

**SCOTT COUNTY FISCAL COURT  
ORDINANCE NO. 2003- 09**

**AN ORDINANCE RELATED TO THE AMENDMENT  
OF THE GEORGETOWN/SCOTT COUNTY SUBDIVISION & DEVELOPMENT  
REGULATIONS REGARDING PUBLIC AND PRIVATE ROAD CONSTRUCTION  
& DESIGN STANDARDS**

**WHEREAS:** The existing Subdivision & Development Regulations requirements are not satisfying the community's needs regarding design and construction of roads, right-of-ways and related structures. The regulation requirements must be updated to reflect the current professional thinking and reduce existing problems with road maintenance and durability by establishing a uniform design standard for proposed public and private roads, including design capacity and loading. The intent of this proposed ordinance is to provide an appropriate means to maintain the integrity and durability of existing and proposed roads within the community and to reduce the potential negative impacts on the residents of Scott County and the Scott County Fiscal Court.

**WHEREAS:** This proposed amendment to the Georgetown/Scott County Subdivision & Development Regulations has been submitted to the citizens through a properly advertised public hearing before the Georgetown-Scott County Planning and Zoning Commission conducted at their June 12, 2003 and July 10, 2003 public meetings. The Commission voted unanimously to recommend the adoption of this amendment to the Scott County Fiscal Court;

**NOW, THEREFORE, BE IT ORDAINED BY THE SCOTT COUNTY FISCAL COURT, KENTUCKY, as follows:**

**SECTION ONE: NEW PROVISIONS.** [New language is underlined. Language which is unchanged is not marked. Superseded language is shown as ~~stricken~~.]

**ARTICLE X  
SITE DESIGN STANDARDS FOR SUBDIVISION AND DEVELOPMENT**

1000 CIRCULATION SYSTEM DESIGN

A. GENERAL

1. The provision, arrangement, construction, and phasing of streets shall substantially conform to the Comprehensive Plan, including the Transportation Element in particular.
2. No street shall be approved which will be subject to flooding.
3. Traffic from higher intensity residential uses shall not pass through lower

2. Curbing shall be designed to provide ramps for wheelchairs at all street intersections with sidewalks with a minimum of one for every corner, and as required by state law.
3. **Curbs and gutters are to be built to the following specifications:**
  - a) **Construct all curb and gutter on a prepared subgrade to the dimensions and design as in the approved construction plans and/or standard drawings.**
  - b) **All Concrete shall have class "A" specifications.**
  - c) **Sawed contraction joints shall be constructed every 20 feet with a minimum depth of 3 inches in accordance with the Kentucky Department of Highways Standard Specifications, Current Edition.**
  - d) **Expansion joints shall be constructed at all breaks in alignment, at contact with new or existing concrete, at all drainage inlets, at the beginning and ending points of curves, and not to exceed 200' maximum spacing for slip form application and 30' maximum spacing for hand placed.**
  - e) **Maintain concrete at a minimum temperature of 45 degrees Fahrenheit for 3 calendar days after placement and at a minimum temperature of 40 degrees Fahrenheit for an additional 4 calendar days. When the Planning Commission Engineer requires, submit a written outline of the method to be used for protecting concrete. The Planning Commission Engineer, and or Development Inspector reserve the right to discontinue concrete placement when the means of protection or method of placement does not produce satisfactory results. Do not place concrete during times of the year that the temperatures may be expected to drop below the 45 or 40 degrees Fahrenheit limits, unless there are adequate provisions at the job site for maintaining concrete at the specified temperature.**
  - f) **Immediately after completing finishing operations and the concrete has set sufficiently to prevent marring the surface, cure the entire surface of the newly placed concrete, including the face of all construction joints. Cure according to one of the following methods:**
    - i) **White Membrane Curing: (Type 2, Class "A" or "B") Ensure that all curing compounds conform to AASHTO M 148.**
    - ii) **Wet Burlap: Thoroughly wet the burlap before placing. Carefully place the burlap over the finished**

shall be:

- i) box curb
- ii) shall be placed on a minimum of 6 inches of granular base material (DGA/CSB).

E. SHOULDERS

- 1. Shoulders and drainage swales may be permitted instead of curbs when:
  - a) Shoulders are required by state law;
  - b) Soil or topography make the use of shoulders and/or drainage swales preferable;
  - c) It is in the best interest of the community to preserve its rural character or natural drainage systems by using shoulders and/or drainage swales instead of curbs.

Where shoulders and ditches are used, there shall be adequate cross drain measures at all driveways and intersections.

- 2. Shoulders shall measure four (4) feet in width on each side for all streets and roads less than 24 feet, 2 feet in width, both sides, for all streets and roads 24 feet or greater, and shall be located within the right-of-way as shown in Exhibit 10-2 Table 1 (page 7 of this ordinance). The width of swales shall be determined by calculation of storm water flow according to Manning's formula and approved by Commission Engineer. Surface drainage shall not be conveyed over fill. the Storm Water Ordinance 2002-026, 2002-07 and approved by Planning Commission Engineer.
- 3. Shoulder subgrades shall be constructed concurrently with roadway subgrades to ensure uniform compaction throughout the street cross sections.
- 4. ~~Shoulders shall consist of a stabilized subgrade and 8 inches of gravel or other material acceptable to the Planning Commission and stabilized with compacted backfill and grass to hold shoulder in place.~~

F. PRIVATE STREETS

Private street standards shall only apply to non-through streets that are privately-owned and maintained, including those specifically designated in planned unit developments. The minimum paving standard in ~~Appendix VII~~ Table 2 shall be met for all private streets. A private street constructed to less than public street standards shall not be offered or considered for dedication to the public.

- 1. Private residential streets:

EXHIBIT 10-1

RIGHT-OF-WAY REQUIREMENTS AND STREET DIMENSIONS

TYPE	R.O.W WIDTH	PAVEMENT SECTION
LOCAL STREET 75 RESIDENTIAL UNITS OR LESS PARKING 1-SIDE	41 FEET	24 FEET - FACE OF CURB
SUB-COLLECTOR 75-500 RESIDENTIAL UNITS PARKING 1-SIDE	45 FEET	28 FEET - FACE OF CURB
COLLECTOR 500+ RESIDENTIAL UNITS/ALL COMMERCIAL-INDUSTRIAL- PROFESSIONAL- INSTITUTIONAL USES PARKING 1-SIDE IN RESIDENTIAL NO PARKING OTHER USES	49 FEET	32 FEET - FACE OF CURB
ARTERIAL 3 LANES WHERE DETERMINED BY COMPREHENSIVE PLAN	93 FEET	40 FEET - FACE OF CURB
5 LANES WHERE DETERMINED BY COMPREHENSIVE PLAN	93 FEET	64 FEET - FACE OF CURB

WHERE SHOULDERS ARE USED THE FOLLOWING STANDARDS APPLY:

Table 1

Street Type	Right Of Way Width ft	Pavement Width ft	Shoulder Width ft
Local	50	22	4
Continuous	50	24	2
Collector <sup>(1)</sup>	60	28	2
Collector <sup>(2)</sup>	60	32	2

Notes: (1): Parking permitted on one side.

joints conform to that in the curb. Round the edges of the sidewalk at all expansion joints with an approved edging tool to a ¼ inch radius. Install ½ inch premolded expansion joint material to the full depth of the sidewalk where the sidewalk abuts any rigid structure or fixture, such as curbs, columns, castings, buildings, and light standards.

- c) Divide the surfaces of sidewalks into rectangular areas by means of a jointer having a radius of ¼ inch and forming a groove no less than one inch in depth for the full width of the walk. Ensure that the length of the rectangles formed does not exceed the width to the sidewalk being constructed. Sawed joints will need to be completed no later than one day following the end of the curing period.
- d) The sidewalks shall be placed adjacent to the street right-of-way line. Slope toward curb shall be one quarter ( ¼) of an inch to the foot. Construction in existing neighborhoods requires the contractor to match existing grade and sidewalk width unless specified otherwise by the Planning Commission Engineer. Distance will vary with road cross-section when conforming to detail of (sidewalk/curb and gutter with grass utility strip).
- e) All Concrete shall have class "A" specifications.
- f) Concrete curing for sidewalks and pedestrian ways are to conform to the specifications listed in Article X, Section 1000, part D. of Subdivision and Development Regulations.

#### H. RIGHT-OF-WAY

- 1. The right-of-way shall be measured from lot line to lot line. Right-of-way requirements are shown in Exhibit 10-1.
- 2. The right-of-way width shall not change along the width of any street, unless it can be demonstrated that the change will not reduce the level of service of the street or cause incompatibility of setbacks.
- 3. Where development includes proposed public streets, or streets planned in the Transportation Element of the Comprehensive Plan, required right-of-way widths shall be dedicated pursuant to Article XIII (Dedication and Maintenance).

#### I. STREET GRADE, PAVEMENT AND INTERSECTION SPECIFICATIONS

~~Street grade and intersection specifications are included in Appendix VI.~~

- h) Proposed concrete pavements are to adhere to the minimum standards:
- i) Slab thickness designs are to be based on AASHTO Guide for Design of Pavement Structures, 1993 for a 20 year design life.
  - ii) A minimum 4 inch, base course, 5 inch slab thickness required.
  - iii) Joint details pertaining to dimensions, types, and configurations are to be provided.
  - iv) Reinforcement designs are to be included for all proposed rigid pavement designs.
3. All proposed roadways must conform to the following minimum construction standards:
- a) Subgrade construction
    - i) Subgrade areas for all proposed roadways are to be thoroughly compacted to the specifications listed in this article and the approved construction drawings.
    - ii) No organic material to be permitted in any roadway subgrade.
    - iii) All roadway subgrades are to have California Bearing Ratio (CBR) tests performed except as noted in 2(d) of this section. Tests are to be representative of the site.
    - iv) Compact the subgrade and embankments to a density of at least 95 percent of standard proctor. During compaction, maintain the moisture content of embankment or subgrade material within  $\pm 2$  percent of the optimum moisture content. Compact each lift as required before depositing for the next lift. Soil is to be compacted in lifts not exceeding one foot unless directed otherwise by the design engineer.
    - v) The cross slope of the proposed subgrade is to be  $\frac{1}{4}$  inch per foot fall, except in cases of superelevated crowns.
    - vi) Finished subgrades must be proof rolled with a loaded 20 ton vehicle, minimum. All lanes and cul-de-sac areas are to be rolled tested. Proof roll test is only applicable prior to any increase in moisture content due to weather conditions or other water-related circumstances, for example, rain, snow, waterline breaks, groundwater intrusion, etc.

c) Asphalt layers

- i) All asphalt base and/or binder layers are to comply with KYTC Specifications.
- ii) Any proposed asphalt courses are to adhere to the following temperature limitations:

Bituminous Mixtures	Minimum Ambient Air Temperature for Placing (Degrees Fahrenheit)
Asphalt Mixture, Surface (one inch thick or less)	45
Asphalt Mixture, Surface (thicker than one inch)	40
Asphalt Mixture, Base and Binder	35
Leveling and Wedging	45

- iii) Asphalt pavement sections are to have overlapping longitudinal joints of 6 inches. This can be achieved at either the base/binder or surface coat.
- iv) Proposed surface coats abutting existing surfaced roadways are to be milled and keyed into existing roadways, at least one foot.
- v) Asphalt base material may only be used with pavement specifications using a minimum base thickness of 4 inches. Excluding the use of surface material, asphalt layers less than 4 inches are to be KYTC Binder Class I materials.

J. TEMPORARY CONSTRUCTION ROADS

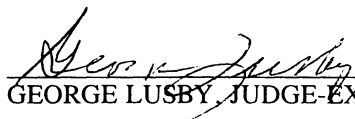
The developer and/or his contractor shall build temporary access roads or designate specific routes to accommodate project traffic during construction. This shall be accomplished after approval of the preliminary plat and designated in the field with signage prior to the approval of the final plat and shall be subject to the provisions of Article XI. Any damage to existing paved roads due to subsequent construction activities shall be restored or repaired to the existing road standard prior to damage. See Article VI (construction of improvements) for bonding requirements for phased development. If the temporary construction traffic route is a system of proposed roadways that can be dedicated to a municipality of and including Scott County, then these roads are to be designed to accommodate the construction traffic plus the anticipated 20 year roadway traffic. These streets are to have signs

2. The developer shall place at least two street name signs at each four-way street intersection, and one at each "T" intersection. Where a street lighting ordinance applies, signs shall be installed under light standards, free of visual obstruction, and easily legible.
3. All signs must comply with the locally adopted sign ordinance.
4. **In developments containing 60 or more dwelling units and/or an urban-style development as previously defined , at the end of all newly constructed streets where future phases of the development are anticipated, a sign must be posted stating, "Not an End Street". This is to be done prior to the approval of the final record plat.**

**SECTION TWO: EFFECTIVE DATE:** This Ordinance shall take effect upon passage and publication.

The foregoing Ordinance was introduced and read for the first time at the Court's regular meeting September 12, 2003, and for the second time, adopted and approved, at the Court's regular meeting September 25, 2003.

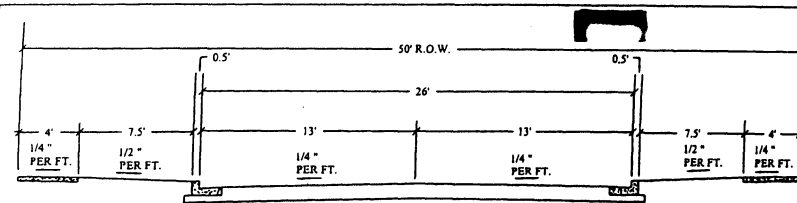
APPROVED BY:

  
GEORGE LUSBY, JUDGE-EXECUTIVE

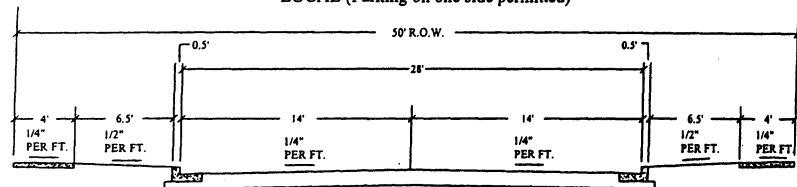
ATTESTED BY:

  
MARTHA NECLERIO, CLERK

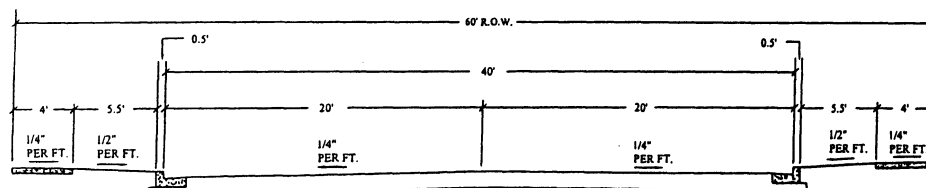




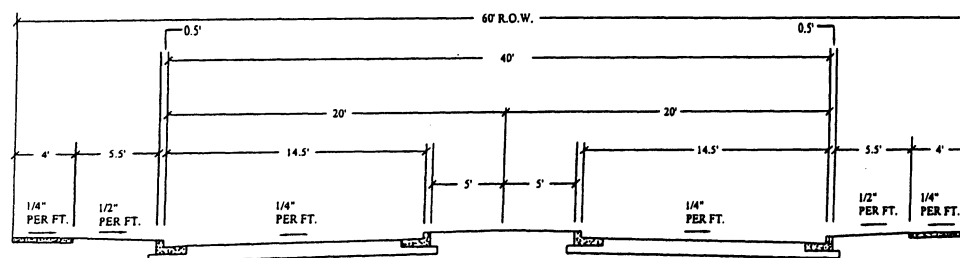
LOCAL (Parking on one side permitted)



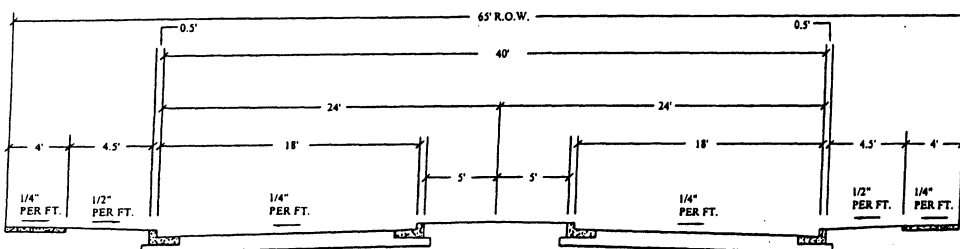
CONTINUOUS (Parking on side permitted)



COLLECTOR, (\*residential) (\*\*non-residential)



BOULEVARD (No parking permitted)



BOULEVARD (Parking on one side permitted)

**Notes:**

\* Parking on one side permitted with Planning Commission approval

\*\* No Parking Permitted

Exhibit 10-1

Street Cross-Sections



**Table 2**

Street Characteristic	Local	Continuous	Collector <sup>(1)</sup>	Boulevard <sup>(1)</sup>	Cluster	County
Speed limit	25 mph	25 mph	25, 35 mph	25, 35 mph	25 mph	25 mph
Pavement cross slope	¼" per foot	¼" per foot	¼" per foot	¼" per foot	¼" per foot	¼" per foot
Pavement specification <sup>(2)</sup> , min	8,3,1 4,5	8,3,1 4,5	8,3,1 4,5	8,3,1 4,5	8,2,1 4,5	8,2,1 4,5
Cut/fill slopes, max	2:1	2:1	2:1	2:1	2:1	2:1
Shoulder width, min	-	-	-	-	6"	2'
<b>Horizontal Alignment</b>						
Curve radius, min	100'	100'	300'	300'	100'	100'
Tangent intersection length <sup>(3)</sup>	100'	100'	100'	100'	100'	100'
Intersection angle, desired/min	90°, 75°	90°, 75°	90°, 75°	90°, 75°	90°, 75°	90°, 75°
Intersection sight distance	250'	250'	250', 350'	250', 350'	250'	250'
<b>Vertical Alignment</b>						
Street grade, min	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
Street grade, max	10%	10%	8%, 5%	8%, 5%	12%	12%
Intersection street grade within 50', max	3%	3%	3%	3%	3%	3%
Crest SSD <sup>(4)</sup> , min	150'	150'	200', 250'	200', 250'	150'	150'
Crest vertical curve length <sup>(5)</sup> , min	20* A	20* A	30* A , 50* A	30* A , 50* A	20* A	20* A
	100'	100'	200', 250'	200', 250'	100'	100'
Sag HSD <sup>(6)</sup> , min	150'	150'	200', 250'	200', 250'	150'	150'
Sag vertical curve length, min	30* A	30* A	40* A , 50* A	40* A , 50* A	30* A	30* A
	100'	100'	200', 250'	200', 250'	100'	100'
Crest/sag rate of vertical curvature, max	167'	167'	167'	167'	167'	167'

Notes:

- (1): Collector for subdivisions within the County must comply with these standards, unless otherwise approved by Planning Commission.
- (2): Inches of material for flexible; rigid pavements.
- (3): Measured from the insection of the right of way lines.
- (4): Stopping sight distance.
- (5): "A" is the absolute value of the algebraic difference between percent grades.
- (6): Headlight sight distance.

Horizontal curves requiring superelevation cross slopes are to comply with AASHTO: A Policy on Geometric Design of Highways and Streets \_\_\_\_\_, current edition.

**Table 4**

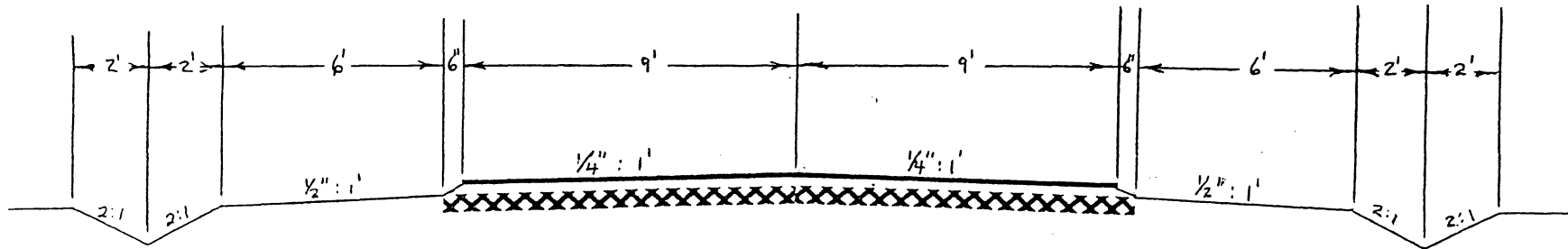
*Scott County*




Initial serviceability: 4.50  
 Terminal serviceability: 2.00      ΔPSI: 2.50  
 Reliability: 95%      Z<sub>R</sub>: -1.645  
 Overall deviation: 0.45  
 Soil resilient modulus: 1500(CBR)      S<sub>0.1</sub>: 2.70

ESAL's/CBR	1	2	3	4	5	6	7	8	9	10	11
1,000	2.15	1.65	1.40	1.23	1.09	1.01	1.00				
2,000	2.38	1.84	1.58	1.40	1.27	1.17	1.15	1.02			
3,000	2.54	1.97	1.68	1.50	1.36	1.26	1.24	1.11	1.04		
4,000	2.65	2.07	1.77	1.59	1.44	1.33	1.31	1.17	1.09	1.06	1.07
5,000	2.74	2.14	1.84	1.64	1.50	1.37	1.35	1.21	1.12	1.10	1.11
6,000	2.81	2.20	1.88	1.68	1.53	1.40	1.38	1.23	1.14	1.12	1.13
7,000	2.88	2.26	1.94	1.74	1.59	1.45	1.43	1.27	1.18	1.16	1.17
8,000	2.94	2.31	1.99	1.78	1.62	1.47	1.45	1.29	1.20	1.18	1.19
9,000	2.99	2.35	2.02	1.81	1.65	1.50	1.48	1.31	1.22	1.20	1.21
10,000	3.03	2.39	2.06	1.85	1.68	1.52	1.50	1.33	1.24	1.22	1.23
20,000	3.35	2.65	2.30	2.07	1.90	1.71	1.69	1.50	1.40	1.38	1.39
30,000	3.55	2.82	2.44	2.20	2.00	1.80	1.78	1.58	1.47	1.45	1.46
40,000	3.70	2.94	2.55	2.31	2.09	1.87	1.85	1.64	1.53	1.51	1.52
50,000	3.81	3.03	2.64	2.39	2.20	2.00	1.98	1.75	1.64	1.62	1.63
60,000	3.91	3.12	2.71	2.45	2.27	2.07	2.05	1.81	1.70	1.68	1.69
70,000	3.99	3.19	2.78	2.51	2.32	2.11	2.09	1.84	1.73	1.71	1.72
80,000	4.07	3.25	2.83	2.56	2.37	2.22	2.19	1.93	1.81	1.79	1.80
90,000	4.13	3.30	2.88	2.61	2.41	2.23	2.21	1.95	1.83	1.81	1.82
100,000	4.19	3.35	2.93	2.65	2.45	2.26	2.24	1.97	1.85	1.83	1.84
200,000	4.60	3.70	3.24	2.94	2.72	2.50	2.47	2.17	2.04	2.01	2.02
300,000	4.86	3.91	3.43	3.12	2.89	2.71	2.67	2.35	2.21	2.17	2.18
400,000	5.04	4.07	3.57	3.25	3.01	2.83	2.79	2.45	2.31	2.27	2.28
500,000	5.19	4.19	3.68	3.35	3.11	2.93	2.78	2.43	2.28	2.24	2.25
600,000	5.31	4.30	3.78	3.44	3.20	3.01	2.85	2.49	2.33	2.29	2.30
700,000	5.42	4.39	3.86	3.52	3.27	3.08	2.92	2.79	2.51	2.45	2.46
800,000	5.51	4.47	3.93	3.58	3.33	3.13	2.98	2.84	2.55	2.48	2.49
900,000	5.60	4.54	4.00	3.64	3.39	3.19	3.03	2.89	2.78	2.69	2.70
1,000,000	5.67	4.60	4.06	3.70	3.44	3.24	3.07	2.94	2.82	2.72	2.73
2,000,000	6.19	5.04	4.45	4.07	3.79	3.57	3.40	3.25	3.12	3.01	2.92
3,000,000	6.51	5.31	4.70	4.30	4.01	3.78	3.60	3.44	3.31	3.20	3.10
4,000,000	6.75	5.51	4.88	4.47	4.17	3.93	3.74	3.58	3.45	3.33	3.23
5,000,000	6.93	5.67	5.03	4.60	4.30	4.06	3.86	3.70	3.56	3.44	3.33
7,000,000	7.23	5.92	5.25	4.81	4.49	4.25	4.04	3.88	3.73	3.61	3.50
10,000,000	7.55	6.19	5.50	5.04	4.71	4.45	4.24	4.07	3.92	3.79	3.68

**SCOTT COUNTY FISCAL COURT  
ADOPTED 10/24/94**

**STREET DESIGN & SPECIFICATIONS**



	BOTTOM LEVEL	8" ROCK
	NEXT LEVEL	2" BINDER
	TOP SURFACE	1" ASPHALT

Cut into existing grade to a depth of 8" and 19 feet wide.

(18 feet of pavement and 6 inches of rock shoulder on each side.)

6 ft. of earth shoulder on each side at a slope of 1/2" per foot.

Slope on pavement to be 1/4" per foot.

Both sides of road to be ditched at 2:1 to allow stormwater to flow to the drainage ditches.

County Road Supervisor and Planning Commission Engineer to review all plans and construction for compliance.

Final course of asphalt cannot be laid until 50% of lots have received occupancy permits.

Once final course of asphalt has been laid, street will become eligible for dedication after a period of two years.