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NORTH STONINGTON VILLAGE: ENSURING A SENSE OF PLACE

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NORTH STONINGTON VILLAGE

Ensuring a Sense of Place

By
Jennifer M. Lutke



The Village Square, North Stonington, Conn.

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF COMMUNITY PLANNING

UNIVERSITY OF RHODE ISLAND
1998

NORTH STONINGTON VILLAGE

Ensuring a Sense of Place

Research Project
of
Jennifer M. Lutke

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ABSTRACT

The purpose of this research project is to determine how North Stonington, Connecticut, can best protect and enhance the character of North Stonington Village through land development regulations.

The character of North Stonington Village is in jeopardy as a direct result of its current land development regulations. Stated in both the North Stonington Zoning Regulations (1985) and, indirectly, in the North Stonington Plan of Development (1981), the citizens of North Stonington desire to protect and enhance the Village's character to ensure its unique sense of place.

The main product of this work is a proposed Village District. This district, if adopted, would effectively protect and enhance the character of North Stonington Village because the proposed district's regulations are based on the Village's specific character-defining elements.

However, because one of the integral elements of this district is to increase the permitted building density by lowering the minimum lot size, the recommended Village District presents environmental issues which must be addressed. Therefore, the recommended regulations presented in this work are dependent upon establishing alternative sewage disposal and/or water supply in the Village which will mitigate primary negative environmental effects of increased building density.

This work also presents general and master planning recommendations that are intended to enhance the Village. These recommendations address the existing sign ordinance, a possible historic overlay district and relevant design guidelines, a parking study, the Town Commons, new parcels for infill development, and circulation.

All of the recommendations presented in this work intend to make the Village a better place to live, work, and visit by protecting and enhancing the characteristics that contribute to its sense of place.

ACKNOWLEDGEMENT

This research project would not have been possible without the support and assistance of various professionals and friends. I would like to thank my readers: Dr. Farhad Atash, Karen L. Jessup, Dr. Rolf Pendall, and Richard C. Youngken. Their insightful comments undoubtedly heightened the quality of this project. I would like to extend extra gratitude to Dr. Rolf Pendall who unfalteringly continued his commitment to this project in spite of his move to Cornell University.

Various individuals from the Town of North Stonington provided valuable direction and information including Charles Ames, Richard Blodgett, Rosalind Choquette, Anna Coit, Warren Gray, Leonora Gwyer, Charles Elias, Joyce Elias, William Hescocock, Amy Kennedy, True Miller, and Nicholas H. Mullane II.

I would also like to thank my family for their constant support and for understanding my absence at Easter, my aversion to the telephone, and many overdue birthday gifts.

Last, but certainly not least, I would like to thank Brian T. Goldson for being sometimes my worst, but always my most valuable critic and for putting up with me through it all.

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CHAPTER ONE

CHAPTER ONE

INTRODUCTION

PURPOSE AND OBJECTIVES

The purpose of this research project is to determine how North Stonington, Connecticut, can best protect and enhance the character of North Stonington Village through land development regulations. In existing municipal documents, the Town supports this goal, both directly and indirectly. In the North Stonington Plan of Development (1981, 81) various goals supporting this concept are listed under “Community Character” including the following:

- Preserve the present rural character throughout as much of the Town as possible. . . .
- Encourage land uses, ownerships, and land-development, conservation, and preservation techniques that result in as much land as possible being retained in a natural condition or devoted to agricultural use. . . .
- Preserve the town’s rich historical, architectural, and archeological heritage.

The third goal more directly supports this research project than the first two goals do. The relevance of this project to the first two goals will be clarified in Chapter Eight.

In the North Stonington Zoning Regulations, the intent of the Village Preservation Overlay Area also directly supports the overall concept of this

project and is stated as follows: “. . . is intended to protect and preserve the appearance and character of the Village and its individual buildings . . .” (1985, 3-2).

Protecting and enhancing the character of North Stonington Village is unquestionably an important goal for the Town. This research project determines how to accomplish this by undertaking the following objectives:

- ascertaining what characteristics of the Village contribute to its sense of place;
- analyzing how those characteristics could change as controlled by the existing municipal land development regulations; and
- examining six village-oriented land development regulations which are intended to protect and enhance the character of similar East Coast villages.

The overarching objective of this project is to devise recommended amendments to the North Stonington Zoning Regulations that will best serve the intent currently as defined for North Stonington Village.

BACKGROUND

This project was an indirect result of the State Historic Resources Survey of North Stonington (see Map 1). The Connecticut Historical Commission contracted with my employer, the Newport Collaborative Architects, to update the survey in 1996 (Connecticut State Historical 1997). Under the supervision of Richard C. Youngken, Planning Director, I worked on the survey for approximately one year.

During the survey project, I developed a cursory knowledge of the Town, the Village, and their inhabitants, government, and land development regulations. Through this knowledge, I realized that the integrity of the Village as an historic resource and way of life was in jeopardy as a consequence of the current land development regulations. This realization, coupled with my interest in community design as a product of land development regulations and my growing fondness for the Town and Village, lead to the formation of this research project.

DESCRIPTION AND HISTORY

The Town of North Stonington, Connecticut, is located in New London County (see Map 2) and is bordered by the Connecticut municipalities of Preston, Griswold, Voluntown, Stonington, and Ledyard, and by the Rhode Island municipalities of Hopkinton and Westerly. Interstate 95 runs northeast and southwest through the southeast portion of the Town. Recently State Route Two, which forms the eastern, southern, and western border of North Stonington Village, has become a major thoroughfare for traffic generated by Foxwoods Resort Casino in Ledyard, which opened in 1992. Foxwoods is located less than one mile from the Town of North Stonington and “is the nation’s largest gambling establishment - and third most profitable . . .” (McCormick 1997, 4).

North Stonington Village originated in the early 18th century as the site of a gristmill serving the area’s farmers. Over time, the mill expanded to several mills including a sawmill, fulling mill, cotton mill, and woolen mill, all powered by the Shanuck and Assekonk rivers. Between 1790 and

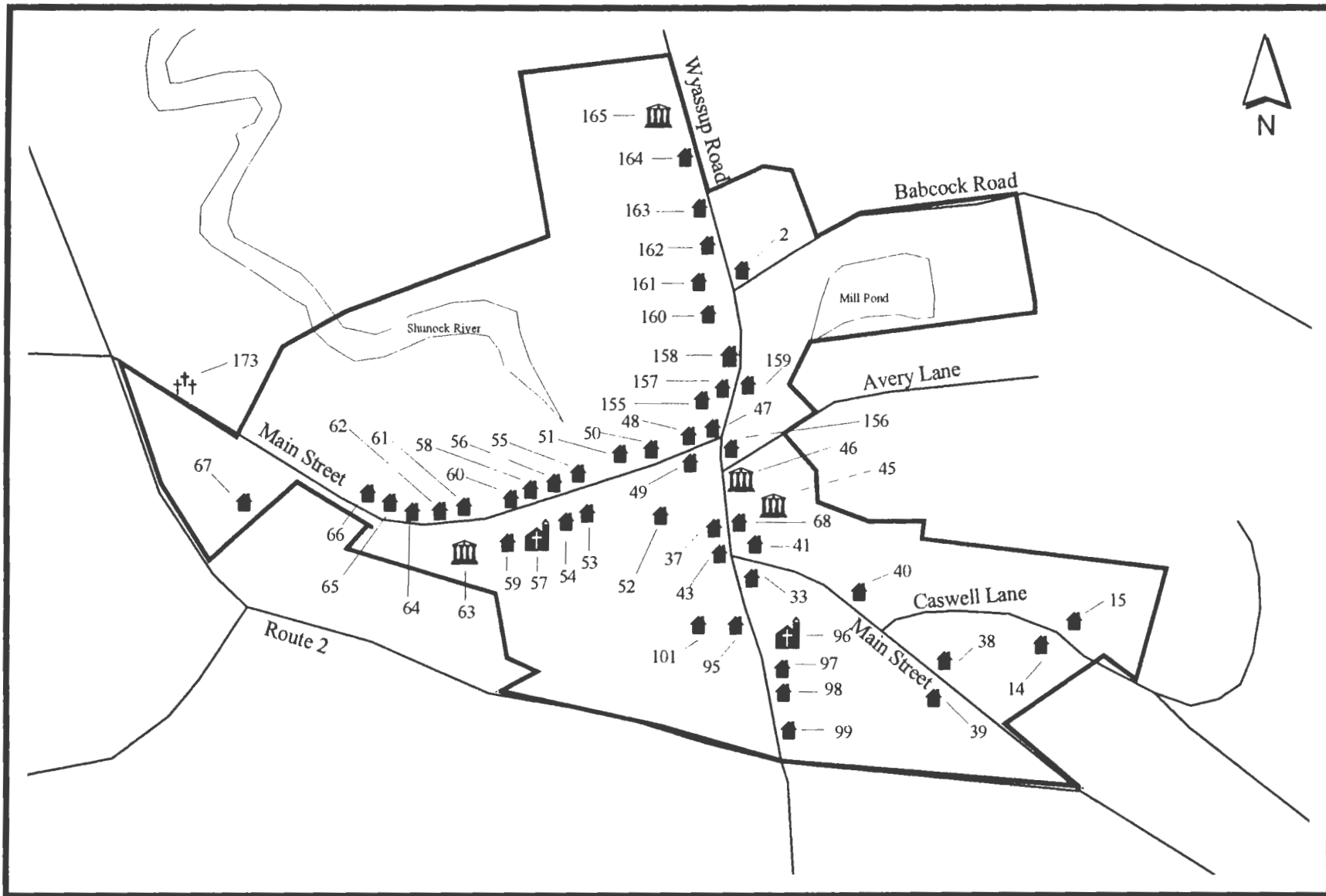
1840, the village grew and included residences, a tannery, a trip hammer works (iron forge), and the various mills. A woolen mill was built in 1820 by Nathan Pendleton and was the Village’s major industry through most of the 19th century. Craftsmen also manufactured goods in the Village. The most common early craft in North Stonington Village was cabinet-making.

The Village also prospered as a mercantile center in the 19th century. At one time, as many as six stores were located here which served customers from farms in and out of Town.






Although industry declined in the early 20th century, the completion of the Norwich-Westerly trolley line in 1906 helped revive the Village. The trolley provided transportation of local farm products to New York and Boston. The state highway (Route Two) was constructed in 1919 and the trolley line was abandoned in 1921. Since then, the diversity of land uses and building density of North Stonington Village has waned.¹

North Stonington Village retains its 19th century village character as evident in its remaining density, the small front yard setbacks of buildings, the 19th century architectural styles exhibited in the majority of buildings, and the numerous extant outbuildings (e.g., carriage houses, workshops, sheds). The Village is clustered along Main Street, Rocky Hollow Road, and the southern portion of Wyassup Road. (see Map 3)

¹ This historical information is abstracted from Plummer, Dale S. *North Stonington Village National Register Nomination Form*. 1981.

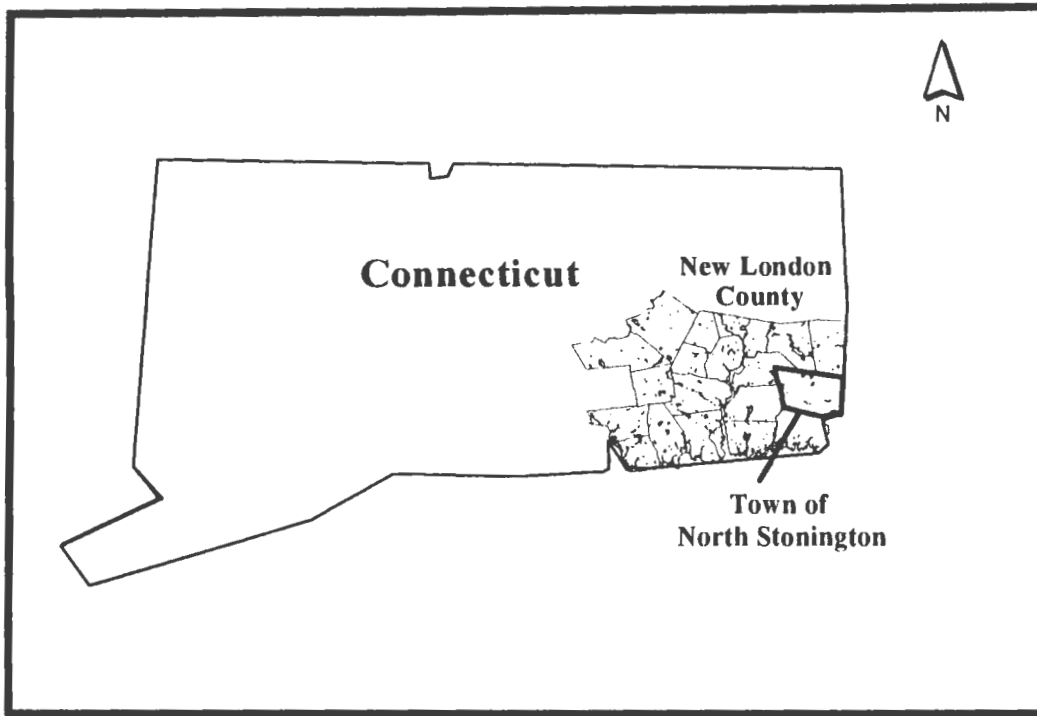


LEGEND

-  Institutional and Civic Buildings
-  Cemeteries
-  Residential and Commercial Buildings
-  Churches
-  National Register Historic District Boundary

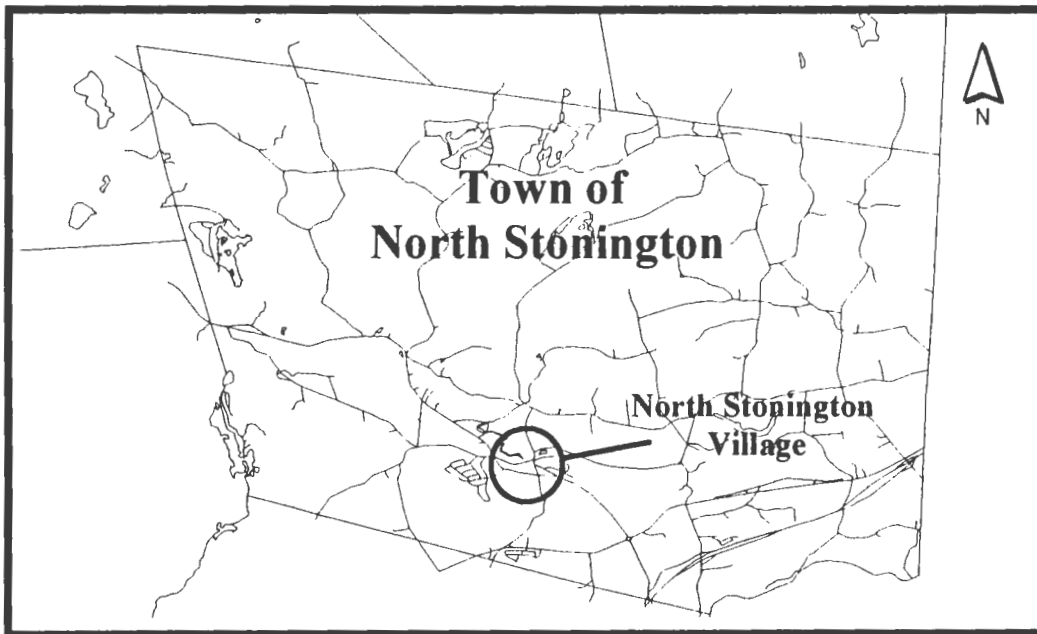
MAP 1: Historic Resources of the Village

Source: Connecticut State Historic Resources Survey of North Stonington. 1997.
No Scale

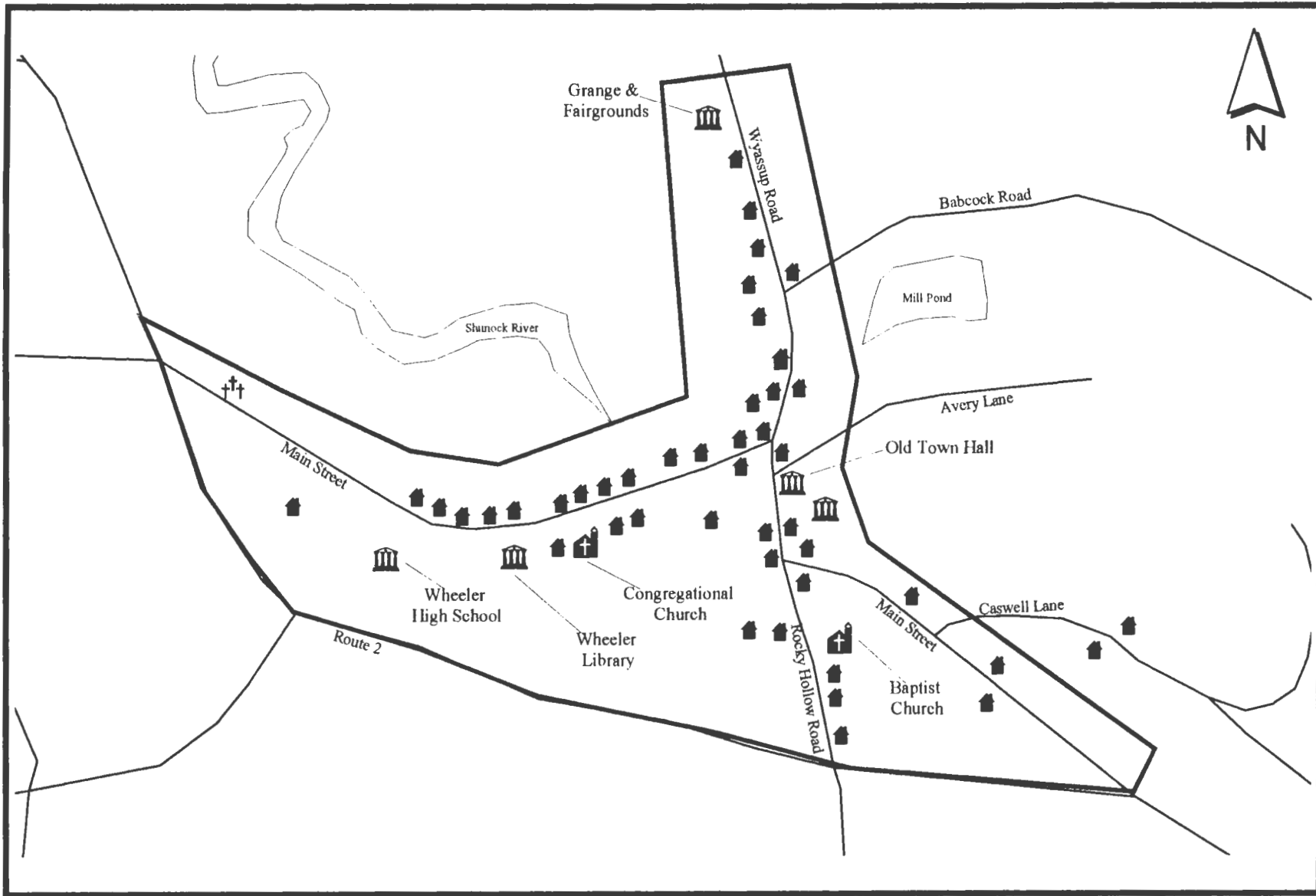


No Scale





MAP 2: Locus



No Scale



LEGEND

-  Institutional and Civic Buildings
-  Cemetery
-  Residential and Commercial Buildings
-  Churches

MAP 3: Project Study Area

PROJECT SIGNIFICANCE

North Stonington's current zoning for the Village, which is called the Village Preservation Overlay District, has the potential to destroy its sense of place. In fact, although the zoning ordinance states that "the purpose of this overlay area is to recognize and preserve the unique historical character of the village area", this district's zoning is designed in a way that could transform what remains of this historic village into a low-density residential neighborhood with a typical suburban settlement pattern.

As defined by the North Stonington Zoning Ordinance, the Village Preservation Overlay area overlays the Town's R40 High-Density Residential District. The R40 District is primarily zoned for detached single-family houses with 40,000 square foot (sf) minimum lots (approximately one acre) and minimum front setbacks of 35 feet.

The overlay district gives authority to the Planning and Zoning Commission to prohibit any building, structure, or use ". . . that would be inconsistent or harmful to the historic charm and character of the Village. . ." (North Stonington Zoning Regulations 1985, 4-3). However, the ordinance does not include *specific* dimensional and use regulations designed to further the intent of the overlay district.

As defined for the purposes of this research project, a village is a small, dense, mixed-use neighborhood, often with a defined edge, that serves as a nodal center to the citizens of the town. A village generally includes a

mixture of housing, commercial and professional establishments, and recreational and civic establishments.

North Stonington Village is currently of a much greater density, has significantly smaller building front yard setbacks, and is enhanced by a greater mixture of uses than the current underlying zoning would allow by right. The vague nature of the overlay district regulations coupled with the superfluous review procedures necessitated by acquiring special use permits endanger the integrity of this historic village.

The proposed Village District regulations, presented in Chapter Seven, directly address the problems of the current regulations through specificity to the existing settlement pattern of the Village.

DOCUMENT ORGANIZATION

This document is meant to guide the reader through the progression of this project and is divided into eight chapters. Chapter Two presents the findings of the literature review covering the topics of sprawl, neighborhood character, design, and methods for protecting and enhancing village character. Chapter Three lays out the project methodology and details both quantitative and qualitative methods used to accomplish the objectives of this study.

Chapter Four presents the elements that define the character of the Village and their attributes, as based on field measurements, municipal sources, interviews, and the Kevin Lynch analysis (explained further in Chapters

Two and Three). Chapter Five reviews and evaluates the Village's existing land development regulations and illustrates their potentially ominous effect on the character of the Village. Chapter Six presents six case studies of village-oriented land development regulations geared toward small, historic, East Coast villages.

The recommended amendments to the existing land development regulations are presented in Chapter Seven. These amendments include specific dimensional regulations and use regulations. Chapter Seven also includes general recommendations for master planning and future study. The last chapter analyzes the implications and significance of the findings for the Town as a whole and the region. Also, it gives direction for further research and projects that can spiral from and strengthen the work begun with this research project. In particular, the concluding chapter addresses the issue of protecting the rural character of the Town and region from suburban sprawl and other potential growth pressures.

CHAPTER TWO

CHAPTER TWO

LITERATURE REVIEW

The literature pertaining to this work includes publications on traditional and neo-traditional design, sense of place, village character, New England character, village zoning, regulations for historic preservation, and the effects of sprawl. These issues can be categorized into four overall concepts: sprawl, community character, design, and zoning as a method to protect character. This chapter summarizes each of these concepts in relation to this research project.

SPRAWL

This section demonstrates that discouraging sprawl by encouraging compact development, such as the protection and enhancement of existing villages, has enormous environmental, social, and economic benefits.

The negative effects of sprawl are well known throughout the planning profession. Numerous authors have elaborated on the devastating environmental, social, and economic effects of sprawl in America. In general, sprawl is:

. . . unplanned, uncontrolled, and uncoordinated single-use development that does not provide for an attractive and functional mix of uses and/or is not functionally related to surrounding land uses and which variously appears as low density, ribbon or strip, scattered, leapfrog, or isolated development (Nelson 1995, 1).

Sprawling development, which is immensely wasteful of land, excessively costly to service, irreparably damaging to the environment, and unduly forces automobile dependency, has been rapidly increasing in the United States since the mid-20th century.

After English colonial settlement in this country, the landscape of New England traditionally consisted of cities and rural areas with small villages or hamlets. With the advent of transportation innovations, such as the railroad and the street car, suburban development began. After the invention of the automobile and its increasing popularity as a primary means of transportation in this country, suburbs became even more idealized. This ideology was manifested in various powerful federal policies, including subsidies for highway building and home mortgages (Kay 1997, 198-201).

Data from various places illustrate the reality of sprawl. In the Puget Sound area in Washington State between 1970 and 1990, developed land increased by 87% while population increased by only 36% (Arendt 1994, 19). In Rhode Island in 1908, farmland amounted to approximately 270,000 acres. In 1960, the amount of farmland in Rhode Island decreased to about 70,000 acres; and in 1990 the farmland decreased to about 35,000. (Poon 1997, c-4)

Since the 1950s, Pennsylvania has lost an area of farmland larger than the combined size of Connecticut and Rhode Island (more than four million acres). However, since 1940, Pennsylvania's population has only grown about 20%. Between 1970 and 1990, land consumption in the Philadelphia

area increased 32% while the population actually decreased by 3%. (Hylton 1995, 16, 42)

During the period 1950 to 1970, in western Massachusetts, the average per capita land consumption in three counties combined was 0.51 acres per new resident. Between the years 1970 and 1985, that figure jumped to 1.83 acres per new resident - more than three and a half times the earlier period's average land consumption. (Arendt 1994, 19)

Environmental Impacts

Sprawl unnecessarily and disproportionately increases environmental degradation. Since sprawling land development practically mandates the use of automobiles, air pollution is a direct result of this development pattern. Air pollution from gasoline-powered vehicles includes the release of carbon monoxide, nitrogen oxides, and particulates into the atmosphere.

Such chronic poisons ingested through the lungs and penetrating into the body through the respiratory system, or even through the skin, hit the stomach and bloodstream. Together they interact, increasing the probability of disease years down the road - cancer, lung diseases like asthma and bronchitis, [and] possibly cardiovascular conditions. (Kay 1997, 111)

Deforestation, an activity which provides material for new development, leads to global warming, a phenomenon in the forefront of global issues. Through deforestation carbon dioxide is produced. This is one of the gases that work to trap heat in the Earth's atmosphere. Global warming would affect humans dramatically, including western drying (greatly decreasing

crop production and increasing the frequency of wildfires) and a rise in sea levels which would endanger coastal settlements and possibly contaminate groundwater supplies with salt. (Schneider 1990, 25-34)

Due to increased road and parking lot area, surface run-off leads to water pollution. Automobiles directly cause various pollutant by-products such as nitrogen, phosphorus, lead, and zinc. Pollutant loading of storm water increases with the amount of impervious land cover (such as asphalt). This is because the pollutants are not given the opportunity to leach into the ground, but, instead, are directed into storm drains which drain directly into designated water bodies without being purified first. "... the amount of storm water pollution per person actually decreases with higher residential densities" because there are less impervious surfaces per person. (Marsh 1991 162)

As more natural areas are stripped and wetlands drained through the course of development, ecological cycles are disrupted and biological diversity is endangered.

The human species came into being at the time of greatest biological diversity in the history of the earth. Today as human populations expand and alter the natural environment, they are reducing biological diversity to its lowest level since the end of the Mesozoic era . . . The ultimate consequences of this biological collision are beyond calculation and certain to be harmful. That, in essence, is the biodiversity crisis. (Wilson 1990, 49)

Wilson also points out that the loss of biodiversity is the only environmental process that is wholly irreversible. Its consequences are the

least predictable because “. . . the value of the earth’s biota . . . remains largely unstudied and unappreciated.” (Wilson 1990, 49)

Another environmental hazard of sprawl is the disruption of groundwater recharge and sedimentation of water bodies. These processes occur when woodlands and wetlands are developed. The process of sedimentation destroys water quality due to added muddiness and chemicals, and can choke stream channels and reservoirs (Marsh 1991, 178).

Social Impacts

The social effects of sprawl are not as often written about as the environmental and economic effects, however, sprawl is unquestionably altering society for the worse. Economic and ‘ability’ segregation are major effects of sprawl. By spreading development over the landscape and segregating land uses, automobile use is required for efficient transportation between work, home, entertainment, and services. Since automobiles are costly to purchase, maintain, and insure, people with low incomes have difficulty affording them. Thus, this pattern of development blatantly decreases opportunities for the poor as well as the disabled, elderly, and very young. (Goldson 1995; Hylton 1995, 18; Kay 1997, 35-53)

In a house-poor nation - a nation with 75.9 percent of its elderly over sixty-five years of age living alone, a nation hard-pressed for affordable housing, a nation with dwellings too isolated for children to be independent - dense living is the geometry of humanity (Kay 1997, 300).

Forced car reliance is also a great safety hazard. Motor vehicle fatalities have risen to 43,000 persons per year or 120 deaths per day. In the same 40 days that 146 people were killed in the Persian Gulf War, 4,900 people died “with equal violence on our country’s highways. (Kay 1997, 103)

Sprawling development comes in the form of suburbia. Although there are many forms of suburban development, the general physical design of suburbia (after the advent of the automobile) is dominated by detached single family houses with lawns, driveways, and garages, oversized streets (designed for emergency use), and separated land uses. This type of physical design fosters isolated households and a diminished sense of neighborhood community (Solomon 1989, 21-38).

Although there is still debate over the reality of physical determinism, Calthorpe makes sense when he writes:

. . . building walkable neighborhoods may not get people out of their cars and building front porches and neighborhood parks may not create more integrated, convivial communities. To this I can only assert that people should be given the choice and that, neither black nor white, the result will probably be mixed - and that is OK. (Calthorpe 1993, 10)

Economic Impacts

Sprawl is excessively costly to service. Spreading development necessitates increased miles of highway, electric and telephone lines, and water and sewer pipes. Dr. James Frank, professor of urban and regional planning at Florida State University, claims that if

suburbanites were to pay the full costs of their lifestyles, they would be paying more for roads, because they drive longer distances; and more for electric, telephone, and sewer service, because of the longer transmission distances and higher lot frontage costs . . . no one knows how many people would switch [to urban and traditional town lifestyles if we had to pay for what we use] (Hylton 1995, 42).

Frank found that the high density of traditional towns and villages cost only a third to a half as much for infrastructure as the low-density development of suburban sprawl. Currently, these services are being subsidized by the ratepayer and taxpayer. (Hylton 1995, 42)

COMMUNITY CHARACTER

Community character is an indispensable concept in regulating any community. For the purposes of this research project, community character is the essential nature that physically distinguishes a place where a group of people live.

The land use regulations for a place will ultimately determine the future parameters of its character. Therefore, it is vital to define what the present character is, what is desirable about it, and what is undesirable about it.

Numerous publications explore the factors of community (or neighborhood) character and provide instructive advice for community leaders to define the elements of their community's character. Three publications of this kind are Randall Arendt's *Rural By Design* (1994), Philip Herr's *Saving Place* (1991), the Colorado Historical Society's *Good Neighbors: Building Next to History* (1980), and Kevin Lynch's *The Image of the City* (1960).

The major elements that work together to make up a community's visual character are its natural setting, settlement patterns, vegetation, architecture, and civic art and amenities (Colorado 1980, 18). These elements will be clarified below.

Natural Setting

The natural setting provides the context for all the people-made structures in the community. Topography, water bodies, climate, wildlife, and vistas can all contribute to a community's character and, in fact, often shape the settlement patterns of the community through numerous constraints that are countered and opportunities that are taken advantage of.

Settlement Patterns

Settlement patterns include street layouts and widths and how buildings relate to the street as well as how buildings relate to each other. Trancik identifies six typological patterns of solids and voids which can be determined through a figure-ground analysis.

The solid-void relationships formed by the shape and location of buildings, the design of site elements (plantings, walls), and the channeling of movement result in six typological patterns: grid, angular, curvilinear, radial/concentric, axial, and organic (Trancik 1986, 101).

According to Webster's Dictionary, pattern is "a form or model proposed for imitation." (1974). The Colorado Historical Society's definition of pattern is: "objects arranged in a formal or rectangular manner where the arrangement is reproducible" (1980, 12). Pattern can also be informal and

curvilinear and still be reproducible. Elements contributing to settlement pattern are building setbacks, nodes, junctions, open space, and spatial location of land uses (i.e., civic, institutional, residential, and commercial).

Vegetation

Vegetation gives shape, form, shade, softness, and color to the built environment and can help define edges of streets, sites, and districts in the village (Colorado 1980). Mature trees lining streets can transform the feeling of a neighborhood, provide shade and protection from winter winds, and can psychologically work to slow traffic.

Architecture

A significant element in the character of a village is its buildings. Important factors in determining architecture's specific contribution to the character of a village include style, form, rhythm, materials, age, height, details, craftsmanship, placement on and relation to the site, and maintenance.

Civic Art and Amenities

Civic art can create focal points and landmarks in a village and can emphasize part of the village's unique character through remembrance of events, people, and places.

Amenities (such as street lights, benches, clocks, and bicycle paths) can create a visual cohesiveness that ties the village together and can provide residents and visitors additional comfort while enjoying the village.

The Lynch Method

Authors have numerous opinions about positive and negative elements of community character. Kevin Lynch developed a leading method to determine the physical strengths and weaknesses of community design as described in *The Image of the City* (1960). Lynch's overall objective is to determine if the look of cities is of any importance and whether the look can be enhanced. Lynch states that: "The urban landscape, among its many roles, is also something to be seen, to be remembered, and to delight in." (Lynch 1960, v) Although Lynch writes about *city* design, his work can be adapted to apply to *community* design.

The Lynch method combines verbal interviews and field analysis. This method is based on the belief that the best way to define a common physical reality is not through any quantitative methods.

The creation of the environmental image is a two-way process between observer and observed. What he [or she] sees is based on exterior form, but how he interprets and organizes this, and how he directs his attention, in its turn affects what he sees. (Lynch 1960, 131)

Throughout the interview, the subject must draw a sketch map of the neighborhood or area under study and the interviewee observes in what sequence the map is drawn, in what scale elements are drawn, and what is not drawn. All of these observations are meant to provide insight into what

the subject believes is important and character-defining about the area and are to be used as the basis for future community design.

DESIGN

Literature on neighborhood design concepts abounds, especially regarding the concept of neo-traditional design within the New Urbanism movement. Classic literature is also quite useful today such as Lynch's work discussed above. This section will describe the general essence of New Urbanism design concepts and Lynch's five elements of community design.

New Urbanism

This urban design and town planning movement relates back to concepts of design that were prevalent in the late 19th and early 20th centuries in the United States, planning in the time before the automobile dominated settlement patterns. The New Urbanism goal is to:

... capture a stronger sense of place through the layout of its streets, the arrangement of its open spaces, the appearance of its streetscapes, and its link to historical and regional prototypes (Bookout 1993, 23).

Three of the major leaders in the movement are Peter Calthorpe, who relates concentrated settlement patterns to transportation networks, and Andres Duany and Elizabeth Plater-Zyberk, who are best known for new town designs such as Seaside and Kentlands. Calthorpe planned Laguna West, California, based on his transportation linkage concept called pedestrian pockets or trust oriented development.

The Pedestrian Pocket is a simple cluster of housing, retail space, and offices within a quarter-mile walking radius of a transit system . . . It is a planning strategy that preserves open space and reduces automobile traffic. . . (Calthorpe 1989, 3)

Elements of communities that are of special concern are: density to foster a sense of community, setbacks to create street-edge definition, pedestrian orientation, maximization of alternative transportation, mixed use, walkable distances between residences, employment and services, and the provision and design of public open space. Table 1 displays the building densities of new towns (some built, some unbuilt) that were planned by visionaries using New Urbanism design concepts.

TABLE 1: New Urbanism Planned Communities

VILLAGES/TOWN	ACRES	DWEL. UNITS	DENSITY (units per acre)
Anne Arundel County, Maryland	174	487	2.80
Sandy Spring, Maryland	400	225	0.56
Windsor: Vero Beach, Florida	400	320	0.80
Tannin: Orange Beach, Alabama	60	172	2.87
Seaside, Florida	80	350	4.38
Kentlands: Gaithersburg, Maryland	356	1600	4.49
Belmont: Loudoun County, Virginia	273	752	2.75
Haymount: Caroline County, Virginia	1582	4000	2.53
Wellington: Palm Beach County, Florida	1500	4400	2.93
Mashpee Commons: Mashpee, Mass.	278	300	1.08
Goldson Thesis, Lincoln, Rhode Island	175	625	3.57
Average Units per Acre			2.61

Sources: Krieger 1991 and Goldson 1995.

Lynch

Kevin Lynch, discussed above, defined five community design elements that are important to evaluate when working with an established community. These elements are paths, edges, districts, nodes, and landmarks. Communities can have some or all of these elements and they can be weak or strong components of an area. These elements should be identified and evaluated to determine design solutions for communities. (Lynch 1960)

- “Paths are the channels along which the observer customarily, occasionally, or potentially moves” (Lynch 1960, 47).
- Edges “. . . are the boundaries between two phases, linear breaks in continuity” (Ibid.).
- Districts are sections of a community which one mentally enters inside of and are recognizable as having a common identifying character (Ibid.).
- “Nodes are points, the strategic spots in a [community] into which an observer can enter, and which are the intensive foci to and from which he [/she] is traveling” (Ibid.).
- “Landmarks are another type of point-reference but in this case the observer does not enter within them, they are external” (Ibid., 48).

ZONING AS A METHOD TO PROTECT CHARACTER

Even though most villages are pre-zoning forms, zoning is probably the most common method used to preserve and recapture village character. Zoning can include regulating land uses, intensity of use, bulk and dimensions of buildings, parking allowances, design, and relation of buildings to their site. Zoning can also be based on performance standards which allows more flexibility rather than being based on minimum and maximum amounts. For example, in a flexible zoning ordinance, a district may allow smaller lot size on the condition that the lot be connected to the sewer line before use of the lot begins.

Zoning can dramatically change the appearance and essential nature of a village. By increasing lot size and front and sideyard setbacks requirements and eliminating or minimizing mixed use, a community can transform a once vibrant and dynamic village into a sterile single-use district like the multitude of suburban subdivisions seen today. (Arendt 1994, 22)

However, by allowing for higher densities through small lot sizes, enabling more community interaction through decreased setbacks, and encouraging walking, convenience and variety through allowing mixed land use in a village, zoning can recapture the village dynamic. Arendt provides several examples of places who have done this by revising their land development regulations (i.e., Loudoun County, Virginia; Dover Township, New Jersey; and Kent County, Maryland).

Many existing villages are National Historic Districts (such as North Stonington Village) or are eligible for listing in the National Register. Local governments can set up local historic zoning overlay districts through historic preservation ordinances which establish design review processes that can be either regulatory or advisory. Whether the process is regulatory or advisory, it is important to create and use design guidelines that are tailored to the community in order to avoid ambiguity and subjectivity. Also, “the more detailed the design standards, the less vulnerable they will be to possible constitutional due-process or void-for-vagueness challenges” (Lassar 1989, 59).

Protecting villages is currently an issue at the state level in Connecticut. In March 1998, two bills were introduced to the State of Connecticut House of Representatives which, if passed into law, would enable municipalities to establish village zoning districts (H.R. 5485 and H.R. 5487). The intent of the village districts would be to “. . . protect the rural character, landscape, and historic structures of such areas” (H.R. 5487).

The village districts may regulate:

- alterations and improvements;
- substantial reconstruction and rehabilitation including
 - design and placement of buildings
 - maintenance of public views; and
- design, paving materials, and placement of public roadways.

The regulations:

. . . shall encourage the conversion and preservation of existing buildings and sights in a manner that maintains the historic, natural, and community character of the district (H.R. 5487).

The difference between the two bills is that H.R. 5487 requires state agencies, departments, or institutions undertaking projects that impact a village district to consider that district’s regulations (H.R. 5485 does not require this consideration).

CHAPTER THREE

CHAPTER THREE

METHODOLOGY

Overall, this research project was guided by the assumption that land development regulations can *preserve* a community's character by allowing replication of the existing and valued fabric of the community, especially existing settlement patterns and land use. This research project also worked under the assumption that land development regulations can *enhance* a community's character by intensifying certain characteristics of a community that are deemed positive.

Each of the following chapters is based on specific methods that further the intents to preserve and enhance the community character of North Stonington Village. This chapter describes the research methods used for each applicable chapter (all the chapters except chapters one, three, and eight).

LITERATURE REVIEW

The review of literature included the following methods:

- researching existing literature that pertains to sprawl, neighborhood character, design (including New Urbanism and Kevin Lynch), and zoning as a method for protecting village character;
- gathering and reviewing literature about village character with emphasis placed on the process of determining character and the elements of character;

- using various computerized search engines at the University of Rhode Island main library; and
- following the chain of references listed in appropriate sources (such as Arendt's *Rural by Design*).

CHARACTER OF THE VILLAGE

A modified version of Randall Arendt's analysis method for "Rediscovering Traditional Townscape Elements", Roger Trancik's figure-ground analysis (Trancik 1986, 98-105), and Kevin Lynch's analysis (Lynch 1960) was used to analyze the existing character-defining elements in the Village.

The Arendt-based methods are as follows:

- list all the different land uses in the Village;
- describe various sizes, types, and architectural styles of the buildings in the Village;
- measure distance relationships between house fronts and the sidewalk and the street, width of cartway; and
- calculate the existing distribution of developed lot size, frontage, and setback.

Since the figure-ground analysis in its pure form is more applicable to urban settlement patterns, the figure-ground analysis in this project included street lines as a modification of the pure figure-ground. This modification enabled the figure-ground analysis to fit the rural village

settlement pattern of North Stonington Village. Adding street lines helped to clarify the circulation routes of the Village, which, in turn, helped clarify the settlement patterns. The figure-ground without street lines did not illustrate the settlement patterns clearly due to the many extant outbuildings in the Village.

A modified Kevin Lynch analysis identified perceived nodes, paths, landmarks, districts, and edges. To accomplish this task, nine users of the Village drew sketch maps of the area and answered five interview questions (see Appendix Two for the interview questions). The number nine is not magical or statistically-based, rather, it was derived by the self-imposed time-limit of one day to complete these interviews.

The results of the interviews provided information to determine the location and extents of these Lynch elements. To accomplish this, the frequency of occurrence of the each element on the sketch maps and responses to the interview questions was an indicator for the location, presence of, and strength of each element.

The scale that the participants drew each element and the order in which they were drawn were also indicators. This analysis is based on the assumption that stronger elements will be drawn on the maps more frequently, larger, and sooner than weak elements. For example, in Figure 1, the Shunock River is drawn very large and was also drawn first. Therefore, the Shunock River is a strong image element for this participant.

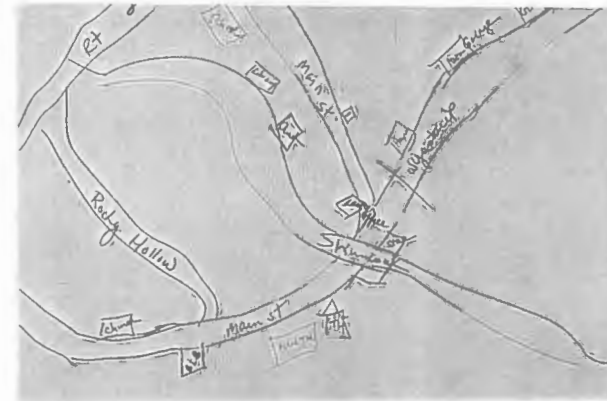


FIGURE 1: A sketch map from the Lynch Analysis

EXISTING LAND DEVELOPMENT REGULATIONS

The analysis of the existing land development regulations applicable to North Stonington Village is critiqued in comparison to the character-defining elements that are presented in Chapter Four and to general village characteristics. The applicable land development regulations included the regulations presented in the North Stonington Zoning Ordinance for the R-40 district, the Village Preservation Overlay Area, and the Aquifer Protection Area.

A hypothetical future figure-ground of the Village based on the existing zoning ordinance is used to compare the existing Village settlement pattern to the possible settlement pattern as determined by the zoning ordinance. The existing and future figure grounds are displayed side-by-side to emphasize the radical change that the land use controls encourage.

CASE STUDIES OF VILLAGE-ORIENTED REGULATIONS

Six case studies of village-oriented land development regulations (including five municipal ordinances and one model bylaw) were chosen based on their general similarities to North Stonington Village and identified through the literature review and the subsequent network of contacts. Some considerations were the total land area encompassed by each village, the density of settlement, presence of mixed use, number of dwelling units, the historic status, and the presence of village-oriented land development regulations.

The appropriateness of each regulation to North Stonington Village was based on the parameters of character-defining elements of the Village and was determined through reviewing and analyzing each municipality's land development regulations. No evidence was gathered to determine if these particular regulations are actually effective in protecting and enhancing these villages because appropriate indicators were not located for evaluation due to both time and financial constraints.

RECOMMENDATIONS

Based directly on the findings of the three previous listed chapters, the recommendations include new zoning district regulations, master planning ideas, and other general recommendations. Cross references to previous chapters frequently remind the reader of the basis of the recommendations.

ΠΡΟΤΗΡΙΑΚΑ

CHAPTER FOUR

CHARACTER OF THE VILLAGE

This chapter defines and analyzes the elements that make up the character of North Stonington Village. Specifically, this chapter describes the Town of North Stonington as it relates to the context of the Village and the general characteristics of the Village, summarizes the results of the Kevin Lynch analysis, and defines the five elements of community character. These elements are defined by the Colorado Historical Society (1980) as natural setting, settlement patterns, vegetation, architecture, and amenities.²

CONTEXT OF THE VILLAGE

North Stonington Village is a small village of approximately 110 acres set in a rural town located in southeastern Connecticut. The Town of North Stonington is about 36,032 acres (or 563 square miles). In terms of land area, North Stonington is the ninth largest in the state (Elias 1998).

In 1981, only 7 percent of the Town's land was developed. The undeveloped land included agricultural, reserved open space, and undeveloped private land (North Stonington Plan of Development 1981).

² I have eliminated the element of civic art in this description of North Stonington Village because civic art is not currently an element of the community's character.

In 1990, according to the U.S. Census, North Stonington had 4,884 residents. In 1994, according to the Department of Public Health, North Stonington had 4,793 residents. Based on these figures, the Town's population actually *declined* by 1.9 percent from 1990 to 1994, despite the opening of Foxwoods Resort Casino in Ledyard. However, the number of dwelling units *increased* from 1,810 in 1990 to 1,859 in 1994 and 1,904 in 1996 (North Stonington Tax Assessor). This represents an increase of 5 percent from 1990 to 1996. The bottom line of these statistics is that the population is declining and building development is increasing.

These two seemingly conflicting groups of statistics indicates that the number of persons per household is decreasing. In other words, fewer people are living in each building and therefore, more buildings are required to house less people. If this is indeed the cause of these statistics, then this phenomenon could contribute to the suburbanization of North Stonington.

THE VILLAGE

As discussed in Chapter One, North Stonington Village originated as a mill village which prospered in the 19th century. North Stonington Village retains some of its 19th century village character, as evident in its remaining density, the small building setbacks, the 19th century architectural styles that are exhibited in the majority of the dwellings and commercial buildings, the numerous extant outbuildings, and its mixture of uses. Table 2 displays some vital statistics of the Village as it exists today and is defined for this project.

TABLE 2: Vital Statistics of the Village

Study Area: (acres)	110
Dwelling Units (#):	42
Density: (dwelling units per acres of developed lots)	1.9

Source: Calculated from North Stonington Tax Assessor Cards and Plat Maps

LYNCH ANALYSIS

This Lynch analysis is based on interviews with nine users of the village: six residents and three employees. The methods used for this analysis are detailed in the Chapter Three. Based on the interviews, it is apparent that history and historic architecture are key factors in the general character of the Village. The interviews and resulting sketch maps also lead to identifying the five elements of the village image: paths, edges, districts, nodes, and landmarks (see Map 4).

Paths

As identified through field observations and the participant sketch maps, the paths consist of the major roads: Main Street, Rocky Hollow Road, and Wyassup Road. The west end of Main Street was identified most frequently on the sketch maps. It appears on eight maps and the east end of Main Street appears on five maps. Wyassup Road was identified on seven maps and Rocky Hollow was identified on six. Although Route 2 was drawn on five of the maps, it is viewed as an exterior edge to the Village rather than a

path. No strictly pedestrian or bicycle paths were identified because pedestrian, bicycles, and automobiles share the main paths.

Main Street and Wyassup Road form a modified “T” intersection which visually terminates at the hardware store building. Main Street and Rocky Hollow Road form a “V” intersection.

Edges

The major hard edge of the Village is Route 2 which defines the Village’s south and west boundaries. The brook, although a seemingly soft edge, does not appear to function as an edge. It was only drawn on four of the interview sketch maps. Since it runs through the Village center underneath buildings it is not a highly visible element in the Village nor does it physically separate districts.

Districts

Although the Village is relatively small and compact, three general districts exist. The central district is the core commercial and civic area where the hardware store, town hall buildings, and intersections of Wyassup Road and Main Street are located. Another district is located southeast of the central district and is comprised of houses, the bed & breakfast, and the Baptist Church. A third district is located west of the central district and is comprised of houses, the Congregational Church, the Wheeler Library, and the high school.

Nodes

The center of North Stonington Village, at the intersection of Main Street and Wyassup Road, serves as a district and a node. The center is both a junction of paths and a concentration of characteristics. The majority of the active mixed uses are clustered in this node. One participant even identified this node as the extent of the Village.

Landmarks

The most frequently mapped physical object-elements were the Hescoc law office (Figure 4), the old Town Hall, and the Hardware store (Figure 8).

The second most frequently mapped elements of this kind were the Wheeler Library (Figure 7), the brook, the bed & breakfast (Figure 3), and the new Town Hall. The third most mapped elements were the Congregational and Baptist churches (Figures 2 & 6).

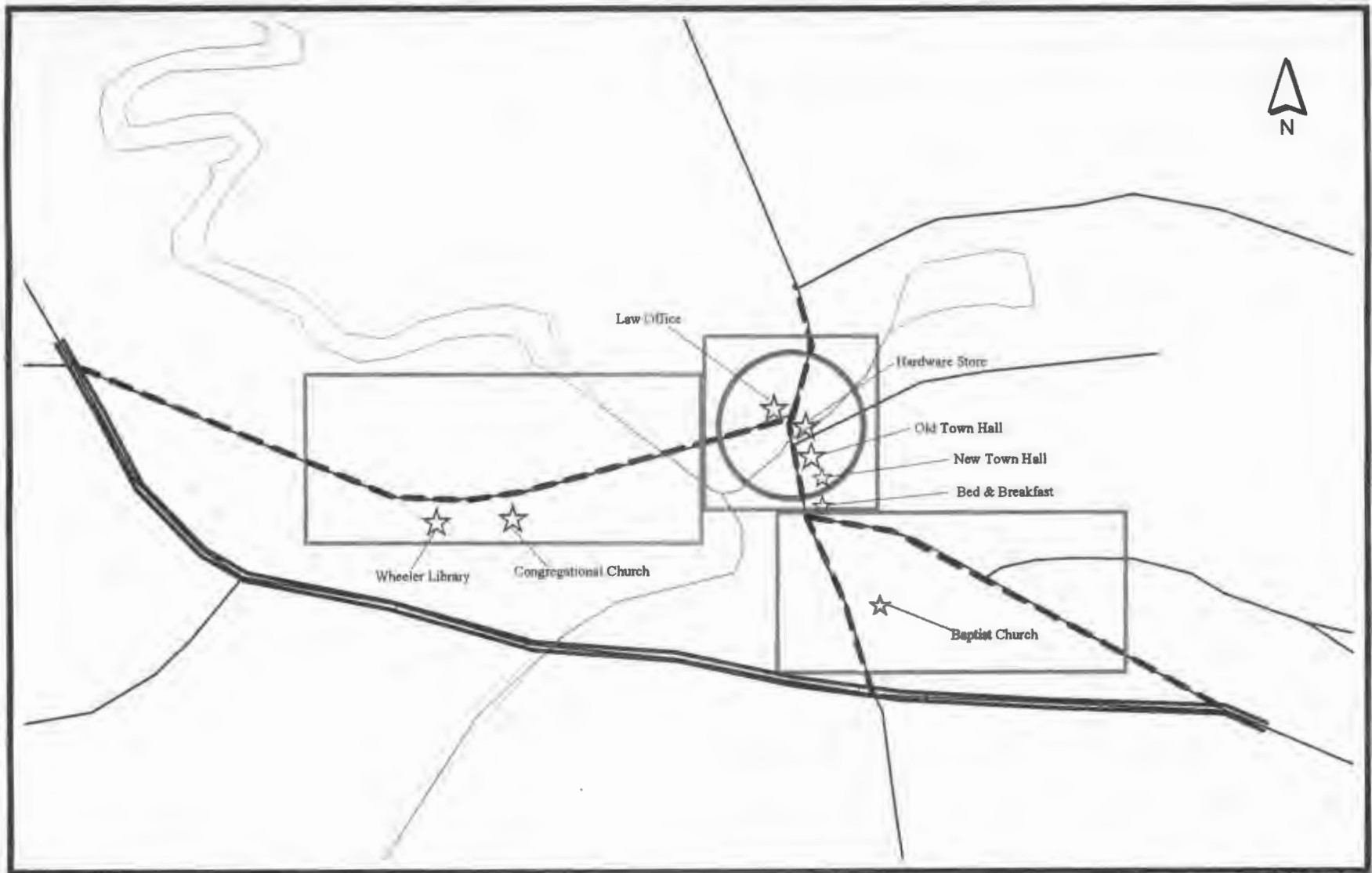
When asked, “What are the most distinctive elements of the Village?”, most participants named the Wheeler Library. The second most frequent answers were the Congregational Church and the hardware store.

These results show that the major landmarks of the Village are the hardware store, the Hescoc law office, the old Town Hall, the Wheeler Library, and the Congregational Church. The minor landmarks include the brook, the bed & breakfast, the new Town Hall, and the Baptist Church.

Summary Of Lynch Analysis






The are the major conclusions that are drawn from the Lynch Analysis are:

- Mixed-use (especially commercial, civic, and professional uses) is important to the image of the Village. This is concluded because the defined node is also the commercial core of the Village and many of the identified landmarks are commercial, civic, professional, or institutional.
- Good design is important to the image of the Village. This conclusion is based on the fact that most of the landmarks chosen were also architecturally significant buildings (Connecticut Historical Commission 1997) in the Village (such as the Wheeler Library and the two churches).
- One strong boundary edge of the Village is Route 2. This conclusion is based on the layouts of the participants’ sketch maps and helps to define the study area for this project (see Map 3).



Not to Scale

LEGEND

-  Node
-  District
-  Major Landmark
-  Minor Landmark
-  Path
-  Edge
-  Roads
-  Water Bodies

MAP 4: Lynch Analysis

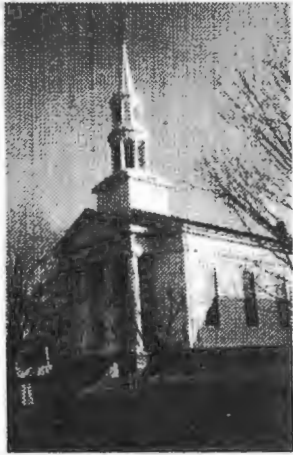


FIGURE 2: The Congregational Church



FIGURE 4: The Law Office



FIGURE 6: The Baptist Church



FIGURE 3: The Bed & Breakfast



FIGURE 5: The Blodgett House



FIGURE 7: The Wheeler Library

NATURAL SETTING

Water

North Stonington Village is located on the Shanuck and Assekonnk rivers, small rivers which wind through the settlement.³ The Village is located in the Aquifer Protection Overlay area and consists of stratified sand and gravel deposits. According to the 1981 Plan of Development, the Shunock River Valley is the aquifer in town with the greatest potential for a highly sustainable yield of groundwater. The Village falls within the local Aquifer Protection Overlay Area and the buildings in the Village are served by wells.

Polluting activities in the Village include: on-lot subsurface sewage disposal systems (serving almost all buildings in the Village), livestock, and the application and storage of road salt (N. S. Plan of Development 1981). The water quality of the ground water (as determined by the quality of the well water) is variable and highly susceptible to pollution from salt storage and septic systems (Mullane 1998). In fact, three wells in the Village are currently polluted as a result of salt storage (Ibid.). These properties are obtaining water from the Town well (Ibid.).

According to the Connecticut Department of Environmental Protection, the water quality in the Shanuck and Assekonnk rivers is Class A which means it's very clean (Hust 1998). The classes range from AA to C, C being the lowest quality (Ibid.).

Soils

Most of the Village is sited on Hinckley Gravelly Sandy Loam which is an excessively drained soil. Table 3 lists the soil types found in North Stonington Village and the drainage category for each. The Hinckley soil series was formed in glacial outwash, its slopes can range from 0 to 35 percent, and the depth to the high water table is over six feet (USDA 1983).

TABLE 3: Soil Types in the Village

Abr.	Name	Drainage Quality
CbB	Canton & Charlton Fine Sandy Loams	well drained
HkC	Hinckley Gravelly Sandy Loam	excessively drained
Ts	Tisbury Silt Loam	moderately well drained
HcA	Haven Silt Loam	well drained
CcB	Canton & Charlton Very Stony Fine Sandy Loams	well drained
Ro	Rippowam Fine Sandy Loam	poorly drained

Source: USDA 1983

³ These small rivers are referred to as brooks by the participants in the Kevin Lynch study.

Topography

The grade of the land drops dramatically just north of the Village (see Map 5). In fact, to the northeast of the Village (east of Wyassup Road) are slopes exceeding 20 percent. Approximately 22 percent of the Town has slopes greater than 20 percent. (North Stonington Plan of Development 1981)



MAP 5: USGS Topographic Map showing North Stonington Village

Farmland

The surrounding farmland is not visible from within the Village because the Village is within a small valley. However, farming's visual, cultural, and economic importance to the Town affects the general character and purpose of the Village.

In 1997, there were eight dairy farms, two Christmas tree farms, and two berry farms in North Stonington. In order to profit, the farms are large. For example, the Charles Palmer, Jr. Farm on Clarks Falls Road, milks 280 cows and encompasses about 280 acres of land. The largest farm (in acreage) in North Stonington is the Palmer Niles Miner Farm which

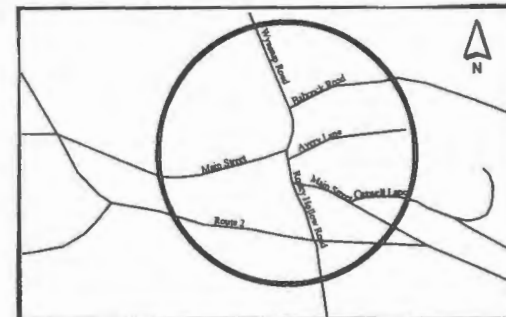
consists of approximately 476 acres. Farming is the most substantial industry located in North Stonington. (Connecticut Historical Commission 1997).

SETTLEMENT PATTERNS

There are three major roads with the Village: Main Street, Rocky Hollow Road, and Wyassup Road. Where these roads join forms the heart of the Village, and located here are the hardware store, Hescocock's law office, a bridge over the Shanuck River, the Town Hall complex, and the Historical Society. The roads are not straight or perpendicular to each other and this junction is fairly awkward for automobile traffic to negotiate.

The Village has a town commons, but this was established in 1976 and the residents do not consider it a visually integral part of the Village, as the Kevin Lynch analysis above illustrates.

The Village is quite walkable. As seen in Map 6, from the central node (at the intersection of Wyassup Road and Main Street) most of the Village lies within a quarter mile radius (or an approximately five-minute walk).



MAP 6: Quarter-Mile Radius Around The Village



FIGURE 8: The Hardware Store

The land uses in the Village are mixed (see Table 4). The majority of lots are used as single-family residences (53 percent). Ten of the lots are vacant. Included in the other use categories are a lawyer's office, the Historical Society museum, a hardware store (see Figure 8), two antique stores, a bed & breakfast, the Town Hall, two churches, a school, a library, and four multi-family residential structures.

TABLE 4: Village Land Use in 1997

USE	# of Lots
Single-Family Residential	31
Open Space	9
Mixed	5
Multi-Family Residential	4
Institutional	4
Civic	2
Commercial	1
Professional	1
Parking	1

Source: North Stonington Tax Assessor Cards

Various physical dimensions contribute to the character of the Village. The cartway (the paved road width) varies between approximately 22 and 30 feet (based on field measurements at four random points along the roads) (see Figure 9).

As displayed in Table 5, the majority of lots in the Village are smaller than one acre. In fact, the largest category shown below is for lots between 10,000 and 19,999 square feet (approximately 1/4 to 1/2 of an acre). Vacant lots are discounted from the calculation in Table 5.

TABLE 5: Village Lot Size

Area	#
< 5,000 sf	2
5,000 - 9,999	5
10,000 - 19,999	15
20,000 - 29,999	4
30,000 - 43,559	12
1 acre - 1.49	4
1.5 - 1.9	5
2+	4

Source: North Stonington Tax Assessor Cards

The average density (excluding the school and vacant lots from the calculation) of dwelling units per acre of developed lots is 1.9 units per acre. As displayed in the lot frontage distribution table below, the majority of lot frontages are less than 150 feet, with the highest category being lots of between 100 and 149 feet. Vacant lots and lots with zero frontage are discounted from the calculations in Table 6.

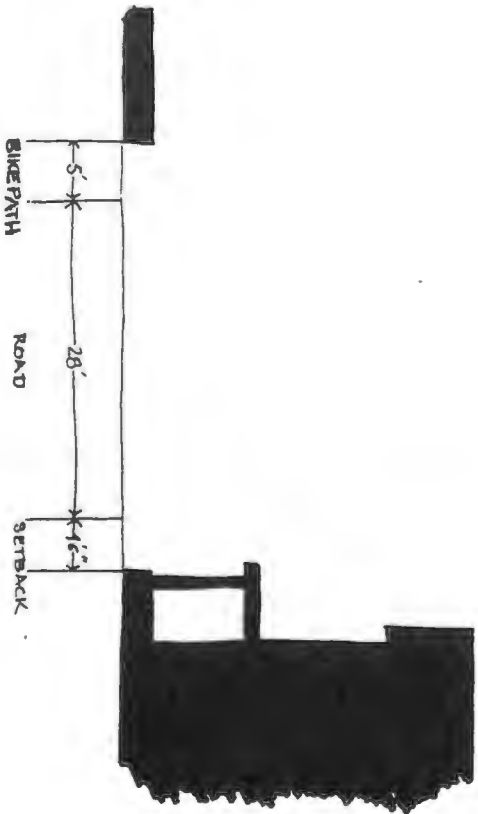
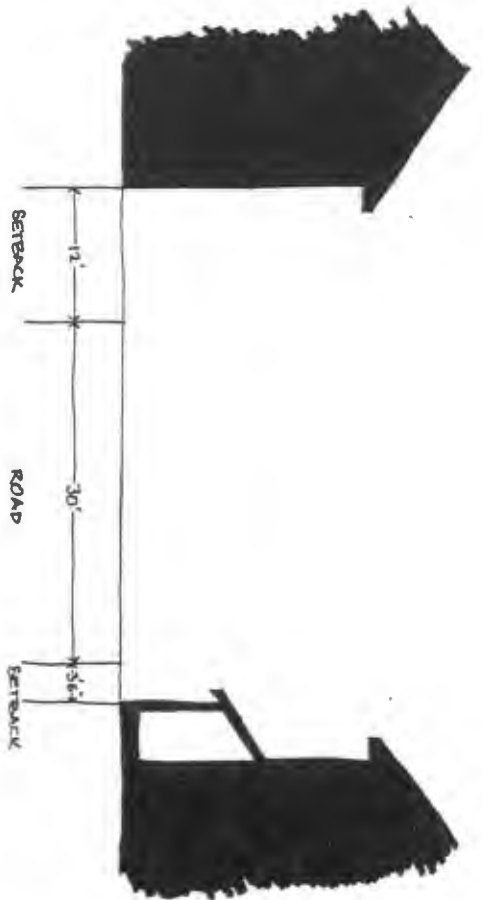
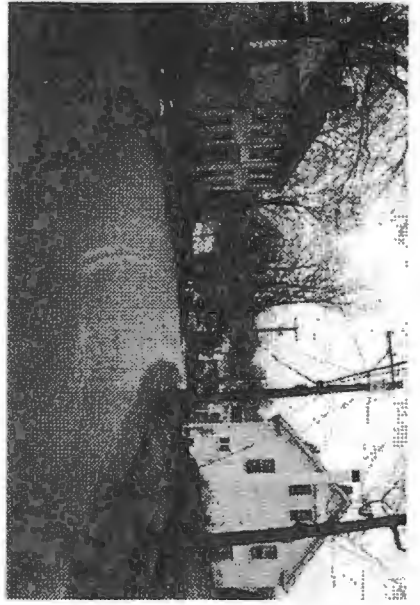


FIGURE 9: Street sections of the Village

TABLE 6: Village Lot Frontage

Frontage	#
<50 feet	3
50 - 99	8
100 - 149	13
150 - 199	8
200 - 249	4
250 - 299	2
300 +	6

Source: North Stonington
Tax Assessor

Table 7 displays front yard setbacks in the core of North Stonington Village. These measurements were taken in the field by this author in December 1997. All of the buildings in the study area were not measured; only those buildings located in the core of the Village were measured. Based on visual observation, the buildings further from the core of the Village generally have larger front yard setbacks than those in the core. Also based on visual observation, the older buildings generally have smaller setbacks than newer buildings. For example the new Town Hall has a larger front yard setback than the old Town Hall. Two anomalies to this observation are the churches which are older buildings⁴, but have very large front yard setbacks.

⁴ The Baptist Church was constructed in 1833 and the Congregational Church was constructed in 1848 (CT Historical Commission, 1997 and Plummer, 1981).

TABLE 7: Village Front Yard Setbacks

Setback	#
< 9.9 feet	5
10 - 19.9	9
20 - 29.9	1
30 - 39.9	2
40+	7

Source: Field measurements
(1997)

VEGETATION

The Village has old and new growth vegetation, exemplifying its evolution over time. The roadsides are inconsistently lined with both deciduous and coniferous trees. The most cohesively tree-lined area of street is on Main Street north of 85 Main and near the Town Commons (see Figure 10). This area is lined with large coniferous trees. Many of the house lots have small shrubs and garden-type vegetation in their grassy yards.



FIGURE 10: Tree Canopy on Main Street

ARCHITECTURE

The Village consists of mostly 19th century buildings. Various architectural styles are found here including: Georgian (1700-1800), Federal (1800-1830), Greek Revival (1825-1860), Gothic Revival (1840-1860), Italianate (1860-1880), Richardsonian Romanesque (1880-1900), and Colonial Revival (1880-present).⁵

Most of the buildings are in the Georgian, Federal, and Greek Revival styles. All the pre-1950 buildings are listed as contributing buildings in the National Register Historic District (Plummer 1981) and are individually listed in the Connecticut State Register of Historic Resources (Connecticut Historical Commission 1997).

In the Village, the median floor area is 3,816 square feet (Tax Assessor Field Cards) and most buildings are two stories high with gable or hip roofs. The predominant building material is wood with clapboard or shingle siding. The anomalies are the newer Town Hall building and the high school (both constructed of brick and larger in scale). Many of the roofs now have asphalt shingles replacing the original material, which was probably wood shingles in many cases.

Main building entrances are generally located on the street facade. Many of the doors and door surrounds are indicative of the buildings' styles (see



FIGURE 11: Federal style door surround at 62 Main Street

Figure 11). For example, fan lights are commonly found above doors on Federal buildings and transoms and sidelights are commonly found surrounding the doors of Greek Revival buildings. Window configurations are generally in harmony with the buildings' styles, as well, such as 12/12 double hung sash on Georgian structures and 2/2 double-hung sash on Italianate structures.

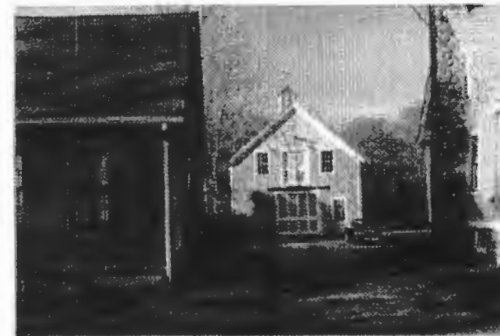


FIGURE 12: A carriage house in the Village

⁵ Inclusive dates of styles based on McAlester, Virginia and Lee. 1989. *A Field Guide to American Houses*. New York: Alfred A. Knopf. and *Connecticut State Historic Resources Survey for North Stonington*. [1997] Connecticut Historical Commission, Hartford, Connecticut.

North Stonington Village is notable for its amount of extant outbuildings including carriage houses, sheds, outhouses, and workshops (see Figure 12).

AMENITIES

The Village has a few amenities. In November 1997, the Town installed a freestanding clock at the street edge of the municipal parking lot. Some amenities are located in the Town Commons including a bicentennial plaque embedded in a large stone, a bench, and a footbridge.

The Village has no sidewalks, but does have a bicycle lane on Main Street that is designated by a painted line on the asphalt of the street. This bicycle lane varies in width from approximately five feet to two and a half feet (based on non-inclusive field measurements).

In the center of the Village, the River is lined with stone walls, harmonizing with the stone fences found in the rural areas of North Stonington (see Figure 13).



FIGURE 13: The stone retaining walls at the Shanuck River

SUMMARY OF FINDINGS

This chapter has described various aspects of North Stonington Village's character beginning with the results of the Lynch Analysis and including the five major elements of character: natural setting, settlement patterns, vegetation, architecture, and amenities. The following chapters discuss strategies to enhance and protect three of these elements: settlement patterns, architecture, and amenities because they are most easily affected by land development regulations. Other regulations (e.g., environmental review or tree ordinances) may be more appropriate for protecting the natural setting and vegetation.

CHAPTER FIVE

CHAPTER FIVE

EXISTING LAND DEVELOPMENT REGULATIONS

INVENTORY

The North Stonington Zoning Ordinance designates seven zoning districts and three overlay areas throughout the municipality. The districts include R40 High-Density Residential, R60 Medium-Density Residential, R80 Rural Preservation, C Commercial, HC Highway Commercial, OR Office/Research, and I Industrial. The overlay areas include VP Village Preservation Overlay, AP Aquifer Protection, and SU Seasonal Use.

North Stonington Village is within the Town's R-40 District. This district is primarily zoned for detached single-family houses with 40,000 square foot (sf) minimum lots (approximately one acre), minimum front setbacks of 35 feet, and minimum lot frontage of 150 feet.

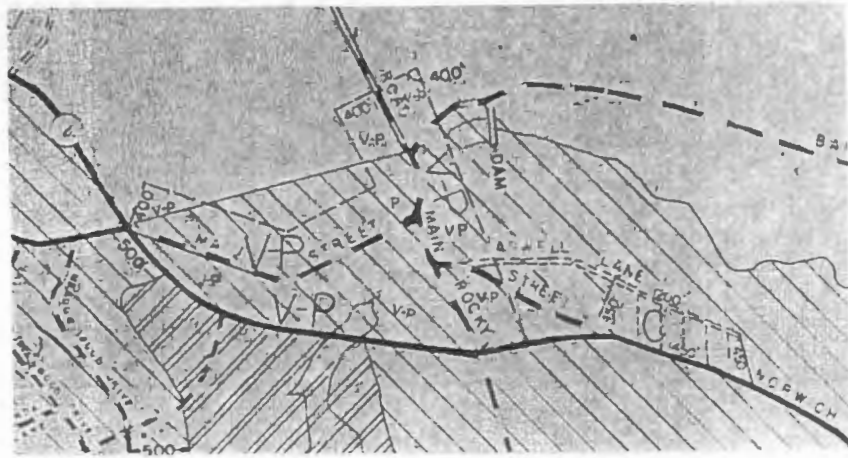
304.1 R40 High-Density Residential District. This zoning district focuses on the village area and contains most of the Town's higher residential densities as well as most of the municipal facilities and services. It is intended that residential growth be encouraged to locate in the southern part of the Town, and particularly in this district, rather than in the northern area that is remote from facilities and services. (N.S. Zoning Ordinance 1985, 3-1)

TABLE 8: Uses in the R40 Zoning District

Permitted	Special Permit
Single family residence	Multi-family residence
Duplex residence	Lodging house
Church	Home occupation
Educational facility	Senior housing
Town recreation facility	Residential caretaker / accessory apartment
Town building	Membership club (no firearms)
Public utility distribution	Cemetery
Library	Emergency service
Post office	Social service agency
Agricultural	Farm winery
Agricultural facility	Veterinary hospital
	Funeral home
	Professional office
	Real estate / insurance office
	Communications tower
	Day care / Nursery school
	Earth excavating / filling

The village is also designated as the Village Preservation Overlay Area (see Map 7) which is intended to allow development and alterations that are more sensitive to the village nature of the area than the R40 regulations allow.

305.1 VP Village Preservation Overlay Area. This overlay focuses on the grouping of historically and architecturally significant buildings in the Village of North Stonington. It overlays the residential district and is intended to protect and preserve the appearance and character of the Village and its individual buildings, regardless of the type of land uses involved. (N.S. Zoning Ordinance 1985, 3-2)



MAP 7: Current Village Zoning

Regulations within the VP area include the following:

405.1 No building, structure, or use shall be permitted that would be inconsistent or harmful to the historic charm and character of the Village because of size, location, design, or use. Specifically, permitted uses are limited solely to those listed under the R-40 District residential uses of the Table of Use Regulations, Sections 403.1 and 403.2, except that existing nonresidential uses may be changed to uses that are considered by the Commission as being compatible with the historical neighborhood.

405.2 No principal building or use shall be established or changed to another use without a Special Permit.

405.3 Existing building line setbacks shall be maintained for principal and accessory buildings.

405.4 The preservation and restoration of derelict structures and reconstruction on documented sites shall be permitted when it can be demonstrated to the Commission that the structure is significant under the criteria of the National Register District.

405.5 Re-constructing or re-building after a fire or other casualty to buildings or features on documented historic sites within the Village Preservation Overlay Area shall be permitted if it can be demonstrated that the building or feature is significant under the criteria of the National Register District.

The Village is also located in the Aquifer Protection Overlay Area. The intent of this district is to preserve “. . . the quality and quantity of the Town’s major groundwater resources.” (3-3).

The majority of the uses prohibited in the AP area are related to hazardous chemicals or other polluting by-products. The only prohibited uses that may be appropriate in a village context are: mortuary; dry cleaning operation; veterinary operation; photographic processing or laboratory; and furniture stripping, refinishing, or reconditioning operation. (4-6)

The AP area does not have dimensional regulations.

CRITIQUE

Based on field measurements and tax assessor maps and cards, the Village is currently of a much greater density, has much smaller front yard setbacks and frontages, and is enhanced by a greater mixture of uses than zoning would allow by right (see Map 8). Map 9 is a conjectural figure-ground that projects the R40 zoning into the future. This is a dramatized vision of what the Village could be transformed into if the R40 zoning regulations dominate the future direction of the Village.

The existing village character (see Chapter Four) is very different from the requirements of its R40 base zoning:

- As opposed to the R40 requirement of 40,000 sf minimum lots, the largest category for lot area is lots between 10,000 and 19,999 square feet (approximately 1/4 to 1/2 of an acre).
- In contrast to the 150 foot lot frontage requirement, the majority of lot frontages are less than 150 feet, with the highest category being lots of between 100 and 149 feet.
- Front yard setbacks are also much smaller than the zoning requirement of 35 feet; the majority of buildings in the core of the Village have a front setback of between 10 and 20 feet from the roads' edge.

Dimensional Regulations

Undoubtedly, the R40 zone dimensional requirements are quite oversized when compared to the existing dimensional characteristics of the Village. Although the dimensional regulations as defined for the R40 zone are not

inherently bad, they are not appropriate for North Stonington Village, and in time could change the very nature of the Village.

In fact, if these dimensional regulations dominated the appearance of the Village over the next few decades, it is probable that the Village would appear and function like a typical suburban residential neighborhood. This historic Village would no longer be a Village. Another special place is being “zoned out.”

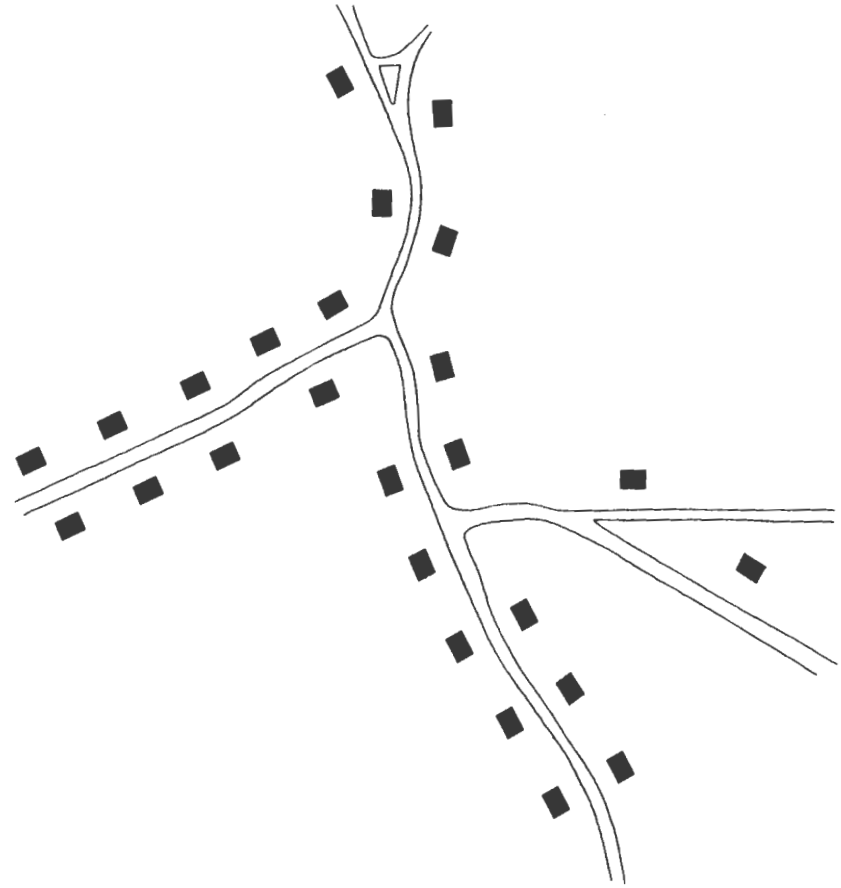
Why are the dimensional aspects of a village so vital to its character? A village needs density and close proximity of buildings to the road to foster communication and neighborliness. Anton Nelessen, one of the leading village planners in this country, defines a village as follows:

Villages are mid-sized small communities. . . Villages are characterized by a compact nature, a distinctive and unique building design vocabulary, a community focus, and perhaps a green or common defined by buildings. . . The low density periphery of the village is no more than a 1/4 mile walking distance from the end of the commercial spine, community center, or Main Street. (Nelessen 1994, 16)

The dimensional regulations for the Village are probably oversized due to the environmental constraints of the area. The Village is served by individual septic systems and private wells, is located in an aquifer protection area, and is sited along two rivers. Although the quality of the rivers is defined as Class A by the Connecticut Department of Environmental Protection (Hust 1998), the rivers and wells have been severely polluted in the past. In fact, the town condemned and demolished



MAP 8: Existing Figure-Ground



MAP 9: Possible Future Figure-Ground (R40 Zoning)

a few houses in the Village for discharging sewage directly into the rivers (Graeci 1998). Less settlement density means larger leaching fields and thus, less pollution. This is the beneficial aspect of the R40 zoning. However, there are other methods to avoid pollution. This is discussed in Chapter Seven.

Although the Village Preservation Overlay Area regulations may allow more harmony with the character of the Village than the R40 zone regulations do, they are vague and not prescriptive. Much discretion is left to the Planning and Zoning Commission. Also, the generality of the legislative language provides property owners with no direction or foresight nor does it inspire them to see all the potential for their property and the Village.

Use Regulations

Essential to the nature of a Village is a mixture of uses. The benefits of a mixed-use community are many. First, due to the convenient location of goods and services from residences, auto reliance is reduced. Reduced auto reliance is not only good for the environment but also for physical and mental health. Mixed use creates more appeal and convenience for using alternative modes of transportation such as walking and biking. Physical health is enhanced and communication is fostered among neighbors by limiting the isolation of automobile travel. From an historic perspective, a mixture of uses can help to preserve a way of life so integral to the history of the Village.

Although villages are intimate residential communities, they should offer the most basic employment services, and shopping for their residents as well as for those living in surrounding low-density, rural, or exurban reserve areas. . . Housing and offices may be located above shops. A variety of community and social facilities [should be] present. (Nelessen 1994, 16)

The uses observed in the Village include: residences; a hardware store; a stationery store, art gallery, and tea salon (recently out of business); antique stores; the historical society museum; two churches; parking lots; and the town hall complex. Among these, the hardware store (retail), recently closed stationery store, art gallery, and tea salon (retail and restaurant), and antique store (retail) would be prohibited outright under the R40 zoning use regulations.

Why are these uses prohibited? The answer to this question traces back to the concept of 'Euclidean zoning' that promotes the separation of uses to create safer and nuisance-free residential neighborhoods. This term is based on *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 47 S.Ct. 114, 71 L.Ed. 303, 54 A.L.R. 1016 (1926). This United States Supreme Court case condoned zoning and the separation of uses. (Wright 1991, 770)

What is the cost of this type of strict separation of uses? The cost is isolated suburban-type residential areas with deficient or non-existent community cohesion.

It is not clear under the VP Overlay Area whether the zoning board would allow these uses in other buildings in the Village or what other uses would be allowed in the already non-conforming buildings. The clause,

. . . existing nonresidential uses may be changed to uses that are considered by the Commission as being compatible with the historical neighborhood (N.S. Zoning Ordinance 1985, 4-3)

is fairly vague. For example, the hardware store (located at the corner of Wyassup and Main Street) is a non-conforming use. If the hardware store goes out of business, what uses are considered by the Commission to be “compatible” with the historic neighborhood? Probably another hardware store, maybe an art gallery, maybe an antique shop, or maybe a cafe. But, the regulations are so general that what the Commission considers to be compatible uses is not definitive. With no specific definition of ‘compatible’ uses, the uses allowed by special permit are potentially based on the success of the applicants’ rhetoric or the Commission’s whims.

Protecting Historic Architecture

Another aspect of the Village that is in great jeopardy is the integrity of its historic architecture. Currently, no substantial protection exists to maintain that sense of place which the Village’s great wealth of historic architecture provides. The VP Overlay Area offers minimal protection and is vaguely worded as discussed above. The Village has been fortunate to have property owners who seem to care about and respect the historic significance of their buildings. But, this good will and knowledge alone

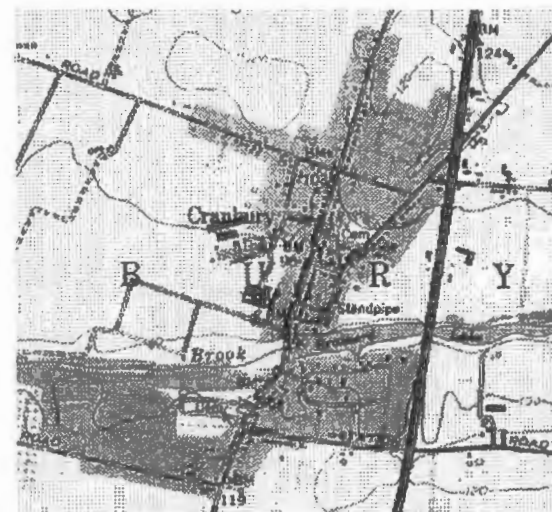
cannot be relied on indefinitely if North Stonington residents wish to preserve the charm and character of their community.

CHAPTER SIX

CHAPTER SIX

CASE STUDIES OF VILLAGE-ORIENTED REGULATIONS

Various villages on the East Coast are protected by village-oriented land development regulations. These local regulations are tailored to the particular village's character and establish either a village district, village overlay district, or an historic overlay district. This chapter reviews five municipal ordinances and one model ordinance: Cranbury, New Jersey; Tewksbury, New Jersey; Manheim, Pennsylvania; Salford, Pennsylvania; Chelsea, Vermont; and the Cape Cod Commission Model Bylaws, Massachusetts. The background data presented for each town varies according to availability. The conclusion of this chapter compares these ordinances and highlights selected aspects of each in order to determine useful elements for the protection and enhancement of North Stonington Village.



MAP 10: USGS Topographic Map showing Cranbury, NJ

CRANBURY, NEW JERSEY

Cranbury, New Jersey, a 13.42 square mile rural community, is located in the southern end of Middlesex County and is in close proximity to Princeton and Trenton. Approximately two-thirds of the Town is agricultural and about 11 percent is protected open space. Cranbury Village is a National Register Historic District and about half of the Town's 2,545 residents live in the Village (see Map 10). The Village is serviced by municipal water and sewer. (Moskowitz 1993)

Cranbury adopted a Village/Hamlet Residential Zone (V/HR) and a Village Commercial Zone (VC) as part of its land development ordinance in 1995. These zones protect Cranbury Village which is a densely developed residential area with small retail and service establishments forming its core. The V/HR district is defined through permitted uses, conditional

uses, and area and bulk regulations. The VC district is defined through permitted uses, prohibited uses, and area and bulk regulations.

Permitted Uses

V/HR

The permitted uses in the Village/Hamlet Residential Zone consists of:

- detached single-family dwellings;
- commercial and home agricultural;
- places of worship;
- public utility and service structures;
- family day care homes;
- community residences for the developmentally disabled;
- community shelters for victims of domestic violence;
- home occupations;
- bed and breakfast establishments;
- public parks, playgrounds, buildings, structures, and uses owned and operated by the Town; and
- accessory uses.

VC

The uses permitted in the Village Commercial Zone consists of:

- detached single-family dwellings;
- two-family dwellings;

- retail and service establishments;
- offices for professional services, commercial, business, and government;
- banks and financial institutions;
- funeral homes;
- restaurants, excluding drive-through restaurants;
- clubs, lodges, and fraternal organizations;
- dwelling units within mixed use buildings;
- commercial and home agricultural;
- places of worship;
- public utility and service structures;
- child care centers;
- public parks, playgrounds, buildings, structures and uses owned and operated by the Town; and
- accessory uses.

Conditional Uses

In the V/HR zone, the conversion of a single-family dwelling into a two-family dwelling is permitted upon the following conditions:

- the dwelling was built before 1953;
- each dwelling unit has separate ingress and egress;
- off-street parking is provided in accordance with the requirements of this ordinance (Article V: 1.25 for each one bedroom or efficiency unit; 1.75 for each 2 bedroom unit; and 2.0 for each 3 or more bedroom unit);

- minimum lot size is 18,000 sf;
- minimum size of each unit is not less than 600 sf; and
- any conversion shall not alter the exterior architectural appearance of the structure with the exception of an additional entranceway. Any alterations shall “. . . be in harmony with the architectural style, materials, and scale thereof.”

Prohibited Uses

In the VC zone, drive-through uses are prohibited.

Area and Bulk Regulations

V/HR

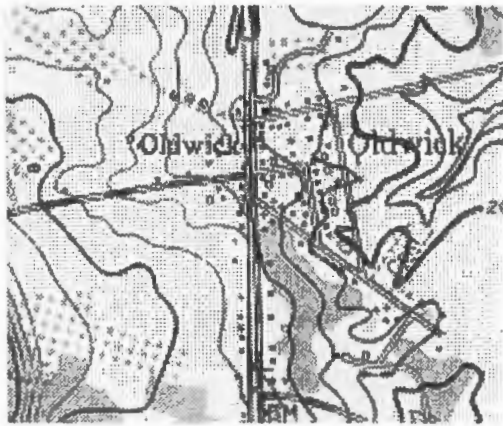
The following regulations apply to this zone:

- minimum lot size: 15,000 sf
- minimum lot width: 100 feet
- minimum front yard depth: “. . . the lesser of 40 feet or the average setback of existing buildings on the same side of the street within 200 feet on each side of the lot . . .”; no building shall be erected closer than 15 feet to the street line
- minimum side yard: 12 feet
- minimum rear yard: 40 feet
- maximum building height: 35 feet

VC

The following regulations apply to this zone:

- minimum lot area: 6,500 sf
- minimum lot width: 40 feet
- minimum front yard depth: “. . . the lesser of 45 feet or the average setback of existing buildings on the same side of the street within 200 feet on each side of the lot.”
- minimum side yard width: eight feet for one yard; 24 feet for combined side yards; or when the side lot line of the yard coincides with another residence zone, the requirement for that zone shall take precedence
- minimum rear yard: 40 feet
- maximum building height: 35 feet
- maximum building coverage: 30 percent
- maximum impervious surface coverage: 60 percent



MAP 11: USGS Topographic Map showing Oldwick Village, NJ

OLDWICK VILLAGE, TEWKSBURY, NEW JERSEY

Tewksbury, New Jersey is a largely rural community located in Hunterdon County. Oldwick Village is an historic village with mostly residential uses and some commercial uses (see Map 11). Tewksbury adopted a Village district and an Historic/Architectural Overlay District as part of their land development ordinance to protect the village of Oldwick as well as those of Pottersville and Mountainville. Oldwick Village also has a commercial district.

The H/A district is defined through purpose; permitted principal uses; accessory buildings and uses; and conditional uses. The Village district is defined through purpose and area, yard, and bulk regulations. The Commercial district is defined through purpose; permitted principal uses; accessory uses; and area, yard, bulk regulations. In the following summary,

the H/A district is defined only as it pertains to the underlying Village district.

Purpose

H/A

The Historic/Architectural Overlay district was created:

... to recognize the unique features of the existing village in terms of their historic and architectural qualities as well as the smaller lot sizes and limited commercial services available within them (Tewksbury Zoning Ordinance, 46).

Village

The intent of the Village district is to:

- identify the boundaries of the villages;
- encourage the preservation of the historic and architectural qualities that now exist;
- provide for review of the compatibility of the design of a proposed development located at the perimeter of the H/A District;
- maintain a size and level of intensity within the villages consistent with the present character of the villages; and
- recognize small enclaves of development with clusters of older homes on smaller lots.

Commercial

The intent of the Commercial district is to identify the few small commercial service areas now in the Town.

Permitted Principal Uses

H/A

The following uses are permitted in this district:

- detached single-family dwellings;
- government and public buildings and services necessary to the health, safety, convenience, and general welfare of the residents of the Town; and
- churches and public and private, non-profit schools whose curriculum is limited to the general education of children in grades K-12 and whose curriculum is provided by the State.

Commercial

The following uses are permitted in the commercial district:

- retail store or shop;
- restaurant; and
- office.

Accessory Buildings and Uses

H/A

The following accessory uses are permitted in this overlay district:

- garage for parking vehicles of the residents on the lot;
- building to house domesticated animals (other than a farm building);
- building tools and equipment used for maintenance of the dwelling and grounds;

- home occupation;
- one earth terminal antenna with associated dish (in rear yard or on roof and below the ridge - screened from view of the street);
- UHF/VHF television antenna; and
- fences that are set back at least five feet from the right of way (not located in sight triangle); fences and walls shall be reviewed by the Historic/Architecture Committee.

Commercial

The permitted accessory uses in this district are the following:

- a building with a business use on the ground floor may also have one apartment dwelling unit;
- storage facilities necessary to the conduct of the commercial uses permitted by this section; and
- one free standing flag pole (not more than 18 feet in height).

Conditional Uses

H/A

The conditional uses permitted in this district (within the underlying Village District) are public utility facilities that are owned and operated by a public utility company serving a franchise area of the Town.

Area, Yard, and Bulk Regulations

Village

For residential uses in the village district, the following regulations apply:

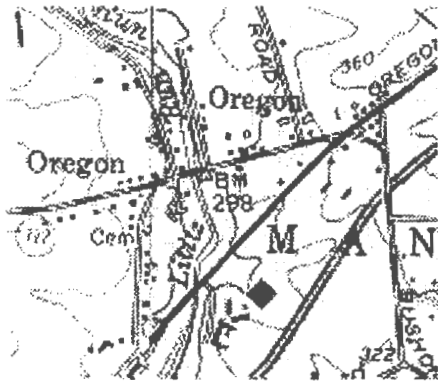
- minimum lot area: 40,000 sf
- minimum lot width: 100 feet
- minimum lot depth: 100 feet
- minimum front yard: 40 feet; the front setback may be reduced, after review and approval by the approving authority, to the average setback of existing buildings within 200 feet on each side of the proposed building; in no case shall the front setback be less than 15 feet
- minimum rear yard: 30 feet
- minimum side yard: 15 feet
- maximum building height: 35 feet
- maximum lot coverage: 20 percent

Commercial

The commercial district has the following regulatory requirements:

- minimum lot area: 7,500 sf
- minimum lot width: 75 feet
- minimum lot depth: 100 feet
- minimum front yard: 5 feet
- minimum side yard: 5 feet

- minimum rear yard: 25 feet
- maximum building height: 35 feet
- maximum lot coverage: 50 percent



MAP 12: USGS Topographic Map showing Oregon Village, PA

VILLAGE OF OREGON, MANHEIM, PENNSYLVANIA

Manheim Township, Pennsylvania, adopted an historic overlay district as part of its zoning ordinance in 1993. In part, this historic overlay district protects the Village of Oregon which is a mostly residential village with some mixture of uses (see Map 12). The Township is largely agricultural. The historic overlay district is defined through intent, general provisions, definition of historic resources, role of the historic preservation trust, modification of lot area regulations, standards for rehabilitation, permits, and demolition criteria and procedure.

Intent

The purpose of this district is to protect the general welfare by preserving the historic values in the Town's environment. It is intended that the effects of this district will . . .

encourage continued use and facilitate appropriate adaptive use of historic resources, encourage the preservation and restoration of historic settings and landscapes, and discourage the demolition of historic resources (Manheim Zoning Ordinance Article 20A 1993, 20A-1).

General Provisions

The overlay district applies only to those historic resources as identified and mapped. The overlay district regulations shall supersede any provisions of underlying zoning unless those provisions are more restrictive.

Definition of Historic Resources

The resources included in this district are those eligible for or listed on the National Register of Historic Places (maintained by the U.S. Department of the Interior) or the Lancaster County Historic Sites Register (level of significance 1 or 2).

Eligibility for the National Register is determined by the Pennsylvania Historical and Museum Commission or the U.S. Department of the Interior.

The Township Secretary maintains both an official historic resources map and list. The official map and list are established and amended by official action of the Board of Commissioners.

Role of the Historic Preservation Trust

The Historic Preservation Trust is established with advisory power. The Trust shall make recommendations upon:

- the establishment of or amendments to the official map and list;
- requests for special exceptions, conditional uses, or variances affecting historic resources;
- rehabilitation, alteration, or enlargement of historic resources; and
- the demolition of historic resources.

All recommendations must be made within 30 days of receiving a request.

Modification of Lot Area Regulations

Any subdivision of a lot that contains an historic resource shall preserve the integrity of the setting of the resource in size and configuration. The size and configuration shall be dependent on the class of the resource and the characteristics of the landscaping of the lot and adjacent lots.

Standards for Rehabilitation

Any proposed rehabilitation, alteration, or enlargement of an historic resource should be in compliance with the U.S. Secretary of the Interior's "Standards for Rehabilitation." These standards are reproduced in Appendix One. The Zoning Officer shall refer applications for permits for proposed rehabilitation of historic resources to the Trust.

Permits

No permits for any land within the Historic Overlay District shall be issued by the Zoning Officer prior to the Trust having an opportunity to review and make recommendations. The Zoning Officer has five days from receipt of a complete application to provide the Trust with a copy of said application. A copy of the Trust's recommendation shall be sent to the applicant. The recommendations shall indicate appropriate changes in the plans to mitigate any detrimental effects.

The Zoning Officer shall issue a permit if all other requirements of the Town are met and:

- the Trust issues a report of no detrimental effect;
- the applicant revises the plans according to the Trust's recommendations; or
- no later than 90 days from the date of receipt of a complete application.

Demolition Criteria and Procedures

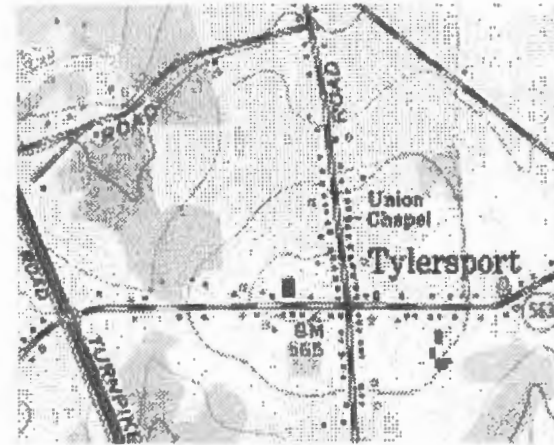
No historic resource shall be demolished by neglect, which includes leaving a resource open or vulnerable to vandalism or decay. No historic resource shall be demolished without obtaining a permit from the Zoning Officer. The following information shall be provided with the permit application:

- owner of record;
- classification in Historic Resources Map;

- site plan showing all buildings and structures on the property;
- recent photographs of the resource;
- reasons for the proposed demolition;
- method of proposed demolition; and
- future uses of the site and the material from the demolished resource.

The Trust may take the following actions:

- recommend immediate approval of the permit;
- elect to use a maximum time period of 75 days to document the resource or discuss alternatives with the applicant; or
- use the 75 day time period to recommend approval of the permit.



MAP 13: USGS Topographic Map showing Tylersport Village, PA

TYLERSPORT VILLAGE, SALFORD, PENNSYLVANIA

The zoning ordinance for Salford Township, Pennsylvania, designates a Village Commercial-Residential district (VCR) and a Village Transition Overlay district (VTO) for Tylersport Village (see Map 13). Salford is part of Montgomery County. The VCR and the VTO districts are defined through legislative intent; use regulations; height regulations; area, width, and yard regulations; and plan modifications. The VCR also includes development requirements and application procedures for conditional use. These sections are summarized below.

Legislative Intent

VCR

The intent of this article is to

... encourage the maintenance and enhancement of the existing visual character and residential life-style of the defined Tylersport Village area ... which exhibits a mixture of single-family detached, single-family semi-detached, and converted multi-family dwellings, as well as scattered commercial uses and home occupations, on smaller lot sizes than those generally found throughout the Township.

The intent also includes the following:

- guide preservation, future development, and redevelopment of the Village through strict controls and guidelines;
- introduce neighborhood-scale office and retain commercial enterprises; and
- provide for evaluation of all subdivision and development proposed in the Village to ensure that development will be compatible with the existing character of the Village.

VTO

This Overlay district extends outward for a distance of 100 feet from the edges of the defined VCR district. The intent of the Overlay district is to

... relate the preservation and future development or redevelopment of the defined Tylersport Village area to the future development of the surrounding, non-village

area if future provision of sewage facilities makes such development more feasible.

Overall, the intent of this district is to regulate the location of development and the uses permitted in the transitional zone of the underlying zoning districts.

Use Regulations

VCR

The following uses are permitted by right in this district: single-family detached dwellings; single-family semi-detached dwelling; municipal uses; and home occupations.

The following are permitted as conditional uses: conversion of a residential use to a single-family or multi-family use; conversion of a residential use to a non-residential use (including municipal, office, personal service shop, small-scale neighborhood retail, those from section 1000, and any use of same general character of those already specified); agriculture; accessory uses; and signs.

VTO

All uses as allowed in the underlying zoning districts except R-90 Residential, R-40 Residential, MF-Multi-Family, and passenger stations.

Height Regulations

VCR

Height limitations are a maximum of 35 feet, not exceeding two and one-half stories.

VTO

These regulations are the same as the VCR district.

Area, Width, and Yard Regulations

VCR

This section applies to single-family detached dwellings and single-family semi-detached buildings.

- Minimum lot area:
 - detached - 25,000 sf
 - semi-detached - 15,000 sf
- Minimum lot width:
 - detached - 100 feet
 - semi-detached - 60 feet
- Minimum front yard:
 - 25 foot setback from right of way
- Minimum side yards:
 - 15 foot setback from lot line with an aggregate width of 50 feet for both side yards combined

- corner lots - minimum of two side yards with the yard abutting the street have a minimum width of 25 feet from the right of way and the other side yard must have a minimum of 15 feet
- accessory building with floor area greater than 100 sf- a minimum side yard of ten feet
- Rear yard:
 - minimum depth of 60 feet
 - accessory building - minimum depth of 20 feet
- Building coverage:
 - detached - maximum coverage of 15 percent of lot
 - semi-detached - maximum coverage of 20 percent of lot

VTO

The area width and yard regulations in this overlay district follow the regulations for the underlying districts, except that no accessory structure shall be closer than 40 feet to the VCR district boundary.

Plan Modifications

VCR

This section allows for maximum flexibility in interpreting the requirements of this Article if the Board of Supervisors, with the advice of the Planning Commission, believes the proposal will result in furthering the legislative intent of this Article.

VTO

In essence, this section allows applicants to apply for a variance if the requirements of the Article of found to place an unnecessary hardship on the owner or applicant.

Development Requirements

This section addresses conversions of buildings to residential uses and to non-residential uses. The standards for conversions to residential uses are as follows:

- a single-family detached or semi-detached (twin) building, with a minimum of a 4,000 sf lot, can be converted to a maximum of three dwelling units per building or two dwelling units per twin;
- an accessory use, with a minimum of a 4,000 sf lot, can be converted to a maximum of four dwelling units in both a principal and accessory building;
- a non-residential use, with a minimum of a 4,000 sf lot, can be converted to a maximum of two dwelling units with a non-residential use and three units with no non-residential use; and
- all of the above types of conversions must have a minimum of two off-street parking spaces per dwelling unit on the same lot. They must also have not less than 750 sf of floor area per unit.

The standards for conversions to non-residential uses are as follows:

- for conversions to a municipal, professional, office, retail, personal service shop, or similar uses, the lot must be a minimum of 25,000 sf; and
- for conversions to accessory uses to a use specified above, there is no minimum lot area requirement and no lot shall contain more than three

dwelling units and one non-residential use. One additional off-street parking spot must be provided beyond the usual requirement for residential uses.

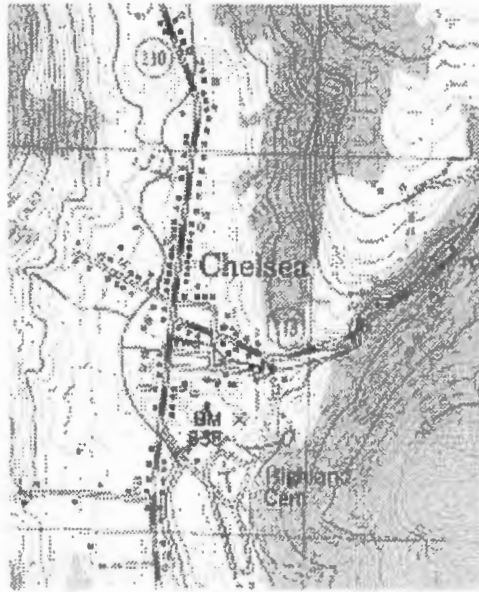
Application Procedures for Conditional Use

All applications for conversions, as listed above, shall be submitted simultaneously as a Conditional Use Application and as a Land Development Application and must be approved simultaneously. All other Conditional Use Applications shall be sent to the Board of Supervisor only.

The applicant shall include with the application for conditional use:

- the relationship of the project to the intent of this Article;
- statement of the compliance with or a request for waivers from the requirements of this Article;
- a general description of the architectural features of the building and its relationship to the character of the Village;
- a description of the alternatives considered by the applicant prior to selecting the proposed action; and
- a set of plans to detail the construction work to be done.

Review and action on a conditional use includes a public hearing with the Board of Supervisors and recommendations from the Planning Commission. With any negative decision against any proposal, “. . . the Board of Supervisors must clearly set forth the reasons for their decision” The Board must also offer any ameliorative steps that the applicant could take to address the problems.



MAP 14: USGS Topographic Map showing Chelsea, VT

CHELSEA, VERMONT

The town of Chelsea, Vermont, has recently proposed zoning bylaws which were scheduled to be warned for adoption during the 5 March 1998 Annual Town Meeting. Chelsea is a small, primarily agricultural town with a small, mostly residential village (see Map 14). The total ordinance has only one zoning district: the Village Historic Area. Outside of this district, general dimensional and use regulations apply. This district is defined through legislative findings, purpose, applicability, exemptions, application procedures, review limitations, criteria for approval, and demolition review criteria.

Legislative Findings

The legislative findings recognize that the village has a unique character created by its buildings, landscape, and streetscape, and that this character is what gives identity to the Town as a whole. These findings also recognize that change should be a part of the community and that new construction can be positive if visual integrity is maintained.

Purpose

The purpose of this article is to ensure that the natural beauty and visual character of the Village are maintained and promoted in order to protect and foster the economic, cultural, and social well being of the community. An additional purpose of this article is to improve or stabilize property values.

Applicability

Approval is necessary from the planning commission with any of the following acts within the Village Historic Area: construction or relocation of a building; addition or alteration of the exterior of a building; and construction or alteration of fences fronting or adjacent to specified roads.

Approval is necessary from the Planning Commission prior to obtaining a Zoning Permit.

Exemptions

Routine maintenance which uses the same or similar materials and does not alter the exterior appearance of a building and a change of use or type of occupancy (not causing any exterior alterations) are both exempt from Historic Area Approval.

Application Procedures

To begin the process, application materials must be submitted to the Zoning Administrator. The application is forwarded to the Clerk of the Planning Commission. The Commission reviews the application and issues a written decision to the applicant within 45 days. The approved plans are filed in the Town Records and shall not be significantly changed during construction without an amendment.

Review Limitations

The Planning Commission is limited in their review in that they shall not insist that new construction should copy existing styles or details. It also shall not be overly restrictive when the building is of little historic value or not visible from a public right of way.

Criteria for Approval

Various criteria are listed to consider before granting approval. The heights and setbacks shall maintain the prevailing dimensions existing in the immediate area. The following elements of a building shall be considered in relation to the buildings in the surrounding area: proportion;

roof shape, pitch, and direction; pattern (rhythm); materials and texture; and architectural features (details).

Demolition Criteria

Any demolition in the Historic Area requires approval from the Planning Commission. The Commission may determine that there is valid reason for preservation, than it may impose a waiting period of up to 60 days to afford the applicant time to arrange for the building's preservation. However, any building of substantial structural instability is exempt from the requirements of this section.

CAPE COD COMMISSION, MASSACHUSETTS

The Cape Cod Commission, headquartered in Barnstable, Massachusetts, produced a model bylaw for village-style development in March 1997 (Horsley 1997). The model bylaw is intended to be used by towns in Barnstable County to create new or strengthen existing villages through village districts or village overlay districts.

The authors of the model bylaw recognize that the historic development patterns of village centers are quite diverse and, therefore, the model bylaw is intended to be modified as appropriate for each village. Blanks have been left in the text of the bylaw where the regulations are meant to be tailored to each village based on in-field measurements of existing settlement patterns. This summary reproduces the blanks.

The bylaw is defined by purpose and intent; definitions; pre-application conference requirements; site planning standards and filing requirements; height, bulk, and setback standards; parking requirements; allowable uses; special permit standards and criteria; and review by special permit granting authority.

Purpose and Intent

This district enables the development and re-development of village centers “. . . in keeping with their historic development patterns, including the size and spacing of structures and open spaces.”

Definitions

In this section, the ordinance defines village development (overlay) districts, special permits, and special permit granting authority (SPGA).

This model ordinance gives two options for requiring special permits:

1. for all uses required to obtain a special permit under underlying zoning
2. for an increase in floor area by greater than _____ sf

Pre-Application Conference Requirements

A pre-application conference is required for special permit applications in the form of a public meeting with the SPGA. At this conference the purposed development is discussed in general terms. The purpose of this conference is to inform the SPGA of the preliminary nature of the proposed project.

Site Planning Standards and Filing Requirements

This section addresses access, parking lot design, pedestrian access, landscape and appearance, and plan filing requirements.

- access: new curb cuts shall be minimized through (a) common driveways, (b) existing side or rear street, or (c) cul-de-sac shared by adjacent premises.
- parking lot design: (a) lots must be located on the side or rear of the structure, (b) lots must be shared with adjacent businesses, (c) must include provisions for parking bicycles, (d) include adequate provisions for on-site retention and treatment of storm water, and (e) lots serving

uses other than solely residential shall be paved unless an alternative surface is approved by the SPGA.

- pedestrian access: plans for new construction must incorporate provision for safe and convenient pedestrian access; new construction should improve pedestrian access to building, sidewalks, and parking areas and “. . . should be completed with considerations of pedestrian safety, handicapped access, and visual quality.”
- landscaping and appearance: (a) a landscaped buffer strip may be required adjacent to adjoining uses, (b) large parking areas (more than 20 spaces) shall be separated by landscaped islands of eight to ten feet in width; one shade tree shall be planted for every three spaces, (c) exposed storage areas, machinery, service areas, and utility structures shall be screened from view of abutting properties, and (d) maintenance of landscaping is required and any tree or shrub that dies within one growing season shall be replaced by a tree or shrub of similar type and size.
- plan filing requirements: (a) a locus inset at 1”=1,000’ scale, (b) a plan with dimensions of all existing and proposed buildings on lot not to exceed 1”=40’, (c) elevation showing existing and proposed buildings as viewed from all sides not to exceed 1”=40’, (d) all buildings, parking areas, bicycle racks, roads, etc. within a radius of 800 feet on a plan of 1”=100’, (e) location, species, and dimensions of trees and other landscape features within a radius of 800 feet at 1”=100’, and (f) a proposed landscape plan of 1”=20’.

Height, Bulk, and Setback Standards

Two options for height standards are presented: (1) a fixed maximum height of a certain measurement as based on in-field measurements of existing village heights, or (2) the SPGA can allow a height increase of up to ___ percent above that in the underlying zoning district in conjunction

with allowing a decrease of required parking spaces if the additional height is found to be consistent with the scale of adjacent structures.

Options for floor area ratio (or square footage) requirements are also presented as either: (1) a fixed number, or (2) a percentage increase along with a reduction in required parking if found that this additional bulk reflects the scale of adjacent structures.

The bylaws present two options for setback requirements: (1) a fixed minimum and maximum front yard setback, or (2) SPGA can allow a reduction of setback standards upon finding that the setback’s in the underlying district are not in keeping with the area’s scale and character.

Parking Requirements

The SPGA is authorized to reduce the parking requirements of the underlying zoning up to ___ percent. To determine the appropriate reduction, the SPGA may consider the hours of usage of the proposed use, hours of usage of other uses, amount of shared parking with other uses, and the opinions of merchants, residents, and municipal officials.

Allowable Uses

- Residential: single family, two-family, and multi-family with specified density; the provisions of this section only apply if the underlying district is less restrictive.
- Non-residential: retail, business or professional offices, banks and other financial institutions, restaurants or other places serving food, but not including fast food restaurants.

Special Permit Standards and Criteria

When granting a special permit, the SPGA must consider the following:

- adequacy of the size of the site;
- suitability of site for proposed use;
- impact on traffic and pedestrian flow and safety;
- impact on neighborhood visual character;
- adequacy of utilities (including sewage disposal, water supply, and storm water drainage); and
- degree to which proposed project complies with the goals of the Town Comprehensive Plan and this ordinance.

Review By Special Permit Granting Authority

The Planning Board is designated as the SPGA under this ordinance and shall apply the criteria of this ordinance for review of special permits.

SUMMARY OF FINDINGS

This chapter examines the land development regulations of small historic villages that serve to protect and enhance the present character and visual integrity of the villages. Each community furthered this intent by either designating an individual zoning district or an overlay district. Although the cases presented in this chapter range geographically from Pennsylvania to New Jersey to Vermont, they exhibit various commonalities that deviate from conventional zoning.

Generally, these regulations allow and encourage mixture of uses within the villages. This allowance contrasts with the concept of Euclidean zoning (strict separation of land uses) that many current land use ordinances are based on. Uses that are deemed compatible through these village-oriented regulations include single-household, two-household, and multi-household dwellings; small-scale retail; professional offices; personal service shops; home occupations; restaurants (except drive-through or fast food); municipal services; parks; and mixed-use buildings.

These regulations also largely allow for smaller setbacks, lot sizes, street frontages, and parking requirements than conventional zoning typically allows. In the examined regulations, designated front yard setbacks are as small as five feet (in the Tewksbury ordinance). The front yard setbacks (as well as height limits) are also determined in relation to existing conditions. In fact, five of the ordinances mandate compatibility with adjacent lots rather than a fixed minimum and/or maximum setback.

Salford had the only ordinance that only provided a fixed minimum front setback (25 feet).

Lot size requirements were as low as 6,500 sf (in the Cranbury ordinance). Street frontages ranged from 40 feet to 100 feet.

The Cape Cod Commission Model Ordinance presented an interesting option for village parking requirements. The ordinance allows the review board to reduce the parking requirements of the underlying zoning through the development of shared-parking plans.

The role of the designated review board in each of these ordinances was regulatory (as opposed to advisory) in all but Manheim.

As a whole, these village-oriented land development regulations induce consideration of the village's history, scale, and character and require that growth and change harmonize with the existing identifying qualities of the villages. These village district regulations serve as a useful range of options to protect and enhance the character of North Stonington Village.

CHAPTER SEVEN

CHAPTER SEVEN

RECOMMENDATIONS

The Town of North Stonington should amend its zoning ordinance by adopting a North Stonington Village District in place of the current Village Preservation Overlay area. This chapter, presents recommended regulations that should apply to this proposed village district based on the findings of the character study (Chapter Four) and the case studies (Chapter Six). The boundaries of this proposed Village District should be equivalent to the project study area boundaries, as identified in Map 3.

Based on the format of the Cape Cod Commission's Model Bylaws (Horsley 1997), this chapter provides commentary after each recommended regulation which explains its basis and purpose. The general organization of the North Stonington Zoning Ordinance is used as the basis for the following recommended regulations. Applicable section numbers from the North Stonington Zoning Ordinance are included. This chapter also discusses general recommendations and various master planning approaches which can help to further enhance the Village.

VILLAGE DISTRICT REGULATIONS

Section 300 Zoning Districts

304.8 Village District

The Village District encompasses historic North Stonington Village which has a unique character made up of its historic buildings, settlement patterns, and mixture of uses. This district is intended to protect and enhance the historic and visual character of the Village and to work in conjunction with additional municipal programs to ultimately protect the rural character of the Town.

Commentary

This regulation is meant to recreate the historic village development pattern by providing for in-fill development, specific dimensional criteria based on the real dimensional characteristics of the Village, and a mixture of uses compatible with the character of the Village.

This regulation is not intended to act as historic district regulations and therefore does not require design review for new buildings and additions or exterior alterations to buildings within the district. However, an historic overlay district could work in harmony with this proposed Village District, but would require the creation of design guidelines that are specific to the historic architecture of North Stonington Village. This subject is also discussed in the General Recommendations section below.

Section 400 Use Regulations

403 List Of Use Regulations For The Village District

Single Family Residence	Permitted
Duplex Residence	Permitted
Multi-family Residence (maximum of five units)	Permitted
Lodging House	Permitted
Home Occupation	Permitted
Senior Housing	Permitted
Residential Caretaker Accessory Apartment	Permitted
Commercial Caretaker Accessory Apartment	Permitted
Church	Permitted
Education Facility	Permitted
Membership Club (no firearms)	Permitted
Town Building	Permitted
Library	Permitted
Post Office	Permitted
Social Service Agency	Permitted
Agricultural	Permitted
Agricultural Facility	Permitted
Equine Stable	Permitted
Veterinary Hospital	Conditional
Small Retail Store	Conditional
Restaurant (no drive-through)	Permitted
Personal Services Establishment	Permitted
Theater	Conditional

Financial Institution (no drive through)	Permitted
Professional Office	Permitted
Real Estate/Insurance Office	Permitted
Print Shop	Permitted
Country Inn (Bed & Breakfast)	Permitted
Day Care/Nursery School	Permitted
Mixed Use (of any permitted or conditional uses in district)	Permitted
Accessory Structures and Uses	Conditional

Any use not listed above is *prohibited* in the Village District.

Commentary

The intent of these use regulations is to allow by right a mixture of uses that is in harmony with the concept of a rural village. North Stonington Village, being primarily residential in nature, can greatly benefit from a appropriate mixture of uses that will enhance the neighborhood services in the Village for both residents, employees, customers, and other users of the Village.

Section 700 Special Permits

Those uses listed as *conditional* will be subject to the following criteria within the Village District and will require the Commission to grant a *special use permit* upon finding that the conditions are met.

Veterinary Hospital

The building footprint shall be no more than 3,000 sf

Small Retail Store

The building footprint shall be no more than 3,000 sf

Theater

Shall have no more than one theater and the building footprint shall be no more than 3,000 sf

Day Care/Nursery School

A minimum 20-foot front yard is required. No building, parking lot, driveway (except for the entrance of the driveway onto the street), play area, or any other use is permitted in this buffer area.

Accessory Structures And Uses

All accessory structures (including attached garages) must be placed toward the rear of the lot and have a minimum front setback of 35 feet to reduce their prominence from the road.

Commentary

The conditions applied to veterinary hospitals, small retail stores, theaters, and day cares/nurseries are meant to ensure that all uses allowed in the Village District are fully compatible with its small-scale nature. The maximum building footprint allowance of 3,000 sf is based on the footprint

of the existing hardware store building which is 3,201 sf (N.S. Tax Assessor Field Cards).

The condition applied to accessory structures and uses (garages) is intended to require traditional development patterns that are in keeping with the historic development of the Village by placing outbuildings including carriage houses, garages, and sheds toward the rear of the lot.

Section 500 Dimensional Requirements

502 Table Of Minimum Lot Area And Width And Minimum And Maximum Yard Requirements For Principal And Accessory Structures And Uses

District	Village (V)
Minimum Lot Area (sf)	10,000
Minimum Lot Width at Front Lot Line (feet)	75 or the average lot width at the front lot line of the existing buildings on the same side of the street within 200 feet on each side of the lot (whichever is lower)
Maximum Setback from Front Boundary Line (feet)	20
Minimum Setback from Front Boundary Line (feet)	10 or the average setback of the existing buildings on the same side of the street within 200 feet on each side of the lot (whichever is lower)
Minimum Side Yard (feet)	15
Minimum Rear Yard (feet)	15

Duplex Residences in the Village District *do not* need to have at least twice the required Lot Area as required in other districts of this ordinance.

Front yards of any use may not be paved or used for parking vehicles.

Commentary

These dimensional regulations are directly based on the data presented in the Character chapter of this work. For example, the 10,000 sf minimum lot size was determined through the analysis of existing lot sizes in the Village and their distribution. According to the North Stonington Tax Assessor's field cards, only seven lots in the village fall below 10,000 sf, whereas 15 lots are between 10,000 and 19,999 sf (see Table 5).

The same rationale helps to determine the lot frontage and maximum front setback regulations. The minimum setback requirement is based on the Cranbury, New Jersey, regulations (see Chapter Six). The side and rear yard regulations are the same as the current R40 district regulations, because there is no need to alter them.

502.2 (Revised)

The minimum lot area must include at least 10,000 sf on contiguous buildable land. Buildable land shall not include regulated wetland soils as defined by the Soils Conservation Service . . . *(the rest of this section shall remain unchanged).*

Commentary

This section was changed from a minimum of 40,000 sf to 10,000 sf to maintain consistency with the proposed minimum lot size requirement as presented above. General recommendations to deal with the environmental

hazards caused by this change are addressed in the master planning section below.

503 Table Of Height, Roof, And Bulk Regulations

District	Village (V)
Maximum Building Height (feet)	40
Minimum Building Height (stories)	two
Maximum Building Coverage (% of total lot area)	30
Residential Floor Area Per Unit (sf)	900

Commentary

The existing R40 regulations were used to determine the maximum building height and the residential floor area. A minimum building height is added and is based on the existing buildings which are mostly two to three stories in height. This requirement of two stories (minimum) is intended to discourage single-use, one-story, non-residential uses (e.g., retail store, restaurant) and to encourage mixed use buildings with residences or offices on the second stories and commercial uses at the street level.

The maximum building coverage is an alteration of the existing ordinance's requirement for a minimum building coverage, and is based directly on the distribution of building coverage existing currently in the Village as calculated directly from the Tax Assessor's field cards.

The residential floor area requirement is the same as the existing Town standard as required for all zoning districts.

Parking Requirements

808.6 (Revised)

Driveways shall be provided with an all-weather surface and shall be *20* feet wide for two-way traffic and *10* feet wide for one-way traffic. No driveway shall be closer than 40 feet from another driveway or 50 feet from a street corner.

Commentary

The recommended minimum driveway widths in the Village District are reduced from 30 feet wide for two-way traffic and 15 feet wide for one-way traffic. Both of these widths are excessive and would negatively impact both the visual character of the Village and the environment due to increased surface runoff. The required distances between other driveways and street corners is not altered.

1000.4a (Added)

Recognizing that the general parking requirements (as designated by use) may hamper development of village-style land use and development, the Planning and Zoning Commission is authorized to reduce the parking requirements in the Village District. In determining the appropriate reduction, the Commission may give consideration to the hours of usage of the proposed use/structure, hours of usage of other uses/structures within the Village District, amount of “shared” parking with other uses, the opinions of merchants, residents, and municipal officials as to the adequacy or inadequacy of parking spaces within the specific area of the proposed

use/structure, as well as other relevant information to assist the Commission in determining the need for additional parking for motor vehicles.

Commentary

In order to determine the appropriate extent of allowable parking space reductions an inventory of the number of existing parking spaces within the Village should be conducted. (See parking study section under general recommendations below.)

This requirement is based on the parking requirement stated in the Cape Cod Commission Model Bylaw Project (Horsley 1997, 12).

The concept of shared parking allows an applicant to jointly use parking spaces with uses that have different peak hours or days. For example, in North Stonington Village, the peak hours for the churches are probably on Sunday mornings and the peak use for commercial uses are Monday through Saturday during the day. These uses are potentially compatible with the concept of shared parking.

GENERAL RECOMMENDATIONS

Sign Ordinance

The Town should undertake a professional study of the existing sign regulations (Section 900) to determine if a separate section is needed that specifically applies to the Village District in order to protect and enhance the historic character of the Village. This type of study was beyond the scope of this work, but is especially important considering the commercial and professional uses recommended in the proposed Village District.

Historic Overlay District

The Village District could work in harmony with an historic overlay district which would require design review to ensure the historic integrity of the Village. The types of design elements that can be regulated include roof pitch, sheathing materials, window configurations, and overall proportion. For this type of review a specific commission would be created and could be required to consist of professionals and experts in the fields of historic preservation, architecture, history, and/or planning.

The Town should hold educational workshops on the costs and benefits of an historic district and, afterwards, undertake a study of citizen opinion which relies heavily on direct citizen participation (such as focus groups rather than a survey). Citizen participation is not only an opportunity to hear citizens' viewpoints and explore the deeper meanings and agendas

behind these viewpoints, but also an opportunity to educate and be educated.

An historic overlay district should not only be discussed as a possibility through citizen participation, but, if consensus supporting such a district is reached, then the regulations and design guidelines should be created with strong input from a citizen advisory committee in addition to professionals in the fields of historic preservation and planning. The design guidelines should be tailored to protect the *specific* nature of the historic architecture in North Stonington Village and its character-defining qualities.

Parking Study

The Town should undertake a parking study for the Village which determines the amount of existing on-street parking, opportunity for additional on-street parking, amount of parking in existing lots (both private and public), and the existing frequency and amount of use of the existing lots. This study should be used:

1. to determine the amount of reduced parking requirements allowed for applicants using the benefits of the proposed requirements of section 1000.4a (above); and
2. to justify or prove unfeasible various master planning ideas suggested below.

Three major reasons that on-street parking should be encourage in the Village are:

1. it can provide needed parking spots to alleviate the demand for off-street parking and to enable a greater mixture of land uses in the Village;
2. it can act as a buffer between pedestrians and automobile traffic to provide a more comfortable experience for pedestrians; and
3. by narrowing the effective road way and creating more obstacles (such as cars pulling in or out of on-street parking spots), it can act as a traffic calming method.

Traffic calming, which essentially means slowing down automobile traffic, is beneficial in commercial cores and residential neighborhoods because it creates a safer and more comfortable experience for pedestrians and bicyclists. Also, in commercial cores, it slows drivers down so that they may be more inclined to patronize a business.

One potentially negative impact of increasing on-street parking is that it can create a hazardous environment for bicyclists who constantly have to ride defensively against opening car doors and cars pulling in and out of parking spots. The recommendations in the circulation section below directly relate to the bicycle path.

MASTER PLANNING

Sewage Disposal And Water Supply

As detailed in Chapter Four, the majority of the Village is built on excessively drained soil, all developed lots currently rely on individual septic systems and wells, the Village is in close proximity to an aquifer protection district, and two rivers run directly through the Village. The combination of these factors creates a situation that *will not support* individual septic systems and wells on 10,000 sf lots, the minimum lot size recommended in the proposed Village District regulations.

The Town has various options to remedy this situation. A 10,000 sf lot with excessively drained soil in the Village could probably safely handle either a well or a septic system, but not both together (Lumis 1998). Before rezoning the Village, the Town needs to conduct a feasibility study to determine the most cost-effective way to either provide for at least one of these systems.

Options include extending municipal water to the Village, establishing a municipal sewer facility and extending it to the Village, establishing community wells, or establishing community waste collection systems. The municipal water extension may be a viable possibility since Wheeler High School (located within the project study area) is already connected to municipal water, however, the existing facility's capacity will need to be increased to properly handle the additional load of the Village (Mullane 1998). Also, if this water is being extracted from groundwater other than the Shanuck River aquifer and being discharged into this aquifer, then an

increased watertable in the Shauuck River aquifer could cause septic system failure (Lumis 1998). These are just a few of the issues that should be addressed in the feasibility study recommended above.

Park

The Town Commons is not a functional design element of the community due to both its location in the Village and its design. This assessment is strengthened by the results of the Lynch Analysis as presented in Chapter Four. No participant in the Lynch Analysis initially drew the park on his/her maps. When asked to locate and describe the Town Commons, most of the participants had difficulty with both mapping the park's location and describing its physical elements. The elements most participants did recall were the flag pole, bench, and brook.

A central green or commons acts as a foundation for the social life of the community and should be an integral element of every small community . . . The green is best located where it is accessible to the highest possible number of residents and adjacent to any mixed-use core. Thus, the commons will be surrounded by buildings which should enclose and define the central space. (Nelessen 1994, 170)

The Town Commons of North Stonington Village does not act as a foundation for the social life of the community. The park is not located where it is accessible to the highest possible number of residents because it is not located in the heart of the Village's mixed-use core. The park is not surrounded by buildings which enclose and define it. In fact, it appears

more as a vacant house lot located between two houses than it appears a park.

The Town should relocate the Town Commons to the western area of the current municipal parking lot located directly across the street from the new Town Hall. This is an ideal location for the park because it is in the central core of the Village, has a quite visible water amenity, and would help to fill in the lost space created by the municipal parking lot.

Although recently enhanced by the addition of a clock and granite curbing, this parking lot is still a vast lost space in the Village. It is a negative break in the consistency of the street edge that is made up of buildings and fences set in close proximity to the road. Based on visual observations, this parking lot is not used to its capacity most of the time. Based on informal conversations with various users of the Village, the municipal lot is only filled to capacity on election day and other special town events. To minimize the need for this parking lot, the Town should create more on-street parking and possibly establish a town shuttle service for elections and other event days.

According to Nelessen, the optimum amount of public park land needed in a village is 200 sf per housing unit. Based on the tax assessor's field cards, there are 42 housing units in the Village, thus, there is the need for 8,400 sf of public park land. Also according to the tax assessor's field cards, the municipal parking lot discussed above measures approximately 13,504 sf. The Town should convert approximately three-fourths of the current municipal lot (or 10,000 sf) into a new Town Commons.

The design of this new park should incorporate extending the stone walls at the river along the street edge of the park to add definition to the street edge (see Figure 14). The design should also incorporate numerous benches oriented toward the rivers and a flag pole to distinguish the area as a civic center. This location for a park is ideal to visually enhance the Town's civic center as it is located across the street from the Town Hall buildings. Trees, as opposed to shrubs, should be used to buffer the new park from the remaining parking lot because they can provide a visual buffer while allowing for virtually unobstructed access between the park and parking lot.

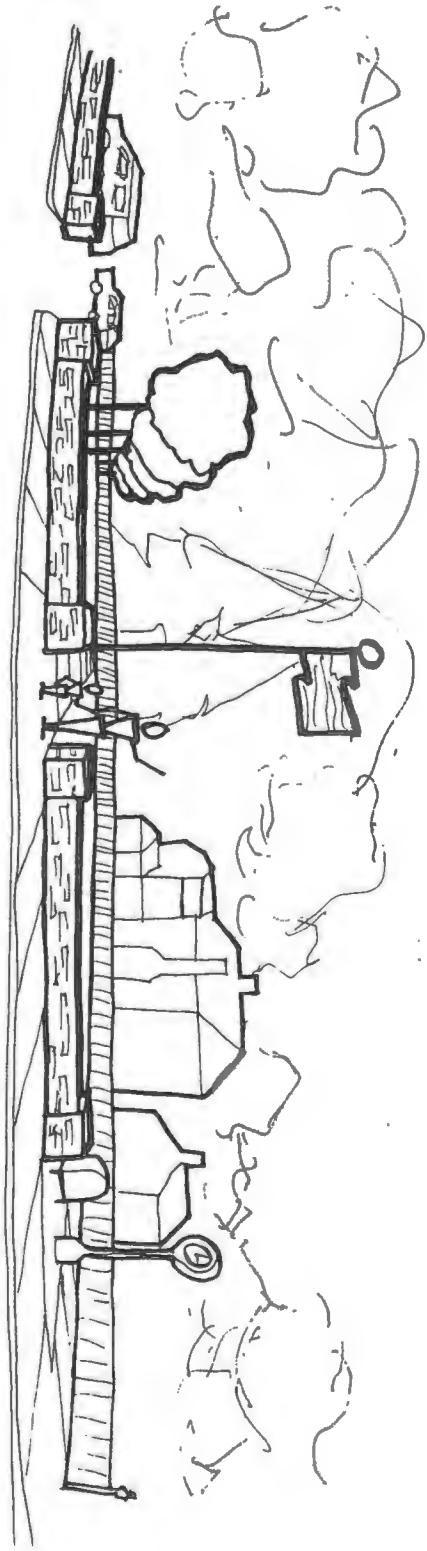


FIGURE 14: A vision for a new Town Commons

New Parcels

One of the essential elements of a vital village is density. In order to increase density, the Town should actively establish new parcels for development. These parcels should infill the existing core of the Village first and move outward toward the Village's outer boundaries in subsequent phases.

As discussed above in the Park section, the Town should relocate the Town Commons to the lot directly across from the new Town Hall (the current municipal parking lot). The land currently used as the Town Commons should be designated as developable land.

The Town should also create buildable lots on Main Street at the rear of the Baptist church parking lot in order to continue the definition of that street edge (see Figure 15). Planning for this project should be accompanied by the parking study mentioned above to determine how many on-street parking spots could be available to accommodate the displaced cars (if any) resulting from the proposed lots.

A portion of the yard of Wheeler High School should also be parceled as developable lots along Main Street (see Figure 16). An appropriate buffer of side yard should be maintained around the Wheeler School and Library building in order to protect the visual integrity and prominence of this historic building (identified in the Lynch Analysis as a landmark).



FIGURE 15: Parking lot for the Baptist Church



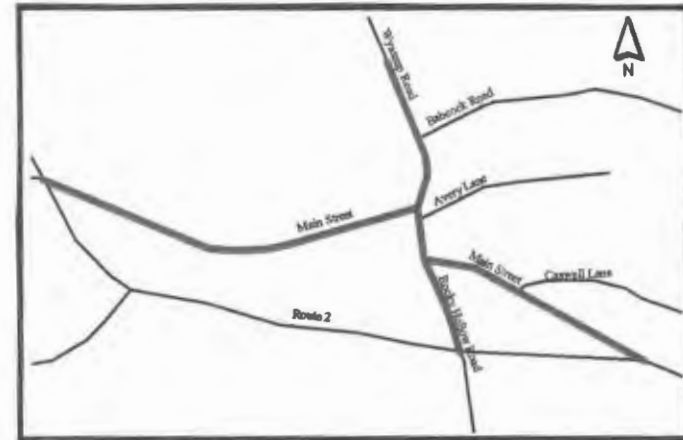
FIGURE 16: The front yard of Wheeler High School

Circulation

Based on non-inclusive field measurements, the roads in the Village vary in width from 22' 6" to almost 30'. None of the roads appear to maintain a constant width throughout their length. The Town should conduct a detailed study of existing road widths in the Village to examine the following recommendations more carefully.

According to the Connecticut Department of Transportation, the Average Daily Traffic (ADT) on southern Wyassup Road is 1,700 cars per day (Lagosh 1998). Based on observation, the Village generates enough automobile traffic to cause pedestrians (including myself) discomfort when traversing the Village.

Because pedestrian traffic is crucial to the vitality of a village (arguably more important than bicycle traffic) and because the roads in various places are as narrow as 22' 6", the Town should remove the designated bike path and the establish a continuous sidewalk at least on one side of each road (see Figure 17). The new sidewalks should connect the intersections of Route 2 east at Main Street, Route 2 south at Rocky Hollow, Route 2 west at Main Street, and along Wyassup to the North Stonington Grange and Fairgrounds (see Map 15). The sidewalk should be a minimum of three feet wide (Jarvis 1993, 72) and, if not raised from the height of the road pavement, should be differentiated by using a different pavement texture or color than that of the road pavement.



MAP 15: General Location of Proposed Sidewalks



FIGURE 17: A student walking on the bike path

СИАР-УМ -СИ-

CHAPTER EIGHT

CONCLUSION

GENERAL FINDINGS

The character of North Stonington Village is in jeopardy as a direct result of the Town's existing land development regulations. Since the townspeople desire to preserve and enhance the Village, stated in both the North Stonington Zoning Regulations and, indirectly, in the North Stonington Plan of Development, North Stonington needs to adopt new regulations.

The main product of this work is a proposed Village District. This district, if adopted, would effectively protect and enhance the character of North Stonington Village because the district's regulations are largely based on the Village's specific character-defining elements.

However, because one of the integral elements of this district is to increase the permitted building density by lowering the minimum lot size, the recommended Village District presents environmental issues which must be addressed. Therefore, the recommended regulations presented in this work are dependent upon establishing alternative sewage disposal and/or water supply in the Village which will mitigate primary negative environmental effects of increasing density.

This work also presents additional general and master planning recommendations intended to enhance the Village. These

recommendations address the existing sign ordinance, a possible historic overlay district and relevant design guidelines, a parking study, the Town Commons, new parcels for infill development, and circulation.

All of the recommendations presented in this work intend to make the Village a better place to live, work, and visit by protecting and enhancing the characteristics that contribute to its sense of place. The major positive village-characteristics that are identified in this work are the mixture of uses, building density, building in close proximity to the road, and the scale. Some aspects of the Village which should be enhanced are its pedestrian comfort-level, the appeal of the Town Commons, and street-edge definition.

THE BIGGER PICTURE

Protecting and enhancing the character of North Stonington Village is only the beginning of a larger idea. This larger idea is a strategy to protect the rural character of the Town and region from suburban sprawl and other potential growth pressures and involves amending current Town and regional policy.

The purpose of this section is to look at the bigger picture by analyzing the implications and significance of this project at the Town and the regional levels. To conclude this section, I suggest further research and projects that can spiral from and strengthen the work begun with this project.

Local Perspective

The North Stonington Plan of Development states the following two goals for community character:

- Preserve the present rural character throughout as much of the Town as possible.
- Encourage land uses, ownership, and land development, conservation, and preservation techniques that result in as much land as possible being retained in a natural condition or devoted to agricultural use. (1981, 81)

Preserving the rural character of North Stonington is certainly a valued community goal.

To transform this goal into a reality, the Town must alter the prevailing land use pattern by directing new growth into village growth centers and discouraging non-agricultural growth from locating outside these village growth centers.

This is not a new idea. In fact, it is a nationally established growth management concept which can be accomplished by combining a variety of growth management techniques.

Some of the various techniques to transform this vision into reality include: growth boundaries, transfer of development rights, purchase of development rights, conservation easements, shadow platting, nontransitional zoning, traditional neighborhood development districts,

taxation policies, and voluntary agricultural districting. (These techniques are defined in Appendix Three.)

The above list of growth management strategies includes both regulatory and incentive-based techniques. All of these techniques either prevent or discourage development of farmland or open space and/or encourage development in designated growth areas.

This is also not a new idea for North Stonington. In fact, there is historic precedent for establishing various small villages scattered throughout the Town. During the 19th century, there were at least three active industrial villages in Town. These villages included Clark's Falls, Laurel Glen, and North Stonington Village. (CT Historic Resources Survey 1997)

Various smaller industries and neighborhood service clusters were scattered throughout Town as well. These smaller service clusters typically consisted of a post office, general store, and school house, such as the historic cluster along Northwest Corner Road. The growth management concept presented here is similar to these historic settlement patterns of North Stonington .

Regional Perspective

Unquestionably, the region would also benefit from altering the prevailing land use pattern by encouraging strategic compact development in conjunction with preservation of farmlands and open space. From a regional policy perspective, the same types of growth management strategies mentioned above can be implemented in various combinations at the regional (state/county) level. These strategies can direct new

development towards existing and new village and urban growth areas while discouraging growth from locating in existing farmland and open space areas.

A renowned case example of this type of effort is the state of Oregon, which implemented a state-wide regional growth management program that began in 1973 with the Land Conservation and Development Act (Nelson and Duncan 1995, 75-76).

Two recent State of Connecticut bills (described in Chapter Two) support village districts as a way to save farms and open space (H.R. 5485 and H.R. 5487)

The regulations establishing village districts shall protect the rural character, landscape, and historic structures of such areas . . .” (H.R. 5487)

In the face of a largely decentralized national government, the nation-wide problem of suburban sprawl must be overcome incrementally at the local and regional levels. As Calthorpe states, “the current round of suburban growth is generating a crisis of many dimensions . . .” (1989, 3). The devastating effects of sprawl are discussed in further detail in Chapter Two. Calthorpe has developed a growth management concept similar to the concept explored here that he calls “Pedestrian Pockets.” Calthorpe’s concept is one well-known vision among many lesser-known visions aimed at countering sprawling and wasteful land development patterns that are all too prevalent in this country.

Future Research Needed

To realize the full potential of the concept presented in this chapter, a study needs to be conducted to determine what combination of growth management techniques should be implemented at either the regional or local level.

It seems that a policy combining a transfer of development rights (TDR) program and zoning for village districts could give vitality to this concept.

A TDR program typically permits owners of land in development-restricted areas called sending districts to sever the development rights from their property and sell those rights to property owners in specified receiving districts (Nelson & Duncan 1995, 48).

Zoning for village districts simply means to designate areas in Town as village districts. These districts would allow a similar dense settlement pattern and mixture of uses that are allowed in the proposed Village District presented in this work.

To determine the real potential of such a combination (TDR and village districts), further study could include determination of marketable strategies for establishment of a TDR program as well as a village and agricultural land suitability analysis. The TDR study would identify sending and receiving zones. In this case, the sending zones would be the existing farmland and open space and the receiving zones would be the village districts.

Appropriate locations for the establishment of new villages should be based on a land suitability analysis that takes into account such factors as prime

agricultural soils, development constraints, circulation capacity, access to and capacity of facilities (such as sewer, water, and schools), current building density, and historic uses. This type of analysis can ensure that prime agricultural soils are reserved for agricultural use and can test the realism of re-establishing the historic villages (such as Clark's Falls and Laurel Glen).

SUMMARY

This work proposes various courses of action for North Stonington to protect and enhance the character of historic North Stonington Village. These courses of action include establishing a Village District to replace the present R-40 District and Village Preservation Overlay area and undertaking various general and master planning recommendations.

Also presented is the kernel of a larger idea for preserving the rural character of the Town of North Stonington and its region. North Stonington, like other rural towns in the face of suburbanization, has precious little time to take action against sprawl. *Halting growth* is not economically or socially productive, but *halting sprawl* is essential for the vitality of our economy, society, and natural world.

SELECTED BIBLIOGRAPHY

- Alterman, Rachell. 1997. The Challenge of Farmland Preservation: Lessons from a Six Nation Comparison. *APA Journal*. (Spring).
- Arendt, Randall. 1994. *Rural by Design: Maintaining Small Town Character*. Chicago: Planners Press, American Planning Association.
- Beaumont, Constance Epton. 1991. What's New in Preservation. *Planning*. (October): 18-21.
- Bookout, Lloyd W. 1993. Neo-traditional Town Planning: A New Vision For the Suburbs? *Urban Land*. (January): 20-26.
- Bowler, Christi. 1997. Farmland Preservation and the Cluster Zoning Model. *APA Journal*. (Winter)
- Bradford, Susan. 1991. Halting Sprawl. *Builder*. (July): 78-84.
- Bucks County Commissioners. 1989. *Village Planning Handbook*. Doylestown, Pennsylvania: Bucks County Planning Commission.
- Calthorpe, Peter, et al. 1989. *Pedestrian Pockets: A New Suburban Design Strategy*. New York: Princeton Architectural Press in association with the University of Washington.
- Calthorpe, Peter. 1993. *The Next American Metropolis: Ecology, Community, and the American Dream*. New York: Princeton Architectural Press.
- Chelsea Zoning Bylaw: As Warned for Adoption at the March 5, 1998 Annual Town Meeting*. [1998] Chelsea, Vermont: Town of Chelsea.
- Colorado Historical Society 1980. *Good Neighbors: Building Next to History: Design Guidelines Handbook*. Denver: Colorado Historical Society.
- Connecticut State Historic Resources Survey for North Stonington*. [1997] Connecticut Historical Commission, Hartford, Connecticut.
- Cranbury Township Planning Board. 1995. *Land Development Ordinance of the Township of Cranbury*. Cranbury, New Jersey: Town of Cranbury.
- Elias, Joyce, North Stonington Tax Assessor. 1998. Telephone interview by Jennifer M. Lutke, 14 April 1998. No Transcript.
- Garnham, Harry Launce. 1985. *Maintaining the spirit of Place: A Process for the preservation of Town Character*. Mesa, Arizona: PDA Publishers Corp.
- Goldson, Brian. T. 1995. *Redefining Suburbia: Creating New Alternatives*. Bachelors Thesis, School of Architecture, Roger Williams University.

- Graeci, Dennis, Municipal Facilities Department, Water Management Bureau, State of Connecticut. 1998. Telephone Interview by Jennifer M. Lutke, 26 February 1998. No Transcript.
- H.R. 5485, 1998 Reg. Sess. (Conn).
- H.R. 5487, 1998 Reg. Sess. (Conn).
- Harbor Point Associates. 1989. *Stonington: A background for Responsible Development*. Mystic, Connecticut.
- Hedman, Richard and Andrew Jaszewski. 1984. *Fundamentals of Urban Design*. Washington, D. C.: Planners Press, American Planning Association.
- Herr, Philip B. 1991. *Saving Place*. Boston: National Trust for Historic Preservation.
- Hillsborough County City-County Planning Commission. 1992. *Principals for Good Neighborhoods*. Collection of Hillsborough County City-County Planning Commission, Florida.
- Horsley & Witten, Inc. with Robinson & Cole P.C. 1997. *Cape Cod Commission Model Bylaw Project*. [photocopy]. Supplied by the Cape Cod Commission, Barnstable, Massachusetts.
- Hust, Robert, Connecticut Department of Environmental Protection, Division of Water Management. 1998. Telephone Interview by Jennifer M. Lutke, 24 February 1998. No Transcript.
- Hylton, Thomas. 1995. *Save Our Land, Save Our Towns*. Harrisburg, Pennsylvania: RB Books.
- Jarvis, Frederick D. 1993. *Site Planning and Community Design for Great Neighborhoods*. Washington, D. C.: Home Builders Press.
- Kay, Jane Holtz. 1997. *Asphalt Nation: How the Automobile Took Over America and How We Can Take it Back*. New York: Crown Publishers, Inc.
- Kellogg, Edmund H., and Peter M. Lavigne. 1987. *Vermont Townscape*. New Brunswick, New Jersey: Center for Urban Policy Research, Rutgers, The State University of New Jersey.
- Krieger, Alex and William Lennertz, cd. 1991. *Andres Duany and Elizabeth Plater-Zyberk: Towns and Town-Making Principles*. Cambridge, Massachusetts: Harvard University Graduate School of Design.
- Lagosh, Liz. Connecticut Department of Transportation. 1998. Telephone Interview by Jennifer M. Lutke, 14 April 1998. No Transcript.
- Lassar, Terry Jill. 1989. *Carrots & Sticks: New Zoning Downtown*. Washington D. C.: Urban Land Institute.

- Lu, Weiming. 1981. *Preservation Criteria: Defining and Protecting Design Relationships. Old and New Architecture: Design Relationship.* Washington, D. C.: Preservation Press.
- Lumis, George. Research and Extension Soil Scientist, Department of Natural Resource and Science, University of Rhode Island. 1998. Telephone Interview by Jennifer M. Lutke, 20 April 1998. No Transcript.
- Lynch, Kevin. 1960. *The Image of the City.* Cambridge, Massachusetts: The M. I. T. Press.
- Manheim Township Zoning Ordinance.* 1989. Manheim Planning Commission, Pennsylvania.
- Marsh, William M. 1991. *Landscape Planning Environmental Applications.* 2nd ed. New York: John Willey & Sons, Inc.
- McAlester, Virginia and Lee. 1989. *A Field Guide to American Houses.* New York: Alfred A. Knopf.
- McCormick, Kathleen. 1997. In the Clutch of the Casinos. *Planning* (June): 4-9.
- Morris, Philip A. 1997. Village Idiom. *Landscape Architecture* (February): 34-41.
- Moskowitz, Heyer, & Gruel, PA. 1993. *Cranbury Township Master Plan.* Collection of the Planning Board of Cranbury Township.
- Mullane, Nicholas H. II, First Selectman of North Stonington. 1998. Telephone Interview by Jennifer M. Lutke, 14 April 1998. No Transcript.
- Nelessen, Anton C. 1994. *Visions for a New American Dream.* Chicago: Planners Press.
- Nelson, Arthur C. and James Duncan, et al. 1995. *Growth Management Principals and Practices.* Chicago: Planners Press.
- North Stonington Plan of Development.* [1981] North Stonington Planning and Zoning Commission.
- North Stonington Zoning Regulations.* [1985] North Stonington Planning and Zoning Commission.
- Plummer, Dale S. 1981. *North Stonington Village National Register Nomination Form.* Connecticut Historical Commission, Hartford, Connecticut.
- Poon, Chris. 1997. Preserving Farmland and a Livelihood. *The Providence Sunday Journal.* Nov 23 1997.
- Rhode Island Historical Preservation Commission. 1992. *Easy Guide to Rehab Standards.* Providence: RIHPC.
- Salford Zoning Ordinance.* [1982] Town of Salford, Pennsylvania.
- Schneider, Stephen H. 1990. The Changing Climate. In *Managing Planet Earth.* New York: W. H. Freeman and Company.

- Solomon, Daniel. 1989. Fixing Suburbs. In Calthorpe, Peter, et al. *Pedestrian Pockets: A New Suburban Design Strategy*. New York: Princeton Architectural Press in association with the University of Washington.
- Southworth, Michael. 1997. Walkable Suburbs?: An Evaluation of Neo-traditional Communities at the Urban Edge. *APA Journal* 63 (Winter): 28-44.
- Stilgoe, John R. 1989. Everyday Rural Landscape and Thoreau's Wild Apples. *New England Landscape*. v. 1: 5-11.
- Stone, George H. 1985. *Cracker Barrel Chronicle: A Connecticut Yankee Storekeeper Views life in North Stonington*. North Stonington, Connecticut: North Stonington Historical Society.
- Stone, George H. 1986. *Cracker Barrel Chronicle II: A Connecticut Yankee Storekeeper Views life in North Stonington*. North Stonington, Connecticut: North Stonington Historical Society
- Sutro, Suzanne. Reinventing the Village. *APA Planning Advisory Service Report* 430: 1-40.
- Tewksbury Development Regulations Ordinance*. [1988, revised 1998] Tewksbury Township, New Jersey.
- Trancik, Roger. 1986. *Finding Lost Space: Theories of Urban Design*. New York: Van Nostrand Reinhold Company.
- United States Department of Agriculture and the Soil Conservation Service. 1983. *Soil Survey of New London County, Connecticut*. Washington D. C.: The Service.
- United States Geological Survey. 1954, photo-revised 1970. *Califon Quadrangle, New Jersey: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey
- United States Geological Survey. 1954, photo-revised 1970. *Gladstone Quadrangle, New Jersey: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey
- United States Geological Survey. 1954, photo-revised 1981. *Highstown Quadrangle, New Jersey: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey
- United States Geological Survey. 1981, photo-inspected 1983. *Chelsea Quadrangle, Vermont - Orange Co.: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey
- United States Geological Survey. 1983. *Old Mystic Quadrangle, Connecticut - New London Co.: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey
- United States Geological Survey. 1992. *Leola Quadrangle, Pennsylvania - Lancaster Co.: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey.

United States Geological Survey. 1992. *Perkiomenville Quadrangle, Pennsylvania: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey

United States Geological Survey. 1995. *Lancaster Quadrangle, Pennsylvania - Lancaster Co.: 7.5 Minute Series (Topographic)*. Denver: United States Geological Survey

Webster's New Collegiate Dictionary. [1974] Springfield, Massachusetts: G. & C. Meriam Company.

Wilson, Edward O. 1990. Threats to Biodiversity. In *Managing Planet Earth*. New York: W. H. Freeman and Company.

Wright, Robert R. and Morton Gitelman. 1991. *Land Use Cases and Materials*. 4th Edition. St. Paul Minnesota: West Publishing Company.

Wunderlich, Gene. April 1997. *Land Taxes in Agriculture: Preferential Rate and Assessment Effects*. *American Journal of Economics and Sociology*. v. 56 no. 2.

APPENDIX ONE

U.S. DEPARTMENT OF THE INTERIOR'S STANDARDS FOR REHABILITATION⁶

1

A property shall be used for its historic purpose or shall be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2

The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3

Each property shall be recognized as a physical record of its own time, place, and use. Changes that create a false sense of historical development, such as adding a conjectural feature or architectural elements from other buildings, shall not be undertaken.

⁶ Rhode Island Historical Preservation Commission. 1992. *Easy Guide to Rehab Standards*. Providence: RIHPC.

4

Most properties change over time; those changes that have acquired significance in their own right shall be retained and preserved.

5

Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize an historic property shall be preserved.

6

Deteriorated historic features shall be repaired rather [than] replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7

Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8

Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9

New additions, exterior alterations, or related new construction shall not destroy historic materials which characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10

New additions and adjacent or related construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment shall be unimpaired.

APPENDIX TWO

LYNCH INTERVIEW QUESTIONS

1. What first comes to your mind when you hear the name North Stonington Village?
2. How would you broadly describe the Village in a physical sense?
3. I'd like you to make a quick map of the Village. Make it just as if you were making a quick description of the Village to a stranger, covering all the main features.
4. What elements of the Village are most distinctive? (Which are the easiest to identify and remember?)
5. Would you describe the Town Commons to me? If you were taken there blindfolded, when the blindfold was taken off, what clues would you use to positively identify where you were?
 - Where on your map is the commons?
6. Would you mark on your map the direction of north?

APPENDIX THREE

GROWTH MANAGEMENT TECHNIQUES⁷

Conservation Easements

The transfer of development rights from a property owner to a third party, such as a Conservation Foundation. Conservation easements enable landowners to retain title to an undivided tract and use it for resource purposes. (51)

Growth Boundaries

This is a form of “urban containment” which (1) promotes compact and contiguous development patterns that can be efficiently served by public services and (2) preserves open space, agricultural land, and environmentally sensitive areas that are not currently suitable for urban development. At the most basic level, an urban containment program consists of a perimeter drawn around an urban area. (73)

Nontransitional Zoning

This type of zoning (1) establishes moderate to high-density and intensity land-use categories throughout much of the urban area, (2) facilitates nodal development, (3) greatly reduces the scale of low and very low urban densities within urban areas, (4) eliminates low and very low

density development in areas that are predominantly resource lands or other environmentally sensitive lands. (82)

Purchase Of Development Rights

This technique does not result in purchase of title fee simple. Rather, the rights to all future development are acquired. (49)

Shadow Platting

This is a proposed subdivision scheme showing prospective future lots consistent with anticipated future subdivision and density requirements. The home site for a single residence is located on one of these lots. The shadow plat becomes a formal record of the local planning office and is used to guide review of future subdivision.

Taxation Policies

Tax incentives and disincentives can be used to slow, if not prevent, the premature conversion of farmland to urban uses. In theory, if the tax burden can be reduced, resource landowners will defer selling out to speculators. Such policies include differential assessments and deferred assessments. (44)

TND Districts

Traditional neighborhood development has come to be viewed as a new community planning concept, even though it borrows features from ancient (pre-automobile) town planning practices. (90)

Transfer Of Development Rights

TDR programs typically permit landowners in development-restricted areas called sending districts to sever the development rights from their property

⁷ These definitions are directly taken from: Nelson, Arthur C. and James Duncan, et al. 1995. *Growth Management Principals and Practices*. Chicago: Planners Press.

and sell those rights to property owners in specified receiving districts. Landowners who purchase development rights are then able to increase the amount of development that could otherwise be built on the receiver site. (48)

Voluntary Agricultural Districting

This involves farmers within a defined area petitioning a state agency to collectively form such a district. Within agricultural districts, farmers are protected to some extent from (1) state and local land-use and building regulations on farming activities, (2) special assessments for utility districts, and (3) the use of eminent domain to acquire farmland for public uses. The land in these districts receive differential property tax assessment. (52)