

GUIDE RESIDENTIAL GROWTH

5

Overview

The potential for residential development in Lisbon is an important factor in planning for the Town's future. Approximately 94 percent of Lisbon is residentially zoned and only 32 percent of the land area is currently developed. Under zoning standards now in place, another 3000 residences could be added. At the current average of 2.6 persons per household, this would bring the eventual population of Lisbon to about 12,000 people.

Environmental and aesthetic impacts from residential development become more apparent as the amount of development increases and the pace of development quickens. Lisbon must take steps now to ensure that future development patterns and designs reflect and sustain the community's character and its quality of life.

Additionally, municipalities are required by State Statute to consider housing opportunity in their Plans. Lisbon, like many Connecticut towns, faces changes in the composition of its population, particularly with respect to average age. Lisbon is also like many towns in needing to consider affordability of housing in its land use planning and regulation.

The pace and intensity of development in Lisbon may fundamentally change the rural character of the community. Residential development must be guided in ways to retain as much of our rural character as possible.



Lot Size Determination

Lisbon's current regulation specifies a minimum acreage per lot, of which a certain amount must be contiguous "buildable area." For open space subdivisions, a density regulation specifies the maximum number of lots per acre of "buildable area."

Consider Alternative Residential Zoning Concepts

As shown on the map on the facing page, considerable potential exists in Lisbon for additional residential development. The Planning and Zoning Commission and Town residents have identified this as a key issue and this section of the Plan outlines strategies for managing residential development to maintain the character of the community and ensure sustainable rates of residential growth.

Existing Regulations

Lisbon's residential zoning standards are based on a defined minimum lot area that includes a minimum contiguous buildable area, defined in the regulations to limit or exclude constrained land. A build out analysis based on these standards estimates that 3000 new building lots could eventually be created in Lisbon.

In addition to the geometric and buildability standards, Lisbon's zoning regulations permit "open space" subdivision designs. This regulation allows parcels of 20 acres or more to be subdivided without regard for lot sizes (other than an absolute minimum of 25,000 square feet) as long as the number of lots does not exceed that permitted under the standard regulations for the buildable area within the entire parcel.

While functional, these existing regulations may not necessarily ensure development patterns that address the Town's concerns for preserving the community's character and managing the ultimate development yield in Lisbon. If conservation design subdivisions are discretionary, regulations may need to ensure adequate incentives to encourage such designs, otherwise developers may revert to standard development patterns. Standards should also ensure that subdivision designs meet minimum standards to protect such community assets as streetscapes, viewsheds, ridgelines, water resources, and priority open spaces.

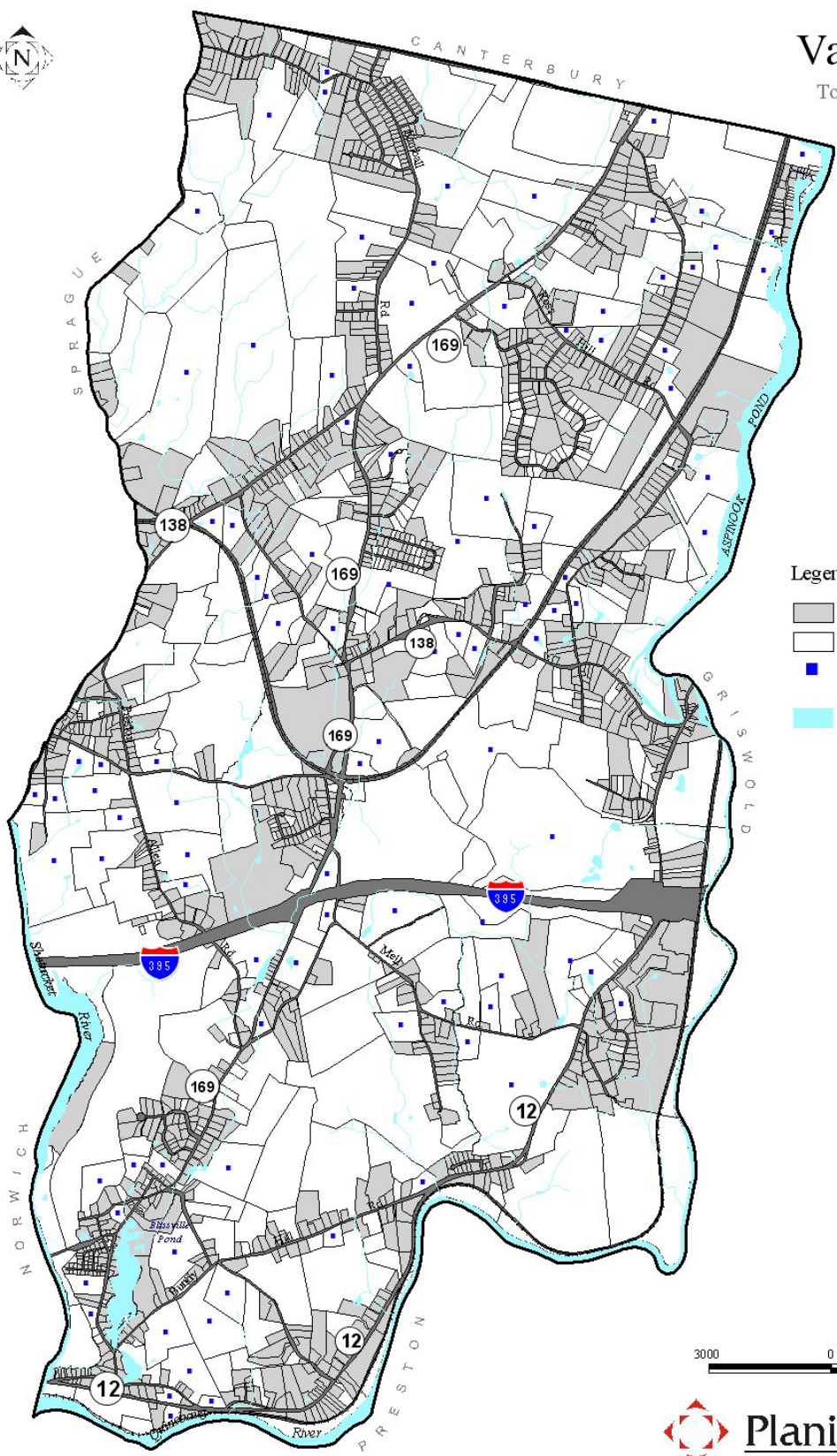
Additional refinements to zoning and subdivision regulations that have been applied in other Connecticut communities to address these concerns are summarized in the following table.

Zoning Concept	Description
Buildable Area	Establishes standards for calculating the minimum required area for a building lot based on constraints
Soil-based Zoning	Calculates minimum required area based on soil types
Density Standards	Applies a maximum density factor to the calculated buildable area on a given parcel
Conservation ("Open Space") Design	Allows lots smaller than the underlying residential zone standard, but with increased open space set aside and no increase in overall density



Vacant Land

Town of Lisbon, CT



- Legend
- Developed Land
 - Vacant Land
 - Underdeveloped Land
 - Water and Watercourses



**Planimetrics**
3 E-sign Drive, Avon, CT 06001 860 677 1267

Zoning Concepts

This Plan offers three zoning options for further consideration:

- a. increase lot size and/or minimum buildable area in each existing residential district,
- b. establish town-wide density limits based on buildable area, and
- c. establish town-wide density limits based on soils types.

Under any of these options, reduction of the minimum lot size may be allowed if conforming to specific standards for conservation subdivisions, provided separately in the Subdivision Regulations.

The following table provides estimates of potential increases in housing units and populations under existing regulations and under the options listed above. Because of the number of variables involved, these are only approximations provided to illustrate relative impacts of the alternatives. The build-out estimates would vary depending on density factors chosen; this table applies the factors listed in the conceptual regulations provided below.

Hypothetical Build-out Comparison		
Zoning Concept	Number of New Housing Units	Ultimate Population Increase*
Existing Regulations	3,000	7,800
Increased Lot Size	1,950	5,070
Buildable Area/Density	2,050	5,900
Soil-based/Density	1,330	3,500
Current Conditions (2000)	1,560	4,069

*based on 2.6 persons per household

Lot Size Standards: The Planning and Zoning Commission recently initiated consideration of this option, which would simply increase the minimum lot size. A hypothetical buildout of Lisbon with a town-wide minimum lot size of 80,000 square feet would yield about 1,950 new lots, compared to the 3,000 possible under current standards, as shown on the comparison table above.

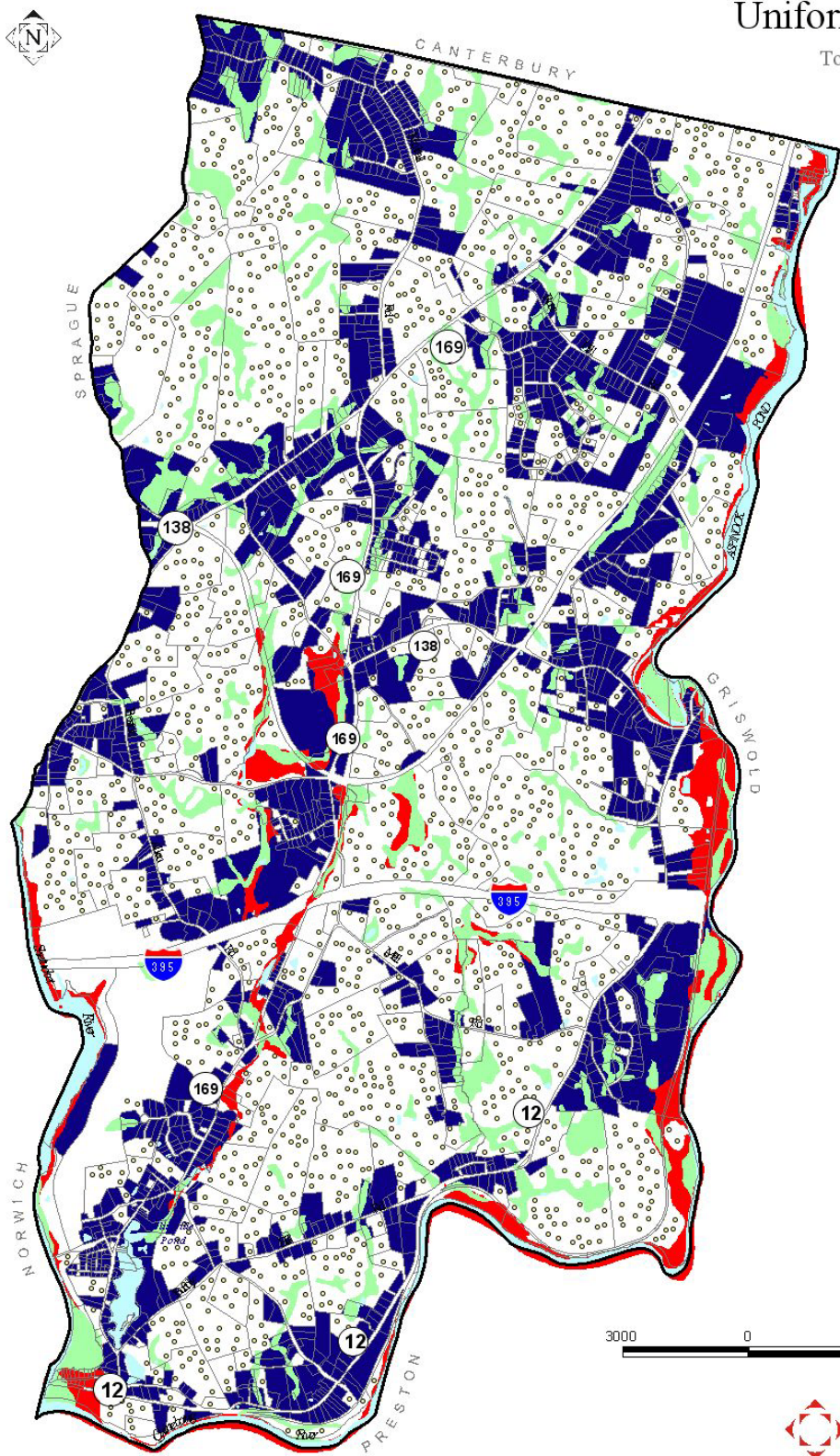
While this approach might increase the incentive for property developers to apply the conservation subdivision design provisions, it would create a significant number of non-conforming properties. Currently, approximately 1,020 parcels in the R-40 and R-60 districts are smaller than 80,000 square feet. Therefore, this approach is the least recommended alternative.

The zoning map under this approach and the approximate buildout result are shown on the facing page.



Uniform R-80 Zoning

Town of Lisbon, CT



Legend

- Floodplain
- Wetland
- Built-out Parcels
- New Buildings
- Water

1,950 New Houses



31 Lisbon Drive, Avon, CT 06001 508-673-5267

Density Definition

Residential density is simply another way of looking at development yield. For example, seven lots on a 20-acre parcel are the same as a density of 0.35 units per acre.

Like a minimum lot size regulation, a maximum density regulation can be used to regulate development yield from a piece of property.

Buildable Land

A buildable land regulation is based on the concept that not all land is created equal. Yet, when determining residential yield, most zoning regulations treat all areas the same despite the fact that some has less suitability for building.

Adjustability

The density factors can be established based on local experience and other factors.

For example, density factors of 0.3, 0.5, and 0.7 for R-80, R-60, and R-40, respectively, would result in a build out potential of approximately 2,260 new lots under the Buildable/Density Zoning option, compared to a total buildout potential of 2,050 with density factors of 0.2, 0.4, and 0.6, respectively.

Buildable Area Density Standards: The buildable area concept in the existing regulations establishes an additional geometric requirement for building lots. An alternative approach to ensuring adequate suitable land and encourage better subdivision designs is to establish density standards for each existing residential district, based on the availability of buildable area.

This approach ensures that overall developmental density and yield are controlled since the maximum development of a given parcel is defined by the density standard, and approvals must specify that no further subdivision is permitted once the density yield is reached.

An analysis of the hypothetical build-out potential under this approach yields 2,050 new building lots based on the density standards suggested in the Conceptual Regulation below. The resulting zoning pattern is shown on the map on the facing page. The actual density standard would be determined based on the community's experience with subdivisions.

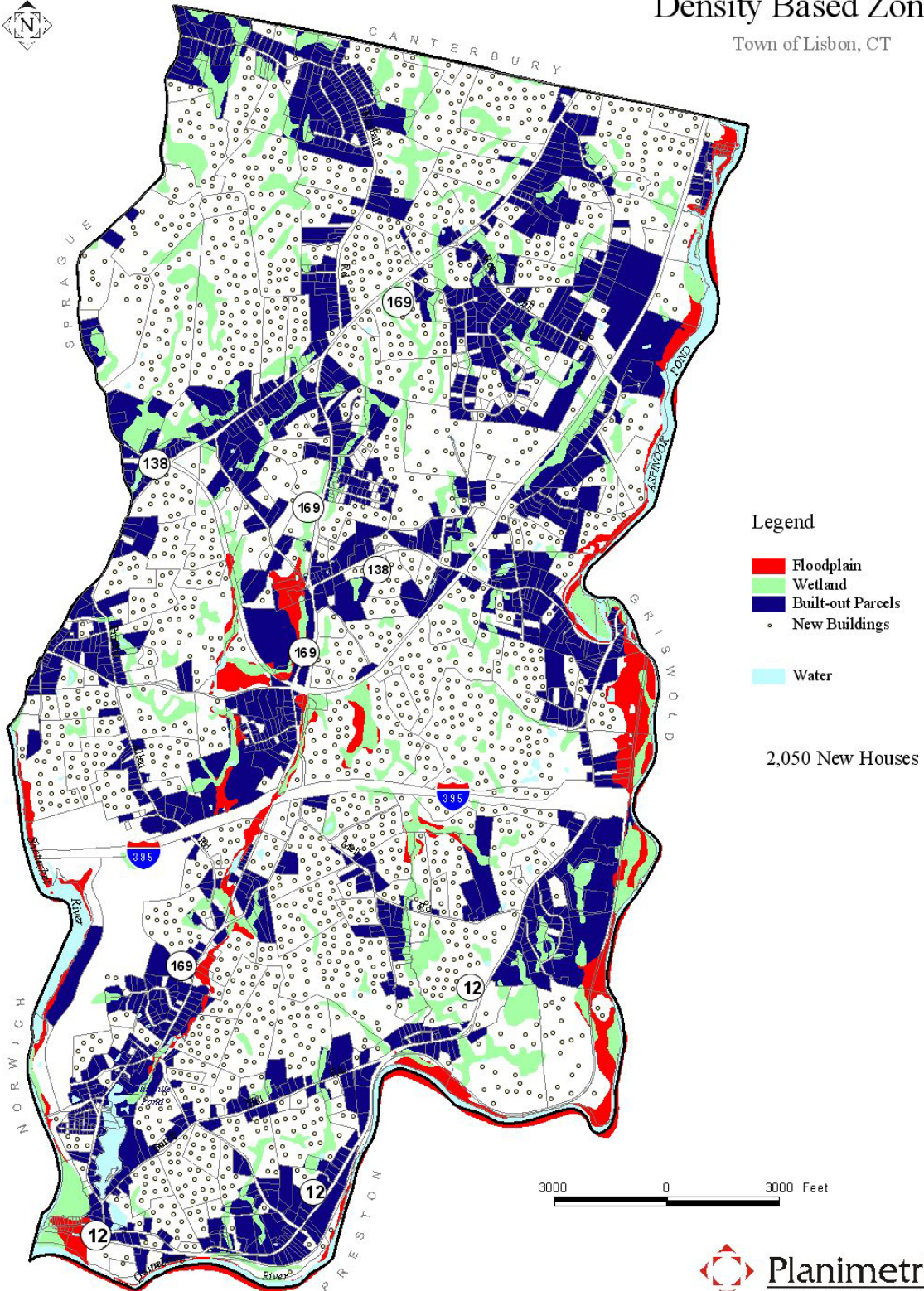
A conceptual regulation to implement this approach is provided below. Because of the relative ease with which this concept could be incorporated and its effectiveness under the soil and topographic conditions found in Lisbon, density-based regulations are the most appropriate zoning tool for Lisbon to adopt.

<u>Conceptual Buildability/Density Zoning Regulation</u>	
8.1	Minimum Lot Sizes. Within the residential use districts designated on the Zoning Map hereto appended, minimum lot size shall be as follows: R-80 – 80,000 square feet R-60 – 60,000 square feet R-40 – 40,000 square feet
8.2	Buildable Area and Density Calculation
8.2.1	The intent of the minimum buildable area and density calculation is to ensure that residential developments conform to the capability of the land to accommodate that development.
8.2.2	For the purposes of these regulations, “buildable land” shall not include areas designated as 100 year floodplain on the FEMA Flood Insurance Rate Maps, inland wetlands, watercourses, slopes in excess of 25 percent, or land constrained by existing easements or permanent use restrictions.
8.2.3	The overall development yield for a given parcel shall be calculated as follows R-80 – 0.2 lots per acre of buildable land R-60 – 0.4 lots per acre of buildable land R-40 – 0.6 lots per acre of buildable land.
8.2.4	Once the overall development yield has been established, the Commission may reduce the minimum lot size standards in Section 8.1, if allowable under applicable health standards for septic treatment and water supply and if conforming with all other standards of these regulations, in any consideration of an application for approval of a subdivision, if such reduction meets the objectives of the Lisbon Subdivision Regulations. In no event shall any building lot of less than 25,000 square feet be approved.
8.2.5	No parcel of land shall have the density factor reapplied once the maximum lot yield has been reached for the original parcel of land that existed as of the effective date of this regulation.



Density Based Zoning

Town of Lisbon, CT



Soil-based Density Standards: Soils-based standards are a further refinement of the buildable land regulation concept discussed above. Rather than specifying land characteristics that define “buildable area,” the underlying soils types are used to determine the number of new lots that a given piece of land can accommodate and the density of development on that land. The soils must be identified and the area of each calculated to arrive at a composite soil factor. A density factor is applied to this to determine the number of lots that the parcel can support.

The map on the facing page illustrates the zoning and density patterns that would result from the standards suggested in the conceptual regulations below. The actual density standard would need to be determined based on the community’s experience with recently developed subdivisions.

A suggested regulation to implement this approach is provided below.

Soils-based Density Zoning Regulation

8.1 Soils Based Density Calculation

8.1.1 The intent of the soils based density calculation is to ensure that residential developments conform to the capability of the land to accommodate that development.

8.1.2 Any parcel to be developed for residential use shall conform to the following density standards:

Soil Based Density Standards			
	Major Natural Soil Group Characteristics	Maximum Density (Units/Acre)	Minimum Lot Size (Acres)
Class A	Excessively- or well-drained	0.50	1.0
Class B	Slope exceeding 15 percent, seasonal high water	0.33	1.5
Class C	Hardpan, shallow, rocky	0.25	2.0
Class D	Hardpan, shallow, rocky; slope exceeding 15 percent	0.15	NA
Class E	Variable	Determined by Commission	NA
Class F	Wetlands	0.0	NA

8.1.3 Land designated as floodplain, wetlands or watercourses, or having slopes in excess of 25% (as indicated by 10 foot contour intervals being separated by less than 40 feet horizontally), or subject to pre-existing utility easements, pre-existing conservation easements, or land that is classified as Class E (except as may be permitted by the Commission) or Class F, shall not be used to calculate density for residential use.

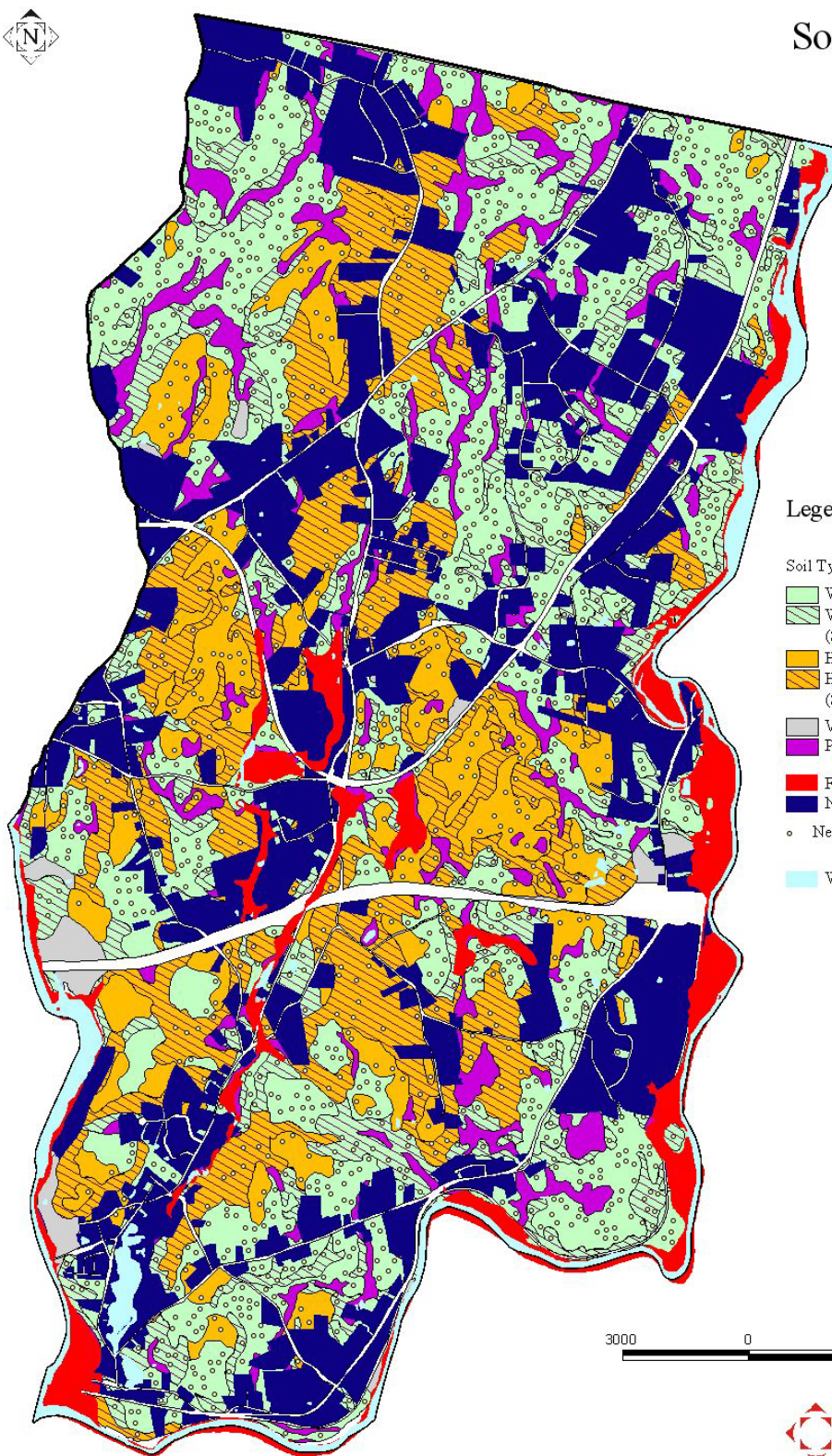
8.1.4 In determining the maximum number of dwelling units to be permitted on a parcel to be subdivided, the area in acres of each soil class within the parcel shall be multiplied by the density factor for that soil class and the products shall be added together to determine the maximum number of dwelling units which may be permitted in the parcel. The final sum so calculated shall be rounded down to the next lower whole number.

8.1.5 Once the overall development yield has been established, the Commission may reduce the minimum lot size standards in Section 8.1, if allowable under applicable health standards for septic treatment and water supply and if conforming with all other standards of these regulations, in any consideration of an application for approval of a subdivision, if such reduction meets the objectives of the Lisbon Subdivision Regulations.



Soil Based Zoning

Town of Lisbon, CT



Legend

Soil Types

- Well Drained
- Well Drained
(Slopes >15% or High Water Table)
- Hardpan or Shallow/Rocky
- Hardpan or Shallow/Rocky
(Slopes > 15% or High Water Table)
- Variable
- Poorly Drained
- Floodplain
- Non-Buildable Parcels
- New Buildings
- Water

1,327 New Houses

3000 0 3000 Feet



Planimetrics
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Single Family Development Patterns

Conventional

A parcel of land that is divided into residential lots with little or no open space

Conservation Design

A parcel of land divided into roughly the same number of lots that are smaller in area than a conventional development and the remaining area is preserved or dedicated as open space.

Conservation design development patterns, also called open space subdivision design, can help ensure that important natural resources and features are protected, open spaces are preserved for public use and enjoyment, and rural character is preserved.

Statutory Changes Since 1990

Section	Subject
8-25(a)	Fee-in-lieu of open space
8-25(c)	Cluster development
8-25(a)	Drainage upgrading
8-25	30 days to deliver approved plan
8-26	Passive solar techniques
8-26	Fee schedule
8-26	Time extensions, expiration, notice
8-26	35 day hearing period

Update and Refine Subdivision Regulations

A key strategy to help the Town guide future development is the establishment of effective, up-to-date subdivision regulations. Amendments to the General Statutes since the last revision of Lisbon's subdivision regulations and the experience of other communities will be incorporated into revisions to Lisbon's subdivision regulations. The table in the sidebar lists statutory amendments since 1990 that should be addressed in the subdivision regulations.

In addition to updating the regulations, two strategies for regulatory revisions will be considered by Lisbon to address residential development issues identified through the planning process:

- refine conservation (open space) subdivision standards, and
- increase open space set-aside requirements and establish open space criteria.

The improvements to road classification and design standards detailed in Chapter 3 will also help improve subdivision designs and reduce environmental impacts.

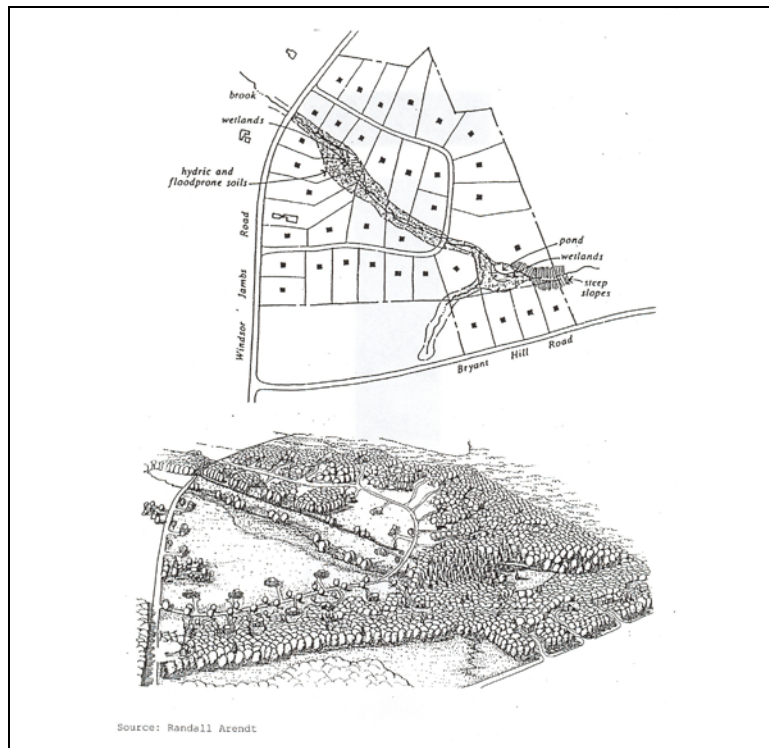
Conservation Subdivision Design Standards

The current zoning and subdivision regulations in Lisbon encourage subdivision designs with lot layouts based on geometric standards rather than the unique features of each parcel. In addition, only limited amounts of open space are set aside for public use. Over time, this promotes a "sprawl" development pattern that does not contribute to community character and that will likely detract from the rural atmosphere that residents have indicated is important to them. Open space may consist of scattered small parcels with no connection to an overall open space plan.

Lisbon's zoning regulations permit open space, or clustered, development with reduced lot sizes on parcels of 20 acres or more. This concept would be enhanced by applying refined buildable area density standards, discussed in the previous section, and by specific standards and criteria in the subdivision regulations to guide design. These include the quality of open space set-aside, road and drainage system designs, amount of impervious surface, conservation of natural resources, preservation of scenic resources, and provision of public recreational opportunities.

The graphics on the following page illustrate the difference between conventional development patterns and conservation design development and how the latter approach pays more attention to the natural capabilities of the land.

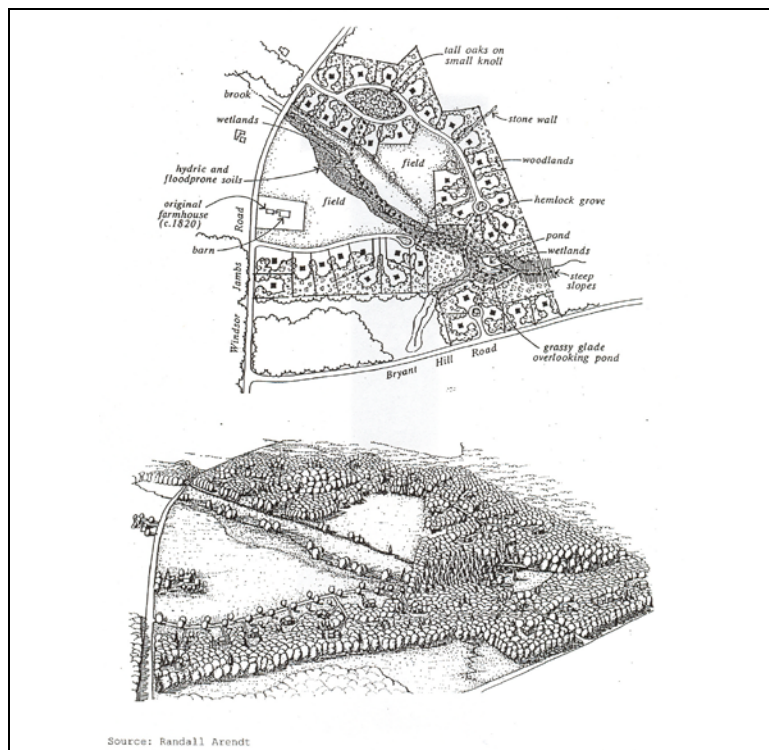
Subdivision Design Concepts



Conventional Design Subdivision

Conventional Subdivision Characteristics:

- All land divided into lots
- Little or no open space or public access
- No consideration of natural resources
- Rural character changes to suburban



Conservation Design Subdivision

Conservation Subdivision Characteristics

- Open space protected
- Natural resources conserved
- Scenic features preserved
- Rural character maintained

Other Design Standards

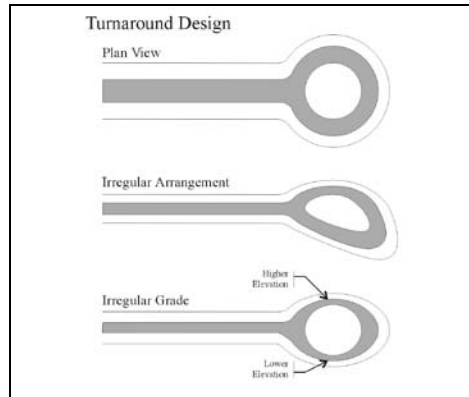
Subdivision and street design standards that apply to cul-de-sacs, streets, and drainage may be evaluated for refinements that will enhance the incentive for consideration of conservation designs for new subdivisions.

Cul-de-sacs – Current standards require a circular turn-around of 50 foot radius. Regulations should be considered to require a circular turnaround to be irregularly shaped (and meeting turning radius requirements) and include a vegetated island. Alternative terminus designs should also be permitted including “T” or “hammerhead” turnarounds.

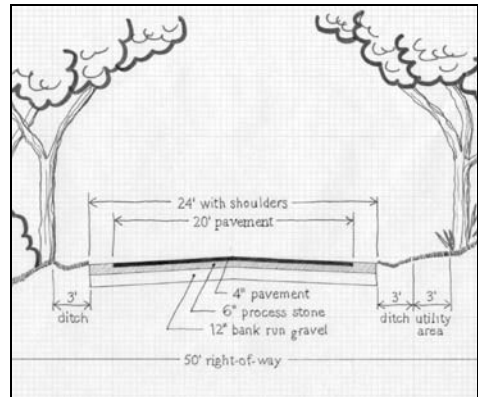
Road Standards – As discussed in Chapter 3, minimum road width should be a function of the use. Standards should attempt to permit roads only as wide as necessary for safe and efficient travel.

Drainage – Regulations should make clear that alternative designs making use of infiltration and natural topography are acceptable. Such designs may be more readily incorporated into conservation design developments and will reduce the potential for stormwater run-off impacts on water quality.

Circular Turnarounds



Swale Drainage



Subdivision Open Space Set-Aside

Connecticut General Statutes authorize towns to require open space set-aside as part of any subdivision application. Lisbon's current subdivision regulations allow the Planning and Zoning Commission to require open space set aside up to 10% of the subdivision.

Historically, this requirement has resulted in several relatively small, discontinuous parcels of open space within approved subdivisions. Such parcels not only create monitoring and management responsibilities for the Town, their value as part of a town-wide open space plan is limited.

The experience of other municipalities shows that a larger proportion of open space set-aside can make a significant reduction in subdivision impacts, while improving the potential contribution to a Town-wide open space plan. Alternatively, the imposition of a fee-in-lieu of open space, where suitable open space is not available, can provide funding for municipal acquisition of high priority open space parcels in the future. The establishment of open space set-aside criteria as suggested in the table below provides guidance to developers and the Commission for when to apply the fee-in-lieu of open space provision.

Lisbon's subdivision regulations will be revised to:

- Increase the minimum open space set-aside requirements to 15% or 20% (currently up to ten percent) and set standards for qualification, incorporating the criteria and priorities developed in response to the Open Space Planning strategies discussed in Section 3 of this Plan;
- Establish standards for ownership of the set-aside requirement;
- Create incentives for designs that preserve open space and natural characteristics at entrances to subdivisions on arterial and collector roads; and
- Permit a fee-in-lieu of open space to afford regulatory flexibility.

Suggested Open Space Requirements and Criteria

Open Space Requirement: Not less than 15% of the total area of the subdivision or resubdivision shall be preserved as open space. As determined appropriate by the Commission, the open space preservation requirement can be met by:

- i. fee simple donation of land;
- ii. conservation easements;
- iii. a fee in lieu of preserved open space; or
- iv. any combination of land in fee, easements, or fee in lieu of open space.

Criteria: The land reserved shall be of such size, location, shape, and topography and of a general character as to meet one or more of the following criteria:

- a. Land meeting the objectives and criteria for open space preservation as specified in the Lisbon Plan of Conservation and Development.
- b. Areas providing for the expansion of existing open space and recreational areas.
- c. Areas of woodland and/or farmland useful as wildlife habitat.
- d. Streambelts.
- e. Prime agricultural land.
- f. Areas providing or protecting existing or potential drinking water supplies.
- g. Areas adjacent to town streets with features such as large trees and stone walls and which retain the rural character of the Town.
- h. Ridge tops and other areas of scenic vistas, which add to the open space quality of the Town.
- i. Areas of significant tree cover, historic sites, archeological sites, water-related resources, or other agricultural or environmentally important lands, soils or geological phenomena.

Connecticut General Statutes Section 8-25

"...Such regulations shall also provide that the commission may require the provision of open spaces, parks and playgrounds when, and in places, deemed proper by the planning commission..."

"...such regulations may...authorize the applicant to pay a fee...in lieu of any requirement to provide open spaces..."

j. Land which buffers existing residential development and proposed development areas.
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Statutory Reference

“The Plan shall make provision for the development of housing opportunities, including opportunities for multifamily dwellings consistent with soil types, terrain and infrastructure capacity, for all residents of the municipality and the planning region.”

“The Plan shall promote housing choice and economic diversity in housing, including housing for both low and moderate income households, and encourage the development of housing which will meet the housing needs.”

CGS 8-23

Affordable Housing

“Affordable housing” includes governmentally assisted units, units financed with CHFA or FMHA mortgages, or units that are deed-restricted to sell or rent at prices that make them affordable to persons or families earning 80 percent of the median income for the Norwich/New London area.

CGS 8-39a and 8-30g

Affordable Housing Appeals Procedure

In Connecticut, communities with less than ten percent of their housing stock meeting the definition of “affordable housing” are subject to the “Affordable Housing Appeals Procedure”.

In this procedure, a developer can propose an affordable housing development and potentially override local zoning regulations.

Promote Housing for a Diverse Community

Connecticut General Statutes require consideration of housing opportunities in the municipal Plan of Conservation and Development. The availability of housing to meet diverse needs and the overall affordability of housing are two issues that Lisbon needs to address in this Plan.

Over the next 20 years, the composition of mature adults (ages 55+) in Lisbon is expected to increase significantly as older residents live longer and healthier lives. Because Lisbon currently has fewer multi-family housing units (2 or more units) when compared to many surrounding communities and the state average, this should factor into future considerations by the Town regarding residential development.

Only about 6% of Lisbon’s housing stock meets the State of Connecticut affordable criteria (see sidebar) and so Lisbon is subject to the provisions of CGS Section 8-30g, intended to enable the construction of affordable housing units.

At some point over the ten year Plan period, the Town may wish to pursue specific strategies to address housing diversity and affordability. Some of these options, which would require further study and evaluation, are described below.

Regulatory – Regulatory approaches to encouraging diverse and affordable housing could include the following.

- Identification in regulations of preferred locations and standards for multifamily and other housing types to promote housing diversity.
- Allowing more diverse housing options (such as apartments on upper floors in mixed use buildings) in village center areas.
- Permitting the development of congregate housing developments, assisted living facilities, or skilled nursing facilities in Lisbon through a special permit process if they are located in an appropriate location (preferably on an arterial or collector road in or near a village center) and are either constructed or converted to be compatible with the character of the community

Town Involvement – Non-profit or municipal developments should be designed to fit the location and be consistent with Lisbon’s character and structure. The Town may be able to play a role in an affordable housing project or elderly housing by seeking or identifying opportunities for land

donations, use of existing Town owned property, or leasing of land for affordable housing development.

Approaches directly involving the Town in housing development (such as a public/private partnership or a Town-sponsored development) would be a secondary choice since the financial and management responsibilities are not within the Town's area of expertise. For-profit developers may be another alternative provided that the development addresses unique local needs and is designed in a way to make it compatible within the community as a whole. The municipality may be able to assist with such private developments.

Summary

Like many small communities, Lisbon faces the challenge of guiding future growth. The pace and intensity of residential development can have far-reaching implications to the Town and this Plan proposes steps to prepare for future growth. Additionally, this Plan recognizes the need to consider promoting housing opportunity and diversity in preparing for the future.

These objectives will be addressed with the following set of strategies.

Guide Residential Growth – Strategies Summary

A. Revise Residential Zoning Standards

1. Revise zoning regulations to provide buildable area, density-based standards for parcel subdivision

B. Update and Refine Subdivision Regulations

1. Evaluate and develop standards to encourage conservation design subdivisions, within maximum density limits or as permitted under revised zoning density standards, to maximize the preservation of open space and reduce environmental and aesthetic impacts of development, including
 - Road design standards
 - Cul-de-sac specifications
 - Drainage design options
2. Revise subdivision regulations to set minimum open space set-aside, define criteria for such open space, and permit a fee-in-lieu of open space where appropriate

C. Promote Housing Diversity

1. Evaluate regulatory standards to encourage affordable housing and promote housing diversity
2. Consider regulations permitting development of congregate housing and assisted living facilities
3. Consider regulation revisions to encourage housing options, such as mixed residential uses in village areas
4. Support public and private efforts to develop elderly housing

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