

# SUBDIVISION REGULATIONS & INFRASTRUCTURE



*Local Planning Assistance Office*

*Planning Commissioner Training*

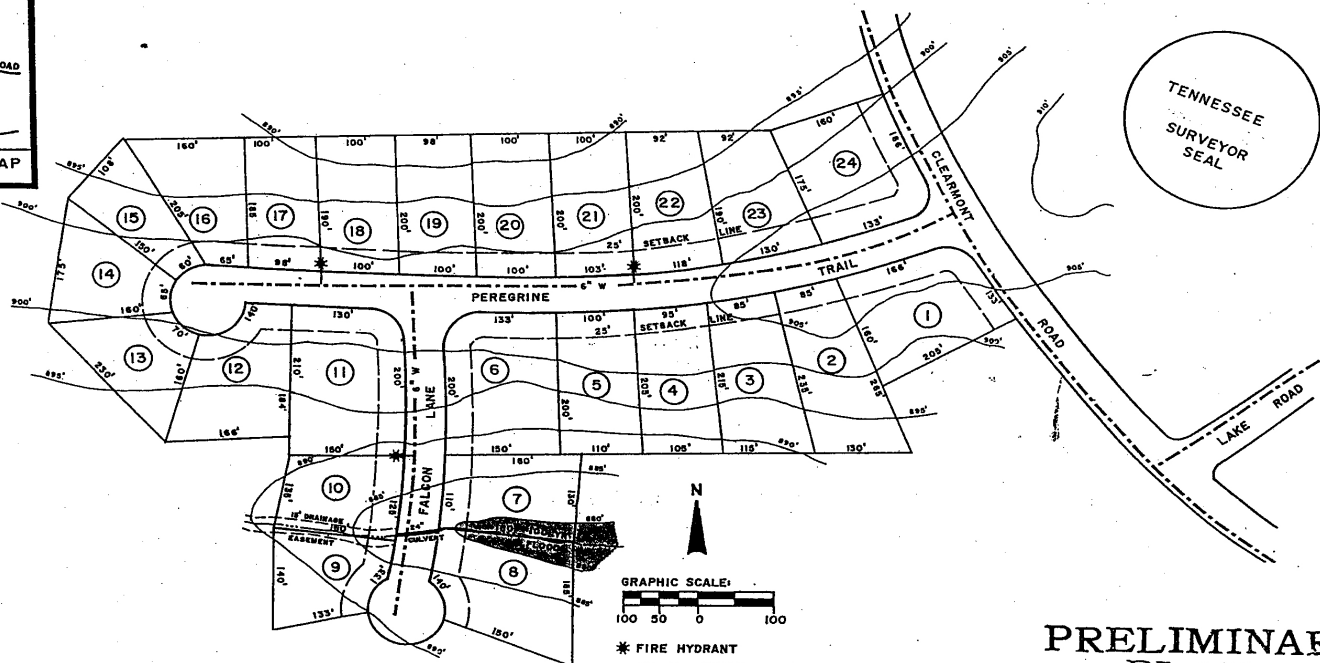
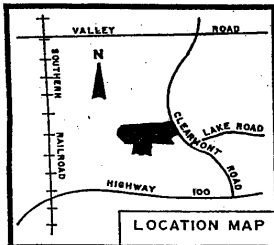


# SUBDIVISIONS

*How many do you have?*



# THE PURPOSE OF SUBDIVISION REGULATIONS



\* FIRE HYDRANT  
TOTAL ACREAGE: 12.4  
NOTE: Sewage By Septic Tanks, No  
Zoning In Area

## PRELIMINARY PLAT

FALCON CREST SUBDIVISION	
OWNER & DEVELOPER: A. CITIZEN	
(555-0000)	111 VALLEY ROAD
	COUNTY, TENNESSEE
ENGINEER/SURVEYOR: COUNTY DRAFTING, INC.	
(555-1111)	P.O. BOX 12
	COUNTY, TENNESSEE
DATE: 1/1/90	

## Subdivision Regulations in Tennessee History

- *Tennessee enacted State version of SCPEA in 1935*
- *Planning authority organized into municipal and regional authority*
- *Subdivision Definition*

“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 re-subdivision and when appropriate to the context, relates to the process of re-subdividing or to the land or area subdivided.

# EXERCISE #1

Illustration #1

100 acres

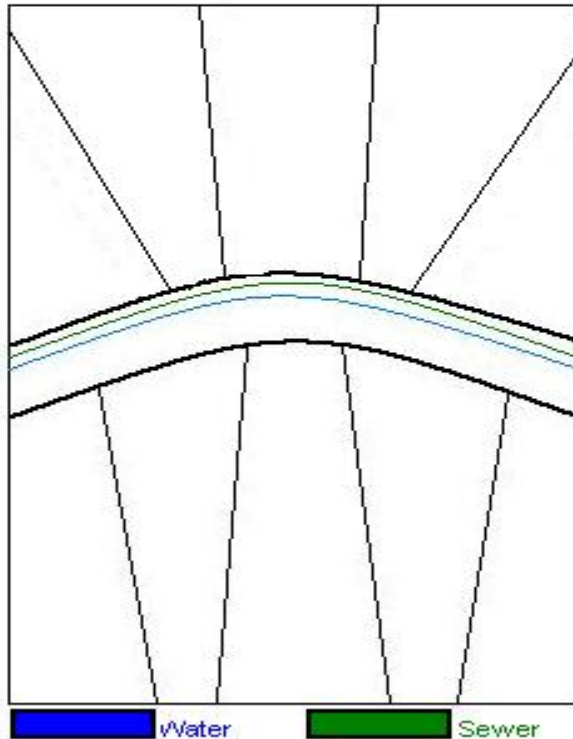
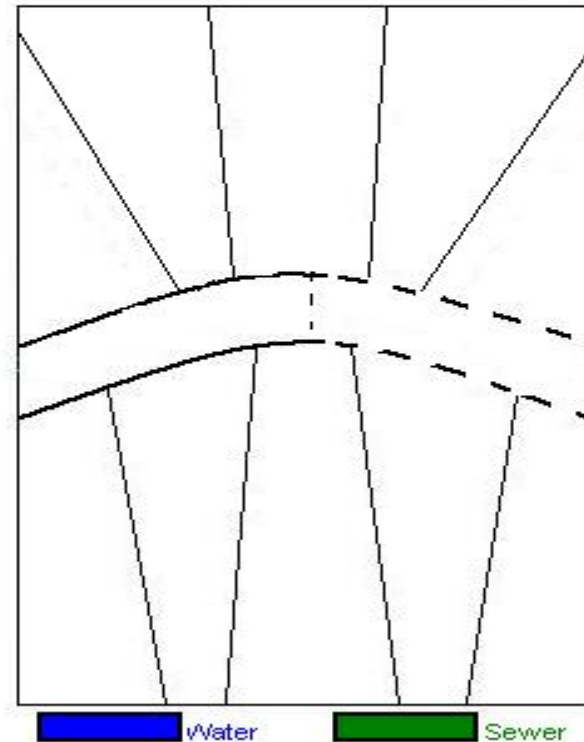


Illustration #2

100 acres



# Subdivision Regulations: Adoption and Use

- *Major Road Plan is a prerequisite*
- *Implementation of Comprehensive Plan*
- *Enforcement is critical*

## *TCA Citations:*

- *13-4-306: prohibit property sales based on unapproved plats*
- *13-4-307: accepting unapproved roads*
- *13-4-308: prohibits issuing building permits for lots with unapproved access*



# SUBDIVISION REGULATION DEVELOPMENT



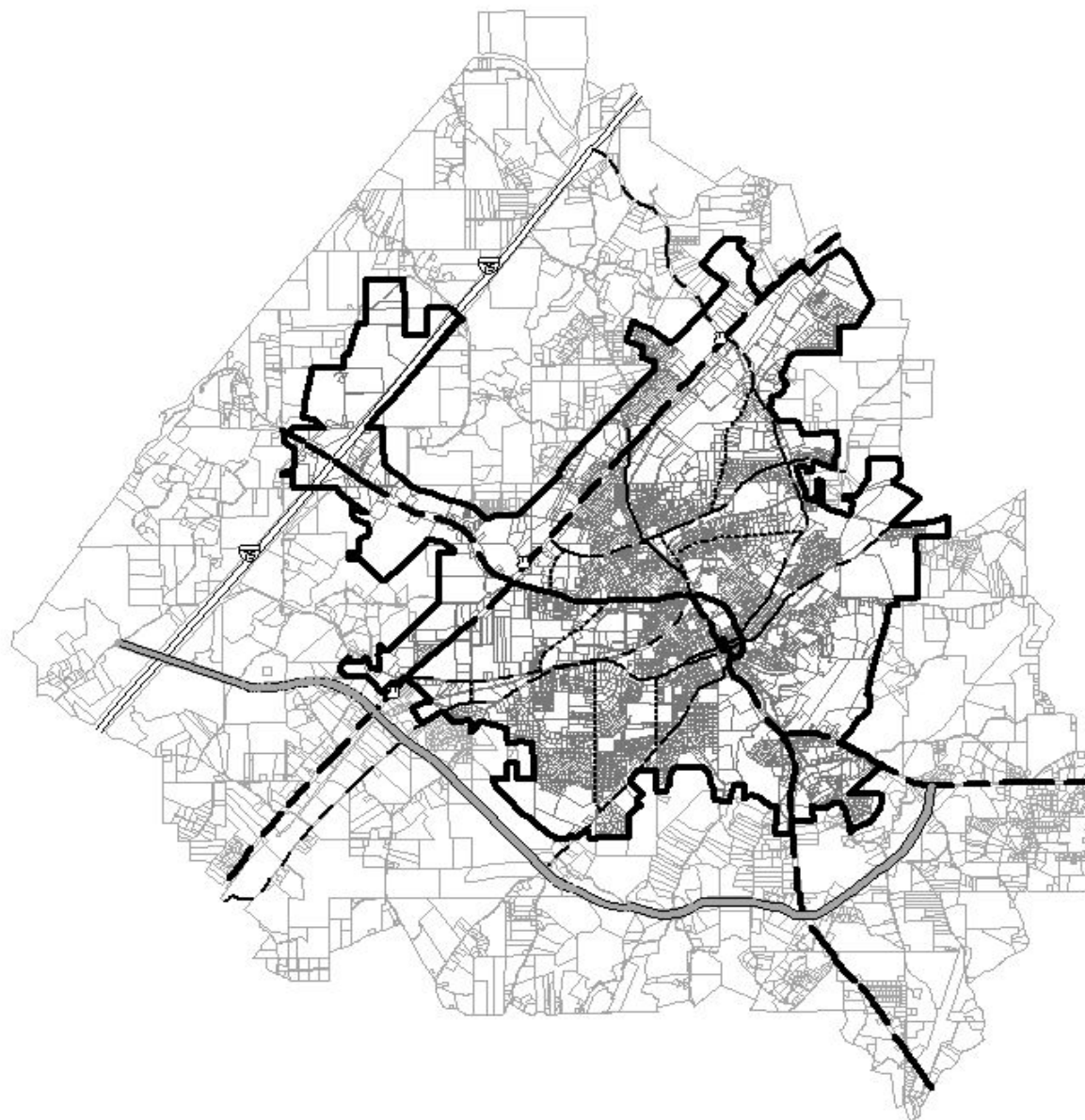
# SUBDIVISION REGULATIONS: THE MAJOR ROAD PLAN

*A Street Classification System*

*Arterial, collector, residential*

*Plans for Future Streets*

*Street Types=Right-of-Way Requirements*



## ATHENS, TENNESSEE

### Major Road Plan

Illustration 5-8

January 2004



6000 0 6000 12000 Feet

-  Interstate
-  Major Arterial
-  Minor Arterial
-  Collector
-  Proposed Bypass
-  Parcels
-  City Limits

Map Prepared By:  
State of Tennessee  
Local Planning Assistance Office  
Chattanooga, Tennessee

This is not an Engineering Map

# EXERCISE #2

## JASPER, TENNESSEE

### Major Road Plan/ Traffic Counts

Illustration 5-6

January 2004



3000 0 3000 6000 Feet



Note: All others Local

Corporate Limits

Parcels

Tennessee River

39630 2002 Traffic Data acquired  
from the Tennessee Department  
Of Transportation (TDOT)

Map Prepared By:  
State of Tennessee  
Local Planning Assistance Office  
Chattanooga, Tennessee

This is not an Engineering Map

# SUBDIVISION REGULATIONS: THE ADOPTION PROCESS



*Planning Commission develops proposed standards*

*Input needed during preparation from street and utility providers*

*Public Notice posted: Public hearing held by the Planning Commission*

*Majority vote of the Planning Commissioners present needed for adoption*

# SUBDIVISION REGULATIONS: TECHNICAL STANDARDS



*Street Standards: Design, Construction, Inspection*

*Water: Potable water, Fire Protection, Construction standards*

*Sewer: Expansion where possible, Connection requirements*

*Drainage: Design to limit runoff to pre-construction levels, Federal Phase II requirements*

# SUBDIVISION REGULATIONS: PLAYERS & THEIR ROLES

## *The Land Owner*

- select a surveyor to develop a plan that meets the landowner's needs*

## *The Surveyor & The Engineer*

- surveyor establishes boundary lines; engineer designs infrastructure*

## *Infrastructure Providers*

- extension policies for water, sewer, electrical, telephone, gas, cable service; streets administered by the local government*

## *Planning Commission*

- develops subdivision regulations; reviews, then approves or denies subdivision plats*

## *City Commission*

- selects one member to serve on PC; sets streets standards and accepts conforming streets*

## *Planning Staff*

- works with all of the above to assure a smooth process*

# SUBDIVISION REGULATIONS: THE FINAL PRODUCT



- *Legal Preambles*
- *Definitions*
- *Plat Requirements and Submittal Process*
- *Construction & Design Standards*
- *Enforcement, Penalties*

# SUBDIVISION REGULATIONS: PLAT SUBMITTAL & APPROVAL



## *Preliminary Plat*

*-also called Design Plat; shows general lot layouts, overall development uses and densities, locations of infrastructure elements*

## *Construction Plat*

*-not always required; shows detailed engineering of infrastructure*

## *Final Plat*

*-instrument used to record the final approved design; shows all lot lines and street locations; contains certificates to document approvals*



## EXERCISE #3





# SUBDIVISION DEVELOPMENT & SITE DESIGN

# SUBDIVISION DESIGN TECHNIQUES AND ISSUES



- *Consider existing street and utility capacities*
- *Avoid problematic natural features*
- *Fit the development to the site, not vice versa*
- *Conserve trees, nature habitat, and wetlands as open space*
- *Adequately design for storm water*
- *Design issues involve short-term and long-term costs*

# SUBDIVISION DESIGN: USING ALTERNATIVE TECHNIQUES



*Before imposing a design, evaluate the site's features:*

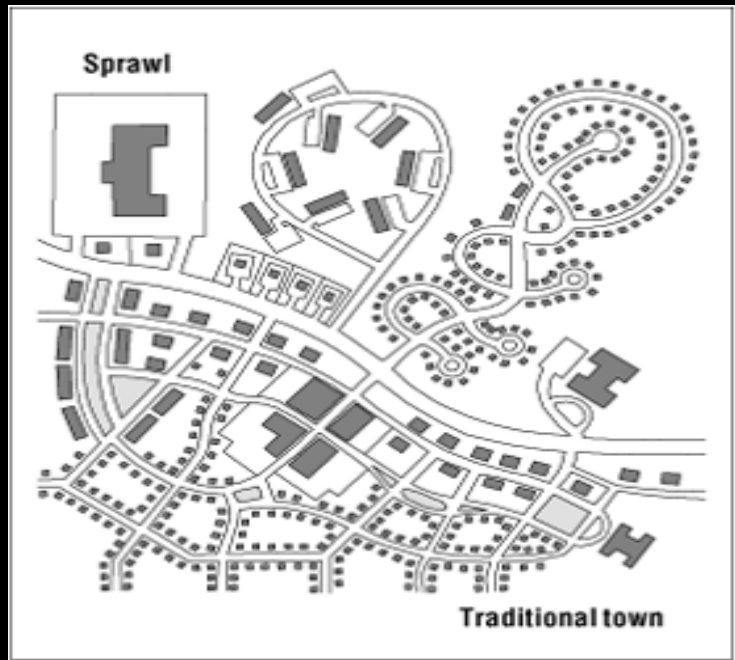
- *soils*
- *geological features*
- *topographic features*
- *hydrological features*
- *plants and wildlife, if applicable*

# SUBDIVISION DESIGN: ALTERNATIVES TO TRADITION



- *Cluster Design*
- *Conservation Design*
- *New Urbanism/TND*

# COMPARISON OF DESIGN PATTERNS



- Vehicular vs pedestrian
- Sprawl vs compact
- Large vs small lot
- Segregated vs mixed use
- Low vs high population density
- Big box vs main street

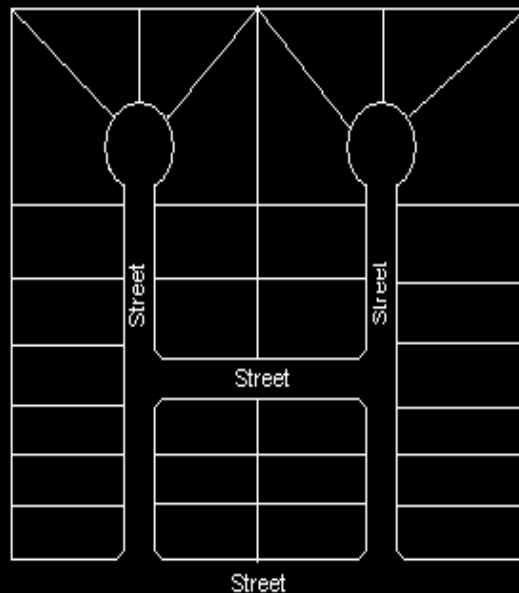
# CONVENTIONAL DESIGN



- Divides entire property into separate parcels
- Environmentally sensitive areas are deeded to individuals
- Streets and utilities may not be designed efficiently

# CONVENTIONAL AND CLUSTER DESIGN

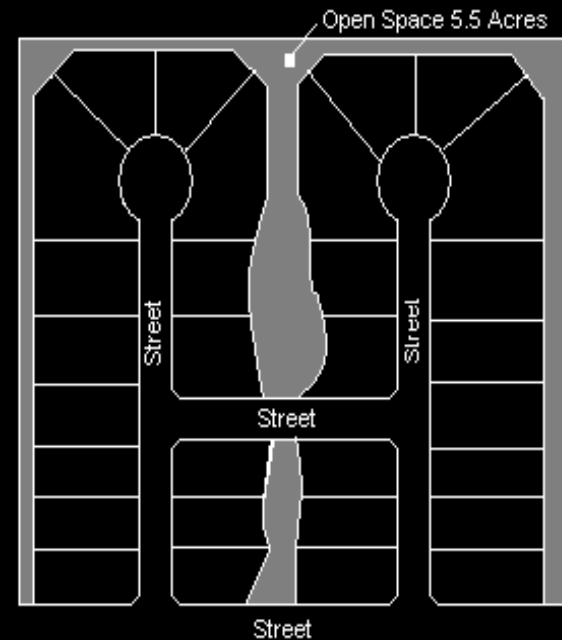
Conventional Subdivision



Number of Lots 30  
Acres 20

Open Space None

Cluster Subdivision



Number of Lots 30  
Acres 20



# CONSERVATION DESIGN



# NEW URBANIST AND TRADITIONAL NEIGHBORHOOD DESIGN



- Conservation Areas
- Public Open Space & Trails
- Use of Alleys for Utilities and Services
- Pedestrian Oriented
- Public Facilities Onsite
- Mixed Use Encouraged

# CONVERSION OF FARM TO SUBDIVISION



LPO Planning Commissioner Training



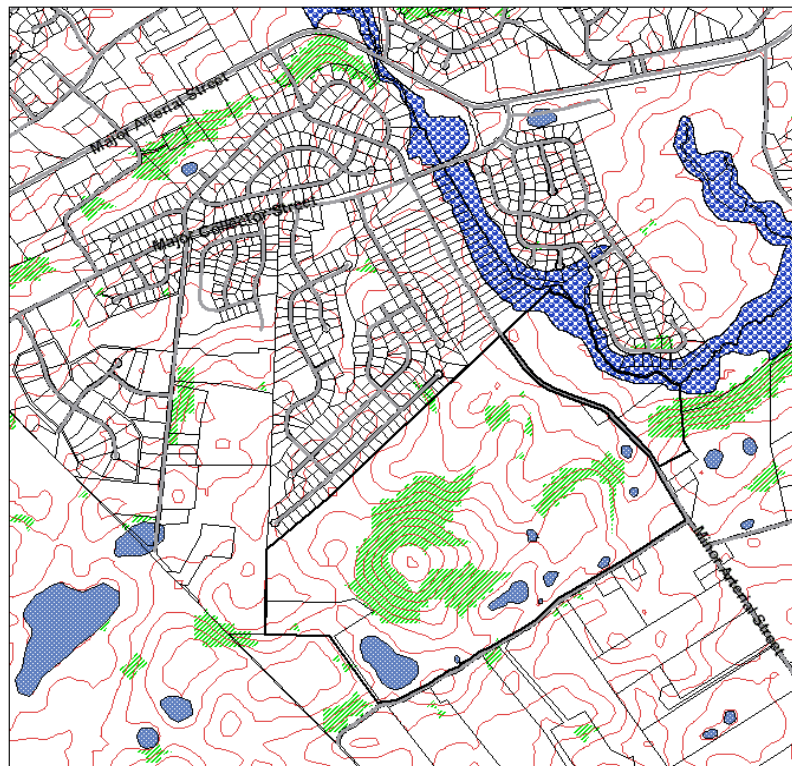
Subdivision Regulations & Infrastructure



# AERIAL PHOTOS ARE USEFUL IN SITE DESIGN









# DESIGN WITH THE PHYSICAL ENVIRONMENT



Planning & Zoning:  
Subdivision and Infrastructure

Site Design  
Factors

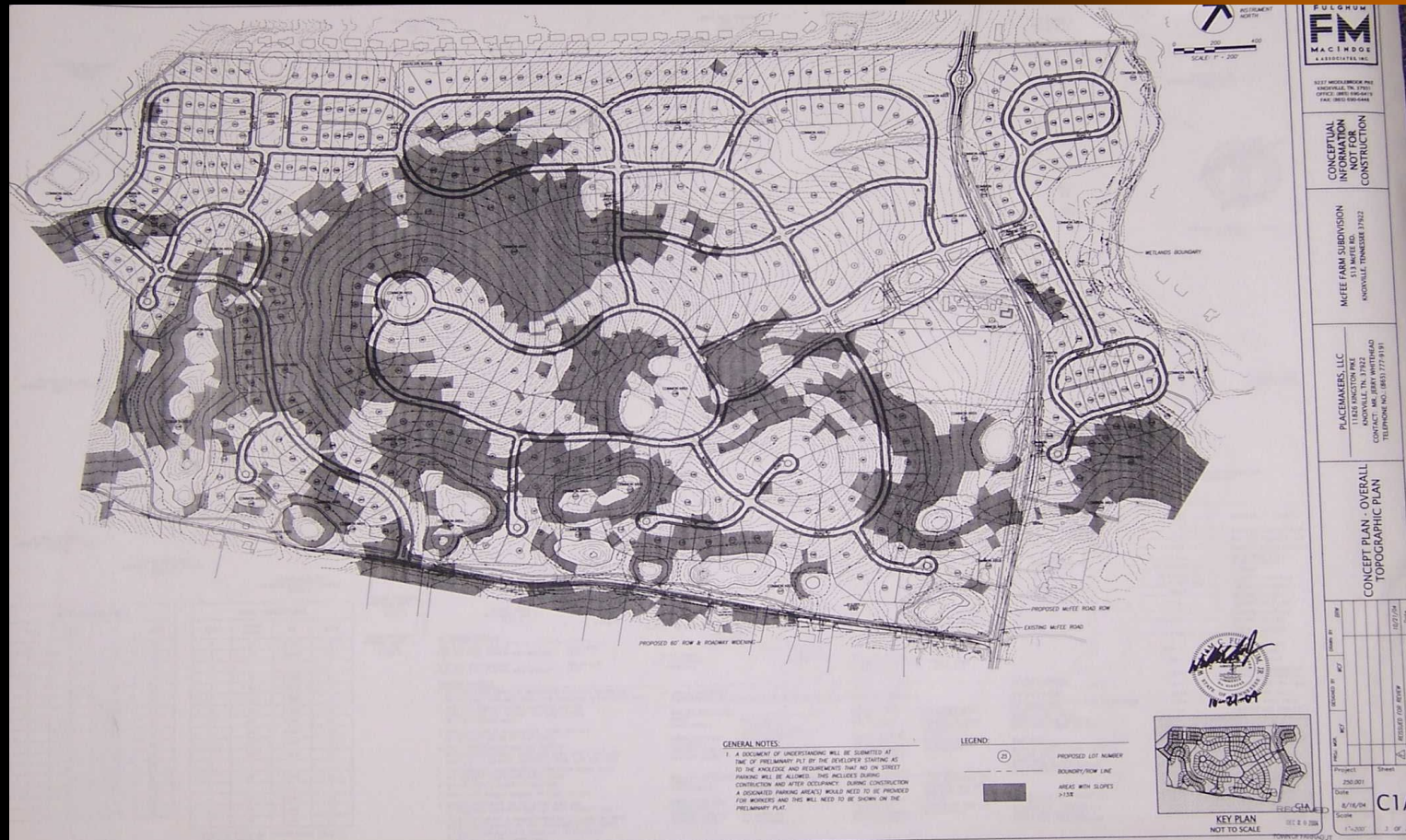
Legend

-  Streets
-  Parcel Lines
-  Flood Plain & Wetlands
-  Sinkholes
-  20 Foot Contours
-  Slope > 15%





# CONSERVATION DESIGN EMPHASIZING OPEN SPACE WITH SLOPE, WETLANDS & TREE PRESERVATION





## EXERCISE #4: DESIGN A CONSERVATION SUBDIVISION



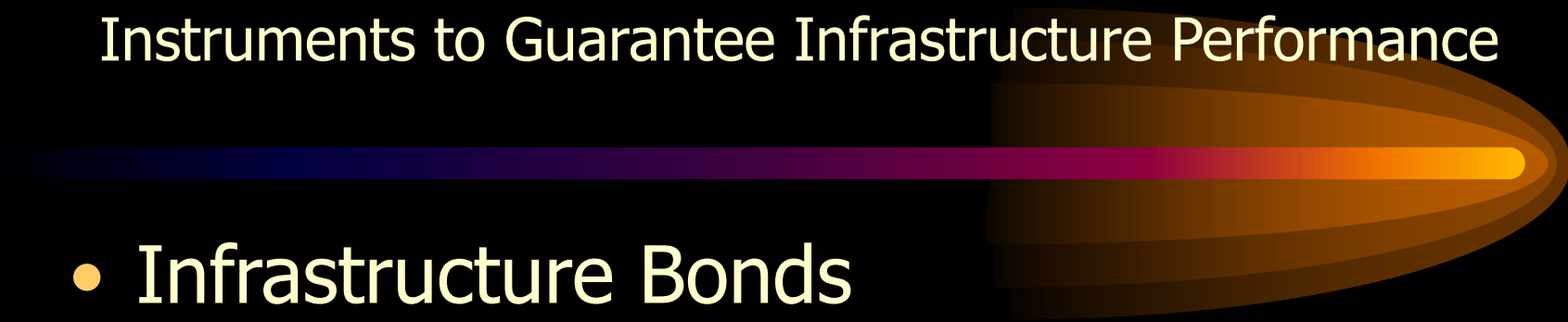
- *Keep out of the floodplain*
- *Protect Sinkholes*
- *Preserve forests where practical*
- *Keep street grade under 15%*
- *Cluster and mix lot sizes*





# SUBDIVISION REGULATION ADMINISTRATION, GUARANTEES & RELATED ISSUES

# Instruments to Guarantee Infrastructure Performance



- Infrastructure Bonds

- *Surety Bond*
- *Escrow Account*
- *Irrevocable Letter of Credit*

- Maintenance Bonds lessens financial impact on taxpayers by serving as a “warranty” on improvements

## Dedication & Acceptance: Streets and Other Public Ways

- Foley v. Hamilton – *Dedication* ≠ *Acceptance*
- Formal Dedication Process includes a recommendation from the Planning Commission and a legal mechanism to perform the transfer to the public by the legislative body

# Development Assessments

A decorative graphic consisting of a horizontal bar with a color gradient from dark blue on the left to bright yellow on the right. To the right of this bar is a large, stylized arrow pointing to the right, filled with a gradient from dark brown to light brown.

## Impact Fees vs. Development Taxes and Exactions

## IMPACT FEES



- Imposed as a condition for approval of development
- Finances public improvements directly impacted by development
- Fees assessed must not exceed proportionate share of costs incurred by local government in providing public facilities
- Fees must be used to the benefit of the development that pays the fee

## DEVELOPMENT TAXES/PRIVILEGE TAXES



- Revenue-raising tool
- Can be added to the community's general fund
- Funds can be used for operation and maintenance of facilities
- Not subject to "rational nexus" or "rough proportionality" determinations



# IN SUMMARY

*Questions??*