

**PLANNING & ZONING WORKSHOP:  
SUBDIVISION REGULATIONS & INFRASTRUCTURE**

*prepared by*

**Local Planning Assistance Office  
Tennessee Department of Economic and Community Development**

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## *Foreword*

This document supplements the *Tennessee Planning Commissioner Handbook*, Local Planning's training manual for its contract communities and others. The *Handbook* has been used to provide training to Planning Commissioners in Local Planning's contract communities, and was followed by *A Closer Look at Zoning*, developed to continue the comprehensive planning discussion by detailing implementation tools. *Subdivision Regulations & Infrastructure* adds detail to the *Handbook's* description of the land subdivision process and the subsequent impact on communities and the services they provide. Read in conjunction with the other materials mentioned above, the reader should be able to see how the planning process is used to formulate and establish community goals and policies, and how those goals and policies are enforced, reviewed, and amended on a day-to-day basis through implementation tools such as zoning and subdivision regulations. These materials provide a starting point for further research on the readers' part, but on their own, offer good information on how communities grow over time and why buildings, streets, and other uses and structures are built how and where they are.

We certainly hope each reader will find something of value here, since those of us involved in its preparation have benefited by our own research. We look forward to your feedback.

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# CHAPTER 1

## PURPOSE OF SUBDIVISION REGULATIONS

### Introduction

Regulating the subdivision of property is a common and essential method for implementing a community's comprehensive planning program. "Subdivision" in this context is not simply the residential development you live in. It is how communities grow and develop over time. It involves the process of dividing raw land into lots, streets, parks and the other spaces that together form the underlying development pattern and structure of a community. Regulating this process is critical to any community that is interested in planning for its future. Once an area has been divided into lots, the street system has been established, and utilities have been installed, a development pattern has been established that is unlikely to be changed. The quality and design of each new subdivision will permanently affect its future occupants and the surrounding area. The application of well-crafted subdivision regulations to this process provides a community with its only opportunity to ensure that newly developed neighborhoods and other areas are properly designed, constructed, and integrated into the surrounding area.<sup>1</sup>

### History of Subdivision Controls

#### Early Beginnings of Subdivision Control

The history of governmental regulation and control over the subdivision process in the United States is not a new one. Many of this country's first towns were founded and physically laid out according to royal directives brought from Europe by their settlers. The original colonial assemblies and the early state legislatures continued this method of creating new towns and settlements. These initial efforts at controlling the pattern of development were further expanded as some state legislatures authorized larger, rapidly growing cities to plan and map proposed streets and to require individual property owners to follow these street plans as they divided their property.<sup>2</sup> These early efforts focused on direct governmental involvement with the creation of towns and their physical pattern of development.

#### Platting Requirements and Early Street System Design

During the 19<sup>th</sup> century, state and local governments began to experience the effects of significant population growth and expanding settlement activities. The increasing pace of this growth and expansion of settlement in the country created problems with land records and the coordination of street systems as development expanded. The division and transfer of property at this time was done by "metes and bounds" deed description. The metes and bounds system relied on verbal description and approximate measures of property boundaries. Deeds of this type often refer to natural features, large rocks, trees, and rough distance or area measures when describing a piece of property. This system of land

description proved to be both inaccurate and inconsistent. It created poorly defined property records that in turn led to disputes and difficulties with land taxation. The use of metes and bounds description, combined with a general lack of development coordination between properties, also led to increasingly disconnected development patterns. The need to coordinate the logical extension of street systems became a particular concern for local governments. As new properties were being subdivided communities needed to ensure that new streets were being properly connected to the existing street systems.<sup>3</sup>

In response to these growing problems many state legislatures enacted legislation that required subdivisions to be accurately surveyed and mapped or “platted”. The resulting laws established uniform survey methods, required that local officials review the platted subdivisions and that the plats be officially recorded prior to lots being sold. State legislatures also passed laws allowing local governments to require that all new streets be properly coordinated with their existing street systems. These laws allowed local governments some control over the placement and alignment of new streets, enabled them to control the width of streets as they were extended, and to require that new streets be dedicated to the public. The platting process was used as the enforcement mechanism for these new controls over private subdivision activity.<sup>4</sup> In both instances the governmental role in controlling subdivision development shifted from the direct creation of towns to regulating the activities of private land developers. This shift and the resulting laws enacted by state governments began the evolution of modern subdivision regulations.

### Subdivision Regulations and the Comprehensive Plan

By the early part of the 20<sup>th</sup> century, state and local governments were again suffering the negative effects of rapid, largely uncoordinated growth. Initial attempts to simply mitigate the impacts of subdivision activity through platting requirements and street system design controls had failed to keep pace with the growing effects of urbanization. Uncontrolled subdivision and urban expansion had left many communities without adequate streets, public facilities, and utilities. Local governments and utility systems were forced to extend services into areas without any control over how they developed. This often led to poorly designed public infrastructure and facilities that proved inadequate to serve the areas population. As a result, many developing areas became characterized by disorderly chaotic growth and eventually depressed economic values.<sup>5</sup>

The modern era of comprehensive planning and subdivision regulation began in 1928 with the Standard City Planning Enabling Act (SCPEA). This act was published by the US Department of Commerce to promote the development and implementation of comprehensive plans. The enabling act recognized the pressing need for public sector comprehensive planning and the role that subdivision regulations could play in controlling development. Many state legislatures, including Tennessee, subsequently passed their own enabling acts based on the SCPEA model.

Under the SCPEA model and the state enabling laws that followed, local governments were granted the authority to engage in broad-based comprehensive planning. The comprehensive plan in this context is a long-range policy plan that is intended to guide the physical

development of a community. It describes how, when, where, and why to build, rebuild, or preserve areas within a community. It addresses the many physical elements that allow a community to grow and function properly, including transportation systems, utilities, land use development patterns, public open spaces and environment quality, housing, and community facilities.<sup>6</sup> The model legislation recognized the role that subdivision regulations could play in implementing a community's comprehensive planning program, and expanded the regulatory reach of subdivision regulations accordingly. Under the new enabling laws, local governments were able to craft regulations that better controlled how new subdivisions were developed and integrated into the surrounding community. This new regulatory authority could be used to prevent the creation of inadequate streets and traffic congestion, undersized utilities, and small or poorly designed building lots.<sup>7</sup> It allowed local governments the ability to better control the design of streets in relation to existing or planned streets, to coordinate utility extensions, relieve congestion and provide for adequate access to developing areas. Open space and areas needed for new roads, parks, and schools could be required through public dedication. Finally, local governments were for the first time given the authority to control the premature subdivision of land in order to eliminate wasteful development practices and inefficient public expenditures.<sup>8</sup>

## **Planning and Subdivision Authority in Tennessee**

### Introduction

The State of Tennessee enacted its planning legislation in 1935, based on the federal Standard City Planning Enabling Act. Tennessee's legislation was drafted by Alfred Bettman, a noted attorney and planner from Cincinnati, who was hired as a consultant by the Tennessee Valley Authority. The 1935 legislation fully embraces the concept of comprehensive planning and the use of subdivision regulations as an implementation tool for planning. The legislation is purely enabling, in that it provides planning authority for local governments in the state. The legislation provides for the creation of local planning commissions, the authority to engage in long range comprehensive planning, and it enables these planning commissions and their local governments to implement plans through the adoption of subdivision regulations and zoning. Title 13 of the Tennessee Code (TCA) grants these powers to local governments and their planning commissions.

### Municipal and Regional Jurisdiction

Tennessee's planning and subdivision control legislation is organized into two broad authorities, municipal planning authority and regional planning authority. The municipal statutes are located in TCA Title 13, Chapter 4 while the regional statutes are located in Chapter 3. Together, these statutes provide for the creation of four separate types of planning commissions and define their overall planning jurisdictions. Under these statutes it is the planning commission that is granted the authority to engage in comprehensive planning and to adopt subdivision regulations, not the local government's legislative body.

## Types of Planning Commissions and Jurisdictions:

1. The municipal planning commission as provided for in TCA section 13-4-101. Its planning and subdivision control jurisdiction is restricted to the incorporated territory of a single municipality. These commissions obtain their planning and subdivision control authority from Title 13, Chapter 4 of the Tennessee Code.
2. The municipal designated-regional planning commission as provided for in TCA section 13-3-102. This variation of the municipal planning commission has the authority to plan and regulate subdivision activity within both a municipality and an adjoining planning region that has been defined by the state. It is important to note that this type of planning commission must utilize the regional planning and subdivision control statutes when operating within its defined planning region.
3. The regional planning commission as provided for in TCA section 13-3-101. Regional planning commissions generally have jurisdiction within a territory composed of either a single county or contiguous parts of two or more counties. The majority of regional planning commissions in Tennessee are single county commissions and are often referred to as the “County Planning Commission”. These commissions obtain their planning and subdivision control authority from Title 13, Chapter 3 of the Tennessee Code.
4. The community planning commission as provided for in TCA section 13-3-201. Community planning commissions are created and defined by the state in small unincorporated communities. They operate as regional planning commissions within their defined jurisdictions.<sup>9</sup>

### Municipal and Regional Subdivision Authority

The Tennessee Code gives local governments, via their planning commissions, the authority to adopt and enforce subdivision regulations. This authority can only be exercised by a community’s planning commission, not its legislative body. The statutes define what a subdivision is for regulatory purposes; prohibit the recording of subdivision plats without planning commission approval; provide the authority, purpose, and procedures for adopting subdivision regulations; and provide mechanisms and penalties for their enforcement. The municipal authority regarding subdivision regulation is contained in TCA sections 13-4-301 through 13-4-309. The regional authority is contained in TCA sections 13-3-401 through 13-3-411. The general powers granted to both municipal and regional planning commissions are very similar.<sup>10</sup>

### Definition of Subdivision

The definition of what constitutes a subdivision is the same under both the municipal and regional authorities. It is important for regulatory purposes because it defines the types of land division activity where a planning commission can apply its subdivision regulations. If a property owner divides land in a manner that does not meet the state's definition of a

subdivision, the locally adopted subdivision regulations will not apply. In other words, it must first be a subdivision to be regulated as a subdivision. The definition of a subdivision in both the municipal and regional context is contained in TCA sections 13-4-301 and 13-3-401, respectively.

The definition has changed a number of times since its original passage in 1935. Its original form followed the SCPEA model and basically included any division of land into two (2) or more lots. The state's current definition of subdivision was last amended in 1988 and reads as follows:

**“Subdivision” means the division of a tract or parcel of land into two (2) or more lots, sites, or other divisions requiring new street or utility construction or any division of less than five (5) acres for the purpose, whether immediate or future, of sale or building development, and includes resubdivision and when appropriate the context, relates to the process of resubdividing or to the land or area subdivided.”**

This definition creates two development scenarios under which a planning commission can apply its subdivision regulations. The first is for any division of land into two (2) or more lots, regardless of size, where new streets or utilities will have to be extended to serve those lots. The second scenario is the division of land into two (2) or more lots where those lots are less than five acres in size. Most land division activities will generally meet one of these conditions and be subject to the authority of locally adopted subdivision regulations.

#### Major Road Plan and the Platting of Subdivisions

The Tennessee Code, in sections 13-4-302 and 13-3-402, requires municipal and regional planning commissions to adopt major road plans prior to exercising their subdivision authority. These statutes also require that the local planning commission approve all subdivision plats before they can be recorded by the county register.<sup>11</sup> In addition, TCA sections 13-4-306 and 13-3-410 prohibit the sale of property by reference to or exhibition of an unapproved subdivision plat. These statutes also note that the use of metes and bounds description does not exempt the sale from the requirements. The linkage between these TCA sections and the early land platting and street system design justifications for controlling the subdivision of property is clear.

#### Adoption, Purpose and Scope of Subdivision Regulations

The Tennessee Code, in sections 13-4-303 and 13-3-403, provides local planning commissions with the authority to adopt subdivision regulations. These sections also provide the planning commission with broad authority regarding the scope of their regulations. The nature of this authority is directly tied to the role that subdivision regulations should play in implementing a community's comprehensive planning program. Both municipal and regional planning commissions are granted similar authorities. Generally speaking, their regulations:

**“May provide for the harmonious development of [their jurisdiction] and its environs; for the coordination of streets ... with other existing or planned streets; for adequate open spaces for traffic, recreation, light, and air; and for [the planned]**



**distribution of population and traffic which will tend to create conditions favorable to the public's health, safety, convenience and prosperity.”**

The statutes go on to allow both municipal and regional planning commissions to include in their subdivision regulations requirements regarding:

**“The extent to which and the manner in which streets shall be graded and improved; and water, sewer, and other utility mains, piping, connections and other facilities shall be installed as a condition precedent to the approval of the plat.”**

The concept of using subdivision regulations as an implementation tool for comprehensive planning is evident in the broad scope of authority granted by these TCA sections. Under their respective statutes, municipal and regional planning commissions are empowered to adopt subdivision regulations that control many aspects of a community's physical development. These regulations can be used to literally control the design and development pattern of a community. New street and utility construction can be coordinated with existing or planned infrastructure systems. Development standards can be set for new streets, utilities, and building lots. Public areas for parks and schools can be reserved in accordance with locally adopted plans. And finally, the overall timing of subdivision development can be controlled relative to existing or planned public infrastructure requirements.

#### Enforcement Mechanisms

The statutes also detail a number of enforcement mechanisms to support the municipal or regional planning commission's efforts to regulate subdivisions. As previously noted, TCA sections 13-4-302 and 13-3-402 require that the local planning commission approve all subdivision plats before they can be recorded by the county register, while sections 13-4-306 and 13-3-410 prohibit the sale of property by reference to or exhibition of an unapproved subdivision plat. In addition, TCA sections 13-4-307 and 13-3-406 deal with the acceptance of unapproved roads by municipal or regional officials, respectively. These sections generally prohibit local officials from accepting or improving roads without planning commission approval. They also prohibit the installation of utility lines in any street that has not been accepted as a public street or that appears on a subdivision plat approved by the planning commission. Finally, TCA sections 13-4-308 and 13-3-411 prohibit the issuance of building permits on any lot within the respective jurisdiction unless the street providing access to the lot in question has received the status of a public street, or the street corresponds to the location of a street shown on a subdivision plat approved by the planning commission, or unless the lot fronts on a private easement that conforms to all specifications for private easements as approved by the planning commission. The legislative intent of these statutes seems clear. Local planning commissions are empowered to adopt and enforce regulations governing the subdivision of property for the broad public purpose of implementing a community's comprehensive planning program.

## Endnotes

<sup>1</sup>Tennessee Department of Economic and Community Development, Local Planning Assistance Office, Local Planning Office Staff Planner Training Manual, 1<sup>st</sup> ed. (State of Tennessee, 1990), p. 76

<sup>2</sup>William I Goodman and Eric Freund, eds., Principles and Practice of Urban Planning, Municipal Management Series, (Washington D.C.: International City Managers Association, 1968), pp. 443-444.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

<sup>5</sup>Donald G Waller, Why Regulate Subdivisions?, Date Unknown, Unpublished Paper, Local Planning Assistance Office, State of Tennessee, pp. 1-5.

<sup>6</sup>Local Planning Office Staff Planner Training Manual, p. 41

<sup>7</sup>Ibid, p. 76.

<sup>8</sup>Donald G Waller, pp. 1-5.

<sup>9</sup>Local Planning Office Staff Planner Training Manual, p. 77

<sup>10</sup>Tennessee Department of Economic and Community Development, Local Planning Assistance Office, Tennessee Planning Commissioner Handbook, 2<sup>nd</sup> ed. (State of Tennessee, 2003), p. 16

<sup>11</sup>Ibid, p. 34.

## **CHAPTER 2**

### **SUBDIVISION REGULATION DEVELOPMENT**

#### **Major Road Plan**

The first element of a community's comprehensive plan is the base map. This map details the legal corporate jurisdiction of a city, street locations, lot lines and any streams or bodies of water. Based upon this map the planning commission develops its first planning component: the major road plan. This plan serves the community as the foundation of its local planning program. Tennessee's planning law is enabling, not mandated, but the law does require a major road plan to be developed, adopted and recorded in the county register's office prior to the enactment of subdivision regulations. Subdivision Regulations then coordinate the development of the city's transportation system with the major road plan.<sup>1</sup>

The major road plan provides a street classification system for existing streets and proposes a plan for the development of future streets to meet the growing needs of the city. At a minimum, streets are generally classified either as arterial, collector, and residential or local streets. These designations vary based on the individual role of each street in the overall transportation system. Based on the amount of traffic each carries, the design standards for each classification will also vary. Arterial streets are usually an interstate, other Federal highway, or a State highway. Collector streets would be the major city streets that provide access between residential and other areas and the arterial streets. Residential or local streets are those streets that transfer traffic within a subdivision development. They also tend to be shorter streets with cul-de-sacs and serving fewer lots than other street types.

Based upon the above classifications it is the role of the planning commission to review the existing street pattern in relation to large tracts of land prone to future division for development. The planning commission should then propose route locations for future streets to be developed to better the city's traffic circulation system. Therefore, all subdivision plats should be reviewed in light of the major road plan to assured that the planned system will be actually constructed. More often than not, planning commissions fail to properly review and compare subdivision proposals with the adopted major road plan. This plan should put land owners, developers and surveyors on notice as to what is expected for particular properties as designs are developed.

It is critical to a planning commission's success for there to be serious consideration given to the major road plan. Absent this in the subdivision design review process, there is essentially no long range planning. The planning commission would only be reacting to subdivision proposals with the development community planning the future of the community in a piecemeal manner.

## **Legal Process**

The planning commission is charged with the responsibility of preparing a plan for the community's physical development. Implementation of that plan is accomplished through the tools of subdivision regulations, as adopted by the planning commission and zoning regulations, as adopted by the legislative body. In Tennessee, absent the creation of subdivision regulations any property owner or developer may subdivide property with no public input into design of infrastructure standards. Such an approach will ultimately result in an increased cost to the public through already-limited tax revenues being expended to correct problems associated with poor development.

The process for the adoption of public design and construction standards is outlined in the Tennessee Code. After the preparation, adoption and recording of the major road plan, the planning commission is free to develop its subdivision regulations. The regulations establish standards that the commission believes meets the individual needs of the locality. Once a set of regulations have been developed, it is time for input from the public.<sup>2</sup>

Tennessee law requires that the planning commission hold a public hearing to consider the adoption of subdivision regulations. The commission should have copies of the proposed regulations available for public review. At the appointed date and time of the public hearing the planning commission should open the floor to any and all comments concerning the contents of the proposed regulations. If there are no proposed changes to the regulations, the planning commission may adopt the regulations by a simple majority vote. The regulations are then effective immediately. From that point on, reference to an unapproved plat or the recording of a plat without the approval of the planning commission and the signature of its secretary is a misdemeanor violation in Tennessee.<sup>3</sup>

## **Technical Design Specifications**

Other than inspection and enforcement, the most important part of the subdivision process is in regards to the minimum development standards for construction adopted by the planning commission. These are the standards that will assure the city of infrastructure that is adequate to prevent future costs to the city in the form of repairs. These standards should have been developed with input from professionals: planners, surveyors, engineers, public works staff and water/sewer staff. They should be based on accepted construction standards and reflect the city's ability to inspect and to maintain the improvements as the infrastructure ages. The most critical design standards are those associated with the streets, water, sewer and drainage control. Each of those will be briefly examined.

## Street Standards

The general standards related to streets begin with layout in relation to proposed lots and the existing transportation system. This includes curve standards, percentage of grade, site distance limitations and length. Standards of design for the construction of streets begin with the preparation of the subsurface soils to support and properly drain the street surface. This usually requires the removal of the top soil and standards related to any fill soil that might be required, as well as requiring tree roots and stumps to be removed. The next important area of consideration is the type and depth of the road base required prior to any surface treatment. The final area of construction standard concerns the type of and the standards for surface treatment. This will depend on whether the street is to be so called "tar and chip," asphalt or concrete. Most communities rely upon the State of Tennessee's Department of Transportation's published specification handbook to detail the exact construction requirements.

## Water

Water is one of the more important infrastructure improvements in subdivision development. Water systems are a pressure system relying on that pressure to provide sufficient flow for normal use and, hopefully, for fire protection. Therefore, it is important that the city has standards that require sufficient minimum line sizes for fire protection and fire hydrants. Other standards for consideration are in regards to the type of water line materials that the city will permit. Also installation standards must be established to assure that there will be no shifting of lines after construction that would result in breaks and possible damage to other infrastructure improvements. The Municipal Technical Assistance Service (MTAS) has developed an excellent book of engineering standards for use in this area. In the more mountainous areas of the State the relationship of a proposed subdivision to the water storage tanks that pressurize the system has to be taken into consideration.

## Sewer

The availability of sewer service is often dependent upon the location of the subdivision in relation to a collection line. One purpose of the regulations should be to encourage the expansion of the system as much as possible. Therefore, many regulations may require the developer to extend services to a site if it is within a certain distance of a collection line. In most cases developers prefer sewer since it will allow for smaller, thus more, lots in a subdivision. Again, there should be standards related to line sizes, line materials and to installation standards. The previously-mentioned MTAS book of engineering standards is also a good reference source.

## Drainage Control

Drainage problems associated with increased development provides a community with many complaints from its citizens. This is an area in which standards are critical to the welfare of the whole community due to the costs associated with later correcting problems. Design standards mandating on-site retention are not popular but have become a necessity.

Construction standards should be developed that require minimum culvert sizes, storm drains, catch basins and ditch design standards. With the implementation of the Phase II requirements of the Federal Clean Water Act, drainage and sedimentation control standards have become more important due to the increased responsibilities placed on cities. These new requirements provide standards that are necessitating amendments to subdivision regulations. The Tennessee Department of Environment and Conservation's web site has several good examples of standards and resulting local regulations that can serve as a model for use by others.

### **Players and their Roles**

Subdivision of property involves the cooperation and interaction of several participants for an actual division of a single tract into multiple properties for development and resale. These parties have been identified, at a minimum, as consisting of the six entities listed below.

- The Land Owner
- Surveyors and/or Engineers
- Staff Planner
- Infrastructure Providers
- The Planning Commission
- The City Commission<sup>4</sup>

Each of these entities have unique attributes necessary for the successful division of property. Each rely upon the skills and actions of the others for an actual development to occur. Therefore each will be examined as to their respective role in the land development process.

#### Land Owner

The process for the subdivision of land first begins with the property owner deciding to develop his property. In some cases the property may have been acquired for the express purpose of development. In other cases, the property may have been acquired through inheritance and the division being utilized as a means to settle an estate. It may also simply be a case where an owner wishes to sell but wishes to maximize the value of the property by selling several smaller tracts rather than one large tract. The first step in the process is for the property owner to select and hire a surveyor to complete an outer boundary survey.

#### Surveyor and/or Engineer

Under Tennessee law only a licensed surveyor can establish boundaries. The boundaries established by the surveyor will ultimately serve as a legal description of the subdivided property. Therefore, accuracy is important. More often than not the surveyor is tasked by the property owner to maximize the final number of lots. This results in the surveyor being responsible for determining the ultimate design of the overall development. In some cases the subdivision may not require any infrastructure improvements such as streets, water or sewer. In those cases design ends with the surveyor.

In the case where new infrastructure is required an engineer must be involved. In Tennessee only engineers can do infrastructure design work. The engineer will take the surveyors initial design work and develop the plans for the required infrastructure. This will result in the development of construction plans for the actual on-site installation of public improvements to serve the needs of the proposed new lots. In addition to accepted principles of engineering design the engineer will refer to the minimum design standards established by the Planning Commission through its subdivision regulations. This would include minimum water/sewer line sizes or minimum distances between fire hydrants. The engineer will work with the appropriate city public works or utility staffs or the State of Tennessee in the development of the construction plans final design. In most cases the engineer will also be on-site to inspect and to supervise the actual installation of the required improvements for the property owner.

### Staff Planner

The staff planner is either an on-staff employee or a consultant that is retained to provide professional planning assistance to the community. In most cases this is the individual that actually developed the subdivision regulations for the planning commission. It is the responsibility of the planner to work closely with the property owner/developer and their surveyor and/or engineering team in the development of the plats for review by the planning commission. Generally the planner serves as the point of contact for the community to answer development related questions and to accept the plats once submitted for placement on the agenda for review by the planning commission. Once a plat is submitted, the planner will review the plat in relation to the communities major road plan, flood hazard areas and the actual contents of the subdivision regulations for conformity with the community's minimum standards of design. Based on this review the planner then serves to advise the developer and the planning commission of any problems or if the plat meets the minimum standards of the community.

### Infrastructure Providers

Infrastructure providers consist of the entire public sector service providers. This ranges from the municipal public works department that maintains streets, traffic control signs, storm water control, and garbage collection to the public safety department that provides police, fire and emergency medical services. Although often overlooked by the general public, in reality a final subdivision design does have an impact on the efficiency of these departments and the ultimate cost of these services on the tax base of a community.

Generally, when infrastructure providers are discussed in the context of subdivision development there are three main types of infrastructure that come to mind: streets, water service and sewer service. Based on the size and the location of the subdivision, the design of the street system is a major critical element of the process. This will determine the efficiency of the development in relation to the existing street system and that planned for the future of the community. In addition to design safety, attention should be directed toward traffic flow, mass transit (even if only for school buses), emergency response and service efficiency for police patrols and garbage collection.<sup>5</sup>

Most communities provide water and sewer service through separate divisions of the same department. More often than not the role of these forms of public infrastructure are the most critical to any subdivision development. The presence or absence of one or both of these public services will determine the size and the final number of lots that can be developed on a tract of land. A new subdivision with both water and sewer lines will expand the size of the municipal system and also impact its treatment capacity. In some cases additional subdivision development cannot occur due to water storage or pressure problems or inadequate sewer treatment capacity.

Generally, the engineer will work with the local water/sewer department to design the addition to the municipal system with the land owner paying for the cost of these improvements. This expands the municipal system with the actual cost being passed on to the ultimate beneficiary: the buyer of the new subdivided lot. Therefore, the subdivision process is essentially a mechanism to expand public utility and street systems at a cost borne by the user.

### Planning Commission

The role of the planning commission begins long before an initial subdivision proposal is submitted. As previously noted the commission has developed, adopted and recorded a major road plan. Next the planning commission works with the infrastructure providers to develop physical design standards for incorporation into the communities adopted subdivision regulations. Once adopted, the planning commission has established the communities official standards and process for the division of lands within its jurisdiction. The Commission then works with city staff and the owner and his surveyor and/or engineer in the approval process, culminating in either approval or rejection of individual plats.

### City Commission

One of the more common misconceptions is in regard to the role of the city commission in the subdivision process. Much of the confusion is the result of the roles both the planning commission and the city commission play in the separate zoning process in which both have defined roles. The adoption of subdivision regulations and the approval of plats are solely the purview and authority of the planning commission. The city commission has no appeal authority concerning decisions of the planning commission regarding standards for or the division of property. At least one member of the planning commission must also be a member of the city commission, along with the Mayor or his designee.

The major role of the city commission in the subdivision process involves any new streets in a subdivision. The role of the city commission is to accept dedicated streets into the city's transportation system once the streets have been completed to the planning commission's standards. It is also the responsibility of the city to establish speed limits on those streets and to maintain all the new infrastructure once in place.



## **The Final Product**

After all agencies, individuals and the general public have had input into the preparation of the Subdivision Regulations, the Planning Commission, generally through its staff planners, will prepare a final document for adoption. The regulations will vary by community in content and format, but at a minimum, the following sections should be included:

*Legal Preambles* – The title of the document, statutory authority to adopt, amendment procedures and other legalities are included to provide a legislative framework.

*Definitions* - Definitions should serve several purposes: They simplify the text; they precisely establish the meaning of a word or term which may be subject to differing interpretations; they translate technical terms into usable and understandable terminology. What they should *not* do is attempt to contain the elements or standards which regulate the intensity or bulk of the defined use. Definitions should be periodically reviewed for usefulness, and lists purged of out-dated definitions.

*Procedures for Plat Approval* – This section is discussed in greater detail below, but the intent is to clearly establish which types of plats are required, and the method by which they should be submitted. Also, the requirements for what is included on the plat should be clearly noted.

*Design Standards* – This section provides detail on the required infrastructure within a proposed subdivision of property. Clear guidance should be provided on each type of infrastructure element (water, sewer, streets, drainage, etc.) based on the meetings held with the infrastructure providers prior to preparing the subdivision regulations. Care should be taken that the standards within the regulations do not conflict with the providers but instead reflect the extension policies and construction requirements that are in force at the time of adoption.

*Enforcement and Penalties for Violations* – This section discusses the various methods to assure enforcement of the regulations and what penalties can be assessed for non-compliance. These sections are also discussed in greater detail later in this document.

## **Plat Submittal and Approval Process**

Most communities require that once a subdivision plat has been developed, and before the Planning Commission will take action on the plat, that it be submitted to the city several days or even weeks prior to the next regular planning commission meeting. The process begins with the submission of a preliminary or design plat. Early submittal of the preliminary plat allows the city staff an opportunity for a thorough review of the plat in relation to the adopted subdivision regulations. In this process, the staff planner should look at the following preliminary information contained on the plat:

- The location of the development in relation to the larger community.

- General plat information: scale, north arrow, name of the development, developer, surveyor/engineer and date.
- The stamp of the surveyor and/or engineer.
- The plat should then be compared to the Major Road Plan for conformity.
- The plat should also be compared to the communities' flood maps.<sup>6</sup>

If the required information is present, the planner then should move to a more technical review of the design aspects of the plat. This review should consider the following design elements:

- The topography of the property and its relation to street and lot locations.
- The shape and size of the proposed lots.
- Length of streets, street intersections and profiles, horizontal and vertical curves, and site distances.
- Water line locations, line sizes, and fire hydrant locations.
- Sewer line locations, proposed line sizes and/or pump stations.
- Proposed drainage structures and proposed surface water flow within the development and on to adjacent properties.
- Erosion control and sedimentation plans for Phase II communities.<sup>7</sup>

Most of the time, if problems are found, the surveyor is notified to allow for corrections prior to the planning commission meeting. If there are no problems found, the preliminary plat is placed on the planning commission's agenda and staff recommendations are developed for review and action by the planning commission. At the regular meeting of the planning commission the land owner and/or the surveyor are allowed the opportunity to present their design proposal to the commission for a formal review of the preliminary plat. State law gives municipal planning commissions 30 days to either approve or disapprove the plat, or defer with consent of the applicant, else the plat is automatically approved. For regional planning commissions, the time is extended to 60 days. Once approved, the land owner can begin actual on-site infrastructure improvements. It should be noted that most regulations provide that a preliminary plat is good for only one year and that its approval will lapse at the end of that year if a final plat has not been submitted and approved.

At some point later, the land owner or surveyor should submit a final plat to the city staff for a second review prior to a future meeting of the planning commission. Staff will again compare the final plat to the regulations, as well as to the original preliminary plat for any

potential design changes from the first plat. Specifically the planner will review the plat for the following:

- Format of the completed plat in accordance with the information required by the subdivision regulations.
- Lot and street line locations with distances and bearings noted.
- Signature blocks for the water, sewer, street departments, a surveyor block, an ownership block dedicating public ways and an approval block for the secretary of the planning commission.
- Submission of a bond for any required, but yet to be included, infrastructure improvements.<sup>8</sup>

As indicated, the final plat reflects all lot lines and street locations with distances and bearings noted and infrastructure approval signatures by the various departments, plus the planning commission. These signatures will convey that all minimum standards have been completed or have been bonded by the developer. If approved by the planning commission, the secretary of the commission may then sign the plat for recording at the county register's office to become a legal instrument for the sale and transfer of ownership of property. State law prevents the recording of a plat unless the signature of the secretary of the planning commission is affixed to the plat. At this point, case law in Tennessee has deemed the final plat to be a form of a contract between the land owner/developer and the planning commission for the construction of infrastructure improvements to the standards established by the planning commission. Throughout this process, there have generally been several visits to the site by staff that assist with the development of recommendations to the planning commission.<sup>9</sup>

Some communities require a separate step between the preliminary and final plats: construction plats. These drawings, prepared by an engineer, detail the infrastructure improvements themselves and are valuable in assuring design standards are met and in setting bond amounts.

Occasionally a situation will arise in which a recorded subdivision requires amendment. In some cases, that may be due to an older development that never occurred. There may be an interest in restoring the property to a single parcel or in a new design that would meet current codes. In those cases the process to amend the plat is essentially the same as that process to create a new plat. Replacement plats should have a title that refers to it as being an amendment of the original development to maintain a consistent chain of record for future title searches related to the property.

## Endnotes

<sup>1</sup>Tennessee Code Annotated; Title 13, Chapter 13, Sections 301-309.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

<sup>4</sup>Land Development Handbook: Planning, Engineering and Surveying; Chapter 33: “Plan Submittal, Review and Approval Process;” pages 867-880. The Dewberry Companies.

<sup>5</sup>Residential Development Handbook; Chapter 4: “Design Process,” pages 145-247. Community Builders Handbook Series; The Urban Land Institute.

<sup>6</sup>Land Development Handbook: Planning, Engineering and Surveying; Chapter 33: “Plan Submittal, Review and Approval Process;” pages 867-880. The Dewberry Companies.

<sup>7</sup>Ibid.

<sup>8</sup>Ibid.

<sup>9</sup>The Practice of Local Government Planning; Chapter 14: “Subdivision Regulation and Land Conversion,” (William Lamont, Jr.) pages 389-415. Municipal Management Series; International City Management Association; edited by Frank S. So.

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## **CHAPTER 3**

### **DEVELOPMENT AND SITE DESIGN ISSUES**

Regardless of the basic elements of design, or the development type utilized, there are many ways that streets, drainage structures, water lines, sewer lines, street lights, and electric lines, as well as telephone and television cables may be situated on, in, and under the ground. The layout of these infrastructure elements will of course dictate the ultimate location or placement of residences and other structures on the ground. In this regard, certain design principles are superior to their alternatives in terms of: the cost of constructing and maintaining the subdivision; the sense of community afforded; the functionality of the subdivision in terms of access, comfort, safety, aesthetics and preservation of the environment. A few recommended design principles are:<sup>1, 2</sup>

1. The proposed design of the subdivision should be adapted to fit the topographic and geographic characteristics of the site, rather than the site being extensively graded to fit the plan of the subdivision.
2. Planted buffer strips should be utilized to screen and protect water bodies and wetlands from residences and other manmade structures.
3. On-site impervious surfaces should be minimized in order to decrease flooding, to promote aquifer recharge, to allow for the natural absorption of pollutants into the ground, and reduce the collection of vehicular pollutants.
4. A maximum effort should be made to preserve all on-site natural resources including floodplains, wetlands, streams, as well as any unique natural features.
5. The street system should be appropriate to the physical factors of the site; it should follow the topographic contours of the site whenever possible.
6. The street system should be designed with the convenience and safety of the residents in mind, rather than being geared toward the functional needs of automobiles.
7. The design of the internal street system should be oriented so as to protect residents from the hazards of noise and traffic.

The greatest obstacle to improving the design of residential subdivisions concerns the fact that land developers and subdividers, along with the rest of us, are creatures of habit, i.e., the way subdivisions have always been designed, constitutes the most convenient, easiest and likely technique to be used in the future. Accordingly, less time and effort is required “to follow the beaten path” than may be required to pursue more creative, innovative and improved methods of subdividing property. What is needed most is an educational program for developers of subdivisions regarding viable design alternatives to the conventional subdivision design concept. The innate advantages and disadvantages of contrasting design elements, as they pertain to geological and topographic site characteristics should be explained. Likewise, a true rendering of the short and long-term financial costs involved with the construction of alternative and different types of subdivision designs must be made readily available to subdividers.

## Conventional Subdivision Design

Historically, the conventional subdivision forms the basis of a majority of the developed suburban and rural landscape. Such developments typically involve the subdivision of undeveloped land into individual lots and street rights-of-way. Streets are often constructed on the geometric basis of a rectangle or square, thereby requiring that individual lots be “laid out” in a like manner. This simple and convenient manner of subdividing property, while suitable for flat to gently rolling lands, is not particularly compatible with lands containing moderate to steep topographic characteristics. In contrast, the other widely accepted type of conventional subdivision, the curvilinear designed subdivision offers more flexibility and variety than its more linear alternative. This technique of designing subdivision streets is often superior to the geometric design discussed above on all but flat or nearly level terrain, in that it is based on a curved system of streets that run with the grade and are more complementary to the natural topography of the site.

Another conventional design configuration that can stand alone or be integrated into subdivisions that are based on the curvilinear pattern and grid pattern of streets is the cul-de-sac arrangement. Cul-de-sacs are essentially dead-end streets that contain single ingress and egress outlets on one end, and circular turnarounds on the other end. This design option was initially utilized and continues to be of use in allowing residential lots to be located on segments of property that are of such unique shapes or conditions that no other type of design scheme can efficiently serve to subdivide such properties. The incorporation of cul-de-sacs into curvilinear-based subdivision proposals, when properly utilized, often prove to be an effective means of maximizing density. Furthermore, subdivisions designed around linear cul-de-sacs typically offer the only viable alternative to the economical development of unusually rough terrain, such as ridges or valleys, as well as narrow strips or peninsulas of land surrounded by lakes and rivers. Problems occur, however, when overly lengthy cul-de-sacs are constructed, and/or when the primary method of subdividing property involves little more than a collection of linear cul-de-sacs extending along an existing street. The extensive use of cul-de-sacs to the exclusion of all other development styles presents its own set of problems. An ever-present deficiency accompanying all excessively long cul-de-sac subdivisions is the possibility for some portion of the street to be blocked by a fallen tree, a stalled vehicle, or an accident during an emergency such as a tornado, fire, earthquake, or some other dire circumstance. In contrast, good site design requires that there be sufficient interconnectivity between adjoining subdivisions, in order that residences are located such that no obstacles prevent emergency services from being efficiently and effectively provided. Another disincentive for excessive use of cul-de-sacs is the inherently high cost per residential dwelling of constructing and maintaining streets, drainage facilities, and utilities in contrast to other design schemes. Further, the absence of a “looped” system of water lines serving lots adjoining cul-de-sacs often reduces the water pressure and available quantity of water to a point where fire protection becomes non-existent.

## **Design Alternatives: Assessing the Natural Environment**

What exactly is the recommended process of analyzing a particular piece of property in order to determine how best to subdivide it; by "best", meaning to arrive at the optimum amount of development the site can sustain without significant degradation of its natural environment? The key to creating an environmentally-friendly, highly marketable and aesthetically pleasing subdivision lies in the preparation of a comprehensive inventory and analysis of all the essential natural features or characteristics of the site. This process of conducting a comprehensive site inventory of each important type of natural factor in the successful process of subdividing property was institutionalized by planners and landscape architects during the 1970's. One book that advocated this approach is Design with Nature, authored by the eminent Ian McHarg, a professor emeritus of landscape architecture and regional planning at the University of Pennsylvania.

The evaluation process recommended within this publication involves a detailed investigation of the characteristics of a potential development site as they relate to a listing of natural factors, resulting in a definitive assessment of the site's ability to support various components i.e., streets, drainage facilities and structures, building sites, subsurface sewage disposal areas, passive and active recreation areas, scenic and historic areas, and areas of unique ecological and physiographic significance. A few of the natural features or factors that go into a proposed development scheme, as are listed in Design with Nature include:

- Soils associations and types
- Geological features
- Topographic characteristics
- Hydrological features including the location of any floodplain, streams, springs, and marshes, as well as predominant drainage patterns
- Plant associations
- Unique and endangered vegetative and wildlife species

The ways in which various natural elements dictate the over-all development pattern helps establish a composite map of the site and the proposed development.

### **Floodplain and Water Quality Issues**

A specific concern of land development involves the presence of floodplains and the legal and practical matters of mitigating damage to and from them. Properties that are adjacent to a floodplain, or that have identified flood hazard areas within the proposed development area, present special challenges that must be handled correctly in the design phase. Hydrological and hydraulic data are compiled and analyzed, with the emphasis placed on assuring no increase in base flood elevation heights. Detention or retention basins may be necessary to handle run-off, topography may need to be altered to accommodate on-site drainage concerns, and placement of structures and especially non-porous surfaces are studied to assure compliance with all applicable legal requirements, and to assure a safe, flood-free development.

Another contemporary environmentally-oriented design initiative is the Tennessee Growth Readiness Program. This program, established in 2002, seeks to complement the Federal Water Pollution Control Act as amended in 1972 and 1977, commonly known as the Clean Water Act. Emphasis is placed on increasing awareness of various land use/water quality issues, while assisting communities to comply with the educational requirements associated with the CWA Phase II Municipal Sanitary Storm Sewer Program. Accordingly, the guiding purpose of the Clean Water Act is to regulate and permit discharges of pollutants into the waters of the United States with the goal of improving the quality of such waters for humans, wildlife, and aquatic life. The Tennessee Growth Readiness Program is jointly sponsored by the Tennessee Department of Agriculture Non-point Source Section, the U.S. Environmental Protection Agency, the Tennessee Valley Authority and the University of Tennessee. Information on developmental factors influencing water quality in combination with the presentation of precise methods designed to maintain and improve the quality of water in local streams and creeks is designed for presentation to elected officials, planning and public works professionals, land developers, agricultural organizations, construction workers, as well as the local citizenry.

The Tennessee Growth Readiness Program makes available pertinent information as to how water quality is impacted by alternative land use planning scenarios, especially with regard to the proposed density and distribution of development. Particular attention is given to how different mean impervious surface ratios impact the long term quality of local and regional waters; the impervious surface ratio being defined as a measure of the density of land use derived by dividing the total quantity of impervious surfaces on any site by the gross area of the site.<sup>8</sup> In addition, the Tennessee Growth Readiness Program sets out numerous best management practices designed to reduce the discharge of non-point pollutants into local water bodies and streams, through the adoption of 22 model site planning principles. An explanation of the differing degrees to which water quality is subject to degradation according to the density of development and impermeability promoted by varying land use, site design and subdivision configurations is thoroughly elaborated. In this respect, conservation and cluster subdivision designs offer the desired means of preserving water quality by way of restricting impervious surfaces. In doing so, these design alternatives decrease flooding, raise the level of groundwater, assist in the processing and collection of pollutants, and expedite the infiltration of pollutants into the pervious surfaces of the site.<sup>3</sup>

### **Conservation Design and New Urbanism**

Conservation subdivisions are based on the premise that the preservation, abundance, and quality of natural resources within any subdivision is a design factor and amenity to be highly valued. A conservation subdivision may be defined as a development technique that concentrates lots and buildings in specific areas on a development site, thereby allowing the remaining land and natural features to be protected and preserved<sup>4</sup>. A principal exponent of conservation subdivisions is Randall Arendt, the author of Conservation Design for Subdivisions, A Practical Guide to Creating Open Space Networks. Since its publication in 1996, this resource has become an essential guide to all those intent on designing subdivisions as an integral part of woodland preserves, open space pastures and farmland



preserves. Conservation subdivisions place an emphasis on conserving the rare, unique and irreplaceable facets of the natural environment as an integral part of the development process. As in numerous cluster subdivisions, a majority of conservation subdivisions are "density neutral". "Density neutral" means that the overall number of dwellings allowed on a site is the same as would be permitted in a conventional layout or subdivision. Dwellings not constructed on buildable conservation land are constructed in other more appropriate locations on the site.

The first step in designing a conservation subdivision is to delineate all on—site “Primary Conservation Areas”. These areas include wetlands, water bodies, floodplains, and steep slopes. Next comes the identification of all “secondary conservation areas” on the site. These include mature woodlands, upland buffer wetlands and water bodies, prime farmland, natural meadows, sites of historic, cultural, scenic or archeological significance, and areas containing critical wildlife habitat.<sup>5</sup> After deducting these areas from the remaining buildable acreage, lots are clustered in a manner that affords a nominal spacing of dwellings in accordance with all fire and development codes.

A seven step approach is recommended in designing a conservation subdivision. A listing and description of each of these steps is as follows:<sup>6</sup>

1. Identify all conservation areas. This process entails the delineation of primary and secondary conservation areas already described.
2. Locate the sites of all dwellings. It is recommended that dwellings be clustered and designed such that no garages front any street. Lots are to be no larger than one-half acre. Septic tanks and wells may be located on common land.
3. Design the street alignments and trail system. Streets should be designed so that they tuck into the natural landscape following topographic contours as much as possible.
4. Draw in the lot lines. Lots should be reduced in size as much as is practical, marketable and safe, and be aggregated in groups no larger than 20 lots. All residual acreage should be conjoined with areas being conserved. A portion of this common area should contain non-intrusive recreational amenities.
5. Locate the septic tanks and fields. A sufficient amount of acreage should be allocated to the location of septic systems. Whenever possible, alternative systems utilizing peat moss and constructed wetlands should be investigated. These systems require far less land than traditional “low flow” sewage disposal systems.
6. Plan out recreational fitness areas, foot trails, and exercise paths. All recreational facilities and activities must be readily accessible. Such activities may include: walking trails in riparian buffer areas, picnic facilities, playgrounds, natural trails in woodland forests, and pedestrian paths scattered throughout the development such that there are no more than three dwellings together not containing a walking path between them.
7. Plan for landscape enhancement utilizing trees and shrubs bearing fruits and nuts to attract wildlife to the site. Developers should focus on planting hardwoods and fruit bearing trees along greenways such as white ash, cypress, oaks, maples, apple, peach, and cherry trees.

The design flexibility afforded via the clustering or tighter grouping of single-family residences is such that various types of these cluster residential developments are now being developed under a variety of banners besides the "conservation subdivision" concept discussed above. These include "Traditional Neighborhood Development" practices, the "New Urbanism", and Smart Growth practices.

New Urbanism is a development trend that began in the late 1970's and 1980's by a few disenchanting architects and planners. By the 1990's the new urbanist movement had become highly organized and unified in its approach. This trend which is essentially synonymous with the concepts entitled "traditional neighborhood development" and "neo-traditional development" seeks to reinstitute the mixed use urban development patterns that were common during the first quarter of the nineteenth century, with of course some notable improvements. The new urbanist approach offers a viable option to the "automobile driven" suburban sprawl that we are all familiar with. In contrast, this concept strives to create a pedestrian-friendly environment on a far more human scale than the environments that characterize the predominate development techniques of the last fifty years. Accordingly, new urbanism endeavors to borrow that which has been lost from the past while adapting itself to the design advantages of the present. Perhaps above all, the new urbanist approach is an attempt to re-instill a sense of community and true social interaction between persons that reside within such rejuvenated communities.

As outlined in the book Towns and Town Making by Andres Duany and Elizabeth Plater-Zyberk there are a number of key premises upon which the new urbanist platform rests. Some of these are as follows:<sup>7</sup>

1. Every neighborhood should have a discernible center or focal point.
2. All dwellings should ideally be located within 2000 feet of the town center, or within a five minute walking time.
3. There should be a variety of housing types available to those earning a diverse range of incomes.
4. Shops and offices of different types should be located at the periphery of the neighborhood unit.
5. An elementary school should be located within walking distance of a majority of residences
6. Small playgrounds should be readily available to every child, not being further than a tenth of a mile away.
7. Streets should be relatively narrow, as well as being landscaped whenever possible.
8. All buildings located within the town or neighborhood center should be placed near to their servicing streets.
9. Parking areas and garage doors should not be situated within the front of structures, facing the street.
10. Prominent civic buildings or civic oriented sites should be located at the terminus of major streets and/or at the focal point of the town center.

Notable new urbanist communities that have been developed include: Harle Village Center in Gainesville, Florida, Kentlands in Gaithersburg, Maryland, Harbor Town in Memphis,

Tennessee, Addison Circle in Addison, Texas, Orenco Station in Hillsboro, Oregon, Mashpee Commons in Mashpee, Massachusetts, and the Celebration Community developed by the Disney Corporation in Orlando, Florida.

While it appears that the implementation of the new urbanist philosophy is fostering a real revitalization of interest in many stagnant and deteriorating urban areas, there are at least two remaining challenges that must be met and eliminated if it is to continue to expand and prosper. First, retail enterprises in new urbanist centers must expand their markets to compete with retail businesses in conventional suburban developments (shopping centers), and secondly, housing alternatives within new urbanist neighborhoods must become far more affordable. If indeed the current orientation toward the creation of ever more new urbanist communities does continue, it may be that new urbanism is poised to become one of the prominent real estate and planning approach of the 21<sup>st</sup> century.

## Endnotes

<sup>1</sup>Protecting Natural Wetlands: A Guide to Stormwater Best Management Practices (EPA – 843-B-96-001, October, 1996) p. 18.

<sup>2</sup>David Listokin and Carole Walker, The Subdivision and Site Plan Handbook (Rutgers University Center for Urban Policy Research, New Brunswick, New Jersey, 1990), pp. 202, 204, 208, 209.

<sup>3</sup>Tennessee Growth Readiness; Leadership Training for Planning and Public Works Officials (Tennessee Valley Authority, 2002), p. 16.

<sup>4</sup>Randall G. Arendt, Conservation Design for Subdivisions, A Practical Guide to Creating Open Space Networks (Island Press, Washington, D.C., 1996) p. 6.

<sup>5</sup>Greenway Conservation Subdivision Design (Greenway Builders Publications, 2002) pp. 2, 3.

<sup>6</sup>Ibid, pp. 2, 3.

<sup>7</sup>Andres Duany and Elizabeth Plater-Zybeck, Towns and Town Making Principles (Rizzoli Publishing, 1991) p. 20.

## **CHAPTER 4 SUBDIVISION REGULATION ADMINISTRATION, GUARANTEES & RELATED ISSUES**

### **Infrastructure Bonds/Maintenance Bonds**

After a preliminary plat is approved by the planning commission, the developer must decide if improvements will be constructed before recording the plat, or if some type of surety instrument will be posted to guarantee completion of improvements. Sections 13-3-403 and 13-4-303 of the Tennessee Code grant to a planning commission the authority to include in the subdivision regulations a provision that in lieu of completing all improvements, there may be posted a surety instrument (bond) to allow final approval and recording of the plat. These bonds shall be in an amount and with conditions acceptable to the planning commission and the community's legal counsel. If the improvements are not constructed or provisions are not made to extend the bond, the community is granted the power to enforce these bonds by all appropriate legal and equitable remedies. The law also specifies to whom the bond or other surety should be made. It is extremely important that the entity specified to hold the bond has the legal authority to do so.

There are general three types of performance bonds used by communities today to assure completion of improvements. The first of these is the surety bond, which is essentially a type of insurance policy that was once the most popular type of performance bond. Currently, its use is limited because most bonding companies consider them risky and therefore charge extremely high premiums.

A second type of performance bond is the escrow account, where the developer places the funds in an account to be used for improvements. Escrow accounts have never been popular with developers because they tie up funds for long periods of time.

A frequently used type of performance bond is the irrevocable letter of credit, which is the most popular surety instrument used today. These letters, secured from banks or other financial institutions, pledge to pay the community in case of default by the developer and cannot be revoked without approval of the planning commission. Communities and developers feel this type of bond is best because the community is assured the funds will be easily available in case of default, and the developers are able to obtain the letter less expensively than other forms of guarantees.

Developers usually assume that once the improvements are completed their obligation to the community has ended. However, many communities are beginning to require the developer to file a maintenance bond with the planning commission at time of dedication of the improvements. Maintenance bonds serve as a warranty on the improvements that are being dedicated to the community. The length of time and the amount of such bonds are usually specified in the subdivision regulations and also require acceptance by the planning commission. Caution must be exercised to make sure performance and maintenance bonds are required only for public improvements.

## Street Dedication and Acceptance by the Public

### Dedication vs. Acceptance

The final phase of subdivision development is the dedication of improvements to the community. A common misconception among developers is that the improvements are accepted when the plat is recorded and the bond released. But the law clearly indicates that all improvements remain the responsibility of the developer until the chief legislative body accepts them. Sections 13-3-405 and 13-4-305 of Tennessee Code state that approval of a plat by the planning commission shall not constitute an acceptance by the public of any road shown on a plat.

In the case of Foley v. Hamilton, also referred to as a Gatlinburg Case, this provision of the code is substantially reinforced. The developer, in this case, constructed subdivision roads and maintained them for eighteen (18) months as required by the planning commission. At the end of the maintenance period, the bond was released, but the developer did not follow through in having the roads accepted by the county. As a result, the roads were never accepted, and with the passage of several years they became all but impassable. At this point, the property owners filed suit to have the roads repaired. Ultimately decided by the Supreme Court of Tennessee, the decision stated that it is the responsibility of the developer to obtain acceptance of the roads by the community, and until he does, the roads remain the responsibility of the developer.<sup>1</sup>

### Legal Mechanisms

Most subdivision regulations require a formal dedication of streets and other public improvements.

Acceptance of formal offers of dedication of public ways, easements, and parks should be by formal action of the governing body. Such action would be in the form of a resolution recommended by the planning commission to the governing body. As noted earlier, approval by the planning commission of a subdivision plat does not constitute or imply acceptance by the local government of any public way, easement, or other ground shown on the plat. The planning commission may require the plat to be endorsed with appropriate notes to this effect.

*Exhibit 1*, at the end of this section, is a sample form used for dedication purposes<sup>2</sup>:

## **Assessments**

Growth brings challenges along with its many advantages. Maintaining an acceptable level of services is always of concern to municipalities experiencing rapid growth. New methods of financing these services have emerged as tools to be considered alongside traditional tax, user fee or bond issue financing.

### Impact Fees

In recent years, the concept of impact fees has become popular in fast growing localities, and is a measure being studied in many Tennessee communities. In an American Planning Association, Planning Advisory Report, the purpose of impact fees was described as follows:

Impact fees are generally imposed as a condition for some approval to proceed with development. Thus, they fall within the general system of land development regulation as contrasted with revenue raising (taxation) programs. The objective of impact fees is not to raise money. Rather, the objective of impact fees is to insure adequate capital facilities. The adequacy of capital facilities is critically important to the entire system of land development regulation. Where capital facilities are not adequate, permitting development is contrary to the responsibility of a local government to protect health, safety, and welfare. Therefore, a requirement that development proceed only when such adequacy is attained or insured is an act protecting the public from the harm that would occur in the absence of the facilities.

Unlike other types of developer exactions, impact fees are based on a standard formula and a pre-determined fee schedule. Essentially, impact fees require that each new residential or commercial project pay its pro-rata share of the cost of new facilities required to serve that development.

Tennessee, following the approach of other states, in May, 1988, enacted the "Tennessee Cooperative Public Facilities Financing Act" which authorized local governments to finance public facilities through the imposition of fair share fees on new growth and development. Criteria for this fee are described below:

1. The cost of public facilities for which a fair share impact fee may be assessed, imposed, levied or collected must be reasonably attributable or reasonably related to the service demands of the development which is assessed the fee.
2. Fair share impact fees assessed, imposed, levied or collected for development must not exceed a proportionate share of the costs incurred or to be incurred by the local unit of government in providing public facilities to development.
3. Fair share impact fees shall be used and expended to the benefit of the development that pays the fee.

It should be noted that the bulk of this legislation parallels guidelines presented in the American Planning Association PAS Report No. 408, "The Calculation of Proportionate-Share Impact Fees, The Rational Nexus Test." Its generalized provisions are noted below:

1. There must be a reasonable connection between the need for additional facilities and the growth resulting from new development.
2. The fees charged must not exceed a proportionate share of the cost incurred or to be incurred in accommodating the development paying the fee.
3. There must be a reasonable connection between the expenditure of the fees collected and the benefits received by the development paying the fees.
4. The need for additional capital facilities that will be financed with impact fees must be a consequence of new development rather than arising from existing developments.
5. The charges or fees imposed upon a new development must be no more than a proportionate share of the local governments cost of those new capital facilities needed to serve new developments.
6. The revenue raised must be managed and expended at such a time that the development paying the fee will receive a substantial benefit from the improved facility.

Because of the controversial nature of impact fees and resistance from specific groups, the Tennessee Legislature only allows impact fees to be established within certain counties. For a locality other than those within Davidson County to adopt an impact fee system, it is now required that the original act be amended to be general in application or to apply specifically to a town or county through population ranges.

Most localities, primarily counties, are asking the Legislature to enact private acts which allow the imposition of a privilege tax on new development. By making the exaction a privilege tax, the locality can bypass the necessity to correlate an impact fee with the fair share costs of serving the development.<sup>3</sup>

### Development Taxes

Development taxes, also referred to as privilege taxes or development excise taxes, are imposed on the business or occupation of real estate development in general (or a part of that business) in order to raise monies to pay for the added costs that development imposes on the community. Typically, they are assessed at the time of application for a building permit, and are often based on the square footage of the proposed building. However, they can be assessed at other times during the development process (e.g., at time of subdivision), or on the basis of characteristics other than building size. Rutherford County, for example, splits



its development tax of \$750 per residential unit between developers and buildings, charging \$375 at time of final plat and \$375 at time of building permit.

Development taxes differ from impact fees in several important ways. First, they are primarily a tool for raising revenue, as opposed to a land use regulation designed to finance facilities for specific developments. Second, they do not have to be earmarked or segregated or accounted for separately from the local government's general revenues. Rutherford County, for example, places the tax revenue in the general fund. Third, they can be used to pay for operations and maintenance of facilities, as well as for their construction. Fourth, they generally do not need to be based on either general or specific studies to document a reasonable relationship of burdens and benefits. For all of those reasons, the developments tax mechanism offers municipalities substantially more flexibility in raising revenues to cover the costs of development.

At the same time, development taxes differ from ad valorem property taxes. They are not taxes on property at all, but are taxes on the exercise of an occupation. They are generally not subject to constitutional and statutory requirements of uniform real property taxation. They are seldom based directly on the value of a property, but are usually calculated based on some measure of the amount of construction itself. Finally, unpaid ad valorem property taxes are generally secured by a lien on the property, while payment of the development tax is not secured by a lien. Instead, it is usually collected at the time of building permit issuance.

Development taxes are adopted pursuant to municipal taxation powers, and not police powers. As a result, they are generally not subject to the body of law dealing with the limits of police power regulations and exactions. Court-defined standards for "nexus," "reasonable relationships," and "rough proportionality" generally do not apply.

Development taxes are not without disadvantages. In spite of the fact that development taxes are not subject to the strict nexus/rational relationship test, studies may still need to be compiled. Generally, it is good practice to calibrate development taxes carefully, based on the types of expenses that they are intended to cover. In addition, the adoption of new taxes is generally more unpopular than the adoption of new impact fees or special assessments, even though the practical results and burdens of the different tools may be the same.

Impact fees and development taxes are different mechanisms for achieving the same broad goal of shifting more of the cost of growth onto the developments creating the need for expanded infrastructure. The key differences between the two may be summarized as the "legitimacy and predictability" of impact fees versus the "flexibility and simplicity" of development taxes.<sup>4</sup>

## Tennessee Cases

There have also been court cases involving situations in Tennessee which have bearing on the enforcement of subdivision regulations.

One area of concern is the dedication of streets and utilities. *Foley v. Hamilton* 659 S.W. 2d 356 (Tenn 1983), has already been noted earlier in this report for its significance regarding dedication versus acceptance of streets. To reinforce the point, it is noted that the Supreme Court of Tennessee stated it is the responsibility of the developer to obtain acceptance of the roads by the community, and until he does, the roads remain the responsibility of the developer.

Remedies for violations of the Subdivision Regulations are another concern addressed by the courts. In the case of *Lake County v. Truett* 758 S.W. 2d 529 (Tenn. Court of Appeal 1988), the court held that the developer was not relieved of his responsibility to have a plat approved by the planning commission although the commission secretary had erroneously signed the plat and it had been recorded. The Court of Appeals of Tennessee affirmed the decision enjoining the developer from the sale of lots and went even further in directing the county to take whatever steps necessary to cause the illegally recorded plats to be expunged from the records of the county. If the plat is accidentally recorded without the planning commission's approval, the developer is still legally responsible. Although this was a county case the issue is still relevant to Municipal Planning Commissions due to the similar nature of the enabling legislation.

In the case of *Williamson Planning Commission v. Hamilton Bank*, 473 U.S.72 (1985)473 U.S. 172, the US Supreme Court held that a developer cannot litigate a case until a final decision has been made by the Planning Commission. The Planning Commission had denied the developer's proposal because it did not meet the standards of the regulations. The developer had not properly asked for variances that would have allowed the development, therefore, the court held that the developer had not completed the process.

## Endnotes

<sup>1</sup>State of Tennessee, Local Planning Assistance Office, Tennessee Planning Commissioner Handbook, 2003, pp. 36-37.

<sup>2</sup>Local Planning Assistance Office, Middle Tennessee Region, Model Subdivision Regulations, undated.

<sup>3</sup>TPC Handbook, op. cit., pp. 39-41.

<sup>4</sup>Duncan Associates, Impact Fee Study: Smyrna, TN, October, 1999.

**EXHIBIT 1**

**SAMPLE FORM FOR OFFER OF  
IRREVOCABLE DEDICATION**

**AGREEMENT** made this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_, having its office and place of business at \_\_\_\_\_, \_\_\_\_\_, Tennessee, hereinafter designated as the "local government".

**WHEREAS**, the \_\_\_\_\_ Planning Commission is in the process of approving a subdivision plat entitled \_\_\_\_\_, dated \_\_\_\_\_, and made by \_\_\_\_\_; and

**WHEREAS**, said map designates certain public improvements consisting of \_\_\_\_\_ to be dedicated to the Town of \_\_\_\_\_ free and clear of all encumbrances and liens, pursuant to the requirements of the planning commission and the local government; and

**WHEREAS**, the developer, simultaneously herewith, shall post a performance bond with the county for the construction, maintenance, and dedication of said improvements, if required;

**WHEREAS**, the developer is desirous of offering for dedication the said improvements and land to the town more particularly described in Schedule \_\_\_\_\_ attached hereto;

**WHEREAS**, the developer has delivered deeds of conveyance to the town for the said land and improvements as described herein;

**NOW, THEREFORE**, in consideration of the sum of one dollar (\$1.00) lawful money of the United States paid by the town to the developer and other good and valuable consideration, it is mutually **AGREED** as follows:

- A. The developer herewith delivers to the town deeds of conveyance for the premises described in Schedule \_\_\_\_\_ attached hereto, said delivery being a formal offer of dedication to the town until the acceptance or rejection of such offer of dedication by the Board of Mayor and Aldermen.
- B. The developer agrees that said formal offer of dedication is irrevocable and can be accepted by the town at the time.
- C. The developer agrees to complete the construction and maintenance of the land and improvements pursuant to the performance bond and the requirements of the \_\_\_\_\_ Planning Commission and any ordinances, regulations, requirements, covenants, and agreements that may be imposed by the town with respect thereto and, upon acceptance by the town of the offer of dedication, furnish to the town a sworn statement certifying that the premises

are free and clear of all liens and encumbrances and shall furnish to the town a check for all necessary fees and taxes to record the deeds heretofore delivered.

D.

\_\_\_\_\_, 20\_\_ \_\_\_\_\_  
Date Developer

**(CORPORATE SEAL)**

ATTEST: FOR THE COUNTY OF \_\_\_\_\_  
BY \_\_\_\_\_  
\_\_\_\_\_, 20\_\_ \_\_\_\_\_

**ACKNOWLEDGEMENT: COPARTNERSHIP**

**STATE OF TENNESSEE**

**(COUNTY OF \_\_\_\_\_) SS.: \_\_\_\_\_**

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, before me personally appeared \_\_\_\_\_, to me known and known to me to be one of the firm \_\_\_\_\_, described in and who executed the foregoing instrument, and he thereupon acknowledged to me that he executed such instrument as and for the act and deed of said firm.

\_\_\_\_\_  
CORPORATE

**STATE OF TENNESSEE**

**(COUNTY OF \_\_\_\_\_) SS.: \_\_\_\_\_**

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, before me personally appeared \_\_\_\_\_, to me known, who, being by me first duly sworn, did depose and said that he resides in \_\_\_\_\_; that he is the \_\_\_\_\_ of \_\_\_\_\_, the corporate seal affixed to said instrument is such corporate seal; that it was so affixed by order and authority of the Board of Directors of said corporation, and that he signed his name thereto by like order and authority.

\_\_\_\_\_  
INDIVIDUAL