Board of Commissioners
Agenda Item Transmittal Form
Ordinance Transmittal Form

Type of Request: TEXT2026-02 – AN ORDINANCE REPEALING AND REPLACING CERTAIN CHAPTERS OF TITLE 3, DEVELOPMENT AND PERMITTING, OF THE ROCKDALE COUNTY UNIFIED DEVELOPMENT ORDINANCE; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR APPLICABILITY; AND FOR OTHER PURPOSES.	**County Clerk Use Only** **Ordinance #:**

Submission Information:	**Information:**
Contact Name: Brandon White, Director **Department:** Planning & Development	**Summary of Request:** TEXT2026-02 - AN ORDINANCE REPEALING AND REPLACING CERTAIN CHAPTERS OF TITLE 3, DEVELOPMENT AND PERMITTING, OF THE ROCKDALE COUNTY UNIFIED DEVELOPMENT ORDINANCE; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR APPLICABILITY; AND FOR OTHER PURPOSES.

Notes and Comments:
1ST READ – JANUARY 27, 2026
PLANNING COMMISSION – FEBRUARY 12, 2026
BOC ZONING PUBLIC HEARING – FEBRUARY 26, 2026
2ND READ – MARCH 10, 2026

Ordinance No. _____
Case No. TEXT2026 - 02

AN ORDINANCE REPEALING AND REPLACING CERTAIN CHAPTERS OF TITLE 3, DEVELOPMENT AND PERMITTING, OF THE ROCKDALE COUNTY UNIFIED DEVELOPMENT ORDINANCE; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR APPLICABILITY; AND FOR OTHER PURPOSES.

WHEREAS, Subpart B – Planning and Development of The Code of Rockdale County, Georgia, as amended, governs land use and zoning; and

WHEREAS, the Board of Commissioners has determined that certain development and permitting regulations within Title 3 of the Unified Development Ordinance should be repealed and replaced in order to modernize standards, improve clarity, and ensure consistency with state and federal requirements; and

WHEREAS, the proposed amendments have been reviewed in accordance with applicable public hearing and notice requirements;

NOW, THEREFORE BE IT ORDAINED by the Board of Commissioners of Rockdale County, Georgia, and it is hereby ordained by the authority of same as follows:

Section I

Title 3, Development and Permitting, of the Rockdale County Unified Development Ordinance is hereby amended as follows:

The following chapters are repealed in their entirety and replaced with the provisions set forth in Exhibit "A," attached hereto and incorporated herein by reference:

- Chapter 306 – Soil Erosion and Sedimentation Control
- Chapter 310 – Stormwater Management
- Chapter 320 – Flood Damage Prevention
- Chapter 324 – Environmental Planning Criteria
- Chapter 332 – Public Improvements

Section II

The amendments adopted herein shall be codified as part of the Rockdale County Unified Development Ordinance. The County Attorney, Clerk, or codifier is authorized to renumber, reletter, and reformat sections as necessary for codification purposes, provided no substantive changes are made.

Section III

All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed to the extent of such conflict.

Section IV

If any section, subsection, sentence, clause, or provision of this Ordinance is held invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance.

Section V

This Ordinance shall apply to all applications submitted on or after the effective date. Applications deemed complete prior to the effective date may proceed in accordance with the regulations in effect at the time of submission, unless otherwise expressly provided herein.

EFFECTIVE DATE: This Ordinance shall become effective as of the date hereof.

ADOPTED AND APPROVED THIS _____ DAY OF _____, 2026

ROCKDALE COUNTY, GEORGIA
BOARD OF COMMISSIONERS

_____
JaNice Van Ness, Chair & CEO

_____
Tuwanya C. Smith, Commissioner Post I

_____
Dr. Doreen Williams, Commissioner Post II

(Signatures continued on following page)

Ordinance No. _____
Case No. TEXT2026 - 02

Attest:

By: _____
Jennifer Rutledge, County Clerk

Approved as to Form:

By: _____
M. Qader A. Baig, County Attorney

First Reading: _____

Second Reading: _____

EXHIBIT "A"
Repeal and Replacement of Certain Chapters of Title 3, Development and Permitting

Article 13: Streets and Improvements

13.1 Streets and Sidewalks.

13.1.1 Street classification and right-of-way requirements.

A. Street classification.
   1. Streets are classified into a street hierarchy system based on road function and traffic volumes. Streets are classified into the following categories:
      a. Interstate principal arterials.
      b. Principal arterials.
      c. Minor arterials.
      d. Collector streets
      e. Local streets in urban area boundaries.
   2. The application for approval of a preliminary plat, site development plan, or building permit that will require the applicant to construct new public streets or make improvements to existing public streets shall determine the design of the street based on projected traffic volumes and use the right-of-way and lane widths as noted in the "table of minimum right-of-way and lane widths." The final determination regarding the classification of any existing or proposed street shall be made by the director.

B. Right-of-way and lane widths.
   1. Minimum widths for new streets or roads shall be as shown in "table of minimum right-of-way and lane widths." See Rockdale County Standard Design and Construction Details for detailed dimensions. Total width of streets includes lane width plus curb and gutter (back to back of curb) or from edge of pavement if no curbs exist. Local streets will use a 24-inch curb and gutter. Other road/street classifications will use a 30-inch curb and gutter. If an existing street is used for access, the developer shall conform to the existing street width if it is greater than is required for a new street in this UDO.
   2. Minimum widths of right-of-way and lanes shall be as shown in the table of right-of-way and lane widths.

Table 13.1.1.B : Minimum Right-of-Way and Lane Widths

Street Category	Minimum R-O-W	Lane Width*
Principal Arterial: Ditch section/ 20 ft. median C&G/20 ft. median C&G, undivided	 120 ft. 120 ft. 120 ft.	 12 ft. 12 ft. 12 ft.
Minor Arterial: Ditch section C&G section	 100 ft. 100 ft.	 12 ft. 12 ft.
Collector Street: Ditch section C&G section	 80 ft. 80 ft.	 12 ft. Standard; 11 ft. Minimum

		12 ft. Standard; 11 ft. Minimum
Local Street: Residential/Subdivision (C&G) Commercial/Industrial/Other	50 ft. 60 ft.	11 ft.* 12 ft. Standard ; 11 ft. Minimum
Cul-de-sac: Commercial/Industrial Residential	75 ft. radius 50 ft. radius	65 ft. radius 40 ft. radius

Notes:
1. *Lane widths include only pavement width. Example: Two lanes at 11 feet with two feet C&G would be 26 feet back to back of curb.
2. Ten-foot lanes are allowed in conservation residential subdivisions.
3. Lane widths on collector streets and other local (non-subdivision) streets will be based on design speed and traffic volumes.
4. Number of lanes will be determined based on traffic volumes, except for subdivision streets which will be typically two lanes only.
5. Street categories based on the current Federal Functional Classification System for Rockdale County.
6. Typical section details are shown in the Rockdale County Standard Design and Construction Details.

C. Right-of-way dedication.
   1. The minimum width of right-of-way shall be dedicated based upon the street classification, as provided in this section and approved by the Director of Transportation.
   2. On any existing street abutting a proposed development, one-half of the required width of right-of-way shall be dedicated, at no cost to Rockdale County, as measured from the centerline of the roadway along the entire property frontage. Right-of-way widths for existing streets shall be based on the current classification as determined by the Director of Transportation.
   3. Additional right-of-way may be required at intersections or other locations fronting the property where turning lanes, storage lanes, medians, re-alignments or other traffic safety improvements are required.
   4. If a new street or thoroughfare is proposed by Rockdale County or the State of Georgia to adjoin or traverse the property, the proposed road shall be accommodated into the development plans of the property in accordance with this UDO. These right-of-way requirements shall govern except where there exist clearly defined plans of the Georgia Department of Transportation (GDOT) or Rockdale County that require additional right-of-way. In that case, the greater right-of-way requirements shall govern.
   5. Clear zone requirements. All new roads/streets should utilize the concepts, designs, and philosophies in the Federal Highway Administration (FHWA) Roadside Design Guide, where practical and feasible to use the latest state-of-the-practice in roadside safety. New roads/streets should also use context-sensitive design concepts in the applications of clear zone. Context-sensitive design concepts are also on the GDOT web site (www.dot.state.ga.us). The application of clear zone concepts on existing roads/streets needs to be used where the greatest safety benefit can be realized. Crash reports, site

investigations, and maintenance records offer starting points for identifying these locations.

13.1.2 Access management.

A. These standards shall apply unless a more restrictive standard is required by the Georgia Department of Transportation.
B. All off-street parking lots shall have access to a paved public or private street and be served by a paved access drive.
C. Interparcel access is required between all abutting parking lots and sites based on site conditions and as determined by the Planning and Development Director, to provide a cross-access drive and pedestrian access to allow circulation between sites.
    1. Interparcel access is not required between nonresidential uses and single-family residential uses.
    2. This shall be accomplished by stubbing a connection to each adjacent the property line. The property owner shall grant an access easement granting public access through the lot. This easement shall be submitted to the Planning and Development Director and recorded by the applicant or property owner with the Rockdale County Superior Court.
    3. Joint driveways between properties shall be established wherever feasible along a major thoroughfare, or arterial or collector street.
D. All developments shall have access to a public right-of-way. The number of access points shall be in accordance with Table 13.1.2.D.

Table 13.1.2.D: Minimum Number of Access Points

Type of Development	Minimum Number of Access Points
Residential, 40 or fewer units	1
Residential, 41—150 units	2
Residential, 151—300 units	3
Residential over 300 units	4
Nonresidential, less than 200 required parking spaces	1
Nonresidential, 200—999 required parking spaces	2
Nonresidential, 1,000 or more required parking spaces	2 or more, as determined by the Planning and Development Director

E. The separation of access points on a thoroughfare, arterial, or collector street shall be determined by the speed limit of the road with the following minimum spacing requirements in accordance with Table 13.1.2.E.
    1. The distance between access points shall be measured from the centerline of the proposed driveway or street to the centerline of the nearest existing adjacent driveway or street.

2. Driveway spacing at intersections and corners shall provide adequate sight distance, response time, and permit adequate queuing space.
3. No driveway, except driveways providing residential access, shall be allowed within 100 feet of the centerline of an intersecting thoroughfare or arterial or collector street.
4. No nonresidential access except right in/right out channelized access shall be allowed within 100 feet of the centerline of any other thoroughfare or arterial.
5. The requirements of this Section are not intended to eliminate all access to a parcel of land that was legally subdivided prior to the enactment of this Section.

Table 13.1.2.E: Driveway Separation	
Posted Speed Limit of Road	Minimum Driveway Spacing
Less than 35 mph	125 feet
36 to 45 mph	245 feet
Greater than 45 mph	440 feet

F. All street design and other development activities, including landscaping, shall be arranged on site so as to provide safe and convenient access for emergency vehicles.

G. Along thoroughfares, arterials, or collector streets, a deceleration lane, a turn lane, larger or reduced turning radius, traffic islands or other devices or designs, including traffic calming devices and designs, may be required to avoid specific traffic hazards which would otherwise be created by the proposed driveway location. The Planning and Development Director may require the submission of a traffic analysis based on the scale and scope of the project to determine required improvements.

H. Deceleration lanes are required for access to residential uses containing 20 or more units that provide less sight distance (in feet) than ten times the posted speed limit (in miles per hour) in accordance with Table 13.1.2.H.
   1. The minimum deceleration lengths shall be as specified below. The Planning and Development Director may vary length requirements based upon a consideration of available sight distances and other contextual features as determined by an engineering study to verify traffic safety.
   2. Deceleration lanes located within 75 feet of an intersection radius may be extended to the intersection.

Table 13.1.2.H: Deceleration Lanes	
Operating Speed	Deceleration Lane Dimensions
Subdivision streets	Not required
35 mph	150’+50’ taper
40 mph	150’+50’ taper
45 mph	150’+50’ taper
55 mph	200’+150’ taper

I. Emergency access. All public streets, private, and residential drives shall be designed and maintained so as to provide safe and convenient access for emergency vehicles, as required by the Rockdale County Fire Marshal.

13.1.3 Driveway design standards.

A. Permits required. No driveway shall be constructed abutting a county-maintained road or street until all applicable driveway permits have been approved and issued by the department. For driveways that abut a state or federal highway, all applicable permits shall be obtained from the GDOT prior to construction.

B. General requirements.
   1. Joint access driveways are permitted in order to achieve minimum driveway spacing requirements.
   2. No property may have a curb cut in excess of 50 feet in width without approval of the Director of Transportation.
   3. If a non-residential driveway design is one-way in or one-way out, then the driveway shall be a minimum width of 16 feet and shall have appropriate signage designating the driveway as a one-way connection.
   4. For two-way, non-residential access, each travel lane shall have a minimum width of 11 feet. When more than two lanes are proposed, a specific driveway design must be approved by the department.
   5. Driveways that enter an arterial or collector street at traffic signals must have at least two outbound lanes of at least 11 feet in width and one inbound lane with a maximum width of 12 feet.
   6. Except for single-family and two-family residences, driveway grades shall conform to the requirements of the Georgia Department of Transportation Design Standards.
   7. Driveways shall intersect roads or streets with no more than a 10-degree skew from a 90-degree angle.
   8. Driveway aprons shall slope from the right-of-way to the edge of pavement or gutter flow line. For all non-single-family driveways and entrances, a storm sewer inlet or grade break shall be provided at the right-of-way line to prevent discharge of stormwater onto the public right-of-way.
   9. Driveways shall comply with the minimum requirements of the Rockdale County Standard Design and Construction Details, based on projected use and classification.
   10. 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 the curb or edge of the 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 Rockdale County Standard Design and Construction Details. All driveways and driveway curb cuts on state highways shall conform to GDOT Standards.
   11. All driveways and driveway curb cuts on state highways shall conform to GDOT Standards.

C. Driveway construction standards.
   1. Sidewalks and curbs adjacent to driveways shall meet requirements of the Americans with Disabilities Act.

2. Portions of driveways within the public rights-of-way shall be of concrete pavement six inches thick and a minimum of 3,000 psi for residential driveways, and eight inches thick, 3,500 psi concrete over compacted subgrade for commercial and industrial driveways.
3. Driveways shall be no closer than three feet, at the closest point, to an at-grade utility structure, including, but not limited to, curb inlets, drainage structures, streetlights, telephone and electrical poles, boxes and transformers, manholes, handholes and fire hydrants.
4. Driveways shall be no closer than ten feet from a street tree or fire hydrant.
5. Water and sewer lines shall be located outside of driveways, except for generally perpendicular crossings.
6. Commercial driveways shall provide a 35-foot minimum radius at any intersection with a public street. If designed for freight vehicles, the minimum radius shall be 75 feet.

D. Sight distance. All roads, streets, and driveways shall provide adequate sight distance as shown in the Table 13.1.3.D.

Table 13.1.3.D: Intersection Sight Distance Requirements

Design Speed	Sight Distance (in feet)				
	2 lanes	3 and 4 lanes		5 and 6 lanes	
	SDL=SDR	SDL	SDR	SDL	SDR
25 mph	280	290	315	335	350
30 mph	335	350	375	400	420
35 mph	390	410	440	465	490
40 mph	445	470	500	530	560
45 mph	500	530	560	595	630
50 mph	555	590	625	660	700
55 mph	610	650	685	730	770
60 mph	665	705	750	795	840
65 mph	720	765	810	860	910

SDR means sight distance required for vehicle approaching from right side of driveway.
SDL means sight distance required for vehicle approaching from left side of driveway.

13.1.4 Requirements for new streets and roadways.

A. All new streets proposed to be constructed in a subdivision or other development shall be designed and constructed to the minimum standards contained in this chapter, in accordance with the classification of streets.

B. If a new street or thoroughfare is proposed by Rockdale County or the State of Georgia to traverse the property, the proposed road shall be designed and constructed in accordance with the street classification as shown in the latest Federal Functional Classification System for Rockdale County and contained in this chapter or as shown on plans proposed by the county or State of Georgia. The specific vertical and horizontal alignment of the proposed roadway shall be as established or approved by Rockdale County and/or the State of Georgia, as applicable.

C. Substandard streets.
   1. If a substandard street (dirt or gravel road or inadequate width of pavement or right-of-way) provides a means of access to a major subdivision or non-residential development, the street shall be upgraded to the street classification standard required by the

Rockdale County Functional Classification System and in accordance with this article. These improvements shall extend from the entrance of the development to the nearest standard paved road of an equivalent or higher classification, along the route of primary access.

2. All right-of-way required for these off-site improvements shall be acquired at the expense of the developer. Additional requirements may be mandated by the county as outlined in subsection B.

D. Improvements along state highways. For any development that abuts a state or federal highway, 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 GDOT and this chapter. A permit for the proposed access or improvements shall be required to have been approved by the GDOT and incorporated into the construction drawings for the project prior to issuance of a development permit by the department.

E. Permanent dead-end streets.
   1. New streets shall connect at both ends to existing streets unless the Director of Transportation determines that unique parcel configuration or terrain make a fully connected street pattern infeasible or unsafe.
   2. When necessary, streets designed to have one end permanently closed shall provide a cul-de-sac turnaround and may be no more than 800 feet in length, unless otherwise approved by the Director of Transportation.
   3. 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.
   4. Cul-de-sacs shall conform to design requirements of the Rockdale County Standard Design and Construction Details.

F. Temporary dead-end streets.
   1. A temporary dead-end street shall be provided to the boundary of a subdivision to provide access to abutting property for planned continuity of future circulation, improved access for public safety vehicles or for the extension of public water or other utilities to neighboring properties. Such dead-end streets shall be designed to meet the requirements of this article, and to allow their reasonable extension and shall be located so as to be reasonably incorporated into a street design for the neighboring property. A temporary vehicular turnaround shall be provided as shown in the standard details.
   2. Existing dead-end streets on abutting property shall be extended into a proposed subdivision and incorporated into the street design of the development.
   3. Subsections 1 and 2 of this subsection may be modified by the Director of Transportation in cases of serious topographical hardship or unacceptable land use conflicts between the two developments. This modification may be conditioned on the provision of easements necessary for the extension of public utilities, the provision of a 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.
   4. Where a dead-end street (other than a cul-de-sac) serves four or more lots in a multi-phase subdivision and such street is to be extended later, the developer shall be required to provide a temporary vehicular turnaround complying with this ordinance. 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.

G. Access roads. Where a development borders on or contains a railroad right-of-way, major utility easement, limited access highway right-of-way or a 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. Locations of such service roads shall be aligned with similar service roads on adjacent properties.

H. Construction access drives are required for vehicles with gross weight of 10,000 pounds or more.
    1. On multi-phase developments, the developer shall be required to dedicate, install, maintain and remove temporary construction access drives for the ingress and egress of construction vehicles, personnel and equipment.
    2. Temporary construction access drives shall be shown on the concept plan and preliminary plat and shall access an existing county road where possible. Construction access drives shall be permitted through the Department of Transportation, and shall comply with sight distance requirements herein.
    3. Temporary construction access drives shall be utilized as the sole means of ingress and egress during the construction of subsequent phases of the development, to prevent the flow of construction and heavy vehicular traffic on newly constructed streets completed under earlier phases.
    4. If a temporary construction access drive cannot be provided at the discretion of the Director of Transportation, due to site-specific restrictions, then the developer shall provide a maintenance bond for those portions of the newly constructed roadway utilized for construction access. The maintenance bond shall provide surety for roadway repairs and resurfacing. The required bond amount per linear foot shall be the current amount established by the Board of Commissioners. The maintenance bond shall be provided to the county prior to the start of construction, and shall not expire for a period of 24 months following the completion of all construction activities.

I. Half streets. Both the construction of new half streets and the extension of access to existing half streets shall be prohibited. Whenever a street is planned adjacent to the proposed subdivision tract boundary, the entire street right-of-way shall be platted within the proposed subdivision.

J. Reserve strips. Land in private ownership adjacent to public rights-of-way, which could control or is intended to control access to streets, alleys or public lands, shall not be permitted unless control is given to the county under ownership, dedication or easement conditions approved by the county attorney or acceptable to the Director of Transportation. No development shall be designed so as to deny access to abutting properties.

K. Alleys. Alleys may be permitted by the Director of Transportation where lots are less than 75 feet in width or otherwise when the developer produces satisfactory grounds for the request. In the event the Director of Transportation approves the request, the alleys must be laid out in a grid fashion at rear lot lines, and double-fronting lots are permitted. The alley shall be designated as a public street pursuant to the standards contained in this ordinance. Alleys shall not be permitted as dead end-streets.

L. Street jogs.
    1. Local streets shall either directly align or have offsets of a minimum of 125 feet for residential subdivision streets and a minimum of 200 feet for non-residential subdivision streets, as measured between the centerlines.

2. Where it is not feasible to align new streets or entrances with an existing street intersecting nearby on the opposite side of a collector or arterial street, then the new street intersection shall be no less than 600 feet from the intersection of the existing street, as measured between centerlines of the two opposing streets.

M. Traffic-calming measures. Traffic-calming measures shall be incorporated in accordance with the Rockdale County Traffic-calming Guidelines. Specific measures may include eastabout, speed tables or other methods approved by the Director Transportation. Street layout and configuration should include a series of relatively short interconnected roadways in lieu of longer straight roads, to discourage excessive speeds. See Section 13.1.10, Traffic calming devices.

13.1.5 Street intersections.

A. Angle of intersections. Intersections of two public streets shall form an angle that is between 85 and 95 degrees, unless otherwise approved by the Director of Transportation. If the intersection is signalized, the angle of the intersection may be reduced subject to the review and approval of the Director of Transportation.

B. Intersection approaches.
   1. The approaching street at any intersection shall be designed and constructed to provide both the minimum horizontal and vertical approach distances, as defined in this section and indicated in the table below.
   2. Minimum horizontal approach distance is defined as the minimum distance required along the centerline of an approaching street, perpendicular or no less than 85 degrees to the intersected street, as measured from the edge of pavement of the intersected street to the point of horizontal curvature on the approaching street.
   3. Minimum vertical approach distance is defined as the minimum distance required along the centerline of the approaching street, at a grade less than or equal to the recommended grade indicated in Table 13.1.5.B as measured from the edge of pavement of the intersected street to a point on the profile of the approaching street where grades exceed recommended values.

Table 13.1.5.B: Intersection approach distances

Approaching Street Classification	Minimum Horizontal Approach Distance 1	Minimum Vertical Approach Distance 1	Recommended Approach Grade 2
Principal Arterial	300 Ft.	200 Ft.	2.0%
Minor Arterial	200 Ft.	150 Ft.	2.0%
Collector Street	150 Ft.	100 Ft.	2.5%
Local Street	75 Ft.	50 Ft.	4.0%

1. Distance of the approach is measured from edge of pavement of the intersected street to the point of curvature in the approaching street.
2. Recommended approach grades shall be considered as the maximum allowable grades, unless otherwise approved by the Director of Transportation. No grade shall be less than 1.5%.

C. Crown taper. The typical crowned street cross section shall be tapered over a distance of not less than 50 feet on the approaching street at all intersections, in order to connect flush with the line and grade of the edge of pavement on the intersected street. The cross-section taper shall be designed and constructed so as to provide for the adequate drainage of surface water from all portions of the travel surface and gutter.

D. Intersection radii. Intersection radii for roadways measured at back of curb and for the right-of-way lines shall be as shown in Table 13.1.5.D. For intersecting streets of different classification, the larger radii shall be provided. Larger radii may be required for streets intersecting at angles less than 90 degrees. In all cases, adequate right-of-way shall be provided to maintain a minimum of 12 feet from back of curb to right-of-way line. Miters are acceptable.

Table 13.1.5.D: Intersection Radii	
Street Classification	Radius at Intersection
Principal Arterial	30 ft.
Minor Arterial	30 ft.
Collector Street	25 ft.
Local Street-Rural or Urban	25 ft.
Commercial/Industrial	35 ft.

E. Islands. Islands in street intersections shall conform to the design requirements of the Rockdale County Standard Design and Construction Details. 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, street trees and other infrastructure erected or approved by Rockdale County. No island shall be approved that contains less than 100 square feet. Irrigation or other private systems shall not be installed within public right-of-way.

F. Intersection corner sight distance.
   1. Intersections shall be designed with adequate corner sight distance for each approaching street. Where necessary, back slopes 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 calculated using latest edition of AASHTO "Policy on Geometric Design of Highways and Streets", chapter 9 (at-grade intersections).

G. Obstructing visibility at intersections. On all corner lots located at a street intersection, a clear sight zone shall be maintained at all times. The design and location of new intersections shall meet the standards of Section 13.1.2, Access Management and Section 13.1.3, Driveway design Standards.

H. Turning lanes at intersections. Both center left-turn and right-turn lanes shall be provided on all new internal project streets, and on all existing county roads, where traffic volumes and turning movements warrant the installation. At the request of the Director of Transportation, the developer or applicant shall prepare and submit a detailed traffic study (as defined herein), outlining projected traffic volumes, turning movements and auxiliary lanes required. The methodology and conclusions presented in the traffic study are subject to the review and approval of the Department of Transportation.
   1. Center turn lane storage. A minimum storage length of 150 feet shall be provided for center left turn lanes on any arterial streets. A minimum storage length of 100 feet shall be provided on all collector streets. Additional storage capacity shall be provided as required, based on projected peak traffic volumes and turning movements.
   2. Taper length. The taper length shall be in accordance with AASHTO design standards, based on the lane widths and design speed of the subject street.
   3. The design, right-of-way acquisition, drainage system improvements, roadway widening, asphalt construction, traffic control, traffic striping, signage and all other improvements required or incidental to the installation of auxiliary turn lanes required to support any

proposed development shall be completed by the developer or applicant, at no cost to Rockdale County.

4. Under the following conditions, left storage lanes shall be added to two-lane collectors or arterials with speed limits of 30 mph or more, at unsignalized locations where left turning vehicles will leave the arterial or collector street and enter major driveways or development entrances. See Table 13.1.5.H.

Table 13.1.5.H: Left Lane Storage Lane Requirements

If average peak hour left turn volume is:	And collector/arterial traffic is (vehicles per lane in peak hour):	Left turn storage lane:
Over 25	All volumes	Required
16—25	51-100	Required
13—15	101-200	Required
1—12	Over 200	May be required
Any volume	Any volume	May be required by Director of Transportation if sight distance (in feet) in either direction is less than 10 times the posted speed limit.

Source: Institute for Traffic Engineers, Traffic Engineering Handbook.
Note: Traffic volume shall include all additional vehicles from proposed development.

5. The length of left turn storage lanes and tapers shall be as prescribed in the Table 4-9, "Minimum Design Elements of Left Turn Lanes", GDOT "Regulations for Driveway and Encroachment Control", and the latest edition.

13.1.6 Geometric street design standards.

A. All streets and roadways shall be designed in accordance with the AASHTO Standards, as provided in "A Policy on Geometric Design of Highways and Streets," latest edition and any amendments thereto. All applicable signage, markings or other traffic control measures shall be designed in accordance with the Manual of Uniform Traffic Devices (MUTCD), latest edition and any amendments thereto.

B. Horizontal curvature and super-elevation. All new streets shall adhere to the standards governing horizontal curvature and super-elevation in Table 13.1.6.B unless otherwise specified by AASHTO Standards:

Table 13.1.6.B: Horizontal Curvature and Super-elevation

Street Category	Design Speed	Minimum Radius	Maximum Super-elevation
Principal Arterial	55 mph	1190 ft.	0.04
Minor Arterial	45 mph	711 ft.	0.04
Collector Street	30 mph	348 ft.	0.04
Note: Super-elevation not required for local streets.			

C. Tangents. Between reverse horizontal curves there shall not be less than the minimum centerline radii and tangents shown in the "Table of Horizontal Alignment and Reverse Curves," unless otherwise specified by AASHTO Standards. Compound radii are prohibited.

Table 13.1.6.C: Horizontal Alignment and Reverse Curves

Street Category	Desirable Tangent Length	Minimum Tangents Between Reverse Curves
Principal Arterial	400 ft.	250 ft.
Minor Arterial	280 ft.	200 ft.
Collector Street	150 ft.	100 ft.
Local Street	120 ft.	50 ft.

D. Vertical alignment.
   1. All changes in street profile grades having an algebraic difference greater than that shown in Table 4.3.5 of the latest edition of the GDOT Design Manual shall be connected to a parabolic curve having a minimum length in feet (L), which is equal to the algebraic difference between the grades in percent (A) multiplied by the design constant (K) assigned to the street according to its classification and design speed (i.e. L = KA).
   2. (K) values shown in Table 13.1.6.D of Constant (K) Values for Vertical Alignments shall be utilized in all cases, and in no case shall the constant K value be less than the minimum permitted.

Table 13.1.6.D: Constant (K) Values for Vertical Alignments

Street Category	Design Speed	Crest Vertical Curves (K Value)	Sag Vertical Curves (K Value)
Principal Arterial	55 mph	114	115
Minor Arterial	45 mph	61	79
Collector Street	30 mph	19	37
Local Street	25 mph	12	26

E. Street centerline grades.
   1. Street or road grades exceeding ten percent for a minor collector and 12 percent for local streets are prohibited, unless otherwise approved by the Director of Transportation. The Director of Transportation may grant limited exceptions on maximum grades, based on conclusive evidence that shows a lesser grade is impractical due to topographic or site-specific limitations.
   2. The minimum centerline grade for any street or roadway shall not be less than 1.5 percent, without exception, due to drainage concerns. A desirable minimum centerline grade of two percent shall be provided where possible.
   3. The maximum centerline grade across any cul-de-sac turnaround shall be five percent.

F. Crown slope. Unless super-elevated, all streets and roadways, except alleys, shall be designed and constructed with a crown slope of one-quarter inch per foot, to provide for the adequate drainage of surface water from the street centerline to the gutter or edge of pavement.

G. Super-elevation. The design of arterial and major collector roadways may require the super-elevation of the travel surface on horizontal curves in accordance with AASHTO Standards. The design and horizontal alignment of minor collectors and local streets serving residential areas should avoid the use of super-elevation where possible. In all instances, the maximum super-elevation rates shall be in accordance with subsection B above. Under no circumstance is a curved street of any classification to be reverse super-elevated.

H. Pavement design.
   1. Pavement sections shall be constructed in accordance with the standards in the “Table of standard pavement sections.”

2. The developer may submit for review and approval an alternative pavement design, prepared at the developer's cost. This submittal shall meet the following requirements:
    a. Design prepared by a professional engineer licensed in Georgia.
    b. Soils testing results prepared by a professional engineer licensed in Georgia.
    c. Design shall be completed using the GDOT's "Asphalt Pavement Design Procedures", latest edition.
    d. Design shall be based on 15-year pavement life.
    e. Traffic shall be calculated using the Trip Generation Manual, by the Institute of Transportation Engineers, latest edition.
    f. Traffic projections shall be made for any streets that serve areas outside of the proposed development.
    g. Traffic counts, including truck traffic, shall be made as required on existing roads.
    h. Rockdale County will require written certification that material used in sub-base conforms to the soils test results used in the design.
    i. Cores of pavement and base will be made as necessary to verify actual thickness of each pavement layer (surface, base, and sub-base). Copies of the test reports will be made available to the inspector. The minimum number of cores of surface, binder, base, and sub-base is one core per 500 feet of each street (or one core with streets less than 500 feet in length).

Table 13.1.6.H: Standard Pavement Sections

Street Type 1, 2	9.5 mm Superpave		Superpave			GAB 3
	Type I	Type II	12.5 mm	19mm	25mm	
Residential Streets						
<250 VPD	1¼”			2”		6”
250—1,000 VPD	1¼”			2¼”		6”
1,001—5,000 VPD		1½”		2½”		8”
Commercial/Industrial Streets						
>250 VPD		1½”	2½”	3”		10”
251—1,000 VPD		1½”		2½”	3”	10”
1,001—5,000 VPD			2½”	3”	4”	12”

Notes:
1. Only roads that serve strictly residential uses (<1 percent trucks) shall use the sections listed above as residential. All other developments shall use the commercial/industrial sections.
2. All streets designated as “arterial” shall have a pavement design submitted that meet the requirements for commercial/industrial streets.

13.1.7 Street construction standards and specifications.

Unless otherwise specifically set forth in these regulations, all of the materials, methods of construction, and workmanship used in street construction shall conform to GDOT's "Standard Specifications for the Construction of Transportation Systems," latest edition and any amendments thereto.

A. Pre-construction meeting. A mandatory pre-construction meeting is required for all development, construction and land disturbing activities, unless this requirement is specifically waived by the department. The applicant or developer shall contact the department to schedule the pre-construction meeting. The department will ensure the attendance of all necessary county staff. The applicant or developer must, at a minimum, have the following project personnel attend the pre-construction meeting:
    1. On-site project representative on behalf of the applicant or developer.
    2. General and/or grading contractor.
    3. Sub-contractors performing drainage system installation, base course construction and asphalt paving.
    4. Other specialty contractors performing a significant portion of the work.
    5. Design professional responsible for project design.

B. Clearing and grubbing. Before grading is started, the entire right-of-way area shall be first cleared and grubbed of all trees, stumps, roots, brush, debris and other objectionable materials. Specific trees that are intended for preservation shall be indicated on the design plans and subject to the review and approval of the department. All clearing limits shall be marked and tree protection fence installed prior to the pre-construction meeting. All erosion control measures shall be installed as required by the approved plans and in accordance with this chapter.

C. Rough grading.
    1. Grading activities shall be performed in accordance with the lines and grades shown on the approved construction plans. Grading plans shall include a plan view of the proposed roadway, showing existing and proposed contour lines at an interval of no more than two feet, as well as a profile of the street centerline and all applicable curve and design data. Grading plans shall outline those areas required to remain undisturbed (i.e., tree protection areas, buffers, etc.) and shall indicate protective fencing or staking to be placed surrounding such areas.
    2. Cut or fill slopes shall not exceed three horizontal units to one vertical unit, unless otherwise approved by the Director of Transportation based on site-specific topographic and geotechnical conditions. Flatter slopes shall be provided, where possible, to better accommodate utility installation and maintenance activities.
    3. Erosion and sediment control best management practices (BMPs) shall be installed in accordance with the approved construction plans, prior to or concurrent with all land disturbing activities. Alternate or additional BMPs may be required by the county inspector, if it is deemed that current measures do not provide adequate protection.
    4. All suitable material from roadway cuts may be used in the construction of fills, approaches or at other places as needed. Excess or unsuitable materials, including organics, soft clay, etc., shall be removed from within the right-of-way and for a distance not less than one foot on each side of the road surface for each vertical foot of unsuitable material at the right-of-way line.
    5. Fill material shall be placed in uniform horizontal layers or "lifts," not to exceed a compacted thickness of more than six inches. Moisture content shall be adjusted as necessary to compact material to 95 percent of maximum dry density. The top 12 inches of sub-grade material under any roadway, drive or parking area shall be compacted to 98 percent of standard proctor density.

D. Final grading and sub-grade preparation.
    1. After rough grading, storm sewer and utility installation is complete and the back-fill in all such ditches is thoroughly compacted, the sub-grade shall be brought to the lines, grades, and typical roadway section shown on the plans.
    2. All utility crossings shall be installed prior to sub-grade approval. If utility installation cannot be completed at this time, the developer shall coordinate the installation of casings or conduits to accommodate subsequent utility installation without disturbance to the sub-grade. Utility trenches cut in the sub-grade shall be backfilled and compacted as specified herein. The county inspector may require additional compaction tests at utility crossings to verify compaction.
    3. Prior to sub-grade inspection and approval, the design professional shall certify in writing to the department that the lines and grades of the proposed street or streets are within six inches of design grades. This letter shall be submitted prior to sub grade inspection by county personnel.
    4. Sub-grade testing and inspection: Sub-grade compaction shall be tested by the county inspector, prior to construction of the graded aggregate base course. Compaction testing shall be accomplished by visual inspections of actual live axle loads, commonly referred to as a "roll test." The developer or contractor shall schedule all compaction tests with the county inspector no less than 24 hours in advance. The developer or contractor also shall provide an adequate testing vehicle, minimum 18-ton hauling capacity, fully loaded. All areas or sections of the sub-grade that do not pass visual live load compaction testing, at the discretion of the county inspector, shall be corrected. Once the developer or contractor makes all necessary corrections, it shall be his/her responsibility to re-schedule any and all subsequent roll tests.
    5. Provisions shall be made to provide adequate drainage of the road surface during the course of construction, including temporary four-inch drain lines in all concrete gutters.

E. Graded aggregate base course construction.
    1. The base course shall consist of graded aggregate, of a minimum thickness as required based on the street classification. Minimum base course thickness is provided in subsection 13.1.6.H. The base course shall be constructed in accordance with the lines, grades and typical cross sections shown on the approved construction plans. All aggregate materials shall be secured from GDOT- approved sources and shall comply with section 815 of the "Standard Specifications for the Construction of Transportation Systems," latest edition.
    2. All base course material shall be spread uniformly with a mixture spreader, or other approved means, to the proper depth to obtain the required thickness. The maximum thickness of base course material to be placed in one course shall be six inches compacted. If the design thickness of the base course is more than six inches, it shall be constructed in two or more courses of approximate equal thickness. With sufficient and suitable equipment, the county inspector may allow base material to be placed in lifts up to eight inches.
    3. The moisture content of the aggregate material shall be uniformly distributed and shall be adequate to allow compaction to a minimum of 100 percent of the maximum dry density based on the modified proctor method. Immediately following the spreading of the graded aggregate, all material shall be compacted to the full width by rolling with a

smooth-wheel, vibratory roller weighing seven to ten tons, or an equivalent sheepsfoot packer. Rolling shall progress gradually from the edge to the center, parallel with the centerline of the street and lapping uniformly each preceding track by one-half the width of such track. Rolling shall continue until the entire surface is smooth, closely knit, free from cracks, conforming to the prescribed line, grade and cross section, within the limits specified.

4. Any irregularities, areas of segregation or depressions that develop under such rolling shall be corrected by loosening the material at these locations and adding or removing material until the surface is smooth and uniform. The application of water, applied uniformly over the base course, may be required to achieve adequate compaction. Shaping and rolling shall be performed alternately, as required to prepare a uniform compacted base.
5. Along curbs, headers, walls and at all locations not accessible to the roller, the base course material shall be compacted thoroughly with mechanical tampers or approved hand tampers.
6. No base material shall be deposited or shaped when the sub-grade is frozen, thawing, or during other unfavorable weather conditions.

F. Graded aggregate base course testing and inspection.

1. Cross section. The cross section and crown slope shall be verified at intervals or locations determined by the county inspector. The developer or contractor shall provide a string line and dedicated personnel to pull the line and allow verification measurements to be made by the county inspector. Those areas or portions of the roadway, which do not comply with the design cross section or crown slope, shall be corrected and verified by county personnel prior to base course approval.
2. Roll test. Base course compaction shall be tested by the department prior to the application of bituminous asphalt paving. Compaction testing shall be accomplished by visual inspections of actual live axle loads (roll test). The developer or contractor shall schedule all compaction tests with the county inspector no less than 24 hours in advance. The developer or contractor also shall provide an adequate testing vehicle, minimum 18-ton hauling capacity, fully loaded. All areas or sections of the base course that do not pass visual live load compaction testing, at the discretion of the county inspector, shall be corrected. Once the developer or contractor makes all necessary corrections, it shall be his/her responsibility to re-schedule any and all subsequent roll tests.
3. Prime coat. At the completion of base course construction, testing and approval by the county inspector; the base course shall be primed and sealed with 0.25 gallon of R.C. 70 per square yard. This requirement may be waived by the county inspector, if the placement of asphalt paving is anticipated within the following three to five days and prior to any significant rainfall event.
4. Additional inspections due to weather conditions. If a significant weather or rainfall event occurs following the approval of base construction but prior to asphalt paving, the county inspector may require additional roll testing to re-verify the structural integrity of the road base. The developer or contractor shall be subject to comply with such additional inspections, at the discretion of the county inspector.

G. Bituminous asphalt paving.

1. Bituminous asphalt production, handling, transportation and placement shall meet or exceed the requirements of the GDOT's "Standard specifications construction of transportation systems," latest edition and any amendments thereto. Asphalt pavements shall be of the superpave mix design, as specified herein; and the use of conventional mix designs will not be permitted, unless otherwise approved by the Director of Transportation.
2. Equipment.
    a. Mechanical pavers. Mechanical pavers used for the placement of hot-mix asphalt shall be capable of spreading and finishing all courses to the indicated widths and depths, true to line, grade and cross section, and shall be capable of striking a smooth finish, uniform in density and texture. Mechanical pavers shall be equipped with extendable screeds, capable of spreading at the width of each travel lane in one pass.
    b. Compaction equipment. The compaction equipment must be in good mechanical condition and capable of compacting the mixture to the required density. The number, type, size, operation, and condition of the compaction equipment shall be subject to the approval of the county inspector. At a minimum, a smooth drum vibratory roller (minimum eight tons) and a separate pneumatic-tired roller shall be provided. An additional finish roller or larger equipment may be required by the county inspector, based on visual observations of surface texture or density tests.

H. Paving operations.
1. The county inspector will require that a copy of the detailed asphalt mix design be submitted prior to asphalt paving. Only asphalt produced by a GDOT-approved plant may be utilized. Plant production, transportation and paving operations shall be so coordinated that a uniform continuity of operation is maintained. If the spreading operations are interrupted for one hour or more, a transverse joint shall be constructed. Asphalt shall be delivered to the job site at a temperature that is within 20° F (11° C) of the temperature of the job mix formula. The county inspector may reject any asphalt load that does not meet temperature requirements, contains segregated material or does not comply with mix design requirements.
2. Weather limitations. The mixing and placement of bituminous asphalt pavement shall not be performed when the existing surface is wet or frozen. For all courses, the air temperature for placement of the mix shall be in accordance with the "Table of Air Temperature for Placing Asphalt Pavement."

Table 13.1.7.H: Air Temperature for Placing Asphalt Pavement

Lift Thickness (Inches)	Minimum Temperature (°F)
1” or Less	55
1.1 to 2.0”	45
2.1 to 3.0”	40
3.1 to 4.0”	35
4.1 to 8.0”	32
Note: Temperature must be rising and base material may not be frozen.	

3. Bituminous tack coat. Tack shall be applied prior to the placement and compaction of all subsequent courses of asphalt pavement, in accordance with GDOT Standards, Section 413. On curbed streets, the edge of the gutter shall be tacked to provide a water-resistant seal at the joint. Special care shall be taken to avoid the application of bituminous tack to portions of the curb and gutter that are to be visible following construction.
4. Wearing course must be placed at the earliest of the following times:
    a. Upon completion (final inspection) of principal structures on 80 percent of the buildable lots in the subdivision.
    b. Two years after recording of the final plat for the subdivision.
    c. At an earlier time by the mutual consent of the developer and the department.
5. Prior to installation of the surface pavement course and bituminous tack coat, the county inspector shall inspect existing asphalt pavement for damage from traffic and construction activities. Any areas found shall be repaired to the inspector's satisfaction prior to final paving.

I. Concrete streets. Concrete streets are not allowed.

J. Rural cross section. Certain local residential roads may be constructed without curb and gutter as provided in this chapter. On all such rural streets, the road base shall be extended one foot beyond the edge of the pavement.

K. Typical sections. All streets and roadways shall be constructed to the typical sections specified in the Rockdale County Standard Design and Construction Details, based on street classification category.
    1. Copies of test results are to be made available to the county inspector as needed for verification of standards and specifications.

13.1.8 Curbs and gutters.

A. All new streets or street widening sections shall be provided with curb and gutter, except as noted below. All gutters shall drain positively with no areas of ponding.

B. Only in rare circumstances shall streets without curb and gutter be allowed with the approval of the Director of Transportation. Such cases may involve future street widening projects or unique circumstances that prevent the installation of new curb and gutter. Otherwise, all new streets shall have curb and gutter.

C. All concrete curb and gutter shall be GDOT Standard 9032B, Type 2 (except in subdivisions, where the curb and gutter shall be 24 inches wide, while all other dimensions remain). Roll-back or Hollywood curbing shall be prohibited.

D. Curbing shall conform to the following standards:
    1. Concrete shall be class "A," as defined by the GDOT, and have a minimum strength of 3,000 PSI at 28 days.
    2. One-half inch expansion joints or pre-molded bituminous expansion joint material shall be provided at all structures and radius points and at an interval not to exceed 250 feet in the remainder of the curb and gutter. Contraction joints also shall be provided at ten-foot intervals along the curb line.
    3. When the development ties into existing curbing, the curb and gutter shall transition to and match the existing width and profile at the connection point.

4. Terminations or curb tapers shall be provided at the end of any gutter. The curb height shall be tapered from six inches to zero inches over a distance of six feet.

E. Curb and gutter shall be set true to the line and grade of the street, horizontally and vertically field staked and finished to the section shown on the plans. Line and grade shall be established by the developer's engineer or surveyor. Offset staking shall be provided at 50-foot intervals.
F. Curbing not installed in accordance with the requirements of this section or the standard details shall be removed and replaced at the developer's expense. The county inspector may require, and the developer shall provide core samples to verify concrete thickness.
G. Disturbed areas along all curbing shall be backfilled, compacted, stabilized, and grassed.

13.1.9 Sidewalk and bikeway requirements.

A. Sidewalks shall be located:
    1. Along the street frontage of all commercially zoned property.
    2. Along the existing street frontage of any new development.
    3. Within a one-half (½) mile radius of any public school.
    4. On both sides of all streets in any residential subdivision, except in the A-R and W-P zoning districts.
B. Sidewalks in subdivisions shall be continued to the nearest arterial street.
C. Sidewalks shall be located as shown on the Rockdale County Standard Design and Construction Details. All new sidewalks shall match and provide a smooth transition to any existing sidewalk.
D. Sidewalks shall be installed on an individual lot basis at the time of building construction. The county shall inspect the location and construction of the sidewalk and shall not issue a certificate of occupancy until the required sidewalk is properly installed.
E. A strip of grass or other approved landscape material at least four feet in width shall separate all sidewalks from adjacent curbs on public streets. See Rockdale County Standard Design and Construction Details.
F. Sidewalks shall be concrete and a minimum of five feet wide and four inches thick. Concrete shall be class "A," as defined by the GDOT, and have a strength of 3,000 PSI at 28 days. Disturbed areas along sidewalks shall be backfilled, compacted, stabilized and grassed. The county inspector may require and the developer shall provide core samples to verify core thickness.
G. Additional sidewalks and/or pedestrian easements may be required in subdivisions or developments where deemed essential to provide circulation or access to schools, playgrounds, shopping centers, transportation and other community facilities.
H. Bicycle lanes, where provided, shall be a minimum of four feet in width and placed between the outside lane of a roadway and the curb or shoulder. When on-street parking is permitted, the bicycle lane shall be between the parking lane and the outer lane of moving vehicles. Lanes shall be delineated with appropriate markings, as required by MUTCD Standards. Bikeways and bicycle lanes must be pre-approved by the department and meet the requirements of AASHTO "Guide for the Development of Bicycle Facilities," latest edition.

13.1.10 Traffic calming devices.

A. Easeabouts and associated signage shall be included in the design and construction of all streets and roads in the county where either the design speed or the posted speed limit is 35 miles per hour or less.

B. The Director of Transportation shall establish specific standards for the design, construction, placement and planting plan for easeabouts, as well as for the design and construction of other types of island splitters, including entrance islands, boulevards, roundabouts, cul-de-sac islands and other such vegetated or natural islands within the right-of-way. These standards shall be known as "Island, Easeabout and Roundabout Design and Placement Standards for Rockdale County," further referred to and known as the design and placement standards and are hereby made a part of this section by reference. The design and placement standards are available to the public and shall be maintained in the offices of the department and the office of the Board of Commissioners. The Director of Transportation may, from time to time, modify these technical standards.
C. Easeabouts for all local streets shall be designed and installed in accordance with the design and placement standards. Easeabouts shall be placed at intervals and locations as specified in the design and placement standards.
D. All other types of islands or island splitters, including entrance islands, roundabouts, cul-de-sac islands and other such vegetated or natural islands within the right-of-way shall conform to the design standards contained in the design and placement standards.
E. Other designs or types of traffic calming devices may be approved at the discretion of the Director of Transportation, provided that such devices meet the following minimum criteria:
    1. The proposed traffic calming device must be recognized as such by the transportation industry, i.e., it must be recognized by the Institute of Transportation Engineers, American Association State Highway Transportation Officials, the Federal Highway Administration, the American Traffic Safety Services Association or other nationally recognized transportation industry organization or guiding authority.
    2. The proposed traffic-calming device must be designed, located, and constructed in accordance with the minimum standards of the approving organization or guiding authority. The Director of Transportation may impose additional design, location, or construction criteria prior to approving such a device.
    3. The proposed traffic-calming device must include plantings, water quality, or other environmental enhancements or beautification elements.
    4. Traffic calming may be accomplished via proper geometric design of the streets. Such designs may be accepted by the Director of Transportation in lieu of ease-abouts or other structural traffic calming devices.
    5. The Director of Transportation may disallow the use of devices that meet the criteria set forth in subsections A through D of this section if, in his judgment, the installation of such a device would create unusual or costly maintenance, create a safety hazard, restrict movement of emergency vehicles, be incompatible with existing or anticipated freight traffic due to continuous or heavy truck use, or would otherwise not be in the best interest of the county.
F. Islands that are not specifically for traffic calming, such as entrance islands, cul-de-sac islands, tree-save islands or other decorative islands, may be approved for construction by the Director of Transportation, if they conform to the design principles contained in design and placement standards.
G. All plant materials included in easeabouts or other islands shall be installed at the expense of the developer and shall be maintained by the subdivision's homeowner's association. A notification to this effect shall be included on the final plat recorded for the subdivision.

H. The Director of Transportation may, at his or her discretion, approve unusually shaped islands or innovative designs.
I. Any aggrieved person not satisfied by the decision of the Director of Transportation may appeal such a determination in accordance with the procedures set forth in Section 18.10, Appeals.

13.1.11 MUTCD Compliance.

A. MUTCD compliance. All traffic signals, signage, striping and pavement markings shall conform to the MUTCD, latest edition and any amendments thereto. Traffic control signs shall comply in shape, color, size, reflectivity, height, materials and placement.
B. Traffic signage.
    1. After final plat approval, the developer shall procure and install all necessary traffic signs, traffic signals, and pavement markings as called for in the final plat. Rockdale County will inspect the installation to insure that work is done in accordance with the final plat and the Manual on Uniform Traffic Control Devices (MUTCD).
    2. Any signs that are damaged following initial installation, due to additional work at the site, shall be replaced at the developer's expense.
    3. Decorative signs or traffic control devices shall be prohibited. The use of decorative signposts may be approved at the discretion of the Director of Transportation, if covenants are provided that require decorative sign post replacement to be funded by an established property owner's association. If decorative signposts in any development are damaged or worn, the county will provide only a standard U-channel sign post as replacement.
C. Pavement markings.
    1. Local streets with curb and gutter are exempt from traffic striping requirements, except for stop bars at stop signs and markings at ease-abouts and traffic circles. All other street classifications shall require both centerline and edge line striping in accordance with this chapter.
    2. All centerline or edge line striping shall be performed in compliance with GDOT Standard 652, Paint Striping. On any street classified as a major collector or arterial, all traffic striping shall be thermoplastic in accordance with GDOT Standard 653.
    3. All pavement markings shall be reviewed and approved by the department. All pavement markings shall be thermoplastic and shall be installed in accordance with GDOT Standard 653 and MUTCD requirements.
    4. On any newly paved or resurfaced streets on public rights-of-way, thermoplastic stop bars are required on all approach lanes in accordance with MUTCD Standards.
    5. Raised pavement markers or similar devices shall be required on all major collector and arterial streets, and on any other street installed by developers where safety conditions warrant such devices.
D. Traffic signals.
    1. Prior to the installation of a traffic signal, the installation of a single-lane roundabout shall be considered.
    2. Traffic signal installation must be approved by Rockdale County and the GDOT, if on a state route. The developer shall submit a traffic study prepared by a professional engineer, registered in the State of Georgia, detailing existing and projected traffic volumes, movements, capacity and required improvements. The Director of Transportation may require that a traffic study be provided for any development where

increased traffic volumes may significantly impact the existing capacity, traffic flow or safety on any existing county road.

E. Traffic safety improvements. It shall be the developer's sole responsibility to fund, design, construct and/or install any all traffic safety improvements and traffic control devices required to provide safe ingress and egress to any development.

13.1.12 Unpaved county roads.

A. Paving of the county's unpaved roads will be accomplished under the following procedures subject to availability of funds:
    1. Roads requiring additional right-of-way. These type of roads are generally connecting roads to other more heavily traveled roads in the county. The road design would be in accordance with the subdivision standards.
        a. Property owners will submit a request to the department to pave the road.
        b. The request would include a signed petition by at least 60 percent of the owners that agree to donate the necessary right-of-way.
        c. Upon completion of concept design, Rockdale County will provide notice to the public of a public information meeting (PIM) on the specific project. The purpose of the meeting will be to reveal the concept design and address any questions that the citizens may have on the project. Following the PIM, Rockdale County will evaluate the comments from this meeting; and, if 80 percent support is achieved, Rockdale County will proceed with the final design plans.
        d. Upon completion of the final design plans, a second PIM will be held to answer any questions that may arise. Immediately following the second meeting, personal contact will be made with each property owner to secure donations of right-of-way. This contact will be made by an independent land acquisition person and/or a county employee to secure the right-of-way. At this stage of design, if a minimum of 80 percent of the property owners on the project have signed deeds donating right-of-way to the county, the county will proceed with right-of-way negotiations with the final 20 percent of the property owners. The percentage referred to in this paragraph may be changed for public necessity by the Board of Commissioners.
        e. If Rockdale County is unsuccessful in securing the right-of-way from the final 20 percent of the property owners, the county shall proceed with condemnation of the right-of-way.
    2. Roads not requiring additional right-of-way.
        a. The criteria for these roads would be in accordance with the following:
            i. Traffic volumes less than 100 vehicles per day.
            ii. Dead-end road.
            iii. Existing right-of-way of at least 50 feet.
            iv. Less than ten homes/residences adjacent to the road.
            v. No major drainage problems.
            vi. No major environmental issues.
            vii. Little or no crash history.
            viii. Approximately ½ mile in length or less.
        b. The design of the road would be in accordance with the Guidelines for Geometric Design of Very Low-Volume Local Roads, latest edition.

c. The pavement structure would consist of a graded aggregate base (at least four inches) and a two-inch asphalt paved riding surface of at least 18 feet wide and a total roadway width of at least 20 feet.
d. Trees, vegetation side slopes, and open drainage abutting the roadway would be undisturbed to the maximum extent possible without compromising public safety.

B. Paving of the unpaved county roads has to be included in the Rockdale County Comprehensive Transportation Plan.
C. Street names. The names of streets shall be reviewed and approved by the department in coordination with Rockdale County Department of Communications. Proposed street names shall not duplicate nor closely approximate the name of an existing street.

13.1.13 Connectivity.

A. Connectivity.
1. Where feasible, a proposed subdivision shall provide a street system that is interconnected with the existing or planned street system, subject to the following requirements:
a. Proposed streets shall be extended to the boundary lines of the tract to be subdivided unless prevented by topography or other physical conditions.
b. Whenever a tract of land that is to be subdivided abuts a street stub or dead-end street, the design of the streets within the subdivision shall be arranged so that the abutting streets or rights-of-way are continued through the new subdivision and connected with other adjoining streets.
c. Whenever a dedicated or platted half-width street or alley adjoins the tract to be subdivided, the other half-width shall be platted and improved as required by this chapter.
d. Culs-de-sac are discouraged, except where streams, lakes, geological or topographical features make through-connections infeasible.
e. Culs-de-sac longer than 800 feet are prohibited.
f. When culs-de-sac are necessary, the Director of Transportation may require that access easements be provided through one or more lots from the cul-de-sac to another nearby public street in order to ensure interconnected access for pedestrians, bicycles, and emergency vehicles to through-streets and multi-use trails.

B. In order to ensure emergency access, every subdivision meeting the standards of Section 16.2, not exempt from preliminary plat procedures, shall have the minimum number of access points required by the table set forth in Section 13.1.2, Access Management. If two or more public street entrances to a subdivision occur along the same existing street, the entrances shall have adequate sight distance and be no less than 400 feet apart if on a local street, or 600 feet apart if on a street classified as collector or arterial street on the Rockdale County Functional Classification System.

13.1.14 Controlled Access.

A. Access to any development that is controlled through any means, such as private gates and guardhouses, shall comply with the following standards. Emergency and “exit only” access points are exempt for these requirements.

1. Gate Width. The clear opening through gates shall be at least two (2) feet wider than the roadway it controls.
2. Queuing Distance.
    a. Gates placed across the entrance to a private development or a private driveway at the intersection with a public street shall be setback a minimum of 100 feet from the right-of-way of the public street in order to provide queuing space and not impede traffic on public streets.
    b. For any controlled access device that opens on a horizontal plane, such as a gate, a minimum of 20 feet of clear width shall be provided unless additional width is required by the Director of Transportation. Such a device shall open away from the street right-of-way.
    c. For residential developments, adequate maneuvering room between the gate and the street shall be provided for a turnaround area for vehicles to exit in a forward motion. The turnaround area shall have a minimum radius of 60 feet to the outside of the turn. The turnaround area is subject to approval as determined by the Director of Transportation.

13.1.15 Street abandonment.

A. Any abandonment of an actual existing paved public street by the County pursuant to this section shall comply with the applicable requirements set forth in state law and this Code, including, but not limited to, the requirements set forth in O.C.G.A. §32-7-2(b) and 32-7-4 and as may hereinafter be amended.
B. A property owner may petition the Board of Commissioners to abandon an existing public street that abuts the owner's property. The petition shall include documents that comply with all of the requirements set forth in this section. The petition shall contain evidence that each abutting landowner to the public street seeks to have the street abandoned.
C. The petition shall contain evidence that once abandoned pursuant to the requirements of state law, all property owners that abut the street agree that ownership of the street shall be placed in a property owners' association. The petition shall include evidence that 100 percent of all property owners in the property owners' association have agreed that the street at issue may become private and have agreed to maintain and exercise control over the private street as required by this ordinance.
D. The petition shall contain evidence that the property owners' association has the financial ability to maintain the street and associated improvements in perpetuity.
E. The petition shall include evidence that the declaration of covenants and articles of association or other legal instruments creating the property owners' association provide or have been amended to provide that membership in the property owners' association is mandatory for each original and successive purchaser of a lot, building, or unit on the street.
F. The petition shall include evidence that the property owners' association shall be organized so that it has absolute legal authority to maintain and exercise control over the private streets and required improvements associated with private streets, including, but not limited to, sidewalks, bikeways, curbs and gutters, traffic signs and markings, associated landscaping and lighting, entry signs, monuments, perimeter walls and fences, private entry gates, and gatehouses.
G. The petition shall include evidence that the declaration of covenants creating the property owners' association shall be recorded with Rockdale County Superior Court, and the recorded declaration of covenants and articles of incorporation creating the property owners' association

shall provide that all private streets and associated improvements are owned by the property owners' association or are held in common by the property owners within the development in compliance with all requirements for private streets as provided in Section 13.2, Private Streets.

H. The paving and/or the resurfacing of a private street shall be inspected by a licensed engineer. The applicant developing or paving the private street shall provide a sealed inspection report by said engineer to the Director of Transportation certifying compliance with County public street standards.

I. The Board of Commissioners shall not consider a petition for abandonment unless it:
    1. Contains all of the evidence and documents required by this section;
    2. Is supported by an analysis by the County that shows that the street is no longer used by the public to the extent that it serves no substantial public purpose and that the public at large will benefit from its closure since the public will no longer be responsible for any costs to maintain and repair the street; and
    3. Is supported by an analysis by the Director of Transportation that shows that the abandonment of the street does not negatively impact adjacent neighboring communities and the public at large.

13.2 Private Streets.

13.2.1 General provisions.

A. Private streets are allowed only if the development seeking to have private streets is fifteen (15) acres or larger in area.

B. Application of District and Supplemental Regulations.
    1. Where this ordinance measures minimum building setback lines and frontages, or imposes development standards in connection with, or with reference to public streets, such measurements or standards set forth in the district regulations and supplemental regulations of the UDO, in this ordinance, or elsewhere in this Code, apply similarly for property abutting a private street where such private street has been approved by the Board of Commissioners.
    2. Nothing in this section is intended to authorize any kind of development on a private street that would not be authorized where there was public right-of-way.

C. Parking and Addressing.
    1. Private streets within any zoning district may not be used to satisfy the off-street parking requirements of this UDO.
    2. Private streets within any district shall be assigned names and locations. The names of these streets shall be shown on plans required for the issuance of building and development permits as provided by the building code.
    3. The County shall approve all private street names and addresses to avoid conflicting names and addresses.

D. Utilities and Easements.
    1. Where sanitary or storm sewer lines are constructed underneath a private street, the developer is required to grant an easement to the applicable utility authority for their installation, maintenance and repair.
    2. In the case of private streets, the County is authorized to assign responsibility for maintenance of storm sewers to a property owners association.

E. Emergency and Public Safety Access. Developers and property owners' associations shall ensure access to all private streets by emergency and law enforcement vehicles and shall ensure that private streets are constructed to allow access by all emergency vehicles and law enforcement vehicles.

F. Density Limitation. The use of private streets may not result in an increase in permitted density above that which would otherwise be permitted by the applicable district regulations.

G. Design, Construction, and Inspection Standards.
   1. Private streets shall comply with requirements for public streets found in the UDO and all other applicable sections of the County Code.
   2. Private streets shall be surfaced with the same type of materials that are used by the County for the surfacing and resurfacing of public streets or with materials that are as protective as those used by the County to surface and resurface streets so long as such alternative materials are approved by the Director of Transportation.
   3. All paving and/or the resurfacing of a private street shall be inspected by a licensed engineer. The applicant developing or paving the private street shall provide a sealed inspection report by said engineer to the Director Transportation certifying compliance with County public street standards.

H. Authorization for Smaller Developments. The Board of Commissioners may authorize a private street for a development under fifteen (15) acres in size where the Director of Transportation has certified that the applicant has submitted all required documentation as set forth herein and where the Board of Commissioners finds that:
   1. The location of the proposed private street will not adversely impact use of any existing surrounding public street;
   2. The location of the proposed private street will not adversely impact adjacent existing communities or neighborhoods;
   3. The applicant has shown that there is the requisite legal mechanism for the maintenance of the proposed private street; and
   4. The applicant has provided written evidence that the proposed private street system is acceptable to the County departments or divisions responsible for law enforcement, sanitation, transportation, and fire and rescue.

I. Ownership. Private street rights-of-way shall be owned by a mandatory homeowners' or property owners' association created by recorded covenants and incorporated under state law for any development served by such private streets, or in the case of the condominium form of ownership, owned jointly by the unit owners and maintained by the mandatory homeowner's association required by statute. Required standards for homeowners' and property owners' associations:
   1. A public access easement, utility easement, and or declaration of covenants shall entirely overlay the rights-of-way and be recorded with the Rockdale County Superior Court.
   2. All applicable setbacks, lot widths, and lot areas shall be measured from the association right-of- way. This provision is intended to prohibit the incorporation of any portion of the private street into any buildable lot.
   3. Membership in the association shall be mandatory for each original and successive purchaser of a lot, building, or unit within the development.

4. The association shall be organized so that it has clear legal authority to maintain and exercise control over the private streets and required improvements associated with private streets, including, but not limited to, sidewalks, bikeways, curbs and gutters, traffic signs and markings, associated landscaping and lighting, entry signs, monuments, perimeter walls and fences, entry gates, and gatehouses.
5. The recorded declaration of covenants and articles of incorporation creating the association shall provide that all private streets and associated improvements are owned by the association or are held in common by the property owners within the development.
6. The streets shall be properly maintained and insured with no liability or maintenance responsibilities accruing to the County. The recorded declaration of covenants and articles of association shall specifically require the association repair and maintain each private street in the same manner as similar public streets are maintained by the County, and such maintenance and repair shall be performed in compliance with all County standards and all applicable provisions of law.
7. The declaration of covenants and articles of association shall provide for a street maintenance fund, the proceeds of which may be used solely for the purpose of regular maintenance of the streets, whether for resurfacing or a similar purpose. For the purposes of providing further assurance that County funds may not be used for maintenance of private streets, the developer shall submit proof of deposit of 50 percent of the current estimate of resurfacing costs, as determined by the Director of Transportation, in an interest-bearing account on behalf of the association.
8. The association shall be empowered to levy assessments against owners within the development for the payment of expenditures made by the association for maintenance of the private streets and other items set forth in this subsection. At least 15 percent of all fees or assessments paid shall be set aside in the maintenance fund. Any unpaid assessments will constitute a lien in favor of the association on the lot, building, or unit of the owner.

J. Prior to any final plat approval, the developer shall submit recorded articles of incorporation, declarations of covenants, bylaws for the association, and proof of the maintenance deposit.
K. Maintenance Bond. A maintenance bond shall be provided in accordance with Section 16.10, Sureties and Guarantees.
L. Inspection and Deficiencies.
    1. Within nine (9) months following approval of the final plat, the Director of Transportation shall inspect the private streets to ensure compliance with all County standards and all applicable provisions of this Code including, but not limited to, the requirements set forth in law for public streets, curbs, sidewalks, signage, and street lighting.
    2. The developer shall be notified of any deficiencies in writing, and such deficiencies shall be corrected within 60 days of the written notice of deficiencies unless the County agrees to extension of that period in writing.
M. Failure to correct the complete list of deficiencies constitutes a violation of this Section and will subject the developer to prosecution for a code violation in the magistrate court. Any person found to have violated this Section is subject to a fine of not less than $500.00 for each violation. Each day that the violation exists is a separate and distinct offense.

N. The Director of Transportation shall deny the issuance of certificates of occupancy until all deficiencies have been corrected.

13.2.2 Private Street Dedication Process

A. Authority. The dedication and acceptance of a private street as a public street in Rockdale County shall comply with all applicable provisions of state law and this Code, including but not limited to O.C.G.A. §§ 32-3-1, 32-6-1, and 44-5-230, as amended.

B. Petition for Acceptance of Private Street. The owner or owners of property abutting a private street may petition the Rockdale County Board of Commissioners to accept the private street as a public street. The petition shall be submitted to the Department of Transportation and shall include all documentation required by this section.

C. Required Petition Contents. A petition for acceptance of a private street as a public street shall include evidence demonstrating all of the following:
   a. Abutting Owner Consent
   b. Written consent to dedication from all owners of property abutting the private street, unless a lesser percentage is expressly authorized by the Board of Commissioners.
   c. Dedication Instrument
   d. A proposed deed of dedication or other legal instrument conveying the street right-of-way to Rockdale County in a form acceptable to the County Attorney.
   e. Clear Title
   f. Evidence that the street right-of-way is free and clear of liens, encumbrances, or private ownership interests inconsistent with public ownership, or that such interests will be released upon dedication.
   g. Right-of-Way Width
   h. Evidence that the street meets or can be brought into compliance with Rockdale County right-of-way width requirements.
   i. Construction Standards
   j. Certification by the Department of Transportation that the street has been constructed or upgraded to meet all applicable County standards for public streets, or that required improvements have been completed or secured.
   k. Drainage and Utilities
   l. Evidence that drainage facilities, stormwater infrastructure, and utilities within the street right-of-way comply with County standards and do not impose unacceptable maintenance burdens.
   m. Plat or Survey
   n. A draft plat or survey showing the street, right-of-way boundaries, and adjoining properties.
   o. Termination or Modification of Private Controls
   p. Evidence that any private covenants, easements, or association documents governing the street have been terminated or amended to be consistent with public ownership and use.

D. Staff Review. The Board of Commissioners shall not consider a petition unless it is supported by:
   a. Department of Transportation analysis demonstrating that the street meets County construction standards and is suitable for inclusion in the public street system.
   b. Department of Planning and Development analysis demonstrating that acceptance of the street serves a public purpose and is consistent with County plans and policies.
   c. County Attorney review confirming that all dedication instruments and title documentation are legally sufficient.

E. Acceptance. Acceptance of a private street as a public street shall occur only upon formal action of the Rockdale County Board of Commissioners. Acceptance shall constitute the County's assumption of maintenance and responsibility for the street.
F. Discretionary Nature. Nothing in this section shall be construed to require Rockdale County to accept any private street. Acceptance of a private street shall be solely within the discretion of the Board of Commissioners.

13.3 Subdivision Lot Design.

A. Unbuildable lots prohibited. No preliminary plat shall be approved on which is shown a flag lot or other lot or parcel of land that would require a variance to be developed or used or that is otherwise unlawful or unbuildable, whether due to the presence of a floodplain, configuration, lack of public utilities, or other physical impediments.
B. Lot design standards. All lots established in connection with the development of a subdivision shall comply with the following design standards unless the proposed subdivision is covered by approved variances or conditions of zoning that take precedence:
    1. Insofar as practical, side lot lines shall be perpendicular or radial to street lines, unless otherwise approved by the Director of Planning and Development.
    2. Each lot shall have direct abutting access to an approved street.
    3. Each lot shall abut a public street except those that front on an approved private residential street within a gated community, and shall contain at least 60 feet of street frontage, except for lots fronting on cul-de-sacs that shall abut a said public or private street with at least 30 feet of street frontage. All lots shall comply with the developmental regulations of Sections 5.3 and 6.3.
    4. Each lot intended for building development shall contain a building site with required buildable area that is outside the limits of floodways, easements, buffers, and building setback lines required by this UDO.
    5. Subdivisions shall be designed to minimize direct lot access to major thoroughfares. Reverse frontage lots shall be required for residential subdivisions along the state highway system or other arterials or collectors where internal access can be provided. An 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. Said easement shall provide outdoor screening with an evergreen hedge planted along the roadway within said easement.
    6. Lot remnants that constitute reserve strips shall be prohibited. Such remnant areas shall be added to adjacent lots, rather than remain as unusable parcels.
    7. No lot shall be created that is of a lesser dimension than that required to meet the frontage, minimum setbacks, and yards established in Articles 5 and 6, unless a variance is granted by the Board of Adjustment. However, this provision shall not apply when a conforming lot is made nonconforming as a result of public acquisition.
    8. No lot shall be reduced in size less than the minimum lot area established in Articles 5 and 6.
C. Political boundaries. No lot line of a lot established in connection with the development of a subdivision shall cross a jurisdictional boundary line.

13.4 Monumentation.

A. Boundary monument. All subdivisions of residential property resulting in a total of three or more parcels and all subdivisions or site developments consisting of nonresidential property without regard to the number of resulting parcels shall have a boundary monument installed on its boundary with public rights-of-way.
B. Construction. Each subdivision monument shall be embedded in concrete or similar permanent material, complete with brass cap with a unique identification stamped or engraved into the cap face.
C. Map registration and accuracy. Georgia State Plan (West) coordinates for this boundary monument will be annotated on the final plat and also provided under separate cover to the GIS Manager, Rockdale County. The standard accuracy shall be in accordance with applicable American Land Title Act (ALTA) requirements for suburban surveys in all three planes (X, Y, and Z).
D. Street corners. Solid steel rods at least one-half inch in diameter and 18 inches long or concrete posts at least 3.5 inches square and 18 inches long shall be set at all street corners. The top of the monument shall have an indented cross to identify the location and shall be set flush or up to six inches above the finished grade.
E. Lot corners. All other lot corners shall be marked with solid steel rods not less than one-half (½) inch in diameter, and at least 24 inches long and shall be set flush or up to six inches above the finished grade.

Article 14: Environmental Standards

14.1 Administration.

14.1.1 Responsibility.

A. The Director of Stormwater Management shall be responsible for the administration and enforcement of the provisions of this article, and for making professional judgments regarding any environmental protection practices related to the implementation of this article.

14.2 Wetlands.

14.2.1 Wetland Regulations.

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

B. Plans. Design professionals, after consulting the National Wetland Inventory maps and conducting appropriate field studies, must indicate wetlands or jurisdictional waters on plans required for land disturbance permit applications.

C. Design Professional Statement. Prior to the issuance of a land development permit, the design professional who prepared the required plans accompanying the permit

application, must add a statement to the plan sheet indicating land disturbance and the statement must read as follows:

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

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

14.3 State Waters Buffers Protection.

14.3.1 Findings and Purposes.

A. Findings. Rockdale County finds that buffers adjacent to streams provide numerous benefits, including:
   1. Protecting, restoring and maintaining the chemical, physical, and biological integrity of streams and their water resources.
   2. Removing pollutants delivered by urban stormwater runoff.
   3. Reducing erosion and controlling sedimentation.
   4. Protecting and stabilizing stream banks.
   5. Providing for infiltration of stormwater runoff.
   6. Providing tree canopy to shade streams and promote desirable aquatic habitat.
   7. Providing riparian wildlife habitat.
   8. Furnishing scenic value and recreational opportunity.
   9. Providing riparian wildlife habitat.
   10. Furnishing scenic value and recreational opportunity.
   11. Providing opportunities for the protection and restoration of green space.

B. Purposes. The purpose of this article is to protect the public health, safety, environment and general welfare; to minimize public and private losses due to erosion, siltation and water pollution; and to maintain stream water quality by provisions designed to:

C. Create buffer and setback zones along streams within the County for the protection of water resources; and

D. Minimize land development within such buffers and setbacks by establishing buffer and setback requirements and by requiring authorization for any such activities.

14.3.2 Applicability.

This Ordinance shall apply to all Land Development Activity on property containing a Stream Buffer Protection Area. These requirements are in addition to, and do not replace or supersede, any other applicable buffer requirements established under state law and approval or exemption

from these requirements do not constitute approval or exemption from buffer requirements established under state law or from other applicable local, state or federal regulations.

14.3.3 Grandfathered Provisions.

This Ordinance shall not apply to the following activities:

A. Work consisting of the repair or maintenance of any lawful use of land that is zoned and approved for such use on or before the effective date of this UDO.

B. Existing development and on-going Land-Disturbing Activity including but not limited to existing agriculture, silviculture, landscaping, gardening and lawn maintenance, except that new development or Land-Disturbing Activity not otherwise approved by the County on such properties will be subject to all applicable buffer requirements.

C. Any Land Development Activity that is under construction, fully approved for development, scheduled for permit approval or has been submitted for approval as of the effective date of this UDO.

D. Land Development Activity that has not been submitted for approval, but that is part of a larger master development plan, such as for an office park or other phased development that has been previously approved within two (2) years of the effective date of this UDO.

14.3.4 Exemptions.

The following specific activities are exempt from the provisions of this Ordinance. Exemption of these activities does not constitute an exemption for any other activity proposed on a property.

A. Activities for the purpose of building one (1) of the following:

1. A stream crossing by a driveway, transportation route or utility line;
2. Public water supply intake or public wastewater outfall structures;
3. Intrusions necessary to provide Access to a property;
4. Public Access facilities that must be on the water including boat ramps, docks, foot trails leading directly to the river, fishing platforms and overlooks;
5. Unpaved foot trails and paths; or
6. Activities to restore and enhance Stream Bank Stabilization, vegetation, water quality and/or aquatic habitat, so long as native vegetation and bioengineering techniques are used.

B. Public sewer line easements paralleling a creek, except that all easements (permanent and construction) and land disturbance should be at least twenty-five (25) feet from the top of the Stream Bank. This includes such impervious cover as is necessary for the operation and maintenance of utilities, including but not limited to manholes, vents, and valve structures. This exemption shall not be construed as allowing the construction of roads, bike paths or other transportation routes in such easements, regardless of paving material, except for access for the uses specifically cited in subsection A above.

C. Land development activity within a right-of-way existing at the time this UDO takes effect or approved under the terms of this UDO.

D. Within an easement of any utility existing at the time this UDO takes effect or approved under the terms of this UDO, land disturbing activity and such impervious cover as is

necessary for the operation and maintenance of such utility, including but not limited to manholes, vents, and valve structures.

E. Emergency work necessary to preserve life or property. However, when emergency work is performed under this section, the person performing it shall report such work to the Directory of Stormwater Management on the next business day after commencement of the work. Within 10 days thereafter, the person shall apply for a permit and perform such work within such time period as may be determined by the Director of Stormwater Management to be reasonably necessary to correct any impairment such emergency work may have caused to the water conveyance capacity, stability, or water quality of the Stream Buffer Protection Area.

F. Forestry and silviculture activities on land that is zoned for forestry, silvicultural, or agricultural uses and are not incidental to other land development activity. If such activity results in land disturbance in the Stream Buffer that would otherwise be prohibited, then no other land disturbing activity other than normal forest management practices will be allowed on the entire property for three (3) years after the end of the activities that intruded on the Stream Buffer.

G. Any land development activity within a Stream Buffer established hereunder or any impervious cover within a setback established hereunder is prohibited unless a variance is granted pursuant to Section 18.8, Variances, of this UDO.

14.3.5 Stream Buffer and Setback Requirements.

All Land Development Activity subject to this Ordinance shall meet the following requirements:

A. An undisturbed natural vegetative Stream Buffer shall be maintained for fifty (50) feet, measured horizontally, on both banks (as applicable) of a stream as measured from the top of the stream bank.

B. An additional Stream Setback shall be maintained for twenty-five (25) feet, measured horizontally, beyond the undisturbed natural vegetative Stream Buffer, in which all impervious cover shall be prohibited. Grading, filling, and earthmoving shall be minimized within the Stream Setback.

C. No septic tanks or septic tank drain fields shall be permitted within the Stream Buffer or Stream Setback.

14.3.6 Inspections.

A. Rockdale County may cause inspections of the work in the Stream Buffer or Stream Setback to be made periodically during the course thereof and shall make a final inspection following completion of the work. The permittee shall assist the Zoning Director in making such inspections. The County shall have the authority to conduct such investigations as it may reasonably deem necessary to carry out its duties as prescribed in this Ordinance, and for this purpose to enter at reasonable time upon any property, public or private, for the purpose of investigating and inspecting the sites of any land development activity within the Stream Buffer Protection Area.

B. No person shall refuse entry or access to any authorized representative or agent who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper or interfere with any such representative while in the process of carrying out official duties.

14.3.7 Minor Land Disturbing Activities.

The following land-disturbing activities are examples of projects not specifically listed in O.C.G.A. § 12-7-17(3) that would be considered minor land-disturbing activities and are, therefore, exempt from the Georgia Erosion and Sedimentation Act and the applicable buffer requirements for state waters:

A. Elevated structures such as decks, gazebos, patios, walkways, viewing platforms or open picnic shelters, provided that:
    1. The floor or decking is built in a pervious manner to allow for the infiltration of stormwater;
    2. No more than 100 square feet of footprint of the elevated structure extends into or over the buffer, with an exception for structures compliant with the Americans with Disabilities Act (ADA);
    3. No grading, cutting, filling or similar land-disturbing activities occurring as a part of the site preparation, construction or subsequent development;
    4. The structure is built on posts, concrete blocks, or similar supports;
    5. Permanent protective vegetative cover remains, or protective measures (for example, mulch or gravel) are installed within the footprint of the elevated structure to prevent post-construction soil erosion;
    6. A natural canopy is left in sufficient quantity to keep shade on the streambed; and
    7. No concrete or asphalt slabs, pads or foundations are constructed or placed as a part of the site preparation, construction or subsequent development.
B. A pervious ground-level walkway approach to a dock or similar structure, provided that:
    1. No more than 100 square feet of the constructed walkway extends into the buffer, with an exception for structures compliant with the Americans with Disabilities Act (ADA);
    2. No grading, cutting, filling or similar land-disturbing activities occur as a part of the site preparation, construction or subsequent development;
    3. No concrete or asphalt slabs, pads, supports or foundations are constructed or placed as a part of the site preparation, construction or subsequent development; and
    4. All ground preparation and walkway material placement is completed with the use of hand-held equipment.
C. Restoration of buffer area after the removal of an existing structure, provided that the buffer area must be replanted with native vegetation.
D. Maintenance or repair of existing structures, the failure of which would result in a threat to human health or County waters, such as sewer lines, water lines, dams or gas lines. Total disturbance must be less than 100 square feet.

E. Placement of rock riprap within the buffer not to exceed 100 square feet on any one property, provided that:

1. The placement of the riprap does not result in soil disturbance outside the placement area; and
2. No grading, cutting, filling or similar land-disturbing activities occur as part of the site preparation, construction or subsequent development.

14.3.8 Land Disturbing Activities not Considered Minor.

A. The following land-disturbing activities are examples of projects that are not considered minor land-disturbing activities and are, therefore, not exempt from the Georgia Erosion and Sedimentation Act and the applicable buffer requirements for state waters:

1. Any land-disturbing activity utilizing wheeled or tracked machinery and equipment resulting in soil erosion within the buffer;
2. Paving with poured or prefab concrete or asphalt;
3. Any project or combination of projects occurring within the same calendar year on the same property resulting in more than 100 square feet of any elevated structures or pervious ground level walkways within or extending into the buffer;
4. Construction of a barbeque pit on a concrete or asphalt slab or pad within the buffer;
5. Construction of a ground-level patio within the buffer;
6. Construction of a swimming pool within the buffer;
7. Construction of a decorative or structural retaining wall within the buffer;
8. Construction of a new seawall with land-disturbing activities occurring within the buffer; and
9. Backfilling any new seawall construction within the buffer.

B. Prohibited Activity. Any land development activity within a buffer established under this Ordinance or any impervious cover within a setback established under this Ordinance is prohibited unless a variance is granted.

14.4 Floodplain Management.

14.4.1 In General.

A. Purpose. The purpose of this section is to protect, maintain, and enhance the public health, safety, environment, and general welfare and to minimize public and private losses due to flood conditions in flood hazard areas, as well as to protect the beneficial uses of floodplain areas for water quality protection, streambank and stream corridor protection, wetland preservation, and ecological and environmental protection by provisions designed to:

1. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

2. Restrict or prohibit uses which are dangerous to health, safety and property due to flooding or erosion hazards, or which increase flood heights, velocities, or erosion;
3. Control filling, grading, dredging, and other development which may increase flood damage or erosion;
4. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands;
5. Limit the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; and
6. Protect the stormwater management, water quality, streambank protection, stream corridor protection, wetland preservation, and ecological functions of natural floodplain areas.

B. Applicability. This section shall be applicable to all areas of special flood hazard within the County. For the purposes of defining and determining areas of special flood hazard, areas of future-conditions flood hazard, areas of shallow flooding, base flood elevations, floodplains, floodways, future-conditions floodplains, potential flood hazard or risk categories as shown on FIRM maps, and other such terms used in this section, the following documents and sources may be used for such purposes and are adopted by reference thereto:

C. The flood insurance study (FIS) for the county with accompanying maps and other supporting data and any revision thereto.

D. Other studies which may be relied upon for the establishment of the base flood elevation or delineation of the base or one-percent (100-year) floodplain and flood prone areas, including:
   1. Any flood or flood-related study conducted by the United States Corps of Engineers, the United States Geological Survey, or any other local, state or federal agency applicable to the County; and
   2. Any base flood study conducted by a licensed professional which has been prepared utilizing FEMA-approved methodology and approved by the Director of Stormwater Management.

E. Other studies which may be relied upon for the establishment of the future-conditions flood elevation or delineation of the future-conditions floodplain and flood prone areas including:
   1. Any flood or flood-related study conducted by the United States Army Corps of Engineers, the United States Geological Survey, or any other local, state, or federal agency applicable to the County; and
   2. Any future-conditions flood study conducted by a licensed professional engineer which has been prepared by utilizing FEMA-approved methodology approved by the Director of Stormwater Management.

F. The repository for public inspection of the FIS, accompanying maps and other supporting data is located at the Department of Stormwater Management.

G. Compatibility with Other Regulations. This section is not intended to modify or repeal any other chapter, rule, regulation, statute, easement, covenant, deed restriction or other provision of law. The requirements of this section are in addition to the requirements of any other chapter, rule, regulation or other provision of law, and where any provision of this section imposes restrictions different from those imposed by any other chapter, rule, regulation or other provision of law,

whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

H. Severability. If the provisions of any section, subsection, paragraph, subdivision, or clause of this ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision, or clause of this ordinance.

I. Warning and Disclaimer of Liability. The degree of flood protection required by this Division is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur; flood heights may be increased by manmade or natural causes. This Division does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This section shall not create liability on the part of the County or by any officer or employee thereof for any flood damages that result from reliance on this section, or any administrative decision lawfully made thereunder.

14.4.2 Administration and Enforcement.

A. Designation of Administrator. The Director of Stormwater Management is hereby appointed to administer and implement the provisions of this section.

B. Duties and Responsibilities. Duties of the Director of Stormwater Management shall include, but not be limited to:

1. Review all land development applications and permits to assure that the requirements of this ordinance have been satisfied and to determine whether proposed building sites will be reasonably safe from flooding;
2. Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1344;
3. Require the applicant to obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, when base flood elevation data or floodway data have not been provided;
4. Review and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all new or substantially improved structures;
5. Review and record the actual elevation, in relation to mean sea level to which any substantially improved structures have been flood proofed;
6. Obtain certification of design criteria from a registered professional engineer or architect when flood proofing is utilized for a structure;
7. Notify affected adjacent communities and the state Department of Natural Resources (DNR) prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the federal Emergency Management Agency (FEMA);
8. Make the necessary interpretation where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (e.g., where there appears to be a conflict between a mapped boundary and actual field conditions). Any person contesting the location of the boundary is given a reasonable opportunity to appeal the interpretation, as provided in this ordinance. Where floodplain elevations have been

defined, the floodplain is determined based on flood elevations rather than the area graphically delineated on the floodplain maps.

9. Coordinate all Flood Insurance Rate Map (FIRM) revisions with the Georgia DNR and FEMA.
10. Review variance applications and make recommendations to the appointed board.

C. Records.
   1. All records pertaining to the provisions of this section is maintained in the office of the County Clerk and is open for public inspection.
   2. Lowest floor means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other provisions of adopted County building code.

D. Permit Requirements.
   1. No owner or developer shall perform any land development activities on a site where an area of special flood hazard or area of future-conditions flood hazard is located, without first meeting the requirements of this division prior to commencing the proposed activity.
   2. No land development permit will be approved for any land development activities that do not meet the requirements, restrictions and criteria of this ordinance.

E. Additional Requirements. An application for a development project with any area of special flood hazard located on the site shall include a floodplain management/flood damage prevention plan. This plan shall include the following items:
   1. Site plan drawn to scale, which includes but is not limited to:
      a. Existing and proposed elevations of the area in question and the nature, location and dimensions of existing and/or proposed structures, earthen fill placement, amount and location of excavation material, and storage of materials or equipment;
      b. For all proposed structures, spot ground elevations at building corners and 20-foot or smaller intervals along the foundation footprint, or one-foot contour elevations throughout the building site;
      c. Proposed locations of water supply, sanitary sewer, and utilities;
      d. Proposed locations of drainage and stormwater management facilities;
      e. Proposed grading plan;
      f. Base flood elevations and future-conditions flood elevations;
      g. Boundaries of the base flood floodplain and future-conditions floodplain;
      h. If applicable, the location of the floodway; and
      i. Certification of the information required in this subsection by a licensed professional engineer or surveyor.
   2. Building and foundation design detail, including but not limited to:
      a. Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures;
      b. Elevation in relation to mean sea level to which any nonresidential structure will be floodproofed;
      c. Certification that any proposed nonresidential floodproofed structure meets the criteria in Section 14.4.4.B.2, Nonresidential Buildings;

d. For enclosures below the base flood elevation, location and total net area of flood openings as required in Section 14.4.4.A.5, Elevated Buildings; and
e. Design plans certified by a licensed professional engineer or architect for all proposed structure(s).

3. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development;
4. Hard copies and digital files of computer models, if any, copies of work maps, comparison of pre-development and post-development conditions base flood elevations, future-conditions flood elevations, flood protection elevations, special flood hazard areas and regulatory floodway, flood profiles and all other computations and other information similar to that presented in the FIS;
    a. Copies of all applicable state and federal permits necessary for proposed development, including but not limited to permits required by Section 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1334; and
    b. All appropriate certifications required under this section.
5. The approved floodplain management/flood damage prevention plan shall contain certification by the applicant that all development activities will be done according to the plan or previously approved revisions. Any and all development permits and/or use and occupancy certificates or permits may be revoked at any time if the construction and development activities are not in strict accordance with approved plans.

F. Construction Stage Submittal Requirements.
    1. New Construction and Substantial Improvements. For all new construction and substantial improvements on sites with a floodplain management/flood damage prevention plan, the permit holder shall provide to the Director of Stormwater Management a certified as-built elevation certificate or floodproofing certificate for nonresidential construction, including the lowest floor elevation or floodproofing level immediately after the lowest floor or floodproofing is completed. A final elevation certificate is provided after completion of construction including final grading of the site. Any lowest floor certification made relative to mean sea level is prepared by or under the direct supervision of a licensed land surveyor or professional engineer and certified by same. When floodproofing is utilized for nonresidential structures, said certification is prepared by or under the direct supervision of a professional engineer or architect and certified by same, using the FEMA floodproofing certificate. This certification shall also include the design and operation/maintenance plan to assure continued viability of the floodproofing measures.

14.4.3 Development Standards.

A. Definition of Floodplain Boundaries.
    1. "A" zones, as identified in the FIS, are used to establish base flood elevations.
    2. For all streams with a drainage area of 100 acres or greater, the future-conditions flood elevations are provided by the County. If future-conditions elevation data is not available from the County, then it is determined by a licensed professional engineer using a method approved by FEMA and the County.

B. Definition of Floodway Boundaries. The width of a floodway is determined from the FIS or FEMA-approved flood study. For all streams with a drainage area of 100 acres or greater, the regulatory floodway is provided by the County. If floodway data is not available from the County,

then it is determined by a licensed professional engineer using a method approved by FEMA and the County.

C. General Standards.
    1. No development shall be allowed within any area of special flood hazard or area of future-conditions flood hazard that could result in any of the following:
        a. Raising the base flood elevation or future-conditions flood elevation equal to or more than 0.01 foot;
        b. Reducing the base flood or future-conditions regulatory flood storage capacity;
        c. Changing the flow characteristics as to the depth and velocity of the waters of the base flood or future-conditions flood as they pass both the upstream and the downstream boundaries of the property; or
        d. Creating hazardous or erosion-producing velocities or resulting in excessive sedimentation.
    2. Any development within any area of special flood hazard or area of future-conditions flood hazard allowed under this ordinance shall also meet the following conditions:
        a. Compensation for storage capacity shall occur between the average groundwater table elevation and the base flood elevation for the base flood, and between the average groundwater table elevation and the future-conditions flood elevation for the future-conditions flood and lie within the boundaries of ownership of the property being developed and is within the immediate vicinity of the location of the encroachment. Acceptable means of providing required compensation:
            i. Include lowering of natural ground elevations within the floodplain, or lowering of adjoining land areas to create additional floodplain;
            ii. Storage. In no case shall any required compensation be provided via bottom storage or by excavating below the elevation of the natural (pre-development) stream channel unless such excavation results from the widening or relocation of the stream channel;
        b. Cut areas are stabilized and graded to a slope of no less than two percent;
        c. Effective transitions are provided such that flow velocities occurring on both upstream and downstream properties are not increased or decreased;
        d. Verification of no-rise conditions (0.01 foot or less), flood storage volumes, and flow characteristics are provided via a step-backwater analysis meeting the requirements of Section 14.4.3.D, Engineering Study Requirements for Floodplain Encroachments;
        e. Public utilities and facilities, such as water, sanitary sewer, gas, and electrical systems, are located and constructed to minimize or eliminate infiltration or contamination from floodwaters; and
        f. Any significant physical changes to the base flood floodplain is submitted as a conditional letter of map revision (CLOMR) or conditional letter of map amendment (CLOMA), whichever is applicable. The CLOMR submittal is subject to approval by the Department using the FEMA community concurrence forms before forwarding the submittal package to FEMA for final approval. The responsibility for forwarding the CLOMR to FEMA and for obtaining the CLOMR approval is the responsibility of the applicant. Within six months of the completion of development, the applicant shall submit as-built surveys and plans for a final letter of map revision (LOMR).

D. Engineering Study Requirements for Floodplain Encroachments. An engineering study is required, as appropriate to the proposed development activities on the site, whenever a development proposes to disturb any land within the future-conditions floodplain, except for a residential single-lot development on streams without established base flood elevations and floodways. This study is prepared by a licensed professional engineer and made a part of the application for a permit. This information is submitted to and approved by the Department prior to the approval of any permit which would authorize the disturbance of land located within the future-conditions floodplain. Such study shall include all requirements specified in the Rockdale Technical Manual:
    1. Description of the extent to which any watercourse or floodplain will be altered or relocated as a result of the proposed development;
    2. Step-backwater analysis, using a FEMA-approved methodology approved by the Department. Cross sections (which may be supplemented by the applicant) and flow information will be obtained whenever available. Computations will be shown duplicating FIS results and will then be rerun with the proposed modifications to determine the new base flood profiles and future-conditions flood profiles;
    3. Floodplain storage calculations based on cross sections (at least one every 100 feet) showing existing and proposed floodplain conditions to show that base flood floodplain and future-conditions floodplain storage capacity would not be diminished by the development;
    4. The study shall include a preliminary plat, grading plan, or site plan, as appropriate, which shall clearly define all future-conditions floodplain encroachments.

E. Floodway Encroachments. Located within areas of special flood hazard are areas designated as floodways. A floodway may be an extremely hazardous area due to capacity floodwaters, debris or erosion potential. In addition, floodways must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:
    1. Encroachments are prohibited, including earthen fill, new construction, substantial improvements or other development within the regulatory floodway, except for activities specifically allowed in [subsection] (2) below.
    2. Exemptions. Encroachments for bridges, culverts, roadways and utilities within the regulatory floodway may be permitted provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment will not result in any increase to the pre-project base flood elevations, floodway elevations, or floodway widths during the base flood discharge.
        a. A licensed professional engineer must provide supporting technical data and certification thereof; and
        b. If the applicant proposes to revise the floodway boundaries, no permit authorizing the encroachment into or an alteration of the floodway is issued by the County until an affirmative conditional letter of map revision (CLOMR) is issued by FEMA or a no-rise certification is approved by the Department.

F. Maintenance Requirements. The property owner is responsible for continuing maintenance as may be needed within an altered or relocated portion of a floodplain on the property so that the flood-carrying or flood storage capacity is maintained. The County may direct the property owner, at no cost to the County, to restore the flood-carrying or flood storage capacity of the

floodplain if the owner has not performed maintenance as required by the approved floodplain management plan on file with the Department of Stormwater Management.

14.4.4 Flood Damage Reduction.

A. General Standards. In all areas of special flood hazard and areas of future-conditions flood hazard the following provisions apply:
    1. New construction and substantial improvements of structures (residential or nonresidential), including manufactured homes, shall not be allowed within the limits of the future-conditions floodplain, unless all requirements of Section 12.4.3, Development Standards have been met.
    2. New construction and substantial improvements shall be anchored to prevent flotation, collapse, and lateral movement of the structure.
    3. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
    4. New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage.
    5. Elevated buildings. All new construction and substantial improvements that include any fully enclosed area located below the lowest floor formed by foundation and other exterior walls are designed so as to be an unfinished or flood-resistant enclosure. The enclosure is designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.
        a. Designs for complying with this requirement must either be certified by a licensed professional engineer or architect to meet or exceed the following minimum criteria:
            i. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
            ii. The bottom of all openings are no higher than one foot above grade; and
            iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions.
        b. So as not to violate the lowest floor criteria of this Division, the unfinished or flood-resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area; and
        c. The interior portion of such enclosed area shall not be finished or partitioned into separate rooms.
    6. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities are designed and/or located three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher, so as to prevent water from entering or accumulating within the components during conditions of flooding;
    7. Manufactured homes are anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard is in addition to and consistent with applicable state requirements for resisting wind forces;

8. All proposed development shall include adequate drainage and stormwater management facilities per the requirements of the County to reduce exposure to flood hazards;
9. New and replacement water supply systems are designed to minimize or eliminate infiltration of floodwaters into the system;
10. New and replacement sanitary sewage systems are designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;
11. On-site waste disposal systems are located and constructed to avoid impairment to, or contamination from such systems during flooding;
12. Other public utilities such as gas and electric systems shall be located and constructed to avoid impairment to them, or public safety hazards from them during flooding;
13. Any alteration, repair, reconstruction or improvement to a structure which is not compliant with the provisions of this Division is undertaken only if the nonconformity is not furthered, extended or replaced;
14. If the proposed development is located in multiple flood zones or multiple base flood elevations cross the proposed site, the higher or more restrictive base flood elevation or future-condition elevation and development standards shall take precedence;
15. When only a portion of a proposed structure is located within a flood zone or the future conditions floodplain, the entire structure shall meet the requirements of this ordinance; and
16. Subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall be reasonably safe from flooding:
    a. All such proposals shall be consistent with the need to minimize flood damage within the flood-prone area;
    b. All public utilities and facilities, such as sewer, gas, electrical, and water systems shall be located and constructed to minimize or eliminate flood damage; and
    c. Adequate drainage shall be provided to reduce exposure to flood hazards.

B. Building Standards for Structures and Buildings within the Future-Conditions Floodplain.
    1. Residential Buildings:
        a. New Construction New construction of principal residential structures shall not be allowed within the limits of the future-conditions floodplain.
        b. Substantial Improvements Substantial improvements of any principal residential structure shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is highest. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of Section 14.4.4.A, General Standards.
    2. Nonresidential Buildings:
        a. New Construction New construction of principal nonresidential structures shall not be allowed within the limits of the future-conditions floodplain unless all of the requirements of Section 14.4.3, Development Standards are met.
            i. If all of the requirements of Section 14.4.3, Development Standards have been met, all new construction shall have the lowest floor, including basement, elevated no lower than one foot above the base flood

elevation or at least as high as the future-conditions flood elevation, whichever is higher.

ii. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of Section 14.4.4.A, General Standards.

iii. New construction that has met all of the requirements of Section 14.4.3, Development Standards may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to one foot above the base flood elevation, or at least as high as the future-conditions flood elevation, whichever is higher, with walls substantially impermeable to the passage of water and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above and shall provide such certification to the Director of Stormwater Management using the FEMA floodproofing certificate along with the design and operation/maintenance plan.

b. Substantial Improvements Substantial improvements of any principal nonresidential structure located in A1-30, AE, or AH zones may be authorized by the Director of Stormwater Management to be elevated or floodproofed.

i. Substantial improvements shall have the lowest floor, including basement, elevated no lower than one foot above the base flood elevation or at least as high as the future-conditions flood elevation, whichever is higher.

ii. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of Section 14.4.4.A, General Standards.

iii. Substantial improvements may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to one foot above the base flood elevation, or at least as high as the future-conditions flood elevation, whichever is highest, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above and shall provide such certification to the Director of Stormwater Management using the FEMA floodproofing certificate along with the design and operation/maintenance plan.

C. Accessory Structures and Facilities. Accessory structures and facilities (i.e., barns, sheds, gazebos, detached garages, recreational facilities and other similar non-habitable structures and facilities) which meet the requirements of Section 9.8, Accessory Uses and Structures and

are permitted to be located within the limits of the future-conditions floodplain shall be constructed of flood-resistant materials and designed to provide adequate flood openings in accordance with Section 14.4.4.A, General Standards, and be anchored to prevent flotation, collapse, and lateral movement of the structure.

D. Recreational Vehicles. All recreational vehicles placed on sites must either:
    1. Be on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions); or
    2. Meet all the requirements for residential buildings—substantial improvements set forth in Section 14.4.4.B.1.b, including the anchoring and elevation requirements.

E. Manufactured Homes.
    1. New manufactured homes shall not be allowed to be placed within the limits of the future-conditions floodplain unless all of the requirements of Section 14.4.3, Development Standards have been met, all new construction and substantial improvements shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of Section 14.4.4.A, General Standards.
    2. Manufactured homes placed and/or substantially improved in an existing manufactured home park or subdivision are elevated so that either: (a) The lowest floor of the manufactured home is elevated no lower than three feet above the level of the base flood elevation, or one foot above the future-conditions flood elevation, whichever is higher; or (b) The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade.
    3. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement in accordance with the standards of Section 14.4.4.A.7.

F. Building Standards for Structures and Buildings Authorized Adjacent to the Future-Conditions Floodplain.
    1. Residential Buildings. For new construction of and substantial improvement to any principal residential building or manufactured home, the elevation of the lowest floor, including basement and access to the building, is at least three feet above the level of the highest base flood (100-year) elevation adjacent to the building or at least one foot above the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of Section 14.4.4.A, General Standards.
    2. Nonresidential Buildings. For new construction of and substantial improvement to any principal nonresidential building, the elevation of the lowest floor, including basement and access to the building, is at least three feet above the level of the highest base flood elevation adjacent to the building or at least one foot above the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to

elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of Section 14.4.4.B.2, Nonresidential Buildings may be floodproofed in lieu of elevation.

G. Building Standards for Residential Single-Lot Development on Streams without Established Base Flood Elevations and/or Floodway (A zones).
    1. For a residential single-lot development not part of a subdivision that has areas of special flood hazard, where streams exist but no base flood data have been provided (A zones), the Director of Stormwater Management shall review and reasonably utilize any available scientific or historic flood elevation, data, base flood elevation floodway data or future-conditions flood elevation data available from a federal, state, or other source in order to administer the provisions and standards of this Division. If data are not available from any of these sources, the following provisions shall apply:
        a. No encroachments, including structures or fill material, shall be located within an area equal to twice the width of the stream or fifty feet from the top of the bank of the stream, whichever is greater.
        b. In special flood hazard areas without base flood or future-conditions flood elevation data, new construction and substantial improvements shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three feet above the highest adjacent grade at the building site. Flood openings sufficient to facilitate automatic equalization of hydrostatic flood forces shall be provided for flood-prone enclosures in accordance with Section 14.4.4, Flood Damage Reduction.

H. Building Standards for Areas of Shallow Flooding (AO zones). Areas of special flood hazard may include designated AO shallow flooding areas. These areas have base flood depths of one foot to three feet above ground, with no clearly defined channel. In these areas the following provisions apply:
    1. All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated to no lower than one foot above the flood depth number specified on the flood insurance rate map (FIRM), above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, is elevated at least three feet above the highest adjacent grade. Flood openings sufficient to facilitate automatic equalization of hydrostatic flood forces shall be provided in accordance with the standards of Section 14.4.4.A.5, Elevated Building;
    2. New construction and substantial improvement of a nonresidential structure may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to the specified FIRM flood level plus one foot above the highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice, and shall provide such certification to the County using the FEMA floodproofing certificate along with the design and operation/maintenance plan; and
    3. Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

I. Standards for Subdivisions of Land and Other Development.
    1. All subdivision proposals shall identify the areas of special flood hazard and areas of future-conditions flood hazard therein and provide base flood elevation data and future-conditions flood elevation data;
    2. All residential lots in a subdivision proposal shall have sufficient buildable area outside of the future-conditions floodplain such that encroachments into the future-conditions floodplain for residential structures will not be required;
    3. All subdivision plans will provide the elevations of proposed structures in accordance with Section 14.4.2.C, Additional Requirements.

J. Standards for Utilities.
    1. All new and replacement water supply and sanitary sewerage systems are designed to minimize or eliminate:
        a. Infiltration of floodwaters into the systems; and
        b. Discharges from the systems into floodwaters.
    2. On-site waste disposal systems are located outside the floodplain to avoid impairment to them, or contamination from them during flooding.

14.5 Stormwater Management.

14.5.1 Purpose.

The purpose of this Division is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and non-point source pollution associated with new development and redevelopment by focusing on the types of frequently occurring storm events that generate the most water quality impacts. Proper management of post-development stormwater runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, environment and general welfare of the public, and protect water and aquatic resources. This Division seeks to meet that purpose through the following objectives:

A. Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources;
B. Require that new development and redevelopment maintain the pre-development hydrologic response in their post-development state as nearly as practicable in order to reduce flooding, stream bank erosion, non-point source pollution and increases in stream temperature, and maintain the integrity of stream channels and aquatic habitats;
C. Establish minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality and to preserve and/or restore natural hydrologic conditions on development sites;
D. Establish design and application criteria for the construction and use of structural stormwater control facilities that meet the minimum post-development stormwater management standards;
E. Encourage the use of nonstructural stormwater management and stormwater better site design practices, peak rate and/or runoff reduction, and the preservation of greenspace and other conservation areas, by establishing minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality. Coordinate site design plans, which include greenspace, with the County's greenspace protection plan;

F. Establish provisions for the long-term responsibility of operation, inspection, maintenance and repair of private structural stormwater control facilities and private commitments for nonstructural stormwater management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety or the environment;
G. Establish administrative procedures for the submission, review, approval and disapproval of stormwater management plans, and for the inspection of approved active projects, and long-term compliance; and
H. Protect public health and safety by reducing the risk of localized flooding and reducing the amount of runoff entering streets.

14.5.2 Standards.

A. Applicability. This section is applicable to all land development, including, but not limited to, site plan applications, single family residential applications, subdivision applications, and grading applications, unless exempt pursuant to subsection (2) of this section. These standards apply to any new development or redevelopment site that meets one or more of the following criteria, or as otherwise required by the Director of Stormwater Management:
    1. Any new development, redevelopment, addition or replacement that involves the creation of 1,000 square feet or more of impervious cover, or that involves other land development activities of 5,000 square feet or more;
    2. Any new development or redevelopment, regardless of size, if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules or that is defined by the Director to be a hotspot land use.
B. Exemptions. The following activities are exempt from this section:
    1. Agricultural or silvicultural land management activities within areas zoned for these activities; and
    2. Repairs to any stormwater management facility or practice deemed necessary by the Director of Stormwater Management.
    3. Minor improvements to public parks involving less than 5,000 square feet of land disturbance and less than 1,000 square feet of impervious surface.
    4. Utility installations, repairs or modifications outside of stream buffers.
    5. Installations or modifications to existing structures to accommodate Americans with Disability Act (ADA) requirements.
    6. Installation of pervious pavement less than 5,000 square feet.
    7. Maintenance, repair and resurfacing of existing paved surfaces.
    8. Addition of sidewalks along streets.
    9. Stream bank stabilization or restoration.
    10. Land disturbance required for environmental cleanup or remediation.
    11. Residential driveway replacement.
C. Minimum Requirements. Except for repairs to existing stormwater facilities or stormwater facilities in the right-of-way, all developments and redevelopment activity, including single-family residential and those which are otherwise exempt from this section, the following minimum requirements shall apply:
    1. Lots and buildings shall be developed in a manner to ensure that stormwater exiting individual parcels or lots under post-development conditions does not adversely impact

the adjacent parcels or lots as a result of concentrated flows, flooding, erosion or deposits of silt or sediment;

2. The stormwater discharge from a downspout, cistern, or any water collection device shall be located no closer to a property line than ten feet and oriented so direction of flow is away from any downstream improvements. Discharge from any outlet must be dissipated, infiltrated or diverted such that flows will not be concentrated; and
3. No person shall erect, construct, or otherwise permit any obstruction that prevents the natural or contained flow of water to or from any component of the stormwater system of the County unless such obstruction is allowed as a part of a permit approved pursuant to this section.
4. Lots and buildings shall be developed to provide Green Infrastructure/Low Impact Development best management practices. Single Family - Single Lot Development that is not part of a larger common development shall be exempt from this requirement.

D. Designation of Administrator. The Director of Stormwater Management is hereby appointed to administer and implement the provisions of this section.
E. Compatibility With Other Regulations. This section is not intended to modify or repeal any other chapter, rule, regulation or other provision of law. The requirements of this section are in addition to the requirements of any other chapter, rule, regulation or other provision of law, and where any provision of this section imposes restrictions different from those imposed by any other chapter, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

14.5.3 Stormwater Design Manual.

The County will utilize the policy, criteria and information including technical specifications and standards in the latest edition of the 2016 Georgia Stormwater Management Manual and any relevant County addenda (or equivalent County stormwater management design manual) for the proper implementation of the requirements of this section. The manual may be updated and expanded periodically, based on improvements in science, engineering, monitoring and local maintenance experience.

14.5.4 Permit Application Requirements.

A. No owner or developer shall perform any land development activities without first meeting the requirements of this Division prior to commencing the proposed activity.
B. Unless specifically exempted by this Division, any owner or developer proposing a land development activity shall submit to the Department a permit application on a form provided by the County for that purpose.
C. Unless otherwise exempted by this Division, a permit application is accompanied by the following items in order to be considered:
    1. Stormwater concept plan and consultation meeting certification in accordance with Section 14.5.6;
    2. Stormwater management plan in accordance with Section 14.5.7;
    3. Green Infrastructure Feasibility Form in accordance with Section 14.5.6, if applicable;
    4. Inspection and maintenance agreement in accordance with Section 14.5.7, if applicable;
    5. Performance bond, if applicable; and
    6. Permit application and plan review fees in accordance with Section 14.5.8.

D. The approved stormwater management plan shall obligate the responsible party to accomplish all land clearing, construction, development and drainage in accordance with the stormwater management plan. Any and all permits for development activities may be revoked at any time if the construction of stormwater management facilities is not conducted in substantial conformity with approved plans.
E. Applicant or responsible party shall obtain all state and federal permits required for the proposed development activity in addition to the plans and permits required by the County.
F. Upon completion of the project the applicant or responsible party shall submit the engineer-of-record's certification and as-built plan that includes the global positioning system coordinates of the stormwater management facilities. If the as-built plan differs substantially from the approved plan but is still acceptable to the County, then the applicant or responsible party shall update the recorded inspection and maintenance agreement upon approval by the County.

14.5.5 Application Procedure.

A. Applications for land development permits are filed with the Department of Planning and Development.
B. Permit applications shall include the items set forth in Section 14.5.4, Permit Application Requirements. The stormwater management plan and the inspection maintenance agreement, if applicable, shall be included.
C. The Department shall inform the applicant whether the application, stormwater management plan and inspection and maintenance agreement are approved or disapproved.
D. If the permit application, stormwater management plan, or inspection and maintenance agreement is disapproved, the Department shall notify the applicant of such fact in writing. The applicant may then revise any item not meeting the requirements hereof and resubmit the same, in which event this section and Section 14.5.4 shall apply to such resubmittal.
E. Upon a finding by the Department that the permit application, stormwater management plan and inspection and maintenance agreement, if applicable, meet the requirements of this section, the Department may issue a permit for the land development project, provided all other legal requirements for the issuance of such permit have been met.
F. Notwithstanding the issuance of the permit, in conducting the land development project, the applicant or other responsible person is subject to the following requirements:
    1. The applicant shall comply with all applicable requirements of the approved plan and this section and shall certify that all land clearing, construction, land development and drainage will be done according to the approved plan;
    2. The land development project is conducted only within the area specified in the approved plan;
    3. The Department is allowed to conduct periodic inspections of the project;
    4. No changes may be made to an approved plan without review and written approval by the Department; and
    5. Upon completion of the project, the applicant or other responsible person shall submit the engineer's report and certificate and as-built plans required by Section 14.5.10, Performance Criteria.

14.5.6 Stormwater Concept Plan.

A. Discussion of post-development stormwater management. Before any stormwater management permit application is submitted, it is recommended that the landowner or developer shall meet

with the Department for a consultation meeting on a concept plan for the post-development stormwater management system to be utilized in the proposed land development project. This consultation meeting shall take place at the time of the preliminary plan of subdivision or other early step in the development process. The purpose of this meeting is to discuss the post-development stormwater management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential ideas for stormwater management designs before the formal site design engineering is commenced.

B. Information to be submitted. To accomplish this goal, the following information is included in the concept plan that is submitted in advance of the meeting:
    1. Existing Conditions Proposed site plans. Existing conditions and proposed site layout sketch plans which illustrate, at a minimum, existing and proposed topography; perennial and intermittent streams; mapping of predominant soils from soil surveys (when available); boundaries of existing predominant vegetation and proposed limits of clearing and grading; and location of existing and proposed roads, buildings, parking areas and other impervious surfaces.
    2. Natural Resources Inventory. A written or graphic inventory of the natural resources at the site and surrounding area as it exists prior to the commencement of the project. This description should include a discussion of soil conditions, forest cover, topography, wetlands, and other native vegetative areas on the site, as well as the location and boundaries of other natural feature protection and conservation areas such as wetlands, lakes, ponds, floodplains, stream buffers and other setbacks (e.g., drinking water well setbacks, septic setbacks, etc.). Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.
    3. Stormwater Management System Concept Plan. A written or graphic concept plan of the proposed post-development stormwater management system including: preliminary selection and location of proposed structural stormwater controls; location of existing and proposed conveyance systems such as grass channels, swales, and storm drains; flow paths; location of floodplain/floodway limits; relationship of site to upstream and downstream properties and drainages; and preliminary location of proposed stream channel modifications, such as bridge or culvert crossings. Local watershed plans, the County greenspace protection plan (if applicable), and any relevant resource protection plans will be consulted in the discussion of the concept plan.
    4. Green Infrastructure Feasibility Form. The standard County form will be provided with required documentation for Linear or Non-linear projects determining whether the installation of Green Infrastructure best management practices are feasible or infeasible for the proposed project based on soil infiltration rates, water table or bedrock conditions, setbacks, landmark trees, endangered species, brownfield site conditions, on-site contaminants, historic resources, steep slopes, utility conflicts or practicability hardships.

14.5.7 Stormwater Management Plan.

A. The stormwater management plan shall detail how post-development stormwater runoff will be controlled or managed and how the proposed project will meet the requirements of this ordinance, including the performance criteria set forth in Section 14.5.10, Performance Criteria.
B. This plan is in accordance with the criteria established in this section and must be submitted with the stamp and signature of a design professional licensed in the state, who must verify that

the design of all stormwater management facilities and practices meet the submittal requirements outlined in the current Georgia Stormwater Management Manual 2016 Edition (here and henceforth all references to this manual assume the 2016 edition, including all amendments as may be forthcoming from time to time) and the County's submittal requirements for commercial and single-family residential development.

C. Submittal Requirements. The stormwater management plan must ensure that the requirements and criteria in this ordinance are being complied with and that opportunities are being taken to minimize adverse post-development stormwater runoff impacts from the development. The plan shall consist of maps, narrative, and supporting design calculations (hydrologic and hydraulic) for the proposed stormwater management system. The plan shall include all of the applicable design requirements and forms found in the Georgia Stormwater Management Manual and the County's submittal requirement for commercial and single-family residential development. This includes but is not limited to:
    1. The common address and legal description of the site.
    2. Vicinity map.
    3. Existing conditions and proposed site plans. Existing conditions and proposed site layout plans which illustrate at a minimum: existing and proposed topography; perennial and intermittent streams; mapping of predominant soils from soil surveys; boundaries of existing predominant vegetation and proposed limits of clearing and grading; and location of existing and proposed roads, building parking area and other impervious surfaces.
    4. Infiltration rates. Infiltration rates shall be determined by soil surveys, on-site soil analysis or a percolation test. If the site has been previously developed or graded or contains urban soil types, a percolation test is required.
    5. Natural resources inventory. A written or graphic inventory of the natural resources in existence prior to the commencement of the project. This inventory shall address resources both on the site and in the surrounding area that are or may be impacted by the project. This inventory shall also include a description of the soil conditions, forest cover, topography, wetlands, and other native vegetative areas on the site, as well as the location and boundaries of other natural features protection and conservation areas such as wetlands, lakes, ponds, floodplains, stream buffers and other setbacks, including but not limited to drinking water well setbacks and septic setbacks. Particular attention should be paid to environmentally sensitive features that present constraints for development.
    6. Existing conditions hydrologic analysis. The existing condition hydrologic analysis for stormwater runoff rates, volumes, and velocities in accordance with the current Georgia Stormwater Management Manual, which shall include: a topographic map of existing site conditions with the drainage basin boundaries indicated; acreage, soil types and land cover of areas for each subbasin affected by the project; all perennial and intermittent streams and other surface water features; all existing stormwater conveyances and structural control facilities; direction of flow and exits from the site; analysis of runoff provided by off-site areas upstream of the project site; and methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology. For redevelopment sites, pre-development conditions are modeled using guidelines established by the Director for the portion of the site undergoing land development activities.

7. Post development hydrologic analysis. The post-development hydrologic analysis for stormwater runoff rates, volumes, and velocities shall be calculated in accordance with the Georgia Stormwater Management Manual and include: a topographic map of developed site conditions with the post-development drainage basin boundaries indicated; total area of post development impervious surfaces and other land cover areas for each subbasin affected by the project; calculations for determining the runoff volumes that need to be addressed for each subbasin for the development project to meet the post-development stormwater management performance criteria in Section 6.4.12; location and boundaries of proposed natural feature protection and conservation areas; documentation and calculations for any applicable site design credits that are being utilized; methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology. If the land development activity on a redevelopment site constitutes more than 50 percent of the site area for the entire site, then the performance criteria in Section 6.4.12 must be met for the stormwater runoff from the entire site. For a subdivision of land or planned development, post-development runoff volumes, rates, and velocities shall be calculated based on the built-out conditions of the entire parcel to be subdivided, regardless of future ownership of individual lots. Estimates of impervious surfaces shall be made based on maximum allowable lot coverage in accordance with the County's Development Code when meeting the performance criteria. The developer of said subdivided parcel may provide runoff reduction and water quality measures for individual lots, which must be reflected accordingly on the final plat.
8. Stormwater management system. The description, scaled drawings and design calculations for the proposed post-development stormwater management system, which shall include: A map and/or drawing or sketch of the stormwater management facilities, including the location of nonstructural site design features and the placement of existing and proposed structural stormwater controls, including design water surface elevations, storage volumes available from zero to maximum head, location of inlet and outlets, location of bypass and discharge systems, and all orifice/restrictor sizes; a narrative describing how the selected structural stormwater controls will be appropriate and effective; cross section and profile drawings and design details for each of the structural stormwater controls in the system, including supporting calculations to show that the facility is designed according to the applicable design criteria; a hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms (including stage-storage or outlet rating curves, and inflow and outflow hydrographs); documentation and supporting calculations to show that the stormwater management system adequately meets the post-development stormwater management performance criteria in section 109-195; drawings, design calculations, elevations and hydraulic grade lines for all existing and proposed stormwater conveyance elements including stormwater drains, pipes, culverts, catch basins, channels, swales and areas of overland flow; and where applicable, a narrative describing how the stormwater management system corresponds with any watershed protection plans and/or local greenspace protection plan.
9. Post development downstream analysis. A downstream peak flow analysis that includes the assumptions, results and supporting calculations to show safe passage of post-development design flows downstream. The analysis of downstream conditions in the

report shall address each and every point or area along the project site's boundaries at which runoff will exit the property. The analysis shall focus on the portion of the drainage channel or watercourse immediately downstream from the project. This area shall extend downstream from the project to a point in the drainage basin where the project area is ten percent of the total basin area. In calculating runoff volumes and discharge rates, consideration may need to be given to any planned future upstream land use changes. The analysis is in accordance with the stormwater design manual.

10. Construction-phase erosion and sedimentation control plan. An erosion and sedimentation control plan in accordance with the Georgia Erosion and Sedimentation Control Act of 1975 (O.C.G.A. § 12-7-1 et seq.) or NPDES permit for construction activities. The plan shall also include information on the sequence/phasing of construction and temporary stabilization measures and temporary structures that will be converted into permanent stormwater controls. Prior to the approval of the stormwater management plan, the applicant or responsible party shall submit a proposed staged construction and inspection control schedule for approval; otherwise, the construction and inspection control schedule will be for the entire drainage system. No stage work related to the construction of stormwater management facilities or BMPs shall proceed until the next proceeding stage of work, according to the sequence specified in the approved stage construction and inspection control schedule, as inspected and approved. Runoff reduction and water quality measures shall be installed in the final phase of construction to prevent clogging.
11. Landscaping and open space plan. A detailed landscaping and vegetation plan describing the woody and herbaceous vegetation that will be used within and adjacent to stormwater management facilities and practices. The landscaping plan must also include: the arrangement of planted areas, natural and greenspace areas and other landscaped features on the site plan; information necessary to construct the landscaping elements shown on the plan drawings; descriptions and standards for the methods, materials and vegetation that are to be used in the construction; density of plantings; descriptions of the stabilization and management techniques used to establish vegetation; and a description of who will be responsible for ongoing maintenance of vegetation for the stormwater management facility and what practices will be employed to ensure that adequate vegetative cover is preserved.
12. Operations and maintenance plan. Detailed description of ongoing operations and maintenance procedures for stormwater management facilities and practices to ensure their continued function as designed and constructed or preserved. These plans will identify the parts or components of a stormwater management facility or practice that need to be regularly or periodically inspected and maintained, and the equipment and skills or training necessary. The plan shall include a narrative describing how the stormwater management system is designed to function, including capture, runoff control, water quality treatment, channel and flood protection, and ongoing operations and maintenance procedures for all stormwater management facilities and practices shown on the stormwater management site plan. The plan shall include an inspection and maintenance schedule, maintenance tasks, responsible parties for maintenance, funding, access and safety issues. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures are included in the plan.

13. Maintenance access easements. The applicant must ensure access from right-of-way to stormwater management facilities and practices requiring regular maintenance at the site for the purpose of inspection and repair by securing all the maintenance access easements needed on a permanent basis. Such access is sufficient for all necessary equipment for maintenance activities. Upon final inspection and approval, a plat or document indicating that such easements exist is recorded and shall remain in effect even with the transfer of title of the property.
14. Inspection and maintenance agreements. Unless an on-site stormwater management facility or practice is dedicated to and accepted by the Department as provided in Section 6.4.9, the applicant must execute an easement and an inspection and maintenance agreement binding on all subsequent owners of land served by an on-site stormwater management facility or practice in accordance with Section 6.4.9.
15. Evidence of acquisition of applicable local and nonlocal permits. The applicant shall certify and provide documentation to the Department that all other applicable environmental permits have been acquired for the site prior to approval of the stormwater management plan.

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

14.5.8 Application Review Fees.

The fee for review of any stormwater management application is based on the fee structure established by the Department of Planning and Development and is made prior to the issuance of any building permit for the development.

14.5.9 Modifications for Off-Site Facilities.

A. The stormwater management plan for each land development project shall provide for stormwater management measures located on the site of the project, unless provisions are made to manage stormwater by an off-site or regional facility. The off-site or regional facility must be located on property legally dedicated for the purpose, must be designed and adequately sized to provide a level of stormwater quantity and quality control that is equal to or greater than that which would be afforded by on-site practices and there must be a legally obligated entity responsible for long-term operation and maintenance of the off-site or regional stormwater facility. In addition, on-site measures are implemented, where necessary, to protect upstream and downstream properties and drainage channels from the site to the off-site facility.
B. A stormwater management plan must be submitted to the Department that shows the adequacy of the off-site or regional facility.
C. To be eligible for a modification, the applicant must demonstrate to the satisfaction of the Director that the use of an off-site or regional facility will not result in the following impacts to upstream or downstream areas:
    1. Increased threat of flood damage to public health, life, and property;
    2. Deterioration of existing culverts, bridges, dams, and other structures;
    3. Accelerated stream bank or streambed erosion or siltation;

4. Degradation of in-stream biological functions or habitat; or
5. Water quality impairment in violation of the state water quality standards, and/or violation of any state or federal regulations.

14.5.10 Performance Criteria.

A. For new developments, the following performance criteria shall be applied to the area of the site impacted by the proposed work. For redevelopment, the following performance criteria shall be applied to the area of the site impacted by the proposed work, provided that the impacted area does not exceed 35 percent of the previously developed area. If the impacted area exceeds 35 percent of the previously developed area, the following performance criteria shall be applied to the entire development, including previously developed area:
    1. Water Quality/Runoff Reduction. All stormwater runoff generated from a site shall provide runoff reduction of the first 1.2 inches of rainfall or shall be adequately treated for water quality before discharge. With the exception of single lot residential developments that are not part of a common development, this shall be accomplished by the use of Green Infrastructure Best Management Practices unless determined to be infeasible in accordance with Section 14.5.6.B.4, Green Infrastructure Feasibility.
        a. It will be presumed that a stormwater management system complies with this requirement if it satisfies the stormwater reduction criteria in this section. However if any of the stormwater runoff volume generated by the first 1.2 inches of rainfall cannot be reduced or retained on site due to constraints such as a high water table, rock, low infiltration rates or the presence of a hotspot, the remaining volume shall be increased by a multiplier of 1.2 and shall be intercepted and treated in one or more stormwater management practices that provide at least an 80 percent reduction in total suspended solids loads in accordance with the following criteria:
            i. It is sized to treat the prescribed water quality treatment volume from the site, as defined in the Georgia Stormwater Management Manual;
            ii. Appropriate structural stormwater controls or nonstructural practices are selected, designed, constructed or preserved, and maintained according to the specific criteria in the Georgia Stormwater Management Manual or constitutes an alternative practice responsibly designed and documented by the design professional to reproduce the intent of the Georgia Stormwater Management Manual; and
            iii. Runoff from hotspot land uses and activities identified by the Department are adequately treated and addressed through the use of appropriate structural stormwater controls, nonstructural practices and pollution prevention practices.
    2. Stream Channel Protection. Protection of stream channels from bank and bed erosion and degradation is provided by using all of the following three approaches:
        a. Preservation, restoration and/or reforestation (with native vegetation) of the applicable stream buffer;
        b. Twenty-four-hour extended detention storage of the one-year, 24-hour return frequency storm event;
        c. Erosion prevention measures such as energy dissipation and capacity control.

d. For redevelopment projects that create, add, or demolish and replace less than 5,000 square feet of impervious surface and meet the performance criteria of this section, stream channel protection is not required.

3. Overbank Flooding Protection.
    a. Downstream overbank flood and property protection is provided by controlling (attenuating) the post-development peak discharge rate to the pre-development rate for the 25-year, 24-hour return frequency storm event. If control of the one-year, 24-hour storm under subsection (a) of this section is exempted, then peak discharge rate attenuation of the two-year through the 25-year return frequency storm event must be provided. For redevelopment projects overbank flood and property protection shall be provided by reducing the peak discharge rate up to the 25-year, 24-hour storm event in accordance with the following formula:
        %PIC/2 = %PDRR
        PIC = Predevelopment Impervious Cover
        PDRR = Peak Discharge Rate Reduction
    b. For sites where previous demolition has removed impervious surfaces, pre-development peak discharge rate calculations and percentage of impervious coverage shall be calculated based on pre-demolition conditions. For sites that have been demolished and have remained fallow and stabilized with vegetation for a minimum of five years, they shall be considered as having pre-development conditions of 20 percent impervious cover for purposes of calculating peak discharge rate reduction.
    c. For land development permitted after 2005 and served by appropriate stormwater management facilities, subsequent redevelopment of the same area is not required to further reduce the peak discharge rate, provided that the site continues to meet the reduction previously achieved.
    d. For redevelopment projects that create, add, or demolish and replace less than 5,000 square feet of impervious surface and meet the performance criteria of this section, overbank flooding protection is not required.
4. Extreme Flooding Protection.
    a. Extreme flood and public safety protection is provided by controlling and safely conveying the 100-year, 24-hour return frequency storm event such that flooding is not exacerbated.
    b. For redevelopment projects that create, add, or demolish and replace less than 5,000 square feet of impervious surface and meet the performance criteria of this section, extreme flooding protection is not required.
5. Structural Stormwater Controls. All structural stormwater management facilities are selected and designed using the appropriate criteria from the Georgia Stormwater Management Manual. All structural stormwater controls must be designed appropriately to meet their intended function. For other structural stormwater controls not included in the Georgia Stormwater Management Manual, or for which pollutant removal rates have not been provided, the effectiveness and pollutant removal of the structural control must be documented through prior studies, literature reviews, or other means and receive approval from the Department before being included in the design of a stormwater management system. In addition, if hydrologic or topographic conditions, or land use activities warrant greater control than that provided by the minimum control

requirements, the County may impose additional requirements deemed necessary to protect upstream and downstream properties and aquatic resources from damage due to increased volume, frequency, and rate of stormwater runoff or increased non-point source pollution loads created on the site in question. Applicants shall consult the Georgia Stormwater Management Manual for guidance on the factors that determine site design feasibility when selecting and locating a structural stormwater control.

6. Stormwater Credits for Nonstructural Measures. The use of one or more site design measures by the applicant may allow for a reduction in the water quality treatment volume required under Section 14.5.10.A.1, Water Quality/Runoff Reduction. The applicant may, if approved by the Department, take credit for the use of stormwater better site design practices and reduce the water quality volume requirement. For each potential credit, there is a minimum set of criteria and requirements that identifies the conditions or circumstances under which the credit may be applied. The site design practices that qualify for this credit and the criteria and procedures for applying and calculating the credits are included in the Georgia Stormwater Management Manual.
7. Drainage System Guidelines. Stormwater conveyance facilities, which may include but are not limited to culverts, stormwater drainage pipes, catchbasins, drop inlets, junction boxes, headwalls, gutters, swales, channels, ditches, and energy dissipaters, are provided when necessary for the protection of right-of-way and private properties adjoining project sites and/or rights-of-way. Stormwater conveyance facilities that are designed to carry runoff from more than one parcel, existing or proposed, shall meet the following requirements:
    a. Methods to calculate stormwater flows are in accordance with the stormwater design manual;
    b. All culverts, pipe systems and open channel flow systems are sized in accordance with the stormwater management plan using the methods included in the Georgia Stormwater Management Manual; and
    c. Design and construction of stormwater conveyance facilities are in accordance with the criteria and specifications found in the Georgia Stormwater Management Manual.
8. Dam Design Guidelines. Any land disturbing activity that involves a site that proposes a dam shall comply with the Georgia Safe Dams Act of 1978 (O.C.G.A. § 12-5-370 et seq.) and rules for dam safety as applicable.

B. All applicants are required to submit actual "as-built" plans for any stormwater management facilities or practices after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and practices and must be certified by a professional engineer. A final inspection by the Department is required before the release of any performance securities can occur.

C. Long-Term Maintenance Inspection of Stormwater Facilities and Practices.
    1. The absence of an inspection and maintenance agreement shall not relieve the owner or responsible party from performing proper maintenance and inspection of the stormwater management facility. If the owner or responsible party fails or refuses to meet the requirements of this Division, the County may correct the violation at the owner's expense.
    2. For facilities constructed prior to the effective date of this Division the owner or responsible party shall perform proper maintenance of the stormwater maintenance

facility as required by the indemnification agreement. If the owner or responsible party fails or refuses to meet the requirements of this Division, the County may correct the violation at the owner's expense.

3. Stormwater management facilities and practices included in a stormwater management plan which are subject to an inspection and maintenance agreement must undergo ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the agreement, the plan and this Division.
4. A stormwater management facility or practice is inspected on a periodic basis by the responsible person in accordance with the approved inspection and maintenance agreement or in the absence of an inspection and maintenance agreement, in accordance with the requirements of this Division. In the event that the stormwater management facility has not been maintained and/or becomes a danger to public safety or public health, the Department shall notify the person responsible for carrying out the maintenance plan who is specified in the inspection and maintenance agreement by registered or certified mail. The notice shall specify the measures needed to comply with the agreement and the plan and shall specify the time within which such measures are completed. Failure of the County to provide such notice shall not relieve the owner or responsible party from performing proper maintenance and inspection of the stormwater maintenance facility. If the responsible person fails or refuses to meet the requirements of the inspection and maintenance agreement, the Department may correct the violation as provided in Section 6.6.14 hereof.
5. An annual inspection shall be performed and attested to by a professional engineer with results reported to the County. Any deficiencies noted in either operation or maintenance of the facility must be included in the report along with the proposed remedies required and a time table for their implementation. If substantial deficiencies are found, a follow-up inspection to confirm correction of said deficiencies shall be performed and reported to the County.

D. Records of Maintenance Activities. Parties responsible for the operation and maintenance of a stormwater management facility shall provide records of all maintenance and repairs to the Department.

14.6 Soil Erosion and Sedimentation Control.

14.6.1 Title and Findings.

A. Title. This section will be known as "The Rockdale County Soil Erosion, Sedimentation and Pollution Control Ordinance."

B. Findings. Rockdale County finds that soil erosion and sediment deposition onto land and into water within the watersheds of the County are a result of failure to apply proper soil erosion and sedimentation control practices in land clearing, soil movement, and construction activities and that such erosion and sediment deposition result in pollution of state waters and damage to domestic, agricultural, recreational, fish and wildlife, and other resource uses. It is therefore declared to be the policy of Rockdale County and the intent of this section to strengthen and extend the present erosion and sediment control activities and programs of Rockdale County and to provide for the establishment and implementation of a County-wide comprehensive soil erosion and sediment control program to conserve and protect the land, water, air, and other resources of Rockdale County.

14.6.2 Exemptions.

This section shall apply to any land-disturbing activity undertaken by any person or any land except for the following:

A. Surface mining, as the same is defined in O.C.G.A. § 12-4-72, "The Georgia Surface Mining Act of 1968";
B. Granite Quarrying and land for such quarrying;
C. Such minor land-disturbance activities as home gardens and individual home landscaping, repairs, maintenance work, fences, and other related activities. If such activities cause excessive erosion an official notice shall be provided to implement a best management practice (BMP) to stop continued erosion;
D. The construction of single-family residences, when such construction disturbs less than one acre and is not a part of a larger common plan or development or sale with a planned disturbance of equal to or greater than one acre and not otherwise exempted under this paragraph; provided, however:
    1. Construction of any such residence (single-family) shall conform to the minimum requirements as set forth in Section 6.7.3.C of this Division.
    2. For single-family residential construction covered by the provisions of this paragraph, there shall be a buffer zone between the residence and any state waters classified as trout streams pursuant to Article 1 of Chapter 5 of the Georgia Water Quality Control Act. In any such buffer zone, no land-disturbing activity shall be constructed between the residence and the point where vegetation has been wrested by normal stream flow or wave action from the banks of the trout waters. For primary trout waters, the buffer zone shall be at least 50 horizontal feet, and no variance to a smaller buffer shall be granted. For secondary trout waters, the buffer zone shall be at least 50 horizontal feet, but the Director of Stormwater Management may grant variances to no less than 25 feet. Regardless of whether a trout stream is primary or secondary, for first order trout waters, which are streams into which no other streams flow except for springs, the buffer shall be at least 25 horizontal feet, and no variance to a smaller buffer shall be granted.
    3. The minimum requirements of Section 6.7.3.C of this Division and the buffer zones provided by this section shall be enforced by the County;
E. Agricultural operations as defined in O.C.G.A. §1-3-3, "definitions," to include raising, harvesting or storing of products of the field or orchard; feeding, breeding or managing livestock or poultry; producing or storing feed for use in the production of livestock, including, but not limited to, cattle, calves, swine, hogs, goats, sheep, and rabbits or for use in the production of poultry, including, but not limited to, chickens, hens and turkeys; producing plants, trees, fowl, or animals; the production of aquaculture, horticultural, dairy, livestock, poultry, eggs and apiarian products; farm buildings and farm ponds;
F. Forestry land management practices, including harvesting; provided, however, that when such exempt forestry practices cause or result in land-disturbing or other activities otherwise prohibited in a buffer, as established in Section 6.7.3.C of this Division, no other land-disturbing activities, except for normal forest management practices, shall be allowed on the entire property upon which the forestry practices were conducted for a period of three years (3) after completion of such forestry practices;
G. Any project carried out under the technical supervision of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture;

H. Any project involving less than one acre of disturbed area; provided, however, that this exemption shall not apply to any land-disturbing activity within a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre or within 200 feet of the banks/points of wrested vegetation of any state waters, and for purposes of this paragraph, "state waters" excludes channels and drainage ways which have water in them only during and immediately after rainfall events, however, that any person responsible for a project which involves less than one acre, which involves land-disturbing activity, and which is within 200 feet of any such excluded channel or drainageway, must prevent sediment from moving beyond the boundaries of the property on which such project is located and provided, further, that nothing contained herein shall prevent the local issuing authority from regulating any such project which is not specifically exempted by paragraphs A., B., C., D., E., F., G., I. or J. of this Section;

I. Construction or maintenance projects, or both, undertaken or financed in whole or in part, or both, by the Georgia Department of Transportation, the Georgia Highway Authority, or the State Road and Tollway Authority; or any road construction or maintenance project, or both, undertaken by any county or municipality; provided, however, that construction or maintenance projects of the Georgia Department of Transportation or the State Road and Tollway Authority which disturb one or more contiguous acres of land shall be subject to provisions of O.C.G.A. § 12-7-7.1; except where the Georgia Department of Transportation, the Georgia Highway Authority, or the State Road and Tollway Authority is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case a copy of a notice of intent under the state general permit shall be submitted to the local issuing authority, the local issuing authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. § 12-7-6, as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders;

J. Any land-disturbing activities conducted by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Georgia Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. § 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power; except where an electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Georgia Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. § 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case the local issuing authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. § 12-7-6, as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders; and

K. Any public water system reservoir.

14.6.3 Minimum Requirements.

A. General Provisions. Excessive soil erosion and resulting sedimentation can take place during land-disturbing activities if requirements of the ordinance [from which this Division derived] and the NPDES general permit are not met. Therefore, plans for those land-disturbing activities that

are not exempted by this Division shall contain provisions for application of soil erosion, sedimentation and pollution control measures and practices. The provisions shall be incorporated into the erosion, sedimentation and pollution control plans. Soil erosion, sedimentation and pollution control measures and practices shall conform to the minimum requirements of Section 14.6.3.B and Section 14.6.3.C of this ordinance. The application of measures and practices shall apply to all features of the site, including street and utility installations, drainage facilities and other temporary and permanent improvements. Measures shall be installed to prevent or control erosion, sedimentation and pollution during all stages of any land-disturbing activity in accordance with requirements of this Division and the NPDES general permit.

B. Minimum Requirements/BMPs.
    1. Best management practices as set forth in this section of this Division shall be required for all land-disturbing activities. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director of Stormwater Management or to any other allegation of noncompliance with Section 14.6.3.B.2 or any substantially similar terms contained in a permit for the discharge of stormwater issued pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act." As used in this section, the terms "proper design" and "properly designed" mean designed in accordance with the hydraulic design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" specified in O.C.G.A. § 12-7-6(b).
    2. A discharge of stormwater runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the division pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act," for each day on which such discharge results in the turbidity of receiving waters being increased by more than 25 nephelometric turbidity units for waters supporting warm water fisheries or by more than ten nephelometric turbidity units for waters classified as trout waters. The turbidity of the receiving waters shall be measured in accordance with guidelines to be issued by the Director of Stormwater Management, EPD. This paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a larger common plan of development or sale unless the planned disturbance for such construction is equal to or greater than five acres.
    3. Failure to properly design, install, or maintain best management practices shall constitute a violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the division pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act," for each day on which such failure occurs.
    4. The Director of Stormwater Management may require, in accordance with regulations adopted by the Board of Natural Resources, reasonable and prudent monitoring of the turbidity level of receiving waters into which discharges from land-disturbing activities occur.
    5. The local issuing authority (LIA) may set more stringent buffer requirements than stated in Section 14.6.3.C.15 and Section 14.6.3.C.16, in light of O.C.G.A. § 12-7-6(c).

C. The rules and regulations, ordinances, or resolutions adopted pursuant to O.C.G.A. § 12-7-1 et seq. for the purpose of governing land-disturbing activities shall require, as a minimum, protections at least as stringent as the state general permit and best management practices,

including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

1. Stripping of vegetation, regrading and other development activities shall be conducted in a manner so as to minimize erosion;
2. Cut-fill operations must be kept to a minimum;
3. Development plans must conform to topography and soil type so as to create the lowest practicable erosion potential;
4. Whenever feasible, natural vegetation shall be retained, protected and supplemented;
5. The disturbed area and the duration of exposure to erosive elements shall be kept to a practicable minimum;
6. Disturbed soil shall be stabilized as quickly as practicable;
7. Temporary vegetation or mulching shall be employed to protect exposed critical areas during development;
8. Permanent vegetation and structural erosion control practices shall be installed as soon as practicable;
9. To the extent necessary, sediment in runoff water must be trapped by the use of debris basins, sediment basins, silt traps, or similar measures until the disturbed area is stabilized. As used in this paragraph, a disturbed area is stabilized when it is brought to a condition of continuous compliance with the requirements of O.C.G.A. § 12-7-1 et seq.;
10. Adequate provisions must be provided to minimize damage from surface water to the cut face of excavations or the sloping of fills;
11. Cuts and fills may not endanger adjoining property;
12. Fills may not encroach upon natural watercourses or constructed channels in a manner so as to adversely affect other property owners;
13. Grading equipment must cross flowing streams by means of bridges or culverts except when such methods are not feasible, provided, in any case, that such crossings are kept to a minimum;
14. Land-disturbing activity plans for erosion, sedimentation and pollution control shall include provisions for treatment or control of any source of sediments and adequate sedimentation control facilities to retain sediments on site or preclude sedimentation of adjacent waters beyond the levels specified in this article;
15. Except as provided in paragraph (16) of this section, there is established a 25-foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director of Stormwater Management, EPD determines to allow a variance that is at least as protective of natural resources and the environment, where otherwise allowed by the Director of Stormwater Management, EPD pursuant to O.C.G.A. § 12-2-8, where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented; or along any ephemeral stream. As used in this provision, the term "ephemeral stream" means a stream: that under normal circumstances has water flowing only during and for a short duration after precipitation events; that has the channel located above the groundwater table year round; for which

groundwater is not a source of water; and for which runoff from precipitation is the primary source of water flow, unless exempted as along an ephemeral stream, the buffers of at least 25 feet established pursuant to Part 6 of Article 5, Chapter 5 of Title 12, the "Georgia Water Quality Control Act," shall remain in force unless a variance is granted by the Director of Stormwater Management, EPD as provided in this paragraph. The following requirements shall apply to any such buffer:

a. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the streambed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for their own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the streambed; and
b. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) stream crossings for water lines; or (ii) stream crossings for sewer lines;

16. There is established a 50-foot buffer as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any state waters classified as "trout streams" pursuant to Article 2 of Chapter 5 of Title 12, the "Georgia Water Quality Control Act," except where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute or less shall have a 25-foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources, so long as any such pipe stops short of the downstream landowner's property and the landowner complies with the buffer requirement for any adjacent trout streams. The Director of Stormwater Management, EPD may grant a variance from such buffer to allow land-disturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to such buffer:
    a. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the streambed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for their own

occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the streambed; and

b. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) stream crossings for water lines; or (ii) stream crossings for sewer lines.

17. Nothing contained in O.C.G.A. § 12-7-1 et seq. shall prevent any local issuing authority from adopting rules and regulations, ordinances, or resolutions which contain stream buffer requirements that exceed the minimum requirements in Section 14.6.3.B and Section 14.6.3.C of this ordinance.
18. The fact that land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this Division or the terms of the permit.

14.6.4 Application/Permit Process.

A. General. The property owner, developer and designated planners and engineers shall design and review before submittal the general development plans. The local issuing authority shall review the tract to be developed and the area surrounding it. They shall consult the zoning ordinance, stormwater management ordinance, subdivision ordinance, flood damage prevention ordinance, this Division, and any other ordinances, rules, regulations or permits, which regulate the development of land within the jurisdictional boundaries of the local issuing authority. However, the owner and/or operator are the only parties who may obtain a permit.

B. Application Requirements.

1. No person shall conduct any land-disturbing activity within the jurisdictional boundaries of Rockdale County, Georgia, without first obtaining a permit from the Department to perform such activity and providing a copy of notice of intent submitted to EPD, if applicable.
2. The application for a permit shall be submitted to the Department and must include the applicant's erosion, sedimentation and pollution control plan with supporting data, as necessary. Said plans shall include, as a minimum, the data specified in Section 14.6.4.C, Plan Requirements of this ordinance. Erosion, sedimentation and pollution control plans, together with supporting data, must demonstrate affirmatively that the land-disturbing activity proposed will be carried out in such a manner that the provisions of Section 14.6.3.B and Section 14.6.3.C of this ordinance will be met. Applications for a permit will not be accepted unless accompanied by three copies of the applicant's erosion, sedimentation and pollution control plans. All applications shall contain a certification stating that the plan preparer or the designee thereof visited the site prior to creation of the plan in accordance with EPD Rule 391-3-7-10.
3. In addition to the local permitting fees, fees will also be assessed pursuant to paragraph O.C.G.A. § 12-5-23(5)(a), provided that such fees shall not exceed $80.00 per acre of land-disturbing activity, and these fees shall be calculated and paid by the primary permittee as defined in the state general permit for each acre of land-disturbing activity

included in the planned development or each phase of development. All applicable fees shall be paid prior to issuance of the land disturbance permit. In a jurisdiction that is certified pursuant to O.C.G.A. § 12-7-8(a), half of such fees levied shall be submitted to the division; except that any and all fees due from an entity which is required to give notice pursuant to O.C.G.A. § 12-7-17(9) or (10) shall be submitted in full to the division, regardless of the existence of a local issuing authority in the jurisdiction.

4. Upon receipt of an application and plan for a permit, the County shall review and approve or disapprove concerning the adequacy of the erosion, sedimentation and pollution control plan. The County shall approve or disapprove a plan within 35 days of receipt. Failure of the County to act within 35 days shall be considered an approval of the pending plan. No permit will be issued unless the plan has been approved by the County, and any variances required by Section 14.6.3.C have been obtained, all fees have been paid, and bonding, if required as per Section 14.6.4.B, has been obtained.
5. If a permit applicant has had two or more violations of previous permits, this Division section, or the Erosion and Sedimentation Act, as amended, within three years prior to the date of filing the application under consideration, the local issuing authority may deny the permit application.
6. The local issuing authority may require the permit applicant to post a bond in the form of government security, cash, irrevocable letter of credit, or any combination thereof up to, but not exceeding, $3,000.00 per acre or fraction thereof of the proposed land-disturbing activity, prior to issuing the permit. If the applicant does not comply with this section or with the conditions of the permit after issuance, the local issuing authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance. These provisions shall not apply unless there is in effect an ordinance or statute specifically providing for hearing and judicial review of any determination or order of the local issuing authority with respect to alleged permit violations.

C. Plan Requirements.

1. Plans must be prepared to meet the minimum requirements as contained in Section 14.6.3.B and Section 14.6.3.C of this ordinance, or through the use of more stringent, alternate design criteria which conform to sound conservation and engineering practices. The "Manual for Erosion and Sediment Control in Georgia" is hereby incorporated by reference into this ordinance. The plan for the land-disturbing activity shall consider the interrelationship of the soil types, geological and hydrological characteristics, topography, watershed, vegetation, proposed permanent structures, including roadways, constructed waterways, sediment control and stormwater management facilities, local ordinances and state laws. Maps, drawings and supportive computations shall bear the signature and seal of the certified design professional. Persons involved in land development design, review, permitting, construction, monitoring, or inspections or any land-disturbing activity shall meet the education and training certification requirements, dependent on their level of involvement with the process, as developed by the commission and in consultation with the division and the stakeholder advisory board created pursuant to O.C.G.A. § 12-7-20.
2. Data required for site plan shall include all the information required from the appropriate erosion, sedimentation and pollution control plan review checklist established by the

commission as of January 1 of the year in which the land-disturbing activity was permitted.

3. Stand-alone residential development permit and procedures.
4. All building permits for a standalone residential development or redevelopment shall be submitted for review and approval that includes an erosion control plan and details.
5. The building permit shall include a site erosion control plan, sealed by a Georgia registered Engineer, Landscape Architect, Certified Person in Erosion and Sediment Control (CPESC) or Land Surveyor, to accompany the building plans. No permit shall be issued by the local issuing authority unless the erosion, sedimentation and pollution control plan has been approved by the local issuing authority pursuant to Section 14.6.3.C. All proposed BMPs on the site erosion control plan shall be designed per requirements and specifications contained in the "Manual for Erosion and Sediment Control in Georgia."
6. At the time of the preconstruction meeting the owner, operator or applicant shall sign the memorandum of understanding titled "Erosion Control Responsibilities." This document is on file with the Department.
7. Self-inspections and rain event logs.
    a. The on-site operator, owner or applicant shall perform self-inspections of the erosion control BMPs daily when land disturbing is underway and at a minimum of once per week when the site is stabilized.
    b. An inspection be conducted after every rain event of 0.5 inches or more within a 24-hour period.
    c. Any problems noted during these inspections should be logged and corrected immediately.
    d. A log of the self-inspections and remedial measures undertaken must be available for review by Rockdale County at any time during the development and up to the final site stabilization.
8. Permits.
    a. Permits shall be issued or denied as soon as practicable, but in any event not later than 45 days after receipt by the local issuing authority of a completed application, providing variances and bonding are obtained, where necessary, and all applicable fees have been paid prior to permit issuance. The permit shall include conditions under which the activity may be undertaken.
    b. No permit shall be issued by the local issuing authority unless the erosion, sedimentation and pollution control plan has been approved by the district and the local issuing authority has affirmatively determined that the plan is in compliance with this section, any variances required by Section 14.6.3.C.15 and Section 14.6.3.C.16 are obtained, bonding requirements, if necessary, as per Section 14.6.4.B.6 are met and all ordinances and rules and regulations in effect within the jurisdictional boundaries of the local issuing authority are met. If the permit is denied, the reason for denial shall be furnished to the applicant.
    c. Any land-disturbing activities by a local issuing authority shall be subject to the same requirements of this section and any other ordinances relating to land development, as are applied to private persons, and this section shall enforce such requirements upon the local issuing authority.

d. If the tract is to be developed in phases, then a separate permit shall be required for each phase.
e. The permit may be suspended, revoked, or modified by the local issuing authority, as to all or any portion of the land affected by the plan, upon finding that the holder or his successor in the title is not in compliance with the approved erosion and sedimentation control plan or that the holder or his successor in title is in violation of this section. A holder of a permit shall notify any successor in title to him as to all or any portion of the land affected by the approved plan of the conditions contained in the permit.
f. The local issuing authority may reject a permit application if the applicant has had two or more violations of previous permits or the Erosion and Sedimentation Act permit requirements within three years prior to the date of the application, in light of O.C.G.A. § 12-7-7(f)(1).

14.6.5 Education and Certification.

A. Persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on their level of involvement with the process, as developed by the commission in consultation with the division and the stakeholder advisory board created pursuant to O.C.G.A. § 12-7-20.
B. For each site on which land-disturbing activity occurs, each entity or person acting as either a primary, secondary, or tertiary permittee, as defined in the state general permit, shall have as a minimum one person who is in responsible charge of erosion and sedimentation control activities on behalf of said entity or person and meets the applicable education or training certification requirements developed by the commission present on site whenever land-disturbing activities are conducted on that site. A project site shall herein be defined as any land-disturbance site or multiple sites within a larger common plan of development or sale permitted by an owner or operator for compliance with the state general permit.
C. Persons or entities involved in projects not requiring a state general permit but otherwise requiring certified personnel on site may contract with certified persons to meet the requirements of this ordinance.
D. If a state general permittee who has operational control of land-disturbing activities for a site has met the certification requirements of O.C.G.A. § 12-7-19(b)(1), then any person or entity involved in land-disturbing activity at that site and operating in a subcontractor capacity for such permittee shall meet those educational requirements specified in O.C.G.A. § 12-7-19(b)(4) and shall not be required to meet any educational requirements that exceed those specified in said subsection.

14.6.6 Effectivity, Validity, and Liability.

A. Effectivity. This section became effective upon the date of adoption.
B. Validity. If any section, paragraph, clause, phrase, or provision of this section shall be adjudged invalid or held unconstitutional, such decisions shall not affect the remaining portions of this section.
C. Liability.
    1. Neither the approval of a plan under the provisions of this section, nor the compliance with provisions of this section shall relieve any person from the responsibility for damage

to any person or property otherwise imposed by law nor impose any liability upon the local issuing authority or district for damage to any person or property.

2. The fact that a land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this section or the terms of the permit.
3. No provision of this section shall permit any persons to violate the Georgia Erosion and Sedimentation Act of 1975, the Georgia Water Quality Control Act or the rules and regulations promulgated and approved thereunder or pollute any waters of the state as defined thereby.

14.7 Illicit Discharge and Connection.

14.7.1 General Provisions.

A. Purpose and intent. The purpose of this section is to protect the public health, safety, environment and general welfare through the regulation of nonstormwater discharges to the County separate storm sewer system to the maximum extent practicable as required by federal law. This section establishes methods for controlling the introduction of pollutants into the County separate storm sewer system in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this section are to:
   1. Regulate the contribution of pollutants to the storm sewer system by any person;
   2. Prohibit illicit discharges and illegal connections to the storm sewer system;
   3. Prevent nonstormwater discharges, generated as a result of spills, inappropriate dumping or disposal, to the storm sewer system; and
   4. Establish legal authority to carry out all inspection, surveillance, monitoring and enforcement procedures necessary to ensure compliance with this section.

B. Compatibility with Other Regulations. This section is not intended to modify or repeal any other chapter, rule, regulation, or other provision of law. The requirements of this section are in addition to the requirements of any other chapter, rule, regulation, or other provision of law, and where any provision of this section imposes restrictions different from those imposed by any other chapter, rule, regulation, or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

C. Responsibility for Administration. The Department of Stormwater Management shall administer, implement, and enforce the provisions of this section.

14.7.2 Prohibitions.

A. Prohibition of Illicit Discharges. No person shall throw, drain, or otherwise discharge, cause, or allow others under his control to throw, drain, or otherwise discharge into the County separate storm sewer system any pollutants or waters containing any pollutants other than stormwater.

B. Exemptions The following discharges are exempt from the prohibition provision above:
   1. Water line flushing performed by a government agency, other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, natural riparian habitat or wetland flows, and any other water source not containing pollutants;

2. Discharges or flows from firefighting, and other discharges specified in writing by the Director of Stormwater Management as being necessary to protect public health and safety;
3. The prohibition provision above shall not apply to any nonstormwater discharge permitted under an NPDES permit or order issued to the discharger and administered under the authority of the state and the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the County separate storm sewer system.

C. Prohibition of Illegal Connections. The construction, connection, use, maintenance or continued existence of any illegal connection to the storm sewer system is prohibited.
1. This prohibition expressly includes, without limitation, illegal connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
2. A person violates this section if the person connects a line conveying sewage to the storm sewer system or allows such a connection to continue.
3. Improper connections in violation of this section must be disconnected and redirected, if necessary, to an approved onsite wastewater management system or the sanitary sewer system upon approval of the Department of Stormwater Management.
4. Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the storm sewer system, is located by the owner or occupant of that property upon receipt of written notice of violation from the Department of Stormwater Management requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be completed, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the Department of Stormwater Management.

14.7.3 Industrial, Construction Discharges.

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the Department of Stormwater Management prior to allowing discharges to the County separate storm sewer system.

14.7.4 Reporting Illicit Discharge to Issuing Authority / Rockdale County.

A. Notwithstanding other requirements of law, as soon as any person responsible for a facility, activity or operation, or responsible for emergency response for a facility, activity or operation has information of any known or suspected release of pollutants or nonstormwater discharges from that facility or operation which is resulting or may result in illicit discharges or pollutants discharging into stormwater, the County separate storm sewer system, state waters, or waters of the U.S., said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release so as to minimize the effects of the discharge.

B. Said person shall notify the authorized enforcement agency by phone, in writing, or in person no later than 24 hours of the nature, quantity and time of occurrence of the discharge. Notifications in person or by phone are confirmed by written notice addressed and mailed to the Department of Stormwater Management within three business days of the phone or in-person notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records are retained for at least three years. Said person shall also take immediate steps to ensure no recurrence of the discharge or spill.
C. In the event of such a release of hazardous materials, emergency response agencies and/or other appropriate agencies are immediately notified.
D. Failure to provide notification of a release as provided above is a violation of this section.