

AN ORDINANCE OF THE CITY OF MULBERRY, GEORGIA, PROVIDING FOR THE CONTINUATION OF ORDINANCES AND LAWS DURING THE TRANSITION PERIOD LEGISLATIVELY ESTABLISHED FOR THE CITY; TO ADOPT THE LAND DEVELOPMENT REGULATIONS IN THE CITY OF MULBERRY, GEORGIA.

WHEREAS, the Mayor and Council of the City of Mulberry are charged with the protection of the public health, safety, and welfare of the citizens of Mulberry; and

WHEREAS, the City is authorized to adopt and regulate land development regulations within the geographic boundaries of the City pursuant its City Charter and State law; and

WHEREAS, the Mayor and Council desire to ensure the continuation of ordinances and laws during the transition period legislatively established for the City;

NOW THEREFORE, IT IS HEREBY ORDAINED by the governing authority of the City of Mulberry, Georgia, on the _____ day of _____, _____, that the following ordinance be enacted:

Chapter 34 LAND DEVELOPMENT REGULATIONS

ARTICLE I. IN GENERAL

Sec. 34-1. Authority and title.

- (a) These rules and regulations are adopted under the authority of the Constitution of the state and laws enacted pursuant thereto.
- (b) These regulations shall be known as "The Development Regulations of Mulberry, Georgia," and may be referred to generally as "the development regulations," or, as used herein, "these regulations."

Sec. 34-2. Purpose.

These regulations are intended to serve the following purposes:

- (1) To protect and promote the public health, safety, and general welfare.
- (2) To provide a system for the subdividing of lands and the accurate recording of land titles.
- (3) To provide assurance that lots shown on recorded subdivision plats are usable by the purchasers for their intended and permitted functions.
- (4) To encourage economically sound and orderly land development in accordance with the policies and objectives of the county comprehensive plan.
- (5) To ensure the provision of required streets, utilities, and other facilities and services to new land developments in conformance with public improvement policies of the city.

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- (6) To ensure adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in new land developments.
 - (7) To ensure 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.
 - (8) To ensure equitable review and approval of all subdivision and site plans by providing uniform procedures and standards for the developer.

Sec. 34-3. Intent and application.

It is the intent of these regulations that they apply to and provide guidance for the development of any lands within the incorporated area of the city, whether the development involves the subdivision of the land for sale to individual users or pertains only to the construction of buildings or other improvements on a single parcel.

Sec. 34-4. Agricultural exemption.

Clearly agricultural uses, limited to the cultivation of the land, dairying or animal husbandry, are not intended to be governed by these regulations, provided that land proposed to be converted to a new agricultural use must be zoned RA-200 to be exempt from the provisions herein.

Sec. 34-5. Use of words and interpretation.

- (a) For the purposes of these regulations, the following shall apply to the use of all words:
 - (1) Use of the word "and" is inclusive and requires that all of the component phrases so connected must be present or fulfilled for sufficiency.
 - (2) 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."
- (b) The following shall control the interpretation of words and phrases as used in these regulations:
 - (1) Words and phrases defined in this chapter shall be interpreted as defined herein.
 - (2) Words or phrases not defined herein shall be interpreted as defined in the zoning resolution of the city, or as defined in the city's soil erosion and sediment control ordinance, buffer, landscape, and tree ordinance, or mobile home park regulations, as applicable to the use of the word within the context of these regulations.

Sec. 34-6. Definitions of words and phrases.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Alley or service drive means 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.

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

Arterial means a principal arterial, major arterial, or minor arterial street as defined and designated in the comprehensive plan of the city.

As-built survey. See *Record drawing*.

Authorized registered professional.

- (1) The term "authorized registered professional" means:
 - a. A landscape architect who is licensed in the state in accordance with O.C.G.A. § 43-23-1(2), (3);
 - b. A land surveyor who possesses a current certificate of registration issued by the state in accordance with O.C.G.A. §§ 43-15-2(6), (7) and 43-15-13; or
 - c. A professional engineer who possesses a current certificate of registration issued by the state in accordance with O.C.G.A. §§ 43-15-2(10), (11) and 43-15-9.
- (2) An authorized registered professional shall know and understand the limits of their professional expertise, certification, license or registration and shall not perform work which is outside of the scope of said professional expertise, certification, license or registration. An authorized registered professional shall be liable for complying with all state laws and rules and licensing board requirements that apply to their particular profession, including ethical standards, and shall be liable for failure to meet the applicable standards of professional care. All documents and drawings submitted to the city by an authorized registered professional shall bear that person's certification, license, registration or seal, as appropriate. The certification, license, registration or seal of an authorized registered professional on documents and drawings submitted to the city shall certify that the documents and drawings comply with all applicable city ordinances, rules and regulations and shall certify that the documents and drawings are based on personal knowledge of the conditions depicted thereon and that the accuracy and completeness of the documents and drawings have been verified by field inspection of the facilities depicted therein.

Base flood means the flood which has a one percent probability of occurring in any calendar year (i.e., the 100-year frequency flood).

Base flood elevation means the highest water surface elevation anticipated at any given point during the base flood.

Big Haynes Creek Watershed Protection Area refers to that area of land lying within the drainage basin or watershed of Big Haynes Creek, as shown on the official set of maps of the protection area maintained by the department of planning and development.

Block means a piece or parcel of land entirely surrounded by public streets, other than alleys.

Buildable lot of record means a lot or parcel of land which existed as a single parcel of ownership, recorded as such in its entirety and present boundaries with the clerk to superior court prior to June 2, 1970, or which is shown in its entirety and present boundaries on a final plat or exemption plat duly approved under these or any previously applicable regulations providing for the subdivision of land in the city and recorded with the clerk to the superior court of the city.

Building setback line means 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 resolution. On corner lots, the minimum required front yard setback shall be provided along all abutting streets.

Certificate of development conformance means final approval issued by the department for completion of land development activities for a subdivision or project for which a development permit was issued.

Certificate of occupancy means final approval by the department for the use or occupancy of a structure for which a building permit was issued.

City means the City of Mulberry, Georgia.

Clearing means the removal of trees or other vegetation, but not including grubbing activities.

Comprehensive plan means a plan summarizing and illustrating the adopted goals and objectives of the mayor and council 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.

Concept plan means a drawing which shows the overall concept (e.g., a concept 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 multifamily or nonresidential project, and which may be drawn to approximate dimensions in a free-hand style. A sketch plan, as required by the Gwinnett County 1970 Subdivision Regulations, is equivalent to a concept plan under these regulations.

Condominium means a form of property ownership in which the buildings or portions of the buildings, whether residential or nonresidential 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.

Cul-de-sac means a street having one end open to traffic and being permanently terminated within the development 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 means the department of planning and development of the city.

Department of transportation means the city department of transportation.

Developer means 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.

- (1) Verb: 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 land, dairying or animal husbandry. 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, stormwater drainage facilities, sidewalks or other structures permanently placed on or in the property.
- (2) Noun: Where appropriate to the context, the term "development" also may be used to denote a 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 means 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 permit means an official authorization issued by the department permitting clearing, grubbing, grading, or construction of storm drainage facilities, access drives, streets, parking or other improvements exclusive of buildings.

Development plans means 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, stormwater drainage facilities, sanitary sewers, water supply facilities, and other site improvements.

Diameter breast height (dbh) means the diameter of a tree measured at a point 4.5 feet above the ground.

Director means the director of the department of planning and development or his designee.

Drainage improvements means those facilities and structures intended to control and direct the passage of stormwaters and other surface water flows from and across a property; including, but not limited to, swales and ditches, cross drains and other piping systems, catchbasins, detention ponds, and velocity dissipation devices.

Dripline means a line on the ground established by a vertical plane extending from a tree's outermost branch tips down to the ground (i.e., the line enclosing the area directly beneath the tree's crown from which rainfall would drip).

Driveway means a vehicular accessway in private ownership, other than a private street, which provides access primarily to only one property or to no more than two single-family detached residences.

Easement means 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 control regulations means the city soil erosion and sediment control ordinance.

Exemption plat means a subdivision plat drawn to final plat standards, as contained herein, prepared in accordance with one of the exemptions provided under article II of this chapter.

Federal Emergency Management Agency (FEMA) means the federal agency which administers the National Flood Insurance Program. This agency prepares, revises and distributes the maps and studies referenced in these regulations.

Fee simple means a form of property ownership in which the buildings and surrounding lands are owned by the same person.

Final plat means a finished drawing of a subdivision showing completely and accurately all legal and boundary information and certification required by these regulations.

Fire marshal's office means a section of the county department of fire and emergency services 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 state handicap laws.

Fire services division means a division of the county department of public safety charged with the responsibility of enforcing the city's fire prevention and life safety codes, and the city handicap ordinance.

Flood or *flooding* means a general and temporary condition or partial or complete inundation of normally dry land areas.

Flood boundary and floodway map means the official map issued by the Federal Emergency Management Agency, where the boundaries of the floodways are shown and the areas of special flood hazard have been defined as Zone A.

Flood insurance rate map (FIRM) means an official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the applicable risk premium zones.

Flood insurance study means the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary and floodway map and the water surface elevation of the base flood.

Floodway means the channel of a river or other watercourse and the adjacent areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Flood hazard area. See *Floodplain*.

Flood-related definitions. See the floodplain management ordinance for specific definitions of terms used in relation to flooding, alteration of floodplains, construction of structures in or adjacent to floodplains, etc.

Floodplain means those lands subject to flooding that have at least a one percent probability of flooding occurrence in any calendar year based on the basin being fully developed as shown on the current land use plat (i.e., the regulatory flood). See the flood management ordinance for ancillary terms.

Floodprone area. See the floodplain management ordinance of the city.

Freeboard means the distance between the base flood elevation and the top of a stormwater detention structure.

Georgia DOT means the department of transportation of the state.

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

Grading permit means an official authorization issued by the department permitting grading of a site, and may include installation of attendant stormwater drainage facilities.

Grubbing means the removal of stumps or roots from a property.

Health department means the environmental health services division of the state department of human resources for the county.

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

House location plan (HLP) means a drawing showing lot information and all improvements, as outlined in article V of this chapter.

Impervious surface means 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 disturbance permit means any permit other than a building permit issued by the city that authorizes clearing or grading activities on a site or portion of a site. Said permit may be a clearing, clearing and grubbing, a grading, or development permit, as defined and authorized herein.

Lot means a portion of a subdivision, or any other parcel of land, intended as a unit for transfer of ownership or for development, or both. 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, means a lot abutting upon two or more streets at their intersection.

Lot, double frontage, means a lot other than a corner lot abutting upon two or more streets.

Major intersection means the intersection of two or more public streets in which at least one of the streets is an arterial or major collector as designated by the comprehensive plan.

Major thoroughfare means any public street, existing or proposed, which is shown in the Comprehensive plan as an arterial or major collector.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of these

Regulations, the term "mean sea level" is synonymous with National Geodetic Vertical Datum (NGVD).

Minor collector means a through street having the primary function of connecting subdivisions or other areas to major collector 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 minor collector street. For the purposes of these regulations, a central but non-through route within a subdivision or other project will be considered as a minor collector if the average daily traffic generated by the development on the route will exceed 2,000 trips.

Open space, Big Haynes Creek Watershed, means a parcel of land set aside, designated and reserved which shall remain in its natural state, undisturbed and unoccupied by any structures or impervious surfaces, and located within the Big Haynes Creek Watershed Protection Area.

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

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

Person means 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 means the City of Mulberry Planning Commission.

Plat means a map indicating the subdivision, resubdivision, or recombination of land.

Preliminary plat means a drawing which shows the perimeter boundary, topography, lot arrangements, street layout, and other features of a proposed subdivision, as specified in these regulations.

Project means 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 multifamily development, a shopping center or an office park.

Project access improvement means 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.

Record drawing means 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).

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

Responsible party means, 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 these regulations, 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 these regulations.

Road. See *Street, public*.

Roadway means 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 a bridge.

Sheet flow means diffused water running overland to a defined watercourse.

Site work means 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*.

Street, private, means 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, means a right-of-way dedicated to and accepted by the city for vehicular traffic or 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 these regulations, 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, means 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, means a surface street intended primarily to provide local access to adjacent residential development and not for through traffic.

Street, marginal access, means 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.

Structure means anything constructed or erected on the ground or attached to something on the ground.

Subdivider means 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 subdivider.

Subdivision.

- (1) Verb: Any division or re-division of a lot, tract or parcel, regardless of its existing or future use, into two or more lots, tracts or parcels. 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 subdivided lots shall be considered a separate distinct subdivision with a separate name.
- (2) Noun: 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 means a public street, or publicly approved private street, that provides access to subdivided lots.

System improvement means any improvement or facility, such as streets, bridges, or rights-of-way, 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.

Tie point means 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.

Traffic engineer means the designated head of the traffic and operations division of the county department of transportation, or his designee.

Tree means any self-supporting woody perennial plant, usually having a main stem or trunk and many branches, and at maturity normally attaining a trunk diameter greater than three inches at any point and a height of over ten feet.

Tree diameter means the widest cross-sectional dimension of a tree trunk measured at diameter breast height (dbh) or at any point below dbh for new trees or multi-trunked species, but in no case less than six inches from the ground.

Tree preservation/replacement plan means a plan that identifies tree protection areas, existing trees to be preserved and proposed replacement trees to be planted on a property to meet minimum requirements of the buffer, landscape, and tree ordinance, as well as methods of tree protection to be undertaken on the site and other pertinent information.

Tree protection area means any portion of a site wherein are located existing trees which are proposed to be retained in order to comply with the buffer requirements of the zoning resolution or the requirements of the buffer, landscape, and tree ordinance.

Water pollution control division means a division of the public utilities department charged with the responsibility for the design, installation, inspection, approval, and maintenance of the public sanitary sewer system and wastewater treatment in Mulberry.

Water resources department means the county department of water resources, which includes operations and programs for water, wastewater, water pollution control and stormwater; known previously as the public utilities department.

Water system division means a division of the public utilities department charged with the responsibility for the design, installation, and maintenance of the public water supply and distribution system in Mulberry.

Watercourse means a channel with a defined bed and banks, including lakes, ponds, and marshes, and which meets the definition of watercourse in section 391-3-7.01 of the state department of natural resources regulations.

Wetlands means 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, hydrophytic vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation.

Zoning resolution means the adopted zoning resolution of the city, as amended from time to time.

Secs. 34-7—34-30. Reserved.

ARTICLE II. APPLICATION OF THE REGULATIONS

Sec. 34-31. Application.

Any land disturbance activity or any development activity must first comply with these regulations.

Sec. 34-32. Dedication of public lands and facilities.

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 department of planning and development. Said approval shall be entered in writing on the final plat by the director of the department of planning and development. Said 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, subject to ratification by the mayor and council.

Sec. 34-33. Transfer of land ownership.

(a) *Conditions applicable to title transfers.* No person, firm, partnership, association, corporation, estate, trust, developer, subdivider or any other owner or agent shall transfer title or attempt to record the title to any land in Mulberry, and no building permit may be issued on said land, unless:

(1) Said land existed as a single parcel of ownership, recorded as such in its entirety and present boundaries prior to the 1970 Gwinnett County Subdivision Regulations;

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- (2) Said land is shown in its entirety and present boundaries on a final plat as approved (under these or any previous applicable regulations) and duly recorded;
 - (3) Said land is shown in its entirety and present boundaries on a plat authorized by the director and recorded pursuant to the regulations governing subdivision exemptions contained herein; or
 - (4) 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 development permit, pursuant to these regulations.
- (b) *Sale of land by reference to unapproved final plat prohibited.* No person, firm, partnership, association, corporation, estate, trust, developer, subdivider 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 these regulations or any previously applicable regulations and recorded with the clerk to superior court of the county.

Sec. 34-34. Subdivision exemptions.

- (a) *General requirements.* For the purpose of these regulations, the types of activities contained in this section shall be considered subdivisions but exempt from the "procedures" and "required public improvements" portions of these regulations, except as noted. Each such subdivision shall be drawn as an exemption plat in accordance with final plat standards (except subsections (d)(2) and (f) of this section) pursuant to the requirements of these regulations and shall be submitted in an appropriate number of copies, together with the appropriate fees to the department for review and approval. Upon approval, the director shall authorize the recording of the exemption plat with the clerk of superior court of the county and grant the issuance of building permits pursuant to this Code.
- (b) *Recombinations.* An exemption plat shall be required for the combination or recombination of all of two or more buildable lots of record, where the total number of lots is not increased and the resultant lots or parcels are in compliance with the zoning resolution. An exemption plat shall not be required for aggregations of properties for land assembly purposes where no building permit will be requested prior to issuance of a development permit.
- (c) *Minor subdivision.* The division of a buildable lot of record into five or fewer lots, provided:
- (1) Each proposed lot complies with all requirements of the zoning resolution and is limited to single-family detached residential use.
 - (2) Each proposed lot abuts upon an existing public street.
 - (3) All project related slope and utility easements as well as necessary street rights-of-way as determined by the department based on the comprehensive plan are provided at no cost to the city.
 - (4) Each lot thus created may not be resubdivided pursuant to the provisions of this subsection. Such resubdivision shall be accomplished only through the procedures contained in article X of this chapter.

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- (5) Each proposed lot shall comply with the requirements of the department of public utilities and the environmental health department, as appropriate, whose certification of approval shall be required prior to approval of the exemption plat by the department.

The director is authorized to grant a modification from the five-lot maximum exemption; provided, however, modifications shall not be granted to exceed a total of seven exempt lots. The director may impose conditions of approval upon any modification thus granted as may be necessary to ensure the general public welfare.

(d) *Estate subdivisions.*

- (1) The division of land in any single-family detached residential zoning district into lots having a minimum lot area of at least five acres, provided:
- a. Each proposed lot abuts upon an existing public street which contains the necessary right-of-way width required by these regulations as determined by the comprehensive plan.
 - b. Each proposed lot shall provide at least 100 feet of frontage upon the street, shall provide at least 200 feet of lot width measured in accordance with the requirements of the zoning resolution, and shall meet or exceed all other minimum requirements of the applicable single-family detached residential zoning district.
 - c. All project related slope and utility easements as well as necessary street right-of-way shall be provided at no cost to the city as determined by the department based upon the comprehensive plan.
 - d. No lot thus created may be re-subdivided to less than five acres as an exemption to these regulations.
 - e. Each proposed lot shall comply with the requirements of the department of public utilities and the environmental health department, as appropriate, whose certification of approval shall be required prior to approval of the exemption plat by the department.
- (2) The division of land in any single-family detached residential zoning district into lots having a minimum lot area of at least ten acres, provided:
- a. Each proposed lot abuts upon an existing public street.
 - b. Each proposed lot shall provide at least 100 feet of frontage upon the street, shall provide at least 200 feet of lot width measured in accordance with the requirements of the zoning resolution, and shall meet or exceed all other minimum requirements of the applicable single-family detached residential zoning district.
 - c. No lot thus created may be re-subdivided to less than five acres as an exemption to these regulations.
 - d. A record survey certified by a land surveyor currently registered in the state shall be submitted to and approved by the department showing all lots.

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- (e) *Nonresidential project management.* The creation of a lot for recording within an overall nonresidential development, provided:
- (1) The overall nonresidential development is being undertaken as a single multi-phase or multi-use project under the unified control of a single developer is zoned for such use or development, and an overall concept plan for the entire project has been approved by the director.
 - (2) The proposed subdivision is clearly intended to transfer title for financing or building management purposes and not for the sale of the property for future development, to the satisfaction of the director.
 - (3) The proposed lot has been approved by the department to be provided permanent vehicular access by private drive. Said access shall be established by easement or acceptable covenant prior to or concurrently with recording of the exemption plat.
 - (4) The proposed lot must encompass a principal structure which has been granted a building permit and which is under construction or has been completed.
 - (5) The exemption plat shall be drawn to include the entirety of the overall development and shall clearly identify those lots to be recorded, those lots previously recorded and the remainder of the development which shall be labeled "not included." All easements, dedications, etc., shall be shown as appropriate or as required. Each lot shall be consistent with the zoning approved for the overall development and the applicable requirements of the zoning resolution.
- (f) *Amnesty lots.* The designation of a lot as a buildable lot of record if the lot was recorded between June 2, 1970, and the effective date of these regulations but not reviewed and approved under the provisions of the subdivision regulations in effect at that time, provided:
- (1) The exemption plat is limited to one individual lot and no property which adjoins the lot is or has been owned by the applicant in whole or in part.
 - (2) The lot meets all requirements of the zoning resolution, and the applicant demonstrates to the satisfaction of the director that approval of the lot will not create nonconformity to the requirements of the zoning resolution on any other portion of the original property from which the lot was subdivided.
 - (3) The lot abuts upon an existing public street.
 - (4) All project-related slope and utility easements as well as necessary street rights-of-way as determined by the director based on the comprehensive plan are provided at no cost to the city.
 - (5) The lot shall comply with the requirements of the department of public utilities and the environmental health department, as appropriate, whose certification of approval shall be required prior to approval of the exemption plat by the director.
 - (6) A record survey certified by a land surveyor currently registered in the state shall be submitted to and approved by the department showing the lot.

Secs. 34-35—34-56. Reserved.

ARTICLE III. PERMITS REQUIRED FOR DEVELOPMENT OR CONSTRUCTION

Sec. 34-57. Authorization required for land disturbance or development activities.

- (a) *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 these development regulations, unless the activity is exempt as an agricultural activity in the RA-200 zoning district, or is for the construction of an individual single-family detached or duplex residence on a buildable lot of record.
- (b) *Plan review and approval.* Any developer of land within incorporated Mulberry shall first submit to the department such plans, plats, or construction drawings as may be required by these regulations and shall have been granted a permit consistent with these regulations and approved by the department prior to the initiation of development activities. Approval of plans by the 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 IX of this chapter details the elements of the required plans.
- (c) *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 Metropolitan River Protection Act 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 Metropolitan River Protection Act Certificate shall be considered as though a violation of these development regulations, and shall be subject to the enforcement and penalty provisions hereunder.
- (d) *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 or agencies as may have authority or jurisdiction over said activities in whole or in part.
- (e) *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.
- (f) *Developer's responsibility for compliance.* No permit shall be interpreted to relieve any developer or subdivider of the responsibility of maintaining full compliance with all codes, ordinances, and other regulations of the city except as amended by an approved waiver, 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.

Sec. 34-58. Land disturbance permits.

(a) *Clearing permit, clearing and grubbing permit, and grading permit.* The following permits covering portions of the land development process may be issued in accordance with the requirements of these regulations and the provisions of any Metropolitan River Protection Act Certificate, if applicable:

(1) *Clearing permit.*

- a. A permit limited to clearing only with no grubbing or other land disturbance except for such activities necessary to install and maintain erosion and sediment control practices (as defined in the Georgia Soil Erosion and Sedimentation Act) may be issued upon identification of the property, the limits of the area to be cleared and the type of activities to be undertaken, an erosion and sediment control plan unless exempt under the soil erosion and sediment control ordinance, a hydrology study if an erosion and sediment control is required, and approval of a tree preservation/replacement plan as may be required under the buffer, landscape, and tree ordinance. All clearing activities are to be consistent with the provisions of these regulations, the soil erosion and sediment control ordinance, the zoning resolution and any conditions of zoning approval.
- b. A clearing permit shall expire unless activities are commenced within 60 consecutive calendar days of issuance of the permit or if activities lapse and are abandoned for a period exceeding 30 consecutive calendar days.
- c. A clearing permit shall not be construed as approval of or authorization to construct any improvements, buildings, or other structures on the property.

(2) *Clearing and grubbing permit.*

- a. A clearing and grubbing permit may be approved based on approval of a concept plan and tree preservation and/or replacement plan (if required) for the development, Erosion and sediment control plan, and hydrology study. Appropriate soil erosion and sedimentation controls and tree protection measures shall be placed and maintained as required.
- b. A permit for clearing and grubbing shall expire unless activities are commenced within 60 consecutive calendar days of issuance of the permit or if activities lapse and the project is abandoned for a period exceeding 30 consecutive calendar days.
- c. A clearing and grubbing permit shall be limited to the removal of vegetation and stumps and the placement of required tree protection measures and soil erosion and sedimentation facilities, and may authorize the removal of existing structures on the property at the option of the developer. No grading or construction activities may be started under a clearing and grubbing permit except for such activities necessary to install and maintain erosion and sediment control practices. The approval of a clearing and grubbing permit shall not imply the approval of or

authorization to construct any improvements, buildings, or other structures on the property.

(3) *Grading permit.*

- a. A grading permit, which may include clearing and grubbing, may be issued prior to approval of a development permit, as provided under article IX of this chapter. A grading permit may also be issued for earth borrow or storage, where no development or construction is proposed or imminent, based on approval of a grading plan, soil erosion and sediment control plan, and hydrology study, consistent with the requirements of the buffer, landscape, and tree ordinance, the zoning category of the site, and the provisions of the comprehensive plan (as applicable).
- b. A permit authorizing, but not limited to, grading (and clearing and grubbing) shall expire unless activities are commenced within 60 consecutive calendar days of issuance of the permit or if activities lapse and the project is abandoned for a period exceeding 30 consecutive calendar days. Any site for which the grading permit expires shall immediately be stabilized to prevent erosion.
- c. A grading permit shall be limited in its authorization to land grading activities along with associated tree protection, clearing and grubbing, and demolition activities, and may authorize the construction of storm drainage improvements and soil erosion and sedimentation facilities as allowed by the permit itself.

(b) *Development permit.*

- (1) *Development activities authorized.* A development permit shall be issued to authorize all activities associated with the land development process, including clearing and grubbing, grading, and the construction of such improvements as streets, surface parking areas and drives, sewer systems, stormwater 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 system improvements shall be authorized solely by the public utilities department.
- (2) *Development permit approval.* A development permit (which may include grading, clearing, and grubbing) shall be issued at the developer's request following approval of a Metropolitan River Protection Act Certificate, if applicable, and upon approval of a preliminary plat for a subdivision or a site plan for a non-subdivision project, along with approval of all other development plans and documents required to be submitted under article IV of this chapter. All plans approved for a development permit shall expire after six months if no permit is issued within said time period.
- (3) *Expiration of development permits.* A development permit shall expire 12 consecutive calendar months after issuance unless development activity as authorized by the permit is initiated within the 12-month period or if such authorized activities lapse and the project is abandoned for a period exceeding 60 consecutive calendar days. The director may approve one extension not exceeding three consecutive calendar months within which time development activity must commence or the permit shall expire. Said

extension shall be applied for within the first 12 consecutive calendar months after the permit's issuance.

- (4) *Lapse in construction activity.* For the purposes of these regulations, a lapse in or suspension of development activity as authorized by a development permit, as a direct result of action or inaction on the part of the city completely beyond the control of the developer, shall not be considered as a lapse in activity causing the development permit to expire. The 12 months 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 action or inaction.

Sec. 34-59. Building permits.

- (a) *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 building codes of the city, as well as the provisions of any certificate approved under the Metropolitan River Protection Act, if applicable.
- (b) *Health department; on-site sewage disposal.* For any structure for which on-site sewage disposal will be provided, a permit issued by the health department shall be required prior to issuance of a building permit. Said permit may first require approval by the health department of a plan showing the location of the sewage disposal system and other site improvements, in accordance with their regulations.
- (c) *Single-family and duplex residences.*
- (1) 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.
- (2) The approval by the department of a house location plan (HLP), residential drainage plan (RDP), or residential drainage study (RDS), 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 Georgia Metropolitan River Protection Act. For such lots, a certificate of occupancy shall not be issued until conformance to the HLP, RDP, or RDS has been field verified by the department as shown on a certified foundation survey prepared by registered land surveyor. (See article V of this chapter for plan and study specifications.)
- (d) *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 location 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 resolution and swimming pool code. Based on site conditions, a residential drainage study (RDS) may also be required prior to issuance of the building permit. A certificate of occupancy shall not be issued until conformance to the

swimming pool location plan (and to provisions of the RDS, if applicable) has been field verified by the department.

(e) *Multifamily and nonresidential structures.*

- (1) 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 development permit for the building site, and the building permit shall be consistent with said development permit.
- (2) Building plans must be reviewed and approved by the fire services division, development, and public utilities departments prior to permitting for all structures, except for one- and two-family residences or accessory structures. Building plan approval shall expire after one year, after which re-review and approval by the department shall be required prior to issuance of a building permit for the building or additional buildings.

(f) *Issuance on buildable lots of record; exceptions.* Building permits shall only be issued on buildable lots of record, as defined in these regulations, except under special circumstances limited to and as specifically described in this section, below.

- (1) In single-family detached and duplex residential subdivision, building permits for no more than two model home buildings, except by approval of a modification application, on specific lots may be issued by the department on the basis of an approved preliminary plat after the approval of the environmental health department or department of public utilities, as appropriate, and subject to all limitations or requirements as may be established by the director. 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.
- (2) In nonresidential subdivisions, building permits may be issued by the department on the basis of an approved preliminary plat and after a development 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:
 - a. A performance bond or other 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 110 percent of the cost of completing all public improvements as authorized and required by the preliminary plat.
 - b. The performance bond or other approved surety shall not exceed an aggregate total for all required public improvements of \$12,000.00 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.
 - c. Fire services 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.

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- d. Approval of the health department for on-site sewage disposal or by the water pollution control division for a building to be served by public sewer shall be required prior to issuance of any building permit.
 - e. Construction of the required public improvements shall proceed concurrently with construction of the buildings.
 - f. 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.
 - g. The director shall have found that the public interest is best served and that a public purpose is involved in the acceptance of the performance bond.
- (3) In 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.

Secs. 34-60—34-76. Reserved.

ARTICLE IV. GENERAL REQUIREMENTS

Sec. 34-77. Suitability of the land.

- (a) *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.
- (b) *Unsuitable land must be included in buildable lots.*
 - (1) Land within a proposed subdivision or development which is unsuitable for development shall be incorporated into the buildable lots as excess land. Lots which do not comply with the requirements of the zoning resolution are prohibited.
 - (2) Exceptions.
 - a. *Signage and landscape features.* The creation of an unbuildable 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):
 - 1. 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;
 - 2. A mandatory homeowner's association shall be required for the subdivision for ownership and maintenance of the lot as common area;

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3. The lot shall meet the requirements of the zoning resolution or as may be approved by a zoning variance;
 4. Right-of-way of a minimum width of six feet from back of curb shall be provided adjacent to the perimeter of the lot; and
 5. Landscape plantings within the right-of-way shall not extend more than three feet above the street grade.
- b. *Stormwater management facilities.* The creation of an unbuildable lot for the exclusive purpose of providing and maintaining a stormwater management facility is authorized.

Sec. 34-78. Offers of land dedication.

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.

Sec. 34-79. Zoning and other regulations.

- (a) *Discrepancy between minimum standards; what applies.* Whenever there is a discrepancy between minimum standards or dimensions required herein and those contained in zoning regulations, 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 these regulations.
- (b) *Building setback conformity.* Building setback lines shall at least conform to the minimum yard requirements of the zoning resolution. Building setback lines along all public streets shall be no less than the front yard setback required on the property by the applicable zoning district in the zoning resolution.

Sec. 34-80. Required public improvements.

Every developer of lands within the jurisdiction of these regulations shall provide the project access improvements included in these regulations as shall be appropriate to serve the project, in accordance with these development regulations 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.

Sec. 34-81. Lots.

- (a) *Lots to conform to the zoning resolution.* Lots shall at least conform to requirements of the city zoning resolution.
- (b) *Double frontage and reverse frontage lots required along major thoroughfares.*

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- (1) 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.
 - (2) In no-access easements along minor collectors or local streets, planting or other screening treatments shall be at the sole option of the developer.

Sec. 34-82. Survey monuments.

- (a) *Lot corner monumentation.* All corners shall be marked with an iron rebar or pin, at least one-half inch in diameter and 18 inches long and driven so as to extend no less than one inch above the finished grade.
- (b) *Floodplain elevations.* On subdivisions containing floodplains, flood elevation references shall be set in accordance with the requirements of the floodplain management ordinance.

Sec. 34-83. Standard drawings.

- (a) *Department to maintain standard drawings on file.* The department shall maintain on file for consultation and distribution a set of standard drawings illustrating details of construction and design of streets, stormwater drainage facilities, site improvements and other elements related to the development of land in accordance with these regulations and under the jurisdiction of the department.
- (b) *Standard drawings to illustrate standards.* The standard drawings shall illustrate minimum acceptable standards for land development activities authorized under these regulations, but shall not supersede more restrictive prudent design requirements or good engineering practices applied to specific situations on a case-by-case basis.
- (c) *Standard drawings incorporated as part of development regulations.* The standard drawings shall be treated as though they are a part of these regulations for application to the minimum standards for design and construction of improvements required herein and are subject to the modification and appeal provisions of article XII of this chapter.

Sec. 34-84. Buffers, landscaping, tree preservation and tree replacement.

- (a) *General applicability.* The standards and requirements contained in this section shall apply only to tree preservation and replacement, buffers, and landscape areas specifically required by this Code, ordinance or resolution, and shall not apply to general or voluntary landscaping or to open space otherwise voluntarily provided on a property.
- (b) *General requirements.* Any property required by the buffer, landscape, and tree ordinance, the zoning resolution or conditions of zoning special use or variance approval to provide a buffer or other specific landscaping shall do so in compliance with the standards included in the buffer, landscape, and tree ordinance and this section.

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- (1) For any such property, a buffer and landscape plan shall be prepared by those individuals as required and authorized by the buffer, landscape, and tree ordinance, and shall be approved by the department prior to issuance of a development permit on the subject site.
 - (2) At the discretion and option of the applicant, a required buffer and landscape plan and a required tree preservation/replacement plan may be combined into a single document, as long as the details and elements of the plans can be clearly and easily identified.
 - (3) Buffer areas or portions of buffer areas where natural vegetation provides an adequate visual screen as required by the buffer, landscape, and tree ordinance, shall remain natural and undisturbed by any clearing, grading or other construction activity except as authorized by the development permit.
 - (4) In buffer areas where natural vegetation is non-existent or inadequate to provide a visual screen, replanting or supplemental planting shall be required in accordance with the buffer, landscape, and tree ordinance. The department may also approve additional or alternative screening elements, such as planted earthen berms or solid fences where appropriate, to the intent of the requirements of the buffer, landscape, and tree ordinance.
 - (5) New plantings in buffers shall be selected for natural survival expectancy for the city environment and for their ability to meet the screening standards established in the buffer, landscape, and tree ordinance.
 - (6) Landscape areas or strips shall include trees and shrubs to the extent required by the buffer, landscape, and tree ordinance, the zoning resolution or conditions of zoning, special use or variance approval. Plant materials may be grouped or arranged so as to achieve aesthetic results following professional landscaping standards, provided sight distances as required by these regulations are preserved.
 - (7) Tree plantings required by the buffer, landscape, and tree ordinance for parking lots may be grouped or arranged so as to achieve aesthetic results, or may be located in landscape islands within the parking lot.
- (c) *Tree preservation and replacement requirements.*
- (1) Any property required to preserve and protect existing trees or to plant replacement trees under the provisions of the buffer, landscape, and tree ordinance shall do so in compliance with said ordinance.
 - (2) Areas set aside for the preservation of existing trees or the planting of new replacement trees, in fulfillment of any portion of the tree density standard of a property other than the property upon which the areas are located, shall be established within an easement drawn in favor of the other property, and appropriately recorded.
- (d) *Landscape performance surety.* In the event that the requirements of this section have not been met at the time that a certificate of development conformance otherwise can be approved by the department, and the certificate is requested, the director shall require a landscaping performance bond. The owner/developer or the contractor employed by the owner/developer shall post a landscaping performance bond or other city approved surety in

an amount equal to 110 percent of the cost of materials, labor, and other attendant costs, incidental to the installation of the required landscaping as part of the owner's development performance and maintenance agreement with the city. The surety shall:

- (1) Be drawn in favor of the city.
- (2) Be in a form satisfactory to the city attorney.
- (3) Specify the time for the completion of the landscaping, which shall not be longer than three months following approval of the certificate of development conformance, or be in accordance with such other timetable for completion acceptable to the department.

Sec. 34-85. Recreation areas and open space.

- (a) *Recreation areas.* Land for use as project open space or recreation shall be provided in single-family detached subdivisions having a gross area of 50 acres or more and a minimum lot size less than one acre; in duplex subdivisions having a gross area of 50 acres or more; and in single-family attached, townhouse, Senior Oriented Residence Developments (R-SR), and multifamily developments having a gross area of ten acres or more.
 - (1) For each development, six percent of the gross land areas shall be provided for the recreational use, but in no case shall the area required exceed six acres. Not over 60 percent of the area may be within the 100-year floodplain.
 - a. If recreation facilities are not proposed to be constructed, the land so provided shall be contiguous or separated only by parking areas and private drives, and of suitable shape and condition for construction of at least one swimming pool and one regulation-size tennis court.
 - b. If the developer constructs at least a swimming pool and tennis court, or other acceptable active recreation facilities, as part of the project, then the land so provided need not be a single contiguous parcel and the total set-aside area required by this subsection can be reduced to the amount actually required for the construction and maintenance of the facilities, but not less than 50 percent of the gross recreational set-aside requirements outlined herein.
 - (2) In subdivisions, land provided for recreational use in accordance with subsection (a)(1)a of this section, and not proposed for improvement by the developer, shall be deeded to the city or to a qualified property owner's association upon the approval of the final plat containing said land and shall be used exclusively for recreational purposes. The qualified property owners association shall provide for the voluntary membership of all the owner's of property within the subdivision, and shall be established under the laws of the state; it shall be responsible for the perpetuation, maintenance and function of the recreation areas and all uses or facilities therein. The association shall have the authority and duty to assess its members for such maintenance and improvements as set forth in the instrument creating the association. All covenants shall be recorded simultaneously with the final subdivision plat.
 - (3) If the developer constructs recreational facilities as approved under subsection (a)(1)b of this section, on the recreational land in a subdivision, the land area shall be deeded to a homeowner's association or other legal entity incorporated under the laws of the

state. The land shall be deeded to said organization with a restriction that the land shall be used exclusively for recreational purposes and shall be made available to all residents of the subdivision project on an equal basis. The deed shall be filed with the department simultaneously with the final plat, and shall be held by the department until a certificate of occupancy is issued for the recreational improvements, whereupon the deed shall be recorded. Failure to construct or complete the approved facilities shall cause the land to be dedicated to the city.

- (4) In multifamily rental or condominium projects, land provided for recreational use in accordance with these requirements shall be held in the ownership of the owner of the project.
 - (5) The city may lease or sell land reserved for public parks to a qualified property owner's association with a deed restriction that the land be used exclusively for open space or public recreational purposes in perpetuity. The organization of a qualified property owner's association and its adequate financing for the discharge of its responsibilities shall be assured through acceptable private deed covenants running with the land or other such documents as approved by the mayor and council of the city.
- (b) *Open space.* Open space provided in projects located in the Big Haynes Creek Watershed Protection Area shall meet the following requirements:
- (1) 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.
 - (2) 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:
 - a. Automatic (mandatory) membership of all purchasers of lots therein and their successors;
 - b. Conditions and timing of transferring control of the association from the developer to the lot owners shall be specified which shall not exceed four years from the date of recording of the final plat of the subdivision;
 - c. Responsibility for maintenance, insurance and taxes;
 - d. Sharing of the costs of maintenance among the lot owners with shares defined by the association bylaws;
 - e. Authority to place liens on the real property of members who fail to pay their dues or assessments; and
 - f. Prohibition on the dissolution of the association without the approval of the mayor and council.

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- (3) *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.

Sec. 34-86. Wetlands.

- (a) *National Wetland Inventory maps.* The National Wetland Inventory maps, prepared by the United States Fish and Wildlife Service, shall be the official wetland maps of the city. These maps show the general locations of wetlands and should be consulted by persons contemplating activities in or near wetland areas.
- (b) *Plans.* Design professionals, after consulting the National Wetland Inventory maps, shall indicate wetlands on plans required for land disturbance permit applications.
- (c) *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, 2) the appropriate plan sheet [] DOES/ [] DOES NOT (circle 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 shall not occur unless the appropriate federal wetlands alteration ("Section 404") permit has been obtained.

- (d) *Permits.* The issuance of land disturbance permits by the city shall be coordinated with the U.S. Army Corps of Engineers Section 404 permitting process. If the "wetland certification" above indicates the presence of wetlands as shown on the NWI generalized wetlands maps, no land disturbance permit will be issued by the city until a Section 404 permit or letter of permission is obtained from the U.S. Army Corps of Engineers.

Secs. 34-87—34-115. Reserved.

ARTICLE V. ACCESS AND RIGHT-OF-WAY REQUIREMENTS; AND STREET IMPROVEMENT AND CONSTRUCTION REQUIREMENTS

Sec. 34-116. Access.

- (a) *Large parcels to provide future street access.* 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.
- (b) *Landlocking of adjacent property prohibited.* No subdivision 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.

- (c) *Minimum lot frontage required.* 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 subsection (e) of this section.
- (d) *Private streets to be constructed pursuant to roadway construction standards.* Private streets as may be approved under the provisions of the zoning resolution shall be constructed to the roadway construction standards of the city, as contained herein.
- (e) *Vehicular access easements.* Vehicular access easements may be provided from a public street indirectly via easement in any one or more of the following circumstances:
 - (1) 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 services division and the department.
 - (2) 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.
 - (3) 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 one other single-family residence.
 - (4) The access easement was lawfully established as such under the Code, ordinances, or regulations of the city prior to the adoption of these development regulations.
 - (5) 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 these development regulations, and their ownership and maintenance responsibility by private parties must be clearly established on the final plat of the development.
 - (6) The access easement serves a buildable lot of record which meets the minimum frontage requirements of the zoning resolution, but at which point the access is not achieved.

Sec. 34-117. Streets.

- (a) *Dedication of street right-of-way.* Rights-of-way for all project 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.
- (b) *Street improvements.* Streets, whether existing or new, shall be constructed or improved under those circumstances and to the standards as established in these regulations. 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 resolution, as applicable, or as otherwise required by the mayor and council.

Sec. 34-118. Minimum right-of-way and street improvements.

- (a) *Right-of-way and pavement widths.* Minimum widths for new construction (new streets or project access improvements) shall be as shown on Table 6-A (unless a modification is granted by the director).
- (1) *Exception No. 1: Conservation subdivisions.* New local streets in subdivisions developed in the conservation subdivision overlay district shall be as follows:
- a. *Right-of-way width of new interior local streets.*
 - 1. Entrance streets: At least 50 feet for a depth of 300 feet from the subdivision entrance (measured from exterior road right-of-way) after which street right-of-way width shall be at least 46 feet.
 - 2. Other interior streets: at least 44 feet.
 - 3. Right-of-way radii: at least 45 feet for cul-de-sac or "eyebrow" turnarounds.
 - 4. Alleys: no minimum if not to be dedicated to the city; at least 15 feet if to be dedicated to the city.
 - b. *Pavement width of new interior local streets.*
 - 1. Entrance streets: At least 27 feet (measured to back of curb) for a depth of 300 feet from the subdivision entrance (measured from exterior road right-of-way) after which pavement width shall be at least 24 feet (measured to back of curb).
 - 2. Other interior streets: at least 22 feet (measured to back-of-curb).
 - 3. Curb and gutter: at least 1.5 feet.
 - 4. Pavement radii: at least 40 feet for cul-de-sac or "eyebrow" turnarounds (measured to back of curb).
 - 5. Alleys: at least ten feet (concrete or asphalt), with or without curb, if not to be dedicated to the city; at least 12 feet if surfaced with asphalt (which includes one foot concrete curbs) and at least ten feet if surfaced with concrete (with or without curb).
- (2) *Exception No. 2: New local residential streets in the Mixed-Use Redevelopment (MUR) Overlay District.* New local residential streets developed in a MUR Overlay District shall meet the following:
- a. *Right-of-way width.*
 - 1. Interior streets: at least 44 feet.
 - 2. Right-of-way radii: at least 50 feet for cul-de-sac or "eyebrow" turnarounds.
 - 3. Alleys: at least a 15-foot easement if not to be dedicated to the city; at least 15 feet of right-of-way if to be dedicated to the city.
 - b. *Pavement width.*
 - 1. Interior streets: at least 22 feet (measured to back-of-curb).

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2. Pavement radii: at least 40 feet for cul-de-sac or "eyebrow" turnarounds (measured to back of curb).
 3. Alleys: at least ten feet (concrete or asphalt), with or without curb, if not to be dedicated to the city; at least 12 feet if surfaced with asphalt (which includes one foot concrete curbs) and at least ten feet if surfaced with concrete (with or without curb).
- c. *Additional pavement and right-of-way width.*
 1. Additional travel lanes: at least ten feet of pavement width.
 2. On-street parallel parking: at least nine feet of pavement width.
 3. Right-of-way: additional right-of-way shall be provided to accommodate additional travel lanes, on-street parallel parking, sidewalks and underground utilities.
- (3) *Exception No. 3: New local nonresidential streets in the Mixed-Use Redevelopment (MUR) Overlay District.* New local nonresidential streets developed in a MUR Overlay District shall meet the following:
- a. *Right-of-way width.*
 1. Interior streets: at least 48 feet.
 2. Right-of-way radii: at least 55 feet for cul-de-sac or "eyebrow" turnarounds.
 3. Alleys: at least a 15-foot easement if not to be dedicated to the city; at least 15 feet of right-of-way if to be dedicated to the city.
 - b. *Pavement width.*
 1. Interior streets: at least 26 feet (measured to back-of-curb).
 2. Pavement radii: at least 45 feet for cul-de-sac or "eyebrow" turnarounds (measured to back of curb).
 3. Alleys: at least ten feet (concrete or asphalt), with or without curb, if not to be dedicated to the city; at least 12 feet if surfaced with asphalt (which includes one foot concrete curbs) and at least ten feet if surfaced with concrete (with or without curb).
 - c. *Additional pavement and right-of-way width.*
 1. Additional travel lanes: at least 11 feet of pavement width.
 2. On-street parallel parking: at least nine feet of pavement width.
 3. On-street angled parking: at least 18 feet of pavement width.
 4. Right-of-way: additional right-of-way shall be provided to accommodate additional travel lanes, on-street parallel parking, on-street angled parking, sidewalks and underground utilities.

TABLE 6-A
Minimum Right-of-Way and Roadway Widths for

New Streets and Project Access Improvements

Street Category	Minimum Right-of-Way ⁽¹⁾	Minimum Roadway ⁽²⁾
Principal arterial	120 to 150 feet	6 through lanes with median
Major arterial	100 to 120 feet	67 feet
		4 to 6 through lanes with median
Minor arterial	80 to 100 feet	52 to 66 feet
		4 through lanes with median
Major collector	80 feet	52 feet
Minor collector	60 to 80 feet	28 feet
Local street nonresidential cul-de-sac	60 feet ⁽³⁾	32 feet
	60-foot radius	50-foot radius
Local street residential - Urban residential - Urban cul-de-sac	50 feet	27 feet
	50-foot radius	40-foot radius
Local street	60 feet ⁽⁵⁾	24 feet ⁽⁶⁾

residential - Rural ⁽⁴⁾		
residential - Rural cul-de-sac ⁽⁴⁾		
	60-foot radius ⁽⁵⁾	40-foot radius

Footnotes:

- ⁽¹⁾ The greater right-of-way width shall apply under circumstances as described in section 34-118(b)(3).
- ⁽²⁾ Roadway width dimensions are back-of-curb to back-of-curb except where noted.
- ⁽³⁾ Utility easement shall be provided in a location and size as required by the department of public utilities.
- ⁽⁴⁾ Subdivisions zoned R-140 and RA-200.
- ⁽⁵⁾ May be reduced to 50 feet if curb, gutter, and piped drainage system is provided.
- ⁽⁶⁾ Measured to edge of pavement. Curb and gutter is not required in subdivision zoned R-140 and RA-200. Roadway width may be reduced to 23 feet if curb and gutter is provided (27 feet total width).

(b) *Street rights-of-way.*

- (1) The minimum width of street right-of-way shall be dedicated based upon the street categories as shown on the long-range road classification map in the comprehensive plan and as contained in these regulations.
- (2) Additional street right-of-way width shall be required to be dedicated at intersections or other locations which the property abuts upon where deceleration lanes, turning lanes, storage lanes, medians, or realignments are required for traffic safety and minimum right-of-way standards would be inadequate to accommodate the improvements.
- (3) If a new street or thoroughfare is proposed by the comprehensive plan or the state to adjoin or traverse the property, permits shall not be issued until the department has submitted the project to the mayor and 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 council is unable to reach a decision, there shall not be any further delay of a requested permit for this situation.

(c) *Project access improvements; single-family detached, single-family attached and duplex residential subdivisions.*

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- (1) When property that abuts upon an existing or proposed city road is to be developed or redeveloped as a single-family detached or duplex subdivision and the city street will provide access to the property, project access improvements to the city road (deceleration lanes, turn lanes, etc.) shall be provided by the developer as required herein.
 - (2) A deceleration lane shall be required to be provided at each subdivision street entrance that is provided street access. In the event a street has an existing or proposed median, and the developer desires to construct a median break to serve the subdivision, a left turn lane leading to the median break shall be required to be provided by the developer if approved by the department of transportation and shall meet the standards contained herein.
 - (3) Deceleration lanes shall have a length of 200 feet, with an additional 50-foot taper length, a pavement width of 12 feet (exclusive of curb and gutter) and shall be provided with curb and gutter. 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.
 - (4) A left turn lane shall be provided into each subdivision street that accesses a minor collector or major thoroughfare in accordance with the department of transportation's "Criteria and Guidelines for Left Turn Lanes."
 - (5) Other project access improvements may be required by the department upon the recommendation of the department of transportation in order to ensure adequate site access, pedestrian access, convenience and safety to the motoring public.
 - (6) 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.
- (d) *Project access improvements; multifamily and nonresidential developments.*
- (1) When property that abuts upon an existing or proposed city road is to be developed or redeveloped for multifamily or nonresidential uses 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) A deceleration lane shall be required to be provided at each project driveway or subdivision street entrance, as applicable, that is provided street access to a minor collector street or major thoroughfare. In the event a street has an existing or proposed median, and the developer desires to construct a median break to serve the project, a left turn lane leading to the median break shall be required to be provided by the developer if approved by the department of transportation and shall meet the standards contained herein.
 - (3) Deceleration lanes shall have a length of 200 feet, with an additional 50-foot taper length, pavement width of 12 feet (exclusive of curb and gutter) and shall be provided with curb and gutter. 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.

- (4) A left turn lane shall be provided into each project driveway or subdivision street, as applicable, that accesses a minor collector or major thoroughfare in accordance with the department of transportation's "Criteria and Guidelines for Left Turn Lanes."
- (5) Other project access improvements may be required by the department upon the recommendation of the department of transportation in order to ensure adequate site access, pedestrian access, convenience and safety to the motoring public.
- (6) 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.

(e) *New streets.*

- (1) All new streets proposed to be constructed in a subdivision or other development, whether to be public or private, shall be designed and constructed at least to the standards contained in these regulations in accordance with the category of said streets.
- (2) In residential subdivisions, a dead-end ("stub") street required under section 34-119(d) to provide access to an abutting property may be exempted from construction of roadway improvements and public utilities under the following circumstances:
 - a. No lot within the proposed subdivision will gain access from the "stub" street.
 - b. A concept plan has not been submitted or approved on the neighboring tract.
 - c. 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.
 - d. 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).
 - e. 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.

(f) *Substandard streets.*

- (1) In the event that a development has access to a substandard street (i.e., a dirt or gravel road), the following project access improvements shall be required: 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 required under subsection (f)(1) of this section shall, at a minimum, result in a full-section roadway meeting the requirements of a local residential rural roadway (24 feet edge-to-edge of pavement, with drainage swale ditches as needed). Responsibilities shall be as follows:

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- a. The developer shall design the road and provide the labor, equipment, and materials required for roadway improvements and necessary drainage improvements.
 - b. If the city desires the roadway to be improved to a standard greater than that for a local residential rural roadway, the city shall provide or pay the cost of the additional materials and labor.
 - c. 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 department of transportation shall initiate acquisition proceedings, at the expense of the developer, after authorization by the mayor and council.
- (g) *Improvements along state highways.* For any development which abuts a state highway or other right-of-way controlled by the state, 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 the state department of transportation. A permit for the proposed access or improvements shall be required to have been approved by the state DOT and incorporated into the construction drawings for the project prior to issuance of a development permit by the department.

Sec. 34-119. General layout requirements.

- (a) *Conformance to comprehensive plan.* The arrangement, character, extent, width, grade, and location of all streets shall conform, at a minimum, to the comprehensive plan and these regulations.
- (b) *Local streets and minor collectors.* Local streets shall be so laid out that their use by through traffic will be discouraged. Minor 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. Minor collectors also may be provided as central routes within large residential subdivisions, where appropriate to the design, based on project traffic demands exceeding 2,000 trips per day (ADT).
- (c) *Cul-de-sac streets.*
 - (1) Dead end streets designed to have one end permanently closed shall provide a cul-de-sac turnaround and may be no more than 2,000 feet in length. Additional length necessitated by topography or property configuration may be approved by the director.
 - (2) The length of a cul-de-sac street shall be measured from the center of the cul-de-sac to the center of the intersection with another street, whether a through street or another cul-de-sac or dead-end street.
 - (3) 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.
 - (4) Cul-de-sacs shall conform to the layout and dimensional requirements as shown in the standard drawings.
- (d) *Other dead-end streets.*

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- (1) 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 director, provided the directors of the departments of public safety and public utilities concur.
 - (2) 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 conflict 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.
 - (3) 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.
 - (4) Where a street dead ends at the property boundary and the street exceeds 1,000 feet in 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. In no case shall a dead end street exceed 2,000 feet in length unless approved by the department due to unusual topographic conditions or property configuration.
- (e) *Service roads.* 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.
 - (f) *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.
 - (g) *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 director. No development shall be designed so as to deny access to abutting properties.
 - (h) *Alleys.* Alleys shall not be provided except where the subdivider produces evidence satisfactory to the director of the need for same. In the event the 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 these regulations.
 - (i) *Street jogs.*

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- (1) Street jogs shall either directly align or have offsets of a minimum of 125 feet for residential subdivision streets and a minimum of 200 feet for nonresidential subdivision streets, as measured between centerlines of said streets.
 - (2) All major thoroughfares shall provide offsets as required by the department, where alignment is not desirable or feasible, but in no case be spaced less than 600 feet apart as measured between centerlines of said streets.

Sec. 34-120. Traffic control devices.

- (a) *Traffic control signs.* Street signs, traffic control signs, and devices, such as striping and signalization, shall be provided through payment of fees to the engineering department for the installation thereof.
- (b) *Street name signs.* Street name signs shall have a green background with white legends mounted on channelized posts. Alternate post material shall be subject to the review and approval of the traffic engineer. The posts and signs will be furnished and installed by the city at all street intersections. The developer (or homeowner's association in the event an alternate signpost is chosen at a later date) shall pay the city's costs.
- (c) *Traffic signals and signs.* All traffic signals and signs shall conform to the Manual on Uniform Traffic Control Devices (no decorative traffic control devices will be allowed).
- (d) *Striping requirements.* All newly constructed streets having four or more lanes (including auxiliary lanes) and existing streets being widened with one or more additional lanes shall be striped and the payment of said striping costs shall be required from the developer by the engineering department prior to the approval of development conformance for the project. Striping shall be accomplished with paint meeting state DOT standards conforming to the Manual on Uniform Traffic Control Devices.
- (e) *Payment of fees.* Payment for materials and installation of street name and traffic control signs in new developments shall be required by the engineering department prior to the approval of development conformance.
- (f) *Street lights.* Street lights shall be provided by the developer in 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.
 - (1) Prior to the approval of a final plat, the developer shall submit a copy of the approved preliminary plat to the traffic and operations division of the department of transportation. The traffic and operations division shall prepare a street light design drawn on the preliminary plat based upon the city's street lighting ordinance. The design shall be forwarded to the appropriate power provider and the developer shall pay the power provider the appropriate cost for materials and installation. Proof of payment to the power provider shall be required.
 - (2) 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.

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- (3) Upon acceptance of the street light installation by the city, the power provider shall submit monthly bills to the traffic and operations division of the department of transportation for payment. The city shall assign a special assessment to each property abutting a street with street lights for payment of the monthly utility costs in accordance with the provisions of Chapter 94 of the Code of Ordinances, Gwinnett County, Georgia.

Sec. 34-121. 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 the state department of transportation (Georgia DOT).

Sec. 34-122. Subgrade preparation for all streets.

- (a) *Subgrade preparation.* Subgrade preparation shall be in accordance with state DOT specifications and these regulations.
- (b) *Removal of unsuitable material.* If any sections of the subgrade 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.
- (c) *Compaction.* Fill shall be placed in uniform, horizontal layers not more than eight inches thick (loose measurement). Moisture content shall be adjusted as necessary to compact material to 95 percent of maximum dry density, except for the top 12 inches which shall be compacted to 100 percent of maximum dry density.
- (d) *Brought to line and grade.* 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 subgrade shall be brought to the lines, grades, and typical roadway section shown on the plans.
- (e) *Utility trenches to be compacted.* Utility trenches cut in the subgrade shall be backfilled as specified herein. Compaction tests at the rate of one per 150 feet of trench shall be provided to verify compaction.
- (f) *Roll testing required.* The subgrade must pass roll testing prior to placement of the base material. With the approval of the department, a geo-textile or grid may be used to stabilize a subgrade that does not pass proofrolling.
- (g) *Temporary traffic surface.* 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 subgrade, or it shall be removed before the base course is set up for paving.
- (h) *Provisions to drain low points.* Provisions shall be made to drain low points in the road construction when the final paving is delayed. A break in the berm section is required when the curbing has not been constructed. After installation, drainage under the curb to side slopes is required, using minimum four-inch diameter pipe sections.

Sec. 34-123. Project access improvement standards.

- (a) *Sections wider than four feet in width.* For sections four feet or greater in width, the section shall comply with the construction standards for new streets, in accordance with the street's category as shown on the comprehensive plan. The base course must pass roll testing prior to paving. If a delay in paving is reasonably expected by the developer or the department, the base shall be primed with 0.25 gallon of R.C. 70 per square yard and cured for 78 days before paving.
- (b) *Sections less than four feet in width.* For sections less than four feet wide, seven inches of Class "A" concrete base (five inches on local and minor collector streets) and one inches of "E" or "F" topping shall be required.

Sec. 34-124. New local and minor collector streets.

- (a) *Local and minor collector streets within a residential subdivision.*
 - (1) *Asphalt streets.* The following types of base materials may be used:
 - a. *Crushed stone base.*
 - 1. *Two-pass street.* The base course shall consist of at least five inches of graded aggregate base. After being thoroughly compacted and brought to proper section, two inches of "B" binder shall be applied. If a delay in paving is reasonably expected by the developer or the department, 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 seven days prior to paving. The final one inch of type "E" or "F" wearing course shall be applied after 90 percent of the houses on the street have been built, or prior to the end of the maintenance period (but after the 11th month), whichever occurs first. Prior to applying wearing course, a tack coat shall be applied to the binder course at a rate of no less than 0.05 gallons per square yard. Type of tack shall be approved by the department prior to placement.
 - 2. *One-pass street.* The base course shall consist of at least six inches of graded aggregate base. After being thoroughly compacted and brought to proper section, the final two inches of type "E" or "F" wearing course shall be applied. If a delay in paving is reasonably expected by the Developer or the department, 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 seven days prior to paving.
 - b. *Soil cement base.*
 - 1. If the base material (resident soil) is unsatisfactory to the department then a soil cement mix design with professional engineer test results acceptable to the department can be substituted. The design must come from a geo-technical firm with the results certified by a professional engineer registered in the state. The tests required for the design are ASTM D558 or AASHTO T134 or ASTM D559 and/or 560 or AASHTO T135 and 136.

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2. The minimum base course shall consist of at least six inches of suitable soil (high mica content not suitable) stabilized with ten percent of Portland cement by volume (approximately 42.3 pounds per square yard). Depending on whether the street is to be constructed as a on-pass or two-pass street, please refer to section 34-124(a)(1)a or b for the applicable binder and/or paving standards. Where the grade of the street is five percent or greater, a single surface treatment course must be applied before the binder.
- (2) *Concrete streets.* Five inches of 3500 psi concrete is to be applied on a stabilized subgrade, consisting of at least 150 pounds of stone per square yard mixed in four inches deep and compacted. The design and construction of the street shall comply with the Portland Cement Association standards.
- (b) *Local residential-rural streets.* Where allowed (in subdivisions zoned R-140, subdivisions zoned RA-200, and upgrading off-site substandard streets), local residential-rural streets do not require curb and gutter. The road base shall be extended one foot beyond the edge of pavement, and the shoulders shall extend eight feet from the edge of pavement to a standard ditch section on each side (see section 34-83, standard drawings). Otherwise, the roadway shall comply with the standards for new residential subdivision streets, above.
 - (c) *Nonresidential subdivision or development streets.* The following standards shall apply to new local and minor collector streets in nonresidential subdivision and other nonresidential projects:
 - (1) *Asphalt streets.* The following types of base materials may be used:
 - a. *Two-pass street (crushed stone base).* The base course shall consist of at least seven inches of graded aggregate base. After being thoroughly compacted and brought to proper section, two inches of "B" binder shall be applied. If a delay in paving is reasonably expected by the developer or the department, 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 seven days prior to paving. The final one inch of type "E" or "F" wearing course shall be applied after 90 percent of the buildings on the street have been built, or prior to the end of the maintenance period (but after the 11th month), whichever occurs first. Prior to applying wearing course, a tack coat shall be applied to the binder course at a rate of no less than 0.05 gallons per square yard. Type of tack shall be approved by the department prior to placement.
 - b. *One-pass street (crushed stone base).* The base course shall consist of at least eight inches of graded aggregate base. After being thoroughly compacted and brought to proper section, the final two inches of type "E" or "F" wearing course shall be applied. If a delay in paving is reasonably expected by the developer or the department, the base shall be primed with 0.25 gallon of R.C. 70 per square yard the same day it is compacted, and cured of seven days prior to paving.
 - (2) *Concrete streets.* Seven inches of Class "A" 3500 PSI concrete is to be applied on a stabilized subgrade, consisting of at least 150 pounds of stone per square yard mixed in four inches deep and compacted. The design and construction of the street shall comply with the Portland Cement Association standards.

Sec. 34-125. New major thoroughfares.

Minor collectors shall be constructed in accordance with designs prepared by the city or state DOT, or, if no design has been prepared, to the following standards as indicated by Table 6-B:

Table 6-B
Construction Standards for Major thoroughfares

Street Category	Base	Binder	Topping
Principal arterial	10" GAB	5"	10" E or F
Major arterial	10" GAB	4" B	10" E or F
Minor arterial	10" GAB	3" B	10" E or F
Major collector	10" GAB	3" B	10" E or F
Minor collector	8" GAB	2" B	10" E or F

*2½" type "B" binder and 2½" asphaltic concrete base.

Sec. 34-126. Curb and gutter.

- (a) *Curb and gutter required.* All new streets and project access improvements shall be provided with curb and gutter except in subdivisions zoned R-140, and subdivisions zoned RA-200, where swale ditches may be provided in lieu of curb and gutter. All gutters shall drain smoothly with no areas of ponding.
- (b) *Residential curbing.* Residential curbing shall meet the following requirements:
 - (1) Concrete shall be Class "A" (as defined by state DOT) and have a minimum strength of 3000 PSI at 28 days.
 - (2) Typical minimum section shall be six inches by 24 inches by 12 inches.
 - (3) Vertical curbing only.
- (c) *Industrial or commercial curbing.* Industrial or commercial curbing shall meet the following requirements:
 - (1) Concrete shall be Class "A" (as defined by state DOT) and have a minimum strength of 3000 PSI at 28 days.

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- (2) Typical minimum section shall be eight inches by 24 inches by 14 inches.
 - (3) Vertical curbing only.
 - (d) *Principal arterial and major arterial curbing.* Principal arterial and major arterial curbing shall meet the following requirements:
 - (1) Concrete shall be Class "A" (as defined by state DOT) and have a minimum strength of 3000 PSI at 28 days.
 - (2) Typical minimum section shall be eight inches by 30 inches by 14 inches.
 - (3) Vertical curbing only.
 - (e) *Construction methods.*
 - (1) 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 project access improvements of a road which the department of transportation has identified for resurfacing within one year of the new construction, the grade of the new gutter shall be placed one inch above the project access improvement pavement grade in areas where drainage will not be adversely affected.
 - (2) Line and grade shall be field staked for grades less than two percent and grades over 12 percent, and within 100 feet in both directions from all low points.
 - (3) 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.
 - (4) Inferior workmanship or unprofessional construction methods resulting in unacceptable curb and gutter will be cause for rejection of the finished work.
 - (5) Disturbed areas along all curbing shall be backfilled, stabilized, and grassed.

Sec. 34-127. Underground utilities.

- (a) *Installation and compaction required before pavement or base.* All water and sanitary sewer utilities and storm drain facilities within the curbs shall be installed and the ditches backfilled and thoroughly compacted before any pavement or base is installed.
- (b) *After base installed, utilities to be bored.* Once the base has been placed, all further installation of utilities under the roadway shall be bored or otherwise comply with section 34-159, street cuts.
- (c) *Manholes flushed with finished grade.* All utility manholes and valve boxes shall be brought flush to the finished grade within the roadway section.
- (d) *Standard drawings apply.* All utility locations shall adhere to the details found in the standard drawings.

Sec. 34-128. Sidewalks.

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. Whenever a discrepancy

occurs between the design and construction standards of this section and any state or federal regulation, the most restrictive shall apply.

(1) *Sidewalk installation and timing.* Sidewalks shall be installed as follows:

- a. *Residential subdivision projects.* Sidewalks shall be installed on new internal streets (both sides, including "eyebrow" turnarounds) and on abutting external streets (abutting side). Sidewalks are not required adjacent to cul-de-sac turnarounds nor on streets ending in a cul-de-sac turnaround that provide access to six or fewer lots. Sidewalks may end at the radius transition of a cul-de-sac turnaround with an L-shaped "mid-block" curb ramp in alignment with the ramp on the opposite side of the street.
 1. *Residential subdivision developer responsibility.* Developers shall install sidewalks on abutting external streets, "passive" recreation area lots, and open space lots, and shall install intersection radius curb ramps at new street intersections, and L-shaped mid-block ramps at cul-de-sac turnarounds, within 60 days of approval of the final plat. Sidewalks on "active" recreation area lots shall be installed prior to issuance of a certificate of occupancy or shall be installed by the developer prior to release of the subdivision maintenance surety, whichever is earlier. Developers shall also install sidewalks on any vacant lots remaining between developed lots (i.e., dwellings under construction or completed) prior to release of the subdivision maintenance surety.
 2. *Homebuilder responsibility.* Homebuilders shall install sidewalks, and curb ramps not required to be installed by developers, on building lots prior to release of the certificate of occupancy for a home.
- b. *Nonresidential subdivision projects.* Sidewalks shall be installed on new internal streets (both sides, including cul-de-sac and "eyebrow" turnarounds) and on abutting external streets (abutting side) within 60 days of approval of the final plat.
- c. *Non-subdivision projects.* Sidewalks shall be installed on abutting streets (abutting side) prior to the issuance of a certificate of occupancy.
- d. *Maintenance surety.* Maintenance surety provided to the city shall include the cost of sidewalk construction in an amount acceptable to the city.
- e. *Escrow alternative.* The cost of sidewalk installation may be set aside in escrow with the department of transportation if proposed road improvements by the city may impact the location of a sidewalk.
- f. Pursuant to a finding by the public works director that a sidewalk at a specific location would not provide a public benefit, funds may be contributed to the sidewalk bank in lieu of the sidewalk construction.

(2) *Sidewalk design and construction standards.* Sidewalks shall be constructed in accordance with the requirements of this section. The 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 department of transportation.

- a. *Width.* Sidewalks shall be at least four feet wide on new internal subdivision streets, except sidewalks shall be at least five feet wide on new internal streets or drives within the Senior Oriented Residence District (R-SR). Sidewalks shall be at least five feet wide on abutting external streets.
 - b. *Setback.* Sidewalks shall be located at least two 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 six feet from the back of curb (bridges excepted). The area between the curb and the sidewalk shall consist of grass or landscaping. 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 department of transportation.
 - c. *Cross slope.* Sidewalks shall be constructed with a cross slope of 0.25 inch per foot. Sidewalks shall maintain this cross slope at driveway crossings or transition the sidewalk to a driveway with ramps and detectable warnings.
 - d. *Material.* Sidewalks shall be constructed of concrete at least four inches thick. Concrete shall be Class "B" (as defined by state DOT) with a minimum strength of 2200 PSI at 28 days.
 - e. *Final stabilization.* Disturbed areas resulting from sidewalk construction shall be backfilled, stabilized, and grassed or landscaped.
 - f. *State DOT controlled roads.* Sidewalks located in the right-of-way of roads under the jurisdiction of the state DOT shall be constructed in accordance with state DOT design and construction standards.
- (3) *Sidewalk curb ramp design and construction standards.* Intersection radius curb ramps shall be provided at street intersections. L-shaped mid-block curb ramps shall be provided to end sidewalks at the radius of cul-de-sac turnarounds in residential subdivisions. Straight ramps may be provided at intersections of curbed driveways and at streets without sidewalks. Curb ramps shall meet the requirements of the city's standard drawings.
- (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.

Sec. 34-129. Sidewalk bank program.

- (a) In cases where the lack of need for new sidewalk construction has been established, developers shall have the option of contributing the equivalent monetary value of those sidewalk improvements into the City of Mulberry Sidewalk Bank.

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- (b) The monetary value of the sidewalk improvements shall be determined by the public works director according to industry standards at the time of development and that valuation shall consist of the cost of the materials, the cost of installation, and the cost of one year of maintenance.
 - (c) A separate sidewalk bank account shall be established for the receipt of funds collected in cases where the developer makes a monetary contribution instead of providing sidewalks.

Secs. 34-130—34-154. Reserved.

ARTICLE VI. UTILITIES AND EASEMENTS

Sec. 34-155. Placement of utilities.

- (a) *Underground utilities to be in right-of-way or easement.* 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 rights-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.
- (b) *Private underground utilities require department approval if in 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 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.

Sec. 34-156. Water system and fire hydrants.

- (a) *Connection of public water main required.* The developer shall install or have installed a system of water mains connected to a public water supply system in accordance with the requirements of the authority having jurisdiction.
- (b) *Water, fire hydrants, etc., to be designed according to applicable standards, and plans and specifications.* All water mains, fire hydrants and appurtenances shall be designed in accordance with the policies, standards, plans and specifications of the city fire prevention ordinance and the water system having jurisdiction. Where jurisdiction resides with the city water system, the public water mains and appurtenances shall be designed by the city water system upon submittal of the development plans for the project.
- (c) *Water mains to be installed after curbs but before paving.* Within the city water system jurisdiction, water mains and appurtenances shall be installed after installation of the curbs and gutters and before paving, or after staking of the curblines and submission to the water system of an as-graded survey of the street profile accompanied by a certification executed by the owner as required by the water system that the subgrade will not change. Water mains shall be relocated as necessary to meet water system regulations prior to approval of development conformance, if improperly located to final curb line or grade.

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- (d) *[Operational recycled water systems.]* All new commercial conveyor car washes, permitted and constructed after July 18, 2017 must install operational recycled water systems. A minimum of 50 percent of water utilized will be recycled. A conveyor car wash means a commercial car wash where the car moves on a conveyor belt during the car wash. The driver of the vehicle can remain in the vehicle or wait outside of the vehicle.
 - (e) All new landscape irrigation systems shall be installed with a rain sensor shutoff switch.
 - (f) *Outdoor water waste is prohibited.* Outdoor water waste means the excessive application of water that results in water flowing down any curb and gutter, street or storm drain or onto an adjacent property, and shall include the unnecessary loss of water through improper application or failure of an outdoor irrigation or plumbing system resulting in excessive runoff. Activities subject to a violation include without limitation:
 - (1) A broken irrigation system (missing heads, broken pipes, etc.).
 - (2) Excessive runoff such as water running down the driveway, street or sidewalk.
 - (3) A hose running unattended without a shutoff nozzle.
 - (4) A visible and unrepaired leak more than one gallon per minute.

Sec. 34-157. Sanitary sewer disposal.

- (a) *Connection to sewage disposal system required.* Connection to an approved 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 under the water pollution control regulations of the city or as required by the city health department.
- (b) *If sewer is available, septic not allowed.* No septic tanks shall be allowed if public sewer is available. All structures shall connect to public sewer when such sewer is available, in accordance with the sewer regulations of the city. Sewer availability shall be determined by the city water pollution control division.
- (c) *Septic field must be located out of the 100-year floodplain.* Lots with septic tanks and tile drain-field sewerage disposal systems shall contain the contiguous area outside of the 100-year floodplain as required by the health department.
- (d) *Health department notations on plats.* The health department may require notation that certain lots must meet additional requirements prior to issuance of a building permit, or otherwise limit development relative to health department regulations.
 - (1) 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.
 - (2) 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 subdivisions where "dry" sewer has been installed. Such lots shall be noted: "Approval by Water Pollution Control for connection to sanitary sewer required prior to issuance of a building permit."

Sec. 34-158. Easements.

- (a) *Dedication requirement.* Temporary construction easements and permanent easements for public utilities, drainage or other public facilities shall be dedicated to the city in accordance with city requirements. All easements shall be stabilized in accordance with the Manual for Erosion and Sediment Control in Georgia.
- (b) *Cleared, opened, and stabilized.* Drainage easements are required for any part of the drainage system that is designed to carry stormwater runoff from more than one parcel, existing or proposed. 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 runoff (See also article VII of this chapter). Runoff slope and sideslopes shall be specified by the developer's engineer, according to good engineering practice. Drainage easements for storm drain pipes that carry water shall be provided according to the minimum requirements found in Table 7-A below, and shall conform to city standards. The minimum easement width shall be based on the pipe diameter (span), plus two feet, plus two times the pipe invert depth. This value shall be rounded up to the nearest five 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 7-A
Easements for Storm Drain Pipes

	Maximum Pipe Invert Depth (FT)												
Pipe Size (FT)	Minimum Easement width (FT)												
	4	5	6	7	8	9	10	11	12	13	14	15	16
1.25	20	20	20	20	20	25	25	30	30	30	35	35	40
1.50	20	20	20	20	20	25	25	30	30	30	35	35	40
2.00	20	20	20	20	20	25	25	30	30	30	35	35	40
2.50	20	20	20	20	25	25	25	30	30	35	35	35	40
3.00	20	20	20	20	25	25	25	30	30	35	35	35	40
3.50		20	20	20	25	25	30	30	30	35	35	40	40
4.00		20	20	20	25	25	30	30	30	35	35	40	40
4.50			20	25	25	25	30	30	35	35	35	40	40
5.00			20	25	25	25	30	30	35	35	35	40	40
5.50				25	25	30	30	30	35	35	40	40	40

6.00				25	25	30	30	30	35	35	40	40	40
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- (c) *Width of permanent sanitary sewer easements.* Permanent sanitary sewer easements shall be no less than 20 feet in width when no other parallel utilities are located therein. When warranted, temporary construction easement widths shall be determined by the water pollution control division.
- (d) *Provision for common sanitary/drainage easement.* A common easement for sanitary sewer and drainage purposes may be allowed if the pipes are parallel and at least ten feet is provided between pipes (on center). The easement width shall be equal to the width shown in Table 7-A, plus the width distance separating the pipes (minimum of ten feet).
- (e) *Watercourse easements.* 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.
- (f) *Off-street right-of-way easements.* 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 ensure 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; however, the city is not responsible for replacing the landscape material located in the easement when it is removed to maintain the drainage system.
- (g) *Cleared easements to be grassed.* All drainage, sewer, access or other easements that were required to be cleared shall be fine graded and grassed within ten days of completing construction work. The use of sediment control measures may be required to protect the area until a comprehensive vegetative cover is obtained.

Sec. 34-159. Street cuts.

- (a) *Review and approval by the department.* All utility construction plans within city right-of-way shall be reviewed and approved by the department before construction begins. 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.
- (b) *Fees required.* No street cut shall be authorized until such street cut fees have been paid.
- (c) *Trenches to be backfilled.* If approved, all trenches shall be backfilled and compacted the same day the trench is opened.
 - (1) Trenches under the paving shall be returned to 95 percent compaction.

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- (2) Trenches elsewhere shall be returned to 90 percent compaction.
 - (3) See section 34-122 for trench compaction and test requirements.
 - (d) *Trenches under paving.* All trenches under paving shall be concreted with eight inches of Class "A" concrete base and two inches of type "E" or "F" wearing course asphalt is to be spread.
 - (1) The paving cut shall be widened to a minimum of nine inches beyond the edges of the trench.
 - (2) The edges of the paving cut shall be smooth.
 - (e) *Utility extension contact information.* Contact the department of public utilities for public utility extension information from the existing to the proposed development. Contact the traffic engineer at least 24 hours in advance of closure of traffic lanes.

Secs. 34-160—34-186. Reserved.

ARTICLE VII. SITE GRADING, CULVERTS AND PIPED DRAINAGE SYSTEMS, AND EROSION CONTROL

Sec. 34-187. Site grading.

- (a) *Compliance with line and grade required.* Grading shall be done in accordance with the lines and grades shown on the approved grading plan.
- (b) *Contour interval of two feet required.* Grading plans shall show existing and proposed contour lines at an interval of no more than two feet. Grading plans shall outline the areas that are required to remain undisturbed (i.e., tree protection areas, buffer, etc.) and shall indicate protective fencing or staking to be placed surrounding such areas.
- (c) *Consistent with Metropolitan River Protection Act.* If the property is within the jurisdiction of the Metropolitan River Protection Act, the grading shall be consistent with the River Corridor Certificate approved for the project.
- (d) *Embankment layering.* Embankments shall be placed in uniform layers not to exceed a compacted thickness of six inches per layer and shall be compacted to a density of 95 percent of the maximum laboratory dry weight per cubic foot as determined by AASHTO Method T-99 in all areas where structure, parking lots and drives, streets, and utilities are to be placed. All other embankments are to be compacted to at least 85 percent.
- (e) *Maximum slopes.*
 - (1) The maximum slopes for cut or fill shall be 2 to 1 (two feet of horizontal run for each foot of rise or fall), except:
 - a. For earthen dam embankments;

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- b. For rock cuts;
 - c. Where certified by a professional engineer; or
 - d. As discussed in subsection (f) of this section.
- (2) Earthen dam embankments shall be 3 to 1 maximum unless a modification application is approved. The intent of the earthen dam embankment slope regulation is to provide for public safety, soil stability, and dam maintenance considerations. The depth of cut referred to herein shall be the maximum cut or fill that shall be allowed to occur in any one section of cut or fill. The slope of cut or fill shall be uniform throughout for each section of cut or fill unless benching is approved by the city. When a cut is made in rock that requires blasting, the slope may be steeper if pre-splitting is employed and upon submission of a geotechnical report which substantiates the integrity of the rock in the steeper condition, subject to the review and approval of the director. (Note: No blasting shall occur unless a permit has been obtained from the fire marshal's office.) Refer to the standard drawings for grading section and retaining wall details.
- (f) *Special conditions for soil with low shearing resistance and cohesion.* While most soils in the area can be safely stabilized at a 2 to 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 to 1 slope shows evidence of shearing, non-cohesiveness, sliding, or inability to maintain compaction, the slope shall be stabilized at 3 to 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.
- (g) *Grading plan for building pad locations for residential subdivisions.* A grading plan showing building pad locations shall be submitted for residential subdivisions, unless a modification application is approved, zoned for a lot size of less than 12,000 square feet or a density of four units per acre or more. The intent of this regulation is to ensure adequate lot-to-lot drainage. Granting a modification will not nullify the intent of these regulations when the layout has a minimum lot area of 14,520 square feet and a minimum lot width of 90 feet. 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.
- (h) *Grading for roads and ditches.* Grading for roads and improved ditches shall be shown.

Sec. 34-188. Culverts and piped drainage systems.

- (a) *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 these regulations.
- (b) *Design criteria; general.*
- (1) All stormwater conveyance facility design calculations shall be certified by the authorized registered professional (refer to section 34-187(a)(1)).

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- (2) Methods to calculate stormwater flows shall be in accordance with the city stormwater systems and facilities installation standards and specifications.
 - (3) 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.
 - (4) All portions of a stormwater conveyance system which drain areas falling within the same size category above shall be analyzed using the same methodology.
 - (5) Runoff coefficients used for the Rational Method and runoff curve numbers used for the SCS Method shall be consistent with those shown in the city stormwater systems and facilities installation standards and specifications.
- (c) *Design criteria; culverts.*
- (1) Culvert design is to be in accordance with the methods contained in the city stormwater systems and facilities installation standards and specifications and shall include a thorough analysis of both inlet and outlet control conditions.
 - (2) 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.

Sec. 34-189. Erosion control.

- (a) *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 these regulations and shall continue to apply until the project has been completed.
- (b) *Abandoned projects.* Any project, whose permit has lapsed under the terms expressed in article III of this chapter, 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.

Sec. 34-190. Dams.

Any land disturbing activity that involves a property which is proposed to contain a dam shall comply with the provisions of this article as well as the provisions contained in article II of this chapter.

- (1) *New dams which become subject to the requirements of the Georgia Safe Dams Act and Rules for Dam Safety.* Dams proposed to be 25 feet or more in height or proposed to have an impounding capacity of 100 acre-feet or more at maximum water storage elevation shall be subject to the following:
 - a. The developer of any new dam in which development exists within the proposed breach zone shall be subject to the requirements of the Georgia Safe Dams Act and Rules for Dam Safety adopted by the state department of natural resources. The developer shall obtain necessary approvals and permits from the environmental protection division of the state department of natural resources for the project and the dam prior to securing a development permit from the

department. The developer of any new dam as to which development does not exist within the proposed breach zone shall submit construction plans to the city for review of the project and the dam prior to securing a development permit from the department.

- b. If the developer elects to construct the new dam in accordance with the design standards for new dams as contained in the Rules for Dam Safety, then new development shall be permitted within the dam breach zone. However, the dam shall meet the design standards for new dams as contained in the Rules for Dam Safety if development currently exists or is proposed in the dam breach zone.
- c. If the developer elects not to construct the new dam to the design standards for new dams as contained in the Rules for Dam Safety, then a dam breach analysis for the dam shall be submitted along with the construction plans for review prior to securing a development permit from the department. The professional engineer shall utilize the computer model titled "DAMBRK" for the dam breach analysis.
- d. Should the new dam not meet the design standards for new dams as contained in the Rules for Dam Safety, then only the following uses and structures shall be permitted within the dam breach easement:
 - 1. Agriculture which requires no structures for human habitation within the dam breach zone, including forestry, livestock raising, and agricultural and forestry access roads.
 - 2. Fences.
 - 3. Outdoor advertising signs, provided they are located no closer than 100 feet from any residence or place of business.
 - 4. Roads, driveways and parking areas.
 - 5. Utility poles, towers, pipelines, water treatment outfalls and facilities, or other similar facilities and structures.
- e. For any new dam that is proposed not to meet the design 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 off-site 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.
- f. Prior to recording of a final plat or issuance of a certificate of occupancy, as appropriate, an as-built certification from a professional engineer shall be submitted to the department. The certification shall state that the dam is constructed in accordance with the provisions of these regulations 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 owner's association, prior to approval of the final plat, responsible for the maintenance of the dam and its impoundment.

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- (2) *New dams subject to regulation by the city.* Dams proposed to be nine feet or more in height, but less than 25 feet in height, in combination with an impounding capacity proposed to be 20 acre-feet or more at maximum water storage elevation, but less than 100 acre-feet, shall be subject to the following:
- a. If the developer elects not to construct the new dam to the design standards for new dams as contained in the Rules for Dam Safety, then a dam breach analysis for the dam shall be submitted with the construction plans for review and authorization prior to securing a development permit from the department. The professional engineer shall utilize the computer model titled "DAMBRK" for the dam breach analysis.
 - b. Should the new dam not meet the design standards for new dams as contained in the Rules for Dam Safety, then only the following uses and structures shall be permitted within the dam breach zone:
 1. Agriculture which requires no structures for human habitation within the dam breach zone, including forestry, livestock raising, and agricultural and forestry access roads.
 2. Fences.
 3. Outdoor advertising signs, provided they are located no closer than 100 feet from any residence or place of business.
 4. Roads, driveways and parking areas.
 5. Utility poles, towers, pipelines, water treatment outfalls and facilities, or similar facilities and structures.
 - c. If the developer elects to construct the new dam in accordance with the design standards for new dams as contained in the Rules for Dam Safety, then new development shall be permitted within the dam breach zone. However, the dam shall meet the design standards for new dams as contained in the rules for dam safety if development currently exists or is proposed in the dam breach zone.
 - d. Construction plans for new dams defined herein shall be submitted to the city for review for the project and the dam prior to securing a development permit from the department.
 - e. For any 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 off-site 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.
 - f. Prior to recording of a final plat or issuance of a certificate of occupancy, as appropriate, an as-built certification from a professional engineer shall be submitted to the department. The certification shall state that the dam is constructed in accordance with the provisions of these regulations 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 owner's association, at time of recording of the final plat, responsible for the maintenance of the dam and its impoundment.

- (3) *Existing dams.* Existing dams that are located on a project site and will remain after construction is complete shall comply with the provisions of this article and all referenced articles as if they were new dams.
- (4) *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 state safe dams program:
 - a. Location of the Category II dam and the proposed development;
 - 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 Dambreak Computer Model to establish the height of the floodwave in the downstream floodplain. The Dambreak Modeling shall be completed in accordance with the Safe Dams Program quality assurance program by a professional engineer.

Sec. 34-191. Stream buffers and impervious surface setbacks.

Refer to the zoning resolution for buffer and impervious surface setback requirements from streams.

ARTICLE VIII. STORMWATER MANAGEMENT

Sec. 34-192. Area threshold for stormwater management.

- (a) Treatment of stormwater runoff for the purposes of water quality, runoff reduction, and detention shall be in accordance with the criteria specified in the Georgia Stormwater Management (GSMM) and chapter 18, article VI of this Code under the following conditions:
 - (1) Water quality treatment, runoff reduction, and detention must be provided and sized to treat the total amount of disturbed area (offsite and onsite) when 5,000 square feet or more of impervious surface is created, replaced or added, or one acre or more of a developed project site is disturbed for redevelopment.
 - (2) The project is exempt from having to provide the water quality and detention requirements of this section for the project or for the rest of the site when less than 5,000 square feet of impervious surface area is created or added, or less than one acre of land of a developed project site is disturbed for redevelopment.

Sec. 34-193. Stormwater management report required.

- (a) Any permit issued by the city that authorizes clearing or grading activities requires a stormwater management report. The purpose of a stormwater management report is to

support the development of the project site using best management practices and diligent engineering. The report must follow the guidelines set forth in the Georgia Stormwater Management (GSMM) and chapter 18, article VI of this Code. The report shall be certified by an authorized registered professional registered in the state.

- (b) The stormwater management report shall identify the locations and quantities of stormwater runoff entering and exiting the site for both pre- and post-developed conditions. Analysis of the off-site properties shall anticipate future development in addition to addressing existing conditions.
- (c) The following criteria shall be evaluated by the authorized registered professional preparing the stormwater management report:
 - (1) Existing land uses downstream;
 - (2) Anticipated future land uses downstream;
 - (3) Magnitude of increase in peak flows due to development;
 - (4) Presence of existing drainage problems;
 - (5) Capacity of existing and anticipated drainage systems;
 - (6) Creation of concentrated flows where none had occurred previously;
 - (7) Availability of feasible locations for detention facilities;
 - (8) Existing flows generated off-site which pass through the project site; and
 - (9) The nature of the receiving watercourse.

Sec. 34-194. Design and construction guidelines.

- (a) *Detention design criteria, general.*
 - (1) Stormwater detention facilities shall be constructed in accordance with plans reviewed and approved by the department and shall be in place and inspected prior to the initiation of other improvements. If the detention facility is planned to be a lake, temporary detention facilities shall be provided and shall remain in place until such time as the lake has become effective in providing stormwater management. The construction shall be in accordance with the GSMM and chapter 18, article VI of this Code.
 - (2) All stormwater detention facilities shall be designed to detain the one-year storm runoff, for the area draining to the pond, for 24 hours. For the project, this volume called the channel protection volume shall be equal to or greater than the one-year storm runoff volume from the project. In addition, these facilities shall control the peak flow rates associated with storms having one-year, two-year, five-year, ten-year, 25-year, and 50-year return frequencies so that flows from the developed site do not exceed those associated with pre-development conditions at the project boundary nor increase the peak flows downstream from the project to the point in the drainage basin where the project area is ten percent of the total basin.

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- (3) Where adverse impacts occur during the 100-year storm, the 100-year storm shall also be regulated. The hydrologic methodology used for any given project shall conform to the Georgia Stormwater Management (GSMM) and chapter 18, article VI of this Code. Runoff coefficients and runoff curve numbers used for pre- and post-development conditions shall be consistent with those shown in the Georgia Stormwater Management Manual.
 - (4) 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.
 - (5) Calculations shall be provided showing how all times of concentration or lag times were computed, both for pre- and post-developed conditions. Likewise, adequate support must be provided for all composite runoff coefficients or curve numbers used.
- (b) *Best management practice location criteria.*
- (1) A detention facility consists of the area within the maximum design ponding limits, the dam (if one), embankment slopes and wall footings (if applicable), primary and emergency outlet works, any drainage/access easements, and any energy dissipation devices. The extent of the facility is defined to allow flooding, access and maintenance.
 - (2) Detention facilities, to the greatest extent feasible, shall be located so as to minimize the amount of flow generated on the project site that bypasses the facility.
 - (3) No portion of any detention facility shall disturb any required (as opposed to voluntary) buffer, landscape strip, or tree protection area, except that natural bottom detention ponds and its appurtenant structures, which require no grading and removal of trees, may encroach into a required construction buffer.
 - (4) The 100-year ponding limits of a detention facility shall not encroach upon a public right-of-way.
 - (5) Detention facilities may be located within utility easements or rights-of-way, or encroach upon utility easements or rights-of-way, upon receipt by the department of written permission from both the property and utility owners.
 - (6) Detention facilities may be constructed within recreation areas required under section 34-85, if the following criteria are met:
 - a. Ownership of the area will be held by a qualified property owner's association, homeowner's association, or other private parties.
 - b. Permanent structures, such as buildings and swimming pools, will not be constructed within the boundaries of the detention facility.
 - c. Detention facilities within 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.
 - d. Permanent detention features shall not interfere with the intended uses 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.).

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- (7) If a residential subdivision is provided with an on-site detention facility not located within a recreation area, a mandatory property owner's association shall be established for its ownership and maintenance. The facility shall be located on a single lot within the development and owned by the property owner's association. The lot shall have a minimum of 30 feet of public road frontage and a minimum lot width of 30 feet. Access to the facility shall be located on this lot. If the project is provided with an off-site detention facility, a mandatory property owner's association shall be established for its maintenance. The association bylaws shall be recorded concurrently with the recording of a final subdivision plat. The association bylaws shall include the same provisions as specified in subsection 34-85(b)(2).
- (8) A nonresidential subdivision is not required to locate an on-site detention facility on a separate lot. The property owners served by a detention facility that provides detention 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 owner's association.
- (9) 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. The detention methodology utilized for all parking lot detention facility design shall conform to the stormwater design manual.
 - c. 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.
 - d. The maximum depth of detention ponding in a parking lot, except at a flow control structure, shall be six inches for a ten-year storm, and nine 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.
 - e. In truck parking areas, the maximum depth of ponding shall be 12 inches for the ten-year storm.
 - f. Detention ponding areas are to be drained within 30 minutes after the peak inflow occurs.
 - g. Parking lot detention areas shall have a minimum surface slope of one percent, and a maximum slope of five percent.
- (10) 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 general spirit and intent of this article. In the case of rooftop detention, permissible structural loads and weatherproofing shall be governed by the state building code as may be amended by the city.

(11) 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 unusual cases where a normally dry detention basin is planned to be used to trap sediment as well as provide stormwater control, the basin may be undercut to accommodate the sediment so that the required detention characteristics, particularly volume, will be maintained.
- d. The design of sediment basins shall be in accordance with Appendix C of the Manual for Erosion and Sediment Control in Georgia.

(12) 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 these regulations shall apply, but may be modified in instance where a specific requirement is clearly detention-oriented rather than safety-based.

(c) *Detention facility and water quality easement requirements.*

- (1) In both nonresidential and residential subdivisions or projects, an easement at least 20 feet in width shall be required so as to provide access to all detention and water quality facilities from a public street.
- (2) Every normally dry detention basin, lake, water quality facility or parking lot detention facility shall be completely enclosed within a drainage easement. The drainage easement shall extend at least ten feet beyond the 100-year flooding limits of the detention facility.
- (3) Access easement.
 - a. 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.
 - b. A drive to the bottom of the pond shall be provided when the facility is over ten feet deep from the bench elevation or the facility is wider than 50 feet as measured from bench to bench.
 - c. The access easement shall be cleared, grubbed and graded so that it can be utilized by rubber-tired construction vehicles.
 - d. The minimum drive width shall be 15 feet.
 - e. The drive shall be grassed or paved.

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- f. The maximum slope shall be 20 percent (5H:1V).
- (d) *Dam design and construction criteria.*
- (1) Detention facilities which take the form of normally dry basins, ponds, or lakes usually are created by damming a drainage way or watercourse. Such dams can take a variety of different forms, the most common being earthen embankments and reinforced concrete walls. Each type of dam has different characteristics, and the selection of the most appropriate type for a particular site should be made by an authorized registered professional and based on the physical features of the dam site, the purpose of the dam, the type of impoundment, safety, and maintenance requirements.
 - (2) For purposes of these regulations, dams will be addressed separately for each of the three most frequently encountered types of detention facilities: normally dry basins, ponds, and lakes. A normally dry basin is one designed to impound stormwater runoff for only a brief period of time following a storm event. The vast majority of the time the basin will be completely dry except for any normal stream flows which pass through unimpeded. Lakes and ponds, on the other hand, are designed to impound a body of water at least several feet in depth on a more-or-less permanent basis. Lakes and ponds vary from one another only in terms of magnitude. The magnitude of a lake is determined primarily from the height of its dam, the size of its contributing drainage area, and the volume of water it is capable of impounding. For purposes of these regulations, a pond is any lake having a dam height of less than nine feet and which is incapable of impounding more than 20 acre-feet of water.
 - (3) All dam design shall be certified by a professional engineer currently registered in the state.
 - (4) Dams for normally dry detention basins shall conform to the following:
 - a. Dams for normally dry detention basins may be constructed of earth, reinforced concrete, mortared rubble, or other suitable materials.
 - b. The design of any concrete or rubble wall over five feet in height shall be certified by a structural engineer currently registered as a professional engineer in the state, and the structural design shall be based on soil tests certified by a professional engineer.
 - c. Any non-earthen structure shall be designed to prevent piping failure through its subgrade and abutments.
 - d. The construction of walls over five feet in height shall be monitored and approved by a qualified materials testing company.
 - e. Earthen dams for normally dry detention basins shall have a top width of no less than eight feet.
 - f. For earthen dams for normally dry detention basins, there shall be at least 1.5 feet of vertical separation between the 100-year ponding elevation in the basin and the low point on the top of the dam. One foot of this distance is to provide a margin of safety against overtopping of the dam and the other six inches is to allow for

settlement. Separation is not required for a non-earthen dam if it has been designed to overtop safely.

- g. More stringent design and construction criteria shall be used for dams for normally dry detention basins whenever the probable consequences of dam failure are severe.
- (5) Dams for normally dry ponds shall conform to the following: any professional engineer responsible for the design of a dam for a pond is expected to be knowledgeable of the criteria contained within the Georgia Safe Dams Act, state department of natural resources "Rules for Dam Safety" publication, and the U.S.D.A. Soil Conservation Service's Technical Release No. 60 "Earth Dams and Reservoirs." The provisions of each are to be applied wherever applicable. Applicability shall be determined based upon site-specific constraints and downstream conditions. Consultation with appropriate department personnel, both prior to and throughout the design process, is encouraged.
- (6) Dams for lakes shall conform to the following: any professional engineer responsible for the design of a dam for a lake is expected to be thoroughly familiar with the criteria contained within the Georgia Safe Dams Act, state department of natural resources "Rules for Dam Safety" publication, and the U.S.D.A. Soil Conservation Service's Technical Release No. 60 "Earth Dams and Reservoirs." All design is to be in accordance with the applicable requirements contained in each of the above referenced publications.
- (e) *Detention facility outlet devices.*
 - (1) Because of the variables that may be associated with the choice of an outlet device for any given condition, the design consultant is responsible for the selection of the device, subject to the review and approval of the department.
 - (2) The department will include in its consideration the ease of maintenance, longevity of the system, and freedom from congestion, practicality, and aesthetics in its review of the outlet device. The consultant should be guided by the departmental preference of vertical weir designs since they have proven to generally meet most of the considerations expressed herein.
 - (3) An orifice smaller than 15 inches in diameter shall be protected by a trash rack. A trash rack protecting an orifice shall have surface area of at least ten square feet. Design shall be in accordance with the stormwater design manual. No opening in the trash rack shall have an area more than one-half the size of the area of the orifice being protected. Two-stage trash racks or screens having progressively smaller openings placed in series, are suggested. To facilitate outlet operation, curved or inclined trash racks designed to allow debris to rise with the water level are preferred. In all cases, trash racks shall be either hinged or removable to facilitate maintenance operations.
 - (4) If the primary detention facility outlet is a conduit through a dam, and there is not an orifice, weir-box, or other flow-control device affixed to the upstream end, then the conduit shall be analyzed for both inlet and outlet control conditions. If an orifice or weir-box is affixed, then the conduit shall be analyzed to determine if any flows will occur for which outlet control conditions in the conduit, rather than the hydraulic

characteristics of the flow-control structure, will determine the total flows occurring. In any case where the conduit through the dam is less than 15 inches in diameter, the trash rack provisions of subsection (c)(3) of this section shall be followed.

- (5) Unless the 100-year maximum flow velocity in a conduit through a dam forming a pond or a lake is less than ten feet per second, and the hydraulic grade line for the 100-year condition is at or below the crown of the conduit for at least 90 percent of its length, the conduit must be equal or superior to Class V reinforced concrete pipe in its structural characteristics.

(f) *Emergency overflow requirements.*

- (1) For every type of detention facility, a planned safe flow path must be provided for conveyance of flows of water in excess of those for which the detention facility was designed. In many instances, this function can be provided through installation of an emergency spillway. Emergency spillways are usually excavated open channels, either vegetated or paved with reinforced concrete.
- (2) Every earthen dam shall be provided with an open-channel emergency spillway, unless all of the following apply:
 - a. The principal spillway is a closed conduit having a cross-sectional area that can pass 125 percent of the 100-year storm routed peak discharge.
 - b. The principal spillway is a closed conduit having a cross-sectional area of at least one square foot per each three acres of drainage area, or a maximum of 20 square feet of surface area, whichever is less.
 - c. The principal spillway capacity is at least equal to the capacity required for an open channel emergency spillway.
 - d. The low point of the dam crest is not in a fill section except for roadway embankments.
 - e. A trash rack or other debris protection is provided on the outlet control.
- (3) Any portion of any emergency spillway excavated into a dam embankment or other fill section must be paved. Pavement material shall be either reinforced concrete or asphalt, as dictated by the design life of the dam and the potential consequences of its failure. Any portion of any emergency spillway excavated into natural ground shall be vegetated in accordance with the practices described in the Manual for Erosion and Sediment Control in Georgia.
- (4) In determining the necessary dimensions of an open-channel spillway for a normally dry basin, a pond, or a lake, the methodology contained in the Earth Emergency Spillway Design Data section of the Manual for Erosion and Sediment Control in Georgia should be used.
- (5) Emergency spillway capacity for dams shall be as follows:
 - a. For normally dry detention basins, ponds, and lakes, having a dam height of less than nine feet and which are incapable of impounding more than 20 acre-feet of water, and for which the probable sequences of dam failure are not severe, an

emergency spillway should be provided. Its capacity should be at least equal to the routed 100-year peak flow out of the detention facility assuming the principal spillway is blocked.

- b. For normally dry detention basins, ponds, and lakes, having a dam height of nine feet or more and which are capable of impounding 20 acre-feet or more of water, an emergency spillway should be provided. Its capacity should be at least equal to the greater of either the routed 100-year peak flow rate out of the facility assuming the principal spillway is blocked, or the routed one-fourth PMF hydrograph out of the facility. In cases when state or federal regulations may require greater spillway capacity, those more stringent regulations shall govern.
- (6) Emergency overflow for non-earth dams may take the form of planned structure overtopping. In such cases, however, care must be taken to prevent flows from eroding supporting soils along the toe of or immediately downstream from the dam so as the cause it to be undermined. The profile of the top of the dam shall be so designed as to prevent flows along the ends of the structure that might result in abutment erosion.
- (g) *Culverts and pipe collection system guidelines.*
- (1) *Culverts.*
- a. 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.
 - b. The maximum velocity in a corrugated metal culvert for the 100-year flow shall be 15 fps (feet per second). Velocities over ten 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.
 - c. The minimum allowable slope shall be in accordance with the stormwater design manual.
- (2) *Pipe collection systems.*
- a. The maximum velocity in a corrugated metal pipe system for the design flow shall be 15 fps. Velocities over ten 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 Georgia Stormwater Management Manual.
 - c. The maximum allowable slope for a concrete storm drainage pipe shall be ten 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 ten percent, anchor collars may be required.
 - d. A minimum pipe cover of one foot shall be required.

(3) *Outlet location; culverts and pipe systems.*

- a. Outlet structures, such as headwalls, shall not be located closer to the project site's property line with an adjoining property than the greater of the distance necessary to construct any velocity protection or a flow distance equal to six pipe diameters. For non-circular conduits, this distance shall be six times the rise dimension of the conduit.
- b. The invert elevation of a culvert or pipe outlet shall be no more than two feet above the elevation of the bottom of the receiving watercourse at the outlet.

(4) *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. Calculations may be required to support this velocity standard on a case-by-case basis.

(5) *Discharge of concentrated flows.*

- a. The discharge of concentrated flows of stormwater into public roadways shall be avoided. In no case shall such concentrated flows, including flows from swales, ditches, draws, driveways, or piped systems, exceed the allowable peak flow rates in Table 9-G, below.

Table 9-G Maximum Flows into Streets	
Street classification	Allowable peak flow rate for a two-year storm
Local	2.0 cfs
Minor collector	1.0 cfs
Other	0.5 cfs

- 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 two acres, unless contained within a piped drainage system or maintained in a natural watercourse. The stormwater conveyance shall be in a drainage easement.

Sec. 34-195. Project close-out.

(a) *Detention facility as-builts, engineer's certification, and record drawings.*

- (1) When a new facility is constructed in a development, a certified record survey of each detention facility shall be prepared by an authorized registered professional currently registered in the state. A certified record drawing of the facility shall be prepared based upon this survey. Based on the actual parameters established on the record drawing, an addendum to the stormwater management report shall be prepared which demonstrates

that the facility, as constructed, complies with the requirements of these regulations. The amended stormwater management report shall be certified by the authorized registered professional. The survey shall be performed after substantial completion and stabilization of the project has occurred. The record 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).

- (2) When a development uses an existing facility without an existing stormwater maintenance bond, the facility shall be cleaned out, if necessary, and a new record survey, drawing and certification showing that the outlet structure exists 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. As an alternative, a new record survey, drawing, study and certification showing that the facility meets the development requirements that were in effect when the facility was approved shall be submitted. The survey shall be performed after substantial completion and stabilization of the project has occurred. The certification and supporting data 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).
- (3) Prior to or concurrent with the recording of a final plat for a subdivision, or issuance of a certificate of occupancy for a non-subdivision project, the developer shall provide acceptable surety, such as a bond or letter of credit, providing for the maintenance of the facility for a period of not less than 18 months. The amount of the surety shall be the greater of 50 percent of construction costs of the facility or 100 percent of the cost to clean out the facility. At the end of 18 months, the city may require the surety to be renewed due to anticipated maintenance caused by such concerns as future construction activity in the basin draining to the facility. A renewed surety may be required up to a total maximum of ten years. The surety for a facility shall be renewed during the ten years until:
 - a. The surface water drainage area within the project has undergone final stabilization and all planned construction activity has been completed;
 - b. All stormwater runoff in the surface water drainage area within the project is coming from undisturbed or stabilized areas;
 - c. At least 90 percent of the lots in that surface water drainage area within the project have been sold to an unrelated party, permanent structures completed and final stabilization achieved;
 - d. The accumulation of acreage of undeveloped lots, lots with no completed permanent structure and no final stabilization within the surface water drainage area within the project is less than five acres or ten percent of the total area of the common development draining to the facility, whichever is greater; and
 - e. Within two months of surety release, the facility shall be cleaned out, if necessary, and a new record survey, drawing and certification showing that the volume of the facility is equal to or greater than the volume shown in the record survey, drawing and certification when the facility was approved. As an alternative, a new record

survey, drawing and certification showing that the facility complies with these regulations as specified in Chapter 18, Article VI Post-Construction Stormwater Management for New Development and Redevelopment, shall be submitted.

(b) *Detention facility maintenance.*

- (1) The detention storage capacity or function of any detention basin, pond or other impoundment, whether natural or manmade, shall not be removed or diminished without the express approval of the department.
- (2) 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 detention pursuant to city requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- (3) In a nonresidential subdivision or project served by a detention facility that provides detention for more than one property or by an off-site facility, the property owners shall enter into a maintenance agreement with the city for maintenance of 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.
- (4) In a nonresidential project with an on-site detention 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.
- (5) Where no maintenance agreement 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 city requirements, to keep the access drive free of obstructions, and to maintain the facility free of obstruction, silt or debris.
- (6) 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 agreement to be entered into between the city and the owner. The schedule shall describe all maintenance and inspection activities and the parties responsible. The maintenance agreement shall be in a form acceptable to the city and shall be recorded in the deed records of the clerk of superior court of the city.

Secs. 34-196—34-213. Reserved.

ARTICLE IX. PERFORMANCE GUIDELINES

Sec. 34-214. General requirements.

- (a) *Purpose.* 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) *Constraints.* The alternative design solutions are constrained by the design requirements of article IV of this chapter, the access requirements and street and right-of-way requirements and the street construction standards of article V of this chapter, and the grading, detention, drainage requirements of article VII of this chapter, as well as the purpose and intent of these regulations.
- (c) *Documentation required.* In the event that an alternative is suggested by the applicant, studies and reports conducted by professionals currently certified in the state 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.

Sec. 34-215. Lots.

- (a) *Lots design, HLP, RDP and RDS.* Lots should be designed generally such that they are no more than four times as deep as they are wide at the building setback line, unless excepted by the director.
 - (1) The department may require notation that a house location plan (HLP) is required to be approved prior to issuance of a building permit on certain lots when particular care in locating the house or other improvements will be necessary. Such lots include, but are not limited to:
 - a. A lot which presents particular or unusual difficulties for a builder to meet minimum required building setbacks;
 - b. A lot upon which is located an easement of unusual configuration;
 - c. A lot containing floodplain, but upon which no fill or other encroachment into the floodplain is anticipated at the time the final plat is filed;
 - d. A lot upon which is located all or a part of a stormwater detention facility;
 - e. A lot upon which is located a buffer which was required by the zoning resolution as a condition of zoning approval;
 - f. All duplex lots;
 - g. All lots within, or partially within, the Chattahoochee River Corridor, or containing a River Corridor Tributary Buffer Zone.
 - (2) The department may require notation that a residential drainage plan (RDP) is required to be approved prior to issuance of a building permit on certain lots where additional (site specific) engineering will be necessary to properly grade the lot or locate the building or other improvements. Such lots include, but are not limited to:

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- a. A lot containing floodplain where fill or other encroachment into the floodplain is planned or reasonably expected;
 - b. A lot containing severe topographic features interdicting the building site;
 - c. A lot containing a drainage easement with a pipe discharge or other facilities, or flow characteristics which may adversely affect the location of a building or other site improvements.
- (3) The department may require notation that a residential drainage study (RDS) is required to be approved prior to issuance of a building permit on certain lots where particular attention to site grading will be necessary, but formal engineering is not needed. Such an RDS is conducted in the field where the effect of the site grading must be accomplished with adequate care so as not to create a drainage problem on neighboring property.
- (b) *Side lot lines.* Side lot lines generally should be at right angles (90 degrees) to straight street lines or radial to curved street lines as much as practical. Side lot lines should be radial to the radius points of all cul-de-sacs. Variations of more than ten degrees shall require approval of the department, but shall be approved when appropriate to the reasonable loading pattern of the subdivision, efficient use of the land relative to topographic conditions, or provisions of improved building sites over those which would result without variation of the side lot lines.
- (c) *Corner lots.* Corner lots shall be sufficiently larger so that they have the same width between minimum side setback lines as an interior lot, but in no case shall more than 75 feet between side setback lines on a corner lot be required.

Sec. 34-216. Blocks.

- (a) *Length, width and shape.* The lengths, widths, and shapes of blocks shall be determined with regard to:
- (1) Provision of adequate building sites suitable to the special needs of the type of use contemplated;
 - (2) Applicable zoning requirements as to lot size and dimensions;
 - (3) Needs for convenient access, circulation, control, and safety of street traffic;
 - (4) Limitations and opportunities of topography.
- (b) *Pedestrian access.* In blocks over 1,000 feet long, the director may, when existing or proposed pedestrian circulation patterns or public gathering places so justify, require pedestrian ways or pedestrian access easements, as appropriate, through the block.

Sec. 34-217. Access.

Mixed-Use Redevelopment (MUR) Overlay District. Developments in a MUR Overlay District shall be designed with vehicle and pedestrian access between or among all uses within the development and between or among all contiguous external commercial, office, or multifamily property, developed or undeveloped. The director may grant a modification if it is

demonstrated that a specific inter-parcel connection is not feasible due to traffic safety, topography or other development consideration.

Sec. 34-218. Roadway design.

(a) *Street grades and design speeds.*

- (1) Minimum grade for all local and minor collector streets shall be 1.5 percent. Minimum grades for all major collector and arterial streets shall conform to state DOT practice.
- (2) Minimum grade of less than 1.5 percent on a local street may be approved by the department, based on adequate engineering designs, where at least 1.5 percent 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 these regulations. 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.
- (3) Minimum vehicle design speeds and maximum grades allowable in the city by street classification shall be as shown in Table 9-A.
- (4) Maximum grade on any cul-de-sac turnaround shall be six percent.

Table 9-A
Minimum Design Speeds and Maximum Grades

Street Category	Maximum Grade	Design Speed
Principal arterial	6%	60 MPH
Major arterial	8%	50 MPH
Minor arterial	10%	40 MPH
Major collector	10%	40 MPH
Minor collector	10%	30 MPH
Local	15%*	20 MPH

*Grades between 12 percent and 14 percent shall not exceed a length of 150 feet and shall require an "as-graded" survey prior to the installation of the curb or utilities. The distance shall be measured as the tangent length between points of curvature.

(b) *Vertical street alignment.*

- (1) All changes in street profile grades having algebraic difference greater than one percent 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., $L=KA$).
- (2) Constant (K) values are shown in Table 9-B for both desirable and minimum acceptable ("hardship") conditions. In all cases, the "desirable" value shall be used, unless it cannot be achieved due to topographic conditions beyond the developer's control. In such hardship situations, the department may approve a lesser value to the extent required by the hardship situation, but in no event less than the value shown in the Table as "minimum."

Table 9-B
Constant (K) Values for Vertical Curves

Street Category	Crest Curves		Sag Curves	
	Minimum	Desirable	Minimum	Desirable
Principal arterial	200	320	125	155
Major arterial	100	170	80	110
Minor arterial	55	80	55	70
Major collector	55	80	55	70
Minor collector	30	30	35	35
Local	10	10	20	20

(c) *Horizontal street alignment.*

- (1) All new streets shall adhere to the following standards governing horizontal curvature and superelevation:

Table 9-C Horizontal Curves

Street Category	Minimum Radius (FT)	Maximum Superelevation
Principal arterial	1333	0.06
Major arterial	833	0.06
Minor arterial	560	0.04
Major collector	560	0.04
Minor collector	300	0.04*

Local	120	0.00

*No superelevation will be allowed on minor collectors internal to residential subdivisions.

- (2) Superelevation for horizontal curves shall be calculated utilizing the following formula:

R = minimum radius curve.

v = vehicle design speed (MPH).

e = rate of superelevation (decimal of a foot rise per foot roadway).

f = side friction factor.

R	=	$\frac{v^2}{15(e + f)}$
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Vehicle Design Speed (v)	30	40	50	60
Side Friction Factor (f)	.16	.15	.14	.12

- (3) Widening section along existing streets shall be designed reflecting existing curvature and superelevation, if any, unless the existing street has been included in a specific design by the city or state DOT which calls for different standards, in which case the project will be coordinated with the overall design.
- (4) Superelevation runoff. Roadway edge curves shall be provided for tangent runoff (bringing edge from a normal crown to centerline elevation) and superelevation runoff (from the end of tangent runoff to the point of design superelevation) in accordance with design standards of the state department of transportation or other professional engineering standards.
- (5) Tangents and compound curves. Between reverse horizontal curves there shall be not less than the minimum centerline tangents shown in Table 9-D, unless otherwise specified by the state department of transportation. 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, the ratio of the flatter radius to the sharper radius shall not exceed 1.5 to 1.

Table 9-D Tangents

Street Category	Minimum Tangent Length	Desirable Tangent Length
Principal arterial	150 feet	180 feet
Major arterial	125 feet	150 feet
Minor arterial	100 feet	120 feet
Major collector	100 feet	120 feet
Minor collector	75 feet	90 feet
Local	50 feet	60 feet

Note: Minimum tangents are based on the distance traveled in 1.7 seconds at the design speed for each category of street. Desirable length is based on distance traveled in 2.0 seconds.

(d) *Horizontal and vertical clearances.*

(1) *Horizontal clearances.*

- a. 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.
- b. Along all public streets, a clear zone shall be provided for a minimum distance of six feet from back of curb or edge of pavement wherein nothing may be located above ground level except traffic/street signs, public utility structures, and mailboxes.
- c. At selected locations, such as the outside of a sharp curve, a wider clear zone with greater horizontal clearances provided to any roadside obstruction may be required.
- d. The department of transportation, in accordance with O.C.G.A. § 32-6-51, 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.

- (2) *Vertical clearances.* Vertical clearance at underpasses shall be at least 14.5 feet over the entire roadway width.

(e) *Traffic calming for local residential streets.*

- (1) Subdivision streets shall be designed in accordance with the city traffic calming guide so as to encourage and maintain maximum operating speeds in the 25 to 30 miles per hour range. The maximum length of roadway section between speed control points, as defined by the traffic calming guide, shall be 500 feet.
- (2) The traffic-calming plan is subject to review and approval by the department of transportation. The director of the department of transportation may grant modifications.

Sec. 34-219. Street intersections.

- (a) *Angle of intersection.* Intersections shall generally be at right angles and shall not be at an angle of less than 85 degrees unless approved by the department, or less than 80 degrees unless the intersection is signalized in which case the angle of the intersection may be reduced subject to the review and approval of the traffic engineer.

- (b) *Maximum grade.* Street intersections should be designed with a flat grade wherever possible, but in no case should the grade exceed two percent in normal situations (or four percent in topographical hardship situations on local streets).

(c) *Intersection approaches; horizontal alignment.*

- (1) 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. Minor 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.
- (2) 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.

(d) *Intersection approaches; vertical alignment.*

- (1) For intersections with local or minor collector streets, a leveling of the street at a grade not exceeding two percent shall be provided but no level approach distance is required for streets approaching at less than seven percent, and a minimum 25 foot level approach distance shall be provided for streets approaching at a grade of seven percent or more. (See section 34-83, standard drawings.)

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- (2) As a street approaches an intersection with a major thoroughfare, there shall be a suitable leveling of the street at a grade not exceeding two percent and for a distance not less than the following minimums:

Table 9-E
Approach Distances at Major
Intersections

Approaching Street Category	Minimum Approach Distance
Principal arterial	100 feet
Major arterial	100 feet
Minor arterial	100 feet
Major collector	75 feet
Minor collector	75 feet
Local	50 feet

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

- (e) *Intersection radii.* Intersection radii for roadways measured at back of curb and for the right-of-way lines shall be as follows. For intersecting streets of difference classification, the larger radii shall be provided. In all cases, adequate right-of-way shall be provided to maintain a minimum of 11 feet from back-of-curb. Larger radii may be required for streets intersecting at angles less than 90 degrees.

Table 9-F
Intersection Radii

Street Category	Roadway Radii	R/W Radii
Arterial	40 feet	20 feet
Major collector	40 feet	20 feet
Minor collector-Residential	25 feet	9 feet

Minor collector- Nonresidential	40 feet	20 feet
Local-Residential	20 feet	9 feet
Local- Commercial or Office	25 feet	11 feet
Local-Industrial	40 feet	25 feet

*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.

- (f) *Islands.* 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 three 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.
- (g) *Intersection corner sight distance.*
 - (1) Intersections shall be designed with adequate corner sight distance for each street which approaches a street in an equal or higher street category (except an intersection of two local streets). Where necessary, backslopes shall be flattened and horizontal or vertical curves lengthened to provide the minimum required sight distance.
 - (2) The minimum corner sight distance from the approaching street shall be equal to or exceed ten times the regulated speed of the intersecting street, as measured from the center of the approaching street in both directions along the right-of-way line of the intersecting street. As an alternative, the minimum corner sight distance requirement may be calculated using AASHTO "Policy on Geometric Design of Highways and Streets," Chapter 9 (at-grade intersections), latest edition. The sight distance shall provide clear visibility of an object four feet above the intersecting street viewed from the centerline of the approaching street at the right-of-way line of the intersecting street, at a height of 3.5 feet above the ground.
- (h) *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:
 - (1) There shall be no fence or wall or hedge higher than three feet.
 - (2) There shall be no obstruction to vision, other than a post or column or tree (except standards erected by the city) not 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.

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- (i) *Turning lanes at intersections.* Left turning lanes shall be provided on all new internal project streets, classified as a minor collector or major thoroughfare, 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 following criteria:

- (1) Storage length: A minimum of 150 feet of storage length for turning lanes on any arterial roadway shall be used. A minimum of 100 feet of storage length for turning lanes on all collectors shall be used.
- (2) Taper length: The minimum taper length shall be 50 feet.
- (3) Left turning lanes from arterial roads shall be subject to longer storage lengths and tapers as determined on a case by case basis.

(Ord. No. 2013-01-02, art. 9, § 9.6, 1-29-2013)

Sec. 34-220. Driveway intersections.

- (a) *Angle and improvements.* Driveways shall generally intersect streets at right angles. The portion of a driveway located within a public right-of-way shall be paved, if any. Driveways providing access to parking lots which contain six more spaces shall be paved in accordance with the parking lot requirements of the zoning resolution.

- (b) *Driveway design standards.*

- (1) Driveways serving single-family detached or duplex residences may be no less than ten feet wide at the right-of-way line and shall provide a radius to the back of curb or edge of pavement of the roadway of no less than five feet. All other driveway curb cuts on public streets shall conform to the standards shown on the driveway details contained in the standard drawings, by land use type, as follows:

- a. Driveway Detail 1 (32-foot width, 25-foot radius) for:

1. Service stations;
2. Commercial sites (over 80,000 square feet);
3. Office/institutional complexes (over 100,000 square feet);
4. Apartment/condo complexes (over 200 units); and
5. Mobile home complexes (over 200 lots).

- b. Driveway Detail 2 (28-foot width, 25-foot radius) for:

1. Commercial sites (80,000 square feet or less);
2. Office/institutional complexes (100,000 square feet or less);
3. Apartment/condo complexes (200 units or fewer); and
4. Mobile home complexes (200 lots or fewer).

- c. Driveway Detail 3 (32-foot width, 40-foot radius) for: Industrial sites.

- d. Driveway Detail 4 (optional design with island) for:

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1. Private commercial/office street entrances;
 2. Private entrances to apartment/condo complexes (over 200 units); and
 3. Private entrances to mobile home complexes (over 200 lots).
- (2) All driveways and driveway curb cuts on state highways shall conform to state DOT standards unless city requirements are more restrictive.
- (c) *Auxiliary lanes.* Along any major thoroughfare, a deceleration lane, acceleration lane, larger turning radius, traffic islands, or other devices or designs may be required to avoid specific traffic hazards which would otherwise be created by the proposed driveway location.
- (d) *Corner sight distance.* All driveways approaching a minor collector or major thoroughfare shall provide adequate corner sight distance. The minimum corner sight distance from the driveway shall be equal to or exceed ten times the regulated speed of the intersecting street, as measured from the center of the driveway in both directions along the right-of-way line of the intersecting street. As an alternative, the minimum corner sight distance requirement may be calculated using AASHTO "Policy on Geometric Design of Highways and Streets," Chapter 9 (at-grade intersections), latest edition. The sight distance shall provide clear visibility of an object four feet above the intersecting street viewed from the centerline of the driveway at the right-of-way line of the intersecting street, at a height of 3.5 feet above the ground.
- (e) *Separation and spacing.* All driveways except those serving residential units on individual lots shall be recommended to meet the following criteria:
- (1) Minimum separation from a street intersection: 100 feet from centerline of driveway to nearest right-of-way line of the intersecting street, extended. For any driveway on a major thoroughfare having a centerline between 100 feet and 200 feet from the intersecting street right-of-way line, access restriction may be imposed to avoid traffic hazards. Greater separation may be required for safe operation of a free right lane, acceleration or deceleration lane, etc.
 - (2) Minimum separation between driveways along the same side of a major thoroughfare: 100 feet between centerline as measured along the roadway edge or back of curb.
 - (3) Whenever possible, proposed driveways along one side of a street shall coincide with existing or proposed driveways on the opposite side of such street.
 - (4) Maximum number of driveways serving a single project: one for each 400 feet of property frontage, or fraction thereof, per street, along a major thoroughfare. This is not meant to be a spacing standard but only an expression of the total number of driveways that are permitted serving a single project.

Sec. 34-221. Reserved.

Sec. 34-222. Reserved.

Secs. 34-223—34-252. Reserved.

ARTICLE X. PLAN AND PLAT SPECIFICATIONS

Sec. 34-253. Concept plan specifications.

The following subsections outline the required elements of both the required and optional plans and plats mentioned throughout these regulations, and especially in articles III and X of this chapter.

- (1) *Size.* The concept plan 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 48 inches by 36 inches; provided, however, a scale of 200 feet to one inch may be used to avoid sheets in excess of 48 inches by 36 inches. The director may approve other scales and sheet sizes as deemed appropriate.
- (2) *Freehand drawing (approximate scale).* The concept plan may be prepared as a free hand drawing to approximate scale of the proposed improvements, rights-of-way, lot lines, etc., shown on a boundary survey or other property outline map of the property.
- (3) *List of what is required to be shown.* The concept plan shall contain the following:
 - a. Approximate total acreage.
 - b. Proposed total number of lots and minimum lot size.
 - c. Size and location of adjoining existing streets or access drives and proposed rights-of-way, roadways, and access drives.
 - d. For multifamily and nonresidential site developments (not subdivisions), the approximate location and arrangement of buildings, parking areas, and other improvements, including stormwater detention areas, and all required buffers.
 - e. Topography with contour intervals no greater than ten feet.
 - f. Proposed method of sewage disposal (expressed as a note).
 - g. Boundary lines of the overall property showing bearings and distances along all lines and the bearings and distance to an existing street intersection or other recognized permanent landmark. The source of said boundary information shall be indicated.
 - h. All contiguous property under the ownership or control of the developer, except those lands of a dissimilar zoning category specifically approved to be excluded by the department. Areas not planned at the time of the submittal shall be shown as "future development."
 - i. Authorization statement on concept plan to read as follows:

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

Signature of Authorized Agent/Owner	Date
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- j. Location sketch (vicinity map).
- k. Location and size (in acres) of lakes, ponds, wetlands and floodplains and the source of the information.
- l. Required recreation areas, and other public areas to be dedicated to the public or held in common ownership by a homeowner's association or other similar entity.
- m. Existing zoning of the property and adjoining properties.
- n. Land lot and district.
- o. Subdivider's name, local, and permanent (if different) address and phone number.
- p. Name of company or person who prepared plan, local and permanent River Tributary Protection Areas, if applicable to the property.
- q. Boundaries of the Chattahoochee River Corridor and Chattahoochee River Tributary Protection Areas, if applicable to the property.
- r. General development data (in tabular form) for individual multifamily or nonresidential site developments, such as number of residential units, number of gross square feet of nonresidential floor area by building, number of parking spaces, number of stories, etc.
- s. General development data (in tabular form) for single-family developments, such as minimum lot size, floor area, and all relevant conditions of zoning.
- t. Signature block to read as follows:
This Concept Plan has been reviewed and approved for general compliance with the Zoning Resolution and Development Regulations of Mulberry, Georgia.

Director, Department of Public Works	Date
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- (4) *Concept plans for developments in a Mixed-Use Redevelopment (MUR) Overlay District.* Concept plans for developments in a MUR Overlay District must be prepared by authorized registered professionals, planners, and/or architects. A concept plan without all required plan elements shall not be accepted for plan review processing. In addition to the items required for concept plans contained in this section, concept plans in a MUR Overlay District shall contain additional information and plan elements as follows:
- a. Location, footprint, number of residential units, nonresidential floor space, and stories for non-single-family residential structures.

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- b. Proposed street networks, including street cross sections indicating conformance with MUR Overlay District design standards.
 - c. Location and size (in acres and square feet) of uses and pods, including number of units and/or amount of square feet of each use and pod.
 - d. Location and size (in acres and square feet) of plaza, common areas, parks, recreation areas and similar amenity areas.
 - e. Location of greenways, paths, bike routes, etc., both on-site and within 1,000 feet of the project boundary that will be used to promote connectivity.
 - f. Location of stormwater management facilities and BMPs. If these facilities are proposed for inclusion in required common area calculations, detailed design plans of these facilities shall be required.
 - g. Location of proposed landscaped areas and features.
 - h. Proposed phases or stages of development.
 - i. Location of off-street and on-street parking areas and detail drawings of any required decorative fencing or screening.
 - j. Location of transit stops and/or features to be used for public transit. The plan designer shall incorporate transit stops and options into the plan design subject to coordination with the department of transportation.
 - k. A pedestrian access plan (subject to the review and approval by the director) that shall indicate the location of, and connectivity between and among, sidewalks, paths, trails and bike routes. The plan shall also include provisions and details for bike racks, street furniture and directional signage.
 - l. A street and pedestrian lighting plan (subject to the review and approval by the director) that shall include the location and details of lighting fixtures.
 - m. An architectural design plan, subject to the review and approval by the director, that shall include building elevations for each use type and including decorative elements for such items as fountains, street furniture, outdoor restaurant seating, etc.
 - n. A unified signage plan (subject to the review and approval by the director) that shall include typical sign locations, elevations, and construction materials for all signage.

Sec. 34-254. Subdivision development plans.

- (a) *What consists of a development permit for a subdivision.* An application for a development permit for a subdivision shall consist of the preliminary plat, a certified boundary survey, associated slope or construction easements (if any), and such other development plans as may be required by these regulations.
- (b) *Conformation to concept plan.* The development plans shall generally conform to the concept plan, if any, and may constitute only that portion of the approved concept plan which the subdivider proposes to construct at one time as a single unit, provided that such

portion conforms to the requirements of these rules and regulations. If no concept plan was approved on the property, the development plans shall include the entire property being developed within the same zoning category.

- (c) *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 48 inches by 36 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 ten feet to one inch.
- (d) *Certified boundary survey.*
 - (1) The preliminary plat shall be based on a certified boundary survey delineating the entirety of the property contained within the 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 one in 10,000, and shall meet all requirements of state law regarding the recording of maps and plats.
 - (2) Each preliminary plat shall be drawn on, accompanied by, or referenced to a boundary survey which shall at least meet the requirements of subsection (d)(1) of this section.
- (e) *List of what is required to be shown.* The preliminary plat shall contain the following:
 - (1) Proposed name of subdivision.
 - (2) Name, address, and telephone number of the owner of record, and of the subdivider (if not the owner).
 - (3) Name, address, and telephone number of each professional firm associated with the development plans (engineer, surveyor, landscape architect, etc.).
 - (4) Date of survey, north point, and graphic scale, source of vertical datum, date of plat drawing, and space for revision dates.
 - (5) Proposed use of the site, such as single-family detached residences, duplexes, townhouses, office park, industrial subdivision, etc. For residential, indicate total number of dwelling units within plat.
 - (6) Location (land district and land lot), acreage, and density (if applicable).
 - (7) Location sketch locating the subdivision in relation to the surrounding area with regard to well-known landmarks, such as major thoroughfares or railroads. Sketches may be drawn in freehand and at a scale sufficient to show clearly the information required, but not less than one inch equal to 2,000 feet. U.S. Geological Survey maps may be used as a reference guide for the location sketch.
 - (8) Name of former subdivision if any or all of the land in the preliminary plat has been previously subdivided, showing boundaries of same.
 - (9) Boundary lines of the perimeter of the tract indicated by a heavy line giving lengths in feet and hundredths of a foot, and bearings in degrees, minutes, and seconds. Bearing and distance to designated tie point.
 - (10) Directional flow arrows for street drainage and individual lot drainage when finished grading of lots is not shown.

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- (11) Contour lines based on sea level datum, or other datum acceptable to the department. These shall be drawn at intervals of not more than two feet. Contour lines shall be based on field surveys or photogrammetric methods from aerial photographs. The basis for the topographic contour shown shall be specified and dated.
 - (12) Natural features within the proposed subdivision, including drainage channels, bodies of water, and other known significant features, such as extensive exposed rock. On all water courses leaving the tract, the direction of flow shall be indicated. The 100-year floodplain shall be outlined and the source of the depicted floodplain information shall be indicated. For those lots containing floodplain, a floodplain lot chart shall be provided showing the area (in square feet) of each lot lying inside and outside of the floodplain as though the land disturbance activity were completed.
 - (13) Manmade and cultural features existing within and adjacent to the proposed subdivision, including existing right-of-way measured from centerline, pavements widths, and names of existing and platted streets; all easements, city, and city jurisdiction lines; existing structures on the site and their disposition, Chattahoochee River Corridor information and limits of Chattahoochee River Tributary Protection Area (if applicable), and other significant information. Location and dimensions of existing bridges; water, sewer, and other existing utility lines and structures; culverts and other existing features should be indicated.
 - (14) Proposed layout, including lot lines, lot numbers, and block letters; proposed street names, roadway and right-of-way lines; and sites reserved through covenants, easement, dedication, or otherwise for public uses. Lots shall be numbered in numerical order and blocks lettered alphabetically.
 - (15) The minimum building setback line from all streets. Streets shall be dimensioned to show right-of-way and roadway widths, central angles, intersection radii, and cul-de-sac roadway and right-of-way radii. Centerline curve data shall be provided for all roadway curves (radius, length, amount of superelevation (if any), point of curvature (P.C.), point of tangency (P.T.), etc.), if not shown separately on construction drawings.
 - (16) Identify unit number, division, or stage of development, if any, as proposed by the subdivider.
 - (17) Existing zoning of the property. Rezoning and variance case numbers, dates of approval and conditions (as applicable). Note minimum lot size and minimum yard setback requirements, and other applicable zoning requirements. Show and dimension any required buffers, landscape strips, no-access easements, etc. Note any approved waivers from these regulations.
 - (18) All adjoining property owners, subdivision names, lot numbers and lot lines, block letters, and zoning.
 - (19) Location of all known existing or previously existing landfills.
 - (20) Proposed recreation area, if any; area of the site; area and percent of site within the 100-year floodplain; proposed disposition of the site (public ownership, homeowners association, etc.).

(21) Such additional information as may be reasonably required to permit an adequate evaluation of the subdivision.

- (f) *Certificate of development plans approval.* Each preliminary plat shall carry the following certificate printed or stamped thereon:

All requirements of the Mulberry Development Regulations relative to the preparation and submission of a subdivision development 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 regulations, approval is hereby granted, on this Preliminary Plat and all other development plans associated with this subdivision, subject to all further provisions of said Development and other City existing Regulations.

Director, Department of Public Works	Date
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THIS CERTIFICATE EXPIRES SIX MONTHS FROM THE DATE OF APPROVAL
UNLESS A DEVELOPMENT PERMIT IS ISSUED.

Note: The boundaries of the lots shown on this Plat have not been surveyed. This Plat is not for recording.

- (g) *Other development plans to accompany preliminary plat.* The preliminary plat shall be accompanied by other development plans showing the following information when same is not shown on, or evident from, the preliminary plat. The various plans may be combined where appropriate and clarity can be maintained.
- (1) Erosion control plan prepared in accordance with the requirements of the soil erosion and sediment control ordinance. Erosion control measures may be shown on the grading plan, if desired.
 - (2) Grading plan prepared in accordance with the requirements of article VII of this chapter if grading is proposed beyond the street right-of-way.
 - (3) Stormwater drainage construction data.
 - a. Location and size of all proposed drainage structures, including detention ponds, catchbasins, grates, headwalls, pipes and any extensions thereof, energy dissipators, improved channels, and all proposed drainage easements to be located outside street right-of-way lines.
 - b. Profiles of all storm drainage pipes and slope of receiving channels. On storm drainage profiles, a pipe chart will be shown which will include pipe numbers, pipe size, pipe material, pipe slope, pipe length, contributing drainage area, design flow, design storm frequency, runoff coefficient and velocity. The hydraulic grade line will be shown on all pipes for the required design flow.
 - c. Profiles of all open channels and ditches, including Manning's 25-year storm normal depth and velocity. On storm drainage profiles, an open channel chart will

be shown which will include open channel numbers, conveyance size, lining material, length, channel slope, contributing drainage area, design storm frequency, runoff coefficient and velocity.

- d. Hydrological study used in determining size of structures, including map of all contributing drainage basins and acreage.
- (4) If sanitary sewers are required by water pollution control, sanitary sewer plans, including the location and size of all proposed sewer lines, manholes, and any easements required therefore, together with sufficient dimensions to locate same on the ground.
- (5) Construction data for new streets and street widenings.
 - a. Centerline profiles and typical roadway sections of all proposed streets, as well as plans and profiles for all proposed major thoroughfares. Typical roadway sections shall be provided for street widenings.
 - b. Where sanitary or storm sewers are to be installed within a street, the grade; size, location, and bedding class of pipe; location and invert elevation of manholes shall be indicated on the road profile.
 - c. Profiles covering roadways that are extensions of existing roadways shall include elevations at 50 foot intervals for such distance as may be adequate to provide continuity consistent with the standards required by the regulations for street improvements, but no less than 200 feet.
 - d. All elevations shall be coordinated and tied into U.S. Coast and Geodetic Survey or Department of Transportation bench marks, where feasible, or into reference monuments established by the Federal Emergency Management Agency.
 - e. Stub streets shall be profiled at least 200 feet onto adjoining property (no tree cutting).
- (6) Buffer and landscape plan, if any such areas exist within the subdivision, prepared in accordance with the specifications under this article, the requirements of article IV of this chapter, and the requirements of the buffer, landscape, and tree ordinance.
- (7) Tree preservation/replacement plan (if required by the tree protection ordinance).
- (8) Floodplain management plans. If any floodplain areas are located on the property, such data as is required by the floodplain management ordinance of these regulations shall be submitted.
- (h) *Encroachments*. Where construction is proposed on adjacent property, an encroachment agreement or easement shall be submitted to the department.

Sec. 34-255. Final plat specifications.

- (a) *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 (one inch equals 100 feet) or larger. Sheet size shall not exceed 48 inches by 36 inches. (Any sheet that is larger than 17 inches by 22 inches must be photographically reduced to

no more than 17 inches by 22 inches in order to be recorded with the clerk of the superior court.)

- (b) *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 one in 10,000, and shall meet all requirements of state law regarding the recording of maps and plats.
- (c) *Conformity to 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 subdivider proposes to record at any one time, provided that such portion conforms to the requirements of these regulations, 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.
- (d) *List of what is required to be shown.* The final plat shall contain the following information:
 - (1) Name of the subdivision, unit number, land district, and land lot number.
 - (2) Name, address, and telephone number of owner of record and the subdivider (if not the owner).
 - (3) Name, address, and telephone number of each professional firm associated with the portion of the subdivision within the final plat (engineer, surveyor, landscape architect, etc.).
 - (4) Date of plat drawing, graphic scale, north point; notation as to the reference of bearings to magnetic, true north or grid north, and indication whether bearings shown are calculated from angles turned.
 - (5) Location sketch of tract showing major surrounding features.
 - (6) Name of former subdivision, if any or all of the final plat has been previously recorded.
 - (7) Case number and date of approval for any applicable rezoning, special use permit, variance or waiver affecting the property.
 - (8) Location and dimension of any buffer, landscape strip, special setback, no-access easement, etc., required by the zoning resolution or these regulations.
 - (9) Boundary lines of the tract, to be indicated by a heavy line, giving distances to the nearest one-hundredth foot and bearings to the nearest second. Bearing and distance to designated tie point shall be shown. The plat shall have a closure precision of one foot in no less than 10,000 feet.
 - (10) Municipal or city jurisdictional lines approximately tied to the lines of the subdivision by distance and angles when such lines traverse or adjoin the subdivision; land lot lines traversing or adjoining the subdivision shall also be indicated.
 - (11) Locations, widths, and names of all streets and alleys within and immediately adjoining the plat, the location and widths of all internal public crosswalks, and all other public rights-of-way.

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- (12) Street centerlines showing angles of deflection and standard curve data, including radii, length of arcs and tangents between curves, point of curvature (PC) and point of tangency (PT).
 - (13) Lot lines with dimensions to the nearest one-tenth of a foot and bearings to the nearest second, and radii of rounded corners, as necessary to delimit each lot.
 - (14) Building setback lines along streets with dimensions.
 - (15) When lots are located on a curve or when side lot lines are at angles other than 90 degrees, the lot width measured in accordance with the provisions of the zoning resolution may be required to be shown, if deemed necessary by the department for clarity.
 - (16) Lots numbered in numerical order and blocks lettered alphabetically.
 - (17) Location and size of all drainage pipe, location and extent of detention ponds, the location and size of all public water mains and fire hydrants, and the location, dimensions, and purpose of any easements, including construction or slope easements, if required.
 - (18) Location of any areas to be reserved, donated, or dedicated to public use with notes stating their purpose and limitations. Location of any areas to be reserved by private deed covenant for common use of all property owners, or dedicated to a homeowner's association.
 - (19) A statement of private covenants, if any, and they are brief enough to be put directly on the plat; otherwise, if covenants are separately recorded, a statement as follows:

This plat is subject to the covenants set forth in the separate document(s) attached hereto dated _____, which hereby become a part of this plat, and which were recorded _____ and signed by the owner.
 - (20) Accurate location, material, and description of monuments and markers (all monuments shall be in place prior to approval of the final plat.)
 - (21) Certificates and statements specified in these regulations, below.
 - (22) All information required under the Georgia Metropolitan River Protection Act for recording of plats, if applicable.
 - (23) Extent of the 100-year floodplain and a floodplain chart showing the area within and outside the floodplain for each lot containing any portion of the 100-year floodplain. Origin of the floodplain data shall be indicated.
 - (24) Street address numbers and block number designations for street name signs on abutting streets, where appropriate.
 - (25) Individual lots shall be designated HLP (house location plan), RDP (residential drainage plan) and/or RDS (residential drainage study) if such are required by the department to be approved prior to issuance of a building permit.
 - (26) All other notes or notations as may be required by the department.

- (e) *Warranty deed.* 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.
- (f) *Property owner's association.* If any lands are shown on the final plat for dedication to a property owner's association in order to meet minimum park or open space requirements of these regulations, a copy of the deed of transfer for such dedication and a copy of the instrument of incorporation of the property owner's association shall be submitted with the final plat application.
- (g) *Certificates.* Each final plat shall bear the following certificates or statements printed or stamped thereon as follows:

(1) *Final registered land surveyor's certificate.*

It is hereby certified that this plat is true and correct as to the property lines and all improvements shown thereon, and was prepared from an actual survey of the property made by me or under my supervision; that all monuments shown hereon actually exist, and their location, size, type and material are correctly shown. The field data upon which this plat is based has a closure precision of one foot in _____ feet and an angular error of _____ per angle point, and was adjusted using _____ rule. This plat has been calculated for closure and is found to be accurate within one foot in _____ feet, and contains a total of _____ acres. The equipment used to obtain the linear and angular measurements herein was _____.

By: REGISTERED GEORGIA LAND SURVEYOR	
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REG NO _____

DATE OF EXPIRATION _____

(2) *Owners acknowledgment and declaration.*

STATE OF GEORGIA, CITY OF GWINNETT

The owner of the land shown on this plat and whose name is subscribed hereto, in person or through a duly authorized agent, acknowledges that this plat was made from an actual survey, and dedicates by this Acknowledgement and Declaration to the use of the public forever all streets, sewer collectors, lift stations, drains, easements, and other public facilities and appurtenances thereon shown.

SIGNATURE OF SUBDIVIDER	DATE SIGNED

PRINTED OR TYPED NAME OF SUBDIVIDER	
SIGNATURE OF OWNER	DATE SIGNED
PRINTED OR TYPED NAME OF OWNER	

- (3) *Final plat approval.* The director of public works certifies that this plat complies with the zoning resolution and the development regulations, and that it has been approved by all other operational city departments, as appropriate. This plat is approved subject to the provisions and requirements of the development performance and maintenance agreement executed for this project between the owner and Mulberry.

The Director of the Department of Planning & Development certifies that this plat complies with the Zoning Resolution and the Development Regulations, and that it has been approved by all other operational City departments, as appropriate. This plat is approved subject to the provisions and requirements of the Development Performance and Maintenance Agreement executed for this project between the Owner and Mulberry.

DATED THIS ____ DAY OF ____, 20__.

DIRECTOR, DEPARTMENT OF PUBLIC WORKS

- (4) *Environmental health department certification (for subdivisions served by septic tanks).*

The lots shown hereon have been reviewed by the Environmental Health Department and with the exception of lots _____ are approved for development. Each lot is to be reviewed by the Environmental Health Department and approved for septic tank installation prior to the issuance of a building permit.

DATED THIS ____ DAY OF ____, 20__.

BY:

TITLE:
ENVIRONMENTAL HEALTH DEPARTMENT

(5) *Public notice - drainage.*

- a. Every residential final plat shall contain the following statements:
 1. NOTE: Mulberry 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 subdivision plat.
 2. NOTE: Stream buffer easements are to remain in a natural and undisturbed condition.
 3. NOTE: Structures are not allowed in drainage easements.
- b. Every nonresidential final plat shall contain the following statement:
 1. NOTE: Mulberry 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 subdivision plat. Mulberry does not assume the responsibility for the maintenance of pipes in drainage easements beyond the city right-of-way.
 2. NOTE: Stream buffer easements are to remain in a natural and undisturbed condition.
 3. NOTE: Structures are not allowed in drainage easements.

(6) *R-ZT and R-TH fee-simple layout plan.* Every final plat for a subdivision zoned R-ZT or R-TH and proposing single-family detached houses on fee-simple ownership lots shall contain the following statement:

NOTE: Lot layout plan is required on each lot to be approved by the Department prior to a building permit being issued. This lot layout plan must be drawn to scale on a copy of a certified boundary survey of the lot. It must show all proposed improvements and easements on the lot and must indicate compliance with the requirements of the Zoning Resolution or conditions of zoning approval. It shall be the builder's responsibility to ensure that the house is staked out on the site to match the approved lot layout plan.

(7) *House location plans (HLP).* On any final plat containing a lot for which a house location plan approval will first be required prior to issuance of a building permit, the following statement shall be included:

HLP - HOUSE LOCATION PLAN

A House Location Plan shall be required to be approved by the Department prior to issuance of a Building Permit on those lots labeled "HLP". A House Location Plan is a scale drawing submitted by the builder at the time of permit. It is not required that this plan be prepared by an authorized registered professional. The purpose of this plan is to ensure that the house is properly located on the lot. Please refer to the Mulberry Development Regulations or contact the Mulberry Department of Planning and Development for further information.

- (8) *Residential drainage plan (RDP) or study (RDS).* On any final plat containing a lot for which a residential drainage plan (RDP) or residential drainage study (RDS) will first be required prior to issuance of a building permit, the following statement shall be included, as applicable:

RDP - RESIDENTIAL DRAINAGE PLAN

RDS - RESIDENTIAL DRAINAGE STUDY

A Residential Drainage Plan or Residential Drainage Study must be approved by the Storm Water Management Division of the Department of Public Utilities prior to issuance of a Building Permit on those lots labeled "RDP" or "RDS", respectively. Please refer to the Development Regulations and contact the Department of Public Utilities for further information.

Sec. 34-256. House location plan (HLP).

- (a) *Size and description.* House location 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 house location 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. The house location plan may be combined with a residential drainage plan (RDP) if an RDP is required for the lot.
- (b) *May be drawn by an individual.* It is not the intent of the department that the house location plan be prepared by an authorized registered professional 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 these regulations, the zoning resolution, or other regulations, as applicable.
- (c) *List of what is to be shown.* House location plans shall show the following as applicable:
- (1) Boundary lines of the lot, giving distances to the nearest one-tenth of a foot and bearings to the nearest minute.
 - (2) Location and names of all abutting streets or other rights-of-way.
 - (3) Minimum required front, side and rear building setback lines with dimensions, and notation of the existing zoning on the property.
 - (4) The approximate outline of all buildings, driveways, parking areas, swimming pools, recreational courts, patios, accessory structures and other improvements existing or

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- proposed on the property, and dimensions of buildings and distances between all structures and the nearest property lines.
- (5) All easements, public water, sewer or storm drainage facilities traversing or located on the property, septic tank, and septic tank drain field.
 - (6) Subdivision name, lot designation, land lot, and district.
 - (7) North arrow and scale.
 - (8) Limit of the 100-year floodplain and any applicable buffers or special building setback lines.
 - (9) If the lot is located within the Chattahoochee River Corridor, the location of each area by vulnerability category and calculations of impervious surface and clearance by category, or other such data in accordance with the certification for the subdivision approved under the Metropolitan River Protection Act. Show also any buffer or setback required by the Metropolitan River Protection Act.
 - (10) All other applicable requirements of the zoning resolution or conditions of zoning approval.
 - (11) Name, address, and telephone number of the owner and the person who prepared the HLP.
- (d) *Certificate of occupancy.* 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 house location plan have been field verified by a survey prepared by a registered land surveyor and submitted to the department of planning and development.

Sec. 34-257. Residential drainage plan (RDP) or study (RDS).

- (a) *Certified boundary survey required.* Residential drainage plans shall be drawn to scale on a certified boundary survey of the lot prepared by a registered land surveyor. The residential drainage plan may be combined with a house location plan (HLP) if an HLP is required for the lot. The requirements contained herein shall also apply to lots which formerly required SPED (Site Plan - Engineering Division) approval prior to issuance of a building permit.
- (b) *List of what is required to be shown.* Residential drainage plans shall show the following as applicable:
 - (1) Boundary lines of the lot, giving distances to the nearest one-tenth of a foot and bearings to the nearest minute.
 - (2) Location and names of all abutting streets or other rights-of-way.
 - (3) The outline of all buildings, driveways, parking areas, swimming pools, recreational courts, patios, accessory structures and other improvements existing or proposed on the property, and dimensions of buildings and distances between all structures and the nearest property lines as required to locate the major improvements on the lot.
 - (4) All easements, public water or sewer facilities traversing or located on the property, and septic tank drain field.

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- (5) Subdivision name, lot designation, land lot, and district.
 - (6) North arrow and scale.
 - (7) Contour lines based on sea level datum. These shall be drawn at intervals of not more than two feet, and shall be based on a field survey. Proposed grading of the lot shall be shown along with the finished floor elevation of the lowest habitable floor of the house.
 - (8) Stormwater features, including swales, pipes, stormwater detention and other structures, all drainage (DE) easements, and directions of flow.
 - (9) Floodplain features, including the limits of the flood hazard area, 100-year flood high water elevation, origin of the floodplain data, and any proposed modifications to the floodplain limits.
 - (10) Sedimentation and erosion control measures to be taken or placed on the lot during construction.
 - (11) Names, address, and telephone number of the owner and person who prepared the RDP.
 - (12) Seal, registration number, and date of expiration of the authorized registered professional who prepared the drainage improvements or modifications shown on the RDP.
- (c) *Residential drainage study (RDS)*. A residential drainage study (RDS) shall be conducted by the developer's or builder's authorized registered professional prior to issuance of a Certificate of occupancy on those lots so noted on the final plat. The requirements for a RDS contained herein shall also apply to lots that formerly required SSED (Site Study - Engineering Division) approval prior to issuance of a building permit. The grading and construction of the lot shall be field verified by the developer's or builder's authorized registered professional as being in conformance with grading plans and stormwater management studies approved for the subdivision prior to the issuance of a certificate of occupancy.
 - (d) *Certificate of occupancy; conditions*. A certificate of occupancy shall not be issued for the structure until a written certification has been received from the developer's or the builder's authorized registered professional stating that the provisions or improvements required by the residential drainage plan or as a result of the residential drainage study have been field verified.
 - (e) *Certificate; department approval*. If a RDP or RDS is required because a stream or floodplain is on or adjacent to the lot, the notation on the development plans and plat should be "RDP-E" or "RDS-E," as appropriate.

Sec. 34-258. Site development plans.

- (a) *What a development permit for a site plan consists of*. An application for a development permit for a multifamily or nonresidential site shall consist of the site plan, a certified boundary survey or final plat reference, associated slope or construction easements, if any, and such other development plans as may be required by these regulations.

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- (b) *Conformation to concept plan.* The development plans shall generally conform to the concept plan, if any, and may constitute only that portion of the approved concept plan which the developer proposed to construct at one time as a single unit, provided that such portion conforms to the requirements of these rules and regulations and all setbacks, maximum density, and other zoning restrictions. If no concept plan was approved on the property, the development plans shall include the entire property being developed having the same zoning category.
- (c) *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 48 inches by 36 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 ten feet to one inch.
- (d) *Project boundary data.*
- (1) 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 one in 10,000, and shall meet all requirements of state law regarding the recording of maps and plats.
 - (2) Each site plan shall be drawn on, accompanied by, or referenced to a boundary survey which shall at least meet the requirements of subsection (d)(1) of this section.
- (e) *List of what is required to be shown.* The site plan shall contain the following (on one or more sheets):
- (1) Proposed name of development. If the project is located within a subdivision, the name of the subdivision, lot, and block number must also be shown.
 - (2) Name, address, and telephone number of the owner of record, and of the developer (if not the owner).
 - (3) Name, address, and telephone number of each professional firm associated with the development plans (engineer, landscape architect, etc.).
 - (4) Date of survey, north point, and graphic scale, source of datum, date of plan drawing, and space for revision dates.
 - (5) Proposed use of the site, including gross square footage for each different use type or building.
 - (6) Location (land district and land lot), acreage or area in square feet, and density (if applicable).
 - (7) Location sketch locating the development in relation to the surrounding area with regard to well-known landmarks, such as major thoroughfares or railroads. Sketches may be drawn in free-hand and at a scale sufficient to show clearly the information required, but not less than one inch equal to 2,000 feet. U.S. Geological Survey maps may be used as a reference guide for the location sketch.

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- (8) Size and location of all buildings, building setback lines, minimum yard lines, and distances between buildings and from buildings to property lines; location of outdoor storage areas; parking and loading areas, driveways, curb cuts and designated fire lanes. Each building shall be identified with a number or letter.
 - (9) Boundary lines of the perimeter of the tract indicated by a heavy line giving lengths to the nearest one-hundredth of a foot and bearings to the nearest second. Bearing and distance to designated tie point.
 - (10) Directional flow arrows for street drainage.
 - (11) Contour lines based on sea level datum. These shall be drawn at intervals of not more than two feet and shall include the entire site and all abutting public streets. Contour lines shall be based on field surveys or photogrammetric methods from aerial photographs. The basis for the topographic contour shown shall be specified and dated.
 - (12) Natural features within the proposed development, including drainage channels, bodies of water, and other known significant features, such as extensive exposed rock. On all water courses leaving the tract, the direction of flow shall be indicated. The 100-year floodplain shall be outlined and the source of the depicted floodplain information shall be indicated. The acreage or area in square feet within the floodplain shall be indicated.
 - (13) Manmade and cultural features existing within and adjacent to the proposed development, including existing right-of-way measured from centerline, pavement widths, and names of jurisdiction lines; existing structures on the site and their disposition, Chattahoochee River Corridor information and Chattahoochee River Tributary Protection Areas (if applicable), and other significant information. Location and dimensions of existing bridges; water, sewer, and other existing utility lines and structures; culverts and other existing features should be indicated.
 - (14) Proposed street names, roadway and right-of-way lines and widths and sites reserved through covenants, easement, dedication or otherwise for public uses.
 - (15) Identify unit number, division or stage of development, if any, as proposed by the developer.
 - (16) Show all adjoining property owners, subdivision names, lot numbers, lot lines and block letters, and zoning.
 - (17) Show the location and number of parking spaces according to the size of the building on the plans. Show factors used in determining number of spaces as required in the zoning resolution. Handicapped parking spaces must be shown as required by the state handicap law.
 - (18) Zoning district rezoning case number, date of approval and conditions (as applicable). Variances obtained on the property should be shown with the case number, date of approval and conditions, if applicable. Note any approved waivers from these regulations.
 - (19) If buffers or other landscaping or screening treatments are required, show the location, size, and type (natural or planted) on the plans conforming to the tree preservation/replacement plan or buffer and landscape plan, as applicable.

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- (20) Location, height, and size of all freestanding signs to be erected on the site, and indication whether lighted or unlighted.
- (21) Location of all known existing landfills and proposed on-site bury pits (state EPD permit and a city special use permit or other approval may be required).
- (22) Such additional information as may be reasonably required to permit an adequate evaluation of the project.
- (f) *Certificate of development plans approval.* Each site plan shall carry the following certificate printed or stamped thereon:
- All requirements of the city development regulations relative to the preparation and submission of a development 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 regulations, 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 regulations.

Director, Department of Public Works	Date
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THIS CERTIFICATE EXPIRES SIX MONTHS FROM THE DATE OF APPROVAL
UNLESS A DEVELOPMENT PERMIT IS ISSUED.

- (g) *Other development plans to accompany site plan.* The site plan shall be accompanied by other development plans showing the following information when same is not shown on, or evident from the site plan. The various plans may be combined, where appropriate, and clarity can be maintained.
- (1) Erosion control plan prepared in accordance with the requirements of the soil erosion and sediment control ordinance. Erosion control measures may be shown on the grading plan, if desired.
- (2) Grading plan, prepared in accordance with the requirements of article VII of this chapter.
- (3) Stormwater drainage construction data.
- Location and size of all proposed drainage improvements, and all proposed drainage easements to be located outside street right-of-way lines.
 - Profiles of all storm drainage pipes and slope of receiving channels. Hydraulic grade line is to be shown on all pipes (except roof drains) for the required design flow. On storm drainage profiles, a pipe chart will be shown which will include pipe numbers, pipe size, pipe material, pipe slope, pipe length, contributing drainage area, design flow, design storm frequency, runoff coefficient and velocity. On all pipes, the hydraulic grade line shall be shown.
 - Profiles of all open channels and ditches, including the design flow normal depth and velocity. On storm drainage profiles an open channel chart will be shown

which will include open channel numbers, conveyance size, lining material, length, channel slope, contributing drainage area, design flow, design storm frequency, runoff coefficient and velocity for the required design flow.

- d. Acreage of drainage areas and Hydrological study used in determining size of structures, including map of all contributing drainage basins and acreages.
- (4) Sewage disposal plans, as follows.
- a. Sanitary sewer plans, including the profiles and other information as may be required by water pollution control.
 - b. For projects proposed to be served by on-site sewage disposal systems, location and extent of septic tank, drain field and attendant structures, and other information required by the health department.
- (5) Street widening and construction data.
- a. Centerline profiles and typical roadway sections of all proposed streets, as well as plans and profiles for all proposed major thoroughfares. Profiles (and plans, where required) shall be drawn on standard plan and profile sheet with plan section showing street layout, pavement and right-of-way width, curvature, and required drainage facilities. Typical roadway sections shall be provided for street widenings.
 - b. Where sanitary or storm sewers are to be installed within a street, the grade, size, location and bedding class of pipe; location and invert elevation of manholes shall be indicated on the road profile.
 - c. Profiles covering roadways that are extensions of existing roadways shall include elevations at 50 foot intervals for such distance as may be adequate to provide continuity consistent with the standards required by these regulations for street improvements, but no less than 200 feet.
 - d. All elevations shall be coordinated and sited into U.S. Coast and Geodetic Survey or department of transportation bench marks where feasible or into reference monuments established by the Federal Emergency Management Agency.
- (6) Buffer and landscape plan, if any such areas exist within the site, prepared in accordance with the specifications contained in this article, and the requirements of article IV of this chapter, and the requirements of the buffer, landscape, and tree ordinance.
- (7) Tree preservation/replacement plan (if required by the buffer, landscape, and tree ordinance).
- (8) Floodplain management plans, if any floodplain areas are located on the property. Such data as is required by the floodplain management ordinance shall be submitted.
- (9) Private water system plans, if any, indicating proposed water main size and location, with fire hydrants, on the site. The distance and direction to all other fire hydrants within 500 feet of the site or buildings along existing streets or other access drives shall also be indicated.

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- (10) Street striping plan, showing striping in accordance with the Manual on Uniform Traffic Control Devices, for any street newly constructed to four or more lanes, and all newly constructed or widened major thoroughfares.
 - (h) *Encroachments*. Where construction is proposed on adjacent property, an encroachment agreement or easement shall be submitted to the department.
 - (i) *Public notice; drainage*. Every site plan shall contain the following statement:
 - (1) NOTE: The city 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.
 - (2) NOTE: Stream buffer easements are to remain in a natural and undisturbed condition.
 - (3) NOTE: Structures are not allowed in drainage easements.

Sec. 34-259. Tree preservation/replacement plan specifications.

- (a) *When required*. A tree preservation/replacement plan shall be required only under the circumstances described in the buffer, landscape, and tree ordinance.
- (b) *In accordance with buffer, landscape and tree ordinance*. Tree preservation/replacement plans shall be prepared in accordance with the specifications contained in the buffer, landscape, and tree ordinance. At the developer's option, the plan may be combined with other plans, such as a general landscaping plan for the project.

Sec. 34-260. Buffer and landscape plan specifications.

- (a) *When required*. A buffer and landscape plan shall be required as described in the buffer, landscape, and tree ordinance.
- (b) *In accordance with buffer, landscape and tree ordinance*. The buffer and landscape plans shall be prepared in accordance with the specifications contained in the buffer, landscape, and tree ordinance. At the developer's option, the plan may be combined with other plans such as a general landscaping plan for the project.

Secs. 34-261—34-283. Reserved.

ARTICLE XI. PROCEDURES

Sec. 34-284. Subdivision review procedures.

- (a) *Pre-application conference*. Whenever any subdivision of a tract of land is proposed to be made, whether for residential or nonresidential development, the subdivider is encouraged to present to the department preliminary documents and graphic exhibits to permit early evaluation of the subdivider's intentions and coordination with the comprehensive plan, zoning resolution, Metropolitan River Protection Act, etc., and to inform and provide the

subdivider with the necessary regulations in order to properly accomplish the proposed project.

(b) *Concept plan approval.*

- (1) Application for concept plan approval shall be submitted to the department using an application form and in a number of copies to be determined by the director. The concept plan shall include the entire property proposed for development, but need not include the applicant's entire contiguous ownership.
- (2) In such case that the subdivider elects not to submit a concept plan, then the subdivider may proceed directly with the submittal of development plans if they show the entire property proposed for development. In so doing, however, the subdivider assumes the risk of premature design and engineering expenses in the event that the city requires subsequent design and engineering changes.
- (3) Following concept plan approval, a clearing and grubbing permit may be issued based on a tree protection plan (if required, see tree protection ordinance) and soil erosion and sedimentation control plan approved by the department, and consistent with an approved certificate issued under the Metropolitan River Protection Act, if applicable.
- (4) Copies of the approved concept plan shall be provided to the department for permanent record, in a number as determined by the director.

(c) *Development plans approval for subdivisions.*

- (1) An application for development plan approval and issuance of a development permit shall be submitted to the department 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 concept plan. However, if no concept plan has been approved, the development plans must include the entire property being developed and having the same zoning. The application shall include the preliminary plat, and construction drawings. All construction drawings and other engineering data shall be prepared and sealed by an authorized registered professional currently registered in the state, in accordance with provisions of state law.
- (2) Following submission to the department of a preliminary plat and all drawings required for development permit review, a grading permit shall be issued at the developer's request based on a tree protection plan (if required), soil erosion and sedimentation control plan, hydrology study, and related construction drawings, and consistent with an approved certificate issued under the Metropolitan River Protection Act, if applicable. The grading permit shall be limited to the area included within the development plans and may be further conditioned as deemed appropriate or necessary pending development permit approval.
- (3) The director shall indicate on a review copy of the drawings or in a written memorandum all comments related to compliance of the development plans with these regulations, principles of good design, the zoning resolution, conditions of zoning approval, and the regulations of other city departments and state agencies, as appropriate. The director shall have final staff authority to determine the applicability

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- of any and all comments under these development regulations, the zoning resolution or conditions of zoning approval.
- (4) The director may not approve any 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 house location plan (HLP) may be required to be filed as a part of the preliminary plat approval to substantiate the buildability of any such difficult or unusual lot.
 - (5) The subdivider shall be responsible for compliance with all codes, regulations, and zoning requirements and for the satisfaction of all of the noted and written comments of the director.
 - (6) Should an applicant disagree with the findings or final review comments of the director or of any other city department, concluding that factual or interpretive errors have been made, the following appeal procedure shall be followed to resolve the issues:
 - a. Submit to the department of planning and development a written statement clearly defining the nature of the disagreement, the specific reference to the sections of the regulations (i.e., sewer regulations, development regulations, etc.) at issue, and the applicant's own opinion.
 - b. Should the department under appeal fail to respond within ten working days from the date of transmittal of the appeal by the department of planning and development, the department shall automatically forward a copy of the appeal to the mayor and council for final action in their normal course of business.
 - (7) When the director has determined that the plat and other development plans are in compliance with all applicable city regulations and zoning requirements and approval has been received from all affected city departments, he shall sign and date a certificate of development plans approval stamped or printed on a reproducible copy of the plat. Approved copies of the approved plat and development plans shall be printed on a reproducible copy of the plat. Approved copies of the approved plat and development plans shall be transmitted to the applicant and retained by the department for its records.
 - (8) Following the above approval by all affected city departments, a development permit shall be issued at the developer's request to begin construction activities based on the approved development plans.
- (d) *Final plat approval.*
- (1) When the provisions of these regulations have been complied with, the subdivider 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.
 - (2) 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 these regulations, the zoning resolution, conditions of zoning approval, and the regulations of other city departments and state agencies, as appropriate. The director shall have final staff authority to

determine the applicability of any and all comments under these development regulations, the zoning resolution or conditions of zoning approval.

- (3) 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 health department approval, or for any other justified reason.
- (4) 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 (see section 34-81).
- (5) The subdivider shall be responsible for compliance with all codes, regulations, and zoning requirements and for the satisfaction of all of the comments of the director.
- (6) Final approval by the director shall not be shown on the final plat until all requirements of these and other applicable regulations have been met, and the director has received a completed request for approval of development conformance and an executed development performance and maintenance agreement. The agreement shall be accompanied by a bond, letter of credit, or other acceptable surety providing for the maintenance of all site landscape, right of way, and stormwater management facility improvements required by these regulations in the subdivision for a period 18 months following the date of approval of development conformance for subdivision. The maintenance bond period of application may be extended by the director at the request of the developer, provided it is in the best interest of the health, safety and welfare of the public.
- (7) The director shall further determine that either:
 - a. All improvements and installation to the subdivision required for approval of the final plat under the rules and regulations of the city have been completed in accordance with the appropriate specifications; or
 - b. All of the stormwater drainage and detention facilities, water and sewer utilities, street base and curbing construction required for approval of the final plat have been properly installed and completed and, for those required improvements not yet completed (grassing, pavement topping, required landscaping, sidewalks, etc.), a performance bond shall have been filed by the subdivider with the development performance and maintenance agreement, which performance bond shall:
 1. Be conditioned upon the faithful performance by the subdivider or developer of all work required to complete all improvements and installations for the subdivision, or approved portion thereof, in compliance with these rules and regulations within a specified time, not to exceed three months;
 2. Be payable to, and for the indemnification of, the city;

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3. Be in an amount equal to the cost of construction of the required improvements not yet completed, plus an additional ten percent of said costs, as calculated by the director on the basis of yearly contract prices or city contracts, where available;
 4. Be with surety by a company entered and licensed to do business in the state; and
 5. Be in a form acceptable to the director or the city attorney.
- (8) Payment for materials and installation of traffic control and street name signs shall be made to the department of engineering in accordance with the traffic engineering regulations prior to approval of the final plat. Payment of the cost of striping major thoroughfares or required signalization, if required, and not completed by the developer shall also be received by the engineering department prior to approval of the final plat.
 - (9) Payment of the required plat recording fee shall be made to the department prior to approval of the final plat.
 - (10) Once the department has approved the final plat and all other affected departments and agencies of government as required have certified compliance and signed the route sheet, the director shall certify by his signature on the original of the plat that all of the requirements of these regulations, the zoning resolution, and the conditions of zoning approval have been met, and that all other affected departments have approved the plat. The final plat shall not be deemed approved until it has been signed by the director and, where use of septic tanks is proposed, by a duly authorized representative of the health department.
 - (11) Once the final plat has been so certified, the director shall authorize it to be recorded with the clerk of the superior court of the city. The subdivider 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's associations for park or recreational use, shall be recorded simultaneously with the final plat.
 - (12) Periodically, but no less often than once each month, the director shall submit a listing of all approved final plats to the mayor and council for ratification of acceptance of all dedications.

Sec. 34-285. Non-subdivision review procedures.

- (a) *Pre-application conference.* Whenever any development of a single parcel of land (other than a subdivision or a one- or two-family dwelling) is proposed to be made, the developer is encouraged to present to the department preliminary documents and graphic exhibits to permit early evaluation of the developer's intentions and coordination with the comprehensive plan, zoning resolution, Metropolitan River Protection Act, etc., and to inform and provide the developer with the necessary regulations in order to properly accomplish the proposed project.
- (b) *Concept plan approval.*

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- (1) Application for concept plan approval shall be submitted to the department using an application form and in a number of copies to be determined by the director.
 - (2) The concept plan shall include the entire property being developed. Properties which adjoin the subject property and which are under the same ownership or control as the subject property shall be so indicated. In such case that the developer elects not to submit a concept plan, then the developer may proceed directly with the submittal of development plans, if they show the entire parcel being developed. In so doing, however, the developer assumes the risk of premature design and engineering expenses in the event that the city requires subsequent design and engineering changes.
 - (3) Following concept plan approval, a clearing and grubbing permit shall be issued at the developer's request based on a tree protection plan (if required, see tree protection ordinance) and soil erosion and sediment control plan approved by the department, and consistent with an approved certificate issued under the Metropolitan River Protection Act, if applicable.
 - (4) Following concept plan approval, a grading permit may be issued at the developer's request based on the requirements above for a clearing and grubbing permit and in addition a stormwater management report (hydrology study) shall be submitted and approved.
 - (5) Copies of the approved concept plan shall be provided to the department for permanent record, in a number as determined by the director.
- (c) *Site development plans approval.*
- (1) An application for development plan approval and issuance of a development permit shall be submitted to the department 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 concept plan. However, if no concept plan has been approved, the development plans must include the entire property being developed and having similar zoning. As required under section 34-258, the application shall include the site plan and construction drawings, as appropriate to the project. All construction drawings and other engineering data shall be prepared and sealed by an authorized registered professional currently registered in the state, in accordance with the provisions of state law.
 - (2) The director shall indicate on a review copy of the drawings or in a written memorandum all comments related to compliance of the development plans with these regulations, principles of good design, the zoning ordinance, conditions of zoning approval, and the regulations of other city departments and state agencies as appropriate. The director shall have final staff authority to determine the applicability of any and all comments under these development regulations, the zoning resolution or conditions of zoning approval.
 - (3) The developer shall be responsible for compliance with all codes, regulations, and zoning requirements and for the satisfaction of all of the noted and written comments of the director.

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- (4) Deeds to lands dedicated to the city in fee simple shall be submitted to the director for recording.
 - (5) Should an applicant disagree with the findings or final review comments of the director or of any other city department, concluding that factual or interpretive errors have been made, the following appeal procedure shall be followed to resolve the issues:
 - a. Submit to the department of planning and development a written statement clearly defining the nature of the disagreement, the specific reference to the sections of the regulations (i.e., sewer regulations, development regulations, etc.) at issue, and the applicant's own opinion.
 - b. Should the department under appeal fail to respond within ten working days from the date of transmittal of the appeal by the department of planning and development, the department shall automatically forward a copy of the appeal to the mayor and council for final action in their normal course of business.
 - (6) When the director has determined that the site plan and other development plans are in compliance with all applicable city regulations and zoning requirements, and approval has been received from all affected city departments, he shall sign and date a certificate of development plans approval on a reproducible copy of the plan. Approved copies of the approved development plans shall be transmitted to the applicant and retained by the department for its record.
 - (7) Following the above approval by all affected city departments, and approval of a Metropolitan River Protection Act Certificate, if applicable, a development permit shall be issued at the developer's request to begin construction activities based on the approved development plans. Said permit may include clearing, grubbing, and grading, as appropriate, and approved as part of the project. A building permit may also be issued on the basis of the approved development permit under the provisions contained in article III of this chapter. A certificate of occupancy may not be issued, however, until a certificate of development conformance for the project has been executed by the owner and an executed development performance and maintenance agreement has been received in accordance with these regulations.
- (d) *Certificate of development conformance approval process.*
- (1) Final approval by the director shall not be shown on the certificate of development conformance until all requirements of these and other applicable regulations have been met, and the director has received a completed request for approval of development conformance and an executed development performance and maintenance agreement. The agreement shall be accompanied by a bond, letter of credit or other acceptable surety providing for the maintenance of all site landscape, right of way, and stormwater management facility improvements required by these regulations in the development for a period of 18 months following the date of approval of development conformance.
 - (2) The director shall further determine that either:
 - a. All public improvements and installations to the development required to be dedicated and for approval of the certificate of development conformance under

the rules and regulations of the city have been completed in accordance with the appropriate specifications; or

- b. All of the stormwater drainage and detention facilities, water and sewer utilities, street base and curbing construction required for approval of the certificate of development conformance have been properly installed and completed and, for those required public improvements not yet completed, within areas to be dedicated, (grassing, pavement topping, required landscaping, sidewalks, etc.) a performance bond shall have been filed by the developer with the development performance and maintenance agreement, which performance bond shall:
 1. Be conditioned upon the faithful performance by the developer of all work required to complete all public improvements and installation required to be dedicated for the development, or approved portion thereof, in compliance with these rules and regulations within a specified time, not to exceed three months;
 2. Be payable to, and for the indemnification of, the city;
 3. Be in an amount equal to the cost of construction of the required public improvements required to be dedicated not yet completed, plus an additional ten percent of said costs, as calculated by the director on the basis of yearly contract prices or city contracts, where available;
 4. Be with surety by a company entered and licensed to do business in the state; and
 5. Be in a form acceptable to the director or the city attorney.
- (3) Payment for materials and installation of traffic control shall be made to the department of engineering in accordance with the traffic engineering regulations prior to approval of the certificate of development conformance. Payment of the cost of striping major thoroughfares or required signalization, if required, and not completed by the developer shall also be received by the engineering department prior to approval of the certificate of development conformance.
- (4) Payment of the required plat recording fee shall be made to the department prior to approval of the final plat.
- (5) Once the department has approved the certificate of development conformance and all other affected departments and agencies of government, as required, have certified compliance and signed the route sheet, the director shall certify by his signature on the original of the certificate of development conformance that all of the requirements of these regulations, the zoning resolution, and the conditions of zoning approval have been met, and that all other affected departments have approved the plat. The certificate of development conformance shall not be deemed approved until it has been signed by the director and, where use of septic tanks is proposed, by a duly authorized representative of the health department.

Sec. 34-286. Assignment of names and address.

(a) *Subdivision or development names.*

- (1) Proposed subdivision or development names must be reviewed and approved prior to the issuance of a development permit. Names will be reviewed by the department upon submittal of the preliminary plat or site plan
- (2) Proposed names shall not duplicate or too closely approximate, phonetically, the name of any other subdivision or development in the city or its municipalities, except for extensions of existing subdivisions or developments.
- (3) Subdivision and development names may be reserved if submitted and approved along with the concept plan for the project.

(b) *Street names.*

- (1) Proposed street names must be reviewed and approved prior to approval of a final plat for recording. Street names may be reserved through approval as shown on an approved concept plan or preliminary plat for the subdivision. Proposed names for private streets shall follow the same rules as for public streets.
- (2) Street names shall consist of a root name of the developer's choosing and a suffix designation, such as "street," "avenue," "drive," etc., and shall be followed by a quadrant suffix. Directional prefixes (i.e., "North," "South") and the prefixes "old" or "new" shall not be used.
- (3) All streets shall bear the proper quadrant suffix appropriate to its location within the city (i.e., NE, NW, SE and SW), as determined by the department.
- (4) A proposed street that is obviously in alignment with another already existing and named street shall bear the name of such existing street, unless this requirement is waived by the departments of public safety and engineering.
- (5) Except within the same development, no proposed street name shall duplicate (be spelled the same or be phonetically the same) as an existing street name within the city, regardless of the use of such suffix designations as "street," "avenue," "boulevard," "drive," "place," "way," "court," or however otherwise designated. In the same subdivision, a root name may not occur more than twice.
- (6) All street root names and suffix designations are subject to the approval of the department. Obscene or otherwise unacceptable language, abbreviations, contractions, or initials may not be used.
- (7) Root names shall consist of no more than 13 characters, including space, hyphens, etc. Letters not occurring in the English alphabet, and numerals, shall not be used.

(c) *Street address assignments.*

- (1) *Time of number designation.* A street address number must be assigned prior to issuance of a building permit. For any new structure proposed on a property which has not been assigned an address, a street number will be assigned upon confirmation or establishment of the property as a buildable lot of record under the requirements of these regulations.

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- (2) *Subdivisions.* House numbers will be assigned after an exemption plat or preliminary plat is approved for the property. Submit two copies of the approved plat to the department. Block number assignments shall also be designated for abutting major street name signs at this time.
 - (3) *Commercial/industrial projects or buildings.* Projects will be numbered after the developer submits the site plan for development review.
 - (4) *Apartment projects.* Projects will be numbered after the developer submits copies of the site plan for development review. The overall development will be issued a single street address. The developer will be responsible for numbering/lettering individual buildings and units.
 - (5) *Condominium projects.* Projects will be numbered after the developer submits the site plan for development review. Individual units shall be numbered consecutively if located along public or private streets. Units in the "stacked-flat" configuration shall use the same numbering approach as applies to an apartment project.
 - (6) *Numbering system.* The following numbering systems shall be followed per postal regulations:
 - a. Individual mailbox for each dwelling units: Each street in the project must be named.
 - b. Cluster box system, centralized mailbox for entire project: One street name will serve to assign all house numbers for main delivery.

Sec. 34-287. Initiation of development activities.

- (a) *Initial activities required.* Following the issuance of any permit authorizing clearing and grading of a site:
 - (1) 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.
 - (2) Soil sedimentation facilities must be installed and operational prior to major grading operations.
 - (3) 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.
- (b) *Tree protection areas.* Prior to the initiation of land disturbance activities and throughout the clearing and grading process the following must be accomplished for an designated tree protection area in accordance with any approved buffer and landscape plan or tree preservation/replacement plan for the property:
 - (1) 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

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- throughout the land disturbance process and should not be removed until landscaping is begun.
- (2) The tree protection areas shall not be utilized for storage of earth and other materials resulting from or used during the development process.
 - (3) Construction site activities, such as parking, materials storage, concrete washout, burning, etc., shall be arranged to prevent disturbances within the tree protection areas.
- (c) *Development inspections.* Oral notification shall be made by the developer or contractor to the development inspections section of the department 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.
- (1) *Clearing.* Clearing or clearing and grubbing of the site or any portion included under the permit.
 - (2) *Grading.* Installation of slope stakes shall be required. Upon completion of roadway grading, the water certificate shall be submitted to the department certifying that the centerline of the road and the offset centerline of the water line are within six inches of that shown on the approved plans or re-lined plan submittal. Inspection and approval shall be required prior to trenching or continuation with subbase preparation.
 - (3) *Stormwater facilities.* Installation of storm drainage pipe, detention, or other stormwater facilities.
 - (4) *Installation of sanitary sewer and appurtenances.* This notification shall be made simultaneously with official notification by the developer or contractor to the water pollution control division and if for informational purposes only to the department.
 - (5) *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.
 - (6) *Sub-base or subgrade of streets.* After compaction, the subgrade will be string-lined for depth and crown. The subgrade shall be roll tested and shall pass with no movement, to the satisfaction of the department.
 - (7) *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.
 - (8) *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 will be spot-checked, and the roadways will be cored after completion to check thickness.
- (d) *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.

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- (e) *Stop work orders.* Work which is not authorized by an approved permit, or which is not in conformance to the approved plans for the project, or which is not in compliance with the provisions of these regulations or any other adopted code, regulation or ordinance of the city, shall be subject to immediate stop work order by the department. Work which proceeds without having received the necessary inspections of the department shall be halted until all inspections of intervening work is completed.
 - (f) *Stabilization for erosion control.* If for any reason a clearing and grubbing, grading, or development permit expires after land disturbance activities have commenced, the developer shall be responsible for stabilizing the site for erosion control, under the direction of the department.

Sec. 34-288. Approval of development conformance.

- (a) *Prerequisite to final plat or certificate of occupancy.* This approval shall be a prerequisite to the approval of a final plat or issuance of a certificate of occupancy for any part of a project included in a development permit, except for single-family and two-family residential structures. The approval shall reflect the owner's certification that all site work and construction has been accomplished according to the terms of approved plans and permits, and that all facilities intended for maintenance, supervision and/or dedication to the public are in compliance with appropriate standards, regulations, codes and ordinances. Such approval shall be revoked in cases of fraud or whenever unauthorized changes are made to the site without the benefit of required permits.
- (b) *Submission requirements.* Upon completion of the project as authorized for construction by the development permit, the owner shall file a certificate of development conformance with the director along with record drawings of all stormwater detention facilities and modifications to the limits of the 100-year floodplain (if any). An as-built hydrology study shall be submitted for the project with the actual parameters from the record drawing of the detention facilities. A record drawing of the sanitary sewer facilities shall also be prepared, separately or included with the above, and submitted to the public utilities department in accordance with their regulations. The certificate of development conformance shall be in a form as required by the director and shall be accompanied by a development performance and maintenance agreement completed in draft form. If the owner is a corporation, the documents shall be signed by the president or vice-president, be affixed by the corporate seal, and either the corporate secretary shall attest to the signature and affix the corporate seal, or a certificate of corporate resolution shall also be submitted.
- (c) *Approval.* Following final inspection and approval of all record drawings, the director shall approve the certificate of development conformance.

Sec. 34-289. Project closeout and continuing maintenance.

- (a) *Development performance and maintenance agreement.* Based on the approved certificate of development conformance, the owner shall file a final development performance and maintenance agreement with the director, along with any required certificate of corporate resolution and performance or maintenance surety, as a prerequisite to the approval of a final plat or issuance of a certificate of occupancy for any part of a project included in the

development permit, except for single-family and two-family residential structures. The development performance and maintenance agreement shall be in a form as required by the director, and shall include the following:

- (1) Final required improvements yet to be completed (e.g., grassing, topping, sidewalks, required landscaping) and performance bonding. Final landscaping shall be provided in accordance with a schedule acceptable to the department. The developer may be allowed up to three months in which to finish the other designated improvements, after the date of approval of the certificate of development conformance.
- (2) Maintenance of the public streets and drainage facilities within public streets or easements for the bonding period after the date of approval of the certificate of development conformance. Repairs shall be made for any deficiencies identified within the bonding period or the bonds shall be called to complete same.
- (3) Indemnification of the city against all liability for damages arising as a result of errors or omissions in the design or construction of the development for a period of ten years. If liability is subsequently assigned or transferred to a successor in title or other person, a copy of such legal instrument shall be filed with the clerk to superior court.

(b) *Maintenance and performance surety.*

- (1) The maintenance surety and the performance surety, required from the owner/developer or the contractor employed by the owner/developer, may be in the form of cash deposited with the city, or a bond, letter of escrow or letter of credit from a bank or other financial institution in a form acceptable to the director or city attorney.
- (2) Performance surety and maintenance surety shall, in all cases, be provided in an amount of 110% of the cost of the improvements or landscaping. The maintenance bond period of application shall be 18 months from installation of the wearing course or final topping.
- (3) A maintenance bond for the sanitary sewer facilities is required separately by the water pollution control division in accordance with their regulations. For the water system improvements, the contractor employed by the developer shall be responsible for maintenance of all water mains and appurtenances for one year from the date of approval of the certificate of development conformance by correcting all defects or deficiencies in materials or workmanship.

Secs. 34-290—34-311. Reserved.

ARTICLE XII. FEES

Sec. 34-312. Fees set by mayor and council.

Application filing and permit fees shall be as may be established from time to time by the mayor and council.

Sec. 34-313. Prerequisite to issuance of permits.

Permit fees, if any, shall be submitted as a prerequisite to issuance of the permit. Nonpayment 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 council.

Sec. 34-314. Fees nonrefundable.

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.

Sec. 34-315. Sanitary sewer, curb cut, etc., fees.

Following the approval of development plans, and prior to authorization to begin construction, the developer shall pay into the treasury of the city such required inspection, sanitary sewer permit charges, curb cut, or other fees as may be established from time to time by the mayor and council. Such fees shall not be refundable following issuance of a development permit, except upon approval of the mayor and council.

Sec. 34-316. Traffic control fees.

Prior to approval of development conformance for a project, the developer shall provide to the department of engineering such fees for traffic control signs, street name signs, and street striping as shall be required by traffic engineering regulations and established from time to time by the mayor and council.

Sec. 34-317. Recording fees.

Prior to approval of a final plat or certificate of occupancy, the developer shall provide to the department of development such recording fees and performance and/or maintenance bonds as shall be required by these regulations or established from time to time by the mayor and council.

Secs. 34-318—34-337. Reserved.

ARTICLE XIII. ADMINISTRATION, APPEAL, AND VIOLATIONS

Sec. 34-338. Administration.

- (a) *Administered by director of planning and development.* These development regulations shall be administered, interpreted, and enforced by the director of the department of planning and development of the city. All other ordinances or regulations referenced herein, such as the fire prevention and life safety codes, building and other technical codes, health, water, and sewer regulations, shall be administered by the directors of the departments responsible for such regulations, as established by the mayor and council.
- (b) *Director authorized to suspend or stop work and direct corrections.* In any case in which activities are undertaken in violation of these regulations, not in compliance with the provisions of a permit issued under the authorization of these regulations, 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.

Sec. 34-339. Regulations to be published.

It shall be the duty and responsibility of the director of the department of planning and development to maintain an accurate and up-to-date compilation of these development regulations 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 council.

Sec. 34-340. Modifications.

Modification of the design standards set forth in these development regulations may be authorized by the director in specific cases when, in his 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 these regulations. Any such modification granted by the director shall be made in writing to the developer 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 developer and shall explain in detail the reasons and facts supporting the application.

Sec. 34-341. Appeal and waiver of the regulations.

- (a) *Appeals.* Appeals of the interpretation by the director of the requirements of these regulations shall first be submitted in writing (on a form provided by the department) to the director who shall review the request in a timely manner and receive comments from other affected departments. The appeal thereupon shall be forwarded to the mayor and council for

final action in their normal course of business. Exception: appeal requests from the stormwater requirements of article VI, VII or VIII of this chapter shall be submitted to the board of construction adjustments and appeals for action in their normal course of business.

- (b) *Waivers.* Waiver requests of the requirements of these regulations shall be submitted on an application form as prescribed by the director, along with such fees as shall be established by the mayor and council. The director shall coordinate the review of each waiver request with all other affected city departments and shall summarize such comments or recommendations as may be received to the mayor and council for action in their normal course of business. Exception: waiver requests from the stormwater requirements of article VI, VII or VIII of this chapter shall be submitted to the board of construction adjustments and appeals for action in their normal course of business.

Sec. 34-342. Violations, enforcement and penalties.

Any action or inaction that violates the provisions of this chapter 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.

- (1) *Enforcement procedures.* The following are the enforcement procedures authorized by this chapter:

a. *Notices of violation.*

1. Enforcement shall 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;
 - (ii) The location or address of the site upon which the violation is occurring;
 - (iii) A description of the nature of the violation;
 - (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 chapter;
 - (v) The deadline or completion date of any such remedial actions or measures;
 - (vi) A statement of the penalty or penalties that may be 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.
 - 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 has 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 has 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 competent jurisdiction to answer charges for violations of this chapter.
- (2) *Legal penalties and/or remedies.*
- a. *Fine and/or sentence.* Any person convicted by a court of competent jurisdiction of violating any provision of this chapter shall be guilty of violating a duly adopted ordinance of the city and shall be punished either by a fine not less than \$100.00 per day and not greater than \$1,000.00 per day, or by a sentence of imprisonment not to exceed 60 days in jail, or both a fine and jail, or work alternate. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
 - b. *Other legal remedies.* In any case in which a violation of this chapter has occurred, the city, in addition to other remedies provided by law, may petition for a restraining order, injunction, abatement, or take any other appropriate legal

action or proceeding through a court of competent jurisdiction to prevent, restrain, or abate such unlawful use or activity.

- (3) *Other legal remedies.* In any case in which any land is, or is proposed to be, used or activities are undertaken in violation of these regulations or any amendment thereto adopted by the mayor and council, the city, in addition to other remedies provided by law, may petition for a restraining order, injunction, abatement, or take any other appropriate legal action or proceeding through a court of competent jurisdiction to prevent, restrain, or abate such unlawful use or activity.

Secs. 34-343—34-372. Reserved.

ARTICLE XIV. ADOPTION AND AMENDMENT

Sec. 34-373. Effective date.

- (a) *Effective on adoption.* These regulations shall be in full force and effect on January 29, 2013, following the adoption by the mayor and council of the city, and shall apply to any land disturbance permit for which an application is received after the effective date of these regulations.
- (b) *Grandfather provisions; development permit application received prior to adoption.* Any subdivision or other project for which a valid and complete application for a development permit shall have been received prior to the effective date of these regulations 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 in place prior to the effective date of these regulations, provided that the development permit is or can be issued within 90 calendar days of said effective date and all time frames associated with said permit are observed.
- (c) *Grandfather provisions; development permit issued prior to adoption.* Any subdivision or other project for which a development permit has been issued prior to the effective date of these regulations 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 in place prior to said effective date.
- (d) *Grandfather provisions; clearing, clearing and grubbing, grading.* Any subdivision or other project for which only a clearing, clearing and grubbing, or grading permit shall have been issued prior to effective date of these regulations shall be brought into conformance with these regulations prior to issuance of a development permit. Administrative modifications in accordance with article XII of this chapter 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.
- (e) *Building permits.* Nothing in these regulations shall be construed to affect the validity of any building permit lawfully issued prior to the effective date of these regulations.

Sec. 34-374. Amendments.

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- (a) *By mayor and council.* These regulations may be amended from time to time by resolution of the mayor and council of the city. Such amendments shall be effective as of their date of adoption unless otherwise stated in the adopting resolution.
 - (b) *Grandfather provisions; development permit application received prior to adoption.* Any subdivision or other project for which a valid and complete application for a development permit shall have been received prior to the adoption of an amendment to these regulations 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 development permit is or can be issued within 90 calendar days of said amendment and all time frames associated with said permit are observed.
 - (c) *Grandfather provisions; development permit issued prior to adoption.* Any subdivision or other project for which a development permit has been issued prior to the adoption of an amendment to these regulations may, at the developer's option, proceed to completion and building permits may be issued as though no amendment had been approved.
 - (d) *Grandfather provisions; clearing, clearing and grubbing, grading.* Any subdivision or other project for which only a clearing, clearing and grubbing, or grading permit shall have been issued prior to adoption of an amendment to these regulations shall be brought into conformance with the amendment (if applicable) prior to issuance of a development permit. Administrative modifications in accordance with article XII of this chapter 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.
 - (e) *Building permits.* No amendment to these regulations shall be construed to affect the validity of any building permit lawfully issued prior to the adoption of said amendment.

Sec. 34-375. Severability.

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

Sec. 34-376. Conflicting regulations.

All regulations or parts of regulations of this Code in conflict with these regulations shall be and the same are hereby repealed in their portions so in conflict; provided, however, that it is not the intent of these regulations to repeal or affect any law of the state, or any code or ordinance of the city adopted as a requirement of a state law, in which case the most restrictive requirement shall control.

Sec. 34-377. Effective date.

This ordinance shall become effective as upon the signature of the Mayor.

Approved by City Council:

APPROVED:

DATE: _____

Mayor

TIME: _____

ATTEST:

City Clerk

Approved as to Form:

City Attorney