

ARTICLE V.

DISTRICT PERFORMANCE STANDARDS AND CAPACITY ANALYSIS

DIVISION 5000. PURPOSE AND COMPLIANCE

This Article contains the basic performance standards of the district and the site capacity calculations that must be met by all proposed land uses. District standards are contained in Division 5100 with separate sections for residential and non-residential uses. Division 5200 contains information on the adjustments that may be needed on sites that have limitations due to natural features, soils or infrastructure.

DIVISION 5100. DISTRICT PERFORMANCE STANDARDS

The standards for residential uses in all districts are presented in Section 5110. The standards for all non-residential uses are presented in Section 5120. The bulk standards relating to particular uses are contained in Article VI.

SECTION 5110. SINGLE-FAMILY, RESOURCE CONSERVATION, PLANNED RESOURCE CONSERVATION, AND MOBILE HOME PARK RESIDENTIAL PERFORMANCE STANDARDS.

This section contains the minimum standards that must be met by all single-family, resource conservation developments, planned resource conservation developments, and mobile home parks where such uses are permitted by Section 4002 of this Ordinance. The standards shall apply to each district and use therein.

Furthermore, the section defines the unconstrained density permitted on the site, which is the maximum permitted intensity for the district. The number of units permitted on a site is determined by multiplying the maximum gross density from table 5110 by the base site area. However, it should be noted here that there are other Sections of this Ordinance that take into account natural features, poor soils, lack of public facilities, and other situations that may result in a lower density (see Division 5200). Therefore, whenever a standard contained in Section 5110 is different from another performance standard detailed in this Ordinance, the strictest standard shall always govern. The procedure for calculating permitted intensity and/or density is based on a three step process:

Step 1: Identify the zoning district which currently is designated for the subject property. A general description of each zoning district is presented in Article III. The regulations on the use of land in each zoning district is presented in Article IV. These regulations are summarized in Table 4002.

Step 2. Determine which development option will be considered for the subject property. This Ordinance is designed to provide flexible and market-responsive development opportunities that suit the planning goals of the County. Each zoning district permits various land uses and development options.

Residential development options available include conventional single-family, equestrian, resource conservation, planned resource conservation, mobile home, institutional residential and others. (Not every development option is available in every zoning district. See Tables 5110 and 5120.)

Non Residential development options include institutional, office, commercial, industrial and all-purpose categories. These options are subject to limitations on the scale of development. (Not every development option is available in every zoning district. See Table 5120 and Section 5121.)

The Columns entitled "Maximum Resource Threshold" in Table 5110 and 5120 require a brief explanation: only those properties with resource areas as listed in Section 5210 and addressed in Division 7100) exceeding the proportion of the site listed in these columns are required to complete the density/intensity adjustment for natural resources (Section 5210.)

Step 3: Calculate density/intensity available on the subject property. Properties containing significant natural resource areas, soils which are poorly suited to development, and/or areas which are subject to development limitations due to insufficient infrastructure, may not be able to achieve the listed density/intensity maximums listed in Tables 5110 and 5120. Division 5200 contains a series of sections which provide worksheets to determine the extent of such adjustments to maximum permitted density. Each combination of zoning district, type of development (residential or nonresidential), and development option in the proposed development shall require a separate intensity adjustment calculation.

IDENTIFY		SELECT		CALCULATE
ZONING	→	DEVELOPMENT	→	DENSITY/
DISTRICT		OPTION		INTENSITY

KEY TO TABLE OF RESIDENTIAL PERFORMANCE STANDARDS
(Refer to Table 5110.)

Minimum Open Space Ratio is the minimum proportion of the site which must be devoted to open space (See Division 2300 for definitions.)

Maximum Gross Density is the value used to determine the maximum number of units that may be placed on site. This number may be reduced because of inadequate facilities or resource limitations (See Division 5200.)

Minimum Site Area is the minimum acreage needed for the listed land use.

<u>Zoning District & Development Option</u>	<u>Min. OSR</u>	<u>Max GD</u>	<u>Minimum Site Area</u>	<u>Minimum Lot Area</u>	
Single Family Equestrian	.00	.20	5 acres	200,000	.40 Y N N N
Resource Cons. Dev.	.15	.17	50 acres	200,000	.40 Y N N N
Mobile Home	.60	.30	20 acres	40,000	.65 Y N Y N
ESTATE(E)					
Equestrian	.15	.17	50 acres	200,000	.40 Y N N N
Single-Family	.00	.20	5 acres	200,000	.40 Y N N N
Resource Cons. Dev.	.60	.30	20 acres	40,000	.65 Y N Y N

Minimum Lot Area is the smallest permissible lot size allowed for this zoning district and use. Where septic tanks will be used it assumes that adequate soils are present, or larger lots may be required. (See Section 5220.)

Intensity Adjustments: These figures indicate the type of intensity adjustments that may affect a given kind of development proposal.

Intensity Adjustments:

RES: Maximum Resource Threshold. This indicates the minimum percent of the site that may be covered in natural resources (as listed in Division 7100) before a Natural Resources adjustment is required. (See Section 5210.)

Only those properties with resource areas (as listed in Section 5210 and defined in Article II) exceeding the proportion of the site listed in these columns are required to complete the density/intensity adjustment for natural resources (Section 5210.)

SOIL: This indicates whether septic tanks may be used as the method of septage disposal. The actual density of developments use septic tanks may be highly variable, particularly in districts where lots of forty thousand (40,000) square feet or less are permitted. A "Y" indicates that septic tanks are permitted for that particular use in that particular district. An "N" indicates that septic tanks are not permitted for that use in that district. (See Section 5220.)

ROAD: A "Y" indicates that the Highway Capacity adjustment must be calculated. (See Section 5230.) An "N" indicates that it is not required.

SEW: Public sewer is required where "Y" is present. If sewer is required, the Sewer Capacity adjustments apply. (See Section 5240.)

WS: Water Supply. A "Y" indicates that a Water Capacity adjustment must be calculated. (See Section 5250.) An "N" indicates that it is not required.

*
Residential development within the (SE) District may use either septic or sewer systems provided all lots contain a minimum of 30,000 square feet and on-site soils meet the requirements of Section 5220.

TABLE 5110: RESIDENTIAL PERFORMANCE STANDARDS

Zoning Districts & Development Options	Min. OSR	Max GD	Min. Site Area	Min Lot Area	Intensity Adjustments				
					RES	SOIL	ROAD	WS	SEW
RURAL (R)									
Single Family	.00	.20	5 ac	200,000*	.40	Y	N	N	N?
Equestrian	.15	.17	50 ac	200,000	.40	Y	N	N	N?
Resource Cons. Dev.	.60	.30	20 ac	40,000	.65	Y	N	Y	N?
Mobile Home	.00	.20	5 ac	200,000	.60	Y	N	N	N
ESTATE (E)									
Equestrian	.15	.17	50 ac	200,000	.40	Y	N	N	N?
Single Family	.00	.20	5 ac	200,000*	.40	Y	N	N	N?
Resource Cons. Dev.	.60	.30	20 ac	40,000	.65	Y	N	N	N?
SUBURBAN ESTATE (SE)									
Equestrian	.15	.17	50 ac	200,000	.40	Y	N	N	N?
Single Family *	.00	.80	1 ac	40,000	.10	Y	Y	Y	N?
Resource Cons Dev. *	.30	.65	5 ac	30,000	.30	Y#	Y	Y	Y#?
Planned Res. Cons. Dev.	.50	.90	5 ac	14,000	.40	N	Y	Y	Y?
Institutional Res. (9+ Residents)	.50	2.50	5 ac	10,000	.40	N	Y	Y	Y
SUBURBAN (S)									
Equestrian	.15	.17	50 ac	200,000	.40	Y	N	N	N
Single Family*	.00	.95	1 ac	30,000	.10	Y	Y	Y	N
Single Family*	.04!	1.80	20,000	20,000	.10	Y**	Y	Y	Y
Resource Cons. Dev.	.40	2.00	5 ac	8,000	.50	N	Y	Y	Y
Planned Res. Cons. Dev.	.55	3.00	10 ac	1,600	.60	N	Y	Y	Y
Institutional Res.	.50	5.00	10 ac	NA	.60	N	Y	Y	Y
(9+ Residents)	.40	5.00	5 ac	7,000	.40	N	Y	Y	Y
RESTRICTED SINGLE-FAMILY (RS)									
Single Family	.04!	1.70	1 ac	20,000	.05	Y	Y	Y	N
Resource Cons. Dev.	.30	1.70	20 ac	20,000	.30	Y	Y	Y	Y
URBAN (U)									
Single Family	.10	4.50	5 ac	6,000	.10	N	Y	Y	Y
Planned Res. Cons. Dev.	.25	6.00	20 ac	1,600	.40	N	Y	Y	Y
Institutional Res.	.25	6.00	20 ac	NA	.40	N	Y	Y	Y
Institutional Res. (9+ Residents)	.25	6.00	5 ac	5,000	.40	N	Y	Y	Y

TABLE 5110: RESIDENTIAL PERFORMANCE STANDARDS

CROSSROADS CENTER (CC)									
Single Family *	.00	.95	1 ac	20,000	.10	N	Y	Y	Y?
Resource Cons. Dev	.60	1.20	5 ac	10,000	.65	N	Y	Y	Y?
Institutional Res.	.70	1.50	5 ac	NA	.70	N	Y	Y	Y
Single Family*	.00	.95	1 ac	30,000	.10	Y	Y	Y	N
MOBILE HOME (MH)									
Mobile Home Subd.	.25	1.30	10 ac	20,000	.40	N	Y	Y	Y
Mobile Home Park	.45	3.65	10 ac	4,000	.55	N	Y	Y	Y
AIRPORT OVERLAY DISTRICT (AP)									
Single Family	.00	.10	10 ac	400,000	See underlying regs.				
NEIGHBORHOOD CONSERVATION (NC)	See Section 6100								

INTERCHANGE OVERLAY....see standards for SE District.

- ! For developments of less than twenty-five (25) units, the Open Space Ratio (OSR) may be reduced to .00
- * Multiple existing dwellings on lots of record as of 04/18/88 which have insufficient land area to meet zoning regulations will be allowed subdivisions of one to five acre parcels through the mechanism of the Zoning Certificate and Planning Staff approval.
- **Y Only as allowed in Detailed Use Standards 4400U.
- #Y Only if soil composition is conducive to minimum lot area noted.
- ? Land treatment systems as defined by Williamson County Regulations for Wastewater Treatment and Land Disposal Systems, dated April 12, 2000 and as subsequently amended, are allowed, provided the system qualifies as a Regional System as defined in Section 1.9.4 of Article XII. Prior to Site Plan approval or Sketch Plan review, a development proposing to utilize such a system must provide a letter of sewer availability demonstrating that an existing system or a proposed Regional System is capable of serving the development. An applicant must first seek to utilize an existing system, which may be expanded to serve the development, prior to seeking the utilization of a new Regional System. (Note: this language, or similar, improved language, can also be located within Article XII)

SECTION 5120. NONRESIDENTIAL PERFORMANCE STANDARDS

This Section contains the basic standards applicable to all permitted nonresidential uses. The standards are shown district by district and regulate the maximum intensities permitted in each district. The Landscape Surface Ratio (LSR) and Floor Area Ratio (FAR) standards control, but the intensity of use may be reduced by intensity adjustments. (See Division 5200 for site limitations and intensity adjustments and Section 4002 for permitted nonresidential uses.)

KEY TO TABLE OF NONRESIDENTIAL PERFORMANCE STANDARDS
(Refer to Table 5120.)

Minimum Landscape Surface Ratio (LSR) is the minimum proportion of the site which must be devoted to vegetated areas.

Maximum Resource Threshold is the maximum proportion of the site which may be occupied by sensitive natural resources (Section 5210) without having to conduct the natural resources adjustment.

Zoning District & Development Options	Min LSR	Max FAR	RES	SOIL	Intensity Adjustment		
					ROAD	WS	SEW
SUBURBAN (S)							
Institutional	.50	.20	.25	N	Y	Y	Y
Office	.50	.20	.25	N	Y	Y	Y
Commercial	.45	.20	.20	N	Y	Y	Y
Industrial	.60	.15	.35	N	Y	Y	Y
All other	.60	.15	.35	N	Y	Y	Y
URBAN (U)							
Institutional	.40	.20	.10	N	Y	Y	Y
Office	.40	.30	.10	N	Y	Y	Y
Commercial	.30	.25	.10	N	Y	Y	Y
Industrial	.40	.25	.10	N	Y	Y	Y
All other	.40	.25	.10	N	Y	Y	Y

Intensity Adjustment: these figures indicate the type of intensity adjustments that may affect a given kind of development proposal. (See the following page.)

Maximum Floor Area Ratio (FAR) is the maximum proportion of floor area to site area. This number may be reduced because of inadequate facilities or resource limitations. (Division 5200.)

Intensity Adjustments:

RES: Maximum Resource Threshold. This indicates the minimum percent of the site that may be covered in natural resources (as listed in Division 7100) before a Natural Resources adjustment is required. (See Section 5210.) Only those properties with resource areas (as listed in Section 5210 and defined in Article II) exceeding the proportion of the site listed in these columns are required to complete the density/intensity adjustment for natural resources (Section 5210).

SOIL: This indicates whether septic tanks may be used as the method of septage disposal. The actual density of developments using septic tanks may be highly variable, particularly in districts where lots of forty thousand (40,000) square feet or less are permitted. A “Y” indicates that septic tanks are permitted for that particular use in that particular district. An “N” indicates that septic tanks are not permitted for that use in that district. (See Section 5220.)

ROAD: A “Y” indicates that the Highway Capacity adjustment must be calculated. (See Section 5230.) An “N” indicates that it is not required.

SEW: A public sewer is required where “Y” is present. If a sewer is required, the Sewer Capacity adjustments apply. (See Section 5240.)

WS: Water Supply. A “Y” indicates that a Water Capacity adjustment must be calculated. (See Section 5250.) An “N” indicates that it is not required.

Table 5120

Table of Nonresidential Performance Standards

Zoning district & Development Options	Min. LSR	Max FAR	Intensity Adjustments				
			RES	SOIL	ROAD	WS	SEW
RURAL (R)							
Agricultural	NA	NA	NA	NA	NA	NA	NA
All other	.70	.10	.60	Y	N	Y	N
ESTATE (E)							
All	.70	.10	.50	Y	N	Y	N
SUBURBAN ESTATE (SE)							
All	.70	.10	.45	Y	N	Y	N ^{##}
*SUBURBAN (S) ***							
Institutional	.50	.20*	.25	N	Y	Y	Y
Office#	.50	.20*	.25	N	Y	Y	Y
Commercial#	.45*	.20*	.20	N	Y	Y	Y
Industrial	.60	.20*	.35	Y	Y	Y	Y
All other	.60	.20	.35	Y	Y	Y	Y
URBAN (U)							
Institutional	.40	.20	.10	N	Y	Y	Y
Office	.40	.30	.10	N	Y	Y	Y
Commercial	.30	.25	.10	N	Y	Y	Y
Industrial	.40	.25	.10	N	Y	Y	Y
All other	.40	.25	.10	N	Y	Y	Y
CROSSROAD CENTER (CC) **							
Office	.50	.20	.15	Y	Y	Y	N
Commercial	.45	.20	.10	Y	Y	Y	N
All other	.50	.20	.10	Y	Y	Y	N
RESTRICTED SINGLE-FAMILY (RS)							
All	.70	.10	.45	Y	N	Y	N
MOBILE HOME (MH)							
All	.70	.10	.45	Y	N	Y	N
NEIGHBORHOOD CONS. (NC)							
All	.70	.10	.45	N	Y	Y	Y
INTERCHANGE (IC)							
All	.50	.20	.10	Y	Y	Y	Y

Note: Non-residential uses on septic systems are allowed in all districts except Urban, provided peak wastewater discharge is less than six hundred (600) gallons per day and the Floor Area Ratio (FAR) is less than 0.10.

* (See Division 4520 U., Conditional Uses)

** (See also Table of Non-Residential Bulk Standards, Division 6300)

*** The maximum FAR for Institutional, Office, Commercial and Industrial uses in the Suburban (S) District may be raised to 0.25 if parking is located at the site or rear of the building on the Site Plan and if the design of that Site Plan is acceptable to the Planning Commission.*

Only if public sewer is unavailable, and soils are found to be compatible for septic proposed use.

In cases of Indoor Institutional Uses where sewer service is that other than on-site septic, the maximum FAR is .15 and the minimum LSR is .65.

? Land Disposal Systems, as defined by Williamson County Regulations for Wastewater Treatment and Land Disposal Systems, dated April 12, 2000 and as subsequently amended, may be allowed in conjunction with non-residential uses with an approved site plan (See Division 4400 DD).

DIVISION 5200. INTENSITY ADJUSTMENTS

The maximum intensity of use for any proposed development is controlled by the maximum intensity set forth in Section 5110 for residential uses and in Section 5120 for nonresidential uses. On sites that have limitations as to natural features, soils (where septic systems are to be used), or the capacity of public facilities to support a development, then the maximum intensity of use shall be adjusted downward as provided in this Division. This Division provides for a series of analyses that determine such adjustments. The most limiting (restrictive) element is the one that governs the intensity of the site. The resource adjustments in Section 5210 provide the mechanism for determining the limitations on the site based on the natural resources present. Soil limitations for septic tanks require the adjustments provided in Section 5220. The infrastructure capacity adjustments in Sections 5230 through 5250 determine the capacity of roads, water supply systems, and sewers to support the development.

Commentary: Because land forms, parcel size and shape, as well as natural limitations or adequacy of infrastructure, vary significantly from site to site, development regulations should account for these variations. The County cannot afford to provide full services in all areas of the County, and therefore must limit the level of development to the level of service that is presently available or has been programmed for development. The former County Zoning Ordinance did not adequately match or regulate the intensity of permitted

use to the available site and facilities capacities. The result were problems such as flooding, erosion, hillside slippage, inadequate water pressure for domestic or emergency uses, and inadequate roads. This ordinance corrects problems perpetrated by the formed ordinance by directly tying the intensity of development to the natural capacity of the site and the infrastructure available at the sit. For each tract, the calculations contained in Section 5210 and 5260 shall be made. If a parcel consists of land in more than a single district, or when it is to be part residential and part nonresidential, or when more then one development option is proposed, calculations shall be done separately for each such part of the total parcel.

SECTION 5201. APPLICABILITY

The adjustments of Division 5200 shall apply to all developments permitted in any district except:

- A. Where an "N" or natural resource threshold in Tables 5110 or 5120 indicates that the adjustment is not required.
- B. Any agricultural uses (Section 4101.)
- C. Any single residential unit placed on a lot of record prior to the date of adoption of this Ordinance provided, however, that such lot shall receive Environmental Department approval for a septic system or it has public sewer available.
- D. Any subdivision of property involving four (4) lots or less.

(See Following page for Natural Resources Adjustment Worksheet)

SECTION 5210. NATURAL RESOURCES ADJUSTEMENT

All land area consisting of the natural resources or natural features listed below and lying within the base site area shall be measured. The total acreage of each resource shall be multiplied by its respective open space ratio to determine the amount of resource protection land required to be kept in open space in order to protect the resource of feature. The sum total of all resource protection land on the site equals the total resource protection land.

Step 1: Measure Resources and Features Areas. (see notes 1 and 2, below)

Resource/Natural Features	Open Space Ratio (OSR)	Acres in Land in Resource	Resource Protection Land (Acres in Resource Times Open Space Ratio)
Floodplain	1.00	_____	_____
Drainageways	.50	_____	_____
Woodlands			
Mature	.70	_____	_____
Young	.50	_____	_____
Slippage Soils			
0 - 3 %	.00	_____	_____
3 - 6 %	.10	_____	_____
7 - 10 %	.20	_____	_____
Slopes			
15 - 25%	.40	_____	_____
25 - 35%	.75	_____	_____
35+%	.95	_____	_____
10% + w/slippage soils	.95	_____	_____
Sinkholes	1.00	_____	_____
Hilltops	.80	_____	_____
Ridgetops	.50	_____	_____
Historical Site	1.00	_____	_____
All Other Land Area	.00	_____	_____

Step 2: BASE SITE AREA = _____

Step 3: TOTAL RESOURCE PROTECTION LAND = _____
 PERCENT OF SITE TO BE PROTECTED:

Step 4: Calculate the
PERCENT OF SITE TO BE PROTECTED:

Divide total resource protection land
[Step 3] by base site area [Step 2] = _____

Step 5: Calculate the INCREASE IN OPEN SPACE:

Subtract to MAXIMUM RESOURCE
THRESHOLD (from Table 5110 or 5120)
From PERCENT OF SITE IN NATURAL
FEATURES [Step 4] = _____

(No reduction required if less than 0.00:
Use Maximum Gross Density from Table 5110 or
Maximum FAR from Table 5120.)

(Reduction required if greater than 0.00:
CONTINUE IF GREATER THAN 0.0)

Step 6: Calculate DENSITY REDUCTION FACTOR:

Enter Value from [Step 5]
1.00 - (1.00 - resource threshold
from Table 5110 or 5120) = _____

Step 7: Calculate ADJUSTED GROSS DENSITY:

For Residential Uses:

Multiply MAXIMUM GROSS DENSITY
(from Table 5110) by the DENSITY
REDUCTION FACTOR [Step 6] = _____ dus./ac

For Nonresidential Uses:

Multiply MAXIMU FLOOR AREA RATIO
(from Table 5120) by the DENSITY
REDUCTION FACTOR [Step 6] = _____ FAR

Note 1: In conducting this calculation, if two or more resources are present on the same area of land, only the most restrictive shall be used.

Note 2: Those areas to be disturbed by virtue of the application of mitigation techniques described for certain resources (Division 7100), shall not be counted in this Section.

Commentary: This Section implements the Williamson County Comprehensive Plan which sets minimum levels of protection for different natural resources. This Section automatically adjusts gross density to achieve this.

SECTION 5220. SOILS ADJUSTMENT

Refer to “Regulations Governing On-Site Disposal Systems of the Williamson County Department of Sewage Disposal Management”, effective September 1, 2000 and as amended.

Additionally, refer to Table 5110 and 5120 and Sections 6200 and 7210 for lot standards controlling the development of lots using septic systems.

All lots approved solely with on-site disposal systems shall have a minimum area as determined by this Ordinance or that determined by the “Regulations Governing On-Site Disposal Systems of the Williamson County Department of Sewage Disposal Management”, whichever is greater.

SECTION 5230. HIGHWAY CAPACITY ADJUSTMENT

This Section adjusts the development potential of a property to reflect capacity constraints of existing road network. It is intended to adjust the maximum amount of permitted development in an area so that the roads can function at a Level of Service D, or better, during the peak hour. Where traffic congestion is already present (or is projected to be present when the area is more fully developed) the maximum permitted gross density will be reduced for residential projects, and the maximum permitted floor area ratio (FAR) will be reduced for nonresidential projects.

The location of a development in relation to the network of arterial and collector roads in the County plays the most important role in determining the development potential of a parcel under this approach. The Official Traffic Shed Map (available in the Planning Department) divides the County into traffic sheds.

A Traffic Shed is a land area served by a particular segment of an arterial or collector road. The area and boundary of sheds are determined by the anticipated traffic flow generated by the land uses permitted by the zoning ordinance to be located in that boundary that will use that particular road segment. Arterial sheds are composed of the collector sheds that contribute to and add to traffic generated by the land uses directly surrounding the particular arterial road segment. The entire county has been divided into these collectors and arterial traffic sheds.

The development capacity of a traffic shed is limited by the capacity of the collector road which immediately serves that shed and the capacity of the arterial road which is the primary traffic receptor from that collector road. The Traffic Shed divisions are set up so that no other traffic sheds may contribute traffic to an arterial road. For this reason, the development capacity of these two road types are regulated differently. For arterial and collector roads, the development potential of property is based on a pro-rata share of the available road capacity and not on a first come first serve basis. For arterial roads, the development potential of property is ultimately restricted by the level of service since potentially the actual amount of development in the area served by an arterial road could exceed the maximum capacity of the arterial road many times over.

The official Traffic Shed Map and Table (available and maintained by the Planning Department) defines all traffic sheds and other information required to determine the development potential of property located within each traffic shed.

Different zoning districts contained within the same traffic shed may have different permitted maximum densities as a result of the requirements of Section 5110. The approach used in this Section to regulate development potential (which is based on LOS and road capacity) accounts for any differences in development potential initially determined by the presence of different zoning districts.

This Ordinance also requires that all developments that generate 400 or more peak hour trips must conduct traffic studies and make capacity improvements to roads adjoining or located near the site.

The following procedure must be followed to determine the road capacity available at a site.

1. Calculation of the available per acre capacity of the existing arterial road that will be used by the development. Subsection A below is used to determine the maximum per acre capacity of the arterial road in the Arterial Shed where the development is located.
 2. Determination of the development capacity of all projects generating fewer than 400 p.m. peak hour trips by using the procedures in Subsection B below.
- A. Calculation of Available Per Acre Capacity of Arterial Roads.
1. First refer to the Official Traffic Shed Map to:
 - a. Determine in which arterial traffic shed the proposed development is located.
 - b. Next, determine the roadway classification of the arterial highway section that provides primary access to the identified arterial shed.
 2. Obtain a weekday peak hour traffic count for the affected arterial highway section. With the permission of the County Planning Director, data collected on the same arterial section within the past twelve months may be used. Traffic count data may also be available from the State, the County, or from a county recognized traffic consultant. If no current or valid traffic count data area available, then the applicant must conduct and submit a new p.m. peak hour traffic count.
 3.
 - a. If the arterial highway is two lanes wide refer to Table 5230 A1 to determine the current level of service (LOS) based on the traffic count and on the roadway classification shown on the Official Traffic Shed Map. Once the level of service has been determined, refer to Table 5230 A2 to determine the maximum number of trips per acre permitted in the applicable arterial traffic shed.
 - b. If the arterial highway is more than two lanes wide, the level of service must be determined by a County recognized traffic consultant, using the procedures documented in the 1985 Highway Capacity Manual, Special Report 209 of the Transportation Research Board. Once the level of service has been determined,

multiply the value obtained from Table 5230 A2 by 1.67 to determine the maximum number of permitted trips per acre.

B. Determination of the Maximum Permitted Development Potential of Projects Generating Fewer than 400 peak hour trips.

All developments shall follow the following procedures and submit a report documenting the application of these requirements.

For all uses:

Step 1: Determine if Calculation is required.

Examine Table 5110 for residential uses and Table 5120 for nonresidential uses to determine whether the capacity adjustment must be made. If a "Y" is listed for the proposed use under the column labeled "ROAD" then the calculation must be performed. Continue on to Step 2, below.

Step 2: No road capacity adjustment is required is the maximum gross residential density of the development will not exceed 0.2 trips per acre. Non residential uses shall not require a capacity adjustment is they generate less than 10 trips per acre. (see Table 5230 B2).

Step 3: If the arterial road serving the proposed development is already at Level of Service D, or below, the proposed development is limited to a maximum development potential of 0.2 dwelling units per acre or 0.2 trips per acre for residential development; and 10.0 trips per acre for nonresidential development. (Refer to Table 5230 B2).

Step 4: Determine (through reference to the Official Traffic Shed Map maintained by the Planning Department) the collector traffic shed(s) in which the proposed development lies.

Next, determine from Table 5230 B1 the maximum number of permitted trips per acre that may be generated by the proposed development in the p.m. peak hour.

If a residential development of more than 2 lots is proposed to derive primary access directly from a road listed as an arterial road in Table 5230 A2, rather than from a collector road then the maximum number of permitted trip per acre is the p.m. peak hour shall be 0.2.

If a development is proposed to derive primary access via a new collector road or via a collector road not listed in Table 5230 B1, then a traffic study must be conducted and submitted to the County Planning Director for review and approval (in accordance with Subsection F. of this section).

The results of this study shall be used as a guide in modifying the maximum number of permitted trips per acre (as provided for in Subsection D., below).

Step 5: For any proposed development, the maximum number of permitted trips per acre in the p.m. peak hour will be either the collector shed capacity that was calculated in Step 4, above, or the arterial shed capacity that was calculated in Subsection A., which ever is lower. Select the appropriate maximum before proceeding to Step 6.

Step 6: To determine the maximum number of permitted trips for a proposed development, multiply the acreage of the site by the maximum number of permitted trips per acre as determined in Step 5.

Step 7: To determine the maximum number of permitted dwelling units or maximum permitted floor area:

For sites with only one proposed use, divide the total permitted trips as determined in Step 6 by the trip generation rate listed for the proposed use in Table 5230 B2.

For sites with more than one proposed use or more than one type of dwelling unit, allocate a portion of the total permitted trips determined in Step 6 to each proposed use. Then for each proposed use, divide the number of trips allocated to that use by the trip generation rate listed for that use in Table 5230 B2. The total amount of permitted development will be equal to the sum of what will be permitted for each proposed use.

C. Traffic Study of Developments Generating More than 400 peak hour trips.

All developments generating 400 or more trips in the p.m. peak hour must conduct a traffic study to identify all improvements needed to move traffic safely and at a Level of Service C (or better) in an out of the project. This includes traffic on adjacent roads and all intersections within 500 feet for developments of less than 800 peak hour trips and within 1,000 feet for developments generating more than 800 peak hour trips.

D. Modification of Highway Capacity Adjustment.

There are two ways in which the required highway capacity adjustment may be modified. The first of these is to make improvements to the road network which result in additional capacity being added. Second is for the applicant to present a detailed analysis of the reduction to development potential created by the natural resource preservation requirements of this Ordinance.

1. Developer Provided Road Improvements.

If proposed road improvements entail off site improvements to the existing road system, the applicant may participate in the construction of these improvements by any of the following means:

- a. If the road is a county road listed in the County's 5 Year Capital Improvements Program (CIP), then the applicant will not be required to contribute to the cost of the improvements included in the CIP. The permitted capacity determined in Subsection B. of the section shall be revised to reflect any CIP designated improvements.
- b. If the road is a county road not listed in the CIP, or if the applicant wishes to raise the permitted capacity to a level higher than the level that was determined for any CIP improvements, then the applicant may pay for the necessary improvements as well as for any additional right-of-way required. While the costs of right-of-way acquisition are the responsibility of the applicant, the County may choose to acquire the right-of-way itself, if necessary through its powers of condemnation.

Improvements necessary, the newly permitted capacity as a result of these improvements, and the estimated cost of these improvements shall be first determined in a traffic study submitted on behalf of the applicant and reviewed on behalf of the County. This study shall be at the applicant's expense.

Any improvements paid for by an applicant under this subsection may not be used to increase the permitted density of any other proposed developments in the affected Traffic Shed (other than those in which that applicant has an interest), unless a subsequent applicant(s) agree(s) to pay a pro-rata share of the cost of these improvements to the applicant who funded the improvements.

The increase in the maximum number of permitted trips in the shed resulting from these improvements shall be the basis for determining the pro-rata share to be paid by any subsequent applicant.

- c. With the concurrence of the County Highway Commission, the County may require payment of funds-in-lieu-of actual improvements to county roads.
- d. If the road requiring improvements is on the state highway system, the county will estimate the total cost of the necessary improvements. Then the total capacity of the affected traffic shed

must be recalculated based on the improvements to be made. The applicant's share of the total cost of the necessary improvements will be determined by dividing the total trip capacity of the traffic shed (in p.m. peak hour trips) by the number of p.m. peak hour trips expected to be generated by the proposed development.

If there is any question concerning the applicant's share of the total cost of necessary improvements, a consultant may be retained by the County to prepare an independent analysis. The cost of the consultant's analysis shall be responsibility of the applicant.

The funds contributed by the applicant will be placed in the County Escrow Account and used to assist the state in making the improvements that will increase the capacity of the affected traffic shed.

- e. If the necessary improvements are within 500 feet of a site and are needed to provide better access to the site at an entranceway or an intersection (e.q. signalization improvements or turning lanes), the County may require the applicant to pay the entire cost of such improvements.

If the applicable above steps are followed, the applicant may then be granted an increase in the maximum number of permitted trips to reflect the additional capacity that will be provided.

2. Natural Resource Calculations.

Certain portions of the County contain a high percentage of land which has restricted development potential due to the presence of natural resources (see the provisions of Section 5210). The applicant may conduct a detailed study of the development potential of the affected traffic shed which accounts for the presence of restrictive natural resources. Such a study must be approved by the Planning Commission before changes to the Official Traffic Shed Map can be made.

E. Map Amendment

The Planning Commission may amend the map and Tables 5230 A2 and 5230 B1 by the addition or reclassification of arterial or collector roads, or by adding or changing the boundaries of arterial or collectors sheds. If a developer makes improvements that require an amendment, fees for the traffic consultant shall be paid for by the developer. All amendments shall be maintained by the Planning

Department. If an amendment is a result of expenditures made by the County, the State, or the Federal Government, Tables 5230 A2 and 5230 B1 shall be amended by a resolution of the County Commission.

F. Traffic Study Option

Since the Traffic Shed Map was developed using general data and information that may not reflect the actual conditions in a particular area on a specific road, an independent traffic study may be performed by an applicant to more accurately reflect actual conditions. This study shall be conducted by a qualified person or firm and checked by a Traffic Consultant hired by the County and paid for by the developer. The capacities indicated by the study will be used to determine allowable trips.

(See Tables 5230 A1, 5230 B1, and 5230 B2)

TABLE 5230 A1

Highway Traffic Capacities

Roadway Classifications

	Green	Orange	Blue	Purple	Red
LOS A	250	200	1150	100	75
LOS B	500	300	250	200	150
LOS C	850	550	500	375	250
LOS D	1400	850	700	550	350

TABLE 5230 A2

Arterial Traffic Shed Capacities

Arterial Shed	Road Name	Acres	Class	Trips per Acre			
				LOS A	LOS B	LOS C	LOS D
1	Hillsboro Rd	4403	Green	2.02	1.62	0.92	0.20
2	Vaughn Rd	1981	Blue	1.86	1.50	0.96	0.20
3	Temple Rd	6486	Orange	1.38	1.10	0.64	0.20
4	Old Hillsboro Rd	5359	Blue	1.34	1.08	0.62	0.20
5	Hillsboro Rd	5627	Green	1.82	1.46	0.84	0.20
6	Murray Lane	969	Blue	2.42	1.92	1.10	0.20
7	Franklin Rd	2599	Green	2.32	1.86	1.06	0.20
8	Del Rio Pike	2075	Glue	1.86	1.50	0.92	0.20
9	Mack Hatcher Pkwy	1697	Green	2.82	2.26	1.30	0.20
10	Concord Rd	3784	Blue	1.60	1.28	0.74	0.20
11	Nolensville Rd	3648	Green	2.16	1.72	1.00	0.20
12	Split Log/S Donald	3501	Purple	1.26	1.00	0.58	0.20
13	Clovercroft -Nolensville Rd	2853	Blue	1.72	1.38	0.78	0.20
14	Nolensville Rd	1588	Green	2.82	2.26	1.30	0.20
15	Rocky Fork Rd	2244	Blue	1.86	1.50	0.92	0.20
16	Nolensville Rd	5131	Green	1.82	1.46	0.84	0.20
17	Nolensville Rd	10532	Green	1.34	1.08	0.62	0.20
18	Wilson Pike	7673	Purple	0.90	0.72	0.44	0.20
19	96 East	3456	Blue	1.60	1.28	0.74	0.20
20	96 East	6947	Blue	1.22	0.98	0.60	0.20
21	96 East	4776	Blue	1.40	1.12	0.66	0.20
22	Royal Oaks Blvd.	1113	Green	3.26	2.60	1.50	0.20
23	Goose Creek Bypass	759	Green	3.26	2.60	1.50	0.20
24	Lewisburg Pk	1884	Blue	2.08	1.68	0.96	0.20
25	Lewisburg Pk	2729	Blue	1.72	1.38	0.78	0.20
26	Goose Creek Bypass	1508	Green	1.41	1.13	0.65	0.20
27	Columbia Highway	5633	Green	1.82	1.46	0.84	0.20
28	Carters Creek Pk	5988	Green	1.72	1.38	0.80	0.20
29	96 West	2628	Green	2.32	1.86	1.06	0.20
30	Old Hillsboro Rd	13635	Blue	1.00	0.80	0.46	0.20
31	96 West	11310	Green	1.34	1.08	0.62	0.20
32	Highway 100	14276	Green	1.34	1.08	0.62	0.20
33	96 West	7953	Blue	1.10	0.88	0.50	0.20
34	Highway 100	9961	Green	1.34	1.08	0.62	0.20
35	Pinewood Rd	28912	Blue	1.00	0.80	0.46	0.20
36	Pinewood Rd	23274	Blue	1.00	0.80	0.46	0.20
37	Carters Creek Pk	19119	Blue	1.00	0.80	0.46	0.20
38	Carters Creek Pk	10701	Blue	1.00	0.80	0.46	0.20
39	Columbia Highway	4817	Green	1.90	1.52	0.88	0.20
40	Columbia Highway	7561	Green	1.56	1.24	0.72	0.20
41	Lewisburg Pk	10809	Blue	1.00	0.80	0.46	0.20

42	Goose Creek Extension	5250	Green	1.82	1.46	0.84	0.20
43	Arno Rd	1944	Blue	1.86	1.50	0.92	0.20
44	Arno Rd	17872	Purple	0.78	0.62	0.36	0.20
45	Horton Highway	7592	Green	1.56	1.24	0.72	0.20
46	Horton Highway	6646	Green	1.64	1.32	0.76	0.20
47	Bethesda-Duplex Rd	20395	Blue	1.00	0.80	0.46	0.20

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
1-A	Hillsboro Valley Rd	SE	982	1100	1.12
1-B	Murray Lane	SE	1043	1400	1.34
1-C	Sunnyside Dr	SE	663	1400	2.11
1-D	Manley Ln	SE	393	700	1.78
1-E	Moran Rd	E	323	1400	0.80
		SE	318	1400	4.20
1-F	Sneed Rd	E	6	1400	0.20
		SE	675	1400	2.07
1-Total	Hillsboro Rd		4403		
2-A	Steeplechase Ln	SE	947	1100	1.16
2-B	No Collector	SE	487	***	0.20
2-C	Vaughn Rd	E	92	1400	0.20
		SE	455	1400	3.04
2-Total	Vaughn Rd		1981		
3-A	Pasquo Rd	E	491	1100	0.20
		SE	1560	1100	0.64
3-B	Sneed Rd	E	199	1400	0.20
		SE	1133	1400	1.20
3-C	Sneed Rd	E	282	1400	0.20
		SE	1946	1400	0.69
3-D	Temple Rd	E	2075	1700	0.20
		SE	44	1700	29.20
3-Total	Temple Rd		6489		
4-A	Kinnie Rd	E	14	700	0.20
		SE	1521	700	0.46
4-B	Del Rio Pike	SE	1150	1100	0.96
4-C	Springs Hlw Rd	E	996	1400	0.20
		SE	47	1400	25.55
4-D	Old Natchez Tr	E	1204	1100	0.20
		SE	386	1100	2.23
4-Total	Old Hillsboro Rd		5359		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
5-A	Bobby Drive	SE	1087	1100	0.80
		S	1	1100	2.00
5-B	N B Forrest	SE	1092	1400	0.80
		S	52	1400	2.00
5-C	Berrys Chapel Rd	SE	1997	1700	0.85
5-D	Berrys Chapel Rd	SE	1372	1400	0.80
		S	27	1400	11.20
5-Total	Hillsboro Rd		5627		
6	Murray Lane	SE	969	1400	1.44
6-Total	Murray Lane		969		
7-A	Holly Tree Gap	SE	1131	1100	0.80
		S	76	1100	2.57
7-B	S Berrys Chapel	SE	1392	1100	0.79
7-Total	Franklin Rd		2599		
8-A	Carlisle Lane	SE	650	1100	0.80
		S	148	1100	3.92
8-B	Cotton Lane	SE	394	1100	0.80
		S	883	1100	0.89
8-Total	Del Rio Pk		2075		
9-A	Spencer Creek Rd	SE	705	1100	1.56
9-B	Spencer Creek Rd	SE	399	1100	2.76
9-C	Spencer Creek Rd	SE	592	1100	1.86
9-Total	Mack Hatcher Pkwy		1697		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
10-A	Liberty Church	SE	1055	700	0.50
		S	334	700	0.50
10-B	Bluff Rd	SE	39	1400	0.80
		S	701	1400	1.95
10-C	Butts Rd	SE	6	1100	0.80
		S	426	1100	2.57
10-D	Sunset Rd	SE	995	1100	0.80
		S	176	1100	1.13
10-Total	Concord Rd		3784		
11-A	Concord Rd	S	924	1400	1.52
11-B	Kidd Rd	S	1563	1100	0.70
11-C	Sunset Rd	S	1161	1100	0.95
11-Total	Nolensville Rd		3648		
12-A	Ragsdale Rd	SE	932	1100	0.80
		S	55	1100	6.44
12-B	Owl Creek Rd	SE	248	1100	0.80
		S	652	1100	1.38
12-C	Pleasant Hill Rd	SE	1338	1100	0.68
		S	275	1100	0.68
12-Total	Split Log/S Donald		3501		
13-A	Pleasant Hill Rd	SE	1042	1100	0.80
		S	128	1100	2.08
13-B	Burke Hollow Rd	SE	731	1100	0.80
		S	86	1100	5.99
13-C	No Collector	R	8	***	0.20
		SE	858	***	0.20
13-Total	Clovercroft-Nolensville		2853		
14-A	Sam Donald Rd	SE	6	1100	0.80
		S	826	1100	1.33
14-B	Stonebrook Blvd.	S	756	1700	2.25
14-Total	Nolensville Rd		1588		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
15-A	Newsom Lane	S	733	700	0.95
15-B	Rocky Springs Rd	SE	71	1100	0.80
		S	761	1100	1.37
15-C	No Collector	SE	167	***	0.20
		S	513	***	0.20
15-Total			2244		
16-A	York Rd	SE	1553	1400	0.76
		S	293	1400	0.76
16-B	Sanford Rd	SE	1432	1100	0.77
16-C	Williams Rd	R	345	1400	0.20
		SE	1469	1400	0.80
		S	38	1400	4.10
16-Total	Nolensville Rd		5131		
17-A	Osburn Rd	R	1016	1100	0.20
		SE	3129	1100	0.29
17-B	McCanless Rd	SE	4480	1100	0.25
17-C	Spanntown Rd	SE	1256	1100	0.88
17-D	Mullens Rd	SE	651	1100	1.69
17-Total	Nolensville Rd		10532		
18-A	Clovercroft - Nolensville	SE	1084	1100	0.80
		CC	40	1100	5.82
18-B	Tulloss Rd	SE	604	1100	1.82
18-C	Burke Hollow Rd	R	1791	1100	0.20
		SE	1178	1100	0.63
18-D	Trinity Rd	SE	788	1100	1.40
18-E	North Chapel Rd	SE	384	1100	2.86
18-F	Clovercroft Rd	SE	1722	1400	0.78
		CC	82	1400	0.78
18-Total	Wilson Pike		7673		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
19-A	No Collector	SE	272	***	0.20
		CC	46	***	0.20
19-B	Old Murfreesboro Rd	SE	858	700	0.77
		CC	50	700	0.77
19-C	Haley Lane	R	478	1400	0.20
		SE	1224	1400	0.80
		CC	52	1400	6.30
19-D	No Collector	SE	417	***	0.20
		CC	59	***	0.20
19-Total			3456		
20-A	Hickory Hills Rd	SE	936	1400	1.50
20-B	Wilson Pk	SE	1698	1400	0.79
		CC	83	1400	0.79
20-C	Cox Rd	SE	2189	1400	0.58
		CC	223	1400	0.58
20-D	Lampkin Bridge Rd	SE	732	1400	1.91
20-E	Ladd Rd	SE	1086	1100	1.01
20-Total	96 East		6947		
21-A	Breckenridge Rd	SE	119	1700	14.29
21-B	Clovercroft Rd	SE	221	1400	6.33
21-C	North Chapel Rd	SE	914	1100	1.20
21-D	Trinity Rd	SE	460	1100	2.39
21-E	Trinity Rd	SE	681	1400	2.06
21-F	North Chapel Rd	SE	1178	1100	0.93
21-G	Ridgeway	SE	415	1700	4.10
21-H	Carothers Rd	SE	743	1400	0.80
		CC	67	1400	12.02
21-Total	96 East		4776		
22-A	Royal Oaks Blvd.	SE	303	2800	0.80
		S	686	2800	2.00
		U	124	2800	9.56
22-Total	Royal Oaks Blvd.		1113		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
23-A	Old Peytonsville Rd	SE	188	1100	0.80
		S	136	1100	6.98
23-B	Peytonsville Rd	SE	21	2800	0.80
		S	90	2800	30.92
23-C	No Collector	S	272	***	0.20
		U	58	***	0.20
23-Total	Goose Creek Bypass		759		
24-A	Bowman Lane	SE	553	1700	3.06
		S	3	1700	3.06
24-B	Holly Hill Dr	SE	274	1400	5.11
24-C	Ellington Dr	SE	349	1100	0.80
		S	48	1100	17.10
24-D	Henpeck Lane	SE	611	1400	0.80
		S	46	1400	19.81
24-Total	Lewisburg Pk		1884		
25-A	McLemore	SE	489	700	0.80
		S	218	700	1.33
		U	14	700	1.33
25-B	Watkins Rd	SE	211	700	0.50
		S	1124	700	0.50
		U	69	700	0.50
25-C	Anderson Rd	SE	580	700	0.80
		S	25	700	9.44
25-Total	Lewisburg Pk		2729		
26-A	Snowbird Hollow Rd	SE	489	700	0.80
		S	4	700	77.20
26-B	McLemore	SE	1011	700	0.69
		S	4	700	0.69
26-Total	Goose Creek Bypass		1508		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
27-A	Coleman Road	R	14	1400	0.20
		SE	2833	1400	0.49
27-B	Henpeck Lane	SE	1467	1400	0.95
27-C	W. Harpeth Rd	R	385	1100	0.20
		SE	934	1100	1.10
27-Total	Columbia Hwy		5633		
28-A	Old 96	E	773	1400	0.20
		SE	2297	1400	0.45
		S	403	1400	0.45
		CC	53	1400	0.45
28-B	Old Carters Creek	SE	903	1400	0.80
		S	80	1400	8.47
28-C	Coleman Rd	SE	1487	1400	0.80
		CC	62	1400	3.39
28-Total			5988		
29-A	Old Charlotte Pk	SE	629	1100	0.80
		S	291	1100	2.05
29-B	Old Boyd Mill Pk	S	636	1100	1.73
29-C	Boyd Mill Pk	SE	1020	1100	0.80
		S	65	1100	4.37
29-Total	96 West		2628		
30-A	96 West	E	712	2800	0.20
		SE	166	2800	16.01
30-B	96 West	SE	649	2800	4.31
30-C	Boyd Mill Pk	E	349	1100	0.20
		SE	1188	1100	0.87
30-D	Old 96	E	1877	1400	0.20
		SE	65	1400	15.76
30-E	Parker Branch Rd	E	1957	700	0.20
		CC	35	700	8.82
30-F	Waddell Hollow Rd	E	6174	1100	0.17
		SE	443	1100	0.17
30-Total	Old Hillsboro Rd		13635		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
31-A	Old Harding Rd	R	552	1100	0.20
		E	4899	1100	0.20
		SE	2	1100	0.20
		CC	79	1100	0.20
31-B	Stillhouse Hollow Rd	E	2723	700	0.26
31-C	Egypt Hollow Rd	E	2942	700	0.20
		SE	113	700	0.99
31-Total	96 West		11310		
32-A	CCC Rd	R	2852	700	0.25
32-B	Brush Creek Rd	R	4209	1400	0.20
		SE	253	1400	0.80
		NCT	449	1400	0.80
32-C	Taylor Les Hughes Rd	R	2018	700	0.20
		E	562	700	0.20
		SE	186	700	0.99
32-D	Hunting Camp Rd	R	2726	1100	0.20
		E	981	1100	0.20
		SE	11	1100	0.80
		CC	30	1100	11.66
32-Total	Highway 100		14276		
33-A	Drag Strip Rd	R	22	700	0.20
		S	1598	700	0.44
33-B	Kingston Rd	R	1073	700	0.20
		S	291	700	1.67
33-C	Bahne Rd	R	2344	1100	0.20
		S	182	1100	3.47
33-D	Old 96	R	63	1400	0.20
		SE	587	1400	0.80
		S	261	1400	3.52
33-E	Crow Cut Rd	R	1040	1100	0.20
		SE	5	1100	0.80
		S	437	1100	2.03
33-Total	96 West		7953		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
34-A	Spencer Mill Rd	R	4403	1400	0.20
		SE	208	1400	0.80
		CC	69	1400	5.12
34-B	Walker Rd	R	2385	700	0.20
		SE	549	700	0.34
		CC	108	700	0.34
34-C	Liberty Rd	R	524	700	0.20
		SE	1230	700	0.47
		CC	37	700	0.47
34-D	Pinewood Rd	R	370	1400	0.20
		SE	6	1400	0.80
		CC	164	1400	8.06
34-Total	Highway100		9961		
35-A	Union Valley Rd	R	4162	1100	0.20
		SE	697	1100	0.38
35-B	Pewitt Rd	R	5894	1100	0.20
		E	84	1100	0.20
		CC	90	1100	0.20
35-C	Walker Hill Rd	R	6723	1100	0.20
		E	54	1100	0.20
		CC	47	1100	0.20
35-D	Shoals Branch Rd	R	6473	1100	0.20
		CC	8	1100	0.20
35-E	Barnhill Rd	R	4563	1100	0.24
35-Total	Pinewood Rd		28912		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
36-A	Hargrove Rd	R	4234	1100	0.20
		E	1267	1100	0.20
		NCT	459	1100	0.20
36-B	Old 96	R	623	1100	0.20
		E	1880	1100	0.20
		CC	338	1100	1.55
		NCT	49	1100	1.55
36-C	Bailey Rd	E	1662	1100	0.20
		CC	359	1100	2.16
36-D	Leipers Creek Rd	R	2013	1400	0.20
		E	3474	1400	0.20
		CC	86	1400	0.95
		NCT	92	1400	2.40
36-E	Bending Chestnut	R	5606	1400	0.20
		E	1097	1400	0.20
		CC	50	1400	0.20
		NCT	179	1400	0.20
36-Total	Pinewood/SR 46		23274		
37-A	Johnson Hollow Rd	R	10245	1100	0.20
		CC	36	1100	0.20
		NCT	569	1100	0.20
37-B	Thompson St. Rd-Burwood	R	2220	1100	0.20
		SE	469	1100	1.40
37-C	Popes Chapel Rd	R	2505	1100	0.20
		S	230	1100	1.65
		CC	134	1100	1.65
37-D	Barker Rd	R	2731	1100	0.40
37-Total	Carters Creek Pk		19119		
38-A	Bear Creek Rd	R	1946	1100	0.20
		E	3210	1100	0.20
		SE	120	1100	0.57
38-B	W Harpeth Rd	R	2266	1100	0.20
		E	365	1100	0.20
		SE	1410	1100	0.41
38-C	Grey Lane	R	1359	1400	0.20
		SE	131	1400	8.61

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
38-Total	Carters Creek Pk		10701		
39-A	No Collector	R	1545	***	0.20
		SE	958	***	0.20
39-B	Critz Ln	SE	2314	700	0.30
39-Total	Columbia Highway		4817		
40-A	Thompson Station Rd	R	491	1100	0.20
		SE	939	1100	0.57
		S	636	1100	0.57
		CC	183	1100	0.57
40-B	Thompson Station Rd	SE	1567	1400	0.73
		S	316	1400	0.73
		CC	27	1400	0.73
40-C	Buckner Rd	SE	90	1100	0.32
		S	3312	1100	0.32
40-Total	Columbia Highway		7561		
41-A	Harpeth School Rd	SE	2077	1700	0.79
		S	71	1700	0.79
41-B	Harpeth Peytonsville Rd	R	912	1400	0.20
		SE	313	1400	0.80
		CC	51	1400	18.96
41-C	Bethesda Rd	R	838	1100	0.20
		SE	1427	1100	0.65
41-D	Lewisburg Pk	R	2426	1400	0.20
		S	53	1400	17.26
41-E	Owl Hollow Rd	R	798	700	0.20
		SE	476	700	0.80
		S	8	700	19.95
41-F	Thompson Station Rd	SE	1226	1400	0.80
		S	87	1400	2.00
		CC	46	1400	5.33
41-Total	Lewisburg Pk		10809		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
42-A	Long Lane	R	31	1400	0.20
		SE	2551	1400	0.44
		S	648	1400	0.44
42-B	Peytonsville Rd	R	183	1100	0.20
		SE	1649	1100	0.64
42-Total	Goose Creek Ext		5250		
43-A	Cedarmont Dr	SE	1410	1700	1.21
43-B	Pate Rd	SE	535	1100	2.06
43-Total	Arno Rd		1944		
44-A	Trinity Rd	SE	1217	1100	0.90
44-B	McDaniel Rd	SE	3002	1100	0.36
		CC	40	1100	0.36
44-C	Eudaily-Covington Rd	SE	2603	1100	0.42
44-D	Arno-College Grove	SE	2172	1100	0.51
44-E	Peytonsville-Arno Rd	R	2456	1400	0.20
		SE	805	1400	0.80
		CC	277	1400	0.96
44-F	Meeks Rd	R	157	1100	0.20
		SE	1608	1100	0.64
		CC	60	1100	0.64
44-G	Peytonsville-Trinity Rd	R	694	1400	0.20
		SE	1086	1400	1.16
44-H	Gosey Hill Rd	R	69	1100	0.20
		SE	1626	1100	0.67
44-Total	Arno Rd		17872		

TABLE 5230 B1

Shed No.	Road Name	Zoning District	Acres	Highway Capacity	Trips Per Acre
45-A	Patton Rd	SE	653	1100	1.68
45-B	Patterson Rd	R	1289	1400	0.20
		SE	266	1400	4.29
45-C	Taliaferro Rd	R	2076	1400	0.20
		SE	111	1400	0.80
		CC	90	1400	4.90
45-D	US 41-A	R	1084	2800	0.20
		SE	344	2800	0.80
		CC	208	2800	4.68
45-E	Cox Rd	SE	1308	1400	0.80
		CC	160	1400	2.21
45-Total	Nolensville Rd		7592		
46-A	College Grove	SE	2049	1400	0.62
		NCT	203	1400	0.62
46-B	Bellefant Rd	SE	1464	1100	0.64
		CC	74	1100	0.64
		NCT	184	1100	0.64
46-C	Arno-Allisona Rd	R	441	1100	0.20
		SE	825	1100	1.23
46-D	Owen Hill Rd	SE	1399	1100	0.76
		CC	44	1100	0.76
46-Total	Nolensville Rd		6646		
47-A	Bethesda Rd	R	2519	1100	0.20
		SE	130	1100	0.80
		CC	82	1100	6.00
47-B	Cool Springs Rd	R	962	1100	0.20
		SE	524	1100	1.73
47-C	Arno-Allisona Rd	R	539	1100	0.20
		SE	3973	1100	0.25
47-D	Comstock Rd	R	11417	1400	0.20
		SE	32	1400	0.20
		CC	78	1400	0.20
47-E	Smithson Rd	R	4356	700	0.20
47-Total	Bethesda Duplex Rd		20395		

RESERVED

Table 5230 B2
TRIP GENERATION TABLE

Land Use	Number of Peak Hour Trips	Per
AGRICULTURE	NA	NA
RESIDENTIAL		
Single-Family detached	1.00	Dwelling unit
Single-Family attached	.85	Dwelling unit
Multi-Family apartment	.70	Dwelling unit
Mobile Home	.60	Dwelling unit
INSTITUTIONAL		
Outdoor Institutional	NA	NA
Elementary school	.25	Student
High School	.30	Student
College/University	.40	Student
Day Care/nursery school	NA	Student
Hospital	1.30	Bed
Nursing Home	.30	Bed
Single-Family Retirement Attached or Detached*	.40/d.u.	
Independent Living Congregate*	.30/d.u.	
Assisted Living Congregate*	.30/d.u.	
COMMERCIAL		
Office 0-100,000 gross sq. ft.	2.85	1000 gross s.f.
Office > 100,000 gross sq. ft.	2.00	1000 gross s.f.
Medical Office	5.00	1000 gross s.f.
Research Center	2.50	1000 gross s.f.
Specialty Retail	2.25	1000 leasable s.f.
Discount Store	7.00	1000 leasable s.f.
Hardware Store	5.20	1000 leasable s.f.
Shopping Center 0-49,000 s.f.	15.50	1000 leasable s.f.
Shopping Center 50,000 - 100,000 s.f.	9.30	1000 leasable s.f.
Shopping Center 100,000 – 199,999 s.f.	6.60	1000 leasable s.f.
Shopping Center 200,000 - 499,999 s.f.	5.10	1000 leasable s.f.
Shopping Center over 500,000 s.f.	3.80	1000 leasable s.f.
Car Sales	6.00	1000 building s.f.
Restaurant, table service	10.35	1000 gross s.f.
Restaurant, counter service	22.20	1000 gross s.f.
Restaurant, drive up	80.00	1000 gross s.f.
Services	35.80	1000 gross s.f.
Gas Station	5.50	Pump
Supermarket	15.70	1000 gross s.f.
Convenience Store	54.80	1000 gross s.f.
Drive-up Bank	44.00	Window

Table 5230 B2
TRIP GENERATION TABLE
 Number of Peak
 Hour Trips

Land Use	Number of Peak Hour Trips	Per Room
Hotel/Motel	1.00	
INDUSTRIAL		
Light Industrial	1.18	1000 gross s.f.
Warehousing	1.63	1000 gross s.f.
Mini-warehouse	.32	1000 gross s.f.
Heavy Industrial	.69	1000 gross s.f.

SECTION 5240. SEWER CAPACITY

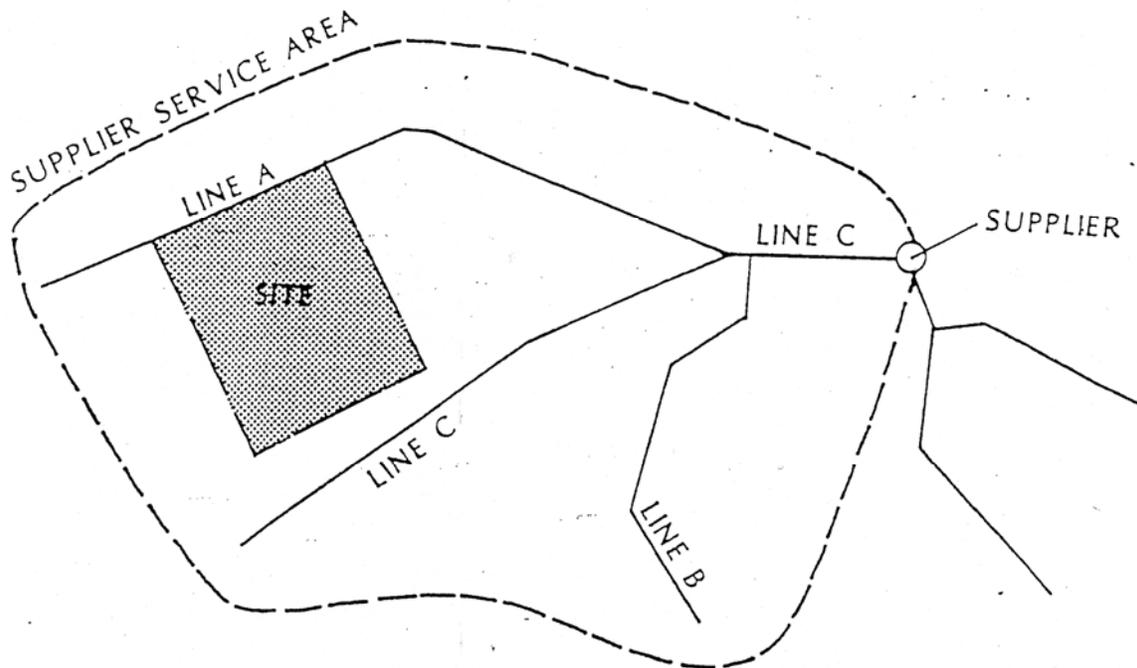
Either this Section or Section 5220 shall govern the capacity of the site based on the ability of the site to adequately dispose of sewerage wastes. If sewers are used this Section controls; if septic systems and tile fields are to be used, then use Section 5220 and refer to Section 7210.

- Step 1: Determine the area of vacant land serviced by the sewer main before the next size change. This shall be done by taking all vacant land that would drain by gravity to the sewer main.
- Step 2: Determine by certification of the sewer agency the capacity of the sewer treatment plant and downstream mains. Measure the total area served by the plan and each segment of the sewer main. If there is more than one zoning district involved, the area of each district should be calculated separately.
- Step 3: Determine the capacity of each portion of the system by dividing total capacity in Equivalent Dwelling Units (EDU's) by the number of areas in each system. Where there is more than one zoning district, the density of the districts shall be used with the total area to apportion the capacity to the districts.
- Step 4: Determine the capacity of each element of the system on a per-acre basis by dividing the capacity by the number of acres of land.
- Step 5: Determine the capacity of the site by multiplying the lowest of the per-acre capacities, determined in Step 4, by the site area.

Sewer capacity = _____

SECTION 5250. WATER CAPACITY ADJUSTMENT

Step1: The developer shall obtain from the water supplier the location of currently undeveloped areas which are designated to be eventually served by the same portion of the water system which serves the subject property. (See the following illustration.)



Commentary: With water supply systems, different portions of the system will each have to be evaluated individually. In the example above, the site is served by two lines, A and D. The lines obviously have different sized service areas, and development will be evaluated on the most restrictive of these sectors. The entire service area of the utility district includes lines A, B, C, and D.

Step 2: Determine system capacity by the dividing total water available by the total vacant land in the system.

_____ gallons/acre

Step 3: Determine the capacity of the system by running the Hardy Cross Model and ascertain the effect of additional water lines and fire hydrants while maintaining a residual pressure of twenty-five (25) pounds per square inch (PSI) in all portions of the system. Also, perform a theoretical run of five hundred (500) gallons per minute for four (4) hours assuming water tanks are half (50%) full.

Does analysis show system meets both tests?

If yes, proceed to next step. If no, scale back development to a gross density of 0.2 units per acre, (if nonresidential) to a maximum FAR of 0.08. Or, the project may provide the improvements to the water system necessary to meet both tests.

Step 4: Use the data presented below to determine the demand for water of the proposed use. Note that nonresidential uses must be evaluated on an individual applicant basis.

Residential Uses: 150 gallons per bedroom
Nonresidential Uses: 20 gallons per square foot

Step 5: Divide the per-acre capacity (from Step 2) by the usage rate (Step 4):

Total du's/acre _____; or
Total FAR _____.

SECTION 5260. DEVELOPER IMPROVEMENTS

The limitations of Section 5230, 5240, and 5250 are imposed by the present conditions of the infrastructure serving the site of the proposed development. Developers may choose to make improvements to the infrastructure to increase the capacity of the system and thus, the development potential of their property. In order to do so, the developers shall follow the provisions of this Section.

- A. Improvement Plan: The developer shall submit an improvement plan for one or more of the following: roads, water and sewer. This plan shall address in detail the improvements suggested by the developer and indicate the precise increase in capacity that would result from those improvements.
- B. Re-Running the Calculations: The developer shall rerun the calculations in Sections 5230, 5240, and 5250 if they are affected by the proposal. These new calculations, together with the old set, shall be submitted to the Planning Commission for review.
- C. Limits on the Development Intensity: The developer shall proceed with the development at the higher levels of intensity resulting from the improvements, provided that in no event shall the maximum intensity be greater than that allowed by the most restrictive section of Division 5200, and provided that surety is posted guaranteeing that the improvements are made.
- D. Making the Improvements: The County may select any of the following methods of insuring that the improvements are actually made: posting a bond, make a payment to the County in the amount required to make the improvements, or participate in a special service district that pays for bonds issued by the County to make the needed improvements. The County shall approve the method based on the following guidelines:
 - 1. Developer Improvements: The preferred method is for the developer to make the improvements and place a performance bond with the County. This bond shall be in an amount equal to one hundred twenty (120) percent of the projected cost of the improvements to ensure they are completed. Subsequent landowners shall have to pay the developer back for their share of the improved capacity or build at the density available prior to the improvements.
 - 2. Special Service Districts: The County may choose to use a special service district to finance the improvements. The criteria for this method is whether the County Plan designates this area as a priority development area, and whether the proposed project meets the Plan's objectives. This method may also be appropriate where condemnation of land beyond the

borders of the proposed development is required to provide adequate facilities, thus necessitating a more comprehensive development package.

3. Payment-in-Lieu-of: This is the least preferred method. It should be used only for small projects where the actual project itself has a minimum impact on the remaining capacity. A rule should be that the project should use less than five (5) percent of the total existing capacity. In addition, this approach should not be used in areas of high development pressure where special districts would remain the preferred method of approach.

Commentary: This Section is intended to provide developers with an ability to develop at higher intensities in areas where the County or utility districts are not able to provide adequate facilities. The County has very limited capital resources, and these resources are to be concentrated in areas designated in the Comprehensive Plan. Therefore, this Section prevents an unnecessary financial burden from being placed on the general taxpayers of the County, because it forces the developers to internalize the costs of developing sites that are not slated for improvement by the County in the near future.

SECTION 5270. HISTORIC SITE

This section is intended to provide the economic incentive to preserve historic structures and places in their original settings. It establishes a transferable development rights (TDR) system to accompany the preservation standards of Section 5110, 5120 and 7120, and to mitigate the impact of these regulations on the owners of such property.

- A. **Applicability.** Buildings, places, or sites which are officially designated as historic sites shall be awarded development rights as of the effective date of this Ordinance for the lot on which they are located, up to a maximum of twenty (20) acres.
- B. **Type of Development Right.** For historic sites located in the Estate (E), Suburban Estate (SE), Neighborhood Conservation (NC), Mobile Home (MH) and Restricted Single-Family (RS) districts, the development rights shall consist of rights to develop residential units. For historic sites located in districts which permit either residential or nonresidential uses, one development right shall permit the construction of one residential unit or 2,000 square feet of nonresidential development.
- C. **Allocation of Development Rights.** All transferable development rights shall be allocated to the property by multiplying the highest gross density in Section 5100 or the highest floor area ratio in Section 5120, for the district in which the property is located, by the number of acres in the historic site.
- D. **Conditions.** Development rights may be transferred to any adjacent property or to any property within the Suburban (S), Urban (U), or Suburban Estate (SE) district of unincorporated Williamson County. In SE districts, residential development rights may only be used in a planned resource conservation development and sanitary sewer service must be available. Development rights may also be used on the remainder of the “sending” property. For any transfer, the following conditions shall be met:
 - 1. The development of the receiving site does not exceed the maximum gross densities allowed by Table 5110 for residential, or the maximum floor area ratios (FARs) permitted by Table 5120 for nonresidential, by more than twenty (20) percent; and
 - 2. If any of the development rights are used on the remainder of the sending property, then the amount of land used for said transferred rights may not exceed twenty-five (25) percent of the minimum required open space, nor shall it exceed the total open space which is actually provided by the transferred development; and

3. Prior to issuance of a building permit authorizing the development of a dwelling unit, all or a part of which is derived from a transferred development right, a deed of transfer shall be recorded in the chain of title of the transferring parcel. This deed shall contain a covenant prohibiting the further development of the parcel containing the historic site or the required open space associated with it if it is not to be subdivided from other open space areas of the development.
- E. Procedure: The transfer of development rights shall be carried out as follows:
1. The owner of a parcel of land who decides to transfer development rights allocated to his property shall prepare an affidavit of ownership and an affidavit of intent to transfer. The affidavits shall be filed with the Director of Planning at least thirty (30) days prior to the submission of an applicant for development approval using said rights.
 2. The transfer of development rights shall be by deed in substantial form and substance the same as the deed set out in Subsection D3, above.
 3. The owner of any parcel of land may transfer any development rights allocated by this Ordinance to this parcel of land at any time to any person. However, the use rights (and their value) shall be deemed for taxation and all other purposes to be appurtenant to the land from which the rights are transferring until a development order is issued authorizing use of the transferred density.
- F. Recordation. The landowner transferring said development rights shall file with the Register of Deeds a restrictive covenant running with the land, affecting the parcel of land of said landowner from which the development rights have been transferred and are enforceable by the County. The restrictive covenant shall be as follows:

“Said premises [legally described] shall not be used at any time for any uses except those specified and indicated in Article IV of the Williamson County Zoning Ordinance for Agricultural Uses (as defined under Section 4101 A.). All rights are waived to develop said land for permitted residential or nonresidential uses other than agriculture. And the grantee, for himself, his heirs, and assigns, by the acceptance of this indenture agrees with the grantor, for himself, his heirs, and assigns that said restrictions and conditions shall be a covenant running with the land, and that in any deed of conveyance of said premises or any part thereof, said restrictions and conditions, when modified pursuant to provisions contained herein, shall be incorporated by reference to this indenture and the record hereof or as fully as the same are contained herein. Said

restrictions run with the land in favor of Williamson County and shall be enforceable by the County.”

- G. Use of Transferring Property. The use of restricted land on the sending parcel shall be limited to agricultural uses detailed in Section 4101 A., a Bed and Breakfast or Country Inn establishment as detailed in Section 4104 J, or to one single-family residential dwelling unit on a lot which may not be subsequently subdivided.

SECTION 5280. DEVELOPMENT INTENSITY

Take the lowest value of Section 5110, 5210, 5220, 5230, 5240, 5250.

_____ du's
or
_____ FAR

Subtract losses or gain due to developer improvements (per Section 5260) or due to transfer of development

_____ du's
or
_____ FAR

Maximum permitted development

_____ du's
or
_____ FAR

DIVISION 5300. AFFORDABLE HOUSING BONUS

This Division provides an incentive for the development of affordable housing within the County in the Suburban (S) and Urban (U) districts. It is intended to provide additional housing opportunities for low-income persons and for those with more moderate incomes who are being forced out of the housing market in Williamson County by inflationary pressures.

The provision of adequate supplies of such housing is an important national goal. The private sector cannot normally accomplish this goal without special assistance or incentives. It is generally inadequate to simply permit such housing (for example, nothing in this Ordinance precludes such housing from being built); in most instances, it is simply impossible to build housing for this sector of the market without a subsidy of one form or another. The use of density bonuses to accomplish this goal provides a strong incentive without a reliance on subsidy funding.

SECTION 5310. HOUSING BONUS

- A. In order to encourage the production of affordable housing for Williamson County residents, the density of development within planned resource conservation developments in the Urban (U) and Suburban (S) districts may be increased under the provisions of this Section.
1. Any unit subsidized by federal, state, or local government shall earn an on-site bonus of one (1) additional dwelling unit above the permitted density called for in this Ordinance.
 2. Any unit meeting all of the conditions specified below shall earn a bonus of one (1) additional dwelling unit, provided that either the gross density set by Division 5100 shall not exceed a base gross density of four (4.0) units per acre for the Suburban (S) District and ten (10.0) units per acre for the Urban (U) District and that the maximums provided for in the adjusted provisions of Division 5200 are not exceeded.
 - a. A household residing within the unit must have a gross income of no more than eighty (80) percent of the median household income within the County.
 - b. No individual purchasing such a unit shall have used this provision for the past five (5) years.
 - c. Rental units must remain rental units for ten (10) years for those qualified, whose annual rent shall be no more than thirty (30) percent of the income specified in 2.a.

3. In no event shall the bonus for low-income housing be permitted where subsidized units constitute more than twenty-five (25) percent of a development, except in the case of a development of less than ten (10) dwelling units.
4. There shall be no limitation on the proportion of low-income dwelling units for developments of ten (10) dwelling units or less.

B. Design Regulations

1. All affordable units built pursuant to this Section shall be integrated into the overall design of the development. They shall be scattered throughout the development and their design and exterior materials and appointments shall not differ from those of other units in the project.
2. The affordable units built pursuant to these regulations may, however, have less square footage than similar units built for the regular market, provided that the minimum standards of this Ordinance are met.

C. Management

1. All governmentally subsidized units shall be managed in accordance with applicable regulations of the subsidizing agency.
2. All other affordable units developed according to this Section shall be required to ensure that they will continue to be available for rental or sale to persons with low-income levels. This may be ensured by placing restrictions on their resale (restrictions which limit price increases and/or which make them available for sale only to persons with low-income levels), or by management agreements, or other means acceptable to Williamson County.

AMENDMENTS

ARTICLE V

Section/Division	Date	Book/Page	Topic
5120	6/20/88	13/637	Non Residential Uses on Septic
5220	6/20/88	13/638	Soils Requirements
5220	6/20/88	13/639	Soils Requirements
5110	9/19/88	14/65	Crossroads Center District
5110	3/20/89	14/187	Residential Performance Standards
5120	3/20/89	14/188	Non-Residential Performance Standards
5121	3/20/89	14/188	NR Development Scale
5210	3/20/89	14/191	Natural Resource Adjustments
5220	11/20/89	14/387	Soils Adjustments
5230	11/20/89	14/387	Highway Adjustments
5120	5/21/90	14/497	FAR – Industrial Uses
5120	5/21/90	14/497	Intensity Adjustments
5120	5/21/90	14/497	Suburban FAR
5110	7/16/90	14/537	Residential Performance Standards
5110	1/21/91	14/665	Residential Performance Standards
5230	1/21/91	14/665	Trip Generation Table
5110	3/18/91	14/707	Residential Performance Standards
5110	11/12/91	15/138	Residential Performance Standards
5220	1/11/93	15/521	Septic Field Tables
5110	11/08/93	16/169	Residential Performance Standards
5120	11/08/93	16/169	Non-Residential Performance Standards
5201	11/08/93	16/169	Applicability
5110	11/08/99	19/379	Interchange Overlay (IC)
5120	11/08/99	19/379	Interchange Overlay (IC)
5110	7/10/00	777/786	Wastewater Treatment and Land Disposal Systems
5220	01/09/06		Soils Adjustments
5120	03/10/08		Non Residential Performance Standards
5110 Table	03/11/09		Notes
5120 Table	03/11/09		Notes