 6-inch, mechanical joint with harnessing lugs.
 - e) Hydrant main valve opening shall be 5-1/4inch.
 - f) Valve seats shall be bronze to bronze.
 - g) Operating nut shall be solid Pentagon, 1-1/2 inches measured flat at point (31/32 on side). Operating nut shall turn counter clockwise to open.
 - h) Hydrant shall have two 2-1/2-inch diameter and one 4-1/2-inch diameter nozzle. Nozzles threads shall be the standard adopted by NBFU. Nozzles shall all have gasketed caps fitted with chain.
 - i) The following fire hydrants are approved for installation in the city, other models may be acceptable when dedicated to and approved by the utility provider:

**TABLE 12.3-1
ACCEPTABLE FIRE HYDRANT MODELS**

MANUFACTURER	MODEL
American AVK	2700 and 2780
Mueller	Centurion and Improved
Kennedy	K81-A
M&H	129 and 929
Clow	Medallion

American-Darling	B-62B
U.S.	M-94

- j) Materials shall conform to AWWA Standard C-502, latest revision.

12.3.5 Water mains and Fire Hydrants on Private Property and Subdivisions

In addition to the other requirements of this Ordinance water mains installed on private property and within subdivisions shall also comply with the following requirements:

- a) Water Main Size

- i. Water mains of at least eight-inch pipe shall be installed; six-inch pipe may be used only where it completes a gridiron and then only up to 600 feet in length between interconnecting mains of approved diameter, unless otherwise approved by the Public Works Director and the Fire Marshal.
- ii. No main line smaller than eight inches shall serve more than one fire hydrant and automatic extinguishing system or one fire hydrant on any dead-end main more than 300 feet in length. All water mains shall be sized in accordance with NFPA 24, as adopted by the State of Georgia.

- b) Fire Hydrant Spacing

Fire hydrants shall be spaced not more than 500 feet apart, with additional fire hydrants located as necessary to comply with the requirements of the International Fire Code and Appendices as adopted by the city and approved by the Fire Marshal.

- c) Clearance Around Fire Hydrants

A minimum of 3 feet of clearance shall be provided around all fire hydrants.

- d) Water Main Material

Water mains shall be of ductile iron or copper or a type listed for this service by a nationally recognized testing laboratory and approved for use by the water authority.

- e) Minimum Cover

Water mains shall be installed at least 12 inches below the frost depth. In areas where frost is not a factor the water main shall be installed to a minimum depth of 30 inches below grade. When the water main is installed under a driveway it shall be installed 36 inches below grade or 48 inches below railroads.

- f) Hydrostatic Testing

Water mains shall be hydrostatically tested at not less than 200-psi or 50-psi greater than the system working pressure, whichever is greater, and shall maintain that pressure, ± 5-psi, for two hours in the presence of a representative of the city. Pressure loss shall be determined by a loss in gauge pressure or visual leakage.

g) Fittings and Valves

Hydrants, fittings, valves and fire department connections shall be approved by the Fire Department. Fire department connections shall be not less than 18 inches or more than 36 inches above the level of the adjoining ground or paving. The thread of such connections shall be uniform with that used by the Fire Department.

h) Timing of Installation

Water mains and fire hydrants shall be installed, under water pressure and ready for fire fighting before any construction with combustible material begins on-site.

i) Dead End Mains

In no case shall dead end mains exceed 600 feet in length for main sizes less than 10 inches.

12.3.6 Sub Meters

When not in conflict with the requirements of the local water authority the city may require sub-metering of individual units where a project may contain multiple tenants.

12.4 SANITARY SEWER DISPOSAL

12.4.1 Connection to an approved sanitary sewage disposal system shall be made, which may require the construction of an on-site system or the extension of public sanitary sewerage and associated appurtenances, as required by Fulton County.

12.4.2 All sanitary sewer construction shall conform to the requirements of Fulton County.

12.4.3 Septic tanks and tile drain-field sewerage disposal systems may be required to be located outside of the 100-year floodplain, stream buffers and impervious setbacks as required by the Fulton County Health Department and City Ordinances.

12.4.4 The Health Department may require a notation that certain lots must meet additional requirements prior to issuance of a building permit, or other wise limit development relative to Health Department regulations.

a. Such lots may include lots upon which adequate depth to water table must be demonstrated during the appropriate season of the year, adequate percolation tests must be performed, limitations upon the number of bedrooms in a dwelling, etc.,

b.No lot shall be included on a Final Plat which the Health Department is not confident will meet all Health Department regulations at a reasonable cost or within a reasonable period of time, except lots proposed to be served by sanitary sewer in subdivision where "dry" sewer has been installed. Such lots shall be noted - "Approval by Fulton County for connection to sanitary sewer required prior to issuance of a building permit."

12.4.5 Where applicable, approval of the sanitary sewer system by Fulton County may be required prior to the issuance of a Land Disturbance Permit.

12.4.6 Whenever the installation of a sanitary sewer is required by the service provider, no new street shall be paved without the sanitary sewer being first installed.

12.5 SEPARATION OF WATER AND SANITARY SEWER LINES

There shall be no physical connection between a drinking water supply line and a sewer or appurtenance.

12.5.1 Horizontal Separation

Water lines shall be laid at least 10 feet horizontally from a sewer or a sewer manhole whenever possible; the distance shall be measured outside edge-to-outside edge. When local conditions prevent a horizontal separation of 10 feet, the water line may be laid closer to a sewer or sewer manhole provided that the bottom (invert) of the water main shall be at least 18 inches above the top (crown) of the sewer. Where this vertical separation cannot be obtained, the sewer shall be constructed of ductile iron pipe and pressure tested in place without leakage prior to backfilling.

12.5.2 Vertical Separation

The water line shall be laid in separate trenches or on an undisturbed earth shelf. Where possible the water main shall pass over the sewer main with a vertical separation of at least 18 inches. When local conditions prevent a vertical separation of 18 inches between the bottom of the water main and the top of the sewer the following construction standards shall be used:

- a) The sewer shall be constructed of ductile iron pipe and pressure tested in place without leakage prior to backfilling.
- b) Adequate structural support for both the water and sewer mains shall be provided to prevent settling and excessive deflection of the joints.
- c) That length of sewer main shall be centered at the point of the crossing such that the joints shall be equidistant from the point of crossing.
- d) No deflection of the joints is permitted within 10 feet of the point of crossing.

12.6 EASEMENTS

12.6.1 Drainage Easements

- a) Temporary construction easements and permanent easements for drainage shall be dedicated to the city in accordance with this Ordinance when said easement is deemed to be in the best interest of the public health, safety or welfare. The city shall not be responsible for any easements that are not expressly dedicated to and accepted by the city. All easements shall be stabilized in accordance with the Manual for Erosion and Sediment Control in Georgia.
- b) Drainage easements are required for any part of the drainage system which is designed to carry stormwater runoff from more than one parcel, existing or proposed.
- c) Drainage easements for improved ditches, pipe construction, and detention facilities shall be cleared, opened, and stabilized at the time of development to control surface water run-off. Run-off slope and side slopes shall be specified by the Developer's Engineer, according to good engineering practice, this Ordinance and the applicable provisions provided in the stormwater management design manual.
- d) Drainage easements for storm drain pipes shall be provided according to the minimum

requirements found in the table below. The minimum easement width shall be 20 feet when no other parallel utilities are located therein. For pipe sizes not shown on the table below the easement width shall be based on the pipe diameter (span) plus 2 feet, plus two times the pipe invert depth. This value shall be rounded up to the nearest 5 feet. For pipes exceeding 16 feet in depth, a pre-submittal conference shall be held with the city to determine what additional requirements may be required.

TABLE 12.6-1 EASEMENTS FOR STORM DRAIN PIPES

PIPE SIZE (IN)	MINIMUM EASEMENT WIDTH (FT)												
	4	5	6	7	8	9	10	11	12	13	14	15	16
15	20	20	20	20	20	25	25	30	30	30	35	35	40
18	20	20	20	20	20	25	25	30	30	30	35	35	40
24	20	20	20	20	20	25	25	30	30	30	35	35	40
30	20	20	20	20	25	25	25	30	30	35	35	35	40
36	20	20	20	20	25	25	25	30	30	35	35	35	40
42	NA	20	20	20	25	25	30	30	30	35	35	40	40
48	NA	20	20	20	25	25	30	30	30	35	35	40	40
54	NA	NA	20	25	25	25	30	30	35	35	35	40	40
60	NA	NA	20	25	25	25	30	30	35	35	35	40	40
66	NA	NA	NA	25	25	30	30	30	35	35	40	40	40
72	NA	NA	NA	25	25	30	30	30	35	35	40	40	40

12.6.2 Common Easements

A common easement for sanitary sewer and drainage purposes may be allowed if the pipes are parallel and at least 10 feet is provided between pipes (outside of pipe to outside of pipe). The easement width shall be equal to the width shown in the table in Section 12.6.1 plus the distance separating the pipes (minimum of 10 feet).

12.6.3 Drainage Easements for Surface Drainage

Drainage easements shall be provided where a development is traversed by or contains a water course, impoundment, detention facility, improved channel, floodplain, natural stream or channel. It shall conform substantially to the flooding limits of the 100 year storm based on fully developed conditions per the Land Use Plan, but shall be no less than 20 feet in width.

12.6.4 Obstruction of Drainage Easements

- a. Drainage easements off the street right-of-way shall be clearly defined on the Final Plat. The property owner will be required to keep the easement free of obstruction in such a way as to assure the maximum designed flow at all times. The property owner shall not alter any drainage improvements without the prior written approval from the city. Structures, except driveways, shall

not be constructed or erected in an easement without the prior written approval from the city. Driveways shall cross an easement as close to perpendicular as practical. Property owners may plant landscaping in an easement that is piped with the approval of the city. Some landscape materials, such as large trees or shrubs, may not be appropriate for use within the easement; the city is not responsible for replacing the landscape material located in the easement when it is removed to maintain the drainage system.

- b. No retaining wall, building, pole, sign or other vertical structure shall be constructed in storm sewer easements, including vehicular easements around facilities without approval from the Public Works Director. No fence shall be placed across storm sewer easements without gates to which the city or representatives of the city have full access. No planting shall take place within the easement that will impede access along the easement or endanger the pipeline. No other pipeline or utility shall be placed in the easement without approval by the Public Works Director.

12.6.5 Stabilization of Drainage Easements

All drainage, sewer, access or other easements which were required to be cleared shall be fine graded, seeded and mulched immediately upon the completion of construction work or if any significant delay is anticipated in the completion of the work. The use of sediment control measures may be required to protect the area until a comprehensive vegetative cover is obtained.

12.6.6 Placement of Fill in Drainage Easements

No fill shall be placed on a storm sewer easement without approval from the Public Works Director. All manholes must extend to the ground surface but shall not impede access where the drainage easement is intended to provide for vehicular access. All easements terminating on a parcel shall extend to the property line.

12.6.7 Sanitary Sewer Easements

Permanent sanitary sewer easements shall be no less than 20 feet in width when no other parallel utilities are located therein or as required by the sanitary sewer authority. When warranted, temporary construction easement widths shall be determined by Fulton County.

12.6.8 Potable Water Easements

Permanent water easements shall be as required by the water authority.

12.7 STREET CUTS

12.7.1 Review of Utility Plans

All utility construction plans within city right-of-way shall be reviewed and approved by the Department before construction begins. A traffic control plan may be required as part of the submittal. Street cuts shall not be allowed unless deemed absolutely necessary due to the presence of rock, the need to tap into an existing line beneath the road surface, or other circumstance which makes boring impossible or infeasible. Where open trenching has been permitted the trench width shall be the minimum width necessary to allow for the installation of the conduit and provide adequate compaction of the backfill material.

12.7.2 Marking of Existing Utilities

All existing utilities shall be properly marked in accordance with Georgia Utility Facility Protection Act prior to any excavation work.

12.7.3 Maintaining Access to Private Properties

Access to private driveways shall be provided at all times except during working hours when construction operations prohibit provision of such access.

12.7.4 Obstruction of Fire Hydrants

Unobstructed access must be provided at all times to fire hydrants.

12.7.5 Lane Closure

Contact the Public Works Department at least 24 hours in advance of closure of traffic lanes. The applicant will be responsible for ensuring notice has been received by Public Works and should utilize verified e-mail notification. All lane closures shall be properly marked and signed with certified flagmen when appropriate.

In trenching across the road, no more than one-half (1/2) of the traveled way is to be closed to traffic at one time.

12.7.6 Maximum Length of Open Trench

The trench construction shall not be opened for a distance of more than three hundred (300) feet at any one time, unless specifically authorized by the Public Works Director.

12.7.7 Damage Repair

Whenever a part of a block, square or section of curb, sidewalk or driveway is broken or damaged by the person making any excavation or opening in or under any street, alley or public place, the entire block, square or section, shall be removed to the score, groove or saw cut line and replaced or reconstructed. Where the line of cut would be less than 2 feet from an existing expansion or weakened plan joint, the concrete shall be removed to said joint.

12.7.8 Trench Construction and Backfill

Definitions and Considerations - In trenched construction, bedding is the subgrade soil and its surface, as prepared to support the pipe. Backfill is the material refilling the rest of the level of top of pipe, and of overfill above that level. The latter may include restoration of surface soils or roadway materials. From the highway viewpoint, the essential features for trench and backfill construction are: (1) entrenched roadbed, (2) security of the pipe against deformation likely to cause leakage, and (3) assurance against drainage being blocked by the backfill. Bedding is important for all pipes.

Controls for Trenched Construction – Trenched construction, bedding, and backfill normally will be adequately controlled by the applicant conforming to the GDOT Standard Specifications for earth work and culverts as well as Standards and Details. Specific controls follow:

- A. Trenches are to be cut to have vertical faces with a maximum width of 2 feet or outside diameter of pipe plus 18 inches. They shall be shored where necessary to prevent caving and sloughing.

- B. Bedding shall be provided to a depth of 12 inches or half of the diameter of the pipe, whichever is the least. Bedding shall consist of granular soil free of lumps, clods, cobbles and frozen materials, and shall be graded to a firm-but-yeilding surface without abrupt changes in bearing value. Unstable soils and rock ledges shall be sub-excavated from the bedding zone and replaced by imported material. For carriers laid without encasement, the bedding shall be shaped to fit the bottom of the pipe for 60% of its width. See the GDOT Standard Specifications for additional information on backfill material.
- C. Backfilling of trenches must be accomplished immediately after the pipeline or other utility is placed therein or as directed by the Director. Backfill shall be placed in two stages: first, sidefill to the level of the top of pipe; second, overfill to former surface grade. Sidefill shall consist of granular material laid in 6-inch layers, each consolidated by mechanical tamping and controlled addition of moisture, to a density of 95% as determined by AASHTO Method T-99 or GHD.

Overfill shall be layered and consolidated to match the compaction. The top 12 inches shall be compacted to 100% of Specified density. Consolidation by saturation or ponding will not be permitted. Use 57 stone material or another GDOT type II material that is approved by the Director in wet trenches, these materials shall be compacted like above stated backfill to a satisfactory uniform density as directed by the Director.

12.7.9 Pavement Cuts

No open cuts in pavement will be permitted except by special permission of the Director when there is an emergency and the public health or safety is imperiled, or for making a service tap on a line under the pavement when no other distribution line is available in the area where the service is required. In no event will an open cut be permitted when it is reasonably practical to bore, tunnel, etc., under the surface of the highway. Whenever the Director is requested to authorize an open cut, such request must be made in writing supported by detailed reasons some other method is not practical and giving details relative to the maintenance history and service life of the facility. The Department requires (1) that backfill and repaving be performed under its direction at the expense of the applicant and (2) that the applicant remain liable for cost of repair if the backfill subsides or the patched pavement fails. When approval of the Director is granted, the following provisions shall be strictly adhered to.

- A. The trench edges in paved areas shall be sawed or cut to neat lines by methods satisfactory to the Director before starting to break the pavement slab.
- B. Materials and methods of shall be adopted to achieve prompt restoration of traffic service.
 - I. In trenching across the highway, only one-half of the paved surface is to be opened at one time. The open half shall be completely backfilled before opening the other half.
 - II. Closure of intersecting streets, road approaches, or other access points for trenching operations will not be permitted. Upon trenching across such facilities, the Applicant shall utilize steel running plates, planks or other satisfactory methods for traffic entering or leaving the highway or adjacent properties. Immediately after the facility authorized by the permit has been placed, the intersecting streets, road approaches or other access facilities, shall be restored to at least as good condition as it was prior to the permit operations and in a manner satisfactory to the Director. Spot resurfacing, (milling, grinding and/or additional asphalt) may be required.

Once the pavement is cut, it is most difficult to reconstruct to obtain the structural strength and surface quality the road and pavement had prior to cutting. For trenches over 4 feet wide, the subbase, base and paving shall be replaced in kind using construction procedures in accordance with the current GDOT Standard Specifications. For trenches up to 4 feet wide, the subbase, base and paving shall be replaced in kind using construction procedures in accordance with GDOT standard number

1401; except Class A GDOT concrete will be used in place of Class B or soil cement base and 9.5mm or 12.5mm superpave asphalt will be used or as determined by the Director. Utility cuts in Portland cement concrete pavement are discouraged by the Department. Pavement cuts, when allowed will require complete or partial slab replacement. The Director will determine the extent of slab replacement on a case by case basis if an open cut is allowed. Procedures for slab removal and replacement will use construction procedures in accordance with the current GDOT Standard Specifications and standard number 1401, also including but not limited to surface tolerance requirements set forth in the current GDOT Standard Specifications.

Any pavement cuts that are not perpendicular to the roadway's horizontal alignment for asphalt highways shall require the entire width of the roadway to be resurfaced with a minimum of 2 inches of asphalt that is the same material as the existing surface or as determined by the Director in addition to the requirements stated hereinbefore. Any pavement cuts that are not perpendicular to the roadway's horizontal alignment for Portland cement concrete pavement shall be in accordance with the current GDOT Standard Specifications and standard number 1401. Any manhole or valve shall have a square concrete pad placed around the facility if the facility is located in the traveled way as determined by the Director and to the satisfaction of the Director.

12.7.10 Sidewalk and Curb Cuts and replacement

All sidewalk and curb cuts require that the section of sidewalk and/or curb be replaced from existing joint to existing joint or as determined by the Director. All sidewalk and curb construction shall meet the construction requirements as shown in section 441 of the current GDOT Standard Specifications or as determined by the Director.

12.7.11 Replacement of Cuts in Unpaved Streets

- a) The trench shall be backfilled in accordance with the manner prescribed in this Article for backfilling of trenches. The surface treatment shall match that of the existing road. For gravel roads the trench shall be backfilled up to and within four inches of the street level. The remaining four inches shall be filled up with No. 2 crushed stone, well compacted into place.
- b) The base stone shall be kept at street level by the contractor until final acceptance of the project of the city engineer without additional cost to the city.

12.7.12 Contact the Public Works Department for public utility extension information from the existing utility locations to the proposed development.

ARTICLE 13

GRADING AND DRAINAGE

13.1 EROSION CONTROL

13.1.1 Design Standards.

The procedures and requirements of the Soil Erosion and Sediment Control Ordinance, as may be amended from time to time, shall be applicable whenever any land disturbance is proposed to occur which requires a permit to be obtained by this Ordinance and shall continue to apply until the project has been completed.

13.1.2 Abandoned Projects

Any project whose permit has lapsed under the terms expressed in Article 6, shall immediately have all disturbed areas stabilized. This responsibility shall fall upon the owner, developer, contractor, or any and all other responsible parties involved in the land disturbance activity.

13.2 EARTHWORK

13.2.1 Clearing and Grubbing

- a) The area within the typical grading section shall be cleared of all trees, brush, stumps, logs, grass roots, vegetable matter, poles, stubs, rubbish, refuse dumps, sawdust piles, and all other matter resting on or protruding through the original ground surface or appearing or being placed on the area within the typical grading section before final acceptance of work.
- b) This item also includes the removal and proper disposal of all the debris or any obstructions not to be salvaged such as fences and incidental structures within the proposed area to be graded, which might interfere with construction.
- c) Clearing and grubbing operations shall be conducted in such a manner as to prevent damage to existing structures, equipment and any proposed work that has been completed, and to provide for the safety of workmen and other personnel on the job site.

13.2.2 Grading

- a) Grading shall be done in accordance with the lines and grades shown on the approved plan.
- b) Grading plans shall show existing and proposed contour lines at an interval of not more than 2 feet.
- c) A grading plan showing building pad locations may be required to be submitted for residential subdivisions to ensure adequate lot-to-lot drainage. The grading plan may be used as a construction document prior to approval of the Final Plat or as a guidance document for individual lot grading after approval of the Final Plat.
- d) Grading plans shall outline the areas which are required to remain undisturbed, i.e. Tree Protection Areas, Undisturbed Buffers Stream Buffers, etc., and shall indicate protective fencing or staking to be placed around such areas.
- e) Shoulder sections shall be provided as required in Article 11.
- f) If the proposed grading is within the jurisdiction of the Metropolitan River Protection Act, the grading shall be consistent with the River Corridor Certificate approved for the project.
- g) Grading for all roads and improved ditches shall be shown.
- h) Unclassified excavation consists of all roadway and drainage excavation, regardless of the nature of the material or the manner in which it is removed. It includes the removal and disposal of unsuitable or unstable material under the roadbed section and back filling with suitable materials.
- i) All rock and boulders in the roadbed shall be excavated to a depth of at least 12 inches below the sub-grade and the space back-filled to the correct grade with material suitable as sub-grade.
- j) Where materials unsuitable for foundation or roadway purposes occur within the limits of the roadbed and front slopes, the same would be excavated to the bottom of their depth and removed.

13.2.3 Embankments

- a) All depressions below the ground surface containing water shall be drained, unsuitable material removed and filled with suitable material and compacted to the ground surface before the embankment proper is begun. Any area deemed jurisdictional under federal, state or local ordinances and regulations shall obtain required approvals or permits prior to any land disturbing activities in those areas.
- b) The entire area upon which the embankment is to be placed shall be plowed, scarified and finely broken up to a depth of at least six inches and all cleavage plains shall be destroyed before the embankment is begun.
- c) The embankment material shall be deposited and spread in uniform horizontal layers not to exceed six inches thick for the full width of the cross sections and the layers shall be kept level by any approved equipment.
- d) Each layer shall be compacted at moisture content proper to permit the compaction specified below. Material containing too much water shall be dried to the correct moisture content. If the material is too dry, water shall be added and uniformly mixed with the soil before it is compacted.
- e) The top 12 inches of embankment shall be compacted to at least 100 percent of the maximum laboratory dry density as determined by AASHTO method T-99. Embankment material located between one foot and six feet below the top of the embankment shall be compacted to at least 90 percent of maximum laboratory dry density as determined by AASHTO method T-99. The measurements of depth as described above shall begin at an elevation equal to the bottom of sub-grade treatment where sub-grade treatment material is used.
- f) Maximum slope in cut or fill sections shall be 2:1. The slope of cut or fill shall be uniform throughout for each section of cut or fill unless benching is approved by the city.
- g) While most soils in the area can be safely stabilized at a 2:1 slope, some soils exhibit a low shearing resistance and a low cohesiveness. These soils typically are micaceous silts and sandy soils with little or no clay. If the 2:1 slope shows evidence of shearing, non-cohesiveness, sliding, or inability to maintain compaction, the slope shall be stabilized at 3:1 or by using such mechanical methods as needed (such as retaining walls or "grow mats" stapled in place) to maintain slope, height, and integrity.
- h) When a cut is made in rock that requires blasting, slope may be changed to vertical slope upon the written approval of the city engineer and only under the following conditions:
 - i. When accompanied by a certification from a registered professional geotechnical engineer stating that the slope material is stable; and,
 - ii. In no instance shall the slope face be steeper than vertical – 1/8" batter is preferred; and,
 - iii. The slope face is free from all deleterious material and is not subject to long-term erosion due to excessive runoff on the face of the slope.
- i) All slopes steeper than 2.5:1 and greater than 10 feet in height shall be hydro-seeded and covered with GDOT approved wheat straw, wood fiber matting or coconut fiber matting. All slopes must be protected until a permanent vegetative stand is established and,

- j) Slopes over 20 feet in height shall be stabilized in stages by matting and vegetation. Stabilization measures shall be placed in vertical increments not to exceed 20 feet immediately at the completion of each 20 foot lift.

13.3 RETAINING WALLS

13.3.1 General Requirements

- a) When permanent grades are proposed to be steeper than 2:1 (1 vertical foot of rise for every two feet of horizontal displacement) an appropriate retaining structure shall be designed to reinforce or retain the resulting embankment.
- b) An engineered design may be substituted for the reinforced concrete design if approved by the Director. All structural components of the wall shall meet the minimum building codes for the proposed use.
- c) All wall designs must demonstrate complete dimensions for line and grade. Wall design will consider foundation drainage and select backfill material for the proposed conditions.

13.3.2 Permits Required

Where retaining walls are to be installed permits shall be obtained in accordance with Article 6 of this Ordinance.

13.3.3 Indemnification/Certification

For all retaining walls over four (4) feet in height, the owner of the property containing the proposed wall shall complete an owner's indemnification agreement. For all retaining walls over six (6) feet in height, a professional engineer shall design and certify the wall and complete an engineer's certification agreement for each wall permitted.

The following criteria (contained on indemnification/certification agreements) pertain to all walls unless specifically allowed under variance or permission from the appropriate governing authority:

- Retaining walls must be located three (3) feet outside the public right-of-way;
- Placement of retaining walls shall comply with any and all applicable easement restrictions;
- Retaining walls are to be located within the confines of owner's/applicant's property;
- Retaining walls shall not be located within undisturbed stream buffers and impervious surface setbacks, floodplains, drainage easements or drainage ways in a manner that impedes the flow of water.

13.3.4 Retaining Wall Height and Materials

- a) All retaining wall structures in excess of 6 feet shall be designed by a qualified registered professional engineer and shall be constructed of reinforced concrete or other masonry materials as required by the registered professional engineer.
- b) When the necessity for an earth retaining structure is required for a vertical displacement of 6 feet or less, appropriate landscaping timbers, or approved equal, may be employed if no permanent structure is supported by the soil retained by the retaining wall. The use of railroad cross ties or other timber product will only be allowed in these instances when the wall is constructed as per detail.

13.3.5 Handrails

All retaining walls, other than for a stormwater facility, over 6 feet must have a hand rail or other suitable barrier installed. See Section 13.3.8 for requirements for handrails within the stormwater facilities.

13.3.6 Tiered Retaining Walls

Where an assemblage of retaining walls and slopes result in a vertical elevation difference exceeding four (4) feet over horizontal distance that is less than two times (2X) the vertical elevation difference, than a retaining wall shall be required, along with applicable indemnification/certification agreement based on criteria found in 13.3.3.

13.3.7 Encroachments

Walls shall be located in such a fashion as to not encroach upon existing or proposed drainage easements, drainage courses, buffers or floodplains or to encumber the natural flow of surface runoff of stormwater. Walls shall be located at a distance from such watercourses to allow for anticipated future maintenance of the easement to prevent a safety hazard to the maintenance workers or to jeopardize the structural integrity of the wall.

13.3.8 Walls for Stormwater Facilities

Retaining walls that are proposed for the purpose of a stormwater detention must be designed to demonstrate that the walls are capable of a hydrostatic load as measured from the top of the foundation footing to the highest elevation along the top of the wall. The hydrological design must allow for a free board dimension of one foot and an emergency overflow capacity equal to the allowable peak discharge for the 100-year storm event. The routing calculations should not take into account the existence of the emergency overflow. Place the overflow device above the projected 100-year flood elevation within the detention area.

Where the walls are located within a fenced stormwater facility no handrails shall be required along the top of the wall. Where no fencing of the facility has been required and the wall exceeds 4 feet in height (as measured from top of wall to normal water level or pond bottom for dry facilities), a handrail or other suitable barrier, approved by the Director, shall be provided along the top of the wall.

13.4 CULVERTS

13.4.1 Drainage Improvements Required

Stormwater conveyance facilities, which may include but are not limited to culverts, storm drainage pipes, catch basins, drop inlets, junction boxes, headwalls, gutter, swales, channels, and ditches, shall be provided 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 requirements of this Ordinance.

13.4.2 Design Criteria – General

- a. All stormwater conveyance facility design calculations shall be certified by a registered professional engineer.
- b. Methods to calculate stormwater flows shall be in accordance with this Ordinance and the Georgia

Stormwater Management Manual.

- c. The USGS Method shall be used where applicable to check the magnitude of peak flows when other hydrologic methods recommended in the manual are used.
- d. All portions of a stormwater conveyance system with drainage areas falling within the same size category shall be analyzed using the same methodology.
- e. 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 Georgia Stormwater Management Manual.
- f. Sizing and location of all drainage structures shall be the responsibility of a registered professional engineer as per accepted standard design procedures, subject to approval by the Director.
- g. All storm drainage designs shall be in accordance with the Georgia Stormwater Management Manual, and GDOT specifications.
- h. GDOT standards shall be used in determining class (concrete) or gauge of pipe under fill, method of back-filling and pipe installation.
- i. A certification of the pipe specifications for each pipe may be required prior to the pipe installation.
- j. Trench construction for storm drainage pipe shall be in accordance with GDOT specifications, OSHA standards and City ordinances.

13.4.3 Design Criteria – Culverts

- a) When the construction of a proposed public road makes it necessary to cross an open stormwater conveyance system, the developer shall provide and install the required size and length of an acceptable grade of pipe.
- b) Culvert design is to be in accordance with the methods contained in this Ordinance and the Georgia Stormwater Management Manual and shall include a thorough analysis of both inlet and outlet control conditions.
- c) 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).
- d) Single barrel or single cell culvert structures are less prone to clogging and require less maintenance than multi-barrel or multi-cell installations and should therefore be used whenever feasible.
- e) The maximum velocity in a corrugated metal culvert for the 100-year flow shall be 15 fps (feet per second). Velocities over 10 fps in a pipe of any material shall be considered a special design with particular attention required to pipe or structure invert protection and to fill slope, stream bed, and stream bank stability.
- f) The minimum allowable slope shall be in accordance with the Stormwater Design Manual.
- g) Minimum culvert size shall be 18".
- h) Culverts shall have head walls of an approved type on inlet and outlet ends of the pipe.

- i) The 100-year pond limits at the upstream end of the culvert shall be indicated on the design plans and final plat if applicable.
- j) Culverts shall be designed to provide a minimum of 1.5 feet of freeboard between the peak design storm elevation and the centerline of the road without raising the established flood elevation on the upstream properties. All crossings shall conform to the floodplain management ordinance. The design storm events are as follows:

**Table 13.4-1
Required Storm Events for Culvert Design**

STREET CLASSIFICATION	STORM EVENT (RECURRENCE INTERVAL)
Arterial/ Major Collector	100 years
Minor Collector/Local*	50 years
Dead End/Alleys*	25 years

* For streets that don't have alternative access routes the design storm event shall be the 100 year event for all street classifications.

- k) Junction boxes having access to the pipe shall be constructed to meet the requirements of GDOT standards and shall be provided with a metal manhole frame and lid for access.
- l) Minimum cover is one-foot between the bottom of the base or sub base, if used, and the exterior crown of culvert.
- m) A minimum of 0.5 foot between underground utilities and exterior crown of the culvert shall be provided.

13.4.4 Materials and Installation

- a) Acceptable pipe materials shall be as follows:
 - i. Reinforced Concrete Pipe (RCP) – required within the right-of-way or when conveying live streams
 - ii. Fully Coated or Aluminized Type II Corrugated Metal Pipe
 - iii. Other materials as approved by GDOT
- b) Pipe installed within the right-of-way shall be reinforced concrete pipe and the class as determined by GDOT specifications.
- c) All pipes carrying live streams shall be reinforced concrete or HDPE. HDPE pipe shall conform to the standard GDOT specifications.
- d) Reinforced concrete pipe shall be manufactured in accordance with AASHTO M-1 70 and/or ASTM C76. All pipes shall be in joint lengths of not less than 8 feet. All joints shall be bell and spigot and shall be laid with the spigot end pointing downstream. All joints shall use an O-ring gasket conforming to ASTM C-443. Class of pipe and wall thickness shall be accordance with GDOT standard details and specifications.

- e) Metal pipe shall be fully bituminous coated or aluminized type II, with re-rolled ends and bands to match.
- f) Culvert pipe on which the coating has been bruised or broken either in the shop or in shipping or which shows defective workmanship shall be rejected. Among others, the following defects are specified as constituting poor workmanship and the presence of any or all of them in any culvert pipe shall constitute cause for rejection:
 - i. Uneven laps
 - ii. Elliptical shaping
 - iii. Variation from a straight centerline
 - iv. Ragged or diagonal sheared edges
 - v. Loose, unevenly lined or spaced rivets
 - vi. Poorly formed rivet heads
 - vii. Unfurnished ends
 - viii. Illegible brand
 - ix. Lack of rigidity
 - x. Bruised, slated or broken coating
 - xi. Dents or bends in the metal itself
- g) Field joints shall be made with coupling bands of the same base metal as the culverts. The bands shall not be less than seven inches wide for diameters of eight inches to 30 inches, inclusive; not less than 12 inches wide for culverts with diameters 36 inches to 60 inches inclusive and not less than 24 inches wide for culverts with diameters greater than 60 inches. Such bands shall be so constructed so as to lap on an equal portion of each of the culvert sections to be connected at the ends by galvanized angles having minimum dimensions of 2"x2" by 3/16". The seven-inch band shall have at least two galvanized bolts not less than 1/2 inch in diameter. The 12- inch band shall have three and the 24-inch band shall have five 1/2 inch bolts. Other equally effective methods of connecting the coupling bands may be used if approved by the Director.
- h) The gauge of the culvert metal will be determined from the thickness of the galvanized sheets as approved by GDOT Standards.
- i) Corrugated metal pipe shall conform to the requirements of AASHTO M36, sizes, shapes, types, base metal, gauges; bituminous coating and paved inverts shall be as provided in the GDOT specifications or a directed by the Director.
- j) All joints and couplings shall be in accordance with the manufacturer's recommendations. Each end of each pipe to be joined by a coupling band shall have minimum of two annular corrugations. Bands shall be manufactured from the same material as the pipe. The minimum band gauges for aluminized pipe shall be as specified in AASHTO M-36, Section 9.
- k) Pipe sections shall be laid in a prepared trench with outside laps of circumferential joints pointing upstream and with longitudinal joints at the sides. Coupling bands fastened by two or more bolts shall join the sections. The space between adjoining sections shall not be more than the width of one corrugation.
- l) Before any traffic over a storm drain is allowed, the developer shall provide an adequate depth and width of back-fill to protect the structure from damage or displacement. All pipe structures shall be cleaned before the work is accepted. Any damage or displacement that may accrue due to traffic or erosion shall be repaired or corrected at the developer's expense.

13.4.5 Bedding and Backfill

a) General

All approved pipe material shall be bedded in accordance with the manufacturers' and engineers' specifications.

b) Bedding

All pipes shall be placed on stable earth of fine granular foundation, the characteristics of which would be expected to provide long-term stability. In all live stream pipe installations, areas of low bearing capacity, solid or non-uniform foundations, where rock is encountered at the foundation level, or in other locations where conditions warrant, a minimum of 6" of crushed stone bedding is required (maximum size of stone is 3"). Geogrids or geotextiles may also be required by the department in problem areas.

When concrete pipe is used all bedding material shall be suitably excavated to allow for the bell and uniformly support the pipe.

c) Backfill

Backfill on all pipe installations shall be constructed using foundation backfill material Type I or Type II as specified in Sections 812.2.01 and 812.2.02 respectively in the GDOT Standard Specifications. These materials shall be placed in layers of not more than 6 inches loose. Compaction of these materials shall be accomplished by hand tamping or machine tamping. Required compaction levels are as follows:

- i. Backfill within all street rights-of-way shall be compacted to 95% maximum laboratory dry density as determined by AASHTO Method T-99. The top 12" shall be compacted to 98% maximum density. Base material shall be compacted to 100% maximum laboratory dry density as determined by AASHTO method T-180.
- ii. Backfill in all other areas shall be compacted to 95% maximum density using the AASHTO Method T-99.

13.4.6 Pipe End Treatments

- a) Headwalls or other end treatments are required on all culverts and at the end of all piped collection systems. Headwalls are to be pre-cast concrete, stone masonry with reinforced footings or poured in place reinforced concrete with reinforced footings.
- b) End treatments that conform to the slope may be masonry, pre-cast concrete, metal, reinforced concrete slope collars or grouted riprap. Concrete and metal flared end sections shall conform to GDOT standards.

13.4.7 Bridges

Bridges shall be designed on a 100-year flood basis.

Bridge piling shall be driven to State Highway load standards for loading. Certification of pile load shall be by registered professional engineer.

13.5 PIPE COLLECTION SYSTEMS

13.5.1 General Requirements

- a. The maximum velocity in a corrugated metal pipe system for the design flow shall be 15 fps. Velocities over 10 fps in a pipe of any material shall be considered a special design with particular attention required to pipe invert protection and the ability of the receiving waterway or detention facility to accept the flow without damage.
- b. The minimum allowable slope shall be in accordance with the Stormwater Design Manual.
- c. The maximum allowable slope for a concrete drainage pipe shall be 10 percent, for a corrugated metal pipe shall be 14 percent and for a HDPE pipe shall be 14 percent. Greater slopes may be approved if installation is in accordance with manufacturer's recommendations. In cases where the slope is in excess of 10 percent, anchor collars may be required.
- d. Drop inlets and junction boxes shall conform to Fulton County or GDOT construction standards.
- e. Catch basins and/or drop inlets shall be designed by the developer's engineer or registered surveyor to GDOT standards and subject to approval by the Director.

13.5.2 Methodology

The rational method shall be used to determine the size of all pipe collection systems in accordance with the methodology provided in the Georgia Stormwater Management Manual. Closed storm drainage systems shall be designed using the 25- year storm event.

13.5.3 Minimum Pipe Size

Minimum pipe size shall be 18 inches.

13.5.4 Inlet Location and Gutter Spread

- a. Catch basins shall be located at low points of streets and at all points where the gutter spread exceeds one-half of the width of the travel lane or 8 feet whichever is smaller. Flows shall be based on a 25-year design storm event and shall be calculated as described in the Georgia Stormwater Management Manual. Gutter spread calculations shall be included in the stormwater management study.
- b. Junction boxes or inlets shall be provided at all changes in pipe grades, direction or materials. All junction boxes or inlets shall be provided with metal manhole frames and lids for access.

13.5.5 Pipe Slope

All storm sewer pipes shall be sloped to provide a minimum velocity of 2.5 fps, actual velocity. In no case shall the slope be less than one-percent (1.0%) for corrugated metal pipe or one-half percent (0.5%) for reinforced concrete pipe.

13.5.6 Flow and Outlet Velocity

Maximum flow velocity, actual or full flow, is 20 fps. Maximum outlet velocity, actual or full flow, is 5 fps with adequate energy dissipation devices installed at the pipe outlet.

13.5.7 Hydraulic Grade Line

Complete flow, velocity, and hydraulic grade line computations shall be provided for all portions of a closed drainage system. Hydraulic grade lines shall be shown on the storm drainage profiles for the 25-year design storm event. Hydraulic grade line calculations shall include any tail-water or backwater effect from downstream structures.

13.5.8 Easements

Easements shall be required as provided in Article 12.

13.5.9 Cover

Minimum cover shall be 12 inches on all drainage pipes, as measured from the bottom of the sub-grade or sub-base if used. Maximum cover shall be as defined in GDOT Specifications.

13.5.10 Maximum Pipe Length

Maximum continuous runs of pipe shall be as follows:

**TABLE 13.5-1
MAXIMUM CONTINUOUS PIPE LENGTH**

PIPE DIAMETER (inches)	MAXIMUM CONTINUOUS LENGTH (feet)
18	300
24-60	400
Larger than 60	500

13.5.11 Subdrainage

Subdrainage may be required to be installed to control any surplus groundwater by intercepting seepage or by lower or regulating the groundwater level where such conditions exist.

13.5.12 Back fill

The back-fill around and over storm sewer pipes, culverts and minor structures shall be of selected material Type I or Type II. The back-fill shall be placed and compacted so as to avoid unbalanced loading and to avoid placing undue stress on the structure. Back-fill shall be built up in horizontal layers not more than six inches thick and each layer shall be thoroughly compacted by the use of rapid striking mechanical tampers or hand tampers. After compaction, the dry weight per cubic foot for each layer of back-fill shall be at least 95 percent of the maximum laboratory dry weight per cubic foot. Back-fills shall be built up and compacted above pipe and culverts to a thickness of at least two feet or half the vertical inside diameter of the pipe, whichever is greater, unless these dimensions exceed the proposed height of embankment, in which case the back-fill shall be made and compacted to the height of the embankment.

13.5.13 Outlet Location - Culverts and Pipe Systems

- a. Outlet structures (such as headwalls) shall not be located closer to the project site's property line than the distance necessary to construct any outlet protection or a flow distance equal to 6 pipe diameters, whichever is greater. For non-circular conduits, the distance equal to 6 pipe diameters shall be 6 times the rise dimension of the conduit. The design of the outlet protection shall be in compliance with the Manual for Erosion and Sediment Control in Georgia.
- b. The invert elevation of a culvert or pipe outlet shall be no more than 2 feet above the elevation of the bottom of the receiving watercourse at the outlet, unless adequate slope protection and channel are constructed to safely convey the discharge from the outlet of the pipe to the receiving channel.

13.5.14 Energy Dissipation.

The maximum developed condition flow velocity at the project site's downstream property line with an adjoining tract shall not exceed the maximum pre-developed condition velocity.

13.5.15 Discharge of Concentrated Flows.

- a. The discharge of concentrated flows of stormwater into public roadways shall be avoided. Applicant shall demonstrate to the satisfaction of the Director that all reasonable efforts have been made to control stormwater on the project site.
- b. In residential subdivisions, the drainage area contributing to the peak flow along any property line between lots within 50 feet of the building setback line for either lot shall not exceed 2 acres, unless contained within a piped drainage system or maintained in a natural watercourse. The stormwater conveyance shall be in a drainage easement.

13.5.16 Storm Drain Stenciling

When required by the city, all residential subdivision and commercial entity storm drainage structures or facilities (catch basins, storm sewer inlets, manholes and other structures that capture and convey stormwater runoff) shall be properly identified as draining to a stream.

13.6 STORMWATER MANAGEMENT

13.6.1 Design Criteria – General

- a. All design related to the stormwater facilities shall be in accordance with the Georgia Stormwater Management Manual as adopted or amended.
- b. Installation of properly functioning stormwater facilities, including outflow control devices shall be the responsibility of the owner. If any facilities are damaged or destroyed during grading or construction activities, all processes shall cease until such devices are restored to their functional capacity. The owner, through application for a Land Disturbance Permit, agrees to accept this responsibility.

13.6.2 Stormwater Management Report Required

A stormwater management report shall be provided for every project as required by the city's Stormwater Management Ordinance. The purpose of this report shall be to formulate a plan to manage stormwater runoff so that stormwater runoff hazards are not created and existing run-off related problems are not exacerbated, either upstream or downstream from or within the boundaries of the property being

developed. The engineer shall be responsible for obtaining all information necessary for the report. Hydrologic analysis and detention pond hydraulics, pipe and open channel hydraulics, culvert hydraulics and water quality best management practices shall be certified by a professional engineer registered in the State of Georgia.

13.6.3 Stormwater Detention

- a. Whenever a stormwater management report indicates that an adverse impact from stormwater runoff is expected to result from the development of a property, that project shall be provided with stormwater detention facilities. The meaning of adverse impact shall apply to situations where the post developed discharge velocities and/or flows, up to and including the 100 year storm event, exceed those determined for the pre-developed conditions or where the downstream conditions indicated that the design flow exceeds the conveyance capacity of the receiving facility or potentially creates flooding conditions in downstream structures.
- b. Stormwater detention facilities shall be designed so that their peak release rates, when combined with those of all detention bypass areas in the same basin, produce peak flow rates and flow velocities at the site's boundary line no greater than those which occurred at the same location under pre-developed conditions.
- c. Peak flow rate and velocity control shall normally be provided only for the 2-year, 5-year, 10-year, and 25-year frequency storm events. However, under certain conditions, the 100-year event must also be detained to the pre-developed rate. Such control of the 100-year event shall be provided when failure to do so would result in flooding of other habitable dwellings, property damage, or public access and/or utility interruption.
- d. Stormwater detention facilities shall be provided, unless the registered professional engineer provides certified documentation supporting the conclusion to the Director that at least one of the following is true and correct as applicable.
 - (1) The undetained flow will pass through downstream properties, in drainage easements obtained by the developer, to an existing detention facility which has been designed to manage the upstream property's runoff or to the point in the downstream analysis which shows that detention is not required; or,
 - (2) Where the site runoff will flow directly into a stream or lake without crossing off-site properties and the following conditions are met:
 - i. Conveyance systems on the project site are adequately designed or sufficient in their existing conditions to transport the undetained flows without further degradation; and,
 - ii. The downstream analysis, using timing of the hydrographs, shows no adverse impacts from the exit of the site to the point in the drainage basin where the project area is 10 percent of the total drainage basin area.
- e. Should the authorized registered professional conclude that stormwater detention may not be necessary, rigid compliance with all of the following criteria is mandatory:
 - (1) A stormwater management report shall always be required whether or not stormwater detention is required.

- (2) If the applicant proposes to show that the detention requirement may be eliminated for all or a portion of a project, then a pre-submittal conference with the Department staff is required prior to preparation and submittal of construction plans for the project.
- (3) At the pre-submittal conference with the staff, the consultant shall be prepared to discuss the downstream analysis findings as follows:
 - i. The affected stream must be analyzed downstream from the project to a point where the project area is 10 percent of the total drainage basin. The analysis must include all culverts, obstructions, existing and potential erosion problems, elevations of existing improvements, and any other existing modifications to natural conditions; and,
 - ii. If the existing downstream conditions are overburdened by the pre-developed flows in the stream, then detention shall be required unless the developer elects to eliminate the downstream overburdened conditions at his or her expense when the development occurs; and,
 - iii. If there are any existing drainage complaints downstream, then detention shall be required unless the developer elects to minimize the conditions causing the complaint at his or her expense when the development occurs.

f. Where it is determined by the analysis required by this section that stormwater detention is not required it should not be interpreted as a waiver of channel protection and water quality requirements.

g. All stormwater detention/retention structures (both above and below ground) shall be located outside of building setbacks and zoning buffers.

13.6.4 Extended Detention

Extended detention shall normally be provided in accordance with the requirements of the city stormwater ordinance.

13.6.5 Water Quality

Water quality measures shall be installed in accordance with the city stormwater ordinance.

13.6.6 Upstream Conditions

- a. All culverts, pipe systems and open channel flow systems shall be sized based on all on-site upstream areas being developed in accordance with the development plans and the off-site upstream areas being fully developed in accordance with the land use plan with no detention. Upstream detention may be included when determining flows, provided the engineer calculates the reduced flow by routing the developed flows through any stormwater facility included in the analysis rather than assuming that a reduction will occur. The engineer shall show that detention facilities used in the analysis will remain, be properly maintained and the storage volume and outlet structure configuration is based on current conditions.
- b. Detention facilities shall be designed using pre-developed flows based on existing conditions for all upstream areas including existing on-site lakes, ponds and detention facilities. Post developed flows shall be based on the upstream basin areas being developed as shown on the approved development

plans and existing conditions for off-site upstream areas. Upstream detention may be included if it meets the conditions as described for culverts, pipe systems and open channel flow systems.

13.6.7 Existing Conditions (Pre-development)

Existing or pre-development conditions shall be defined as the conditions of the site at the time the development permit is applied for. The existing condition shall include all on-site lakes, ponds, or detention facilities. Pre developed flows shall be determined by routing the flows through these stormwater facilities.

If it is determined by the Director that the existing conditions downstream of the project site warrant further protection the Director may require the existing conditions analysis to assume that the site is in its natural, undisturbed state.

13.6.8 Hydrology Report Requirements

The stormwater management report shall comply with the city's Stormwater Management ordinance and shall include the following information when applicable:

- i. Cover sheet signed and sealed in accordance with the Stormwater Management Ordinance
- ii. Table of Contents
- iii. Narrative Summary
- iv. Numerical Summary
- v. Basin Delineation Maps (Pre & Post, tc flow paths, sub-basin CN)
- vi. Hydrograph input and output
- vii. Routing input and output
- viii. Stage-Storage/ Outflow Relationships
- ix. Outlet Control Details
- x. 10% Downstream Analysis
- xi. Channel/Ditch Calculations
- xii. Pipe Chart (shown on plans also)
- xiii. Gutter Spread Calculations
- xiv. Downstream Sediment Analysis

13.6.9 Side Slope and Fencing Requirements

All stormwater facilities shall be constructed with maximum 2:1 side slopes or fenced when the facility contains a permanent pool deeper than 18 inches or the 25 year maximum flood depth exceeds 18 inches (use a 24 hour duration for facilities designed using SCS methodology). The fence shall be a minimum of 6 feet high and made of a durable material with a 10 foot wide access gate. The fence shall comply with all applicable zoning requirements.

13.6.10 Temporary Facilities

Stormwater detention facilities shall be constructed in accordance with the approved plans and shall be in place and inspected prior to the initiation of other improvements. If the detention facility is planned to be a lake, micro pool or constructed wetland, temporary detention facilities shall be provided and shall remain in place until the feature has become a functional stormwater management facility.

13.6.11 Redevelopment and the Use of Existing Stormwater Facilities

- a. When a development uses an existing facility where the last approved certification and record

drawing of the facility was over 18 months prior to the new development's submittal, the engineer shall provide one of the following.

- (1) A new survey, drawing and certification showing that the outlet structure is constructed as approved and the flood storage and water quality volume of the facility is equal to or greater than the volume required when the facility was approved; or,
 - (2) Construction plans and calculations showing that the outlet structure will function as designed and the flood storage and water quality volume of the facility will be equal to or greater than the volume required when the facility was approved once the proposed maintenance has been performed; or,
 - (3) A new record survey, drawing, study and certification showing that the facility meets the development requirements when the facility was approved.
- b. When the development is part of a redevelopment strategy or the proposed development intends to use a master facility that does not meet current stormwater standards as established in the Stormwater Management Ordinance, the following shall apply:
- i. When 5,000 square feet or more of impervious surface is created, added, or replaced, or 1 acre or more of a developed project site is disturbed for redevelopment, and the disturbed area is more than 50% of the property, the water quality requirements of this section must be met for the entire site.
 - ii. When less than 5,000 square feet of impervious surface area is created, added, or replaced, or less than 1 acres of land of a developed project site is disturbed for redevelopment, the project is exempt from having to provide the water quality requirements of this section for the project or for the rest of the site.
 - iii. When 5,000 square feet or more of impervious surface area is created, added, or replaced, or 1 acre or more of a developed project site is disturbed for redevelopment, and the disturbed area is less than 50% of the property, the project shall provide water quality treatment for just the improvements on the site.
 - iv. Where water quality treatment for a proposed development is to be provided in an existing detention basin then treatment must be provided for the entire original project basin. A modification to the 25-year detention requirement may be granted for the purpose of retrofitting the detention pond to meet current water quality regulations. Granting of a modification will meet the intent and purpose of this Ordinance when:
 - a. The detention requirements of the current regulations are provided in the facility for the 1-year, 2-year, 5-year and 10-year and 25 year storm. For a retrofitted basin, 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 basin; and,
 - b. The water quality requirements of the current Ordinance are provided for the original project area in the facility; and,
 - c. The ponding limits create a hardship if no modification is granted; and, the outlet structure meets the requirements of the current Ordinance.

The applicant may be required to provide documentation that all other applicable environmental permits have been acquired for the site prior to approval of the Stormwater Management Report.

13.6.13 Stormwater Facility Location Criteria.

- a. For purposes of this Ordinance, a stormwater facility shall be deemed to consist of the area within the maximum design ponding limits, the dam (if one) including all embankment slopes and wall footings (if applicable), primary and emergency outlet works, any drainage and access easements, and any forebay or energy dissipation devices.

The intent of this Ordinance is to ensure that the extent of the facility is defined to allow flooding, access and maintenance. Granting of a modification will not nullify this Ordinance when the facility is a wet pond or lake, the area within the maximum design ponding limits is reduced to a few feet inside the normal pool elevation, and easements are provided on the perimeter properties to allow for flooding, access and maintenance around the lake. In addition, granting of the modification shall only be considered when the wet pond is an amenity and under no circumstances shall the dam and outlet structure lie on private property that is not in some form of common ownership.

- b. Detention facilities, to the greatest extent feasible, shall be located so as to minimize the amount of flow generated on the project site that by-passes the facility.
- c. No portion of any stormwater facility shall disturb any required buffer, landscape strip, or tree protection area.
- d. The 100-year ponding limits of a stormwater facility shall not encroach upon a public right-of-way.
- e. Stormwater facilities may be located within or encroach upon utility easements or utility rights-of-way upon receipt by the Department of written permission from both the property and utility owners.
- f. Stormwater facilities may be constructed within recreation areas if the following criteria are met:
 - (1) Ownership of the area will be held by a Qualified Property Owner's Association, Homeowners Association, or other private parties.
 - (2) Permanent structures, such as buildings and swimming pools, will not be constructed within the boundaries of the stormwater facility.
 - (3) Stormwater facilities within active recreation areas will be approved only if the design of the area includes recreation amenities such as ball fields, tennis courts, grassed open areas or other similar improvements. The intent is to provide recreation facilities with detention as a secondary feature.
 - (4) Permanent stormwater features shall not interfere with the intended used of the recreation amenity, (i.e., a ditch or large swale shall not traverse a ball field, an inlet structure shall not be in a tennis court, etc.).

- g. A residential subdivision of more than three lots that is required by this Ordinance or the

stormwater management ordinance to provide stormwater management facilities shall locate those facilities on an individual lot of record within the development. Lots created within a development project to accommodate detention and retention facilities which are incidental, related, appropriate, and clearly subordinate to the main use in the project are exempt from the minimum lot size requirements in all zoning districts. No other construction/building is permitted on this lot and the lot shall be owned by the homeowners association or the owners of the lots of record being served by this facility. The lot shall have a minimum of 20 feet of public road frontage. Access to the facility shall be located on this lot and shall be provided in a manner which allows for access and maintenance of the facility. If the project is provided with an off-site detention facility, a mandatory property owners' association shall be established for its maintenance. The association bylaws shall be recorded concurrently with the recording of a final subdivision plat.

- h. A non-residential subdivision is not required to locate an on-site stormwater facility on a separate lot. The property owners served by a stormwater facility that provides detention and/or water quality for more than one property owner or is located off-site shall enter into a maintenance agreement acceptable to the city for the facility's maintenance. However, if desired by the developer, the facility may be located on a separate lot if it is owned and maintained by a mandatory property owners' association.

13.6.14 Stormwater Facility Access Requirements.

- a. In both residential and non-residential projects, an easement at least 20 feet in width shall be required so as to provide access to all detention facilities from a public street. The easement shall conform to the following requirements:
 - (1) The access easement shall be cleared, grubbed and graded so that it can be utilized by rubber-tired construction vehicles.
 - (2) The minimum drive surface width shall be 15 feet.
 - (3) The drive shall be grassed or paved.
 - (4) The maximum slope shall be 30%.
 - (5) Access easements may be combined with drainage easements containing an open channel; however, the combined easement shall be a minimum of 30 feet in width and shall be wide enough for the drainage channel and the drive.
 - (6) A drive to the bottom of the pond shall be provided when the facility is over 10 feet deep from the bench elevation or the facility is wider than 50 feet as measured from bench to bench.
 - (7) Where the facility is completely enclosed by walls, stairs shall be provided into the facility to allow for inspection and maintenance activities.
- b. When not located on an individual lot of record, every normally-dry stormwater basin, lake, or parking lot detention facility shall be completely enclosed within a drainage easement. The drainage easement shall extend at least 10 feet beyond the 100-year flooding limits of the stormwater facility and shall encompass any dam, outlet structure and energy dissipation devices.

13.6.15 Stormwater Facility Maintenance.

- a. The storage capacity or function of any stormwater basin, pond or other impoundment, whether natural or man-made, shall not be removed or diminished without the express approval of the Department.
- b. In a residential subdivision, it shall be the responsibility of the mandatory property owner's association to maintain the operational characteristics of any facility constructed on their property for stormwater management pursuant to city requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- c. In a non-residential project with an on-site stormwater facility which serves only that project, the property owner shall be responsible to maintain the operational characteristics of the facility pursuant to city requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- d. Where no maintenance covenant has been recorded, it shall be the responsibility of the property owner to maintain the operational characteristics of any facility constructed on their property for stormwater management pursuant to county requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- e. Prior to the issuance of a Development Permit, the owner shall submit a detailed schedule of long-term maintenance and inspection activities. This schedule of activities shall be incorporated into a maintenance covenant signed by the property owner. The schedule shall describe all maintenance and inspection activities and the parties responsible. The maintenance covenant shall be in a form acceptable to the city and shall be recorded in the deed records of the Clerk of Superior Court.

13.6.16 Stormwater Facility Certification and As-Built Drawings.

When a new facility is constructed in a development, a certified as-built drawing of each stormwater facility shall be prepared by a land surveyor currently registered in the State of Georgia.

Based on the actual parameters established on the as-built drawing, an addendum to the Stormwater Management Report shall be prepared which demonstrates that the facility, as constructed, complies with the requirements of this Ordinance. The amended or as-built Stormwater Management Report shall be certified by the authorized registered professional. Any deviations from the original design shall be clearly noted as well as any impact, if any, these deficiencies may have on the operational characteristics of the facility

The survey shall be performed after substantial completion and stabilization of the project has occurred. The as-built drawing and addendum to the Stormwater Management Report shall be submitted to the city at least one week prior to the issuance of a Certificate of Occupancy or Final Plat approval (as appropriate to the project).

The as-built drawing shall show the following information. Where elevations or dimensions are shown on the as-built, the original design data should be shown and struck-through with the actual as-built data indicated next to that:

- a. horizontal and vertical alignment
- b. locations of all manholes, catch basins and junction boxes
- c. detention, retention, water quality facilities

- d. storm system outfalls
- e. creeks and drainage swales or ditches
- f. piping materials
- g. location and extent of easements
- h. property lines

This information shall be provided in the form of plans, profiles, details, sections and plats and when possible provided to the city in an electronic format compatible with the city database.

13.6.17 Parking Lot Detention Facilities

- a. Parking lot detention facilities shall generally be of one of the two following types:
 - (1) Depressed areas of pavement at drop inlet locations; and,
 - (2) Ponding areas along sections of raised curbing. The curbing in these areas is usually higher than a standard curbed section.
- b. Parking lot detention areas shall be located so as to restrict ponding to areas other than parking spaces near buildings, and to not encroach upon entrance drives.
- c. The maximum depth of detention ponding in a parking lot, except at a flow control structure, shall be 6 inches for a 10-year storm, and 9 inches for a 100-year storm. The maximum depth of ponding at a flow control structure shall be 12 inches for a 100-year storm.
- d. In truck parking areas, the maximum depth of ponding shall be 12 inches for the 10-year storm.
- e. Detention ponding areas are to be drained within 30 minutes after the peak inflow occurs.
- f. Parking lot detention areas shall have a minimum surface slope of 1 percent, and a maximum slope of 5 percent.

13.6.18 Underground and Rooftop Detention Facilities

The design of underground or rooftop detention facilities shall be in accordance with current engineering standard practice, and shall conform to the requirements of this Article. In the case of rooftop detention, permissible structural loads and weatherproofing shall be governed by the Georgia State Building Code as may be amended by the city.

13.6.19 Sediment Basins

- a. Stormwater management and sediment trapping functions should be separated whenever possible. Every erosion control design should seek to: first, prevent erosion from occurring; second, trap sediments as close to their sources as possible, and: third, provide a second-tier or backup line of defense against sediments leaving the project site. This backup defense will usually consist of check dams/and or sediment basins.
- b. Whenever a sediment basin and a detention facility are both required on the same watercourse, the sediment basin should be located immediately upstream of the detention facility.
- c. In cases where a normally-dry detention basin is planned to be used to trap sediment as well as provide stormwater control, under cutting of the basin will not be permitted.

- d. The design of sediment basins shall be in accordance with Appendix C of the "Manual for Erosion and Sediment Control in Georgia."
- e. Trapping of sediment in state waters shall not be allowed.

13.6.20 Ponds and Lakes Not Used for Detention.

In such cases where a pond or lake is provided as part of a development, but is not planned to function as a stormwater detention facility, the same general and specific criteria contained in this Ordinance shall apply, but may be modified in instances where a specific requirement is clearly detention oriented rather than safety-based.

13.7 DAMS

13.7.1 Application and Exemptions

This dam ordinance shall apply to all new, rebuilt, or modified stormwater impoundment's including appurtenant works whose height exceeds 10 feet as measured from the natural bed of the stream or watercourse at the downstream toe of the barrier, or the lowest elevation of the outside limit of the barrier, if the barrier is not across a stream channel or watercourse, to the maximum water storage elevation, with the exception of:

- a. Any Category I dam requiring permitting under the control of the Georgia Safe Dams Program.
- b. Any dam owned and operated by any department or agency of the United States Government.
- c. Any newly constructed dam financially assisted by the United States Soil Conservation Service or any other department or agency of the United States government when such department or agency designed or approved plans and supervised construction and maintains a regular program of inspection of the dam.
- d. Any dam licensed by the Federal Energy Regulatory commission, or for which a license application is pending with the Federal Energy Regulatory Commission.

13.7.2 Existing Dams

Any dam currently constructed and operating and not subject to regulation under the Georgia Safe Dams Act of 1978 or located on a site for which a development permit is requested is hereby grandfathered in its present state with the owner thereof assuming all rights, responsibilities, and liabilities thereof, subject to the provisions of Section 13.7.3. Upon any modification to the dam it shall become subject to this Ordinance.

Dams that are located on a project site for which a development permit is being requested shall be brought up to the minimum design standards contained in this Ordinance regardless of whether any modifications are proposed to the dam or appurtenant structures. If the dam and structures are not wholly contained within the project boundaries the director may waive any or all of these requirements when satisfied that all reasonable efforts have been unsuccessful to obtain the approval from adjacent land owners for any work necessary to comply with this Ordinance.

13.7.3 Emergency Draining of a Lake

Upon obtaining, evidence which indicates that a potentially hazardous condition may exist, such as:

- a. Excessive leakage transporting soil from the dam interior (i.e. piping).
- b. Slope failure, excessive scouring or other apparent soil instability.
- c. Longitudinal cracks, bulging, or shifts in alignment.
- d. Excessive sloughing or seepage.
- e. Failure of the spillways and/or outlet devices to function properly (due to clog age, damage or other deficiency).

The Director has the authority to order the immediate and complete draining of the lake in whatever manner deemed necessary at the time and to require the owner to keep the pool down until remedial work, as is deemed most appropriate to create a safe dam condition, is completed and approved by the Director.

13.7.4 New Category I and Category II Dams

Any new or modified dams classified as Category I or Category II as defined by the Georgia Safe Dams Act of 1978, O.C.G.A. 12-5-375 shall be subject to the following:

These dams are generally defined as any artificial barrier which impounds or diverts water and either of the following is true:

The barrier is more than 25 feet in height as measured from the natural bed of the stream or watercourse at the downstream toe of the barrier, or from the lowest elevation of the outside limit of the barrier, if the barrier is not across a stream channel or watercourse to the maximum water storage elevation; or

It has an impounding capacity of 100 acre-feet or more.

- a. The developer of any new dam classified as a Category I dam under the rules of the Georgia Safe Dams Act of 1978 shall be subject to the requirements of the Georgia Safe Dams Act of 1978 and Rules for Dam Safety adopted by the Georgia Department of Natural Resources. The developer shall obtain necessary approvals and permits from the Environmental Protection Division of the Georgia Department of Natural Resources for the project and the dam prior to securing a Land Disturbance Permit from the Department.
- b. The developer of any new dam classified as Category II under the rules of the Georgia Safe Dams Act of 1978 shall submit construction plans to the city for review of the project and the dam prior to securing a Land Disturbance Permit from the Department subject to the following:
 - 1) If the developer elects to construct the new Category II dam in accordance with the design standards for new dams as contained in the Rules for Dam Safety, i.e. Category I standards, then new development shall be permitted within the dam breach zone.
 - 2) If the developer elects not to construct the new Category II dam to the design standards for new dams as contained in the Rules for Dam Safety, then the following information shall be submitted along with the construction plans for review prior to securing a Development Permit from the Department:
 - i. A dam breach analysis for the dam shall be submitted. The design engineer shall utilize the computer model entitled "DAMBRK" for the dam breach

analysis. The breach analysis shall be based on a full pool, sunny day breach; and,

- ii. The dam shall be required to meet the minimum city standards contained in this Development Ordinance for dam construction; and,
- iii. For any new dam that is proposed not to meet the design standards for new dams as contained in the Rules for Dam Safety, the developer shall obtain a dam breach easement, recorded with the Clerk of Superior Court, from any offsite property owner where it is proposed for the dam breach zone to extend off the property where the dam is being constructed. The developer shall also cause a dam breach easement to be recorded upon the property being developed. Only the following uses and structures shall be permitted within the dam breach easement:
 - i. Agriculture which requires no structures for human habitation within the dam breach zone including forestry, livestock raising and agricultural and forestry access roads.
 - ii. Fences.
 - iii. Outdoor advertising signs provided they are located no closer than 100-feet from any residence or place of business.
 - iv. Roads, driveways and parking areas.
 - v. Utility poles, towers, pipelines, water treatment outfalls and facilities, or other similar facilities and structures.
- c. Prior to recording of a Final Plat or issuance of a Certificate of Occupancy, as appropriate, an as-built certification from a registered professional engineer shall be submitted to the Department. The certification shall state that the dam is constructed in accordance with the provisions of this Ordinance as well as the authorized construction plans. If the project is for the development of a subdivision, the developer shall also establish a legal entity, acceptable to the City, such as a mandatory Property Owners Association, prior to approval of the Final Plat, responsible for the maintenance of the dam and its impoundment.

13.7.5 New Dams between 10 feet and 25 feet in Height

Any newly constructed or modified dams that is 10 feet or more in height but less than 25 feet in height or having a storage capacity in between 50 acre-feet and 100 acre-feet at the maximum water storage elevation shall be subject to regulation under these development standards.

Any dam that meets the height thresholds of this section and which does not meet the design standards contained in the Rules for Dam Safety shall meet the following minimum standards:

- a. General Requirements
 - i. Design shall be by a professional engineer registered and licensed to practice engineering in the State of Georgia.
 - ii. Plans shall be submitted to the city for review and comment.

- iii. Prior to construction of any dam over 10 vertical feet or any dam impounding more than 50 acre-feet, the contractor shall provide the city with sufficient documentation of his qualifications to construct dams.
- iv. A pre-design meeting shall be held with representatives of the Engineering Division to review any proposed dam or proposed dam changes for any dam over 10 vertical feet or impounding more than 50 acre feet. Depending on the level of downstream risk, and size of impoundment, the city may require a dam breach analysis to be submitted for any proposed or existing dam contained within a proposed development, utilizing the National Weather Service's DAMBREAK program or other methodology approved by the Georgia Safe Dams Program.
- v. When a dam breach analysis is required by the city, a sunny day dam breach analysis shall be performed under full pool conditions as a minimum.
- vi. All impoundments shall have a permanent drain capable of draining the pool to a depth of no more than 2 feet within 24 hours.
- vii. No roadways shall be constructed over any permanent water impoundment structure if that roadway provides the only means of egress for any lot of record, without prior approval of the city.
- viii. No utilities are permitted to pass through any dam, either longitudinally or transversely, without prior approval of the city.
- ix. In addition to the storm events that are required in this Development Ordinance, any dam that impounds stormwater to meet the requirements of the city's Post Development Stormwater Management Ordinance shall also be evaluated based on the storm required in that ordinance.

b. Report Requirements

Guidelines are available from the State of Georgia Safe Dams program (EPD) to assist the design/construction professional. Dam design documents shall include, but not be limited to:

- a. Hydrology/hydraulic Report
- b. Geotechnical Report (with Borrow Study, applicable)
- c. Drainage basin map with land use and land improvement parameters
- d. Existing topography of site
- e. Plan view of Dam
- f. Cross Sections at all critical points
- g. Delineated dam breach zone
- h. Complete Details
- i. Technical specifications
- j. Names and professional seals of design Civil Engineer and Geotechnical Engineer with 24 hour contact
- k. Designated contractor (if available)

c. Outlet/Spillway Requirements

Because of the variables associated with selecting spillway(s), outlet device(s) or appurtenant structure(s) to suit a given site condition, the design consultant is responsible for the selection, subject to the review and approval of the Stormwater Division. The division will include in its consideration

the case of maintenance, longevity of the system, blockage potential, and practicality of operations.

- i. No orifice shall be less than 3 inches in diameter unless it is installed to meet a state or local requirement.
 - ii. All risers (standpipes) shall be equipped with a debris deflector (trash rack) and an anti-vortex device. To facilitate outlet operation, curved or inclined a-ash 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. Corrugated Metal Pipe is not permitted for standpipes.
 - iii. Spillways: Every dam shall be provided with a principal spillway, fully capable of passing at least the 50-year flood, with excess spillway capacity provided by the emergency spillway(s) capable of handling excess flows up to the design storm. The principal spillway can be sized for floods of less magnitude than the 50-year flood only if the emergency spillway is appropriately armored against scour with concrete or other suitable lining as protection against more frequent usage.
 - iv. Principal Spillway: All spillways shall be analyzed (hydraulically rated) for both inlet and outlet control conditions using appropriate tail-water ratings. If a control-box or weir-box is affixed, then the coral system (inlet control box and outlet conduit) shall be hydraulically rated to determine the stage-discharge relationship.
 - v. Emergency Spillway(s): For every type of water impounding facility a planned safe flow path must be provided for conveyance of flows of water in an emergency. In many instances, this function can be provided through installation of an emergency spillway. Emergency spillways may be excavated open channels, either vegetated or paved with reinforced concrete or weir sections of concrete walls, or, appropriately designed conduit. Any portion of an open channel spillway excavated into a dam embankment or other fill section must be paved with reinforced concrete equipped with appropriate seepage controls, under-drainage and cut-off walls.
 - vi. Any portion of any spillway excavated into undisturbed residual soil shall be vegetated in accordance with the practices described in the "Manual for Erosion and Sediment Control in Georgia" or protected against scour and erosion by other suitable measures if vegetation does not provide adequate stabilization. The spillway is activated by storms smaller than the 50-year frequency, and then vegetation alone will not be considered sufficient protection against scour according to these standards.
- d. Permanent Impoundments

The following requirements shall apply to lakes and ponds that maintain a permanent pool of water:

i. Earthen Dam

- a. Design storm shall be at least 25 percent of the Probable Maximum Precipitation storm event (1/4 PMP).
- b. Principal spillway shall be adequate to handle at least the 50-year flood.
- c. Emergency spillway(s) as a minimum shall be adequate to handle flows in excess of the 50-year flood, up to the 1/4 PMP. Front and back slopes, each, shall not be steeper than 3:1

unless design includes a slope stability analysis that confirms and documents a steeper slope will be stable. In no condition, however, will a slope steeper than 2:1 be permitted.

- d. All organics and topsoil shall be removed from the entire footprint of the dam and the foundation certified by a Geotechnical Engineer (PE).
- e. Earthen fill shall be CL or ML material approved for use by Geotechnical Engineer (PE) and placed and compacted to not less than 95% Standard proctor under said Engineer's direction.
- f. Compaction records accompanied by a Geotechnical Engineer's certification that soil compaction meets this specification shall be forwarded to the city.
- g. The low level outlet (lake drain) shall be Concrete Pressure Pipe or Ductile Iron Pressure Pipe, cradled in concrete. Bedding shall be in concrete poured the full width of the exposed trench and as a minimum, up to the spring line of the pipe. Pipe and joints shall be rated for internal pressures exceeding that of the design storm and shall meet or exceed ASTM 361 or AWWA C-301. Corrugated metal pipe is not allowed.
- h. A lake drain may also be comprised of a valve-operated siphon system designed by a registered Civil Engineer licensed in the State of Georgia. Piping for a siphon system shall be ductile iron with mechanical joints or PV joints with adequate strength and anchoring to sustain the water forces incumbent with operation.
- i. Freeboard of dam above the design storm maximum pool shall be 3.0 feet in lieu of fetch calculations of wave height justifying a lesser freeboard. The city reserves the right to require additional freeboard above the nominal 3-feet requirement if supported by fetch calculations.
- j. Crest width shall be not less than 8.0 feet.
- k. Embankments shall be protected from erosion by appropriate vegetation, rip rap, paving or some other type of protective surface and maintained in a safe condition. In appropriate vegetation such as trees or shrubs and hedges that may obscure inspection of the dam shall not be allowed or shall be removed. A qualified professional shall be consulted prior to the removal of trees over 4" dbh or where the removal of any trees may endanger the function or stability of the dam.

ii. Gravity Dam (reinforced concrete or masonry)

- a. Design, construction supervision, and certification of completion according to plans and specifications to be by Design Civil Engineer and a Geotechnical Engineer both licensed to practice in the State of Georgia.
- b. Design shall address and account for overturning, uplift, and seepage with adequate safety factor and adequate freeboard.
- c. All slab on grade concrete, including concrete footings, shall be designed and constructed to control seepage and piping of foundation soil along the underside of the slab in incorporating cutoff walls, or other appropriate measures.

- d. Design storm shall be at least 25 percent of the Probable Maximum Precipitation (1/4 PMP).
 - e. Principal spillway shall be adequate to handle at least the 50-year flood unless the emergency spillway is appropriately armored against scouring.
 - f. Emergency spillway shall be adequate to handle flows in excess of the 50-year flood, up to the 1/4 PMP.
 - g. Freeboard of dam above the design storm maximum pool shall be 3.0 feet in lieu of fetch calculations of wave height justifying a lesser freeboard. Additional freeboard above the nominal 3-feet required if supported by fetch calculations.
 - h. All organics and topsoil shall be removed from the entire footprint of the dam and the foundation certified by a Geotechnical Engineer (PE).
 - i. Earthen fill (if any) shall be subject to the criteria specified above for earthen embankments.
- e. Temporary / Dry Impoundments

The following requirements shall apply to those stormwater facilities that are normally dry, i.e. dry detention ponds:

- i. Design Criteria
 - a. Design storm shall be at least the 100-year, 24 hour storm.
 - b. Multi-frequency outflow control shall be provided in accordance with the Georgia Stormwater Manual. Storm frequencies may include: 24-hour extended detention for the 1-year event and peak flow attenuation for the 25-year and 100-year events.
 - c. Principal spillway shall be adequate to handle at least the 25-year flood.
 - d. Emergency spillway(s) shall be provided to handle flows in excess of the 25-year flood, up to the 100-year flood.
 - e. Where fencing is required by Section 13.6.9 the fence shall not extend across the emergency spillway in such a manner as to create a possible clogging hazard.
- ii. **Earthen Dam**
 - a. Front slope shall not be steeper than 2.5:1 unless design includes a slope stability analysis that confirms and documents a steeper slope will be stable. In no condition, however, can any slope be steeper than 2: 1.
 - b. All organics and topsoil shall be removed from the entire footprint of the dam and the foundation inspected and approved by the city prior to fill placement.
 - c. Earthen fill shall be CL or ML material approved for use by Geotechnical Engineer (PE) and placed and compacted to not less than 95 % Standard Proctor under said Engineer's direction.

- d. Freeboard of dam above the 100-year design storm maximum pool shall be 2.0 feet in lieu of fetch calculations of wave height justifying a lesser freeboard. The city reserves the right to require additional freeboard above the nominal 2-foot requirement if supported by fetch calculations.
- e. Crest width shall be not less than 8.0 feet, unless approved by the Department.
- f. Embankments shall be protected from erosion by appropriate vegetation, rip rap, paving or some other type of protective surface and maintained in a safe condition. In appropriate vegetation such as trees or shrubs and hedges that may obscure inspection of the dam shall not be allowed or shall be removed. A qualified professional shall be consulted prior to the removal of trees over 4" dbh or where the removal of any trees may endanger the function or stability of the dam.

iii. Gravity Dam (reinforced concrete or masonry)

- a. Design shall address and account for overturning uplift, and seepage with adequate safety factor, and adequate freeboard.
- b. All slab on grade concrete, including concrete footings, shall be designed and constructed to incorporate appropriate cutoff walls.
- c. Under no condition, can any fill slope (if any) be steeper than 2:1.
- d. All organics and top soil shall be removed from the entire footprint of the dam and the foundation inspected and approved by the city prior to gravity dam concrete or masonry placement.
- e. Earthen fill (if required) shall be approved for use by Geotechnical Engineer (PE) and placed and compacted to not less than 95 % Standard Proctor under said Engineer's direction.
- f. Freeboard of dam above the 100-year design storm maximum pool shall be 2.0 feet along any earth fill sections of the dam, in lieu of fetch calculations of wave height justifying a lesser freeboard. The city reserves the right to require additional freeboard above the nominal 2-foot requirement if supported by fetch calculations.

13.7.6 Existing Category II Dams

When an existing Category II dam may be reclassified to a Category I dam because of a proposed development downstream of the dam, the following shall be provided by the developer for review by the Georgia Safe Dams Program.

- a. Location of the Category II dam and the proposed development; and,
- b. A surveyed cross-section of the stream valley at the location of the proposed development including finished floor elevations; and,
- c. A dam breach analysis using the Dam break computer model to establish the height of the flood wave in the downstream floodplain. The Dam break modeling shall be completed in accordance with the Safe Dams Program Quality Assurance Program by a qualified registered engineer.

2.

All ordinances, parts of ordinances, or regulations in conflict herewith are repealed.

3.

Severability. Should any court of competent jurisdiction declare any section of this Ordinance invalid or unconstitutional, such declaration shall not affect the validity of the Ordinance as a whole or any part thereof, which is not specifically declared to be invalid or unconstitutional.

4.

Repeal of Conflicting Provisions. It is the intention of the Mayor and Council, and it is hereby ordained that the provisions of this Ordinance shall become and be made a part of the Code of Ordinances, City of Sandy Springs, Georgia and the sections of this Ordinance may be renumbered to accomplish such intention.

5.

This Ordinance is effective September 16th, 2008; and

ORDAINED this the 16th day of September, 2008.

Approved:

Eva Galambos
Eva Galambos, Mayor

Attest: Christina Rowland
Christina Rowland, City Clerk
(Seal)

