COUNTY DEPARTMENT AGENDA REQUEST

Department:	Planning and Zoning	Presenter(s):	Pete Frisina
Meeting Date:	Thursday, June 24, 2010	Type of Request:	Public Hearing

Wording for the Agenda:

Consideration of Ordinance 2010-06, proposed amendments to the Fayette County Code, regarding Chapter 8 Development Regulations, Article III Street Design Standards and Specifications.

Background/History/Details:

The proposed amendments to the Development Regulations include section of the Subdivision Regulations regarding design specifications. These amendments are in conjunction with amendments to the Subdivision Regulations. Staff worked with a group of local developers, surveyors, and engineers to draft the proposed amendments. On June 2, 2010, the Board of Commissioners instructed staff to advertise the proposed amendments for the June 24, 2010, Public Hearing.

What action are you seeking from the Board of Commissioners?

Adoption of Ordinance 2010-06, proposed amendments to the Fayette County Code, Chapter 8 Development Regulations, Article III Street Design Standards and Specifications

If this item requires funding, please describe:

Not Applicable.

Has this issue come before the Commissioners in the past?	Yes	If so, when?	Wednesday, June 2, 2010
Do you need audio-visual for the presentation?	No	Back-up Material Submitted?	Yes

STAFF USE ONLY

Approved by Finance	Yes	Reviewed by Legal	Yes
Approved by Purchasing	Not Applicable	Approved by County Clerk	Yes
Administrator's Approval	Yes		

Staff Notes:

06/25/09 – BOC instructed Staff to begin review
07/09/09 – Bryan Keller, Vanessa Birrell, and Robyn Wilson
07/13/09 – Bryan Keller, Vanessa Birrell, and Robyn Wilson
07/15/09 – Bryan Keller, Vanessa Birrell, and Robyn Wilson
07/27/09 - S/D Regs Committee
10/26/09 – Bryan Keller
11/04/09 – BOC Workshop
11/04/09 – BOC comments from the Workshop
02/03/10 – BOC Workshop
03/30/10 – Vanessa Birrell
04/05/10 – Bryan Keller
04/15/10 – Phil Mallon
04/16/10 – Phil Mallon, Pete Frisina, Vanessa Birrell, Bryan Keller, and Robyn Wilson
05/06/10 – BOC Workshop (tabled until 06/03/10)
06/03/10 – BOC Workshop
06/24/10 - BOC Public Hearing

PROPOSED AMENDMENTS TO THE FAYETTE COUNTY DEVELOPMENT REGULATIONS

§ 8-46 - 8-80 DEVELOPMENT REGULATIONS

ARTICLE III. STREET DESIGN STANDARDS AND SPECIFICATIONS*

Sec. 8-46. Design standards.

All roads and bridges constructed in unincorporated Fayette County shall be designed in accordance with latest editions of the American Association of State Highway and Transportation Officials (AASHTO) design guides and specifications except as provided in these regulations.(Ordinance No. 2001-10)

Sec. 8-47. Classification system.

Five (5) functional classifications are identified on the thoroughfare plan. Any street not indicated on the thoroughfare plan will be classified by the Fayette County Engineer**.** The five classification categories are as follows:

(1) Major Arterial. A Georgia State Route which provides traffic movement through the region, as well as traffic movement within ~~and through~~ the County.

(2) Minor Arterial. A street which provides traffic movement within ~~and through~~ the County.

(3) Collector. A street which collects traffic from local and other collector streets and provides a connection to arterial streets.

(4) County Local. A street which provides access to adjoining properties and traffic circulation within a limited area.

(5) Internal Local. A street which primarily serves an individual development and provides traffic circulation within that development.
(Ordinance No. 86-13, § 3-2, 7-24-86)

State constitution reference - County street and road construction and maintenance, Art. IX, § II, Para. III.

State law references - Acquisition of property by counties for public road construction and other transportation purposes, OCGA § 32-3-1 et seq.; classification, designation, etc., of public roads, OCGA § 32-4-1 et seq.; county powers as to public roads, OCGA § 32-4-40 et seq.; reimbursement of counties in regard to acquisition of rights-of-way, OCGA § 32-5-26; acquisition by county of unauthorized outdoor advertising, OCGA § 32-6-83; limited access roads, OCGA § 32-6-110 et seq.; commercial driveways leading to or from state highways, OCGA § 32-6-130 et seq.; elimination of grade crossings, OCGA § 32-6-193 et seq.; reimbursement of counties for property, interests and right-of-way conveyed to Georgia Highway Authority, OCGA § 32-10-6; county roads, bridges and ferries, OCGA § 36-55-22.1; county police to inspect and report on condition of roads and bridges, OCGA § 36-8-6. (Ordinance No. 86-13, § 3-1, 7-24-86).

***Cross-reference** - Streetlights, Ch. 6.

Sec. 8-48. Minimum right-of-way widths and dedication requirements.

The thoroughfare plan illustrates the functional classification of streets and the general location of future arterial and collector streets in the county. The right-of-way dedication requirements expressed below shall correspond to the functional classifications illustrated on the thoroughfare plan. Should a proposed subdivision adjoin an existing street, the developer shall dedicate additional right-of-way to meet one-half the minimum right-of-way requirement for the applicable functional classification of the adjoining street.

(1) *Minimum right-of-way and pavement widths.*

Functional Classification	*Minimum R/W*	*Minimum Pavement Width*
Major Arterial	Per GA DOT	Per GA DOT
Minor Arterial	100’	24’
Collector	80’	24’
(Ordinance NO. 2001-10)		
County Local	60’	24’
Internal Local	60’	24’

(2)Median width. Minimum median width for a divided street shall be at least twenty-four (24) feet. (Ordinance No. 86-13, § 3 - 3, 7-24-86; Ordinance No. 94 - 04, § 5, 3-24-94) (Amended June 9, 2005)

Sec. 8-49. Roadway sectional composition standards by use and functional classification.

The applicable standard shall be based on functional classification and the predominant zoning through which a street passes. See latest edition of the Georgia Department of Transportation Standard Specifications for the Construction of Roads and Bridges for specifications of referenced asphaltic concrete types. For all street classifications, before asphalt pavement is placed a Bituminous Prime shall be applied to the base material in accordance with DOT specifications. Application rate shall be a minimum of 0.15 gallons per square yard.

(1) *Residential/Local*.

a. 1 ½” Asphaltic concrete Type “F” (top course).
2” Asphaltic concrete Type “B” (binder).
6” Crusher run or graded aggregate base for main line pavement.
10” Crusher run or graded aggregate base for cul-de-sacs.

Subgrade stabilized with stone, unless material in place weighs at least 95 lbs./cu. ft. (Ordinance No. 2001-10)

Or

b. 1 ½" Asphaltic concrete Type "F" (top course).
2" Asphaltic concrete Type "B" (binder).
6" Soil cement base for main line pavement
10" Soil cement base for cul-de-sacs.
Soil cement shall be mixed in place - compacted to 98% maximum dry density per standard proctor test ASTM D698.

Subgrade stabilized with stone, unless material in place weighs at least 95 lbs./cu. ft. (Ordinance No. 2001-10)

Or

c. 6" Concrete pavement per specifications detailed in section 8 - 49.1.
4" Crusher run or graded aggregate base course compacted to 98% maximum dry density per standard proctor test ASTM D698.

(2) *Office, institutional, commercial and all collectors.*

a. 1½" Asphaltic concrete Type "F" (top course).
2½" Asphaltic concrete Type "B" (binder).
8" Graded aggregate or crusher run base course for main line pavement.
10" Graded aggregate or crusher run base course for cul-de-sacs.
Base shall be compacted to 98% maximum dry density per standard proctor test ASTM D698.

Subgrade stabilized with stone, unless material in place weighs at least 95-lbs./cu. ft. (Ordinance No. 2001-10)

Or

b. 1½" Asphaltic concrete Type "F" (top course)
2½" Asphaltic concrete Type "B" (binder).
8" Soil cement base for main line pavement
10" Soil cement base for cul-de-sac.
Soil cement shall be mixed in place - compacted to 98% maximum dry density per standard proctor test ASTM D698.

Subgrade stabilized with stone, unless material in place weighs at least 95-lbs./cu. ft. (Ordinance No. 2001-10)

Or

c. 7" Concrete pavement per specifications detailed in section 8-49.1.
4" Crusher run or graded aggregate base course compacted to 98% maximum dry density per standard proctor test ASTM D698. (Ordinance No. 2001-10)

(3) *Industrial and all arterials.*

a. 1½" Asphaltic concrete Type "F" (top course).
2" Asphaltic concrete Type "B" (binder).
3" Asphaltic base.
8" Graded aggregate or crusher run base course compacted to 98% maximum dry density per standard proctor test ASTM D698.
Subgrade stabilized with stone, unless material in place weighs at least 95 lbs./cu.ft.

Or

b. 1½" Asphaltic concrete Type "F" (top course).
2" Asphaltic concrete Type "B" (binder).
3" Asphaltic base.
8" Soil cement stabilized base course mixed in place compacted to 98% maximum dry density per standard proctor test ASTM D698.
Subgrade stabilized with stone, unless material in place weighs at least 95-lbs./cu. ft.

Or

c. 8" Concrete pavement per specifications detailed in section 8-49.1.
4" Crusher run or graded aggregate base course compacted to 98% maximum dry density per standard proctor test ASTM D698. (Ordinance No. 2001-10)

(4) *Typical Road Cross Sections.*
For typical roadway cross sections with asphalt pavements see Figure 8-49 (4). (Ordinance No. 2001-10; Ordinance No. 86-13, § 3 - 4, 7-24-86; Ordinance No. 90-07, 7-12-90; Ordinance No. 94-04, § 1, 3-24-94; Ordinance No. 95-09, § 1 - 3, 6-21-95; Ordinance No. 2000-07)

Sec. 8-49.1. ***(Deleted July 26, 2001)*** (Ordinance No. 90-07, 7-12-90)

Sec. 8-49.2. Subgrade, base and pavement material and construction specifications.

(a) All tests and data described below shall be conducted or provided and paid for by the paving contractor or the developer. Test results shall be submitted to ~~the Engineering Department~~ ***the County Engineer and Stormwater Management Department for review and/or approval prior to review of the Final Plat.*** (Ordinance No. 2001-10)

(b) Subgrade: Embankments shall be constructed in eight to twelve inch lifts. Individual lifts shall be compacted using sheep's foot rollers, vibratory compactors, pneumatic tire rollers or other equipment capable of obtaining the required compaction. The surface of the completed subgrade shall be bladed to a smooth and uniform texture. The centerline profile shall

conform to the established elevations with an acceptable tolerance of +/- ½ inch. The acceptable tolerance under a template conforming to the designed cross-section shall be +/- ¼ inch. (Ordinance NO. 2001-10)

Soil density tests shall be performed on roadway fills four (4) feet in height and greater. The compaction tests will be performed to within twelve (12) inches of the final grade of the subgrade. For the fills requiring compaction tests they shall be compacted to ninety-five (95) percent of maximum dry density per the standard proctor test (ASTM D698, AASHTO T99). One set of compaction tests shall be performed on every other twelve (12) inch lift at one hundred-foot intervals along the roadway fill section. An independent party selected by the developer's engineer and approved by the Engineering Department shall perform the tests. Where the subgrade compaction is determined to be less than the required degree, the developer shall remove, replace, and/or recompact the section in question, or use other means approved by the Engineering Department ***and Stormwater Management Department***, until the density is determined to meet the required limit. Copies of all test results shall be submitted to the Engineering Department ***and Stormwater Management Department***. (Ordinance No. 2001-10)

The compaction of the top twelve (12) inches of the subgrade shall be inspected by proof rolling. The subgrade shall have sufficient stability to support any and all types of construction equipment used to construct the roadway without "pumping" (vertical and/or horizontal displacement of the subgrade). The "proof-roll" compaction inspection of the subgrade shall be by a vehicle with a minimum gross vehicle weight of 24,000 pounds, fully loaded with a minimum of 16 tons (32,000 pounds) of graded aggregate (54,000 pounds total weight minimum). The weight of the proof-roll inspection vehicle and the accompanying load shall be shown on a printed "load-out" ticket from a reputable quarry. Representatives of the Engineering Department and Road Department or Public Works shall approve all subgrades in the unincorporated areas of Fayette County. The contractor, at the contractor's expense, shall correct any areas not passing the proof-roll inspection. (Ordinance No. 2001-10)

(c) Concrete Pavement:

(1) Concrete pavement compressive strength shall be four thousand (4,000) psi at twenty-eight (28) days. Concrete test cylinders will be taken from each batch poured for every seven hundred fifty (750) feet of street-paving construction. These shall be tested according to ASTM C31-69 and C39-72 to ascertain the twenty-eight day compressive strength. (Ordinance No. 2001-10)

(2) A concrete slump test (ASTM C143-74) will be conducted at the same time that the cylinders are made. The concrete shall not be accepted which has a slump value greater then 2 ½ inches. (Ordinance No. 2001-10; Ordinance No. 90-07, 7-12-90; Ordinance No. 94-04 § 2, 3, 3-24-94; Ordinance No. 2000-7)

(3) Core samples shall be made at intervals of not less than five hundred (500) feet and not more than one thousand (1,000) feet of paving. Core sample report must be approved by Engineering Department prior to final plat approval.

(d) Asphalt Pavement:

(1) Placement of the base material and asphalt shall be inspected and approved by the Road Department as specified below. The paving contractor/developer is responsible for requesting such inspections, and placement of base and /or asphalt shall not be done until such inspections have been scheduled. (Ordinance NO. 2001-10)

(2) The compacted base course (graded aggregate or crusher run) shall have sufficient stability to support any and all types of construction equipment used to construct the roadway without "pumping" (vertical and/or horizontal displacement of the base due to any number of factors including too much water, not enough compactive effort, etc.), regardless of compaction. The "proof-roll" compaction inspection of the graded aggregate base shall be by a vehicle with a minimum gross vehicle weight of 24,000 pounds, fully loaded with a minimum of 16 tons (32,000 pounds) of graded aggregate (54,000 pounds total weight minimum). The weight of the proof-roll inspection vehicle and the accompanying load shall be shown on a printed "load-out" ticket from a reputable quarry. A representative of the Road Department or Public Works shall inspect all graded aggregate bases in the unincorporated areas of Fayette County. The contractor, at the contractor's expense, shall correct any areas not passing the proof-roll inspection. (Ordinance NO. 2001-10)

(3) The graded aggregate base thickness, as required in the current Fayette County Development regulations, shall not be deficient in any area by more than ½ total inches. Any deficient area shall be corrected by adding additional quantities of the same materials and rebuilt to the desired thickness. The contractor, at contractor's expense, and during the proof-roll compaction inspection process, shall do the measurement. Three holes shall be dug every 1500

feet or one hole per each 500 feet, to confirm the required thickness. At least one hole shall be dug for any areas less than the above footage. A representative of Fayette County Public Works or the Road Department shall determine the hole(s) location and confirm the depth of graded aggregate base. (Ordinance NO. 2001-10)

(4) Core samples shall be taken of the asphalt at intervals of not less than three hundred (300) feet and not more than five hundred (500) feet. Samples shall be taken from the center of the travel lane and samples shall alternate between travel lanes. The thickness of the asphalt shall not be less than 1/4" from the plan dimensions. Core sample report must be approved by Engineering Department prior to final plat approval. (Ordinance NO. 2001-10)

(e) Subdrains: Lateral subdrains shall be constructed at a minimum interval of every 500 ft. for roadways with a continuous grade of 2% or less, and in all sag vertical curves and cul-de-sacs. The top of the subdrain shall be at the interface of the subgrade and the subbase. For all locations in the roadway, the subdrain shall extend from the centerline to the nearest drop inlet or ditch on each side of the road. For cul-de-sacs, the subdrain shall be designed to accommodate the location of the drop inlet and expected groundwater flow. The subdrain shall consist of a 6 inch perforated plastic pipe and be placed at the bottom of a two foot by two foot ditch backfilled with AASHTO No. 57 gradation material. Detail drawing, Figure 8-49.2 (e), for the pavement subdrain is on file in the Engineering Department. (Ordinance No. 2001-10; Ordinance No. 90-07, 7-12-90; Ordinance No. 94-04 § 2, 3, 3-24-94; Ordinance No. 2000-7)

Sec. 8-50. Design speed and grade.

Street Classification	*Maximum Grade*	*Maximum Design Speed*	*Minimum Grade*
Arterial	8%	55 MPH	1%
Collector	10%	45 MPH	1%
Local			
County	10%	35 MPH	1%
Internal —(less than 5 acres)	15%	25 MPH	1%
(5 acres or more)	10%	25 MPH	1%

(Ordinance No. 86-13, § 3 - 5, 7-24-86; Ordinance No. 94-04, § 6, 3-24-94)

Sec. 8-51. Minimum cul-de-sac specifications.

The distance between the curb and gutter (or edge of pavement) and the right-of-way within a cul-de-sac shall be at least as wide as such distance along a given roadway prior to entering a cul-de-sac.

(1) *Residential cul-de-sacs.* Sixty-foot right-of-way radius - minimum forty-foot pavement radius. Islands are prohibited in cul-de-sacs. Existing islands will be removed at the county's discretion, or where there is a significant problem with access by or operation of public safety vehicles and school buses.

(2) *Commercial cul-de-sacs.* Sixty-foot right-of-way radius - minimum forty-foot pavement radius.

(3) *Industrial cul-de-sacs.* Industrial cul-de-sacs shall provide a sixty-foot radius without an island, and shall provide a minimum forty-foot pavement width or radius, as applicable.(Ordinance No. 86-13, § 3 - 6, 7-24-86; Ordinance No. of 7-28-88; Ordinance No. 94 - 04. § 4, 3-24-94)

Sec. 8-52. Residential access.

Access. Every residential lot shall meet the minimum requirements of Article V. Street Frontage for Access of the Fayette County Zoning Ordinance.

(a) *Residential driveway cuts.* Each residential lot shall have at least one ***(1)*** and no more than two ***(2)***, driveway cuts. Each driveway cut shall be subject to the following conditions:

(1) ~~The property has a minimum of one hundred (100) feet of immediate road frontage; and for lots~~ ***Where lots have frontage on multiple roads*** ~~fronting on roads with more than one classification~~, the driveway cut(s) shall be located on the street with the lowest functional classification, unless the County Engineer provides written authorization allowing otherwise. Exceptions may be provided if doing so improves traffic safety or flow, minimizes environmental impacts, or is appropriate based on site-specific physical characteristics of the property. (Amended June 9, 2005)

(2) The minimum requirements for sight distance contained in section 8-55 have been met. (Ordinance No. 2001-01)

(3) *Exceptions*. (Ordinance No. 2001-01)

~~a. No more than four (4) lots shall fully abut the turnaround portion of a cul-de-sac and each of those lots must have a minimum of fifty (50) feet of street frontage.~~

~~1.~~a. *Shared Driveways*. Upon determination by the Engineering Department that the sight distance requirements of Section 8-55 cannot be met for individual driveways, a maximum of two (2) lots may share a residential driveway. Shared driveways must meet all of the following conditions:

~~2.~~b. The width of the shared driveway shall be a minimum of ~~twenty (20)~~ ***20*** feet and constructed of an all weather surface approved by the Engineering Department.

~~3.~~c. A permanent cross-access easement agreement shall be recorded and the easement reflected on the plat of both properties.

~~4.~~d. The street address of each lot shall be clearly marked at the road frontage/curb cut and at the fork in the shared driveway.

~~5.~~e. Each lot must have a minimum of one hundred (100) feet of immediate road frontage.

~~6.~~f. The shared driveway must comply with the minimum requirements for sight distance contained in Section 8-55.

(b) *Multiple frontage lot.* When a lot has multiple frontages, the driveway cut(s) shall be located on the street with the lowest functional classification in accordance with Section 8 - 47.

(c) *Circular driveways.* One circular driveway may be permitted, per lot, if the sight distance requirements in Section 8-55 can be met for both entrances. Circular driveways may also connect multiple frontages provided sight distance requirements can be met for both entrances and both streets have the same functional classification. Circular driveways shall count as one driveway cut with respect to Section 8-52(a). (Ordinance No. 2000-07, Ordinance No. 2002-01)

Circular driveways shall not be allowed in conjunction with a non-circular driveway on lots with less than 100 feet or road frontage (i.e., those abutting a cul-de-sac turnaround).

(d) No residential lot may have a mailing address on a street where a driveway cut does not exist. (Ordinance No. 2000-07, Ordinance No. 2002-01) (Ordinance No. 86 - 13 § 3 - 7, 7-24-86; Ordinance No. 92 - 07, 4-9-92; Ordinance No. 92 - 10, 5-14-92; Ordinance No. 93 - 03 § 1, 2, 3-11-93)

Sec. 8-53. New street and nonresidential access cuts.

The language contained in this section refers to nonresidential curb cuts only. The language below applies equally to proposed new streets.

(1) *Nonresidential driveways.* Nonresidential driveway cuts shall be permitted under the following conditions:

a. Required minimum distance between a nonresidential driveway and an existing street intersection or another nonresidential driveway.

Type of Street

Distance from intersection

Local	*Collector*	*Arterial*
100’	200’	250’

Distances shall be measured along a right-of-way line from the point of intersection of the nearest right-of-way of an existing street to the nearest pavement edge of a proposed driveway. If a proposed driveway is on the opposite side of the street from a nonresidential driveway or an existing street intersection, the centerline of the proposed driveway shall be aligned with the existing driveway or street or shall be offset the distances shown above.

b. Required minimum distance between a nonresidential driveway and a street or another nonresidential driveway (other than from existing intersections).

Type of Street

Distance from intersection

Local	*Collector*	*Arterial*
300’	400’	500’

(1) The minimum distance between nonresidential driveway cuts shall be measured along a right-of-way line from its point of intersection with the nearest right-of- way of any existing pavement edge to the nearest pavement edge of the proposed nonresidential driveway. If a proposed driveway is on the opposite side of an existing street intersection or nonresidential driveway, the centerline of the proposed driveway or street shall be aligned with the existing driveway or street or shall be offset the distances shown above.

(2) *Interparcel access.* Interparcel access shall be required in order to facilitate movement between and among parcels adjoining arterial or collector streets to improve overall safety. When the natural grade along a common property line exceeds fifteen (15) percent throughout its length, such access shall be at the option of the property owners.

(3) *Exceptions.* In case where it is determined that for technical or legal reasons these provisions for access cannot be met, the number and location of curb cuts shall be considered by DOT or by the Engineering Department and the zoning administrator, as appropriate. (Ordinance No. 2001-10)

(4) *Multiple-frontage lots.* When a residential lot has multiple frontages, the driveway(s) shall be located on the street with the lowest functional classification in accordance with section 8 - 47. (Ordinance No. 86-13, § 3-8, 7-24-86; Ordinance of 7-23-87; Ordinance of 3-24-88)

Sec. 8-54. Acceleration and deceleration lanes.

Minimum Deceleration Lane Design

County Local & Collector	*Arterial*
120 feet long and 50 foot taper	200 feet long and 50 foot taper

For any driveway or street located on a major thoroughfare, except driveways serving one (1) to five (5) single-family residences, a deceleration lane shall be provided. The minimum length for deceleration lanes at all new street locations shall be as shown above except that either the Engineering Department or the state department of transportation's district traffic and safety engineer, as applicable, may specify longer or shorter deceleration lanes based on grade, distance from an intersection, design speed, etc.

The Engineering Department shall make recommendations to the district traffic engineer on the need for and design of acceleration lanes on state routes.

The Engineering Department shall determine the need for and design specifications for acceleration lanes along county streets. (Ordinance No. 86 - 13, § 3 - 9, 7-24-86) (Ordinance No. 2001-10)

Sec. 8-55. Sight distance and alignment.

Alignment and Continuation Streets within the subdivision shall be arranged as to provide for the alignment and continuation of or projection of existing public streets. *(NOTE: MOVED FROM S/D REGS 6-5.2)*

All driveways shall be located and streets aligned so as to provide at least the horizontal and vertical sight distances as listed below. All sight distance shall be determined by the methods found in the latest edition of A Policy on Geometric Design of Highways and Streets (AASHTO).

(1) Horizontal sight distance refers to the ability to detect objects in the roadway while negotiating a horizontal curve. The distance is measured from a point at which the height of the driver's eye is 3.50 feet above the roadway to a stationary object having a height of six (6) inches above the roadway.

Arterial streets……..500 feet
Collector streets……350 feet
Local streets..……200 feet

(2) Vertical sight distance refers to the ability to detect an object in the roadway while negotiating the crest of a hill. The distance is measured the same as for horizontal curves.

20 miles per hour design = 150 ft. sight distance
25 miles per hour design = 175 ft. sight distance
30 miles per hour design = 200 ft. sight distance

35 miles per hour design = 240 ft. sight distance
40 miles per hour design = 275 ft. sight distance

*See section 8 -51 for cul-de-sac radius.

50 miles per hour design = 350 ft. sight distance

In approaches to intersections, there shall be a leveling of the street at a grade not exceeding four (4) percent for a distance of not less than fifty (50) feet from the nearest right-of-way of the intersecting street.

(3) Minimum horizontal, radii of centerline curvature.

Arterial streets - as specified by state DOT.
Otherwise ……..1,260 feet
Collector streets …… 675 feet
Local streets …..…… 35 mph, 350 feet
30 mph, 250 feet
25 mph, 170 feet
Dead end* and loop streets……. 125 feet

(4) Tangents. Between reverse curves there shall be not less than the following minimum tangents.

Arterial streets - as specified by state DOT.
Otherwise ……250 feet
Collector streets …… 100 feet
Local streets where there is no super elevation…… 50 feet
(Ordinance No. 86-13, § 3 - 10, 7-24-86; Ordinance No. 94 - 04, § 7, 3-24-94)

Sec. 8-56. Stormwater Drainage Plan

(a) *Purpose.* A Stormwater Management Plan (hereinafter referred to as "the plan") shall be prepared for all development projects. The purpose of such a plan shall be to provide for the effective and safe conveyance of excess stormwater off of the subject property in such a way and by such means that adjacent property owners are not adversely affected and, in the case of residential developments, the stormwater runoff within a subdivision does not create an unreasonable impact on any individual lot or property owner. The stormwater management system may include, but shall not be limited to, such elements as: catch basins; culverts; ditches; drainage easements; natural creeks, streams or lakes; piping systems; stormwater detention facilities; and, filtration areas. The following requirements are the minimum for any project. The ~~Engineering Department~~ ***Stormwater Management Department*** shall require more stringent design criteria for a particular project or situation, if it is warranted based on sound engineering principles and practices. (Ordinance No. 2000-07; Ordinance No. 2001-10)

(b) *Design Responsibility.* The plan and its component facilities shall be designed and certified by a professional engineer registered to do business in the State of Georgia. The sufficiency, accuracy and completeness of the

design, including calculations, drawings and all documentation is, and shall remain, the responsibility of the person certifying the plans. The plan shall be checked by the designer for accuracy and completeness prior to submittal for review. (Ordinance No. 2000-07)

(c) *County Review and Approval.* The ~~Engineering~~ ***Stormwater Management*** Department shall review the plan and all submitted calculations and documentation. The submittals will be checked for completeness and compliance with this section of the development regulations as well as the requirements of any other applicable ordinance. (Ordinance No. 2000-07; Ordinance No. 2001-10)

The ~~Engineering~~ ***Stormwater Management*** Department shall require documentation and calculations beyond the original submittal if, in their opinion, the plan does not satisfy the purpose as stated in the subsection (a). The approval of the plan does not preclude the necessity for field changes once construction has begun. Any such amendments to the approved plan shall be submitted to the ~~Engineering~~ ***Stormwater Management*** Department on revised drawings and shall be supported by such documentation as is appropriate. (Ordinance No. 2001-10)

Additional information on stormwater management requirements are provided in Article XIII of the Fayette County Development Regulations, *Post-Development Stormwater Management for New Development and Redevelopment*.

(d) *Design Standards for Street Drainage*

1. *Curb and gutter requirements.* All new streets constructed within the county except those constructed to serve subdivisions in which all lots are five (5) acres or larger, shall have curbs and gutters. Rolled back curbs are not acceptable, only straight back are allowed. Curb shall be six (6) inches high and gutter shall be twenty-four (24) inches face of gutter to back of curb. (Ordinance No. 2000-07)

2. *Curb Inlets.* Curb inlets shall conform to the state department of transportation (GDOT) specifications. Spacing of inlets shall not exceed five hundred (500) feet on a continuous grade and shall be sized to intercept a minimum of eighty-five (85) percent of the flow in the gutter section. Inlets shall be located to prevent stormwater from crossing an intersection. Inlets located in a sag shall be sized to prevent gutter spread from covering more than half of the road's travel surface during the 25-year storm event. If grates are proposed for inlet devices, the bars must be perpendicular to the road and shall pose no hazard to bicycle traffic. In any case, throat height shall not exceed eight (8) inches. (Ordinance No. 2000-07)

3. *Pipe Material.* Only reinforced concrete may be used for storm drain structures under the roadway and in applications to create buildable

lots. The pipe must be designed and installed to meet the requirements in the latest edition of the Concrete Pipe Design Manual. A third-party pipe installation inspection report will be required for all pipes being placed in the ground. See Section 8-454(F) of the Development Regulations for additional information.

The ~~Engineering~~ ***Stormwater Management*** Department shall be notified before the pipe installation begins. (Ordinance No. 2001-10)

All other pipe materials may be used in applications approved by the Georgia Department of Transportation. (Ordinance No. 97-04, 3-27-97; Ordinance No. 2000-07)

4. *Piping Systems* – Cross drains, laterals and outfalls which are part of a street drainage system shall be sized for subcritical gravity flow. In the case of complex piping systems, the design engineer must provide calculations to show that no pipe is flowing under pressurized conditions and that the hydraulic grade line is below finished grade at all points for the 25-year storm event. Calculations determining the headwater elevation (inlet or outlet controlled) for the 100-year storm shall be provided by the design engineer. The backwater area inundated by the 100-year storm shall be shown and designated on the final plat as a 100-year flood plain. It shall be based on as-built road conditions and shall be subject to the same conditions and limitations as any other flood plain. (Ordinance No. 2000-07)

5. *Storm Drain* – Storm drains shall not exceed five hundred (500) feet of continuous length between an inlet, manhole or junction box access.

6. *Headwall Locations* – In residential subdivisions outfall piping from catch basins shall, at a minimum, extend from the street to a point thirty (30) feet behind the front building setback line or to the 100-year floodplain, whichever is less.

7. *As-Builts* – As-built drawings of piping systems shall be submitted to the ~~Engineering Department~~ ***Division of Utility Services*** upon completion of construction and prior to final plat approval. Certification from a registered professional engineer, stating that the piping systems will function as designed, must also be submitted prior to final plat approval. (Ordinance No. 2000-07; Ordinance No. 2001-10)

8. *Bridges* – All new bridges shall be constructed of concrete unless otherwise approved by the Engineering Department. They shall have a deck width equal to the approach roadway and be designed for a HS 20-44 design load. For bridges crossing streams with a regulatory floodway, the bridge shall span the floodway and have three feet of freeboard. For streams without a regulatory floodway, the bridge shall be designed to convey a 100-year storm with three feet of freeboard and create no more than a foot of backwater. (Ordinance No. 2001-10)

9. *Headwalls and Tailwalls.* All culverts and storm drain system outfalls shall have headwalls or tailwalls. Flared end, vertical wall or vertical wall with wing walls types are acceptable.

10. *Outlet velocity.* All outlets must be designed with energy dissipaters if outlet velocities are greater than 4.0 feet per second during the 25-year design storm. (Ordinance No. 2000-07)

11. *Ditches.* Drainage ditches shall have a minimum bottom width of two (2) feet and shall have 3:1 side slopes. Ditches must be designed to handle the 100-year flow rate and lined with an appropriate erosion control matting capable of withstanding the 25-year flow velocity. (Ordinance No. 2000-07)

(e) *Stormwater Runoff Control* – In addition to the standards set forth in Article XIII, the following criteria shall apply to the control of stormwater runoff.

1. In designing the outlet control structure, the design engineer shall consider the effects of submergence on the structure's ability to control discharge. If weirs, orifices, etc. will become submerged by downstream conditions then adjustments must be made by the designer in designing the outlet structure.

2. Detention basins shall be located far enough from any property line to allow dispersal of the discharge, unless the basin discharges directly into a receiving stream. In either case, erosion control considerations shall be addressed in the erosion and sedimentation control plan.

3. An emergency spillway shall be provided to by-pass flows for the 100-year storm in the event that the principal outlet structure gets blocked. (Ordinance No. 2000-07)

4. Any stormwater detention basin which poses a threat to public safety or constitutes an "attractive nuisance" shall be fenced to prevent access to the basin. A gate shall be provided for maintenance access. The gate shall be large enough to accommodate trucks or excavation equipment. (Ordinance No. 97-04, 3-27-97)

5. No stormwater detention basin shall be constructed on a perennial stream or creek. Perennial streams are defined as those indicated as heavy solid blue lines on the U.S.G.S. Quadrangle sheets or any stream with a watershed of twenty (20) acres or more. Buffers and setbacks required by the Watershed Protection Ordinance must also be satisfied. This shall apply unless detention is to be provided by a lake or pond. (Ordinance No. 97-04, 3-27-97; Ordinance No. 2000-07)

6. If detention is to be provided by a lake or pond, adequate storage must be provided, or be available in the case of existing lakes or ponds, to manage the runoff from the one-hundred year storm. In addition to these requirements, ponds or lakes must meet the requirements of the

Flood Plain Regulations, and Dams and Impoundment Design and Specifications. (Ordinance No. 97-04, 3-27-97; Ordinance No. 2000-07)

7. Detention ponds shall be surveyed upon completion of construction to insure that the design stage/storage rating curve can be maintained. This data shall be certified by a registered professional engineer and submitted to the ~~Engineering~~ ***Stormwater Management*** Department prior to final plat approval. (Ordinance No. 2000-07; Ordinance NO. 2001-10)

8. A means of access from the nearest internal street in the subdivision to any detention pond shall be cleared and reserved by means of an easement which shall be accurately shown and identified on the final plat.(Ordinance No. 97-04, 3-27-97)

9. For the purposes of this ordinance, "pre-developed conditions" shall mean prior to any man made improvements. (Ordinance No. 2000-07)

Sec. 8-57. Street resurfacing.

(a) All work shall be in conformance with the Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, latest edition. (Ordinance No. 2001-10)

(b) All weak areas shall be removed and repaired with proper full depth patches. All debris (soil, GAB, and asphalt) shall be removed and disposed of properly. (Ordinance No. 2001-10)

(c) The surface to be overlaid shall be thoroughly cleaned and all debris removed.

(d) A tack coat of asphalt (AC-10 or AC-20) shall be applied to the entire surface to be overlaid.

(e) The overlay thickness shall be 1 ½ inches of Type F or 9.5 mm SuperPave asphalt concrete. For lifts of 1 ½ inches or greater, Type E or 12.5 mm SuperPave asphalt concrete shall be used. The maximum lift thickness shall be 2 inches. (Ordinance No. 2001-10)

(f) Prior to placing the overlay, a leveling course of Type G sand-asphalt shall be used where necessary or as determined by the Engineering or Road Department. (Ordinance No. 2001-10)

(g) The county will evaluate the existing pavement conditions and determine the overlay thickness using the methods in the Asphalt Institute's manual, Asphalt Overlays for Highway and Street Rehabilitation. For all streets other than residential, actual traffic counts will be obtained and coring, or other acceptable methods of obtaining the actual existing pavement thickness, will be utilized. In no case shall an overlay thickness be less than one (1) inch. (Ordinance No. 86-13, § 3 -13, 7-24-86)

Sec. 8-58. Street cuts.

Street cuts shall be constructed in accordance with standards available from the Engineering Department. (Ordinance No. 86-13, § 3-13, 7-24-86; Ordinance No. 2001-10)

Sec. 8-59. Street names.

Street names shall not be similar, duplicate, nor sound similar to the names of existing streets in the county. Hyphenating, dividing one (1) word into two (2) words, affixing "Drive" for "Road", etc., or other manipulations of an existing street name shall not constitute an acceptable street name. Similar sounding names shall be unacceptable regardless of spelling.

(1) *Continuity of street names.* A continuous street, one (1) proposed to be continuous, or one (1) proposed to continue an existing street shall bear the same name throughout.

(2) *Subdivision street numbering.* The county's established residential street numbering system shall be utilized for every residential, commercial or industrial subdivision in the county.

(3) *Property numbers.* Every building shall be assigned and display a property number. Property numbers shall be so located and of such a size as to be visible from the street. If a mailbox is located at the street, such mailbox shall have the property number affixed thereto with numerals measuring at least three (3) inches in height.

(4) *Unlawful to deface, remove.* It shall be unlawful for any person to alter, deface or take down any property number placed in accordance with this provision except for repair or replacement of such number.
(Ordinance No. 86-13, § 3-14, 7-24-86)

Sec. 8-60. Street and traffic signs.

Developers shall be responsible for placing street signs and traffic signs in accordance with these regulations. All required signs shall be in place prior to the occupancy of any structure.

(1) *Street signs.* Major street name signs shall be installed above the intersecting local street name sign. A street name sign shall be installed for every street at an intersection. Standard street name signs shall have at least four-inch high letters for major thoroughfares and at least three-inch high letters for local streets. These letters shall be mounted on an anodized aluminum blank not less than 0.08 inch thick covered with a reflective background. The sign shall be coated with a clear acrylic coating. Nameplates shall be mounted parallel or nearly parallel to the street. Street names shall be visible on both sides. Street signs shall be installed at all street intersections according to the following standards: Sign posts shall be at least seven (7) feet but not more than nine (9) feet above the street elevation. At least two (2) feet shall be well embedded in the ground. Sign poles shall be not less than two (2) feet from

the curb or edge of pavement nor more than ten (10) feet from the curb or edge of pavement.

(2) *Traffic signs.* Traffic control devices to include signs, signals, street markings, etc., shall be installed by the developer. The type and location of traffic control devices shall be determined by the Engineering Department based upon the latest edition of the Manual on Uniform Traffic Control Devices. Stop signs shall be installed at every intersection. (Ordinance No. 2001-10)

(3) *Wooden traffic control signs.*

a. *Scope.* This specification covers the fabrication and installation of wooden street name and traffic control signs for use in subdivisions. (Ordinance No. 2001-10)

b. *Reference publications.* All signs shapes, dimensions, colors and mounting criteria will conform with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) in effect at the time of the installation of the signs.

c. *Materials.*

1. Signs shall be fabricated from clear heart redwood, clear cedar or a waterproof medium density fiberboard that meets the requirement of ASTM D1037-99. Finished thickness of the material shall be one (1) inch. (Ordinance No. 2001-10)

2. Post shall be fabricated from four-inch by four-inch pressure treated lumber or clear heart redwood or clear cedar.

3. Fasteners shall be aluminum, brass or galvanized steel.

4. Other material may be used if specifications are submitted to and approved by the Engineering Department. (Ordinance No. 2001-10)

d. *Finishing.*

1. All Wooden signs shall be painted. No stained signs will be accepted. Signs shall receive a primer coat of latex paint. The background shall receive two (2) coats of latex paint, and raised areas or letters shall receive two (2) additional coats of latex paint.

2. Sign posts shall also be painted with a primer coat of latex paint and two (2) finish coats of latex paint.

e. *Installation.* All traffic control, street name, speed limit and other signs shall be installed in accordance with the requirements of the MUTCD (clearance, height above pavement, etc.). Sign installation will be inspected by the public works or engineering departments prior to the public thoroughfare being accepted by the county.
(Ordinance No. 86-13, § 3 - 15, 7-24-86; Ordinance No. 93 - 04 § 2, 3, 3-11-93)

Sec. 8-61. Grassing of shoulders.
The developer shall be responsible for providing adequate and effective ground cover on the shoulders of the roads as early in the construction process as possible. The requirements for the erosion and sediment control plan (see county erosion and sediment control ordinance) include information on vegetation types and planting dates. Temporary ground cover is permissible within the limits of the erosion and sediment control plan; however, in no case will rye grass be considered, nor accepted, as permanent ground cover. (Ordinance. No. 90-07, 7-12-90)

Sec. 8-62. Utility locations.
In order to promote uniformity in installation and more effective and less damaging maintenance, a uniform system for locating utilities is hereby established. The locations are noted on Drawing 8-63-1 ~~which is on file~~ ***~~at the end of the ordinance~~*** ***in Appendix A***. ~~in the Engineering Department of Fayette County~~. Applicable utilities and their locations shall be noted on subdivision construction plans. (Ordinance No. 96-08 5-9-96)

Sec. 8-63. Sidewalks.

(a) Sidewalks installed in subdivisions may be installed on the ~~County~~ ***county*** right-of-way in accordance with the location and dimensions given below. The ~~County~~ ***county***, through these requirements, does not intend to accept these sidewalks as ~~County~~ ***county*** property. The ~~County~~ ***county*** shall shoulder no responsibility for the maintenance and repair of sidewalks. Maintenance and/or repair of sidewalks are the responsibility of adjacent property owners or the applicable homeowner's association.

(b) Sidewalks shall be no more than three (3) feet wide; and shall be located two (2) feet behind the back face of the curb in order to not interfere with utility locations. See Drawing 8-63-1 ~~which is on file~~ ~~in the Engineering Department of Fayette County~~ ***~~at the end of the ordinance~~*** ***in Appendix A***.

(c) Sidewalks shall be constructed only on individual lots that have been permitted for construction. (Ordinance No. 96-08, 5-9-96)

Sec. 8-64. Reserved.

Sec. 8-65. Landscape islands/traffic dividers.

In order to promote uniformity in the configuration and construction of landscape islands/traffic dividers ("islands/dividers") within the right-of-way at entrances to residential subdivisions, a uniform standard is hereby established.

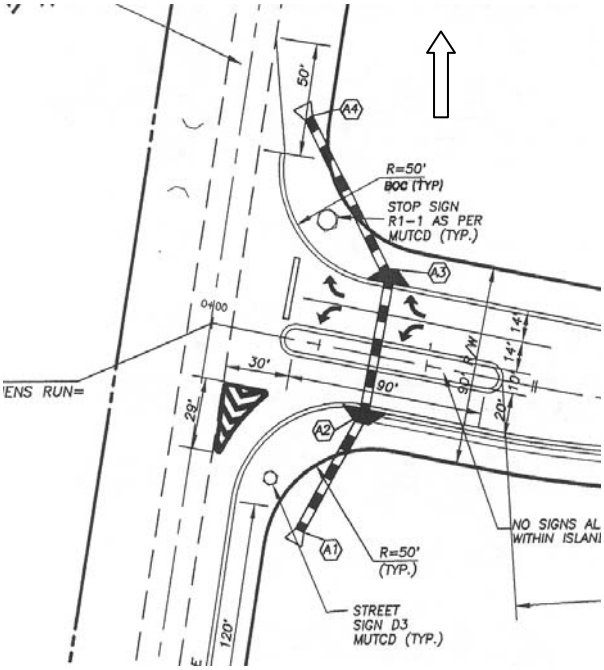
(1) Where an island/divider is planned, the right-of-way shall be eighty (80) feet in width at the connecting public road. The right-of-way shall remain eighty (80) feet in width for a distance of 150 feet at which point the right-of-way will taper to the normal sixty-(60) feet.

(2) The island/divider shall be delineated with curb and gutter regardless of whether curb and gutter is required in the remainder of the development.

(3) The island/divider shall not be more than 100 feet long and shall not be more than sixteen (16) feet in width from the back of curb to back of curb with a sixteen (16) foot travel lane on each side of the island/divider.

(4) No signs or structures shall be allowed in the island/divider. No trees or plants shall be placed in the island/divider that will block a persons view of oncoming traffic. Any object encroaching into the right of way or obstructing to the view of oncoming traffic shall be removed. (See Example below for clarification). (Ordinance No. 97-10, 9/3/97; Ordinance No. 2000-07)

Example:
Paragraph (4) above means that any object placed in an island/divider that will block someone's view of cars traveling North and South bound shall be removed.



Sec. 8-66 – 8-80. Reserved.

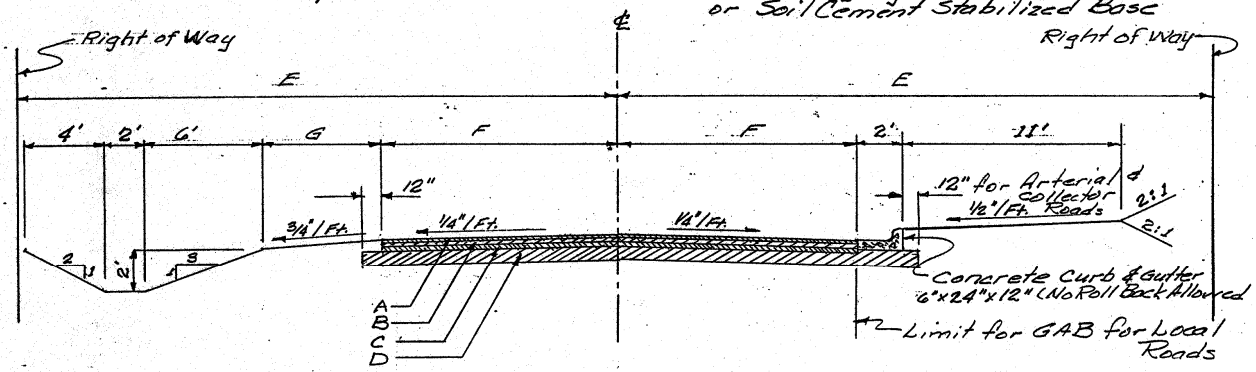
Figures/Drawings
Figure 8-49(4)

Fayette County Typical Road Cross Section

Dimension	Arterial	collector	Local
A	1 1/2"	1 1/2"	1 1/2"
B	2"	2 1/2"	2"
C	3"	—	—
D	8"	8"	6"
E	50'	40'	30'
F	*	*	12'
G	10'	8'	6'

* See Sec. 8-48(2) for pavement width

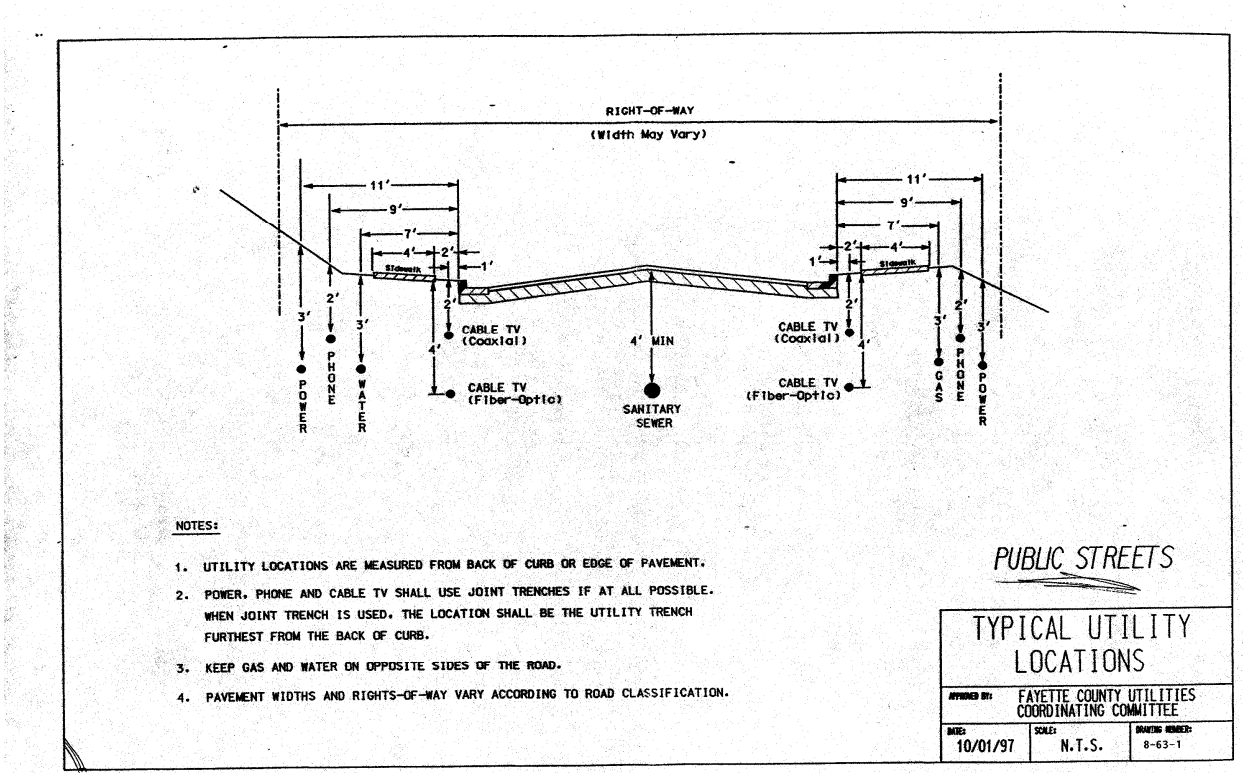
A- Type "F" Asphaltic Concrete
B- Type "B" Asphaltic Concrete
C- Asphaltic Base
D- Graded Aggregate Base (GAB) or Soil Cement Stabilized Base



Typical Half Roadway Section with Ditches

Typical Half Roadway Section with Curb and Gutter

Figure 8-49(4)



Drawing Number 8-63-1