

MENDHAM TOWNSHIP MASTER PLAN TOWNSHIP OF MENDHAM MORRIS COUNTY, NEW JERSEY

Adopted November 13, 2000:

Introduction and Background
Community Characteristics
Statement of Objectives, Principles, Assumptions Underlying the Master Plan
Land Use Plan
Relationship to Other Plans

Adopted November 1, 2001:

Historic Preservation Plan
Circulation Plan

Adopted April 1, 2002:

Amended Land Use Plan
Amended Historic Preservation Plan
Conservation Plan
Community Facilities Plan
Open Space Plan
Recreation Plan

Adopted June 15, 2005:

Housing Element & Fair Share Plan

Adopted February 6, 2006:

Stormwater Management Plan
(Prepared by Connolly Environmental)

Adopted June 2, 2008

Recycling Plan
Reexamination Report

Appendix - Lands Recommended to be Reserved for Public Purposes

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ACKNOWLEDGEMENTS

This Mendham Township Master Plan results from the contributions and comments of many concerned and dedicated Mendham Township citizens, too many to list. Special thanks are owed to Sarah Dean Link for the many hours of research on a number of important subjects:

MASTER PLAN COMMITTEE -2000 -2002

The following citizens of the Township volunteered many hours of time and effort to draft this Master Plan:

Samuel Tolley, Master Plan Committee Chair
Alan Willemsen, Planning Board Chair
Robert Pierson, Township Committee Representative
Sarah Dean Link, Environmental Commission Representative
Pat Zimmerman, Zoning Board of Adjustment & Historic Committee Representative

PLANNING BOARD - 2002

The following members of Planning Board adopted this Master Plan.

Kevin Giordano, Chair	Stephen Mountain, Township Administrator
Samuel Tolley, Vice Chair	Russell Buchanan
Kathryn Porter, Mayor	Jamie Kinsel
Sante D'Emidio, Township Committee	Matt Majorossy
	Thomas Timpson

TOWNSHIP COMMITTEE - 2002

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CONTENTS

Chapter I.	Introduction and Background
Chapter II.	Community Characteristics
Chapter III.	Statement of Objectives, Principles, Assumptions Underlying the Master Plan
Chapter IV.	Land Use Plan
Chapter V.	Housing Plan
Chapter VI.	Relationship to Other Plans
Chapter VII.	Historic Preservation Plan
Chapter VIII.	Circulation Plan
Chapter IX.	Conservation Plan
Chapter X.	Community Facilities Plan
Chapter XI.	Open Space Plan
Chapter XII.	Recreation Plan
Chapter XIII.	Stormwater Management Plan
Chapter XIV.	Recycling Plan
Appendix	Lands Recommended to be Reserved for Public Purposes
Appendix	Reexamination Report

MAPS

Chapter II.	Regional Setting Geology Soils Depth to Bedrock Topography Excessive Slopes Surface Drainage Depth to Water Internal Drainage - Relationship to Parent Material & Drainage Internal Drainage - Septic Effluent Disposal Flood Prone Areas
Chapter IV.	Existing Land Use Future Zone Plan
Chapter VII	Historic Districts
Chapter VIII	Circulation Plan
Chapter X	Community Facilities, Open Space & Recreation
Chapter XIII	Zoning

I. INTRODUCTION AND BACKGROUND (Adopted 11/13/00)

COMMUNITY VISION STATEMENT

The Township of Mendham is a residential community with a traditional character based upon its rural and historic past and high-quality natural resources. It has a number of attributes of particular value that give it its distinct traditional character:

- Extensive woodlands and often steeply sloping terrain
- Pristine streams
- Narrow curving historic roadways
- Existing and proposed State and National Register Historic Districts.

These attributes are legacies of great value to current and future Township residents and to the State as a whole. The overall goal of planning and zoning in Mendham Township should be to appropriately balance property rights, preservation of community character, providing for the needs of Township residents in the 21st Century and fulfilling the State's regional planning goals. The overall planning objective should be to cooperate with the State Planning Commission in promoting the concept of *Communities of Place*,¹ resisting the encroachments of urban sprawl and promoting future land use in balance with a limited infrastructure base. The Township should continue to look to the Borough as its "village center" consistent with its designation in the New Jersey State Plan.

LEGAL BASIS AND CONTENTS OF THE MASTER PLAN

The Municipal Land Use Law (MLUL), the legal basis for municipal planning in New Jersey, requires that every municipal zoning ordinance must be based on a Master Plan. In compliance with the MLUL, this Master Plan is intended to provide a clear description of the rational basis for the Township's zone plan and development regulations and to coordinate their goals.

This Master Plan is an evolutionary result of previous Mendham Township Master Plans, firmly rooted in and building upon those plans. Two major themes, however, distinguish this plan from previous Master Plans:

- Goals and policies to preserve the traditional rural/historic character of the Township which is the most often and strongly expressed planning goal of Township residents.
- A special emphasis on the protection of the quality and quantity of water resources in the Township especially groundwater resources upon which the public health of Township residents depends.

This Master Plan consists of all the elements required by the Municipal Land Use Law for a Master Plan: a Community Characteristics section; a Statement of Objectives, Principles, Assumptions, and Policies Underlying the Master Plan; a Land Use Plan element; a Housing Plan element; and a

¹ The New Jersey State Plan defines *Community of Place* as "a dynamic, diverse, compact and efficient Center that has evolved and been maintained at a human scale, with an easily accessible central core of commercial and community services, residential units, and recognizable natural and built landmarks and boundaries that provide a sense of place and orientation."

Relationship to Other Plans element. Each element includes a review of existing characteristics, analysis of trends and needs, statement of goals and objectives, and a proposed plan.

BACKGROUND AND HISTORY OF THE MASTER PLAN

In 1936 the Township Committee appointed a Zoning Commission for the purpose of developing a Zoning Ordinance for the Township under the leadership of William Alderson. The first Zoning Ordinance was a very basic set of standards that was adopted the following year together with the appointment of a Township Board of Adjustment. World War II delayed the implementation of real planning in the Township until 1947 with the appointment of the Township's first Planning Board.

The first Mendham Township Master Plan was prepared by Morrow Planning Associates, consultants in 1958, and adopted by the Planning Board in 1960 under the Municipal Planning Act of 1953. In 1979 a new Master Plan was prepared by John Rakos, P.P., in accordance with the Municipal Land Use Law of 1976. A major revision to that plan was adopted in 1983, although it was based upon and included the earlier 1979 Master Plan. In 1991 a Master Plan Reexamination and Revision was completed by the Planning Board. An updated Circulation Plan element was included in 1997 and a Community Facilities Plan and Housing Plan elements in 1998.

In the spring of 1999, the Planning Board undertook a reexamination of the Master Plan as periodically required by the MLUL. The Board concluded that there was a need for substantial revision and updating of the Master Plan. This conclusion was based upon recognition of the important changes significant to land use planning that have occurred since 1983. The end of this section contains a summary of those important changes.

The same year, the Planning Board appointed a Master Plan Committee to draft a new plan with the assistance of the Township Planners Kimball & Kimball, Professional Planners. The first priority for the Master Plan Committee was the preparation of the core mandatory elements of a new master plan. These were prepared with the professional assistance of Kimball & Kimball, Professional Planners, Charles Balut, professional engineer and John Aubin professional environmental consultant. This core Township Master Plan was adopted in 2000. It supersedes and replaces all previous Mendham Township Master Plan documents. Although firmly rooted in previous Master Plans, especially the 1983 plan, this Master Plan reflects the major development-related changes that have occurred in the Township since that time and attempts to anticipate future needs.

PUBLIC PARTICIPATION IN THE MASTER PLAN

Mendham Township has traditionally relied upon citizen volunteers in all aspects of local public policy. From the beginning of the required periodic reexamination of the previous Master Plan in 1999, and the drafting of this Master Plan in 1999 and 2000, it was the intention of the Planning Board to encourage involvement of as many Township organizations and citizens as possible. Public involvement in the reexamination of the Master Plan included circulation of the draft document to Township boards, committees, organizations and interested citizens and a well attended public meeting held on June 16, 1999. The findings of the Reexamination Report received virtual unanimous support from the public that attended the hearing. Once the decision was made to draft a new Master Plan it was the Board's goal to adopt a new Master Plan that represented a broad community-wide consensus about the future of the Township.

To undertake the drafting of a new Master Plan, the Planning Board appointed a Master Plan Drafting Committee that included representatives of a wide spectrum of Township organizations. The Committee was instructed to address the concerns expressed in the Reexamination Report and to solicit the involvement of other Township organizations and the public in the drafting process.

To accomplish the task set forth for it by the Planning Board, the Committee held regularly scheduled bi-monthly meetings that were for the most part open to, and attended by, interested citizens. Closed sessions were limited to discussions of issues related to ongoing and potential litigation. The work of the Committee was featured in an article in the Township Newsletter distributed to every Township residence. In addition, at intervals in the drafting process, the Committee held public meetings designed to elicit original ideas from the public for a future vision of the Township and then to review drafts of various elements. The Committee attempted to encourage wide attendance by means of press releases, notices at the post office and municipal building and calls to Boards, Committees and other Township-based organizations. The contents of this Master Plan have been fundamentally influenced by comments and recommendations from citizens and organizations, too numerous to reference.

MAJOR PLANNING ISSUES SINCE 1983

The major events and changes significant to planning that have occurred in Mendham Township since the adoption of the previous Master Plan in 1983 are as follows:

- Development Pressures. A real estate development boom in the 1980's and 1990's resulted in substantial residential development in the Township. The increasing value of the remaining property has generated pressure to subdivide even the smallest parcels although the remaining vacant land is characterized as having substantial amounts of environmentally sensitive characteristics such as steep slopes, wetlands, surface waters, limited groundwater aquifers and aquifer recharge areas. These characteristics make development more costly and potentially harmful to environmental resources.
- Larger Homes. There has been a trend toward much larger new homes with substantial site improvements. This trend has led to an increased concern about environmental impact from the construction of individual homes.
- Environmental Impact of Development. For the reasons described above, there is concern that development in recent years is having a substantial and increasingly detrimental effect on environmental resources in the Township, especially: soil erosion, increased stormwater runoff, decreased surface water quality, and increased level and frequency of flooding.
- Regulatory Controls. A lot development plan ordinance and other development regulation amendments designed to protect environmental resources were adopted to limit the potential impact of development on environmental quality.
- Township Character. The traditionally open landscape and rural setting has been diminished for many areas of the Township in recent years as a result of development, especially due to the construction of very large homes which are often out of scale with the traditional established development pattern.
- Regional Responsibilities. The need to address the Township's constitutional "fair share" housing obligation, protection of the Great Swamp National Wildlife Refuge and participation in the regional Whippany River Watershed Project became the focuses of planning efforts.

- Water Supply. Concern has increased about the impact of existing and future development on the water supply resources. A study of surface water and groundwater resources in the Township was completed in 1994 documenting evidence that continued development at existing permitted zoning densities may be harmful to surface and ground water resources over the long term.²
- State Involvement in Planning. More active State involvement in land use planning went into effect, including state regulation of wetlands, Residential Site Improvement Standards, and the adoption of the State Development and Redevelopment Plan.
- The State Development and Redevelopment Plan adopted in 1992 designated the entire Township as PA-5 (*Environmentally Sensitive*). The protection of environmental resources is a major goal of the State Plan underscoring the need to protect environmentally sensitive resources in the Township. Another overriding goal is to protect and promote "Communities of Place" and discourage "sprawl."
- Traffic Congestion. Traffic congestion on Mendham Road (NJ Route 24) has increased largely as a result of new development in the Township and the surrounding region. Traffic on this important roadway is nearing capacity at peak hours.
- Historic Preservation. There has been an increased appreciation of the important historic heritage and resources in Mendham Township and surrounding area and the desire to preserve it.
- Historic Roadways. Within Mendham Township's region there has been increased appreciation of the importance of preserving the character of historic roadways, many of which are associated with the American Revolution.
- Community Facilities. New development in recent years has created the need for improvements to community facilities including schools, library, fire, public works and recreation.
- Right to Farm Act. In 1998, the State Legislature amended the *Right To Farm Act* in a manner that supercedes municipal zoning controls in regard to limits on commercial farming activities in residential zones.
- Residential Site Improvement Standards. In 1998 the State of New Jersey adopted uniform standards that in most circumstances reduce the cost of construction of new public streets. At the same time, land values in Mendham Township have increased dramatically making it financially feasible for developers to construct public streets in order to create even only one new lot for development. This has undermined the Township's ability to reasonably control the extension of public infrastructure and future public maintenance expenditures.

MASTER PLAN REEXAMINATION

In 1999 the Planning Board adopted a Reexamination Report³ addressing the requirements of NJSA 40:55D-89. That Reexamination Report set forth significant changes that had occurred in the Township since the formulation of the previous Master Plan and recommended the need for a new plan addressing those changes. This Master Plan is a direct result of the findings, conclusions and recommendations set forth in that Reexamination Report.

Introduction.doc

² Critical Water Resources Study, Township of Mendham, Connolly Environmental Inc., Denville, 1994.

³ 1999 Reexamination of the Mendham Township Master Plan and Development Regulations. Mendham Township Planning Board, June 1999.

II. COMMUNITY CHARACTERISTICS (Adopted 11/13/00)

The natural environment is a prominent part of Mendham Township's character, in particular the extensive woodlands, steeply sloping topography and numerous trout production and trout maintenance streams found throughout the Township. At 17.86 square miles it is geographically a medium size community; but with a total population of 4,977⁴ it is demographically small. The resulting population per square mile of 254 persons is very low compared to Morris County as a whole (899 persons per square mile)⁵. It is primarily a residential community of single family homes, for the most part on lots ranging in size from less than one-half acre to more than five acres. The community infrastructure is appropriate to its low-density character.

REGIONAL SETTING

Mendham Township is centrally located within Morris County. The Township has had a historically close relationship with Mendham Borough, which it surrounds on three sides. The Borough functions in many ways as the Mendham community center. Morristown is located about five miles to the east and has historically served as the regional center for Mendham Township's region. Its continuing function as a regional center is reflected in the State Plan.

Route 24 is the single major transportation corridor in the Township connecting the Township and Borough to Morristown, the regional shopping and service center, located approximately five miles to the east. West of Morristown, Route 24 is a relatively narrow two-lane road passing through a number of historically significant areas. Generally the road system in the region is based upon narrow two lane roadways often dating to the early settlement period and passing through historic areas. The roadways in the region have limited traffic capacity that can only support low-density development.

The region west of Morristown to a large extent retains its historic and rural character and is relatively sparsely populated with limited public infrastructure investments. The numerous historic districts in this area often cross municipal boundaries. Mendham Township shares many common interests, concerns and goals with other communities within its region, in particular the Chesters (Borough and Township) located to the west of the Mendhams. The areas east of Morristown are comparatively suburban in character with much more substantial investments in public infrastructure, especially since World War II.

The low-density rural development pattern in the Mendham area has historically played an important role for the broader New York metropolitan region by providing relief from the uniformity of dense urban development to the east.

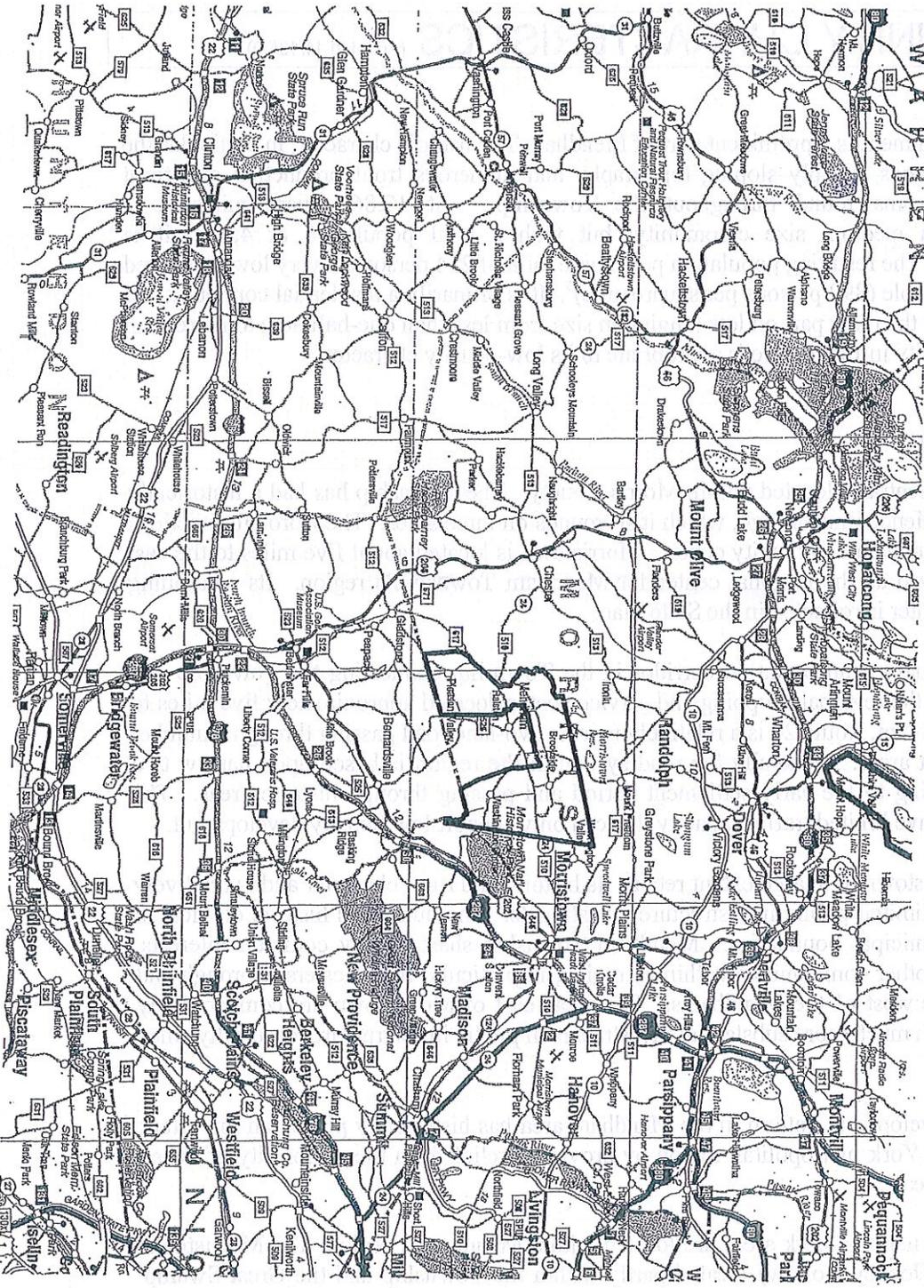
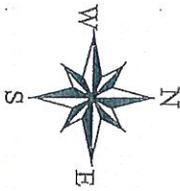
Two regionally important national park areas are located within Mendham's region: The Morristown National Historical Park (Jockey Hollow) located partly within the Township and the Great Swamp National Wildlife Refuge (within the Township's drainage area).

⁴ 1998 population estimate, Morris County Data Book 1999, Morris County Department of Planning & Development, 1999.

⁵ Ibid.

REGIONAL SETTING

NOVEMBER 2000



Reference Maps:
 GIS Resource Data New Jersey Department of
 Environmental Protection Series 1,
 Dated March 7, 1996

Township of Mendham
 Morris County, New Jersey
REGIONAL SETTING

November 2000



ENVIRONMENTAL CHARACTERISTICS

The following is intended as a brief summary of the environmental characteristics of the Township of Mendham. In most cases, a more detailed discussion of each topic can be found in other parts of this document or in the Appendix.

Geology

Mendham Township is located in the New Jersey Highlands, an area of relatively rugged relief underlain by hard crystalline rock. Most of the underlying rock are those formed during the Precambrian era, the oldest and longest era in the geologic time scale. For a more complete description of the Township's underlying geology, see the Appendix attached to this Master Plan. The limited capacity of groundwater aquifers within the Township are an important environmental feature that has been studied and described by the Township Environmental Consultant Connolly Environmental, Inc.⁶ The impact of human development on these aquifers is a major concern in two ways: development increases storm water runoff reducing recharge into aquifers, while at the same time it increases the draw-down of the aquifers.

Soils

There are 16 separate types of soils encompassing the Township. Many of these soil types have characteristics that make development difficult, such as severe limitations for onsite septic systems or a high groundwater table. Other common characteristics pose environmental dangers such as high erosion potential. The Appendix contains a more detail description of soil types and characteristics.

Surface Water

The Township is strategically located at the headwaters of three major river basins in northern New Jersey which are the sources of potable water: the Passaic which drains directly into the Great Swamp National Wildlife Refuge, the Raritan, and the Whippany. Regionally based environmental interest groups have focused attention on the protection of these headwater areas in the Township as important to water quality and quantity and to reducing flooding in the river basins. In addition, flood storage areas in the Township are important to diminishing flood levels and the frequency of flooding downstream.

All of the numerous rivers and streams in the Township are currently classified by NJDEP as "trout production" or "trout maintenance", the highest quality classifications. The high quality of these watershed resources in the Township directly influences water quality downstream in the basins and the Refuge.

Wetlands⁷

Wetlands are environmentally important areas regulated by the federal and state governments. They function as filters for sediments, nutrients and other pollutants to surface waters where such pollutants can cause reduced oxygen levels and turbidity and raise water temperatures. Wetlands provide flood control and important wildlife habitats; they also cool water and the surrounding air by means of evaporative cooling.

⁶ Critical Water Resources Study, Township of Mendham, Connolly Environmental Inc., Denville, N.J., 1994.

⁷ This section based upon information provided by Connolly Environmental Inc.

Wetlands in particular perform functions that are vital to maintaining the very high quality of the Township's numerous trout production and trout maintenance streams. They provide flood storage and stream flow attenuation during wet periods preventing stream bank erosion and clogging of the streambed with sediments. During dry periods they sustain stream flow by releasing stored water, maintaining base flows (the low level of flow) in streams and moderating the extremes of both high and low flow in streams essential to trout production and maintenance. In addition, these characteristics are important to moderating downstream flooding.

The types of wetlands typically found in Mendham are among the most environmentally important for maintaining downstream water quality. Among these are:

- Hillside seeps and springs important to maintaining base flows and moderating water temperature vital to trout production and maintenance.
- Forested wetlands important to moderating water temperature, trapping silt, reducing turbidity and promoting evapotranspiration.
- Swamps (forested wetlands not associated with streams) important to base flows and attenuating flooding and bank erosion.

Wetlands in Mendham Township are generally found in three areas and comprise approximately three to five percent of the Township:

1. The uppermost reaches of sub-watershed catchments.
2. Level areas at the base of slopes associated with stream corridors.
3. Upper Whippany River flood plain in Washington Valley.

Wetlands are an important natural resource anywhere they are found. In the Mendham Township context they are especially important because of their vital role in protecting the fragile water quality of the numerous trout production and trout maintenance streams in the Township. Since these streams feed a number of sources of public water supply downstream, wetlands in Mendham Township are by extension also important to public health.

Topography

In terms of landforms, the Township consists of many small, largely wooded valleys typically bisected by numerous small streams. The Township is topographically highest in the north, generally sloping off toward the south and east. The highest point in the Township is near Horizon Drive, 1,020 feet above sea level; the lowest point is off of Mosle Road about 300 feet above sea level. There are extensive areas of steep slopes, some over 25% slope, especially in the northern and western parts of the Township. Steep slopes often adjoin streams, transition areas, wetlands and flood prone areas. Twenty seven percent, or 3,100 acres of the Township land area, is comprised of slopes over 15 percent.⁸

Vegetation

Mendham Township contains extensive areas of woodlands including many examples of significant specimen trees, some dating back to the early settlement era. Woodlands and specimen trees have a significant impact on the character of the Township as well as the quality of life. The woodlands also directly contribute to water quality and quantity of aquifers and streams and to the control of stormwater runoff. Together the woodlands and streams form the most important and prominent environmental features in the Township. Healthy woodlands and streams constitute major environmental assets.

⁸ Surface Water Protection Study for Mendham Township, NJ. Upper Raritan Watershed Association, 1997.

Endangered Species

The Wood Turtle (*Clemmys Insculpta*) is listed as a threatened and endangered species. It is found in the India Brook watershed, Dawson's Brook watershed and Washington Valley/Whippany River watershed in Mendham Township.⁹

Air Quality

As a primarily low-density residential community, the Township contains no major generators of air pollutants. The most important source of air pollutants is automobiles. The only area of air quality concern is along Route 24 during rush hours.

CULTURAL RESOURCES

Mendham Township has a rich and significant historic heritage. The combination of historic buildings, the fields and woods around them, and the historic roads that connect them, are representative of the Township's settlement pattern and are the focus of preservation efforts. At the present time, Mendham Township has four historic districts, which have been accepted into the State and National Registers of Historic Places: Washington Valley, Brookside, Combs Hollow and Ralston. One other district (Tempe Wick) has been included on the State Register and is pending for inclusion on the National Register. The India Brook historic district is pending on both the State and National Registers. Part of Jockey Hollow, a National Historical Park, is located within the Township.

POPULATION CHARACTERISTICS

The Township's population as of 1990 was 4,537, up slightly from 4,488 in 1980, an increase of only 49 persons. The number of housing units increased more substantially during the same period from 1,495 to 1,712, an increase of 217 units (U.S. Census for 1980 and 1990). This significant difference is attributable to the continuing decline in the average household size following the long-term national trend. In comparison to Morris County as a whole, Mendham Township's population increased by about 1% during the decade while Morris County's increased by more than 3%. Although the Township's average household size has seen a significant decline in line with the rest of the country, its average size remains slightly higher than the County average.

Population
(Source: U.S. Census)

	1960	1970	1980	1990	1998 (est.) ¹⁰
Mendham Township	2,256	3,697	4,488	4,537	4,977
Morris County	259,620	383,454	407,630	421,353	458,076

Number and Size of Households
(Source: U.S. Census)

	1970	1980	1990
Number of households	1,250	1,495	1,712
Average household size	3.59	3.17	2.83
Morris Co. average household size		3.02	2.78

School enrollment in Mendham Township's public schools (elementary and middle) has varied substantially in recent decades. In 1974 it reached a high of 877 students and in 1986 it reached a low

⁹ New Jersey Department of Environmental Protection, Division of Parks and Forestry, Office of Natural Heritage, 1999.

¹⁰ Morris County Data Book, Morris County Department of Planning & Development, 1999.

of 377 students. Since the beginning of the 1990's, school enrollment has gradually increased to 762 students in 1999. In 1999 the Mendham Township Board of Education contracted for a demographic study of future enrollment.¹¹ The study predicts continued increases in school enrollment, projecting enrollment in 2004 to be 932 students.

The population of senior citizens in Mendham Township has seen a substantial increase in recent decades. The population of those 55 and over has more than doubled since 1970, a trend that can be expected to continue.

Senior Citizen Population

(Source: U.S. Census)

AGE	1970	1980	1990
55-64	284	534	604
65-74	155	221	317
75-over	99	137	236
55 and over	539	892	1,157
65 and over	254	358	553

EDUCATIONAL, OCCUPATIONAL AND INCOME CHARACTERISTICS

The adult population of Mendham Township is well educated when compared to the County as a whole. A very high percent of the population has completed high school (96%) and a large majority has completed four years of college (60%) compared to 87 percent and 34 percent respectively for Morris County as a whole.

Education - 1990

18 years and older

(based upon data from the Morris County Data Book)

	High School Grad.	College Grad.	Graduate Degree	Total
Mendham Township	3,324 (96%)	2,069 (60%)	835 (24%)	3,476
Morris County	281,854 (87%)	110,840 (34%)	38,281 (12%)	324,774

The high level of education of the Township's population is reflected in its occupational characteristics. In 1990, 56 percent of the working population was employed in managerial and professional specialty occupations.

Occupational Characteristics

16 years and over

(Source U.S. Census)

Employed Persons	1990
Managerial and professional specialty	1,290
Technical and administrative support	701
Service	137
Farming, forestry and fishing	16
Precision production, crafts and repair	94
Operators, fabricators and laborers	73
Total	2,311

¹¹ Demographic Study, Whitehall Associates, Inc. Kinnelon, N.J., 1999.

The level of educational and professional attainment is reflected in the family income statistics for the Township. The median income for a family in Mendham in 1989 was \$102,896 compared to \$62,749 for Morris County as a whole. The level of affluence in the Township is increasing dramatically. It increased 210% over the previous decade compared to 154% for Morris County as a whole. In 1989 Mendham Township was the tenth most affluent municipality in the state compared to 17th in 1979.

Family Income
(Source U.S. Census)

	1989	% of Total
\$0-9,999	21	(1%)
\$10,000-24,999	56	(4%)
\$25,000-49,999	244	(16%)
\$50,000-74,999	237	(15%)
\$75,000-99,999	194	(12%)
\$100,000-124,999	237	(15%)
\$125,000-149,999	121	(8%)
\$150,000 or more	464	(29%)

Per Capita Income, 1979 and 1989

(Source: New Jersey Dept. of Labor)

	1979	1989	% Change
Mendham Township	\$15,217	\$47,118	+209.6%
Morris County	\$9,909	\$25,177	+154.1%

HOUSING

In 1990 Mendham Township was the third least densely developed municipality in Morris County (after Chester and Harding Townships) as measured by housing unit density. In 1990 there were 6.58 acres per housing unit in Mendham Township compared to 1.96 in Morris County as a whole.¹² The increase in the number of housing units in Mendham Township has been substantial in recent decades. In 1980 there were a total of 1,495 dwelling units, by 1990 the total was 1,712, a 15 percent increase in ten years. In the seven years from 1991 to 1998, 183 additional housing units were built increasing the total housing units to 1,895.¹³ Detailed information about housing characteristics in Mendham Township is included in the Housing Plan element as required by the MLUL.

2000 CENSUS

When available in 2001, updated US Bureau of Census data on the Township will be added as an appendix to this document.

¹² Housing Unit Density, 1990, Morris County Data Book, Morris County Department of Planning & Development, 1999.

¹³ Total Number of Housing Units, 1980 and 1990; New Housing Units from Added Assessment, 1991 through 1998, Morris County Data Book, Morris County Department of Planning & Development, 1999.

LAND USE AND INFRASTRUCTURE

Land Use

With minor exceptions, Mendham Township is developed in accordance with its zone plan, i.e. low-density single family residential. Few active farms remain in the Township in the sense that they are full-time operations. A much more substantial amount of land area is farmland assessed, i.e. meeting the minimum legal requirements. The highest density zone (R Zone) requires a minimum lot size of 20,000 sq. ft. (approx. one-half acre); the lowest density zone (R-5 Zone) requires a minimum lot size of five acres. In 1998, the Township contained 1,895 dwelling units, up from 1,495 in 1980.¹⁴ Out of a total of 1,712 housing units in 1990, 1,644 were detached single family dwellings.¹⁵ Commercial land use is limited to a small commercial area in the center of Brookside.

Substantial areas of public and quasi-public open space exist in the Township, a total of 3,033 acres broken down by ownership in the following chart. This represents about 27% of the total land area in the Township (11,264 acres). The portion of open space (active and passive) owned by the Township is 696 acres in 1999. Township residents, however, authorized a municipal assessment to establish an Open Space Trust Fund in 1991 and the Township is actively considering additional open space acquisitions. This total does not include the extensive conservation easements located primarily on vacant and environmentally sensitive portions of privately owned lands. Nor does it include the privately owned vacant land and over-sized (underdeveloped) lots that still exist in the Township. Additional Township-owned land provides for community facilities, limited utilities and open space or constitutes environmentally important conservation areas.

Public and Quasi-Public Open Space¹⁶

Source: Mendham Township Tax Records¹⁷

Owner	Acreage
Mendham Township Vacant / Park Land	696
Morris County Park Land	830
United States Park Land	22
S. M.C.M.U.A. Land	574
NJ American Water Company Land	7
Quasi-Public and Institutional Land	904
Total	3,033

Road Network

The Township's local and collector roads are typically radially oriented to Mendham Borough, which has historically been the center of community life, and to Route 24 which is the primary transportation corridor through the Borough and Township. These roads are typically narrow and curvilinear, closely conforming to the hilly and wooded topography through which they pass. Many of the roads date from the early settlement period of the Township and retain their historic character. Many specimen trees and historic structures closely line the roads making widening or straightening without major impact impractical.

¹⁴ Ibid.

¹⁵ Total number of Units in Single and Multi-Family Structures, 1990, Morris County Data Book, Morris County Department of Planning & Development, 1999.

¹⁶ Includes lands owned by quasi-public companies, organizations and institutions that are permanently preserved as open space.

¹⁷ Acreage calculations by Sarah Dean Link, 11/22/99.

Water Supply

Geographically most areas of the Township are served by individual private onsite wells. The limited areas served by public water lines are shown on the following Water Service and Open Space Map. The low-density pattern of development in the Township makes the extension of public water system(s) impractical and inappropriate in most areas. In some areas in recent years, older wells have failed requiring drilling of newer wells at greater depths. The apparent lowering of the water table in some areas is an important issue of policy concern to the Township.

Three water suppliers, Randolph Township Municipal Utilities Authority, New Jersey American Water Company and the Southeast Morris County Municipal Utilities Authority, service geographically small areas of the Township shown on the following map.¹⁸ Public water service is provided through individual relationships of property owners with the water companies. The following table is a breakdown of units served by public water by provider. Of the total number of housing units in the Township (1,895 in 1998) 857 or 45 percent are served by public water.

An important issue associated with water supply is fire protection. The onsite private wells in the large areas of the Township without water lines are inadequate for fire protection purposes and the dry hydrants into ponds in these areas are also limited and inadequate. In these areas, underground tanks for fire protection are required improvements as part of major developments.

Dwelling Units Served by Public Water: 1999

Water Provider	Dwelling Units
Randolph Township Municipal Utilities Authority	116
New Jersey American Water Company	621
Southeast Morris County Municipal Utilities Authority	120

Sanitary Sewers

Most existing development in the Township is served by individual onsite septic systems. Soil characteristics are an important factor in the construction of onsite systems. In many areas of the Township, soil conditions are severe for the construction of such systems. However, the low-density pattern of development makes the extension of public sanitary system(s) impractical and inappropriate in most areas. Only three areas of the Township are served by public sanitary sewers, all of which are relatively higher-density developments. Portions of each contain affordable housing as part of the Township's affordable housing program.

- Brookrace: 98 units off of Pleasant Valley Road.
- Drakewick: 92 units off of Tempe Wick Road and Route 24.
- Mountainview: 12 units off of Cold Hill Road.

Stormwater Drainage

The control of stormwater runoff is an important public policy issue in the Township because of the harmful effects that stormwater runoff can have on water quality in the numerous high quality trout production and trout maintenance streams in the Township. Stormwater drainage associated with new development is controlled by ordinance regulations which require detention/retention to assure water quality and to control flows. Stormwater drainage from existing public and private roadways and other impervious surfaces into nearby streams continues to have a harmful environmental impact on

¹⁸ The developer of the *Brookrace* subdivision development owns and operates a fourth small water utility only serving that development. This is anticipated to be turned over to New Jersey American Water Company at the completion of the subdivision development.

those streams. The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads.

The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads. The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads. The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads.

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Table 1: Public Works Department - Drainage Systems

System Name	Year Installed	Notes
Northwest Valley Road <td>1990 <td>Public Works Department </td></td>	1990 <td>Public Works Department </td>	Public Works Department
East Valley Road <td>1995 <td>Public Works Department </td></td>	1995 <td>Public Works Department </td>	Public Works Department
Southwest Valley Road <td>2000 <td>Public Works Department </td></td>	2000 <td>Public Works Department </td>	Public Works Department
Central Valley Road <td>2005 <td>Public Works Department </td></td>	2005 <td>Public Works Department </td>	Public Works Department

The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads. The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads. The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads.

- Northwest Valley Road
- East Valley Road
- Southwest Valley Road
- Central Valley Road

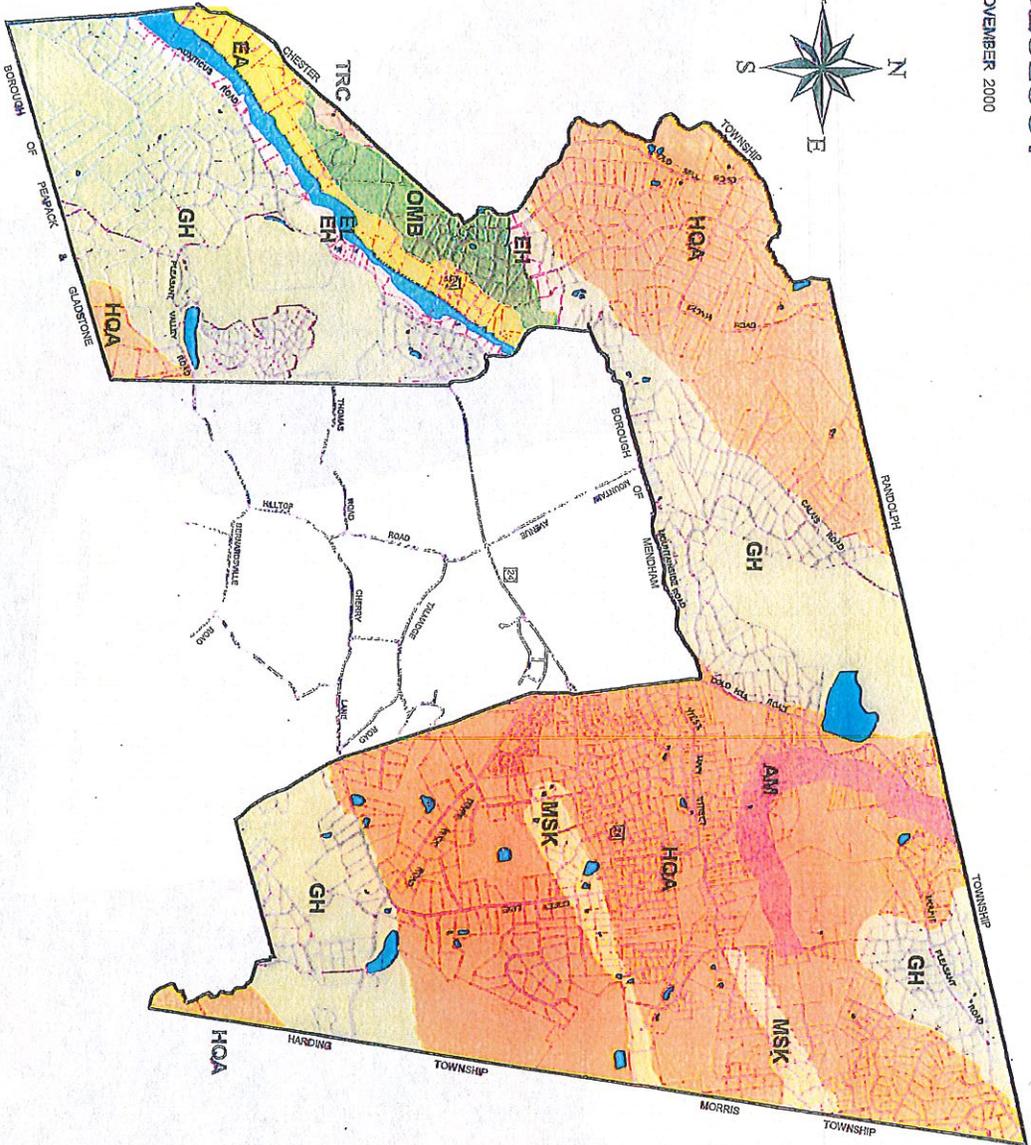
Drainage Systems

The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads. The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads. The Township Public Works Department is active in improving and maintaining drainage systems associated with local public roads.

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GEOLOGY

NOVEMBER 2000



LEGEND

- Amphibolite (AM)
- Allentown Formation (EA)
- Hardyston Quartzite (EH)
- Lehighville Formation (EL)
- Hornblende - Granite & Gneiss (GH)
- Hypersthene - Quartz - Andesine Gneiss (HQA)
- Marble & Siam (MSI)
- Martinsburg Slate (OMB)
- Border Conglomerate (TRC)
- Water
- Parcel Lots
- Township Boundary



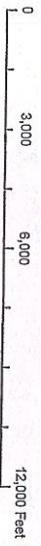
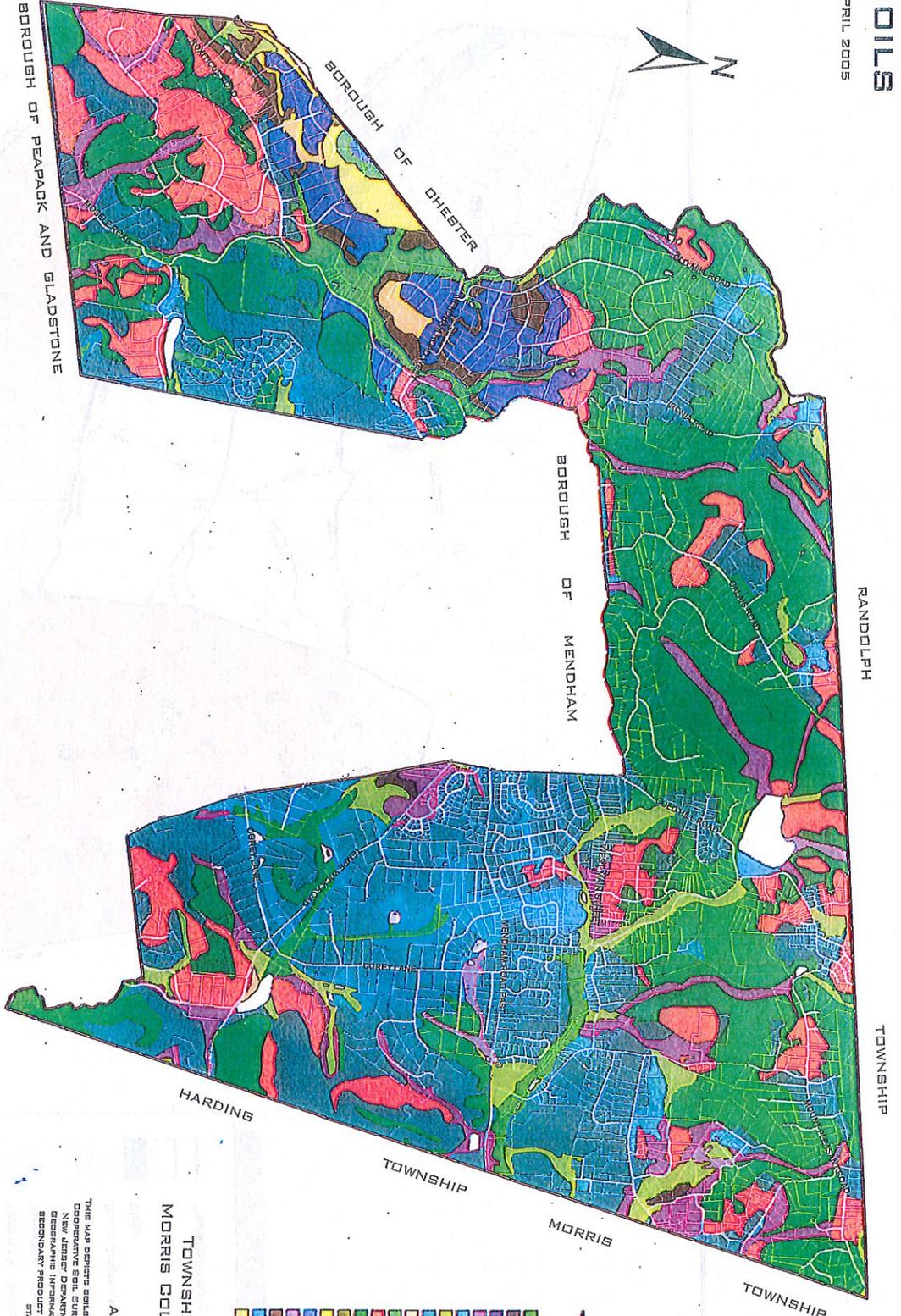
Reference Maps:
 GIS Database Data: New Jersey Department of
 Environmental Protection Series 1,
 Dated March 7, 1996

Township of Mendham
 Morris County, New Jersey
Geology
 November 2000



SOILS

APRIL 2005



- LEGEND**
- MUNICIPAL BOUNDARY
 - PARCEL LINE
 - PARENT SOILS
 - ALLUVIAL
 - ANNANDALE
 - BARTLEY
 - BALTON SERIES
 - DAUPON VARIANT
 - DOCKENBURY
 - ESSEXVILLE
 - HIBERNIA
 - KILMERVILLE
 - PARKER
 - PARKER EDGEVILLE
 - PATTONS
 - PENN
 - PENN-KILMERVILLE
 - ROOSEVELT
 - THROSTVILLE
 - URBAN LAND
 - WASHINGTON

TOWNSHIP OF MENDHAM MORRIS COUNTY, NEW JERSEY

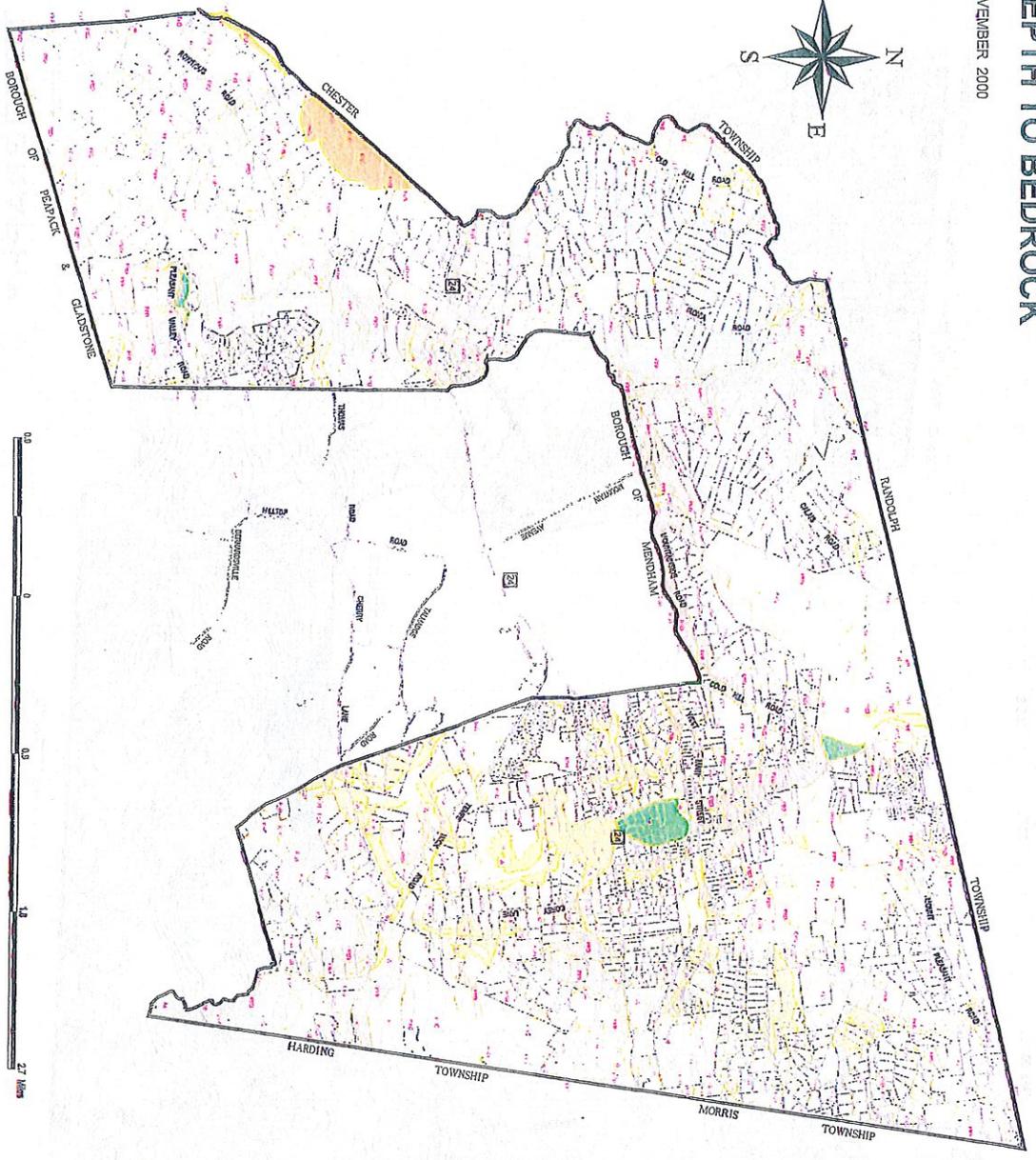
SOILS
APRIL 2005

THIS MAP SHOWS SOILS THAT WERE CREATED BY THE NATIONAL COOPERATIVE SOIL SURVEY. THE DATA WERE OBTAINED FROM THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL AND NATURE RESOURCES USING REMOTE SENSING INFORMATION SYSTEM DIGITAL DATA. THE BOUNDARY PRODUCT HAS NOT BEEN VERIFIED AND IS NOT STATE-AUTHORIZED.



DEPTH TO BEDROCK

NOVEMBER 2000



Legend

- 1' - 3' / 2"
- 4' - 8'
- 9' - 10'
- > 10'
- Other
- Parcel Lots
- Soil Types
- PEC
- Township Boundary

Reference Maps:
 GIS Resource Data New Jersey Department of
 Environmental Protection Series 7:
 Dated March 7, 1996

Township of Mendham
 Morris County, New Jersey
Depth to Bedrock
 November 2000



TOPOGRAPHY

APRIL 2005



LEGEND

- PARCEL LOTS
- TOPOGRAPHY
- MUNICIPAL BOUNDARY
- WELLHEAD PROTECTION AREAS
- TIER
 - 2 YEAR
 - 5 YEAR
 - 12 YEAR

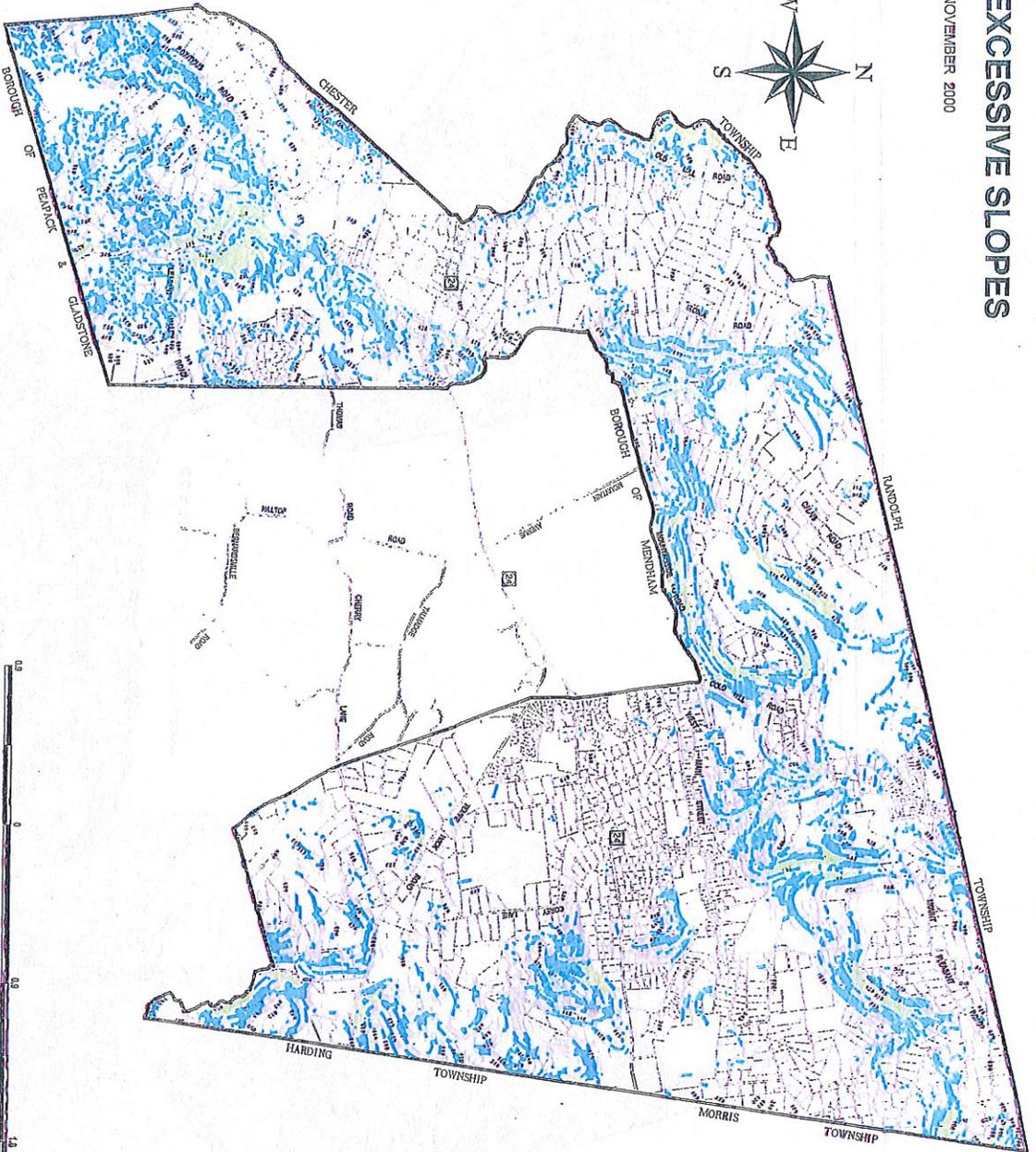
TOWNSHIP OF MENDHAM
MORRIS COUNTY, NEW JERSEY
TOPOGRAPHY
APRIL 2005

THIS MAP WAS DEVELOPED USING NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION GEOGRAPHIC INFORMATION SYSTEM DIGITAL DATA, BUT THE BOUNDARY PRODUCT HAS NOT BEEN VERIFIED AND IS NOT STATE-AUTHORIZED.



EXCESSIVE SLOPES

NOVEMBER 2000



Legend

- 0%-10% Slopes
- 10%-15% Slopes
- 15%-25% Slopes
- 25%+ Slopes
- Parcel Lots
- Topography
- Township Boundary

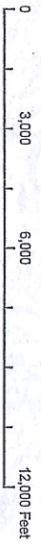
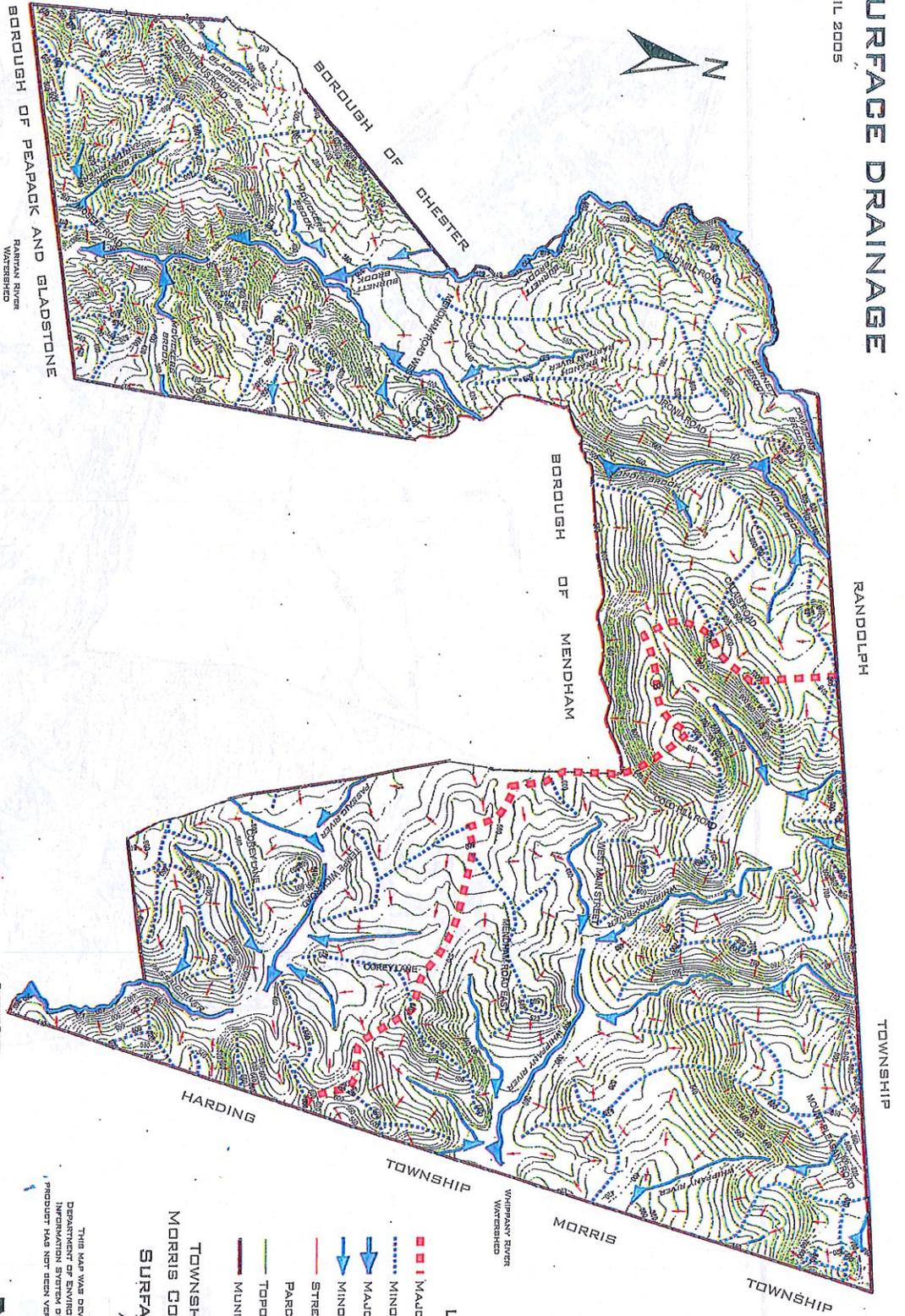
Reference Maps:
 SIS Resource Data New Jersey Department of
 Environmental Protection Series 1,
 Dated March 7, 1999

Township of Mendham
 Morris County, New Jersey
Excessive Slopes
 November 2000



SURFACE DRAINAGE

APRIL 2005



LEGEND

- MAJOR DRAINAGE DIVIDE
- MINOR DRAINAGE DIVIDE
- MAJOR STREAMS
- MINOR STREAMS
- STREAM FLOW ARROWS
- PARCEL LOTS
- TOPOGRAPHY
- MUNICIPAL BOUNDARY

TOWNSHIP OF MENDHAM
 MORRIS COUNTY, NEW JERSEY
SURFACE DRAINAGE
 APRIL 2005

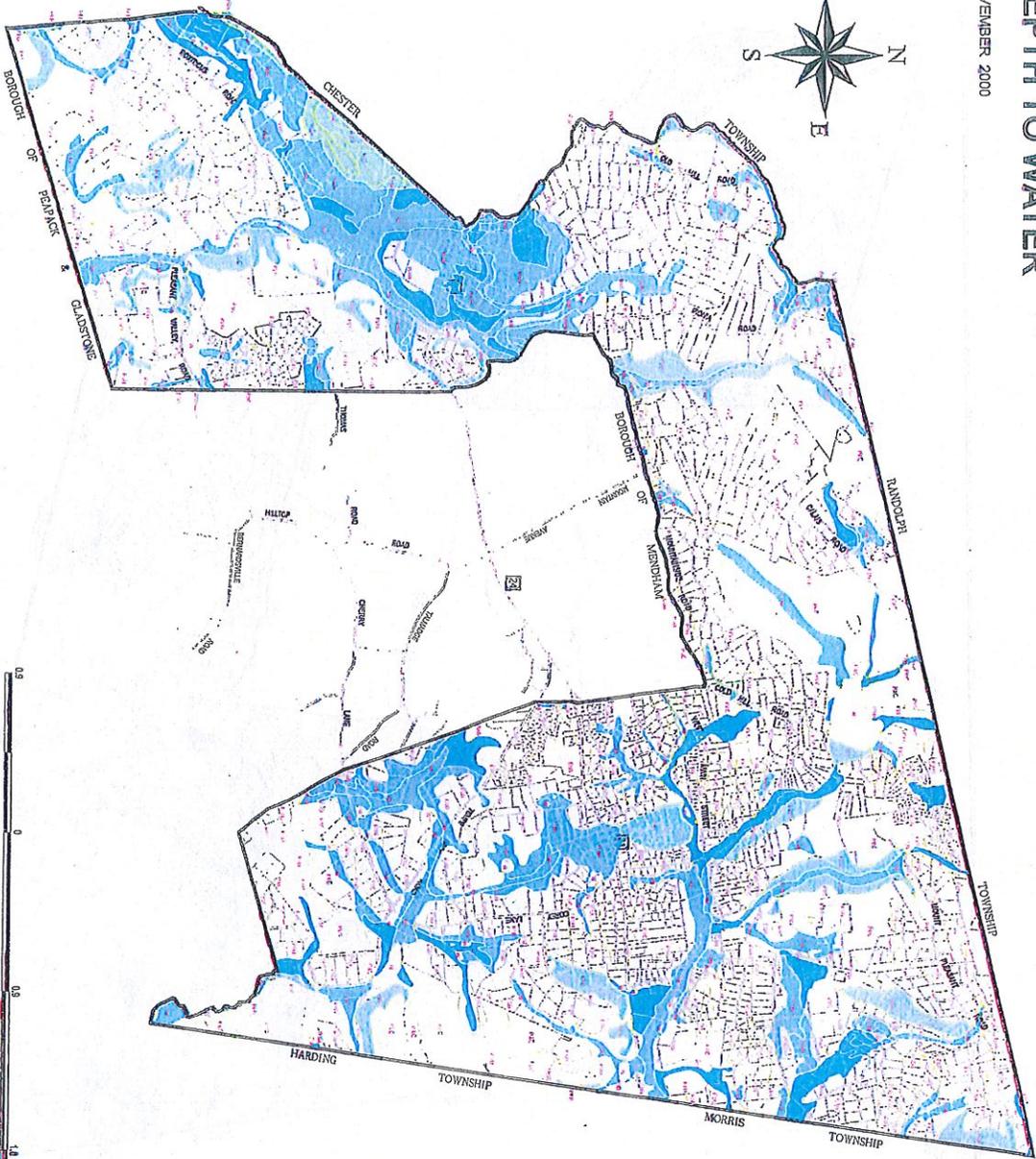
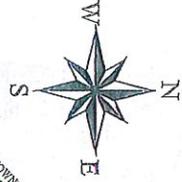
THIS MAP WAS DEVELOPED USING NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION GEOGRAPHIC INFORMATION SYSTEM DIGITAL DATA, BUT THE SECONDARY PRODUCT HAS NOT BEEN VERIFIED AND IS NOT STATE-AUTHORIZED.



ESRI

DEPTH TO WATER

NOVEMBER 2000



Legend

- Less than 1-1/2 feet
- Less than 4 feet
- 4 feet to 6 feet
- More than 10 feet
- Undetermined
- Parcel Lots
- Soil Types
- Township Boundary

Reference Maps:
 GIS Resources Data New Jersey Department of
 Environmental Protection Series 1,
 Dated March 7, 1998

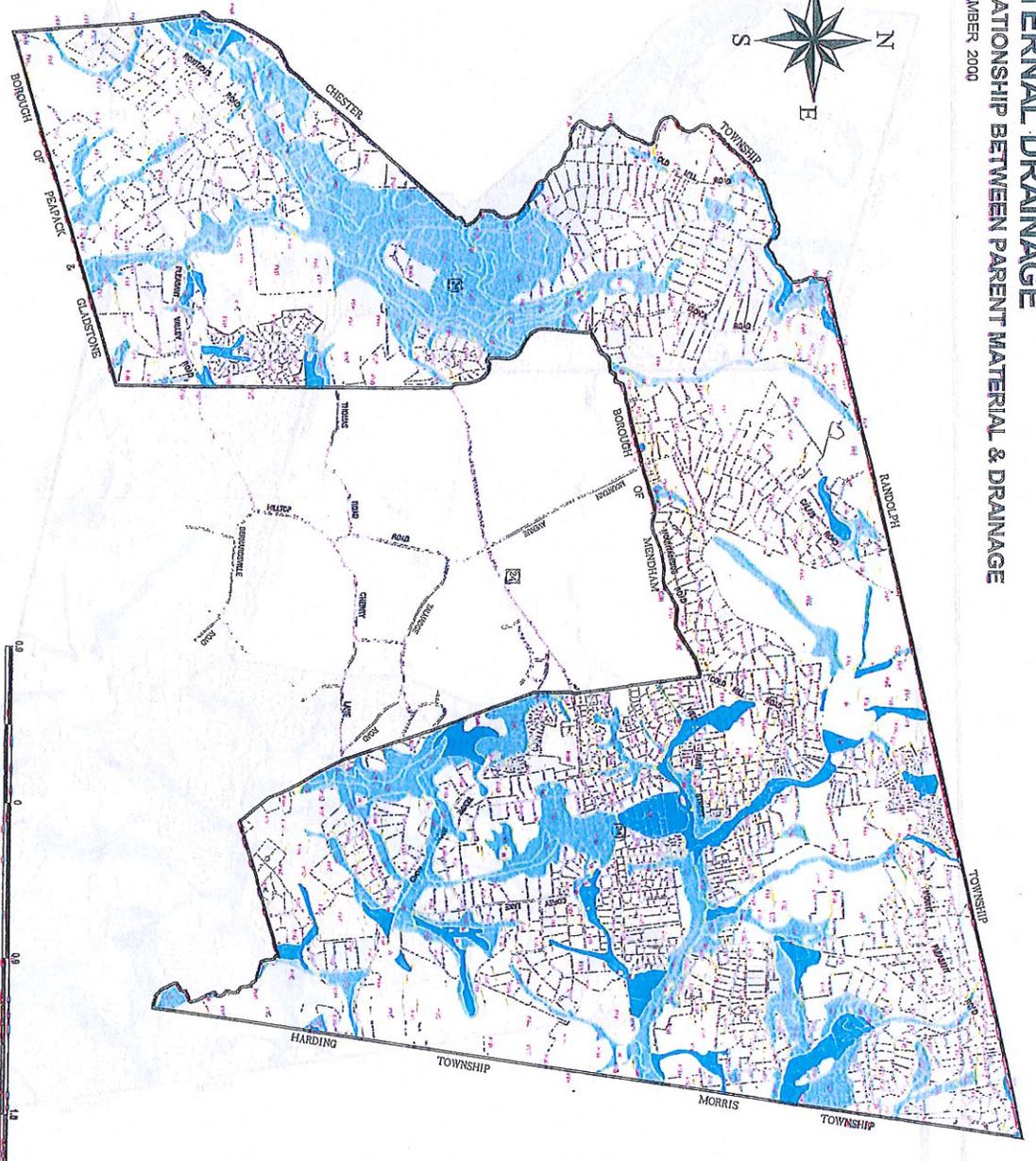
Township of Mendham
 Morris County, New Jersey
Depth to Water

November 2000



INTERNAL DRAINAGE RELATIONSHIP BETWEEN PARENT MATERIAL & DRAINAGE

NOVEMBER 2000



Legend

- Good
- Fair
- Unsatisfactory
- Other
- Parcel Lots
- Soil Types
- Township Boundary

Reference Maps:
 SIS Resource Data New Jersey Department of Environmental Protection Series 1, Dated March 1, 1989

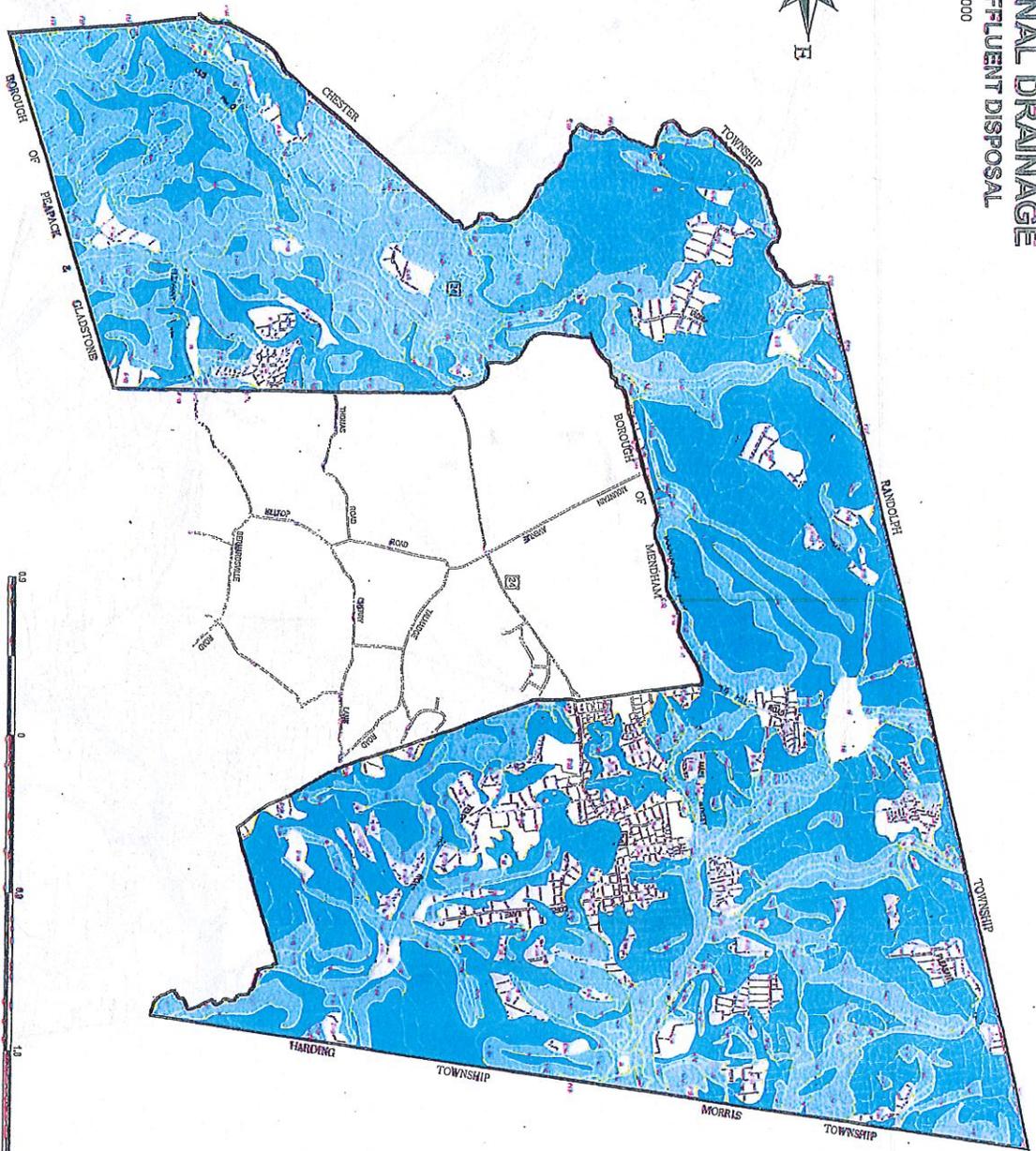
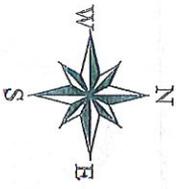
Township of Mendham
 Morris County, New Jersey

**Internal Drainage
 Relationship between Parent Material
 and
 Drainage**

November 2000



**INTERNAL DRAINAGE
SEPTIC EFFLUENT DISPOSAL**
NOVEMBER 2000



Legend

- Slightly Limited
- Moderately Limited
- Severely Limited
- Other
- Parcel Lots
- Soil Types
- Township Boundary

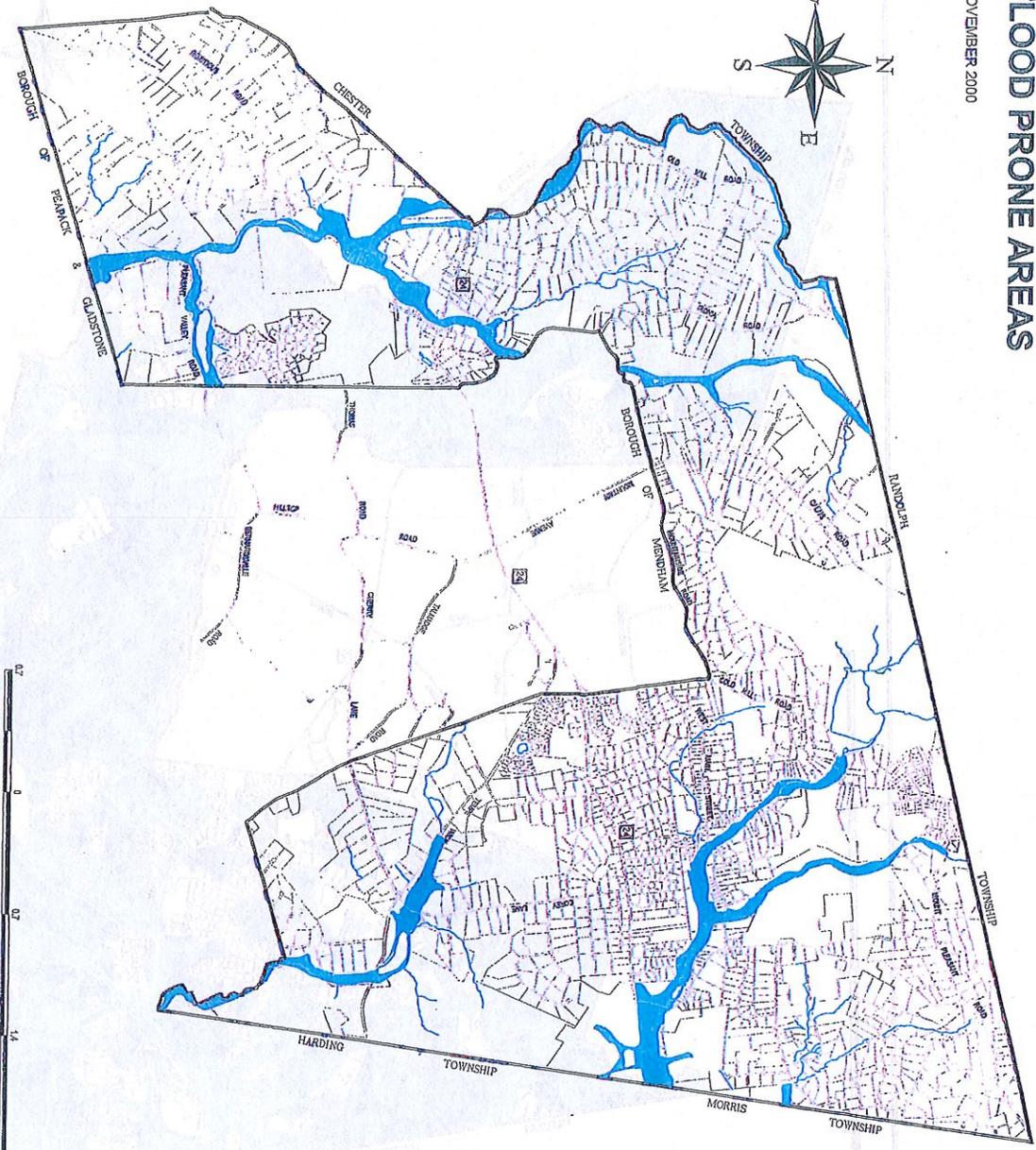
Reference Maps:
GIS Reference Data New Jersey Department of
Environmental Protection
Parcel Data from Series 1,
Dated March 7, 1996

Township of Mendham
Morris County, New Jersey
**Internal Drainage
Septic Effluent Disposal**



FLOOD PRONE AREAS

NOVEMBER 2000



Legend

-  Parcel Lots
-  Primary Flood Prone Area
-  Streams
-  Township Boundary

Reference Maps:
 GIS Resource Data New Jersey Department of
 Environmental Protection Series 1,
 Dated March 7, 1999

Township of Mendham
 Morris County, New Jersey
Flood Prone Areas

November 2000



III. STATEMENT OF OBJECTIVES, PRINCIPLES, ASSUMPTIONS AND POLICIES UNDERLYING THE MASTER PLAN (Adopted 11/13/00)

The MLUL requires that all Master Plans contain a “statement of objectives, principles, assumptions, policies and standards upon which the constituent proposals for the physical, economic and social development of the municipality are based.” The purpose of this chapter is to satisfy this requirement and to bring into focus in one place a summary of the factual, practical and philosophical underpinnings of this Master Plan.

UNDERLYING PRINCIPLES AND ASSUMPTIONS

The major principles and assumptions underlying the goals, objectives and policies of this Master Plan are discussed below. Taken together they form the fundamental rationale for all the elements of the Master Plan and the development regulations of the Township of Mendham.

Community Character Principles and Assumptions

Mendham Township is a residential community with a historic rural character which it retains to a remarkable degree despite substantial development in recent years. The residential character of the community has traditionally been characterized by well-kept homes and properties of small to large size in a wooded setting. Prominent features include extensive woodlands, steeply sloping topography and narrow winding roadways. Other defining characteristics include the high quality of the Township’s environmental resources. Mendham Township has a historic special relationship with Mendham Borough which contains the “Village Center,” recognized in the State Plan as the commercial and service heart for the two municipalities.

Streams and rivers are prominent features in the Township that have directly influenced the character of the community from its beginnings. They were a central design element around which the community developed, and they fundamentally influence its character and quality of life, contributing natural beauty and recreational opportunities. The substantial woodlands, numerous streams and steeply sloping terrain all contribute to the unique character of the Township.

Environmental Principles and Assumptions

The numerous trout production and maintenance streams located throughout the Township are important and sensitive environmental resources. They form the headwaters of the Clyde Potts Reservoir and three important river basins, one of which flows into the Great Swamp National Wildlife Refuge. They are typically found in association with the steeply sloping terrain and extensive woodlands that are natural features also located throughout the Township. These features interact in important ways. In particular, woodlands minimize soil erosion, water pollutants and flooding downstream, and maximize aquifer recharge.

Cultural Principles and Assumptions

Other defining man-made characteristics of the Township are the numerous historic resources located throughout the community, especially five existing and one proposed Registered Historic Districts and Jockey Hollow. The Township's narrow winding roadways retain their historic character and contribute to the character of the Historic Districts. These resources cross municipal boundary lines and contribute to the entire region. They are resources recognized in, and important to, the New Jersey State Plan.

Infrastructure Principles and Assumptions

Mendham Township has a limited infrastructure base consistent with its low-density land use pattern. The road system consists of primarily narrow, winding, and often historic, roadways that have limited traffic carrying capacity. In many cases, that capacity is nearing its limit. Major improvements to most roadways would be destructive to the numerous historic districts and sites through which they pass. Public transportation services are limited with little prospect for expansion.

Most development is served by individual onsite potable water wells and septic systems; public water and sewer lines are generally confined to a few higher density areas. All Township residents rely on groundwater resources for water supply even the limited areas served by public water lines. A groundwater study commissioned by the Township,¹⁹ together with anecdotal evidence from numerous residents, provides compelling evidence that groundwater resources in the Township are under stress from overuse and possible contamination. Major public improvements to water and sewer systems would be infeasibly expensive.

Major improvements to the Township's existing infrastructure base are inconsistent with Township and State planning goals. The existing infrastructure base can safely support only a pattern of overall low-density development. Future land use planning should be consistent with these assumptions.

Community Facility Principles and Assumptions

Community facilities in Mendham Township are generally adequate with the exception of schools and recreational facilities. The Township has extensive recreational resources, especially for passive recreation, and is adding more active recreational facilities. Recent years, however, have seen a substantial increase in school-age population. This growth has created the need for more recreational facilities, especially active recreation. The school expansion referendum passed in 1999 will expand both elementary and middle schools to meet the needs of the growing school population. The Township relies upon numerous active volunteers to run most of the vital functions of the municipality, creating a strong community spirit but imposing limitations on the level of services that can be provided.

Regional Responsibility Principles and Assumptions

The Township contains an unusual degree of resources important to the region, state and country. This imposes a high degree of regional responsibilities in addition to its affordable housing responsibility shared with all communities. In particular, the headwater areas are critical to water quality in regionally important potable water supplies. The many numerous historic resources located in the Township are important to the region, state and country, crossing numerous municipal boundaries. Part of the Township forms a portion of the headwaters for the Great Swamp Wildlife

¹⁹ Critical Water Resources Study, Township of Mendham. Connolly Environmental, Inc., Denville, NJ, 1994.

Refuge which is under threat from the effects of development. These factors have lead to the entire Township being designated Planning Area 5 (*Environmentally Sensitive*) in the State Plan.

Development Trend

Assumptions

Recent years have witnessed a significant increase in development pressures throughout the Township, many in the form of increasingly large "estate-style" homes with substantial site improvements. Many of these homes have not been built on "estate-sized" oversized lots and appear to be out of proportion with the size of the lot. When minimum acreage requirements were originally set in zoning, the trend toward very large homes was unanticipated. This has resulted in much larger percentage of impervious surfaces and the disturbance of a substantial portion of the lot than in pervious years.

This major change in the pattern of development was not contemplated in the previous Master Plan, which assumed the continuation of a more proportionate house to property size relationship as previously established in the Township. The new trend is resulting in substantially more impacts to the environmental quality and historic character of the Township. This is especially the case because the Township has reached the point in its development history where the most easily developed land has already been developed. The remaining vacant land contains substantial amounts of environmentally sensitive characteristics such as steep slopes, wetlands, surface waters, and limited groundwater aquifers.

Assumption: Need for Change

The effects of development trends on the principles and assumptions listed above has lead to a reconsideration of the Master Plan for the Township. Further development along the pattern of recent years will substantially degrade environmental quality and alter the historic character of the Township. Regional water and historic resources would be compromised. Public health and safety will be adversely affected because of impacts on groundwater supplies. The fundamental goals and objectives from the previous Master Plan remain largely unchanged in this plan. The policies needed to achieve those goals, however, require substantial change.

MAJOR GOALS AND OBJECTIVES

The following major goals and objectives constitute the basis for the Master Plan and development regulations for the Township of Mendham.

Retain the Traditional Character of Mendham Township

Community Character - Mendham Township is a residential community on the western edge of the New York/Newark metropolitan area. To a remarkable degree it retains its traditional character as a rural and historic area. That character has three primary and distinguishing elements which should be protected:

- Numerous historic structures that are visually prominent throughout the Township because of their typical proximity to public roads.
- Narrow, often historic, winding public roads that closely conform to a hilly topography.
- High quality environmental resources, especially extensive woodlands, numerous specimen (often historic) trees lining roadways, and pristine streams.

Housing - The Township's character has traditionally been primarily based upon well-kept, low-density single family homes requiring modest and low-key infrastructure support. A high proportion of existing homes and properties are of modest size appropriate to the needs and resources of young families and older citizens. This variety of home and property sizes should be retained in order to address the needs of retired long-term residents and to maintain a diversity of age groups. This traditional character should be retained while fully addressing the Township's regional fair share housing responsibilities.

Relationship with Mendham Borough - The Township has historically had a close relationship with Mendham Borough which it surrounds on three sides. The Borough contains a designated *village center*, the commercial and service center for the two municipalities, while the Township is the residential area essentially surrounding the *village center*. This traditional relationship should be maintained.

Protect the Township's Environmental Resources

Streams and Rivers - The numerous high-quality streams should be protected to preserve their important contribution to the water quality and moderating of flows in three important downstream river systems. Their ability to produce and maintain trout and other wildlife should also be preserved. This means that land disturbance in the Township should in general be minimized to the extent possible. In particular, stormwater runoff must be carefully controlled in both its quality and quantity. It also means that stream corridors, wetlands and their transition areas, vegetation and the streams themselves must be carefully preserved from disturbance.

Steep Slopes - The extensive areas of steeply sloping terrain should be protected to the extent possible from inappropriate development.

Woodlands and Specimen Trees - The extensive woodlands, many on steep slopes, contribute directly to the high quality of environmental resources in the Township, particularly to the high quality of surface waters. These extensive woodlands should be preserved from disturbance to the extent possible. The many very large and often ancient trees located along the Township roadways that are important to the character of the Township, and especially its historic areas, should also be preserved.

Stormwater Runoff - Stormwater runoff is a particularly important issue in the Township because of its steeply sloping topography and the sensitive downstream resources affected by runoff. Stormwater runoff should be carefully controlled and minimized. In particular, impervious surfaces should be minimized.

Aquifers - The groundwater resources are the source of the Township's potable water supply. They need to be carefully monitored to avoid excessive drawdown and protected from pollution that would inevitably result from over-development. Paving and the construction of improvements that reduce recharge should be minimized.

Open Space - Approximately 27% percent of Mendham Township's land area is preserved as public or quasi-public open space in scattered large and small green areas located throughout the Township. A higher percentage of the Township is open space when privately owned vacant lands are added. These areas are important to current and future residents and to the region as a whole, providing an important relief from densely developed urbanized areas not far to the east and contributing directly to environmental quality. Open space areas should be protected and expanded, especially areas important to environmental protection, historic preservation and community character.

Preserve Cultural Resources

Historic Preservation - The historic resources located throughout the Township, especially in the five existing and one proposed Registered Historic Districts, Patriots' Path and the areas adjacent to the Morristown National Historic Park (Jockey Hollow), are significant to understanding the history of the Township, State and country. These historic and culturally significant features and resources should be protected.

Maintain Public Infrastructure at Current Levels

The current modest level of public infrastructure investments is appropriate to the Township's overall very low density and should be maintained at that level, consistent with the State Plan.

Provide for Community Facility and Recreation Needs

Active Recreation - Additional active recreation facilities should be provided to meet the needs of a growing population.

Passive Recreation - Additional passive recreation areas should be acquired through the use of the Open Space Trust Fund and other sources of funds.

Address Regional Responsibilities

Affordable Housing - The Township should continue to fulfill its constitutional responsibility to provide its fair share of affordable housing.

Environmental Protection - Township development policies should protect downstream water quality especially for sources of public water supply. This means minimizing disturbance and removal of woodlands in watershed areas, especially where there are steep slopes.

Historic Preservation - Township development policies should protect regionally important historic resources.

State Plan - Township development policies should be consistent with the State Plan.

Provide for the Appropriate Development of the Township.

Residential Development - The traditional character of the Township as primarily a very low-density residential community surrounding the Mendham Borough *Village Center* should be retained.

House Size - A reasonable balance between house size (and associated site improvements) and lot size should be established consistent with the goals of environmental protection and community character preservation.

Lot Size - The minimum lot size and other bulk requirements should be appropriate to the goals of preserving community character, environmental protection, historic preservation, the established infrastructure base and regional responsibilities.

Statement

IV. LAND USE PLAN (Adopted 11/13/00, revised 4/1/02)

The Municipal Land Use Law (MLUL) requires a Land Use Plan element as a prerequisite for adoption of municipal zoning and land development regulations.²⁰ The element should provide the rational planning basis and justification for such municipal regulations. Specifically, C.40:55D-28 of the MLUL requires that the Land Use Plan element shall:

"Take into account and state its relationship to the statement (Chapter II of this plan), and the other master plan elements and natural conditions including, but not necessarily limited to topography, soil conditions, water supply, drainage, flood plain areas, marshes and woodland, showing the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, educational and other public and private purposes or combination of purposes; and stating the relationship thereof to any existing or proposed zone plan and any proposed zone plan and zoning ordinance."

OVERVIEW / EXECUTIVE SUMMARY

Mendham Township is a low-density residential community with significant sensitive land characteristics and a limited infrastructure base. Its future land use policies should be designed to protect and continue these characteristics, especially regionally important water resources. Overall future land use planning should be limited to very low-density residential uses consistent with the established rural/historic land use pattern and in balance with a limited infrastructure base and environmentally sensitive land characteristics.

Of particular importance, the findings of a study of Township groundwater resources²¹, prepared by the Township environmental consultants, should form the foundation of the Township's future land use planning. The Land Use Plan in the previous Township Master Plan is inconsistent with the findings and recommendations of that Study.²² As a result, changes in minimum lot size requirements are recommended to bring the amount of future development potential into balance with the Study's findings.

This element is organized into three major parts:

Part 1. A listing of the key future land use **objectives** that should guide Township public policies affecting land development.

Part 2. A summary of the important **assumptions and principles** that form the foundation for future land use planning in Mendham Township:

- Existing land use patterns
- Cultural principles and assumptions

²⁰ NJS A C.40:55D-62

²¹ Critical Water Resources Study, Township of Mendham, New Jersey. Connolly Environmental, Inc., 1994.

²² 1983 Master Plan Revision, Township of Mendham. John Rakos, PP/AICP, Dec. 1983.

- Environmental limitations
- Groundwater resource limitations
- Public infrastructure limitations
- Regional responsibilities

Part 3. The recommended **Future Zone Plan** that should guide Township zoning and development regulations including the following specific **land use planning recommendations**:

- Overall recommendations to guide land use regulation
- Recommendations for increasing lot size
- Recommendations for maintaining the traditional relationship of house to lot size
- Recommendations for flexible zone standards
- Recommendations to discouraging the unwarranted extensions of public roads
- Recommendations to preserve bridle trails

PART 1 - LAND USE OBJECTIVES

Land use planning in Mendham Township should be generally guided by the goals and objectives outlined in Chapter III STATEMENT OF OBJECTIVES, PRINCIPLES, ASSUMPTIONS AND POLICIES UNDERLYING THE MASTER PLAN. In addition, following are the key objectives specifically relating to land use. The key principles and assumptions that relate to these objectives are discussed in succeeding sections of this plan.

1. Mendham Township has a limited infrastructure base only suitable for very low density of overall development. Major improvements to that base would be prohibitively expensive, contrary to environmental planning goals and inconsistent with the policies of the New Jersey State Development and Redevelopment Plan. The future densities and intensities of development in Mendham Township should not exceed the capacities of the existing infrastructure to support it.
2. The Township should recognize and continue to address its constitutional responsibility to provide for its fair share of affordable housing for its region.
3. Development adversely affects the quality of groundwater resources. The Township has an obligation to limit the total amount of development to that which can be supported by the Township's groundwater resources to protect the public health of those that depend on those resources. Groundwater quality should not be allowed to degrade below standards established by the United States Environmental Protection Agency and the New Jersey Department of Environmental Protection.²³
4. The Township's land use regulations should be designed to protect the high-quality headwaters of public surface water supplies located within its boundaries and to minimize downstream flooding.
5. The Township's land use policies should promote the preservation of its traditional rural/historic character.

²³ New Jersey Administrative Code: NJAC 7:9 and NJAC 7:15.

PART 2 – ASSUMPTIONS AND PRINCIPLES THAT SHOULD GUIDE FUTURE LAND USE AND ZONE PLANNING IN MENDHAM TOWNSHIP

EXISTING LAND USE PATTERNS THAT SHOULD AFFECT FUTURE DEVELOPMENT

Throughout Mendham Township there is a well established land use pattern of residential neighborhoods. The various neighborhoods exhibit distinct characteristics described below. The preservation and perpetuation of these characteristics should be one of the primary considerations and objective in the Township's future land use and zone planning policies.

Overview

Mendham Township is primarily a residential community of single-family homes. Most are on relatively large lots in excess of one acre and many are on very large lots in excess of three acres. The Township looks to Mendham Borough as its community "center" for commercial and service needs.²⁴ Together the Borough and Township form a *Community of Place*. The only area of primarily non-residential land use is the small area in Brookside centered on Main Street, Cherry Lane and Woodland Road. This area is made up of public uses (mainly municipal) and one commercial use. The commercial and service needs of Township residents are provided for in Mendham Borough and Morristown (the traditional town and regional centers). This regional interrelationship is mutually beneficial and is consistent with the intent of the New Jersey State Development and Redevelopment Plan.²⁵

Brookside

The Brookside area contains most of the important Township institutions (Municipal Building, Municipal Court, Post Office, Library, Fire Company, First Aid Squad, Community Club, Church, Elementary School and Police Dept.) and as such is the center of Township municipal interaction. Its character is, however, still primarily residential, made up of two closely associated neighborhood areas, the older historic Brookside and the newer neighborhoods to the south and northeast.

The older portion of Brookside is included within the Brookside Federal and State Registered Historic District centered on East and West Main Streets. This neighborhood retains a strong sense of a traditional rural village with narrow winding roads and large concentration of historic buildings (the largest in the Township), geographically centered upon the narrow valley of the Whippany River. In accordance with the historic pattern, lot sizes vary widely but most are relatively small with homes of small to moderate size. Also in accordance with historic patterns, setbacks vary widely with many homes located relatively close to the road.

The newer Brookside area contains neighborhoods with a distinct character located to the south and east of historic Brookside. This area was established largely as subdivision developments in the 1950's and 60's. Typical of the era, its character can be characterized by relative uniformity in road design, lot size (relatively small), setbacks, home design and home size (small to moderate). Many homes in this area are single-story "ranch style" in contrast to the two-story "colonial" common to most of the Township. Before subdivision development, this area was largely open farmland; thus trees are still relatively immature.

Washington Valley Area

²⁴ "Center" as used here is intended to have the same meaning as the New Jersey State Development and Redevelopment Plan.

²⁵ The New Jersey State Development and Redevelopment Plan: Interim plan. New Jersey State Planning Commission, 1999.

This area is directly to the east of Brookside and lies in a valley where many small streams meander through meadows into the Whippany River. The character of this area is similar to the Historic Brookside area except that the lots are larger. Mendham Township's portion of the Washington Valley Historic District is located within this area. A large portion of the National and State Registered Historic District extends into the adjacent part of Morris Township. This area was originally farmlands with many cow pastures, and still surviving historic farmhouses. This neighborhood is centered on the narrow, winding and historic Washington Valley Road and on the historic brick schoolhouse located in Morris Township at the fork of Washington Valley Road and Schoolhouse Lane. The character of this area is also heavily influenced by large areas of preserved public open space.

Tempe Wick / Corey Lane Area

This residential area is centered on these two collector roads but includes other local Township roads tributary to them. Its character is still heavily influenced by the many historic homes prominent on these two old, narrow, winding, collector roads. The area is heavily forested with many large old trees and hilly terrain with numerous small streams that are the headwaters of the Passaic River and Great Swamp National Wildlife Refuge. The Tempe Wick Federal and State Registered Historic District, Lewis Morris Park, and the Morristown National Historical Park are all located in this area.

Together, these features heavily influence the area's rural historic character. It also contains numerous recent subdivision developments of a distinctly modern character on relatively wide and straight roads. These, however, are visually less prominent because of their location off of the historic collector roads. Lot sizes and setbacks of historic homes vary widely in accordance with historic rural patterns but lots are generally large and front setbacks small. Historic homes are generally small to moderate in size. In the newer subdivisions, homes are generally larger, especially those built in recent years. Lot sizes and setbacks are generally large and more uniform than historic properties.

Northern Highland Area

This residential area encompasses the entire northernmost portion of the Township extending from Morris Township on the east to Chester Township on the west. It contains the Combs Hollow and proposed India Brook Historic Districts. Although these districts contain many historic homes, the overall character of the area has been heavily influenced by modern subdivision developments, especially those built since the 1970's. These newer developments can be characterized as containing moderate to large colonial style homes on uniformly sized (albeit large) lots and with uniform setbacks. Home sizes in the most recent developments are very large.

The area contains a combination of narrow winding historic roads and newer subdivision roads that are relatively wide and straight. The area is hilly, geographically the highest in the Township, heavily forested with numerous large public open space areas, vacant tracts of undeveloped private land, and watershed areas. Numerous high-quality forest covered streams are located in this residential area heavily influencing its character.

Roxiticus Valley Area

This residential area encompasses the entire southwestern portion of the Township. The Ralston Historic District is located in this area with a significant number of historic homes on narrow winding historic roads. The area has a rolling topography with a combination of wooded hills and, until recently, a significant amount of open farmland. Although these features still influence the area's character, recent development is significantly impacting that character. The new development is primarily "estate size and style" homes that are visually prominent especially because many were built on what was previously open farm fields. The area contains the Schiff Reservation which includes

310 acres of preserved open space. The character of the area is still heavily influenced by open areas, both publicly and privately owned.

Cluster Development Neighborhoods

There are three developments, *Drakewick, Mountain View and Brookrace*, that were comprehensively planned and developed in recent years as part of the Township's affordable housing program. As modern "planned clustered developments" they have their own characteristics defining them as distinct neighborhoods. Homes are typically of moderate size and lots are relatively small in comparison to most other neighborhoods. Areas of common open space have been set aside and incorporated into the design of these neighborhoods. In particular as part of the Brookrace development, a large portion of the development area was set aside as permanent preserved open space.

House Size in Relationship to Property Size Characteristics

The various neighborhoods in the Township exhibit established patterns of house size in relation to lot size. This pattern is changing in recent years. Many new homes are more than double the size of a more typical house, on lots only meeting the minimum zoning requirements. They appear out of proportion with their lots and disrupt the established neighborhood character, substantially reducing the sense of space and openness enjoyed by all. This trend is also resulting in existing homes of small to modest size being torn down or otherwise converted to much larger ones. This issue is one of concern to many residents and commented upon by numerous public participants in the public hearing process as their greatest Township land use concern.

The development trend towards much larger houses on minimum sized lots also has adverse implications on the environmental and public health goals of this plan. It substantially increases the amount of clearing and land disturbance on a per capita basis, increasing environmental impacts. Larger homes also increase the concern about the impact on ground water resources because it is likely that they use more water on a per capita basis than small to modest sized homes.

CULTURAL PRINCIPLES AND ASSUMPTIONS THAT SHOULD AFFECT FUTURE DEVELOPMENT

The preservation and creation of *Communities of Place*²⁶ is the central goal of the New Jersey State Development and Redevelopment Plan. Urban sprawl, especially since World War II, has greatly diminished the number of such communities in New Jersey. Mendham Township, together with the Borough, still remains such a community, a self-evident fact to residents and visitors. The Township retains its traditional historic rural character. Factors that contributed to this include the foresight of earlier Township officials establishing effective zoning controls which have been regularly updated since. The preservation of the traditional rural/historic character is the single most strongly held planning goal of Township residents. It should also be a central goal of Mendham Township's development policies. The two keys to the preservation of this character (roadscape and historic preservation) are discussed below.

Roadscape Preservation

The first key to preserving the Township's character is to preserve the character of the many historic public roadways and the highly visible areas immediately next to them. Within these relatively narrow areas (roadscape) the Township's character is largely defined. The traditional beauty of these

²⁶ *Community of Place* is defined by the State Plan as "a dynamic, diverse, compact and efficient Center that has evolved and been maintained at a human scale, with an easily accessible central core of commercial and community services, residential units, and recognizable natural and built landmarks and boundaries that provide a sense of place and orientation."

roadscape is an attribute of importance not only to Township residents but also significant to the region and state as a whole. There are two important elements to the Township's traditional roadscape that should be preserved through appropriate development policies:

1. Narrow curvilinear roadways. This subject will be covered in detail in the Circulation Plan element.
2. Natural and wooded areas, especially specimen trees and vegetation bordering roadways. This subject is covered extensively in the Mendham Township Roadscape Report prepared by the Mendham Township Roadscape Committee in 1995.

Historic Preservation

The preservation of the historic significance of the five existing and one proposed Registered Historic Districts is a strongly held community planning goal. Taken together, Historic Districts encompass a large portion of the Township. The historic significance of all these districts is based upon the preservation of the historic structures within the districts and of the historic character of the areas surrounding them: the surrounding landscape, vegetation, and the historic roadways upon which they are located. The preservation of the overall historic setting is the key to the preservation of the historic significance of these districts. These factors make them especially prone to detrimental impact from new development. Historic preservation will be discussed in detail in the Historic Preservation Plan element.

ENVIRONMENTAL PRINCIPLES AND ASSUMPTIONS THAT SHOULD AFFECT FUTURE DEVELOPMENT

All of Mendham Township is classified *Environmentally Sensitive (PA-5)* in the New Jersey State Development and Redevelopment Plan.²⁷ Environmentally sensitive features and characteristics are commonly found throughout the Township, and they are especially prevalent in the remaining vacant areas. The Township has reached the point in its development history where the more easily developed lands have generally been developed. The remaining undeveloped areas contain an even higher proportion of steep slopes, extensive wetlands, open waters and poor soil conditions.

The State Plan's land use policies for *PA-5* areas can be summarized as protecting environmentally sensitive areas from the adverse impacts of development by preserving low density (or *center-based*) land use patterns, promoting open space and protecting natural resources. Mendham Township's land use planning should be generally consistent with the State Plan. The overall density of development should be very low. Environmentally sensitive features should be protected by carefully administered controls. Future development should utilize *Best Management Practices* and *Best Available Technologies* to limit adverse effects.

The Township's environmental characteristics are summarized below in terms of their implications on future development. They will be discussed in more detail in the Conservation Plan element.

Steeply Sloping Topography

As can be seen on the following map, steeply sloping topography is found throughout the Township and is especially common in the existing R-3 and R-5 zones. The map also illustrates that such areas are very often in close relationship to the headwaters of numerous streams located throughout the

²⁷ The New Jersey State Development and Redevelopment Plan: Interim Plan, Resource Planning and Management Structure page 242, March 31, 1999.

Township. The close relationship between steep slopes and streams in the Township makes development on steeply sloping areas especially prone to adverse primary and secondary environmental consequences. Development on steep slopes significantly increases runoff and soil erosion, negatively impacting water quality and increasing flooding downstream. The prevalence of steep slopes on the remaining vacant lands should have an important implication on appropriate minimum lot sizes.

Woodland Preservation

Mendham Township has extensive woodlands, especially in the many steeply sloping areas. They are important to minimizing soil erosion and preserving water quality in trout production and trout maintenance streams, especially in steep slope areas. Very low-density development pattern should be maintained to the extent possible to preserve woodland areas and to allow rainwater to replenish groundwater aquifers.

Wetlands and Transition Areas

Wetland areas are commonly found throughout the Township but are especially common on the remaining vacant tracts. Although wetlands are regulated by NJDEP, their prevalence in the remaining vacant areas in the Township should have significant influence on future zoning limitations. Future land use densities should be very low.

Surface Water Quality

Numerous streams are located throughout the Township. All are currently classified by NJDEP as *FW1* or *FW2* (*trout production and trout maintenance*), the highest quality classifications. This system of streams is strategically located at the headwaters of three of the major river basins: the Passaic, Whippany and Raritan. They are the sources of potable water for a number of public water systems including the Southeast Morris County Municipal Utilities Authority. A number of streams drain into the Great Swamp National Wildlife Refuge.

Regionally-based environmental interest groups have focused attention on the protection of these headwater areas as important to water quality, the quantity of public water supplies, and to reducing flooding in the river basins. For these reasons they should be considered an important and sensitive environmental resource worthy of strict protection measures in the form of restrictions on development. Future residential development in these areas should be of very low densities. Development should not alter stream flow characteristics. In particular, they should not be disturbed or encroached upon and mature vegetation around them should be preserved to buffer them from the effects of development.

Groundwater Quality

The protection of groundwater from the impact of development is the most pressing and critical environmental issue facing the Township. It is covered in detail in a separate section below because of its overriding importance and implication on public health and safety.

GROUNDWATER RESOURCE LIMITATIONS THAT SHOULD AFFECT FUTURE DEVELOPMENT

All Township residents are dependent upon the Township's underlying groundwater resource for their potable water supply whether they are served by public water lines or individual wells. Its protection must be one of the Township's primary land use planning concerns in terms of both quantity (capacity) and quality (minimizing pollution). The limited capacity of the resource is determined by underlying geologic characteristics. Its quality is directly affected by the density of development in

relation to soil and geologic characteristics because most Township residences (about 90%) are served by individual septic systems which collectively reduce the quality of groundwater.

For many years there has been increasing concern, based upon anecdotal reports from many sources, that the Township's groundwater is under stress and that both the quality and quantity of the groundwater is being compromised by land development pressures. Residents have reported lost capacity on private wells, wells running dry, and wells becoming fouled by pollutants commonly associated with individual subsurface septic discharges.

Critical Water Resources Study

In response to these concerns a study of the Township's groundwater resources was authorized by the Township Committee, commissioned by the Township Environmental Commission, and prepared by the Township's environmental consultant Connolly Environmental, Inc.²⁸ The initial phase of the Critical Water Resources Study (CWRS) was a questionnaire distributed throughout the Township, mailed to each household, which confirmed the anecdotal reports and pointed to several areas of the Township having particular problems with groundwater supply.²⁹

The next stage of the Study was to consult the NJDEP, Division of Water Resources about current methodologies to assess the impact of development on groundwater resources. Two were recommended: the Current Planning Capacity Model³⁰ (CPCM) was designed to estimate the available groundwater supply and the Nitrate Dilution Model³¹ (NDM) which estimates the potential for groundwater quality degradation resulting from septic system discharges. The NJDEP and State Planning Commission endorse the use of these models by municipalities for assessing the impact of development on groundwater resources and for land use planning. These methodologies provide an assessment from both a quantity and quality perspective.

Current Planning Capacity Model

The CPCM measures the quantity of the groundwater resource, resulting in a recommended *sustainable population* based upon known yields from underlying geologic formations. The groundwater yield is adjusted for known high volume groundwater withdrawal sites from the underlying aquifers. Using the CPCM model and the known geology underlying the Mendhams, the Study concluded that the aquifers upon which Mendham Township residents rely have a sustainable capacity to support no more than 2,130 households.

Nitrate Dilution Model

The NDM measures the potential for degradation of the quality of the groundwater resource resulting from septic system discharges, providing an estimate of the number of households that can utilize such systems, based upon the characteristics of the soils and underlying geology. Even properly functioning septic systems degrade groundwater quality; the greater the number of households utilizing septic systems, the greater the impact on groundwater quality. An important public policy question is a determination of an acceptable level of degradation. At the time of the Study, the NJDEP had adopted the U.S. Public Health standard of 10 milligrams per liter (mg/l) as the upper acceptable limit of groundwater degradation before serious health consequences ensue. At levels above 10 mg/l there are known public health consequences that must be avoided. Using the NDM model, the Study

²⁸ Op cit.

²⁹ The results of the questionnaire are detailed in Section IV of the CWRS.

³⁰ Neiswand, G.A. & Pizor, P.S., Extension Bulletin 413, Rutgers University, June 1977.

³¹ Pizor, Neiswand & Hordon, Journal of Environmental Management, 1984.

concluded that a maximum of 2,111 households could be sustained in the Township without eventually exceeding the 10 mg/l standard.³²

Future Land Use Implications

The findings of the CWRS have clear and important implications to the Township's future land use planning. The two methodologies result in a remarkably close correlation in the maximum sustainable development in the Township, 2,130 (CPCM) and 2,111 (NDM) households. Taken together, they suggest a maximum overall density of residential development of no more than one dwelling unit for each 5.5 acres based upon the total land area in the Township. This confirms what was suspected from the anecdotal evidence of groundwater quantity and quality problems. The areas of the Township experiencing quality and quantity problems exceed this density.

As of the end of 1999 the Township has a total of 1912 dwellings, a number very near the maximum sustainable total. Development densities on the remaining subdividable land must be limited for the protection of the public health. *Best Management Practices* (BMP) and *Best Available Technology* (BAT) that are conservative of, or enhance, surface and groundwater supplies must be employed in all land development activities.

PUBLIC INFRASTRUCTURE LIMITATIONS THAT SHOULD AFFECT FUTURE DEVELOPMENT

As will be documented more fully in the Circulation and Community Facilities Plan Elements, Mendham Township has a limited infrastructure base which can be summarized as follows:

- A narrow winding road system largely made up of historic roads. A number of the most important roads are nearing the limit of their peak-hour capacity.
- Three public water systems serving small areas of the Township. This system cannot be greatly expanded without great cost and/or adverse environmental consequences.
- Two separate small-scale public sanitary sewer systems made up of small "package plants" serving small isolated developments. These systems cannot be expanded without great cost, and without contravention of the planning objectives for PA-5 areas in the State Plan.

Major improvements to this infrastructure base are not contemplated in the Circulation and Community Facilities Plans, consistent with the planning policies for PA-5 areas in the State Plan. Virtually all future development is expected to be served by individual wells, onsite septic systems and the existing road system. The limited capacity of this base requires that an overall very low density of development be maintained in the Township.

REGIONAL RESPONSIBILITIES THAT SHOULD AFFECT FUTURE DEVELOPMENT

Headwaters Protection

The numerous streams found in the Township are the headwaters to the Clyde Potts Reservoir (an important potable water source for the region) and to three important river systems (Raritan, Passaic and Whippany). Together these are important sources of potable water supply for the region. The Passaic flows directly into the Great Swamp National Wildlife Refuge. Maintaining the high water

³² In July 2000, the NJDEP published proposed rules that if adopted will lower the maximum acceptable nitrate level from 10 mg/l to 5.7 mg/l or to the existing background level, whichever is lower.

quality of these streams is an important regional responsibility that is vulnerable to degradation by overly intensive development.

Regional Historic Resources

The Morristown National Historical Park (Jockey Hollow) is located along the eastern boundary of the Township. The area adjacent to the Park in Mendham and Harding Townships is also historically significant (Tempe Wick Historic District). The historic character of this district contributes significantly to the historic character of the Park itself. The Township has a regional responsibility to adopt development policies that are consistent with and will promote the preservation of the historic significance of these areas.

Great Swamp

The headwaters of the Passaic River are located within the Township. The Passaic is one of the primary sources of water to the Great Swamp National Wildlife Refuge. The New Jersey Department of Environmental Protection, the U. S. Department of the Interior and the Ten Towns Great Swamp Watershed Management Committee have conducted extensive studies concluding that development upstream in the headwater areas is having a substantial deleterious effect on the Refuge, recommending that upstream municipalities institute stricter controls on future development.³³ Mendham Township development policies should protect the quality of water flowing into the Refuge by:

- Minimizing forest clearing in headwater areas.
- Minimizing impervious surfaces.
- Maintaining very low development densities.
- Strictly controlling stormwater runoff.
- Strictly utilizing and enforcing Best Management Practices and Best Available Technologies.

Affordable Housing

Similar to every community in the state, Mendham Township has a constitutional responsibility to provide its fair share of the regions affordable housing need. The Housing Element and Fair Share Plan address this responsibility in detail.

State Plan

The goals of the State Plan can be summarized as: balancing public infrastructure investments with land use densities, *center-based* development policies, environmental and historic protection, promoting *Communities of Place*, discouraging sprawl, and encouraging a regional perspective on development policies. The entire Township is designated as *Planning Area 5 – Environmentally Sensitive*. The Township's future land use policies should be consistent with the state planning policies for this designation.

PART 3 – FUTURE LAND USE PLAN

OVERALL RECOMMENDATIONS CONCERNING FUTURE LAND USE

The previous sections summarized the environmental, cultural, infrastructure, public health, and regional responsibility assumptions, principles, and limitations that should be taken into account in

³³ Great Swamp Water quality Monitoring, First Flush Sampling - Final Report, F.X. Browne, Inc. 2000.

formulating Mendham Township's future land development policies. When taken together they require future land use policies that accomplish the following five objectives that should be the guiding principles in the formulation of the Township's development regulations. The sections following the five objectives contain additional specific recommendations relating to the Township's Future Land Use Planning.

Recommended overall objectives for
Mendham Township's land use regulations.

1. Limit future development to overall very low densities.
2. Limit the total amount of future development consistent with the recommendations of the Critical Water Resources Study.³⁴
3. Minimize forest clearing, impervious surfaces and stormwater runoff in order to minimize the impact of development on the hydrologic cycle.
4. Require future development to utilize Best Management Practices and Best Available Technologies.
5. Encourage creative and flexible zoning and development techniques that encourage future development and land conservation techniques that are consistent with the Township's traditional, historic and rural character.

RECOMMENDATIONS FOR THE PROTECTION OF WATER RESOURCES

The protection of public health and environmental quality are fundamental responsibilities of Mendham Township, its boards and public officials. To this end, the protection of groundwater and surface water quality and quantity should be the *sine qua non* of Township future land use planning policies. In particular, future development should be limited in accordance with the recommendations of the Critical Water Resource Study³⁵ in order to limit the adverse effects of development on the hydrologic cycle. Particular emphasis should be placed upon the public health concerns inherent in the Critical Water Resources Study recommendations. The following section contains general recommendations for changes in the zone district plan addressing this issue.

The Critical Water Resources Study used the best available tools (models) for quantifying and judging the effects of development on water resources. However, this is an area of environmental and land use planning and public policy that is still evolving. The Township should not wait for this area of public policy planning to more fully mature. The importance of this issue to public health and the environment requires that the Township take action now based upon the recommendations in the Study even though important changes in this area of public policy may occur in the not too distant future. The Mendham Township Planning Board and Board of Health should monitor and keep abreast of any new developments in this area. In particular, monitoring of water quality should be an ongoing part of the development review process.

³⁴ Op cit.

³⁵ Op cit.

RECOMMENDATIONS FOR ZONE DISTRICTS AND MINIMUM LOT STANDARDS

The Critical Water Resources Study should form the basis of future zoning.

The Critical Water Resources Study recommends that a maximum of 2,111 dwellings can be supported by the Township's groundwater resources. The Township's zone plan in effect at the time of the adoption of this plan permits a total amount of development far in excess of this figure at full build-out. Substantial changes in the zone districts to increase the minimum lot size in many areas are necessary in order to bring future development more into line with groundwater resource capacity.

New zone district plan recommended.

The Future Zone Plan map is intended as a general guide for zoning in Mendham Township. Zone districts should be designated according to the following planning principles:

- The total build-out potential should not exceed 2,111 dwellings, or as close to that target as reasonably possible.
- New very low density districts (10-acre districts) should be created in areas with an existing pattern of very low density of development.
- Large areas of public or quasi-public open space should be included in very low-density (10-acre) districts.
- Most existing properties within a zone district should be fairly consistent with the district's standards; i.e. the number of existing properties nonconforming to zoning standards should be minimized.
- Provision should be made to avoid the necessity for property owners to make applications to the Zoning Board of Adjustment for new construction or additions to single family dwellings on lots rendered undersized or nonconforming as a result of rezoning.
- Zone districts should be as large as possible with boundaries that follow property lines and road lines.
- The zoning for the Mendham Golf & Tennis Club should be consistent with its current use

RECOMMENDATIONS FOR WOODLAND LAKE

It is the intention of this Master Plan to promote the continuation and extension of the existing pattern of single family homes on individual lots that is predominant in the Township. The case of Woodland Lake is a unique exception. It is an established residential neighborhood that was developed in the 1940's to 50's as a summer lake community. It was incorporated in 1969 and consists of detached single family dwellings and common facilities on one lot cooperatively owned by shareholders. Since that time, the dwellings have been converted to year-round use. Normal zoning standards designed for single family detached homes on individual lots create special difficulties for residents of Woodland Lakes who plan improvements to their dwellings. To minimize these difficulties, the area should have its own zone district that reflects its cooperative ownership arrangement. This zoning should reflect and promote the continuation of Woodland Lake's existing density and development pattern. This special zoning, however, should not be extended to other areas of the Township because it is inconsistent with the established pattern of individual homes on individual lots predominant elsewhere in the Township.

RECOMMENDATIONS FOR LIMITING HOUSE SIZE IN RELATION TO LOT SIZE

The traditional character of the various neighborhoods in the Township should be protected and promoted by means of *floor area ratio* (FAR) limitations for new construction. The FAR standards should be developed based upon the existing characteristics of each zone district. FAR standards should be set at a level that prohibits very large homes on relatively small lots while leaving most existing homes conforming. The appropriate standard should be set at a point above which most existing homes are found to be conforming, to permit additions to existing homes, without the need for a variance, in most cases. Research into the existing characteristics of house to lot size in the various zone districts provides the factual basis for choosing an appropriate standard for each zone.

RECOMMENDATIONS FOR FLEXIBLE ZONE STANDARDS

Rigid Zoning Undermines Traditional Historic/Rural Character.

The single most often expressed planning goal of Township residents is to retain the Township's traditional historic/rural character. It is also the major theme of this Master Plan. Zoning is necessary to preserve the low-density pattern of development central to this goal. However, zoning over the long term creates uniformity to the pattern of development that is antithetical to that goal. Even typical large lot zoning, by virtue of its uniformity and rigidity, eventually promotes suburban character, albeit at low density.

In rural landscapes, low-density development (usually homes and farms) is typically widely spaced or clustered in small village groupings. Large open and/or wooded areas are common. The pattern of lot sizes in rural landscapes is also an important design element. They typically vary greatly, with relatively small lots often next to very large lots. The siting of buildings is determined by the geographical and natural characteristics and limitations of the site instead of the imposition of uniform and rigid zoning standards that ignore these characteristics. Variability of building setbacks and building orientation is also typical in a rural landscape.

Conservation design in Subdivisions.

Over the years, many alternatives to standard zoning have been developed with mixed results. In the Mendham Township context, zoning should be designed and/or administered to promote the following planning goals:

- To promote the preservation of large areas of open space, especially the highly visible areas along public roadways.
- To promote the preservation of areas of significant community concern such as scenic vistas and historic areas.
- To improve the design of new development to be more consistent with rural character and to permit the placement of new roads and buildings reflecting the characteristics of the site instead of according to rigid standards.

Historic Preservation.

Rigid zoning often undermines historic preservation by creating disincentives for the improvement of structures and incentives for their demolition. A large percentage of historic structures do not conform to zoning standards, making it more difficult for owners to improve them. This can ultimately result

in their loss. High property values have also made it economically more attractive for developers to remove old structures in order to maximize the number of lots possible in new subdivisions. Reduced lot and/or setback standards should be permitted where necessary and reasonable to permit the preservation of historic structures and rural character.

RECOMMENDATIONS REGARDING ROADSCAPE PRESERVATION

The relatively narrow area along public roads to a large degree defines a community's character. The Roadscape Committee has studied the Township's roadscape characteristics and prepared a report.³⁶ The recommendations in this report and of the Roadscape Committee should be considered in the review of applications for development. Priority should be given to preserving existing vegetation along existing roads in historic areas and other areas that contribute to the township's historic/rural character. Regulations and/or easements that restrict clearing in these areas should be considered.

RECOMMENDATIONS TO DISCOURAGE THE UNWARRANTED EXTENSION OF PUBLIC ROADS

In 1997 the state adopted uniform standards (Residential Site Improvement Standards - RSIS) applicable to all communities for the construction of public roads in connection with residential development. In most communities the cost of road construction has been reduced as a result. About the same time the Township experienced a dramatic increase in property values. The two events together have fundamentally altered the economics of subdivision development and the creation of new public roads. It is now economically viable for developers to create new public roads for even single lot developments. This will have adverse consequences on future public expenditures for maintenance of public roads to single homes. It also undermines Township land use policies by promoting subdivision road development in inappropriate backland locations.

Township policies concerning backlands development, bulk requirements, minimum lot size requirements and subdivision requirements should be reconsidered to discourage the unnecessary and costly extension of public roads and infrastructure. In addition, the Township should investigate applying for special area designation under the Residential Site Improvement Standards to permit reduced road width and other standards consistent with the character of the narrow, winding and historic road system existing in the Township.

RECOMMENDATIONS CONCERNING PRESERVING BRIDLE AND WALKING TRAILS

Equestrian trails have long existed in Mendham Township, some connecting with trail systems outside the Township. They contribute to the character and life of the community. New development is threatening the viability of this system by creating gaps in trails. Wherever reasonable and possible, new development should be designed to accommodate the continuation of existing trails.

³⁶ Mendham Township Roadscape Report, Mendham Township Roadscape Committee, 1995.

LANDS RECOMMENDED TO BE RESERVED FOR CONSERVATION PURPOSES

In order to fulfill the goals of this plan element, and of the Master Plan as a whole, the acquisition of property must be a major part of the Township's overall planning strategy. Depending upon the specific circumstances of the specific property, acquisition may be by fee simple acquisition, easements, or development restrictions. The Appendix at the end of this Master Plan contains a list of properties that are recommended to be reserved for conservation purposes. They should be reserved in accordance with C.40:55D-44.

LandUsePlan

RECOMMENDATIONS TO DISCOURAGE THE UNWARRANTED EXTENSION OF PUBLIC ROADS

In 1997 the State adopted uniform standards (Professional and Improvement Standards - P&IS) applicable to all communities for the construction of public roads in connection with residential development. In most communities the cost of road construction has been reduced as a result. Although the same time the Township experienced a dramatic increase in property values. The two events together have fundamentally altered the cost-benefit analysis of subdivision development and the creation of new public roads. It is now economically viable for developers to create new public roads for certain types of development. This will have adverse consequences for future public expenditures for maintenance of public roads to single houses. It also undermines Township land use policies by promoting and vision road development in inappropriate backland locations.

Township policies concerning backland development seek a minimum lot size, setbacks and subdivision requirements should be recommended to discourage the unnecessary and costly extension of public roads into backlands. In addition, the Township should continue applying its special area designation rules, the Professional and Improvement Standards in certain reduced road width and other standards consistent with the character of the natural, rural and historic road system existing in the Township.

RECOMMENDATIONS CONCERNING PRESERVING BIKES AND WALKING TRAILS

Bike and walking trails have long existed in Mendham Township, being connecting with trail systems outside the Township. They contribute to the economy and life of the community. New development is increasing the ability of the agency to pay for trails. When ever possible and feasible, new development should be designed to incorporate the construction of walking trails.

KIMBALL & KIMBALL

Professional Planners

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AMENDMENT to the
LAND USE PLAN ELEMENT of the
MENDHAM TOWNSHIP MASTER PLAN
2-6-08
Amendment adopted 2/20/08

RECOMMENDATIONS FOR
BLOCK 100, LOT 17
SISTERS OF ST JOHN THE BAPTIST

This 131.60-acre tract was originally developed as the Mosle family estate but has contained the Sisters of St. John the Baptist convent for many decades, and it also contains a school. The current improvements total approximately 125,000 square feet of building floor space in multiple buildings. At the time of this amendment, the Sisters are in the process of closing the convent and the associated convent school. These uses have proven to be compatible with the otherwise predominantly low density residential character of the surrounding area. It is in the best interest of the Township and surrounding neighborhoods that any reuse of these substantial buildings and associated improvements remain compatible with the Township's planning goals for the R-10 Zone. However, it is also true that the substantial improvements should find some reasonable reuse.

The continuation of the current religious use of the property may not be feasible, at least in its current configuration, and some variety of non-religious uses may be necessary to avoid abandonment and blight. The current R-10 zoning continues to be consistent with the Township's overall planning goals and to the general character of the area. However, zoning should also permit the reasonable reuse of the existing buildings provided the uses are not incompatible with the low density residential character of the area. The permitted intensity of reuse should balance a viable reuse of the buildings with the Township's planning goals for the area and the limits of on-site potable water and wastewater infrastructure. Any future redevelopment should be limited to essentially the existing floor area. The zoning should also require that any affordable housing *growth share* that may result from the reuse, in accordance with COAH rules, be accommodated on site.

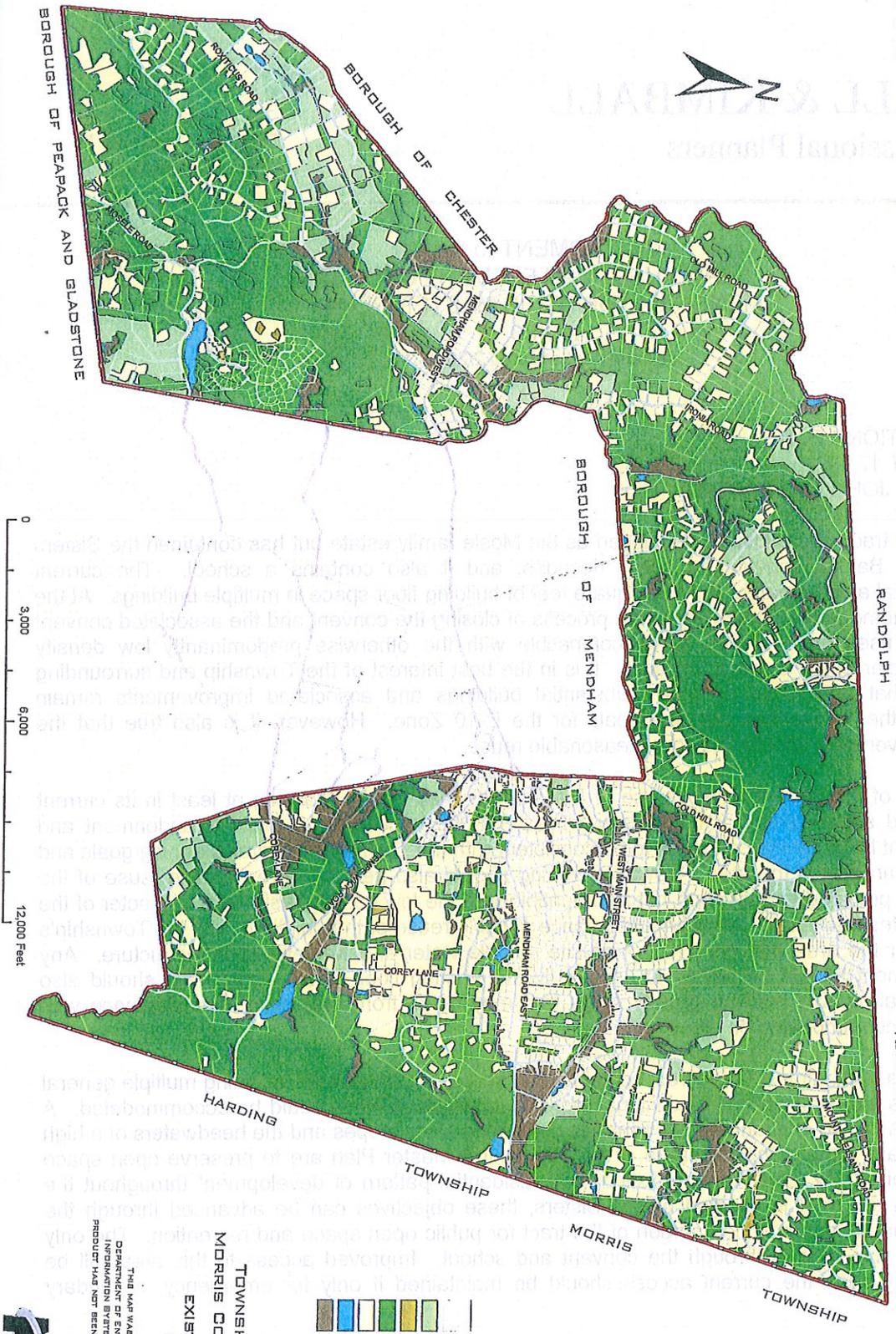
The balance of the tract, almost 100-acres, contains recreational improvements including multiple general purpose ball fields and walking trail. Additional recreational improvements could be accommodated. A portion of this area is also environmentally sensitive containing steep slopes and the headwaters of a high water quality stream. Important objectives of the Township's Master Plan are to preserve open space and environmental quality, and the established rural residential pattern of development throughout the Township. When the tract is vacated by the Sisters, these objectives can be advanced through the purchase of the largely undeveloped portion of the tract for public open space and recreation. The only current access to this area is through the convent and school. Improved access to this area will be needed but in any case the current access should be maintained if only for emergency, secondary access.

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EXISTING LAND USE
 APRIL 2005



- Legend**
- MUNICIPAL BOUNDARY
 - PARCEL LOTS
 - AGRICULTURE
 - BARREN LAND
 - FOREST
 - URBAN
 - WATER
 - WETLANDS

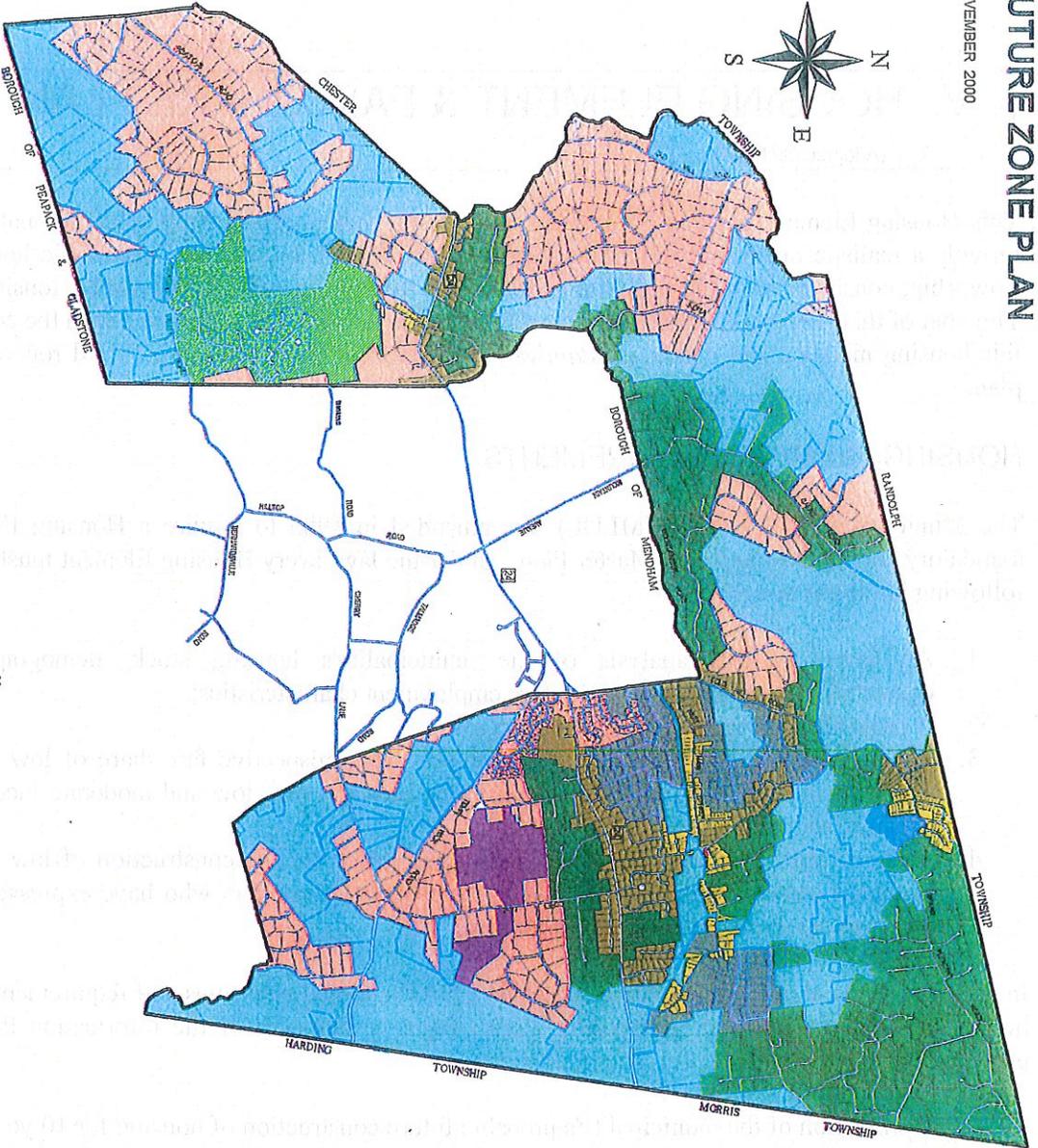
TOWNSHIP OF MENDHAM
 MORRIS COUNTY, NEW JERSEY
 EXISTING LAND USE
 APRIL 2005

THIS MAP WAS DEVELOPED UNDER NEW JERSEY
 DEPARTMENT OF TRANSPORTATION AND
 INFRASTRUCTURE DIVISION DIGITAL DATA
 PRODUCT HAS NOT BEEN VERIFIED AND IS NOT WARRANTED.



FUTURE ZONE PLAN

NOVEMBER 2000



Legend

- Parcel Lots
- Township Boundary
- B Business Zone
- CR-1 Single-Family Residential Zone
- CR-2 Single-Family Residential Zone
- G Golf Club Zone
- R Single-Family Residential Zone
- R-1 Single-Family Residential Zone
- R-10 Single-Family Residential Zone
- R-2 Single-Family Residential Zone
- R-3 Single-Family Residential Zone
- R-5 Single-Family Residential Zone
- R-C Single-Family Residential Zone

Reference Maps:
 Mendham Township, Morris County
 New Jersey Tax Map Database
 Dated 1999
 Plan Title: "Preliminary Study of Possible New
 Zone Districts" Memo
 Prepared By: Maser Consulting, P.C.
 Dated: August 2000.

Township of Mendham
 Morris County, New Jersey
Future Zone Plan
 November 2000



V. HOUSING ELEMENT & FAIR SHARE PLAN

(Adopted 06/15/05)

This Housing Element and Fair Share Plan addresses Mendham Township's constitutional mandate to provide a realistic opportunity for the construction and/or rehabilitation of affordable housing in the Township, consistent with the regulations of the New Jersey Council on Affordable Housing (COAH). The goal of this Housing Element and Fair Share Plan is to continue compliance with the constitutional fair housing mandate and obtain *substantive certification* of the Township's "third round" fair share plan.

HOUSING ELEMENT REQUIREMENTS

The Municipal Land Use Law (MLUL) was amended in 1985 to require a Housing Element as a mandatory part of the municipal Master Plan. Under the law, every Housing Element must contain the following information.

1. An inventory and analysis of the municipality's housing stock, demographic characteristics, and existing and future employment characteristics;
2. A projection of future housing construction;
3. A determination of the municipality's present and prospective fair share of low and moderate income housing and its capacity to accommodate low and moderate income housing; and
4. A consideration of the land that is most appropriate for the construction of low and moderate income housing including land owned by developers who have expressed a commitment to provide affordable housing.

In addition to the above, on December 20, 2004 COAH adopted new rules and requirements that must be met in preparing a housing element. Following is a summary of the information that must be provided.

1. A projection of the municipality's probable future construction of housing for 10 years covering the period January 1, 2004 through January 1, 2014 based on certificates of occupancy, construction permits, approved development, and historic trends over the last ten years.
2. An analysis of the existing jobs and employment characteristics of the municipality and a projection of the probable future jobs and employment characteristics for 10 years covering the period January 1, 2004 through January 1, 2014 based upon certificates of occupancy, construction permits, approved development and historic trends over the last ten years.
3. An analysis of how existing zoning or planned changes in zoning provide adequate capacity to accommodate residential and non-residential growth projections.
4. Plan projections for 2015 consistent with the State Planning Commission.
5. The number of new affordable units the municipality was obligated to provide during the period 1987 to 1999 and the number of affordable units actually provided.
6. The number of deficient units occupied by low or moderate income households that the municipality is obligated to rehabilitate.
7. The projected growth share affordable housing need.
8. A description of any sites slated for the construction of affordable housing in the future.

BACKGROUND

Enacted in 1985, the New Jersey Fair Housing Act created the Council on Affordable Housing (COAH), to provide an administrative alternative to the courts in reviewing and mediating fair housing litigation. COAH adopts rules governing the periodic calculation of fair share obligations (often referred to as a fair share “round” or “cycle”) and the methods by which the obligation may be addressed by communities. Participating in COAH’s administrative process and receiving *substantive certification* of a municipal fair share plan provides a municipality with legal protection from *Mount Laurel* litigation during the period of certification, now ten years.

COAH determined the fair share obligations for each New Jersey municipality covering the first and second rounds based on anticipated growth trends and data from the most recent available census. The first round, based on the 1980 census, was adopted in 1986 and covered the period from 1987-1993. The second round covered the cumulative 12-year period from 1987-1999 (utilizing the 1990 census) and in some cases, included an adjustment (lowering) of the first round obligation due to actual growth versus previously projected trends.

Growth Share Methodology

After data from the 2000 Census was made available, COAH re-evaluated the second round fair share numbers and adjusted (lowered) the second round obligations of some communities, including Mendham Township, as part of its adoption of new rules adopted on December 20, 2004. Under the new rules, COAH will not issue third round obligations based on its own calculations. Rather, each community will estimate its third round obligation based on past trends and formulae applied to anticipated residential and nonresidential development (known as “growth share”).

A fair share obligation based on growth share means that the obligation accrues at the rate of one affordable unit for every eight new dwellings and one affordable unit for every 25 new jobs, as measured by new or expanded nonresidential development. The third round addresses growth for the period 1999 through 2014 and “delivered” from January 1, 2004 to January 1, 2014. Substantive certification will be valid for a period of ten years from the date a municipality submits its adopted housing plan to COAH.

Mendham Township’s Previous Affordable Housing Plans

The table below displays how the township has addressed its previous fair share obligations. In 1983, prior to passage of the Fair Housing Act, the Township of Mendham became involved in *Mount Laurel* litigation. Resolution of the litigation by the Superior Court resulted in a Settlement Agreement and Judgment of Compliance on July 15, 1985 with “repose” for a six year period ending in 1991. The Judgment was based upon the rezoning of three sites to produce 38 affordable housing units as part of market-rate housing developments (known as “inclusionary housing”). In 1988 the Planning Board adopted a housing plan to comply with the MLUL and incorporate the provisions of the Settlement approved by the Court.

In 1994 the Planning Board adopted a new housing plan intended to address COAH’s second round fair share requirements. With reductions for the 38 units of housing addressed in the first round plan, four units remained to be addressed in the second round. Prior to submitting the plan to COAH, however, a

Mount Laurel lawsuit was filed against the Township.¹ The Superior Court transferred the case to COAH in June 1997, whereupon the Planning Board adopted a new housing plan to address contested issues and comply with the cumulative first and second round fair share obligation. Upon reaching a settlement, the township's housing plan was certified by COAH on August 4, 1999. The plan called for the transfer of three units in a Regional Contribution Agreement (RCA) with the City of Orange and one unit of rehabilitation. An updated plan was adopted as part of the new Mendham Township Master Plan in 2000 reflecting compliance with the cumulative second round obligation and the settlement of litigation. Substantive certification of the second round plan expires on August 4, 2005.

First and Second Round Housing Plans

Fair Housing Cycles	Obligation	Housing Plan
First Round: 1987-1993	38	Drakewick: 14 affordable units. Mountain View: 12 affordable units. Brookrace: 12 affordable units.
Second Round (cumulative): 1987-1999	42	Reduction for 38 units in round 1. RCA: 3 units. Rehabilitation: 1 unit.

EXECUTIVE SUMMARY OF THIRD ROUND FAIR SHARE OBLIGATION

The third round fair share obligation is comprised of three components:

1. Rehabilitation share: the number of substandard units occupied by low and moderate income households;
2. Remaining prior round (1987-1999) obligation as adjusted; and
3. The need for affordable housing generated by actual growth from January 1, 2004 to January 1, 2014 based on the number of new housing units and jobs created as measured by new or expanded nonresidential development.

The table below displays the components of the Township's third round obligation and the credits for which it is eligible. The cumulative first and second round obligation was adjusted by COAH with the adoption of the third round rules in 2004, reducing the 1987-1999 obligation from 42 to 20. This results in a surplus of 21 credits since a total of 41 new units were addressed in the previous plans: 38 units built in the Township plus three units transferred in a RCA.²

Third Round Fair Share Obligation

Rehabilitation	0
Remaining Prior Round (1987-1999) Obligation as Adjusted by COAH (previously 42 units)	20
Estimated Growth Share	12
Total Estimated Third Round Obligation	32
Credits for Units Completed under Previous Plans	-41
Balance of Third Round Obligation (Surplus Credits)	9

¹ Stephen S. Ko and Christina Y. Ko vs. the Township of Mendham, Docket No. MRS-L-257-97 (PW).

² Rehabilitation is not credited as a surplus.

DEMOGRAPHIC AND HOUSING DATA

As indicated above, the Municipal Land Use Law requires an analysis of demographic data and housing characteristics as part of any Housing Element. The 2000 US Census is the most recent available comprehensive database for this information for Mendham Township.

Demographic Characteristics

Population

The Census shows that in 2000 Mendham Township had a total population of 5,400, an increase of 19% from 4,537 in 1990. The population density in 2000 was 302 persons per square mile, as compared to 254 in 1990. In contrast, Morris County as a whole has 988 persons per square mile and the state has 1,074 persons per square mile. Comparing previous growth cycles, however, reveals that the Township experienced a period of greater growth in the decades from the 1950's through 1980's with the population doubling between 1960 and 1980. Population growth from 1930 to 2000 is detailed below.

Population Growth: 1930-2000

(Source: Morris Co. Data Book, Morris Co. Planning Board, 1996; 2000 Census)

	1930	1940	1950	1960
Mendham Twp.	1,003	1,079	1,380	2,256
Morris County	110,445	125,732	164,371	259,620
	1970	1980	1990	2000
Mendham Twp.	3,697	4,488	4,537	5,400
Morris County	383,454	407,630	421,361	470,212

Household Size

In 2000, Mendham reversed a long term trend toward smaller households, contrary to its continuation in the County, State and nation as a whole. The average number of persons per occupied housing unit in the Township was 3.01 in 2000, up from 2.83 in 1990. This is significant, not only because of the reversal, but also because of the size of increase (+6%). In part it explains the increase in the overall population. Average household size, however, is still much lower than it was even in 1970 (3.50). The table below shows the substantial increase in larger households in Mendham Township in the last decade. Despite this increase in household size from 1990 to 2000, the long-term decline that has occurred over many decades can be expected to continue in the future.

Persons in Household: 1990 -2000

(Source: 1990 and 2000 Census)

Household Size	1990	2000
1 person	189	198
2 persons	599	618
3 persons	275	320
4 persons	304	372
5 persons	159	199
6 persons	39	63
7 or more persons	9	18
Total households reporting	1,574	1,788

Average Persons Per Household

(Source: Morris Co. Data Book, Morris Co. Planning Board, 1996; 2000 Census)

	1970	1980	1990	2000
Mendham Township	3.50	3.17	2.83	3.01
Morris County	3.40	3.02	2.78	2.72

Population Age, Characteristics and Trends

The rise in the number of children has been the most important change in Mendham Township's age characteristics, reflecting the increase in household size. In particular, the largest increase has been in the number of children aged 0 to 14 years, which has risen from 834 in 1990 to 1,460 in 2000, a 75% increase. During the previous decade, the teenage population had declined substantially, from 23% of the population down to 14%, which reflected the actual decrease in the population of persons 15 to 34 years, a decrease of 22%.

As a percentage of the population, persons 55+ years of age, so-called senior citizens, represented about 25% (1,138 persons) of the total population in 2000, only slightly higher than 24% (1,080 persons) in 1990. This slow increase is inconsistent with the county, state and country as a whole, which are seeing larger increases in this age group. When combined with the larger increase in the number of children, it resulted in a reduction in the median age in the Township from 42.1 in 1990 to 40.3 in 2000. However, this is still higher than for Morris County as a whole (37.8) because the township started at a higher base. Of the Township's total population of 5,400 in 1990, 2,744 (50.8%) were females and 2,656 (49.2%) males. The median age among females in 2000 was 40.2, while among males it was 40.5. The following table displays the population by age from the 1990 and 2000 Census.

Population by Age

(Source: 1990 and 2000 Census)

Age	1990	2000
Under 5	249	423
5-14	585	1,037
15-24	577	459
25-34	400	303
35-44	687	980
45-54	959	1,060
55-64	604	556
65 and older	476	582

Income Data

The median household income in Mendham Township has traditionally been higher than for Morris County as a whole. In 1999, the median was \$136,174 as compared to the Morris County median of \$77,340. In 1999 per capita income in Mendham Township was \$61,460, an increase of over 30% since 1989. Per capita income for Morris County as a whole was \$36,964 in 2000. Only 1.8% of the local population in the Township fell below the poverty level in 1999, a decrease from 2.4% in 1989.

Employment Characteristics

Existing Jobs in Mendham Township

According to the NJ Department of Labor, there were 583 private sector jobs available in Mendham Township as of December 31, 2003 (the latest date for which this data is available). This is based upon employer reporting for workers covered under the NJ Unemployment Insurance System, but it is

possible that employers are attributing their business location to Mendham Township, when in fact the business may be located in another municipality nearby. Existing nonresidential development in the Township is very limited and includes just two schools, municipal offices and a small library, the Brookside village post office and general store.

Employment Characteristics of Residents

According to the 2000 Census there were 2,329 employed persons in Mendham Township 16 years of age and older; 1,370 were male and 959 were female. Management was the occupation most represented, followed by sales and related occupations, office and administrative support. The industry groups highly represented are finance/insurance, professional/scientific/technical services and then health care/social services.

According to the U.S. Census in 2000, out of 2266 workers, 130 residents worked at home, 5 residents walked to work, 86 took public transportation, 148 carpooled, and 1897 drove alone. The mean travel time to work was 35.8 minutes. The largest proportion of residents worked in the management, sales, office/administrative support, health care services, legal and financial services, and educational related fields. Following is a more detailed breakdown of occupations.

Occupations of Persons 16 Years and Older: 2000
(Source: 2000 Census)

Management	602
Business operations specialists	90
Financial specialists	108
Computer and mathematical	28
Architecture and engineering	59
Life, physical, and social services	25
Community and social services	55
Legal occupations	109
Education, training, and library	120
Arts, design, entertainment, sports and media	60
Healthcare practitioners and technical	149
Healthcare support	13
Firefighting, prevention and law enforcement	6
Other protective services	9
Food preparation and serving	34
Building and grounds cleaning and maintenance	20
Personnel care and service	52
Sales and related	398
Office and administrative support	207
Construction, extraction and maintenance	110
Production, transportation, and material moving	75
TOTAL	2,329

Housing Data

Housing Types

In 2000 there were 1,849 dwelling units in the Township, an increase of 8% from 1,712 in 1990. The vacancy rate was 3.3% in 2000 with 61 units reported vacant, less than half the rate in 1990.

Like most Morris County communities, owner-occupied single family detached dwellings are predominant in the Township. Nearly ninety-seven percent (1792 out of a total reported 1849) dwelling units are single-family detached homes. Out of 1,788 occupied units reporting at the time of the 2000 Census, 1,711 units were owner-occupied while 77 were renter-occupied. The median number of rooms per unit was reported to be more than nine rooms. The majority of homes had four or more bedrooms. The following table displays housing types.

Housing Types
(Source: 2000 Census)

Type of Unit	Total units	Percent
1 unit, detached	1,792	96.9%
1 unit, attached	22	1.2%
2 units	0	0
3 or 4 units	8	0.4%
Mobile home	0	0
Other	27	1.4%
TOTAL	1,849	100%

NOTE: Actual sum does not equal 100% due to rounding.

Housing Values

In 2000, the median housing value for 1528 reported owner-occupied units was \$556,200. The lowest values reported were between \$100,000 and \$149,999 for nine housing units. The majority of homes (1,213) were valued over \$300,000. Median gross monthly rent reported in 2000 for 59 leased housing units was \$1,139. Eighteen units reported rents between \$500 and \$749/month; 19 units reported rents between \$1,000 and \$1,499 and 9 report rents exceeding \$1,500/month. Thirteen units reported no cash rent.

Housing Deficiencies

The 2000 Census data contains information of housing deficiencies that serve as indicators of the need (or lack thereof) for rehabilitation. The data reveals that all housing units in the Township had complete plumbing facilities, complete kitchens, and all had some form of heating supply. There is also little evidence of overcrowding in the Township's housing stock. Only eight units reported 1.01 to 1.50 persons per room, while there were no units reporting a greater number of persons per room.

Age of Housing Stock

The age of the housing stock is sometimes a gauge of the overall condition of housing in a community. However, in a community such as Mendham Township, it is indicative of the historic qualities of the area. The largest numbers of homes in Mendham Township were constructed between 1970 and 1979 but 260 units were built before 1939 as shown in the table below.

Age of Housing
(Source: 2000 Census)

Year structure built:	No. of Units	% of total
1999 to March 2000	46	2.5%
1995 to 1998	112	6.1%
1990 to 1994	227	12.3%
1980 to 1989	218	11.8%
1970 to 1979	429	23.2%
1960 to 1969	311	16.8%
1940 to 1959	270	14.6%
1939 or earlier	236	12.8%

NOTE: Actual sum does not equal 100% due to rounding.

DETERMINATION OF GROWTH SHARE

A community's growth share obligation is based on the number of net new dwellings and new or expanded nonresidential development constructed in the community between January 1, 2004 and January 1, 2014. COAH applies the following formulae in calculating growth share:

Residential: 1 affordable unit for every 8 new dwellings.

Nonresidential: 1 affordable unit for every 25 jobs created.

Residential development is the cumulative number of new dwellings constructed and accrues regardless of the location of the units in the community. Nonresidential growth share is based on the number of new jobs created, but it is measured as a function of the new or expanded amount of square footage for various use groups such as retail uses, offices, restaurants, etc. according to the COAH table of uses. For example, 8,333 square feet of office space or a 25,000 square foot school is equivalent to producing 25 jobs under COAH rules, and therefore results in an obligation of one affordable unit.

The growth share obligation is an estimate based on construction completed since January 1, 2004 and projected construction until January 1, 2014. The obligation accrues on the basis of actual growth. Annually, the Township will submit construction activity reports to COAH which will be reviewed on the 3rd, 5th and 8th anniversary from the date of filing the housing plan. COAH may require adjustments to the plan based on actual development that takes place. The following subsections provide the data necessary to estimate the Township's growth share obligation.

Projection of Future Housing

Construction: 2004 - 2014

To estimate the residentially based portion of the fair share obligation, COAH requires data concerning certificates of occupancy issued since January 1, 2004 and any construction permits issued for dwellings still under construction. In addition, growth share can be estimated by identifying the number of new lots approved for residential development where construction permits have not been issued and by analyzing past building trends.

Certificates of Occupancy and Construction Permits

As indicated in the table below, a net total of seven new dwellings have been completed in Mendham Township since January 1, 2004. This number reflects that seven homes were demolished and 14

certificates of occupancy were issued for new dwellings. The table also indicates that there were 14 construction permits issued for new homes that are still under construction. One permit issued prior to January 1, 2004 is also outstanding, for a total of 15 construction permits for new homes.

New Dwelling Construction Since January 1, 2004

(Source: Township of Mendham Building Department)

	House Demolitions	Certificates of Occupancy (CO)	Construction Permits Issued (No CO)
January 2004	0	1	0
February	0	1	0
March	1	1	0
April	2	1	2
May	1	0	1
June	0	1	0
July	1	2	1
August	0	0	1
September	0	2	1
October	1	1	1
November	1	1	3
December	0	1	3
January 2005	0	1	0
February	0	0	0
March	0	1	0
April	0	0	1
May	0	0	0
TOTAL	7	14	14*

*In addition to the 14 construction permits in the last column, there was one construction permit issued prior to 2004 for a new dwelling that is still under construction. Therefore, a total of 15 homes are under construction as of May 31, 2005.

Approved Residential Development:
Vacant Residential Building Lots

The number of newly approved building lots is an indicator of the amount of development that can be expected to take place in a community in the coming years. There are 44 vacant building lots in approved subdivisions reflecting development potential that, as of May 31, 2005, had not been issued construction permits. The number of lots reflected in the table below is the net number of new lots after deducting any existing dwelling(s) or new units already completed or under construction from the total number of approved lots in the subdivision.

Approved Undeveloped Lots
(Source: Mendham Township Planning Board)

Subdivision	Year Approved	Vacant Lots Remaining (No construction permit issued as of 5/31/05)
Hyde	1997	1
Parker	1997	2
Nelson	1998	1
Bocina/Wetteland	2000	1
Grant Homes	2000	1
Bober/Rainetree	2000	1
Bill-Pat/Stewart	2001	1
Ko/Franklin Estates	2002	17
Tufts	2003	1
Bradbury	2003	1
Banko	2004	1
Lawrence Farmland	2004	14
SAJ	2004	2
TOTAL		44

Estimate of Additional Residential Development Based on Past Trends

COAH rules require that the estimate of growth share take into account past trends of development activity. The rules require an analysis of the past trends in construction activity based on certificates of occupancy and demolitions over a ten year period. The following table displays historic construction activity.

Historic Construction Activity:
Residential Construction 1/1/94 – 12/31/03
(Source: Township of Mendham Building Department)

Year	House Demolitions	Certificates of Occupancy Issued	Net No. of New Dwellings
1994	5	33	28
1995	4	31	27
1996	1	31	30
1997	5	37	32
1998	4	35	31
1999	0	41	41
2000	6	41	35
2001	7	24	17
2002	7	13	6
2003	8	13	5
TOTAL	47	299	252
AVERAGE	5/year	30/year	25/year

In Mendham Township, this indicator is of limited value in predicting future growth because there is a diminishing amount of vacant developable land and an active open space preservation program, which is consistent with statewide planning policies. Of even greater significance, a major rezoning was undertaken in 2001 that substantially reduced future development potential.

The State Planning Commission has designated all of Mendham Township within Planning Area 5, the environmentally sensitive planning area. The Township is also designated in the Planning Area of the Highlands Region. In 2000 the new Master Plan recommended rezoning to implement the long term goals of protecting the Township's historic and very low density development pattern and its very high quality of water resources. Carrying capacity studies indicated that a substantial reduction in permitted development would be required to accomplish these goals. The Township consequently undertook a comprehensive rezoning, including the creation of a new zoning district with a 10-acre minimum lot size.

Since the rezoning took place in 2001, the pace of subdivision applications has dropped substantially, as indicated in the following table. In the four years prior to the rezoning, from 1997 through 2000, there were 22 subdivision applications creating 170 new lots. In the four years subsequent to the rezoning, the number of applications dropped to less than half the previous four years and less than one-third the number of lots. This demonstrates that the rezoning has likely had the effect of reducing the pace of development activity, which, in combination with a diminishing supply of developable land, is indicative of a much slower growth rate than prior to the rezoning.

Historic Residential Subdivision Activity: 1997-2004
(Source: Mendham Township Planning Board)

Year	Number of Applications	Number of Lots Approved	Comments
1997	6	107	Included affordable housing development
1998	8	33	
1999	3	10	
2000	5	20	
TOTAL	22	170	
2001	1	4	
2002	2	20	Included second round settlement site
2003	2	4	
2004	4	24	
TOTAL	9	52	

NOTES:

1. Subdivision applications listed are for developments creating new building lots.
2. 2004 includes Lawrence Farmland, comprised of 183 acres, with 16 lots (14 vacant) representing one of the last large undeveloped parcels in the Township.

Estimate of Projected Residential Development Based on Build-Out

A more accurate estimate of future development potential can be made based on a review of the build-out analysis prepared in conjunction with the rezoning in 2000. During the cross-acceptance process conducted by the Morris County Planning Board in 2004, the Township's cross-acceptance committee reviewed the 2000 build-out analysis and updated it based on remaining privately owned developable land. It was again reviewed in conjunction with this housing plan to take into account COs and construction permits already counted in previous tables to arrive at a realistic estimate of the remaining development potential of the Township. On this basis it is estimated that an additional 82 new building lots could be developed, which would represent full build-out based on zoning by 2025, a twenty year time horizon. The Township estimates that about half of that, or 41 units, might be approved and constructed by 2014.

Projection of Probable Future
Jobs and Employment Generating a
Growth Share Obligation: 2004 - 2014

COAH also attributes a portion of a community's fair share obligation based on the creation of jobs from nonresidential growth. COAH projects job creation by applying a formula to the square footage of various nonresidential uses. The table included at the end of this housing plan displays the use groups identified by COAH as contributing toward a community's growth share, which are required to be used for these projections.

Mendham Township's zoning provides for very little nonresidential development and the only existing business zone, which comprises three lots in Brookside village, is already developed with a small post office and general store. Other nonresidential uses in the Township include two schools, one house of worship, municipal offices and library, and one restaurant located in a residential zone. With the exception of the ongoing construction of additions to the two schools, the township does not anticipate any additional nonresidential development that would contribute to the Township's growth share obligation.³

Certificates of Occupancy and Construction Permits
Issued for Nonresidential Uses Since January 1, 2004

Since January 1, 2004 the only construction activity in Mendham Township involving nonresidential uses that COAH has determined would contribute to the Township's growth share obligation involves the renovation and expansion of two public schools. Work is ongoing in connection with both of these developments, which includes additional square footage for each as shown below. The additions are expected to be completed in 2005.

Mendham Township Elementary School
Expansion square footage: 13,200

Mendham Township Middle School
Expansion square footage: 17,670

Total Square Footage: 30,870 sq. ft.

Based on 30,870 additional square feet of school construction, COAH's jobs to square footage formula (schools = 1 job/1000 sq. ft.) equals 31 jobs. Since the COAH formula for nonresidential growth share is based on one affordable unit for every 25 jobs, the school expansion projects contribute one affordable unit to growth share.

No other site plan applications have been approved by the Township or proposed by a property owner that would result in any additional nonresidential square footage for any of the uses COAH has determined would contribute to the Township's growth share obligation. Moreover, over the past ten years, a search of building permit records indicates that there were no construction permits issued for nonresidential uses, with the exception of the two schools as indicated above.

³ Houses of worship are exempt from COAH's growth share formula.

Calculation of Growth Share

Based on all of the above data, the following table summarizes the Township's actual and projected growth and the estimated time frame for delivery over the ten year period January 1, 2004 to January 1, 2014. The residential affordable housing calculations in the table below are based on the COAH rule that for every eight new residential units constructed (after subtracting demolitions) an obligation of one affordable unit is created. COAH calculates this by dividing the number of projected units by nine (9) to represent the requirement that out of every nine units constructed, one unit would represent the affordable housing obligation. The nonresidential obligation is based on COAH's job creation formula as attributed to the net new square footage of buildings for nonresidential land uses.

Projected Growth Share Obligation

(Based on Certificates of Occupancy, Construction Permits, Approved and Projected Development)

Estimated Time Frame for Delivery	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	TOTAL
RESIDENTIAL GROWTH											
Net new unit COs: 1/1/04 – 5/31/05: 7	5	2									7
Construction permits: 15		15									15
Approved vacant lots in subdivisions: 44 lots		1	13	14	6	5	5				44
Add'l projected res. development: 41 lots			5	5	5	5	5	5	5	6	41
Total Projected New Residential Units	5	18	18	19	11	10	10	5	5	6	107
Growth Share (divide by 9)	0.5	2	2	2	1	1	1	0.5	0.5	0.5	11
NONRESIDENTIAL GROWTH											
COs issued: 1/1/04 – 5/31/05		0									0
Construction permits (2 school additions)		30,870									30,870
Approved nonresidential development											0
Total Nonresidential Sq. Ft.		30,870									30,870
Apply Jobs Formula: 1 job per 1000 sq. ft.		31									31
Growth Share (1 unit/25 jobs)		1									1
TOTAL GROWTH SHARE OBLIGATION	0.5	3	2	2	1	1	1	0.5	0.5	0.5	12

NOTES:

1. Projected residential development is based on vacant lots in approved subdivisions (44 lots) with units prorated to 2010 and a build-out analysis (41 lots) with units prorated to 2013. Since all projected development is based on the number of vacant approved and potential new building lots, demolitions have not been estimated or subtracted from these projections. Any new home built on an existing lot involving the demolition of an existing home would not contribute to projected growth share.
2. Calculations of estimated affordable housing based on growth share are rounded to the nearest whole number. Where the growth share calculation is less than 1 unit, but greater than 0.5, the obligation is rounded to 0.5 or 1, whichever is closest.
3. The build-out of approved lots includes 1 unit @ Ko Subdivision in 2005 with the remainder in 2006 and 2007. Build-out of the balance of approved lots is spread over the five year period from 2006-2010, based on historic subdivision build-out trends.

THIRD ROUND FAIR SHARE PLAN

A Fair Share Plan is included in the Housing Element as a recommendation by the Planning Board to the Township Committee as to how the Township should fulfill any projected fair share obligation. The Township Committee endorses the plan and petitions COAH for *Substantive Certification*. As indicated previously, the third round fair share obligation is comprised of the need for rehabilitation, any remaining units from the prior (1987-1999) obligation, and the need for affordable housing based on growth that occurs between January 1, 2004 and January 1, 2014 (growth share).

According to COAH's published rules, based on the 2000 Census, Mendham Township does not have an obligation to conduct a rehabilitation program for low and moderate income households living in deficient housing. As described below, after applying credits to the adjusted cumulative second round obligation, the township has sufficient credits to offset the projected growth share obligation. Therefore, this fair share plan does not project the need to rezone land to produce affordable housing.

Prior Round Obligation: 1987-1999 (Adjusted to 20 units)

When published by COAH in 1993, Mendham Township's cumulative second fair share obligation was 42 units: 41 new units and one unit in need of rehabilitation. In publishing its third round rules, COAH has re-evaluated Mendham Township's cumulative second round obligation and lowered it to 20 new units.

Units Addressing the Prior Round Obligation (41 units completed)

COAH rules provide that a municipality may receive reductions and credits for housing activities conducted in the past that produced affordable housing. The Township provided zoning for the production of 38 affordable units as listed in the table below, all of which have received COAH credit in the prior plan and all of which have been constructed and occupied.

Affordable Housing Provided to
Address 1987-1999 Cumulative Fair Share Obligation

	Units
New units completed and occupied in Mendham Township	
<u>Tract 1</u> - "Drakewick" development.	14
<u>Tract 2</u> - "Mountain View" development.	12
<u>Tract 3</u> - "Brookrace" development.	<u>12</u>
Subtotal	38
Regional Contribution Agreement (funded pursuant to a Settlement Agreement with Dr. Ko) with the City of Orange	3
Total Units Addressing Prior Round Obligation	41

Estimated Growth Share Obligation (Actual and Projected: 12 units)

The estimated growth share obligation is 12 units. This is based on the number of certificates of occupancy for development already completed, construction permits issued for development that is

underway, the number of vacant lots already approved by the Planning Board, and an estimate of potential additional residential development in future subdivisions. The estimate also takes into account the school construction anticipated to be completed in 2005.

Second Round Settlement Agreement

In April 1999, the Township Committee reached a settlement of *Mount Laurel* litigation with Dr. and Mrs. Ko. The Township agreed to rezone the R-3 portion of the property to R-1, consistent with the adjoining R-1 zoning along the Route 24 portion of the site. The rezoning and settlement conditions permitted the development of 17 additional single family detached dwellings with the Kos agreeing to pay \$60,000 (equivalent to a 20% affordable housing setaside of three units) to fund the costs associated with the Township's RCA. The settlement was approved by COAH in connection with Substantive Certification in 1999.

Final Subdivision approval of the Ko's proposed 18-lot single-family residential development (17 new lots plus one lot for an existing dwelling on the property) was granted by the Mendham Township Planning Board in 2002; construction will commence in 2005. Under COAH rules, the development contributes to the Township's growth share obligation despite the fact that the property owner paid for a transfer of units in a second round RCA in an amount equivalent to a setaside of 20% (17 new lots x 20% = 3 units). These units have been included in the estimated number of new dwellings contributing to the third round growth share projection.

Third Round Fair Share Obligation: 2004 - 2014

Based on reductions and credits for past housing activity, Mendham Township does not project a need to rezone sites to generate affordable housing. The third round fair share obligation is fully offset by credits and reductions as shown in the table below. Based on projected development, it is estimated that Mendham Township will have an additional nine surplus credits after 2014.

Third Round Fair Share Obligation: 2004-2014

	Units
Rehabilitation	0
Remaining Prior Round (1987-1999) Obligation as Adjusted by COAH	20
Estimated Growth Share Obligation	12
Total Third Round Obligation	32
Credits for Units Completed under Previous Plans	- 41
BALANCE OF THIRD ROUND OBLIGATION (SURPLUS CREDITS)	- 9

Consistency of Zoning with Growth Projections

The State Planning Commission has designated all of Mendham Township within Planning Area 5 and no major expansion of water or sewer infrastructure is planned in accordance with the state planning policies for PA-5 designated areas. In 2000, the new Master Plan recommended that development

density in the Township be reduced to be consistent with the limited existing infrastructure and capability of the underlying geology and soils to support on-site water and waste disposal systems since almost the entire township is served by private systems. A significant portion of the Township was rezoned to a new R-10 (10-acre minimum lot size) zone and other areas of the township were reduced in density (see the Land Use Plan – Chapter IV of the Mendham Township Master Plan for a more detailed explanation of the rezoning recommendations).

The growth share projections contained in this plan are based on actual development that has been completed or approved plus that which can be anticipated based on a build-out analysis of current zoning. Additionally, Mendham Township’s Land Use Plan and Zoning Ordinance do not provide for any additional nonresidential development that COAH has determined would contribute to growth share. It should be noted that school development does contribute to growth share, and that has been taken into account in these projections. Any future development of houses of worship is excluded from growth share projections. Therefore, the above growth projections take into account and are consistent with the planned development potential of the township.

Plan Projections for 2015

COAH rules require that a community’s projected growth be consistent with population projections contained in the State Development and Redevelopment Plan (SDRP) for the year 2015. Until SDRP projections are available (anticipated by late 2005) the rules require the use of projections made by the applicable metropolitan planning organization, or alternatively, by the municipality if justified.

The North Jersey Transportation Planning Authority (NJTPA) is the metropolitan planning organization covering Mendham Township. It has developed a demographic forecasting model that it is using for transportation planning for northern New Jersey. The NJTPA forecasts population, employment⁴ (jobs in Mendham Township) and household growth in five-year increments to 2030. The NJTPA data from 2000 and forecasts for 2005, 2010 and 2015 are displayed below.

NJTPA Forecasted Growth in
Population, Employment and Households
(Source: North Jersey Transportation Authority, Inc.; 5/3/05)

	2000	2005	2010	2015
Population	5,400	5,620	5,780	5,850
Employment	880	880	890	1,000
Households	1,790	1,840	1,950	2,050

The NJTPA forecast is not, however, an analysis of growth potential based on zoning regulations. It projects an increase in employment despite the fact that there is no area zoned for nonresidential development in the township and no planned community facilities that would contribute to nonresidential-based growth share. Moreover, the forecast does not clearly correlate household growth with population growth. For example, the forecasted population of 5,850 in 2015 divided by 3.01 persons per household would equal 1,943 households, over 100 less than the NJTPA forecast of 2,050 households in 2015. In addition, the population is forecasted to increase by 70 persons from 2010 to 2015, but during the same period the number of households is forecasted to increase by 100. If we assume a relatively stable household size, these forecasts would not seem to be consistent.

⁴ NJTPA defines employment as including both covered employment (jobs included in the NJ Unemployment Insurance System) and non-covered employment such as self-employed workers, unpaid family workers, members of the Armed Forces, some government workers and some employees of nonprofit entities.

Growth in population, employment and households may be more accurately projected by adding to the 2000 base data, the growth that actually occurred in Mendham Township through 2005 and projecting future growth based on approved development and development likely to occur based on the township's amended zoning, as described previously and displayed in the comprehensive table displaying the Projected Growth Share Obligation. The following table displays this projection, with the population increase based on the average household size of 3.01 persons per household (2000 Census).

Mendham Township Growth Projections

(Based on Certificates of Occupancy, Construction Permits, and Projected Development)

	2000	2005	2010	2015
Population	5,400	5,659	5,864	5,912
Employment	880	911	911	911
Households	1,790	1,875	1,944	1,960

NOTES:

1. The NJTPA base data for 2000 was used for these projections.
2. Growth in population and households for 2005, 2010, and 2015 is based on an additional 86 COs, permits, and approved building lots to be developed by the end of 2005, 68 lots projected by December 31, 2010 and 16 lots by December 31, 2013. The base data for the projections is consistent with the data contained in the tables in this plan for construction activity that took place from 2000 – 2005 and that which is projected through 2013.
3. Population for 2005, 2010 and 2015 was based on the 2000 Census report of an average of 3.01 persons per unit applied to the number of units actually built by 2005 and projected to be built by December 31, 2010 and by December 31, 2013.
4. Employment projections include the COAH determined job increase resulting from the construction of school additions in the second half of 2005. No additional growth in employment is predicted based on COAH's rules.

Consideration of Lands for the Construction of Affordable Housing

The Municipal Land Use Law requires that the Township take under consideration the commitments of any developers who have expressed an interest in constructing affordable housing in the Township. Three inclusionary housing sites have already been zoned and constructed to produce affordable housing to satisfy the township's fair share obligation. No other property owners have expressed an interest in providing affordable housing. There are no additional sites slated for the construction of affordable housing and no land proposed for rezoning for affordable housing because the Township has fully satisfied its third round fair share obligation and has a surplus of credits.

Adopted COAH Rules: 12/20/04

Appendix E

Use Group	Description	Square Feet Generating One Affordable Unit	Jobs Per 1,000 Square Feet
B	Office buildings. Places where business transactions of all kinds occur. Includes banks, corporate offices, government offices, professional offices, car showrooms and outpatient clinics.	8,333	3
M	Mercantile uses. Buildings used to display and sell products. Includes retail stores, strip malls, shops and gas stations.	25,000	1
F	Factories where people make, process, or assemble products. Includes automobile manufacturers, electric power plants, foundries, and incinerators. F use group includes FI and F2.	12,500	2
S	Storage uses. Includes warehouses, parking garages, lumberyards, and aircraft hangers. S group includes S-1 and S-2.	125,000	0.2
H	High Hazard manufacturing, processing, generation and storage uses. H group includes HI, H2, H3, H4 and H5.	25,000	1
A1	Assembly uses including theaters, concert halls and TV studios.	12,500	2
A2	Assembly uses including casinos, night clubs, restaurants and taverns.	8,333	3
A3	Assembly uses including libraries, lecture halls, arcades, galleries, bowling alleys, funeral parlors, gymnasiums and museums but excluding houses of worship	8,333	3
A4	Assembly uses including arenas, skating rinks and pools.	8,333	3
A5	Assembly uses including bleachers, grandstands, amusement park structures and stadiums	Exclude	Exclude
E	Schools K — 12	25,000	1
I	Institutional uses such as hospitals, nursing homes, assisted living facilities and jails. I group includes II, I2, I3 and I4.	12,500	2
RI	Hotels and motels	31,250	0.8
U	Miscellaneous uses. Fences tanks, barns, agricultural buildings, sheds, greenhouses, etc.	Exclude	Exclude
In the case of mixed-use development, the jobs calculation will be assigned in proportion to the square footage of each use in the mixed use development.			

VI. RELATIONSHIP TO OTHER PLANS (Adopted 11/13/00)

The Municipal Land Use Law requires that every master plan contain an element that examines the relationship of the master plan with those of other political jurisdictions that may be affected by or affect the plan. The purpose is to encourage planning consistency among political jurisdictions. This element addresses this by evaluating the relationship of this plan to the plans of the State, County and adjacent municipalities. As documented below, there is a high level of consistency between this master plan and those plans. As also required by law, included are specific policy statements recommending future coordination of Township policies with those of other jurisdictions.

REGIONAL PLANNING OVERVIEW AND BACKGROUND

Following are the major factors affecting the Township's relationship to adjacent communities, the County and State.

- One neighboring community, Mendham Borough, forms a major part of the municipal land boundary with Mendham Township. The Township has been and remains almost exclusively residential while the Borough contains areas of commercial uses serving both communities. All other municipalities contiguous to Mendham Township are residentially zoned along the border with the Township.
- The various portions of the Morris County Master Plan are of widely varying ages of adoption. Notably, the Morris County Land Use Plan dates from 1975 and is of little current relevance. On the other hand, the County Circulation, Water Supply and Open Space plans were more recently adopted and are relevant to Mendham Township and this Master Plan.
- In 1992, the State Development and Redevelopment Plan was adopted in accordance with state law after a number of years of negotiations among various levels of government (state, county and local), interested citizens and groups. The plan designates Mendham Township as in *Planning Area 5 - Environmentally Sensitive* because of environmental concerns especially associated with important water resources.
- The Ten Towns Committee was formed as an advisory group among the municipalities that form the watershed of the Great Swamp to recommend land use policies that would help protect the Great Swamp National Wildlife Refuge. The Township actively participates in this process.

RELATIONSHIP OF THIS PLAN TO CONTIGUOUS COMMUNITIES

Of the seven municipalities that border Mendham Township (Mendham Borough, Randolph Township, Morris Township, Harding Township, Bernardsville Borough, Peapack and Gladstone Borough and Chester Township), Mendham Borough is the most significant to the Township because it forms the largest common municipal border and because it forms the commercial center for both municipalities. The other six municipalities have smaller common borders surrounding the Township.

All seven municipalities are predominantly single family residential and have shared concerns about preserving the environmental quality and historic character of their municipalities.

POLICY STATEMENTS

General Statement.

To the extent possible, there should be consistency regarding land development policies along both sides of municipal boundary lines. Whenever there is a major development application proposed along the municipal boundary line, there should be mutual cooperation between the neighboring communities to mitigate any significant impacts wherever possible. In addition, it is in the best interest of all municipalities in our region to cooperate where possible on the whole range of municipal services.

Land Use Planning.

In making planning and zoning decisions in the areas adjacent to adjoining municipalities, the Township should take into consideration the existing land use patterns, planning and zoning in those municipalities. It is evident that this has been the long-standing policy of all the municipalities that border Mendham Township. There exists a high degree of consistency in the planning and zoning along all the various municipal boundary lines. In order to promote the general public welfare, this policy should continue to be pursued by all communities in our area. Consistency of land use planning between municipalities is of mutual benefit and should be an important factor in making planning decisions. No planning proposals of regional significance or significant impact on other communities are proposed in this plan.

Inter-Municipal Cooperation.

Many issues of concern in this plan can most effectively be addressed in cooperation with other municipalities. In particular, the water quality of groundwater and surface water resources can best be addressed on a regional basis. In addition, the provision of municipal services can often most effectively and economically be provided in cooperation with other municipalities. Examples include:

- Police Dept. and First Aid Squad inter-municipal mutual aid
- Fire Dept. inter-municipal mutual aid
- Potable water supply
- Inter-municipal public welfare
- Tax collection (computer links to Morris County Tax Office)
- Building Dept. (computer links to the State)
- Combined (with Mendham Borough) Court Administration (computer links to the State)
- Library (County Library services)
- Recreation
- Schools (Regional High School)

Mendham Borough

Mendham Borough is a geographically smaller municipality almost surrounded by the Township. The existing land use pattern along the joint border is substantially consistent on both sides of the border. In most cases, the pattern is of established neighborhoods of medium to low density single family residential homes. The future land use planning and zoning in both municipalities is reflective of this, permitting future development that is consistent with the established residential neighborhood development pattern. One small area is zoned for Limited Business at the intersection of Mendham Road and Cold Hill Road reflecting the existing uses of the area. No major planning issues or concerns between the two municipalities are foreseen based on current planning and zoning.

Randolph Township

Randolph Township forms the northern border of Mendham Township. It is a geographically large municipality and is demographically larger than Mendham Township. The joint boundary is substantially developed with medium to low density residential homes on both sides of the border. The planning and zoning in both municipalities is reflective of this established pattern, permitting future development that is consistent with the established pattern. The two townships have cooperated in the formation of historic districts straddling their border. No major planning issues or concerns between the two municipalities are foreseen based on current planning and zoning.

Morris Township

Morris Township forms the northeastern border of Mendham Township. It is a geographically large municipality and is demographically larger than Mendham Township. The joint boundary is substantially developed with low density residential homes on both sides of the border. The planning and zoning in both municipalities is reflective of this established pattern, permitting future development that is consistent with the established pattern. The two townships have cooperated in the formation of a historic district straddling their border. No major planning issues or concerns between the two municipalities are foreseen based on current planning and zoning.

Harding Township

Harding Township forms much of the eastern border of Mendham Township. It is a geographically large municipality and demographically similar to Mendham Township. The joint boundary contains substantial areas of County parkland and the Morristown National Historical Park. The balance of the boundary is substantially developed with low density residential homes on both sides of the border. The planning and zoning in both municipalities is reflective of this established pattern, permitting future development that is consistent with the established pattern. The two townships have cooperated in the formation of a historic district straddling their border and are cooperating in the preservation of the environmental quality of the Great Swamp. No major planning issues or concerns between the two municipalities are foreseen based on current planning and zoning.

Bernardsville Borough

Bernardsville Borough forms much of the southeastern border of Mendham Township. It is geographically smaller but demographically similar to Mendham Township. The joint boundary is substantially developed with low density residential homes on both sides of the border. The planning and zoning in both municipalities is reflective of this established pattern, permitting future development that is consistent with the established pattern. No major planning issues or concerns between the two municipalities are foreseen based on current planning and zoning.

Peapack and Gladstone Borough

Peapack and Gladstone Borough forms much of the southwestern order of Mendham Township. It is geographically smaller but demographically similar to Mendham Township. The joint boundary is substantially developed with low density residential homes on both sides of the border. The planning and zoning in both municipalities is reflective of this established pattern, permitting future development that is consistent with the established pattern. No major planning issues or concerns between the two municipalities are foreseen based on current planning and zoning.

Chester Township

Chester Township forms the western border of Mendham Township. It is geographically larger but demographically similar to Mendham Township. The joint boundary is substantially developed with low density residential homes on both sides of the border. The planning and zoning in both municipalities is reflective of this established pattern, permitting future development that is consistent

with the established pattern. No major planning issues or concerns between the two municipalities are foreseen based on current planning and zoning.

RELATIONSHIP OF THIS PLAN TO MORRIS COUNTY PLANS

Mendham Township is located in Morris County with the county seat located a short distance to the east in Morristown. Morristown is a regional center for Mendham Township's region. The County plays an important role in the Township's municipal affairs because of the county roads that pass through the Township and the numerous County owned and maintained bridges located in the Township.

Policy Statement

Morris County in recent years has attempted to foster a cooperative working relationship with its communities through such efforts as the *cross acceptance process* and *Morris 2000*. This cooperative relationship has helped to promote a high degree of consistency between municipal and county planning and should be continued and expanded where appropriate in the future. Consistency in planning between the Township and the County is of mutual benefit and should be an important factor in making planning decisions.

County Master Plan

The elements of the Morris County Master Plan of most relevance to Mendham Township are the Circulation Element and the Open Space and Recreation Plan Element. Other elements of the County Master Plan are either very dated, and thus of little relevance, or have little applicability to the Township.

Circulation Element. This element was adopted in 1992. It contains general policies for maintaining and improving traffic circulation and transit opportunities. Where applicable to Mendham Township, they are generally consistent with this plan and should be generally supported by the Township. One area is of particular concern to the Township is maintaining the character and width of County Roads and bridges, especially in historic areas. The County (Planning Board and Freeholders) has shown increased sensitivity to these local concerns in recent years.

RELATIONSHIP OF THIS PLAN TO STATE PLANS

The State has played an increasingly prominent role in planning in New Jersey in recent years. It ultimately controls the legal framework for planning through the Municipal Land Use Law and through the increasing amount of legislation and regulations that directly or indirectly affects municipal land use planning. Since 1992, it has taken a more direct role through the drafting and adoption of the State Development and Redevelopment Plan. The process of adoption involves *cross acceptance* between the various levels of government, interested organizations and individual citizens. This ongoing process is helping to build a consensus around future planning policies in the state.

Policy Statement

Mendham Township has actively participated in the *cross acceptance* process reexamining the revised State Development and Redevelopment Plan. The Township should continue to support the policies in the State Plan.

Planning Area Designation

All of Mendham Township is included in a PA-5 *Environmentally Sensitive* planning area designation in the State Development and Redevelopment Plan adopted in 1992. This reflects concerns about the impact that further development would have on environmentally sensitive features and resources in the Township. Of particular concern are the Township's water resources which have regional importance.

Center Based Planning – Communities of Place

One of the fundamental goals of the State Plan is to encourage "center-based" land use planning and to discourage the continuation of suburban "sprawl" development patterns. Most simply put, relatively higher density of development of mixed uses should be in centers (villages, town centers, and cities) surrounded by areas of relatively low density. Mendham Township should support these goals.

OtherPlans.doc

VII. HISTORIC PRESERVATION PLAN (Adopted 11/1/01, revised 4/1/02)

The law that governs municipal planning in New Jersey, the Municipal Land Use Law (MLUL), has among its purposes “to promote the conservation of historic sites and districts”.³⁷ The municipal master plan is a tool for accomplishing this purpose. The MLUL defines the roll of the Historic Preservation Plan element of the master plan:

- a. To indicate the location and significance of historic site and historic districts;
- b. identify the standards used to assess worthiness for historic site and district identification; and
- c. analyze the impact of each component and element of the master plan on the preservation of historic sites and districts.³⁸

INTRODUCTION

Mendham Township contains a rich historic heritage that is still vivid in the many existing historic sites, buildings, structures, roads, and trees located throughout the Township. An unusually large portion of the Township is located within six National and State Registered Historic Districts and within a Multiple Properties Listing.³⁹ These historic resources taken together are among the defining characteristics of the Township contributing greatly to its sense of place, high quality of life, and exceptional property values.

There are three foundations for historic preservation in Mendham Township:

1. The active participation of the Historic Preservation Committee (HPC) as an advisor in the development review process, and
2. The identification and designation of historic districts in the State and National Registers of Historic Places.
3. A resident population that is aware of, and concerned about, historic preservation.

The six existing historic districts and a proposed Multiple Properties Listing are described below with their historic significance. Registered districts form a solid foundation for historic preservation because registration requires detailed documentation of historic resources in accordance with specific accepted national standards of historic significance. The six districts and the Multiple Properties Listing contain all known historic resources within the Township.

³⁷ N.J.S.A. 40:55D-2, J.

³⁸ N.J.S.A. 40:55D-28.b.(10).

³⁹ The Multiple Property Listing will officially register many properties scattered throughout the Township when officially accepted by the State and National Registers of Historic Places.

HISTORIC PRESERVATION OVERVIEW AND BACKGROUND

Following are the major events affecting historic preservation in Mendham Township leading up to this point.

- The Morristown National Historical Park was established in the 1930s highlighting the significance of the region to important events and sites in the American Revolutionary War.
- After World War II, Mendham Township became recognized as a relatively inexpensive enclave for ex-urbanites seeking a quiet pastoral and historic setting. These new homebuyers were attracted by the colonial architecture, farmland and orchards, pristine streams, and country roads. This resulted in a core of residents concerned with preserving the historic character of the community during a period of rapid suburbanization in the region after World War II.
- In 1973, the Ralston Historic District was created as the first Registered Historic District in the Township.
- In 1990, the Morris County Freeholders proposed the construction of a major correctional facility in the Washington Valley area. This focused public attention on the historic resources in the area leading to the formation of a Historic Preservation Committee and historic district registration for the Valley.
- In 1991, the Township Committee established the Mendham Township Historic Preservation Committee.
- In 1992, the Washington Valley District, a historic district within both Mendham and Morris Township's was created as the second historic district in the Township. It received registration from the State and National Registers of Historic Places and was the first historic district created in cooperation with an adjacent municipality.
- In 1993, Morris County began a policy of consulting the Mendham Township Historic Preservation Committee regarding design issues concerning the refurbishment and/or replacement of bridges in the Township.
- In 2000, a new Township Master Plan was adopted putting emphasis for the first time on the importance of historic preservation to the Township's overall planning goals. This led to the adoption of this Historic Plan element, the Township's first.

A CONCISE HISTORY OF MENDHAM TOWNSHIP

Mendham Township was incorporated in 1749 encompassing a much larger area than today. At that time Mendham Township included modern day Randolph Township, part of Chester Township and Mendham Borough. Mendham Township's early settlement in the late 1700s and early 1800s was directly related to exploitation of natural resources. The headwaters of three major rivers (Whippany, Passaic and Raritan) easily provided waterpower. The abundance of timber for charcoal, lumber, iron and other ores, rich soil and limestone created an early industrial area. Waterpower encouraged other industries such as grist mills, saw mills, woolen mills, distilleries, cotton mills, forges, and turning shops. The many millponds also created an ice industry.

From the end of the Civil War through to the Great Depression, the industries declined. They could not compete with large steam-powered factories increasingly common after the Civil War. Gradually,

the clank of mill wheels and the thud of forge hammers disappeared. During this period of industrial decline, family farming became a relatively important economic activity, taking advantage of the open fields that resulted from clear-cut forests and the native rich soil characteristics. The Rockaway Valley Railroad, which passed through the middle of the Township, ceased operation in 1913 and the tracks were torn up for scrap during World War I.

This resulted in a period of "sommolence" with no railroad to transport produce or to attract new residents, in contrast to neighboring communities. With little to entice new year-round residents, Mendham Township became relatively isolated and unaffected by the suburbanization occurring in the region in the early to middle 1900s. This is a primary reason for the preservation of the Township's historic landscape.

Schools were very important to early settlers in Mendham Township. Six one-room schoolhouses have survived. Four are located at crossroads: Union Schoolhouse Road and Pleasant Valley (Ralston Historic District), Washington Corners (Tempe Wick Historic District), and the corner of Water Street and Cherry Lane (Brookside Historic District). The remaining two are located on Roxiticus Road (Ralston Historic District) and Mountainside Road (India Brook Historic District). In addition, on the outskirts of the Township, there were joint school districts with Randolph Township, and Morris Township (Washington Valley Historic District). Some of the schools continued in operation well into the 20th Century, the last reportedly closed in 1940.

Throughout the Township, there are many older houses that date from the 1700's to the early 1900s. Areas containing small cottage-style residences (many now expanded), dating from the Township's industrial era, reflect housing built as boarding and workers houses. Other older houses are associated with small family farms. Some of these houses did not have electricity until after World War II. Larger homes, used as country summer retreats for well to do families from urban centers, date from the early 1900s.

ASSUMPTIONS AND OBJECTIVES CONCERNING HISTORIC PRESERVATION IN MENDHAM TOWNSHIP

- Abundance of historic resources. Mendham Township contains abundant historic resources including sites, buildings, structures, landscape features, roads, and trees that together define its character and contribute importantly to its sense of place, high quality of life, and high property values. These historic resources should be preserved.
- Historic roads. The public roads in Mendham Township were improved slowly and gradually from their beginnings as narrow paths and horse trails centuries ago. Their evolutionary, curvilinear, and organic character is central to the historic significance of the historic districts through which they pass. Their historic width and design characteristics should be preserved to the extent possible.
- Bridges. Many bridges are located in historic districts and, as visually prominent structures, are important to the historic integrity and significance of those districts. The portion of the superstructure that is visible from the public road should be maintained, or replaced when necessary, consistent with the historic character of the districts.
- Historic buildings. There are many historic buildings throughout the Township; many are especially visible because of their location close to public roads. They contribute significantly to the integrity of historic districts, and to the character of the Township as a whole, and should be preserved.

- Ancient trees. There are many very old trees throughout the Township; many are especially visible because of their location close to public roads. They contribute significantly to the integrity of historic districts, and to the character of the Township as a whole, and should be preserved.
- Historic development patterns. The pattern of historic development in Mendham Township was established in an era before zoning. Historic structures are typically located in accordance with topographic/geographic features and are often located close to roadways and other property lines. Properties are typically of random and widely varying size, with boundaries that often follow natural features. These characteristics are important contributors to the historic integrity of historic districts, and to the Township as a whole, and should be continued.
- Historic artifacts (remains of foundations, mills, dams, millraces, forges, etc.). The Township contains many artifacts which contain historic significance in and outside of historic districts. Where possible they should be preserved.

ADDRESSING STATUTORY REQUIREMENTS FOR IDENTIFICATION OF HISTORIC SITES AND DISTRICTS

The MLUL requires that the location and significance of historic sites and districts be identified together with the standards used to assess their historic worthiness. These statutory requirements were satisfied in Mendham Township's designated historic districts and sites as follows:

- Identification of the location and boundaries of historic sites and districts. The boundaries of the historic districts in Mendham Township are summarized in the next section below and were established in accordance with National and/or State Historic Register criterion. The Mendham Township Historic Preservation Committee (HPC) maintains two maps showing the boundaries of the historic districts and the location and type of all known historic sites and resources in the Township.⁴⁰ They are available in the Municipal Building and provide important companion documents to this plan. The map following this section is based upon these maps.
- Identification of historic significance. This has been satisfied through the State and Federal historic nomination and registration process for the six historic districts and the proposed Multiple Properties Listing. To qualify for registration, the State and National Registers of Historic Places require a detailed survey and documentation of the historic resources in the district. The following sections provide a summary of identified historic resources in each district.
- Identification of the standards used to assess the worthiness of historic district designation. The standards used by the State and National Registers of Historic Places have been used to assess the worthiness of historic district and sites designation in all designated historic districts and the Multiple Properties Listing in Mendham Township. These standards are summarized as follows:

Criterion A. Property associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B. Property associated with the lives of persons significant in our past.

⁴⁰ Historic Industrial and Commercial Sites, Township of Mendham, New Jersey. prepared by the Mendham Township Historic Preservation Committee, 1996, revised 2001.

Historic Houses, Outbuildings and Schoolhouses, Township of Mendham, New Jersey. prepared by the Mendham Township Historic Preservation Committee, 1996, revised 2001.

Criterion C. Property that embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

Criterion D. Property that has yielded, or is likely to yield, information important in prehistory or history.

HISTORIC DISTRICTS AND MULTIPLE PROPERTIES LISTING, THEIR SIGNIFICANCE AND WORTHINESS FOR DESIGNATION

Following is a summary of the six registered historic districts in the Township, their location and boundaries, their historic significance, and their worthiness for historic designation. In addition, there is a description of a Multiple Properties Listing currently proposed for formal designation by the State and National Registers of Historic Places (# 7 below).

1. Brookside Historic District

This district is located within Mendham Township along Tingley Road, East and West Main Streets, Cold Hill Road, Cherry Lane and Woodland Road. The District retains the scale, character and artifacts of a rural village and small-scale industrial center of the 18th and 19th centuries. The District contains 131 documented historic resources that contribute to its historic significance. Most notable are numerous existing single-family dwellings, outbuildings, and artifacts of water-powered industry relating to the period of historic significance (1780-1942). The artifacts of industry include the remains of water-powered, grist mills, woolen mill, saw mills, forge, tanning and shoe making, glass and chair manufactory, wagon shops, blacksmith shops, iron mines, turning shops lime kilns, and distilleries. The Rockaway Valley Railroad went through the district providing rail access to some of the industries until World War I. The entire R-O-W of this railroad is now Patriots Path in this district.

Prominent unspoiled natural features, particularly the Whippany River, ancient trees along roadways, and the undeveloped steep hill to the south of the village, also contribute to the historic integrity of the District. The historic community development pattern and architecture of the district is characterized by relatively small lot sizes and shallow setbacks of the oldest structures distinguishing the old village from the modern suburban development on larger lots with deeper setbacks that surrounds it.

The following description is taken from the nomination forms of the National Register of Historic Places for the District.⁴¹

"The village is laced with the headraces, tailraces, tunnel and culverts of a long-lived and complex water distribution system which fed the various industrial mills that operated in Brookside in the 18th and 19th centuries....(Today) the tree-shaded roads and babbling brooks offer pastoral beauty, giving no hint of the noisy, bustling village of the 19th century which used the brooks to power large mills".

The District is registered in both the State (1995) and National (1996) Registers of Historic Places. The district boundaries were established to encompass groupings of historic resources, roads, railroad R.O.W., and natural features, most notably the Whippany River and parkland to the north. The numerous historic resources dating from the 18th and 19th centuries provide information illustrating the

⁴¹ National Register of Historic Places Registration Form, prepared by Janet Foster, Acroterion Historic Preservation Consultants, Madison, NJ, 1992, Section 7 Page 1.

architecture, industry and community development pattern of early America and is thus historically significant in accordance with National Register Criteria A.

2. Combs Hollow Historic District

This district is primarily located within Randolph Township with a small portion in Mendham Township. The Mendham Township portion is made up of parts of three lots located along India Brook near, and west of, Combs Hollow Road. The character of the District in Mendham Township is of a currently undeveloped area in a low-density rural and natural setting. It is registered in both the State (1995) and National (1996) Registers of Historic Places.

The district boundary was established to encompass the grouping of significant historic resources as well as natural historic features.⁴² The historic resources located in Mendham Township are the site of an iron mine and the remains of a breached rubble dam and forge. The historic significance of the area relates to the information it contains about the early iron mining and manufacturing industry beginning from 1735. In accordance with National Register Criteria A, the district is associated with events that have made a significant contribution to the broad pattern of our history.

3. India Brook Historic District

This district straddles the municipal boundary between Mendham Borough and Mendham Township. Most of the District, however, is located within the Township along Mountainside Road (mainly north side), Ironia Road (west side), Roxiticus Road (north side) and Combs Hollow Road (both sides). The district is centered on India Brook and adjoins and connects to preexisting registered Districts to the north (Combs Hollow) and to the south (Ralston). A nomination for State and Federal historic registration has been filed by the Mendham Township Historic Committee and a determination on registration is currently pending.

There are 63 documented historic resources located within the District that contribute to its historic significance. The period of historic significance is 1750 to 1940 encompassing the early settlement period, the 19th century period of farming and industrial activity, and the early 20th century Morris County estate era. The District boundary was established to encompass historic resources (mostly dwellings) concentrated along historic roadways and archaeological sites connected with the former industries along India Brook. As stated in the nomination forms for the National Register:

"The India Brook Historic District is eligible for the National Register of Historic Places under Criterion A, association with events that have made a significant contribution to the broad patterns of our history, for its role in eighteenth century settlement, and nineteenth century development of the area from a farming-industrial community to a country retreat and villa site."

"The development of the India Brook area sounds a familiar theme for many areas of Morris County, and the surviving architectural resources constitute a notable collection of building types, so that the district is also eligible for the National Register under Criterion C. The buildings in the district share a location rather than a particular building type; in fact, most of the contributing buildings are distinctive in the style and period of architecture they represent. Thus, the entire district encompasses a virtual catalog of American architecture, from early stone and wood structures to twentieth century pre-cut houses."

"Under Criterion D: There are sites within this district, most notably along the stream, which are likely to yield significant archaeological evidence relating to the industrial activity and

⁴² National Register of Historic Places Registration Form, prepared by Cynthia Hinson, Acroterion, Madison, NJ, 1995, Section 10 Page 2.

development of the area. The most readily apparent relates to the ironworks of the forge and the mining industry. Pieces of slag in various sizes, which were discarded by the forge, are abundant and easily visible in and along the stream. Mining related evidence, such as charcoal hearths and the foundation of a charcoal house, still remain along the stream.”⁴³

4. Ralston Historic District

This large district was first registered in a smaller form in 1973. It is centered on the North Branch of the Raritan River and now contains 90 documented historic resources that contribute to its historic significance relating to the period of 1786-1934. It is registered in both the State (1997) and National (1999) Registers of Historic Places. The following description of the District is excerpted from the National Register nomination forms.⁴⁴

“The district has as its focus the water-powered industries which grew up on the North Branch of the Raritan, and the related houses, outbuildings, and schoolhouses. The residents of the area carried out their business and public lives in neighboring towns like Chester and Mendham. But Ralston, first known as Roxiticus, was recognized as a separate place, not a town or even a village, but a locale of distinct character. It was a place of mills, whose pounding or silence marked local economic prosperity. It was a place of highly visible hierarchy, with the manor house on the north end, the master’s mill house within sight of his house, and small houses for laborers and farmers further downstream.”

The District is historically significant in accordance with National Registration Criterion A, B, and C as follows:

- Criterion A (association with events that have made a significant contribution to the broad patterns of our history) because of its association with the development and subsequent decline of water-powered industry in the 18th and 19th centuries.
- Criterion B (association with the lives of persons significant in our past) because of its association with John Rolston (sic.), an early American industrialist whose woolen mill along the river was one of the earliest of New Jersey’s successful textile industries.
- Criterion C (properties that embody the distinctive characteristics of a type period, or method of construction) for the well-preserved domestic architecture which characterizes the river valley.

The District boundary was designed to encompass historic resources centered on historic roads (Route 510 previously known as William Penn Highway and Washington Turnpike, Roxiticus Road, Union Schoolhouse Road, and Pleasant Valley Road). It also encompasses historic resources associated with and adjacent to Burnett Brook, the North Branch of the Raritan River and McVicker’s Brook. Finally, it encompasses landscape features associated with the history of the area such as Schiff Reservation.

5. Tempe Wick Historic District⁴⁵

This 353-acre District straddles the municipal boundary between Mendham and Harding Townships encompassing substantial historic resources in each township. There are 36 historically significant resources in the Mendham Township portion of the district, most of which are dwellings and other structures and sites. The District is oriented to Tempe Wick Road which is itself one of the district’s most important historic resources dating from the 18th century and is the gateway to Jockey Hollow,

⁴³ National Register of Historic Places Registration Form, prepared by Janet Foster, Acroterion, Madison, NJ, Section 8 Page 1.

⁴⁴ National Register of Historic Places Registration Form, prepared by Janet Foster, Acroterion Historic Preservation Consultants, Morristown, NJ, Section 7 Page 1.

⁴⁵ National Register of Historic Places Registration Form, prepared by Dennis Bertland & Sally Bishop, Dennis Bertland & Sally Bishop Associates, Port Murray, NJ.

the Revolutionary War Continental Army encampment. The District is registered in both the State (2000) and the National (2000) Registers of Historic Places.

The District boundary was established to follow the historic alignment of Tempe Wick Road and expanded where appropriate to encompass adjacent historically significant resources including those on Corey Lane and Kennaday Road. The period of historic significance is 1750 (settlement period) through 1936 (Morris County Estate Era). It is historically significant under Criterion *A* and *B* in the areas of military history (Revolutionary War encampment) and architecture (mostly 19th century New Jersey Rural Vernacular and Colonial Rival eras). Notably, the historic significance also relates to the spatial arrangement of buildings exemplifying siting characteristics of buildings in an earlier pre-zoning rural era.

6. Washington Valley Historic District

This large 1,883-acre historic district was the largest in the state at the time of its registration. It straddles the municipal boundary between Mendham and Morris Townships with substantial areas in each. In Mendham Township, the district is located along Schoolhouse Road, Washington Valley Road, Tingley Road, and Mendham Road (Route 510). It retains its low-density rural character with prominent unspoiled natural features. The District is registered in both the State (1992) and National (1992) Registers of Historic Places. The following description is from the National Register of Historic Places Registration Form.⁴⁶

"It (the District) is also very much an environment fashioned by human use, for the preservation of the valley's landscape and its scattered 18th century farms was made possible by wealthy estate builders of the late 19th and early 20th centuries. The landscape of small houses, barns, cultivated fields and orchards that these newcomers found was a resource which they maintained and improved. They were motivated, in part, by their view of Washington Valley as a romantic artifact of colonial days, with hallowed Revolutionary War associations."

Washington Valley Road was laid out in 1757 and is one of the most important historic resources in the District in its form. Mendham Road (Route 510) is also a historically significant road within the District. It may have begun as an Indian trail and was used by early settlers. Later it was improved and maintained as one of the early "turnpikes" (Washington Turnpike) stretching from Morristown to the Delaware River, chartered in 1806.

The boundaries of the District were established to encompass groupings of historic resources, natural features, and historic roadways. The historic resources in the District are numerous but can be summarized as single-family residences, agricultural fields, and outbuildings relating to the periods of historic significance; 1776-1863 encompassed the early settlement and development period, and 1881-1932 encompassed the estate era.

In accordance with National Register Criteria *A*, the District is associated with events that have made a significant contribution to the broad pattern of our history. In addition, in accordance with Criteria *B*, it contains property that embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

7. Multiple Properties Listing

⁴⁶ National Register of Historic Places Registration Form, Section 7 Page 1 prepared by Janet Foster, Acroterion Historic Preservation Consultants, Morristown, NJ, March 1992.

There are many historically significant sites throughout the Township currently proposed for formal designation which are worthy of preservation efforts. The National Register criteria should be used as a guide in identifying the specific significance of the individual sites contained in the Listing. The Historic Preservation Committee has listed all known historically significant sites within the Listing. The HPC should encourage their preservation through recognition and educational efforts. Three such individual sites serve as examples: Pitney Farm, Franklin Farms (mansion residence of former New Jersey Governor Franklin Murphy), and the Nesbitt Mills/Loughlin Distillery (a.k.a. Sammy's Cider Mill). Every effort should be made to preserve the important historic resources contained in the Listing.

ANALYSIS OF THE IMPACT OF TOWNSHIP POLICIES ON HISTORIC PRESERVATION

The MLUL requires the Historic Preservation Plan to *analyze the impact of each component and element of the master plan on the preservation of historic sites and districts*. Most elements of this Master Plan have either a generally positive impact or no negative impact on historic preservation. However, the policies contained in two elements of this Master Plan have potentially important implications for historic preservation. They are discussed below.

Circulation Plan

Public roadways and bridges are prominent historic resources in all of the Township's historic districts. Their design, improvement, and maintenance can have an important impact on the integrity of historic districts and their significance. The following road and bridge improvement and maintenance policies are recommended for roadways in historic districts.

Road design and width. Road design standards are an area of public policy that can have a profound effect on historic preservation. Historic roadways are visually distinguishable from those designed to modern standards. They have an *organic* quality dictated and shaped by natural features of the land (topographic and geographic). In Mendham Township they are narrow, uncurbed, curvilinear, and closely following the contours of the land, with open swales for drainage.

Roads designed to typical modern engineering standards, which ignore the historic integrity of an area, can unalterably damage this historic character. Today's engineers can, however, when encouraged to do so, design roads that achieve engineering goals without sacrificing historic qualities. The historic integrity of roads in historic districts should be preserved, in particular their historic widths.

Bridges. Public bridges are also important to historic preservation, within or without historic districts. They contribute substantially to the scenic quality of Mendham Township. Many bridges in the Township have historic significance in themselves because they are connected with an historic event or personality, or representative of an era of engineering history. Even if a bridge is not in itself "historic", it may be worthy of preservation.

It must be recognized that bridges must function safely and that the main focus of historic preservation should be that which is visible from the public road. If a bridge is in an otherwise historic area and it is in harmony with, and contributes to, the historic significance of the area, the portion of the superstructure that is visible from the public road should be preserved. There are a number of such examples in the historic districts. Indeed these bridges are particularly important elements of historic landscapes. They are by their nature visually prominent focal points, having more of an effect than most other single elements on the character of historic districts.

Bridges in historic areas should be preserved where possible and, where not possible, replacement bridges should be designed and sized reflective of the historic nature of the area. Portions of these bridges not visible from the public road may be replaced where necessary for public safety. It must be recognized that the Township is not the master of its own fate on the issue of bridge maintenance and design. Bridges in the Township are under the jurisdiction of the County. The County has recently been asking as a first step in the design process for suggestions from the HPC on all proposed projects for rebuilding or refurbishment of bridges in the Township. This should continue in order to assure that decisions regarding bridge refurbishment and replacement are made consistent with the integrity of historic districts.

Ancient trees. There are numerous examples of very old trees dating back to the early 19th and even 18th centuries along public roadways in the Township. Within historic districts, they contribute significantly to the historic integrity of the District. Outside of historic districts, ancient trees often have historic significance in of themselves. In some cases, existing ancient trees are reflected in historic property deed records. In all cases, they are living reminders of times long past, contributing significantly to the historic character of the community. They should be preserved wherever possible.

Land Use Plan

The Land Use Plan contains goals and policies that are intended to guide the Township's zoning and subdivision regulations, which in turn can have implications on historic preservation. These are discussed below.

Zoning. Strong municipal land development regulations are a necessity. However, they can sometimes pose difficulties for historic preservation. Historic structures often do not conform to such standards because they were constructed in an era with different needs and concerns and the limitations imposed by nature were the primary considerations for their location. In contrast to modern patterns, historic structures are typically located close to roadways and/or other property lines and the distance between structures is much more varied than those built to modern standards.

Zoning use limitations can sometimes discourage historic preservation. Some historic structures are not readily adapted to modern needs and tastes or they were constructed for uses no longer economically viable. Modern zoning regulations can pose an extra and significant obstacle for their adaptive reuse. In historic districts, variances from zoning regulations, which promote the preservation of historic structures and/or historic character, should be considered to be consistent with the Township's *zone plan*. In addition, developments in historic areas should be configured to preserve historic sites, structures, landscape features and the historic pattern of development.

Development outside historic districts. Development in areas outside of historic districts can have detrimental impacts on the historic character and integrity of the districts. In Mendham Township, historic districts are closely associated with a rural landscape of small crossroad villages surrounded by a very low-density countryside. Development that changes this context, even outside historic districts, will be detrimental to the historic character, integrity and significance of the districts. The "up-zoning" recommended in the Land Use Plan will substantially reduce the Township's ultimate build-out density, greatly beneficial to the preservation goals of this element.

Institutional and public utility uses. The Land Use Plan has been crafted to only permit uses that are generally compatible with historic preservation goals. However, other uses that generally benefit the public welfare have received special legal status such as institutional and public utility uses. Such uses can be visually prominent and incompatible with historic integrity and if so should be located in areas that minimize their visual impact on historic districts.

Subdivision requirements. Subdivision and zoning regulations over time alter the historic pattern of development to a more regularized and uniform model. Historic landscapes are characterized by great variability in lot sizes and building setbacks. The innate characteristics of the land itself, rather than uniform zone standards, were the standard by which decisions were made about property subdivision and building placement. The uniformity and regularity of development built in conformance with subdivision and zoning regulation can be at odds with historic integrity. In historic districts, variances from zoning standards and subdivision regulations which promote the preservation of historic structures and/or historic character should be considered to be consistent with the Township's *zone plan*.

Controlling the scale of buildings. Research of Township building records has illustrated that there is a traditional pattern of building size in relation to property size in the Township. Pursuant to recommendations in the Land Use Plan, floor area ratio (FAR) standards have been adopted by the Township to promote the traditional scale of buildings by balancing the size of structures in relation to the size of the property they are on. The main purpose is to discourage new structures that are substantially larger in scale than has been traditional in the Township. This is particularly important in historic districts and for historic structures.

Size and design of signs. Signs by their very nature are visually prominent features of the landscape. Signs within historic districts should be sized and designed to be consistent with the historic integrity of the district.

Preservation of historic artifacts. A variety of Township development-related regulations can impact the preservation of historic artifacts (foundations, mines, wells, millraces, and other man-made structures). Wherever appropriate, Township regulations should be flexibly administered in a manner that promotes the preservation of such artifacts as designated on the HPC historic resources maps.

ROLE OF THE HISTORIC PRESERVATION COMMITTEE

Historic Preservation Committee – advocate and educator. The HPC plays an important advisory role to the Planning Board and Township Committee and to the departments under their jurisdiction. It is an advocate for preservation and generally coordinates preservation activities in the Township. In addition, it performs informational and educational functions, including completion of the comprehensive Historic Resources Map and the review of projects affecting the historic resources in the Township. An important part of this educational function is to provide clear guidance to applicants, Planning Board and Board of Adjustment about how developments can be designed consistent with the Township's historic heritage.

Continuing historic research. Educating citizens about what is historically significant in the Township must be an important part of any effective strategy for historic preservation. To accomplish this, the HPC should continue its study of historic properties. Writing history is an evolutionary process. A number of excellent histories, documents, journals and letters exist as excellent reference materials on Township history. This information provides a basis for informing citizens and owners of historic properties and, most importantly, those who plan to develop in historic areas, about what is historically significant.

Design guidelines. Another educational task for the HPC is to suggest specific guidelines for the design and development/redevelopment in historic districts and of individual historic buildings and properties outside of historic districts in the Township. The guidelines should assist prospective

developers to understand how they can accomplish their development goals in a manner compatible with historic architectural and landscape patterns.

SUMMARY AND RECOMMENDATIONS

Mendham Township contains areas which are still clearly representative of the Township's, and early America's, rural past. The historic sites and districts described in this plan, and delineated on the HPC industrial and buildings, structures and sites maps, possess historic integrity and significance; they give a historic identity worthy of preservation. Historic significance in the Township lies not so much in individual sites as in entire landscapes that are representative of early American rural life.

The primary vehicle of a strategy for historic preservation is for the Historic Preservation Committee to participate in the development review process as an advisor to individual citizens, prospective developers, Planning Board, Board of Adjustment and the Township Committee on preservation matters. The creation of the Historic Preservation Committee and the historic districts, well accepted by the community at large, have given official recognition and sanction to the importance of historic preservation in the Township and will continue to provide a framework for the provision of information and education in the future. The continuous updating of the HPC industrial and buildings, structures and sites maps is an important task that will assist those interested in developing/redeveloping historic properties to do it in a manner consistent with historic preservation goals.

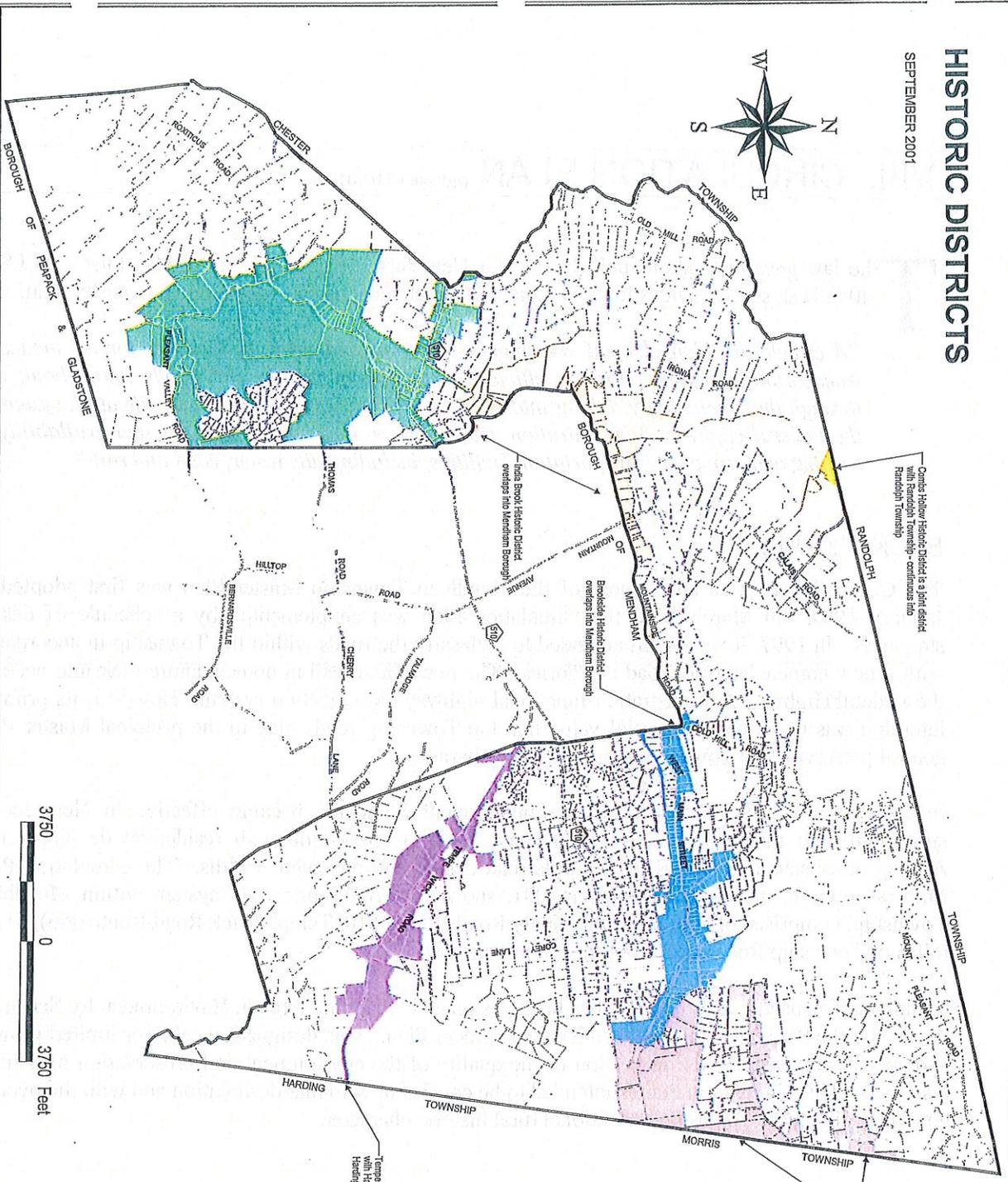
Finally, the Planning Board and Township Committee should continue to reexamine Township policies that affect historic districts and sites, especially land use ordinances and public road standards, to ensure that they are consistent with the goals of this plan.

LANDS RECOMMENDED TO BE RESERVED FOR HISTORIC PRESERVATION PURPOSES

In order to fulfill the goals of this plan element, and of the Master Plan as a whole, the acquisition of property must be a major part of the Township's overall planning strategy. Depending upon the specific circumstances of the specific property, acquisition may be by fee simple acquisition, easements, or development restrictions. The Appendix at the end of this Master Plan contains a list of properties that are recommended to be reserved for historic preservation purposes. They should be reserved in accordance with C.40:55D-44.

HISTORIC DISTRICTS

SEPTEMBER 2001



Cornus Hollow Historic District is a joint district with Rancoclet Township - continuous into Rancoclet Township

Brookside Historic District overlaps the Mendham Borough

India Brook Historic District overlaps the Mendham Borough

Washington Valley Historic District is a joint district with Morris Township - continuous into Morris Township

Tempe Wick Road Historic District is a joint district with Harding Township - continuous into Harding Township

LEGEND

- Historic Districts
- Brookside Historic District
- Cornus Hollow Historic District
- India Brook Historic District
- Ralston Historic District
- Washington Valley Historic District
- Tempe Wick Road Historic District
- Parcel Lots
- Township Boundary



Township of Mendham
Morris County, New Jersey
Historic Districts
September 2001

Reference Maps:
GIS Resource Data New Jersey, Department of Environmental Protection Series 1, Dated March 7, 1996

This map is based upon the official maps of Mendham Township as shown in Mendham Township prepared by the Mendham Historic Preservation Committee entitled: HISTORIC INDUSTRIAL AND COMMERCIAL SITES dated 2001, HISTORIC HOUSES OUTBUILDINGS AND SCHOOL HOUSES dated 2001.

VIII. CIRCULATION PLAN (Adopted 11/1/01)

The law governing municipal planning in New Jersey (Municipal Land Use Law – N.J.S.A. 40:55D et. seq.) provides for a Circulation Plan element as part of a municipal master plan.

“A circulation plan element showing the location and types of facilities for all modes of transportation required for the efficient movement of people and goods into, about, and through the municipality, taking into account the functional highway classification system of the Federal Highway Administration and the types, locations, conditions and availability of existing and proposed transportation facilities, including air, water, road and rail.”

BACKGROUND

The Circulation Plan as an element of the Mendham Township Master Plan was first adopted in January 1989. In March 1990 the Circulation Plan was supplemented by a schedule of design standards. In 1997, it was again amended to reclassify the roads within the Township in accordance with a new nomenclature of road categories. The new classification nomenclature took into account the Federal Highway Administration functional highway classification system. However, its primary intention was to reflect the special value that the Township roads play in the principal Master Plan goal of preserving the Township's rural/historic character.

In June of 1997, the Residential Site Improvement Standards became effective in New Jersey superceding all municipal standards for roads built in connection with residential developments. Among other standards, the RSIS controls road design and pavement widths. The Circulation Plan Map, as revised and dated September 2001, shows the 76.65-mile road system within Mendham Township, comprised of 7.06 miles of County Road (Route 510, Tempe Wick Road/Route 646), 61.81 miles of Township Roads and 7.78 miles of private roads.⁴⁷

Mendham Township, in its entirety, has been designated "Planning Area 5, Environmentally Sensitive Areas" by the State Development and Redevelopment Plan. This designation calls for limited growth and special emphasis on the protection of the quality of the environment and preservation of natural resources. This Circulation Plan is intended to be consistent with that designation and with the overall goal of retaining the Township's traditional rural historic character.

GOALS AND OBJECTIVES

The system of roads in the Township evolved over the life of many generations and, despite the development pressures of recent decades, the network of "spine" roads remains relatively unchanged. This evolutionary pattern is characterized by the curvilinear roadscapes adapted to the natural terrain and is evident throughout the community. This pattern significantly contributes to, and indeed defines, the rural and historic character of the Township. Consequently, any substantial alteration or modification of historic roads would necessarily lead to a decline and attrition of traditional qualities.

Circulation planning should harmonize with the recognition that many of the Township's roads represent more than mere engineering objects for the benefit of accommodating traffic/transportation.

⁴⁷ Road mileage figures provided by David Reed, Mendham Township Public Work Department, July 2001.

The evolved roads are also significant visual elements of its historic heritage. These qualities, together with irreplaceable natural resources, should be preserved as valuable attributes of the Township's unique character. In addition, the Circulation Plan must also promote, in a positive manner, a safe and efficient traffic/transportation network in the community.

ROAD CLASSIFICATIONS

As shown on the Circulation Plan Map, the Circulation Plan classifies all roads in the Township relative to their function within the local or regional transportation-circulation system and establishes the following four categories:

Regional Arterial.

County Route 510 is a two-lane regional arterial road that connects to expressways and principal traffic generators in the region and delivers large volumes of traffic to municipalities throughout several Counties primarily by way of connecting arterial roads.

Collector Roads.

These two-lane roads are the highest order of residential roads in the Township. They conduct and distribute traffic between lower-order residential roads and higher-order arteries such as highways and expressways in the region. Except for the Regional Artery, these roads carry the highest volumes of traffic in the Township. However, it is the Township's goal to retain their traditional character as relatively narrow "country roads". This category essentially corresponds with the Street Hierarchy Definition and Design Standards outlined for Major Collectors (Low Intensity) in the Residential Site Improvement Standards, promulgated by the New Jersey Department of Community Affairs, Division of Codes and Standards (N.J.A.C. 5:21-1 et seq.). The following roads in the Township fall in this category:

- Roxiticus Road (from Route 510 to Chester Township)
- Ironia Road
- South Road
- Cold Hill Road
- Tempe Wick Road
- Woodland Road (Northern Portion)

Local Rural Roads.

All other public roads in the Township fall within this category of roads. They provide frontage for access to lots and carry traffic to and from adjoining Local Rural Roads. They are designed to carry volumes limited to motorists having origin or destination within a limited area. These roads are not intended to carry regional traffic. This category essentially corresponds with the Street Hierarchy Definition and Design Standards outlined for Minor Collectors (Low Intensity) or Rural Streets in the Residential Site Improvement Standards, promulgated by the New Jersey Department of Community Affairs, Division of Codes and Standards (N.J.A.C. 5:21-1 et seq.).

Pedestrian Paths.

This category is designed to provide access to certain sites, limited to pedestrian means, where there is either no demand for vehicular access or where such traffic is deemed undesirable, due to topographic, environmental or other conditions. Pedestrian Paths, designed primarily to access existing school facilities or to provide access to preserved open space areas, have been designated at:

- Extension of Old Orchard Road
- Extension of Hamilton Drive
- Extension of Calais Road
- Within the existing right-of-way of Knollwood Trail

CIRCULATION PLANNING POLICIES AND RECOMMENDATIONS

The Circulation Plan should be designed to pursue and advance explicit policies:

- Preserve road character. Preserve the essential character and scale of existing roads as justified in the context of the State Development and Redevelopment Plan.
- Limited road improvements. Road improvements should be limited to specifically target only necessary enhancement of traffic safety and convenience. In all cases they should be sensitive in scale to the preservation of traditional roadscapes and the vulnerability of environmental resources.
- Road maintenance. Although the condition of the roads in the Township can generally be characterized as good, a consistent, scheduled monitoring plan should be continued. Such a strategy will aid the conduct of a regular ongoing and deliberate road maintenance program, which is necessary not only to provide convenience and safety of traffic, but will also help to reduce the cost of repairs in the long-term.
- Roadside plantings. In consultation with the Landscape and Tree Protection Commission, perimeter plant material (trees and shrubs) along existing roads shall be maintained and, where appropriate, installed or replaced in a manner responsive to the historic atmosphere by the Township and/or developers operating on lands adjacent to such roads.
- New road design. The design and scale of any new roadways, constructed as components of future developments, shall emulate to the extent practicable, the curvilinear alignment, improved widths and perimeter vegetation of historic rural roads.
- Speed limits. Speed limits should be appropriately controlled to suit the scale, visibility conditions, alignment, traffic loads and abutting intensity of development, in order to minimize risks to cyclists, school children, joggers, pedestrians, and wildlife, as well as vehicles on the road.
- Public roads proposed to serve only one lot. The construction of public roads causes substantial land disturbance harmful to preservation goals. In addition, they are a long-term burden on taxpayers. The construction of new public roads should therefore be discouraged when they are proposed to serve only one lot.

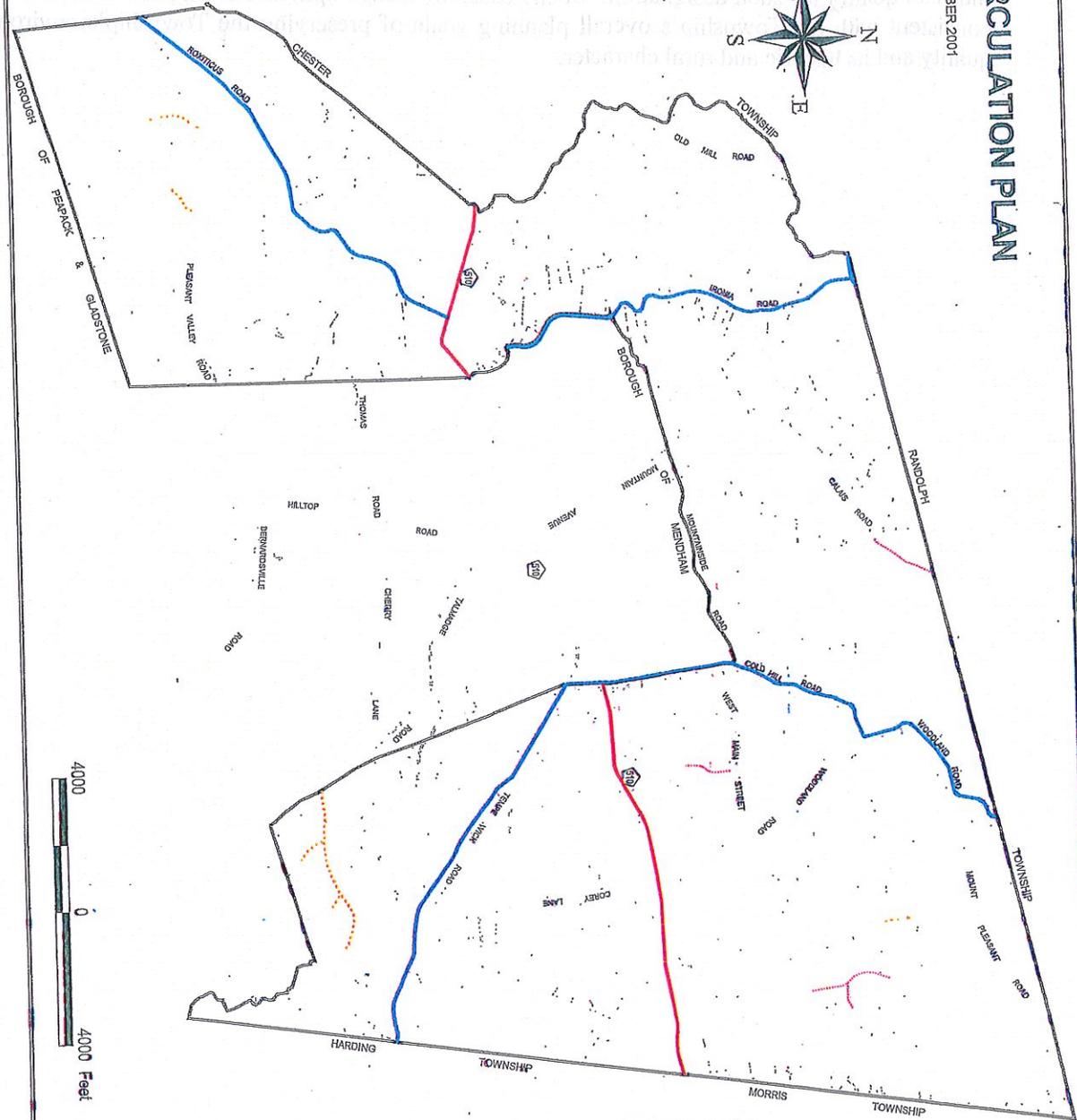
DESIGN STANDARDS FOR ROADS

The New Jersey Residential Site Improvement Standards (RSIS) specifies required right-of-way widths, pavement widths, and design standards, for roads consistent with their function. Although these standards are uniform throughout the State, design options are provided in some cases, especially for lower order roads carrying limited traffic volumes. In addition, the RSIS provides for *Special Area Designation* permitting alternate design standards in areas of special environmental and historic preservation concerns. All of Mendham Township is affected by one or both of these concerns and

thus can qualify for such designation. In any case, the design options chosen should be those that are consistent with the Township's overall planning goals of preserving the Township's environmental quality and its historic and rural character.

CIRCULATION PLAN

OCTOBER 2001



LEGEND		RIGHT-OF-WAY WIDTH	PAVEMENT WIDTH
Existing Regional Arterial	68'	32'	
Existing Collector	50'	20'-24'	
Existing Local/Rural	40'-50'	18'-24'	
Proposed Local/Rural *	40'-50'	18'-24'	
Proposed Pedestrian Path *	20'-40'	N.A.	
Parcel Lots			
Township Boundary			

* The proposed alignments are only conceptual and are intended for consideration when and if the subject lots are developed.

Reference Maps:
GIS Resource Data New Jersey Department of Environmental Protection Series 1,
Date: March 7, 1999

Township of Mendham
Morris County, New Jersey
Circulation Plan
October 2001



IX. CONSERVATION PLAN (Adopted April 1, 2002)

The law governing municipal planning in New Jersey (Municipal Land Use Law – N.J.S.A. 40:55D et. seq.) provides for a Conservation Plan element as part of a municipal master plan.

“A conservation plan element providing for the preservation, conservation, and utilization of natural resources, including, to the extent appropriate, energy, open space, water supply, forests, soil, marshes, wetlands, harbors, rivers and other waters, fisheries, endangered or threatened species wildlife and other resources, and which systematically analyzes the impact of each other component and element of the master plan on the present and future preservation, conservation and utilization of those resources.”

INTRODUCTION

This document is Mendham Township’s first Conservation Element, drafted by the Environmental Commission in 2001 for the comprehensive revision of the Master Plan adopted by the Planning Board on November 13, 2000. This element is particularly important because the new Master Plan puts special emphasis on the protection of the high quality natural resources of the Township, in particular the quality and quantity of water resources. Below are sections covering the major categories of natural resources found in the Township: Topography, Air, Surface Water, Groundwater, Wetlands, Wildlife and Vegetation, and Open Space. These sections systematically analyze the impact of Township policies on each category of resource and provide recommendations for their conservation and preservation.

MAJOR PLANNING ISSUES

The major issues that are significant to the protection of environmental resources in the Township are as follows:

- Development Pressures. Substantial residential development has occurred in the Township over the last two decades, with a trend toward much larger homes and site improvements with larger areas of impervious surface. Most suitable land has largely been developed, and the remaining vacant property is increasingly characterized by large amounts of environmentally sensitive characteristics such as woodlands, steep slopes, wetlands, and surface waters. The detrimental effects of the increase in development include soil erosion, increased stormwater runoff, decreased surface and groundwater quality, and increased level and frequency of flooding.
- Impact on Surface Water Resources. The headwaters of three major river systems, which are regionally important sources of potable water, are located in Mendham Township: the Whippany, Passaic and Raritan. These headwater streams are under threat from increased development, especially the development of the remaining environmentally sensitive properties in the Township.
- Impact on Groundwater Resources. The Critical Water Resources Study commissioned by the Environmental Commission in 1994 documents evidence that continued development will have a significant impact on the quality and quantity of groundwater. There is also evidence from well records of the potential negative impact of future development on the aquifers underlying the Township.

- Stormwater Management. Stormwater runoff from existing roadways and other impervious surfaces into the Township's high quality streams continues to have a harmful environmental impact on those streams.
- State Development and Redevelopment Plan. All of Mendham Township is classified Environmentally Sensitive (PA-5) in the New Jersey State Development and Redevelopment Plan. The Plan's land use policies call for protecting environmentally sensitive areas from the adverse impacts of development by preserving low density land use patterns, promoting open space and protecting natural resources.
- Ten Towns Great Swamp Watershed Committee. The Ten Towns Great Swamp Watershed Committee, consisting of representatives from each of the ten towns within the Great Swamp Watershed, was formed through an Inter-municipal Agreement in 1995. The purpose was to develop and implement a Watershed Management Plan for the Great Swamp Watershed. Studies concluded that development in the watershed was having a substantial negative effect on the Great Swamp because of pollution and flooding from stormwater runoff throughout the watershed. The Ten Towns united to develop and adopt model ordinances that will protect the ecological condition of the wildlife refuge, decrease stormwater runoff, and maintain or improve existing water quality in the Great Swamp and its tributaries. This unique grassroots effort has been a model for other watershed management groups and has the support of the State and Federal government.
- Preservation of Community Character. There is growing concern among Township residents that significant elements of the Township's character are disappearing or under threat. These elements include extensive woodlands, ponds, natural areas, pristine trout streams, narrow tree-lined roads, and the Township's many historic homes and landmarks.
- Regional Responsibilities. The numerous streams in the Township are the headwaters of three river systems, which are important sources of potable water supply for the region. The Township has a responsibility to adopt land use regulations that will protect the high quality of the streams in these watersheds. The Environmental Commission represents the Township at each of the watershed management groups: the Whippany River Watershed Action Committee; the Ten Towns Great Swamp Watershed Management Committee; and the Raritan Basin Watershed Management Project. Three of the Township's historic districts are shared with other communities: Tempe Wick (Harding Township), Combs Hollow (Randolph Township) and Washington Valley (Morris Township). Part of Jockey Hollow, a National Historical Park, is located within the Township. Mendham Borough and Township share a common Town Center and open space in both municipalities. The Town Center is in the Borough; most of the open space is in the Township.

GOALS AND OBJECTIVES

The primary goal of the conservation plan is to provide for the preservation and conservation of the Township's natural resources. Conservation of these resources is critical to the quality of life and character of Mendham Township. It is also important to communities downstream because of the Township's location at the headwaters of three major river basins. Following are the major natural resources in the Township that should be protected and preserved:

- Ponds
- Wildlife habitat that will preserve bio-diversity
- Pristine streams that provide breeding grounds and habitat for native trout
- Woodlands

- Natural areas for passive recreation
- Greenways that will provide wildlife corridors and hiking opportunities
- Forested slopes that shade streams and provide natural protection from erosion
- Diversity of bird and animal species
- Wetlands and their transition areas
- Floodplains that retard stormwater runoff
- Scenic vistas and natural ridge lines
- Forested roadscapes
- Open fields and farmlands
- Specimen trees
- Aquifers
- Open space

In addition to natural resources, effort should be made to preserve the scenic roadways in Mendham Township that define the character of the community. These roadways, which are characterized by historic homes sited close to narrow winding roads, open fields once farmland, woodlands containing many specimen trees, and historic bridges crossing sparkling trout streams, include the following:

- Washington Valley Road
- Main Street
- Roxiticus Road
- Tempe Wick Road
- Combs Hollow Road
- Woodland Road
- Mosele Road
- Hardscrabble Road
- Pleasant Valley Road
- Calais Road
- Leddell Road
- Union Schoolhouse Road
- Schoolhouse Lane
- Corey Lane
- Route 510
- Old Mill Road
- Ironia Road
- Mt. Pleasant Road
- Mountainside Road
- Tingley Road

RECOMMENDATIONS

Included in the background planning studies for this Element is an inventory of the environmental resources of the Township including geology, topography, surface water, soils, ground water hydrology and resources, floodplains, wetlands, vegetation, wildlife and open space. The background studies provide a basis for decisions by the Planning Board, Environmental Commission and other interested groups involved with land development in the township. Based on these studies, the following recommendations are offered.

TOPOGRAPHY

Mendham Township consists of a land area of approximately 11,000 acres located in the southern portion of the Highlands physiographic province of New Jersey. Much of the Township is characterized by steep slopes, which in many cases adjoin streams, transition areas, wetlands or flood prone areas. Twenty seven percent, or 3100 acres, of the total land area contains slopes over 15%. Inappropriate development of steep slope areas can result in soil instability, erosion, sedimentation, increased stormwater runoff and flooding. Since many of the steep slope areas adjoin surface water and wetlands, protection of these slopes is important to protect the high quality of Mendham Township's streams. Regrading and/or stripping of native or existing vegetation on steep slopes is limited by standards in the Township's Land Use Ordinances. Erosion on steep slopes is especially prevalent where excessive tree removal has taken place.

Ordinances restricting construction and tree removal on steep slopes are essential to protecting the Township's sensitive environment.

AIR

Due to Mendham Township's semi-rural character, air pollution is not yet a problem for the community. There are no industrial or commercial facilities contributing to poor air quality. However, the dimensions and locations of residential roads impact the amount and speed of traffic, community character and air pollution. Several roads are used heavily by commuters, resulting in increased vehicle emissions, air pollution, and health hazards such as ground level ozone, which forms when carbon monoxide combines with oxygen. Of particular concern is Route 510, which is the most direct route to Morristown and surrounding areas where many people are employed.

Tempe Wick Road and Route 510, as well as other roads of historic value in the Township, should remain at their current widths to prevent them from becoming attractive commuter routes. The Township should join with other municipalities to address regional traffic issues.

SURFACE WATER

Mendham Township lies in the headwaters of three major river systems: the Whippany, North Branch of the Raritan, and the Passaic. All the rivers and streams in the Township are classified by the NJDEP as Trout Production or Trout Maintenance. The presence of these high quality waterways necessitates additional diligence on the part of the Township to protect the streams from erosion and runoff and the subsequent sedimentation which can be caused by improper development and deforestation, especially on steep slopes. Streams must also be protected from nonpoint source pollution such as runoff from paved parking lots, roadways and construction sites. Increases in residential development also result in the potential for excessive siltation and increases in chemical lawn maintenance practices which can add to nonpoint source pollution through runoff during storms.

Conservation easements on all streams are required of new subdivisions to protect water quality. Protection should also be extended to existing unprotected stream corridors through voluntary conservation easements from property owners. The Township should develop a program to encourage the maintenance and planting of natural vegetative cover as well as bank stabilization to provide a natural filter for buffering streams. A riparian buffer zone protection strategy will produce important improvement in stream quality. Residents should be educated in environmentally friendly lawn maintenance practices. Existing stormwater outfalls and detention facilities should be retrofitted using more environmentally sound technology that will reduce nonpoint source pollution.

GROUNDWATER

Mendham Township's predominate source of potable water is private wells. There are limited areas in the eastern part of the township that are serviced by public water purveyed/managed by the Southeast Morris County Municipal Utilities Authority, the New Jersey American Water Company, and Randolph Township Municipal Utilities Authority. Recharge areas, such as the permeable soils that overlay upland areas of the Township, and sites where the water table is high, must be protected to ensure that rain and surface water can infiltrate back into the ground to replenish drinking water supplies. Over-development of these sensitive areas reduces the amount of pervious surfaces and results in greater stormwater runoff. Another threat to drinking water occurs when the amount of household pollutants discharged into septic systems exceeds the ability of the infiltrating precipitation and groundwater to remediate and dilute the pollutants. Maintaining and caring for individual septic systems and minimizing the use of hazardous household chemicals will help prevent contamination of the aquifer.

Because Mendham Township's groundwater supply is limited due to underlying geologic formations, it is essential that the Township protect groundwater from degradation and overuse. This can be achieved by requiring that all land developments result in a zero net increase in stormwater runoff; that development densities do not exceed the nitrate dilution and remediation capacity of the overlying soils; and that groundwater recharge rates are not exceeded by groundwater withdrawal. Best Management Practices for stormwater management should be employed, especially those practices that require infiltration of stormwater runoff to recharge the aquifers. The Township should monitor new technologies that protect groundwater quality and be open to new ordinances that will provide this protection.

WETLANDS

Wetlands serve many important functions. They provide flood storage and stream flow attenuation during wet periods and sustain stream flow by releasing stored water during dry periods. They filter out pollutants in stormwater runoff, thus protecting water quality, and they provide habitat for important species of plants and animals. New Jersey's wetlands are found on the U.S. Fish and Wildlife's National Wetlands Inventory aerial maps, county soil surveys and NJDEP's more detailed wetlands maps. A more accurate wetlands delineation can be obtained from specific site visits, when wetlands can be identified by vegetative, soil and hydrologic features. Mendham Township's Surface Water Protection Study, 1997, contains maps of wetlands in the municipality.

NJDEP regulates the disturbance and protection of wetlands. The N. J. Freshwater Wetlands Act defines a wetland as an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation. The state classifies wetlands into three categories: Exceptional wetlands include those which discharge into trout production waters or those which support habitat for threatened or endangered species. Ordinary wetlands include certain isolated wetlands, detention facilities and drainage ditches. Intermediate wetlands are all wetlands that are not defined as exceptional or ordinary. Exceptional and intermediate wetlands must have a buffer, or transition area, within which any disturbance is regulated by the NJDEP. The transition areas for exceptional and intermediate wetlands are 150 feet and 50 feet respectively.

According to Mendham Township's Surface Water Protection Study, 1997, streams in the municipality are either of trout production or trout maintenance quality. Wetlands associated with these streams are

classified by the state as exceptional or intermediate and need to be buffered accordingly. The Surface Water Protection Study recommends a minimum riparian protection zone of 150 feet measured from the top of a stream bank or the edge of a wetland.

Mendham Township should continue to obtain conservation easements on all wetlands and transition areas when land is subdivided. Wetland delineation is required on all plans submitted to the Planning Board, and an L.O.I. is required for all approvals. Permits for construction should also require evidence of the presence or absence of wetlands or transition areas and appropriate permits. All conservation easement boundaries on newly approved sites should be delineated with permanent markers, and a system for monitoring conservation easements should be established.

WILDLIFE AND VEGETATION

Woodlands play an important part in the Township's overall environmental quality, help to define the character of the community, and should be conserved through effective tree protection ordinances. Woodlands also mitigate stormwater runoff and contribute to the quality and quantity of water that recharges the aquifers. The preservation of open space and the protection of stream and forest corridors will assure the maintenance of strong, diverse wildlife communities within the Township.

Land Use Ordinances in Mendham Township should provide for protection of trees against unnecessary destruction, removal, injury and disease, both in new subdivisions and on residential lots. The natural and wooded areas bordering roadways should be preserved through conservation easements. The Township provides standards for landscaping suitable to promote the scenic appeal of roads as well as an approved Plant List. Wildlife management practices should be employed to control the deer population which threatens the health of Township woodlands.

OPEN SPACE

Open space conservation planning should be utilized to preserve the character of Mendham Township, preserve open space, and protect critical environmental areas. Open space should also promote the protection of biological diversity through the maintenance of large contiguous tracts and corridors of forest. In November 1993 the citizens of the Township overwhelmingly approved the Open Space Trust Fund Referendum. With this vote, citizens expressed the recognition that recent development had removed large amounts of private open space in the Township as well as the fact that ever increasing development pressure threatens to take away what remains. Sprawling farms, rolling hills, woodlands, open green areas, and pristine stream corridors represent the many varieties of open space which exist in the Township. These open space properties, balanced with existing land uses, combine to give the Township a rich, rural character, not only reflecting the locale's history but adding to the quality of life enjoyed by its residents.

Open space preservation must be given immediate priority. The use of conservation design concepts for new subdivisions should be encouraged by the Planning Board.

ENVIRONMENTAL RESOURCES

The following sources comprise the environmental resource inventory for Mendham Township:

- The Chesters - The Mendhams, A Natural Resource Inventory and Environmental Study. L. Angela Fowler, Mark Satre, Theodore V. Wall, Department of Landscape Architecture and Regional Planning, University of Pennsylvania, 1976.

- Natural Resource Inventory, Dismal Harmony Park, Mendham Township. Prepared by F.D.U. Environmental Geology Class, 1985.
- Critical Water Resources Study, Connolly Environmental and John Rakos, 1994.
- Critical Water Resources Study, Phase II: Land Use. John Rakos, 1996.
- Surface Water Protection Study. Upper Raritan Watershed Association, 1997.
- Open Space and Historic Sites Inventory. Upper Raritan Watershed Association, 1999.

LANDS RECOMMENDED TO BE RESERVED FOR CONSERVATION PURPOSES

In order to fulfill the goals of this plan element, and of the Master Plan as a whole, the acquisition of property must be a major part of the Township's overall planning strategy. Depending upon the specific circumstances of the specific property, acquisition may be by fee simple acquisition, easements, or development restrictions. The Appendix at the end of this Master Plan contains a list of properties that are recommended to be reserved for conservation purposes. They should be reserved in accordance with C.40:55D-44.

X. COMMUNITY FACILITIES PLAN (Adopted April 1, 2002)

INTRODUCTION

The Municipal Land Use Law provides for an optional community facilities plan element as part of a municipal master plan.

A community facilities plan element showing the existing and proposed location and type of educational or cultural facilities, historic sites, libraries, hospitals, firehouses, police stations and other related facilities including their relation to the surrounding areas.

The overall purpose of this plan is in general:

- To predict trends in public demand and need for community facilities.
- To inventory existing Township community facilities and assess their adequacy or inadequacy.
- To make recommendations for future improvements to Township community facilities.

BACKGROUND AND ASSUMPTIONS

In the 1990s and early 2000s, the Township has undergone a period of sustained growth, increasing enrollment in schools and putting pressure on other municipal facilities. This pressure, which could affect the size and scale of Township facilities, can be at odds with the increased desire among residents, and the new Township Master Plan's overriding goal, to preserve the Township's unique historic/rural character and distinctive *sense of place*.

Presently, the Township is nearing "build-out". A large percentage of the Township has recently been rezoned (2001) reducing the total amount of development that will be permitted. In addition, the Township has an active open space acquisition program in place, which will further reduce future development potential. As a result, future development may not be as important a factor in increasing the need for additional facilities as it has been in the recent past.

Following are the major factors affecting community facilities and the need for them in Mendham Township.

- Volunteers. The Township has traditionally depended on citizen volunteers to provide many of the services on which Township citizens depend. This has enabled the provision of quality services at lower cost. Quality facilities are important to maintaining the current high level of citizen volunteer spirit.
- Inter-municipal services. The Township has for many years cooperated with adjacent municipalities in providing various services to residents. They have ranged from informal sharing of equipment to formal mutual assistance agreements for fire fighting to a combined court. More inter-municipal cooperation and/or consolidation in providing services and facilities may be possible.
- Preserving the Township's character and *sense of place*. The new Township Master Plan's overriding goal is to preserve the Township's unique historic character and distinctive sense of place. Community Facility decisions concerning the location and design of future facilities can affect this goal.

ASSESSMENT OF COMMUNITY FACILITIES

In 1995, the Township Mayor appointed a committee of citizen volunteers (Building Facilities Committee) to analyze the current status of Township buildings, space use of all departments, and future space needs. Since that time, the Township Committee hired architectural firms to conduct two additional analyses, a process that is still ongoing. The following inventory and assessment of Township community facilities is a result of all of these preceding efforts.

Municipal Complex - Cherry Lane and West Main Street (Block 137 Lot 16).

General comments. The Township's municipal complex is located in the small historic crossroads hamlet of Brookside and in many ways is the center of community life and focus of interaction for Mendham Township residents. The three-acre site contains three buildings and five important municipal institutions. The Township Administrative offices and the Mendham Township Library occupy the largest building located on the corner of Cherry Lane and West Main Street. Brookside Engine Company # 1 and the Mendham Township First Aid squad occupy the second largest building which faces Cherry Lane. The Police Department is housed in its own building, the smallest of the three, also fronting on Cherry Lane.

The concentration of municipal activities and interaction in one location near the Post Office, Brookside Community Club, and Community Church contributes to Brookside's traditional role as the center of community life and as such reinforces the Township's traditional character and unique sense of place. These municipal institution lands and the Community Club property are zoned R-10 (single family - ten acres). The size and design of buildings are compatible with the surrounding single-family residential neighborhoods.

These facilities, and surrounding area, are in a State and National registered Brookside Historic District. The Municipal building, Community Club, and Post Office building are important contributing structures in the district. Expansion of facilities in the municipal complex should be compatible with the surrounding residential character and with the historic value of these structures when practical and where appropriate. The impact on the nearby stream should also be considered.

Township Administrative Offices. The administrative office, along with the Mendham Township/Mendham Borough Joint Municipal Court, occupy 5,500-sq. ft. (gross floor area), the entire second floor of the Township Municipal Building. The Mendham Township Library occupies the first floor. The second floor houses the offices of the Township Administration, Municipal Court (joint Court with Mendham Borough), Finance, Tax, Recreation, Building, Planning and Zoning Boards, Board of Health, and Historic Preservation Committee. It also includes a room for public meetings and municipal court sessions. Administrative office space is inadequate for office, storage, and meeting room needs for both the paid administrative staff and for the volunteer committees and boards. Additional space for administrative offices, storage, and meeting rooms should be provided.

Mendham Township Library. The Mendham Township Library is a private, non-profit "Association" library that enjoys substantial volunteer support as well as support from the municipality. It is an important and well-used Township institution. The Library takes up the 5,500-sq. ft. (gross floor area) first floor of the same building that houses the municipal administrative offices. The Library reports the need for more storage, work, and office, space; a

meeting room; and space for children's activities. In addition, space for computers, a study area for senior students and adults, and more stacks is also needed. The Mendham Borough Public Library has also expressed the need for more space and facilities. Both communities have a strong desire for improved library facilities and the two library boards and municipalities are open to consolidation in one larger building, if feasible.

Brookside Engine Company # 1 & Mendham Township First Aid Squad. There are two fire companies in Mendham Township, one located in Brookside and one in Ralston. There is one Mendham Township First Aid Squad with its main office in the Brookside firehouse and an additional station in the Ralston firehouse. Brookside Engine Company No. 1 and first aid headquarters are housed in the 5,299-sq. ft. firehouse, located on Cherry Lane between the Municipal Building and the Police Department. Three of the four bays garage fire trucks and other related equipment. The fourth bay houses one of the two ambulances operated by the Mendham Township First Aid Squad. The second floor of the firehouse contains offices, meeting rooms and a kitchen for both the fire company and first aid squad.

From the standpoint of the fire department, the main deficiency in the firehouse building is the small size of the fire truck bays. Development trends towards very large homes are increasing pressure for larger trucks which can only be accommodated in larger bays. In addition, more storage space for new and more sophisticated equipment is also needed.

The principal deficiency in the Brookside firehouse from the standpoint of the First Aid Squad is the need for a larger office, additional storage space, and new facilities to address health and safety issues. The squad notes the increasing difficulty of attracting volunteer members and requests that the Township consider ways of addressing this issue, including making housing available to volunteers.

Township Police Department. The Police Department is located in the smallest building in the municipal complex site, a converted split-level residence. The Department is basically satisfied with its existing facilities although it would benefit by a detention cell and records space.

Brookside Community Club – East Main Street (Block 139, Lots 1, 3, 9).

The Brookside Community Club is also located in the village of Brookside, across the street from the municipal complex, although access is limited to East Main Street. As such it contributes to the Township's focal point for community interaction and its traditional sense of place. It is a private non-profit (501[c]3) organization open to all Township residents and supported by the Township with services. It is housed in an historic clubhouse building of 2,256-sq. ft. that includes large meeting room, a kitchen and storage. The building, originally a schoolhouse and later as a church, is currently used for a variety of civic and social activities.

The site is large (about 41 acres) and contains two baseball fields and a soccer field. These recreational and athletic facilities are available to all residents as well as local league play. The club supports a variety of inter-generation activities and provides meeting space for community groups. Membership is open to all Township residents for a nominal fee.

Ralston Municipal Complex – Route 510 (Block 107, Lot 23 & 33).

General comments. The Ralston complex is located in the small historic crossroads of Ralston and is a focal point of community activities for the western part of the Township. The 38.39-acre site contains two buildings: the Ralston Fire House and the Old Ralston Firehouse considered by some to be the Ralston Community Center. The site is also used for active

recreation (ball fields) and is proposed to be improved as a community playground. Also in the area are community facilities not owned by the municipality, including the historic Nesbitt Cider Mill and Ralston General Store.

These community facilities contribute to Ralston's traditional role as a focal point for community activities and as such reinforces the Township's traditional character and unique sense of place. These municipal uses are compatible to the single-family residential zone they are located within. A substantial portion of the surrounding area is in a State and National registered Ralston Historic District. Both firehouse buildings currently are architecturally and of a scale that is compatible with the residential and historic character of the area. Expansion to facilities in this area should continue this compatibility.

Ralston Engine Company #1 and First Aid Squad. The Ralston Fire Company and Mendham Township First Aid Squad are in a 6,000-sq. ft. 4-bay building located on the western part of the site on Route 510. Three bays contain fire trucks and one bay contains a first aid ambulance. The second floor contains a meeting room, offices and a kitchen. The main deficiency of the Firehouse is the need for additional space for equipment maintenance and storage. The department also points out the need for use of the land behind the Firehouse for fire fighting drills and training.

Old Ralston Firehouse. This 1,832-sq. ft. building is utilized for storage on the first floor for Public Works, Recreation, and apparatus for the First Aid Squad. The basement, accessed from behind the building is used as a polling place for residents who live on the western side of the Township. It is considered by some as their Community Center accommodating meetings of the Ralston Historical Association, Mendham Garden Club, BSA, and Chess Club.

Ralston General Store – Route 510 (Block 108 Lot 1). This one-story historic building of 787.5-sq. ft. dates from 1786 and is used to exhibit artifacts of the 18th and 19th centuries and for storage. The Ralston Historical Association, a private non-profit (501[c]3) organization, owns and maintains the property and building.

Department of Public Works – Mount Pleasant Road (Block 127 Lot 73).

Public Works includes the Road and the Building and Grounds sections. The Mount Pleasant Road Complex houses both Departments on 17.13 acres. The complex includes a 7,500 sq. ft. main building (offices, equipment maintenance and garage), a 3,000 sq. ft. pole barn garage, and sheds for storage of materials. The Department also uses various small buildings scattered around town for storage of equipment and materials.

The Department has also been impacted by the growth in the Township, particularly the construction of new public roads and detention facilities as part of new subdivision developments. In addition, the Township's open space acquisition program has increased the Department's responsibilities for open space maintenance. The main building is over capacity and some equipment must be stored outside unprotected from the elements. As a result, the Department will need to creatively use its limited resources, and additional facilities may also be needed. The Department complex is located in an R-3 Zone bordered by single family residential dwellings and parkland. The site has additional room for expansion of facilities and is fairly well buffered by surrounding woodlands and recreation facilities.

“Seeing Eye” property – Ironia Road (Block 116, Lot 6).

This property was recently purchased by the Township. It contains a total of 103.5 acres, about 18.5 acres of which is in Randolph Township. It contains a 4,205-sq. ft. three-family dwelling, a 2,266-sq. ft. two-family dwelling, 2,400-sq. ft. garage/office building, three dog kennels totaling 10,149-sq. ft. and seven garages.⁴⁸ A portion of the property will be preserved as part of the Township’s open space system. However, the existing buildings and substantial areas of cleared and usable land may be suitable to conversion to municipal uses. The site is located in a residential zone but most of the existing buildings are isolated from surrounding residential areas by the size of the property and geographic features making them appropriate for a variety of municipal purposes.

Mendham Township Elementary School – West Main Street (Block 137 Lot 48).

The Mendham Township Elementary School houses grades pre-K through 4 and the offices of the Township Board of Education. The total size of the building (after construction) will be 64,820-sq. ft. on 14.37 acres. Construction of a new wing, adding classrooms and a new library, is intended to address the recent growth in elementary age school children in the Township in recent years and to satisfy standards set by the State. The Board of Education has announced that, based upon projections of future enrollment, the school district will need one additional classroom per grade by the year 2004-2005 school year. In addition, they report that important renovation projects, some involving health and safety issues, will also need attention in the next few years. These include: ADA accessibility, leaking roofs, bathroom upgrades, ventilation problems, and lack of storage space.

The Elementary School borders the Brookside Historic District. Within easy walking distance to the center of Brookside, the school is to an extent buffered from adjacent residential neighborhoods by a Township-owned natural area and a pond known as “Brookside Beach.” Future additions and improvements to the school should continue this compatibility with the Historic District and surrounding neighborhoods.

Mendham Township Middle School – Washington Valley Road (Block 127 Lot 152).

The Mendham Township Middle School houses grades 5 through 8. The total size of the building (after construction) will be 41,046-sq. ft. on 21.95 acres. New construction of additional classrooms and a new multipurpose room with kitchen is intended to address the recent growth in middle school age children in the Township in recent years and to satisfy standards set by the State. As with the Elementary School, the Board of Education has announced that, based upon projections of future enrollment, the school district will need one additional classroom per grade by the year 2004-2005 school year. Also as with the Elementary School, they report that important renovation/repair projects have been deferred and have to be addressed within the next few years. These include: ADA accessibility, bathrooms, deteriorating façade, science lab safety features and ventilation.

The Middle School borders the Washington Valley Historic District. About 1.5 miles from the center of Brookside and without sidewalks in the area, the school is to an extent buffered from adjacent residential neighborhoods by the large size of the property and its location set back from the public road. Further development of the site will be limited by wetlands and drainage problems. Future additions and improvements to the school should continue the compatibility with the Historic District and surrounding neighborhoods.

⁴⁸ Report by Krauser, Welsh & Cirz, Inc., Real Estate Advisory Services, December, 1998.

West Morris Regional High School (locations: West Morris Mendham -- Mendham Borough, West Morris Central -- Washington Township.

There are currently approximately 2,200 students in the West Morris Regional High School system. Representatives of the Board of Education have reported that both schools are overcrowded. In the short term, there are plans to make modest additions to both school buildings, which will be funded out of the Regional Board of Education's capital savings, operating budget, and state aid. However, since it is expected that school enrollment will increase by 800 to 1,000 within the next ten years, the Board of Education anticipates the need for either an entirely new school at a new location or building significant additions to both of the existing schools.

COMMUNITY FACILITY RECOMMENDATIONS

The overall conclusion of this plan is that improvement to community facilities, a desire expressed by many residents, appears to be justified. However, this should be balanced with the fundamental goals of this Master Plan, most particularly, to maintain the Township's historic/rural character and traditional sense of place. Following are additional specific recommendations concerning community facilities.

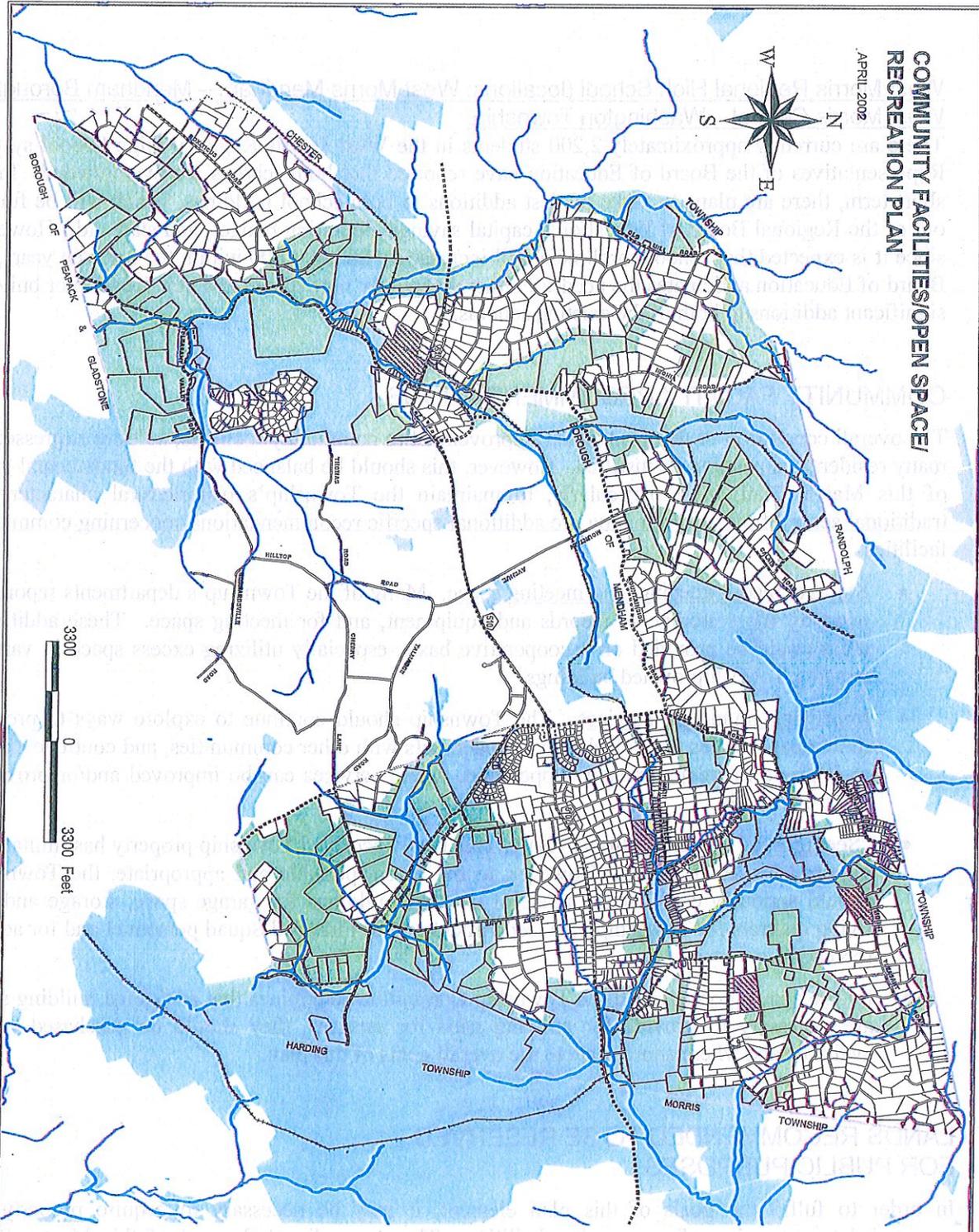
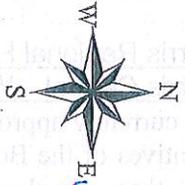
- Storage, record keeping, and meeting space. Many of the Township's departments report the need for more storage of records and equipment, and for meeting space. These additional areas could be provided on a cooperative basis, especially utilizing excess space in various existing Township-owned buildings.
- Improving municipal services. The Township should continue to explore ways to provide municipal services through shared arrangements with other communities, and continue efforts to improve interdepartmental cooperation, where services can be improved and/or provided more efficiently.
- "Seeing Eye" property -- Ironia Road. This newly acquired Township property has limitations imposed by Green Acres. However, to the extent possible and appropriate, the Township should seriously consider the reuse of existing buildings for garage space, storage and for living quarters for Township Fire Department and/or First Aid Squad personnel and for active recreation.
- Future acquisition sites. If the Township Committee determines that additional building sites are necessary to provide for growing need for services, they should be purchased when available and where appropriate to the overall goals of this plan.

LANDS RECOMMENDED TO BE RESERVED FOR PUBLIC PURPOSES

In order to fulfill the goals of this plan element, it may be necessary to acquire property to accommodate expansion of community facilities. The Appendix at the end of this Master Plan contains a list of properties that are recommended to be reserved for public purposes. They should be reserved in accordance with C.40:55D-44.

COMMUNITY FACILITIES/OPEN SPACE/ RECREATION PLAN

APRIL 2002



- Legend**
- Parks Path
 - Scenic Roads
 - Streams
 - Athletic Fields
 - Existing Open Spaces
 - Active Recreation Areas
 - Community Facilities
 - Gateway Vision

Township of Menhaden
Morris County, New Jersey
Community Facilities/Open Space/
Recreation Plan
April 2002



XI. OPEN SPACE PLAN (Adopted April 1, 2002)

INTRODUCTION

Open space preservation is a central part of Mendham Township's overall planning strategy to preserve the high quality of the natural environment and the high quality of life in the Township, over the long term. The Township's open spaces are vital to its rural, small community character, valued by its residents as voiced at numerous public hearings and admired by its visitors. These attributes are important not only to the Township's citizens but also to the region and State as a whole. The purpose of this plan is to:

Explain the importance of open space preservation to the Township's (and State's) overall planning goals

- Recommend an overall vision for future open space preservation
- Set specific objectives for open space preservation
- Inventory existing preserved open space and assess future open space needs
- Make recommendations regarding future open space acquisitions

The following is based on a plan that was developed by the Mendham Township Open Space Trust Committee in 2001.

OVERVIEW AND BACKGROUND

Relationship of Open Space Preservation to the Township's, and State's, Planning Goals.

The Land Use Plan element has set forth the assumptions, principals, and objectives that should guide future land use in the Township. In particular, it recommends limits on development to meet the overall environmental and planning goals of the Township and of the New Jersey State Development and Redevelopment Plan. These planning goals cannot be met without a broad-based open space preservation program.

All of Mendham Township is designated as Environmentally Sensitive in the State Plan because of the critical water resources located within the Township. These resources are important to the welfare of current and future residents of the Township, region, and State. The Critical Water Resources Study⁴⁹, prepared for the Township Environmental Commission, concludes that future development in the Township must be limited in order to avoid substantial degradation to these critical ground and surface water resources.

The Land Use Plan recommends reasonable changes to the Township's zone plan to limit development consistent with the findings of the Study. However, zoning changes will only partially meet the recommendations in the Study. As a result, the Land Use Plan also recommends an open space preservation program as a necessary part of the Township's land use planning. A substantial portion of Mendham Township's remaining privately owned open space will need to be preserved in order to meet Township and State goals.

⁴⁹ Critical Water Resources Study, Township of Mendham, New Jersey. Connolly Environmental, Inc., 1994.

Public Support for Open Space Preservation

In recent years, there has been a heightened public awareness of the need to preserve open space throughout New Jersey. This has been particularly true in Mendham Township where a dramatic increase in land values has promoted the development of land widely considered unsuitable for development. The rapid diminishment of large tracts of such land, much containing features of particular value to the public, has convinced residents that the Township's natural and historic heritage is vanishing. The public also recognizes the benefit of open space preservation to maintaining property values and reducing the need for expensive improvements to community facilities resulting from increased development. These trends have resulted in substantial support for open space preservation in the Township. This public support has been expressed by the following means:

- Approval by Mendham Township residents of an Open Space Trust Referendum in 1993
- Establishment of the Open Space Trust Committee in 1995
- Approval of an open space tax levy in 1995 to fund the "Open Space Trust Fund"
- Approval by Mendham Township residents of a second Open Space Trust Referendum in 1998.
- Approval by Mendham Township residents of a third Open Space Trust Referendum in 2001.
- Public expressions at numerous public meetings and hearings

VISION FOR OPEN SPACE PRESERVATION IN MENDHAM TOWNSHIP

Mendham Township has substantial areas of preserved open space. They are, however, mostly scattered and isolated from each other, separated by critical, but as yet unprotected, land. The Township's overall vision for open space preservation should be to interconnect these scattered open space areas by means of the acquisition of currently unprotected strategic properties, through purchase or easement, to form *greenways*. In other words, connecting the currently scattered pattern of open space into a more cohesive, coherent, and linked network of protected recreational, natural, historic, and scenic resources.

Mendham Township's *greenway* vision is defined as follows:

A linear corridor, or wider area, of permanently preserved public and private land linking parks, natural reserves, and historic sites with each other and with various parts of the Township. Trails often coincide with greenways, but parts of greenways may not permit through public access.

Such a *greenway* vision will result in an open space pattern that is more supportive of the Township's overall Master Plan goals. Open spaces will be more usable for recreational purposes such as hiking; but most importantly, they will be more beneficial to natural ecological systems and more effective in retaining the Township's rural/historic character.

The basic structure of the proposed *greenway* is shown on the following Open Space Map and is intended to augment existing preserves and link them to each other. Realizing this *greenway* will enhance the quality of life for Township residents and those of neighboring communities by maintaining the Township's character for current and future generations.

OPEN SPACE PRESERVATION GOALS AND OBJECTIVES AND THEIR UNDERLYING ASSUMPTIONS

The overall goal of open space preservation in Mendham Township should be to support the overall goals of the Land Use Plan and of the State Development and Redevelopment Plan for Environmentally Sensitive Areas. Open space acquisition can do this by emphasizing the acquisition of land containing or impacting high-quality environmentally sensitive wetlands, streams, and aquifers, natural and forested areas, and by acquiring lands containing features important to the Township's rural/historic character.

The following should be the objectives of open space preservation, together with their underlying assumptions, in Mendham Township:

- Acquisition of open space. Properties that address the following objectives should be acquired, as they become available. Acquisition can be by fee simple acquisition, easements or development restrictions depending upon the specific circumstances of the specific property and its anticipated use.
- Linking open space areas. Future open space acquisitions should support the *greenway* vision of this plan wherever possible.
- Ground water protection. Over-development degrades the water quality of groundwater aquifers upon which Township residents, and the residents of other communities, rely. Open space acquisition in Mendham Township should seek to limit development consistent with the findings of the Critical Water Resources Study⁵⁰ and with the objectives of the Conservation Plan element of this Master Plan.
- Surface water protection. Development in the headwaters of high-quality streams degrades water quality and is detrimental to trout and other wildlife and to downstream communities that rely on these water resources. These areas should be preserved through open space acquisition wherever possible.
- Critical habitats protection. The Township contains substantial areas that are habitats for fragile, rare, and native vegetation and animal life. These areas should be preserved through open space acquisition wherever possible.
- Enhancing passive recreational opportunities. The State Development and Redevelopment Plan emphasizes the importance of environmentally sensitive areas to meeting the needs for passive recreational opportunities, such as hiking, nature study, photography, cross-country skiing, and sledding. These areas should be preserved through open space acquisition wherever possible.
- Enhancing active recreational opportunities. The Recreation Plan element describes active recreational facilities and objectives in the Township. Future open space acquisition should target areas that might enhance Township recreational opportunities in accordance with the objectives of that Plan.
- Preserving historic features and sites. The Historic Preservation element contains a summary of the historic resources in the Township and their historic significance. These areas should be preserved through open space acquisition wherever possible.

⁵⁰ Ibid

- Preserving enjoyable views and scenery. Mendham Township is valued by residents and visitors for its enjoyable roadscapes and vistas. These areas should be preserved through open space acquisition wherever possible.
- Maintaining the rural atmosphere and character of the Township. The Township's rural atmosphere and character has been admired by residents and visitors for generations. Areas that contribute to that character should be preserved through open space acquisition wherever possible.
- Flood prevention. Development upstream of flood prone areas can increase the frequency and severity of flooding. These areas should be preserved through open space acquisition wherever possible.
- Maintaining land values within the Township. For most families in the Township, the value of their home and property is their most important asset. Open space preservation will help to maintain the value of that asset.

INVENTORY OF PRESERVED OPEN SPACE

Mendham Township has many properties comprising hundreds of acres of open space for many purposes, including passive recreation, historic and natural resource protection, and scenic view-shed protection. Currently, Mendham Township has approximately 7.5% of its total acreage as Township open space (Township owned parklands, natural areas and farmland preservation). In addition, about 21% of Mendham Township is protected as Federal or County parklands, or by private non-profits, (such as the Brookside Community Club). The following parcels of land have been dedicated as open space.⁵¹ Their locations are shown on the map following the Community Facilities Plan entitled Community Facilities, Open Space and Recreation Map.

Township Owned or Protected Vacant/Park Lands

<u>Block</u>	<u>Lot</u>	<u>Acres</u>	
137	49	4.38	Brookside Beach (Municipal Pond)
107	19, 33, 35	47.62	Ralston Recreation and Natural Area
107	10, 67	68.1	Burnett Brook Natural Area (incl. 11.9 acres in Chester Twp.)
109	35	2.00	Patriots Path (ATT easement)
109	27	0.64	Vacant Land
112	48	0.08	Wills Cemetery (Oak Knoll)
113	4	48.65	Meadowood Park
116	2	0.90	Open Space
116	6	103.5	Seeing Eye (includes 18.5 acres in Randolph Twp.)
116	52	58.04	India Brook Natural Area
116	7, 9, 01	207.39	Buttermilk Falls Natural Area
118	9	(total below)	Clyde Potts Reservoir
119	13	573.95	Clyde Potts Reservoir
127	19, 20, 71,	(total below)	Dismal Harmony Natural Area
127	179	146.02	Dismal Harmony Natural Area
130	7.02	45.83	Cold Hill Reserve
131	23	(total below)	Patriots Path

⁵¹ The Open Space List was compiled by Sarah Dean Link for the Environmental Commission's OES grant project: Open Space and Historic Sites Inventory, revised October 2001. Acreage is taken from the Township tax map. Where parcels are too small to show the acreage on the tax map, the figure is taken from the Tax Assessor's Book or John Rakos' Inventory of September 1997.

137	50	6.33	Patriots Path
137	47	5.48	Open Space
139	30, 51	4.04	Open Space
146	11	73.65	Buck Hill (Dos Passos)
146	4	51.19	Tempe Wick Reserve

U.S. Government

<u>Block</u>	<u>Lot</u>	<u>Acres</u>	
149	8	22.00	Jockey Hollow National Park

Morris County

<u>Block</u>	<u>Lot</u>	<u>Acres</u>	
107	64	3.87	Mount Paul Memorial Park
127	171	198.00	Lewis Morris Park
139	15, 20, 41, 42, 50, 52	29.68	Morris County Park Commission
141	34, 35, 37, 38, 39, 40, 41	156.12	Morris County Park Commission
142	29, 63, 66, 68, 70	442.62	Lewis Morris Park

Protected Private and Institutional Open Space

<u>Block</u>	<u>Lot</u>	<u>Acres</u>	
139	1, 3, 9	40.91	Brookside Community Club
149	6, 7	(total below)	Girl Scouts of America
148	4	148.38	Girl Scouts of America
108	1	.10	Ralston Historical Society
146	10, 12	16.00	N.J. Conservation Foundation
104	23, 26	298.15	Schiff Nature Preserve
107	44	57.30	Farmland Preservation Program
104.02	18	44.55	Brookrace Homeowners Association
131	51.01	16.08	Pitney Farm Estates Homeowners Association
145.04	42	(total below)	Drakewick Homeowners Association
145.02	26	13.40	Drakewick Homeowners Association

Other Private and Institutional Open Space⁵²

<u>Block</u>	<u>Lot</u>	<u>Acres</u>	
118	74	6.80	New Jersey American Water Co.
128	3, 4	1.38	Brookside Community Church
127	21	1.00	Hope Bible Mission
100	17	131.68	Sisters of Saint John the Baptist
104	22	33.00	Community of Saint John the Baptist
142	56	(total below)	Mendham Golf and Tennis Club
144	24	164.08	Mendham Golf and Tennis Club

Township Owned Open Space Parks and Protected Lands	1,447.79
U.S. Government	22.00
Morris County	830.29
Protected Private and Institutional Open Space	634.87

⁵² These areas are not necessarily permanently preserved.

Other Private and Institutional Open Space	337.94
Total	3,272.89
Percent of Township's total area	28.6%

ASSESSMENT OF FUTURE OPEN SPACE NEEDS

The Open Space Trust Committee has tabulated existing unprotected open space and evaluated each property based on its proximity to preserved land or potential open space, and its environmental, recreational, and historic importance. The properties were then ranked, incorporated into an Open Space Report⁵³, and presented to the Township Committee in 2001. The Report provides the Township Committee with a resource for making future open space acquisition decisions.

Past efforts in Mendham Township have focused on acquiring available individual land parcels, which has resulted in acquisitions of significant open space and associated benefits. The next stage of open space acquisition should be directed toward achieving the strategic objective of protecting land that will result in larger, contiguous areas of open space and connected *greenways*. The benefits of such a connected open space arrangement are:

- The creation of areas more beneficial to ecological systems and wildlife habitats.
- Areas more usable for human recreational activities.
- An open space pattern that is more attractive and supportive of residents' goals to preserve the Township's character.

While individual parcels of unusually high merit should still be protected, the longer-term emphasis should be to protect, by acquisition or other means, key properties that support the overall *greenway* vision, rather than disconnected, individual properties. A map-based vision for this *greenway* is shown on the attached Open Space Map. This is a schematic vision of open space preservation, rather than a boundary line. It shows preserved open space, linked by high-priority unprotected open space that should be protected through acquisition or conservation easements.

The map also shows *greenway* "connectors" and "enhancements." "Connectors" are generally linear corridors (roads and streams) of significant natural, historic, or scenic quality. "Enhancements" are mainly clusters of natural resources in the backlands of Mendham Township residents' properties. The Township should encourage the protection of these enhancement areas by educating the landowners, by encouraging multiple-landowner management agreements, or by accepting conservation easement donations, depending on landowner interest and willingness. Together, these three elements (open space, connectors, and enhancements) set forth a vision that will nourish and preserve the Township's character and its many resources.

FUNDING FOR OPEN SPACE PRESERVATION

Numerous sources of funding are available for open space acquisition in Mendham Township. However, since the costs of fee-simple purchases of land can be prohibitive or take time to arrange, alternative means of open space preservation should also be considered as an integral part of this program. Alternatives include obtaining conservation easements, the purchase of development rights,

⁵³ Open Space Trust Committee Report. Open Space Trust Committee, Mendham Township, Morris County, New Jersey, 4/19/2001.

and facilitation of open space acquisitions undertaken by private/third-party nonprofit groups that meet the goals of this plan.

Sources of Open Space funding include:

Green Acres Funding
from the New Jersey Department of Environmental Protection

The Green Acres Program funds local land protection projects, either by providing low interest loans or a grant in connection with a "match" of local money. The source of funds for the local match may be generated through outright appropriations from the municipal budget, Municipal or County Open Space Trust Funds, bargain sales from landowners, or other sources.

Local and County
Open Space Trust Funds

In recent years, the County of Morris and numerous communities in the region have determined that it is in the public interest to set aside dedicated funds for the acquisition of permanent open space. In November 1993, Mendham Township voters approved a referendum establishing an Open Space Trust Fund to finance the acquisition of land and easements for the preservation of open space within the Township. Funds are raised through a dedicated tax on real property at the rate of \$.04/\$100 assessed property valuation. Property owners are also presently (2002) taxed \$.03/\$100 for the Morris County Open Space Trust Fund which provides funds for acquisitions of open space by the County. The Township and County should consider increasing their respective taxes so that we can leverage additional dollars from other sources. Additionally, the Township should investigate progressive financing options to fully leverage its Open Space Trust Fund.

Farmland Preservation Program

The Farmland Preservation program funds farmland preservation projects by 1) acquiring farms, purchasing development rights, or securing easements on farms directly from landowners 2) funding farm or easement acquisition through the County Agriculture Development Board (CADB) 3) providing Planning Incentive Grants to counties or municipalities that are proactively planning farmland preservation areas and reaching out to landowners or 4) through a 50% matching grants program to nonprofits that acquire farms or easement on farms.

Land and Water
Conservation Funding

This is Federal funding earmarked for New Jersey that is being distributed through the Green Acres program.

Creative Financing

One of the largest funders of preservation projects is landowners. Landowners are often willing to give bargain sales or donations of land, conservation easements, or life estates to nonprofits and governments, and in so doing can reap income, inheritance, and capital gains tax benefits. Such contributions by landowners can also satisfy Mendham Township's matching requirement when using public funds such as county or state dollars. Landowner contributions can also be used by nonprofits working in partnership with the Township, which need to match public dollars at a 1:1 ratio. The Township can suggest that landowners investigate financial instruments like charitable remainder trusts, annuities and life insurance policies to make a preservation deal as lucrative as sales for development. Another seldom used tool is the tax-free exchange - the Township can exchange land

appropriate for development with land that is a preservation target, allowing the landowner to reduce capital gains tax⁵⁴.

FUTURE OPEN SPACE ACQUISITIONS RECOMMENDATIONS

Mendham Township should increase its open space preservation activities in order to support the Township's, and State's, overall planning goals for environmentally sensitive areas. That goal is to limit development in accordance with the capacity of natural systems to accommodate development without substantial degradation of those systems. The Township and County Open Space Trust Funds should be increased, diverse funding sources should be pursued, residents should be educated on open space issues and opportunities (including donations of land and money), and an intensive landowner outreach program should be implemented.

Mendham Township should continue to implement a multi-faceted preservation strategy that includes preserving *greenway* components through:

- Fee-simple acquisition
- Life estates
- Rights of first refusal
- Conservation easements
- Historic easements
- Historic district designation
- Deed restrictions
- Management agreements
- Pathway easements
- Alternate zoning techniques that preserve large open space areas

The Appendix at the end of this Master Plan contains a list of properties that are recommended for acquisition. They should be reserved in accordance with C.40:55D-44.

OUTREACH PROGRAM

The Mendham Township Open Space Trust Committee is both a central resource and an advocate of open space preservation in the Township. It supports an active outreach or awareness program aimed at helping residents, and particularly property owners, to understand the nature and benefits of the open space program. The outreach program should also be used to encourage additional land donations and monetary contributions for land protection through the following means.

- General town-wide mailings
- Personal meetings, in cases where Township representatives have personal relationships with landowners of high priority properties
- Targeted mailings to landowners of priority parcels
- Workshops and social gatherings for landowners interested in preserving their land

⁵⁴ While tax advice should not be given to landowners, it is appropriate to suggest that these benefits may apply to them and they should explore them with a professional.

LANDS RECOMMENDED TO BE RESERVED FOR OPEN SPACE PURPOSES

In order to fulfill the goals of this plan element, the reservation of property for open space purposes must be a major part of the Township's overall planning strategy. Depending upon the specific circumstances of the specific property and its anticipated use, reservation may be by fee simple acquisition, easements, or development restrictions. The Appendix at the end of this Master Plan contains a list of properties that are recommended to be reserved for open space purposes. They should be reserved in accordance with C.40:55D-44.

XII. RECREATION PLAN (Adopted April 1, 2002)

INTRODUCTION

The Municipal Land Use Law provides for a recreation plan element as part of a municipal master plan.

“A recreation plan element showing a comprehensive system of areas and public sites for recreation.”

It is the purpose of this plan to generally:

- Describe trends in public demand and need for recreation facilities and sites in Mendham Township.
- Inventory existing Township recreation facilities and sites and assess their adequacy or inadequacy.
- Make recommendations for future improvements and additions to Township recreation facilities and sites.

BACKGROUND AND ASSUMPTIONS

In the 1990s and early 2000s, the Township underwent a period of sustained growth, increasing pressure on municipal recreational facilities. This pressure, which could affect the size and scale of Township recreational facilities, can be at odds with the increased desire among residents, and the new Township Master Plan’s overriding goal, to preserve the Township’s unique historic/rural character and distinctive sense of place.

Presently, the Township is nearing “build-out”. A large percentage of the Township has recently been rezoned (2001) reducing the total amount of development that will be permitted. In addition, the Township has an active open space acquisition program in place, which will further reduce future development potential. As a result, future development may not be as important a factor in increasing the need for additional facilities as it has been in the recent past.

Following are the major factors affecting recreational facilities and the need for them in Mendham Township.

- Volunteers. The Township has traditionally depended on citizen volunteers to provide recreational services for the Township. This has enabled the provision of quality recreational services at lower cost. Quality recreational facilities are necessary in order to maintain a high level of citizen volunteer involvement.
- Inter-municipal services. The Township has for many years cooperated with adjacent municipalities in providing various recreation services to residents. This includes Mendham Borough for all sports programs, Harding (basketball), and the Chesters (soccer, lacrosse, basketball). In many cases, this has had the benefit of increased efficiency, but at the cost of increased scale. There are other future options that are potentially appropriate to a regional approach for which interest has been expressed. They include, for example, a par 3 golf course and a community center/indoor gym. More inter-municipal cooperation and/or consolidation in providing these services and facilities are possible and should be actively pursued.

- Growth in population of children. The Township has undergone a period of sustained growth that has put more demands on recreational facilities. Other factors contributing to the demand are the popularity of the youth soccer program and a growing preference for organized recreation.
- Higher percentage of working households. Households increasingly have both parents working in full time occupations. This has increased the need for organized and supervised sporting activities.
- Increased concern for security. Increased development in the Township has created a perception among many parents that organized sporting activities with adult supervision is more necessary than in the past.
- Increased participation of females in active sports. Girls and women are increasingly participating in active sports. This has put more pressure on the use of existing facilities.
- Need for improved quality of playing fields. While the Recreation Department has added facilities at Mount Pleasant (tennis courts, fields) and new fields in Ralston, significant interest remains for improving the quality of playing fields in the Township in the short-term and providing additional playing fields in years to come.
- Need for improvements to Brookside Beach. Interest has also been expressed in making improvements to the facilities at Brookside Beach.
- Preserving the Township's character and sense of place. The new Township Master Plan's overriding goal is to preserve the Township's unique historic character and distinctive sense of place. Decisions concerning the location and design of future recreation facilities should generally support this goal.
- Open Space Trust Fund. The Mendham Township Trust Fund provides a potential source of funding for future acquisition of land for a variety of recreational purposes. Voters more recently have voted to increase the levy to provide additional funds.
- Playgrounds. The recent substantial growth in the number of younger children in Mendham Township has increased the need to upgrade the existing Brookside Beach Playground and for additional playground facilities appropriate for younger children.

ASSESSMENT OF TOWNSHIP RECREATION FACILITIES AND SITES

The following is an inventory of existing Township recreation sites/facilities, an assessment of their adequacy to meet community needs and, where appropriate, general recommendations for improvement. The location of these facilities is shown on the map entitled Community Facilities, Open Space and Recreation.

Brookside Area -- Cherry Lane and West Main Street

The Township's municipal complex is located in the small historic crossroads village of Brookside. Close by are the post office, community club, community church, and Brookside Beach. These institutions and facilities contribute to Brookside's role as the center of community life and focus of interaction for local residents and as such they reinforce the Township's traditional character and unique sense of place. Following are the important recreational facilities located in the Brookside area.

Brookside Community Club – East Main Street (Block 139, Lots 1, 3, 9)

The Brookside Community Club is located in the village of Brookside, across the street from the municipal complex, with access from East Main Street. It contributes to the Township's focal point for community interaction and its traditional sense of place. It is a non-profit, privately funded organization supported by the Township with services. It is housed in an historic clubhouse building of 2,000 sq. ft. that includes meeting room, kitchen and storage and is used for a variety of civic activities. The building originally served as a schoolhouse and church for Brookside. As a result of a new management philosophy, usage has grown dramatically in recent years.

The site is large (about 41 acres) and contains two baseball fields, one of which can also serve as a soccer field. The club supports a variety of multi-generation community activities including dances and meeting space for community groups and is open to all Township residents for a nominal fee. It also provides recreational and athletic facilities to all residents.

Brookside Beach – West Main Street (Block 137 Lot 49)

Brookside Beach is located on a 4.4-acre municipal site adjacent to the Township Elementary School. It provides a one-acre pond, beach, snack bar, guard stand, picnic area, playground, and rest room facilities. The Beach serves as a summer gathering place for the Township and neighboring communities, hosting cookouts, swim lessons and swim team, beach oriented recreational activities and ice skating in the winter.

Ralston Complex – Mendham Road West (Block 107, Lots 19, 23, 33, & 35)

The Ralston complex is located in the small historic crossroads hamlet of Ralston and is a focal point of community life for the western part of the Township. The 48.6-acre site contains two buildings: the Ralston Fire House and the Old Ralston Firehouse often used as a community center. The complex is used for active recreation (ball fields), provides short walking trails, and offers access to an adjacent section of Patriots' Path that allows horseback riding, bicycling, and hiking.

These municipal activities contribute to Ralston's traditional role as a focal point for community life and as such reinforces the Township's traditional character and unique sense of place. These municipal uses are compatible with the single-family residential zone they are located within. A substantial portion of the surrounding area is in a State and National Registered Historic District. Both buildings currently are architecturally and of a scale that is compatible with the residential and historic character of the area. Expansion to facilities in this area should continue this compatibility.

The Ralston complex includes two active recreation sites: Wysong Park and Ralston Park. Wysong Park includes a soccer/Little League baseball area, a soccer practice field that will be a playground site in 2002, and parking for 30-40 cars. Ralston Park, opened in 2001, includes a championship Little League baseball field, two large playing fields for soccer and lacrosse, and parking for 50-70 cars. The two sites are connected by a short trail.

Mount Pleasant Park – Mount Pleasant Road (Block 127, Lot 73)

This recreation area is on a 17-acre site that includes the Public Works complex. It provides a small Little League field, two tennis courts and parking for about 30 cars.

Mendham Township Elementary School – West Main Street (Block 137 Lot 48)

The Mendham Township Elementary School and associated recreational facilities are located off of West Main Street on a 14-acre site. The Elementary School-related recreational facilities include a Little League baseball field, an all-purpose field used mainly for soccer, a playground and a gymnasium.

Mendham Township Middle School – Washington Valley Road (Block 127 Lot 152)

The Mendham Township Middle School and associated recreational facilities are located off of Washington Valley Road on a 22-acre site. The Middle School-related recreational facilities include an all purpose field, a regulation baseball field, a shared softball field/all purpose field used for softball in the spring/summer and soccer in the fall, a gymnasium and an auditorium.

Mendham Township Parklands

There are nine Township parks open to the public. Six of the parks have blazed trail systems for hiking. They offer some of the most scenic views of Mendham Township including trout streams, wetlands and ponds, farm fields, and steep forested areas. The trail terrain varies from the flat areas of Burnett Brook and Tempe Wick to steep hills and stream crossings at Buttermilk Falls and India Brook. Many of the trails are suitable for cross-country skiing and snowshoeing, especially those at Buttermilk Falls Natural Area. Meadowood Park offers family picnicking around the old summer camp fireplace, as well as a scenic trail along Burnett Brook. Trail maps are available at the Township Municipal Building and Library and will be posted at most of the park entrances. There are a total of 54 miles of trails within the Township, and trails are in the planning stage for the remaining three parks. Following are the Township parks and their locations:

Buttermilk Falls Natural Area – Calais Road and Combs Hollow Road

India Brook Natural Area – Mountainside Road

Dismal Harmony Natural Area – East Main Street

Burnett Brook Natural Area – Mendham Road West

Meadowood Park – Old Mill Road

Cold Hill Reserve – Robert Road

Seeing Eye – Ironia Road

Tempe Wick Reserve – Tempe Wick Road

Ralston Recreation and Natural Area – Mendham Road West

Patriots' Path

Patriots' Path was developed by the Morris County Park Commission and extends over 20 miles across Morris County. It follows a six-mile east-west route from Lewis Morris Park near Sunrise Lake on the Mendham/Morris Township border through Mendham Borough to the Ralston Recreation area. Much of the route through the Mendhams follows the right-of way of the Rockaway Valley Railroad, abandoned in 1913, and for the most part is hard-packed gravel on gentle slopes. This trail is open to walking, bicycling, horseback riding and cross-country skiing.

County and National Parks

Sections of Morris County's Lewis Morris Park and the Jockey Hollow area of Morristown National Historic Park lie within Mendham Township. They offer an extensive network of trails, available for walkers and, in some areas of Lewis Morris Park, cyclists and horseback riders. The trails in winter offer opportunities for snowshoeing and cross-country skiing. Sunrise Lake, in Lewis Morris Park, is open for swimming in the summer and ice-skating when weather permits in the winter.

Schiff Nature Preserve – Pleasant Valley Road

Schiff Nature Preserve occupies a portion of a former Boy Scouts of America National Training Center. Some 298 acres of woodland and meadow are owned and managed by the Schiff Natural Lands Trust. Many of the former Boy Scout trails remain, providing walks of varying degrees of difficulty.

RECREATION FACILITIES RECOMMENDATIONS

The overall conclusion of this plan is that improvement to recreation and to recreational facilities in Mendham Township appears to be justified. Following are recommendations concerning specific recreational needs and facilities in the Township

General Recommendations

The Recreation Commission sees both a need and interest in the following types of facilities given the changing community. The Township should consider providing facilities meeting these interests and needs.

- Upgrade in current playing fields – in conjunction with the Board of Education and Community Club.
- Continue regional planning and cooperation with Mendham Borough and the Chesters, especially for recreational facilities that require extensive infrastructure. Possible future options could include, for example, a par 3 golf course and a community center/indoor gym/swimming pool to meet winter needs.
- Playgrounds to meet the needs of a growing population of children.

Recommendation Concerning Existing Township Recreation Sites and Facilities

While the number of playing fields appears to cover the current demands of the community, there is a need for continual maintenance and improvement. Improvement is particularly necessary at the Board of Education facilities at the Elementary and Middle Schools.

The Brookside Beach has become a popular summer spot and would benefit by additional landscaping and summer facilities (volleyball, spectator stands for swim meets). In addition, the playground facilities should be upgraded.

The Meadowood Park, Seeing Eye and Tempe Wick Reserve locations provide good options for future recreation sites. All should be considered for a variety of recreational activities. Stirling Pond in Burnett Brook Natural Area should be considered for winter ice-skating.

LANDS RECOMMENDED TO BE RESEVED FOR RECREATIONAL PURPOSES

In order to fulfill the goals of this plan element, property may need to be acquired for recreational purposes. The Appendix at the end of this Master Plan contains a list of properties that are recommended for acquisition. They should be reserved in accordance with C.40:55D-44.

XIII. STORMWATER MANAGEMENT PLAN

(ADOPTED 2-6-06)

INTRODUCTION

This Municipal Stormwater Management Plan (MSWMP) documents the strategy for Mendham Township to address stormwater-related impacts. The creation of this plan is required by N.J.A.C. 7:14A-25 Municipal Stormwater Regulations. It contains all of the required elements described in N.J.A.C. 7:8 Stormwater Management Rules. The plan addresses groundwater recharge, stormwater quantity, and stormwater quality impacts by incorporating stormwater design and performance standards for new major development, defined as projects that disturb one or more acre of land. These standards are intended to minimize the adverse impact of stormwater runoff on water quality and water quantity and the loss of groundwater recharge that provides baseflow in receiving water bodies. The plan describes long-term operation and maintenance measures for existing and future stormwater facilities.

A "build-out" analysis has been included in this plan based upon existing zoning and land available for development in accordance with the Stormwater Management Rules. The plan also addresses the review and update of existing ordinances, the Township Master Plan, and other planning documents to allow for project designs that include low impact development techniques. The final component is a mitigation strategy for when a variance or exemption of the design and performance standards is sought. As part of the mitigation section, specific stormwater management measures are identified to lessen the impact of existing development.

GOALS

The goals of this MSWMP are to:

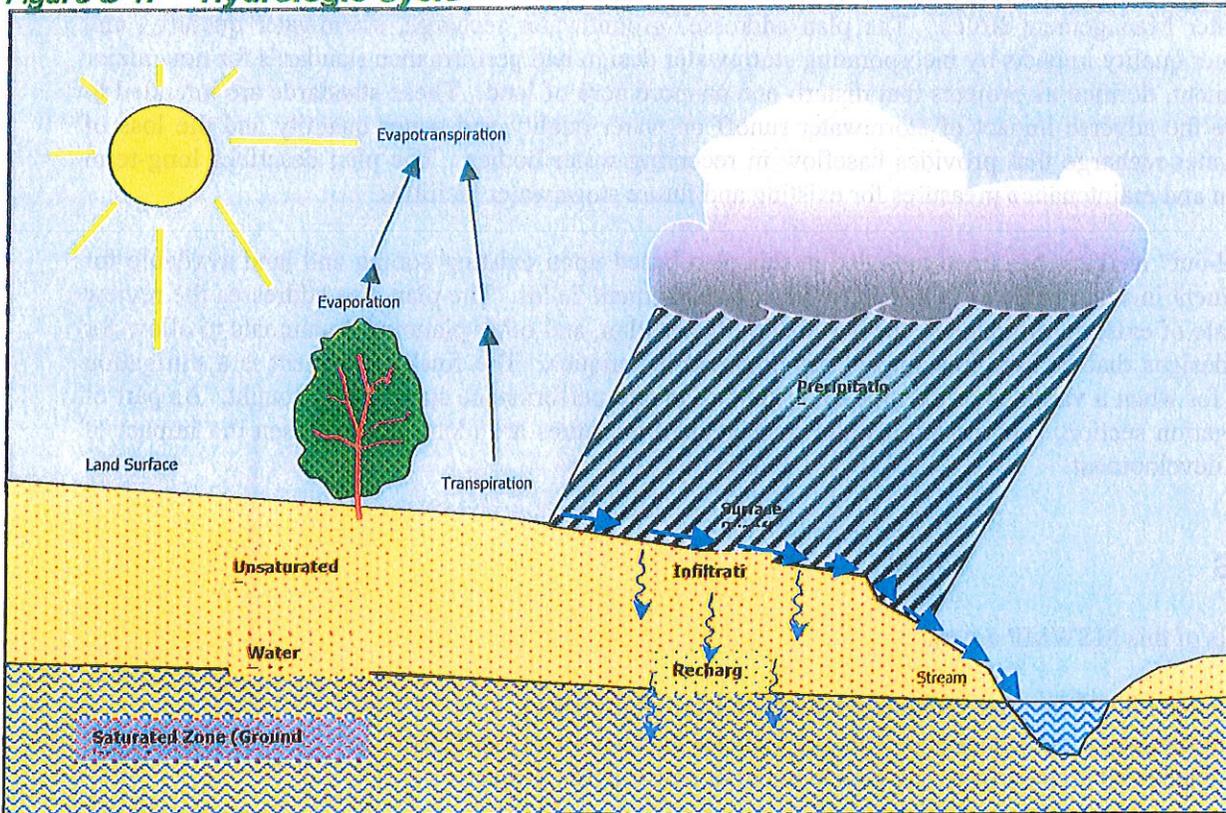
- reduce flood damage, including damage to life and property;
- minimize, to the extent practical, any increase in stormwater runoff from any new development;
- reduce soil erosion from any development or construction project;
- assure the adequacy of existing and proposed culverts and bridges, and other in-stream structures;
- maintain groundwater recharge;
- prevent, to the greatest extent feasible, an increase in nonpoint pollution;
- maintain the integrity of stream channels for their biological functions, as well as for drainage;
- minimize pollutants in stormwater runoff from new and existing development to restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the state, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial, and other uses of water; and
- protect public safety through the proper design and operation of stormwater basins.

To achieve these goals, specific stormwater design and performance standards for new development are outlined. Additionally, stormwater management controls to address impacts from existing development are proposed. Preventative and corrective maintenance strategies are included to ensure long-term effectiveness of stormwater management facilities. Safety standards for stormwater infrastructure to be implemented to protect public safety are also outlined.

IMPORTANCE OF STORMWATER MANAGEMENT

Land development can dramatically alter the hydrologic cycle (See Figure C-1 - Hydrologic Cycle) of a site and, ultimately, an entire watershed. Prior to development, native vegetation can either directly intercept precipitation or draw that portion that has infiltrated into the ground and return it to the atmosphere through evapotranspiration. Development can remove this beneficial vegetation and replace it with lawn or impervious cover, reducing the site's evapotranspiration and infiltration rates. Clearing and grading a site can remove depressions that store rainfall.

Figure C 1. Hydrologic Cycle



Construction activities may also compact the soil and diminish its infiltration ability, resulting in increased volumes and rates of stormwater runoff from the site. Impervious areas that are connected to each other through gutters, channels, and storm sewers can transport runoff more quickly than natural areas. The reduction of the transport or travel time speeds up the rainfall-runoff response of the drainage area, causing flow in downstream waterways to peak faster and at higher than natural conditions. These increases can create new and aggravate existing downstream flooding and erosion problems and increase the quantity of sediment in the channel.

Filtration of runoff and removal of pollutants by surface and channel vegetation is eliminated by storm sewers that discharge runoff directly into a stream. Increases in impervious area can also decrease opportunities for infiltration which, in turn, reduces stream base flow and groundwater recharge. Reduced base flows and increased peak flows produce greater fluctuations between normal and storm flow rates, which can increase channel erosion. Reduced base flows can also negatively impact the hydrology of adjacent wetlands and the health of biological communities that depend on base flows. Finally, erosion and sedimentation can destroy habitat from which some species cannot adapt.

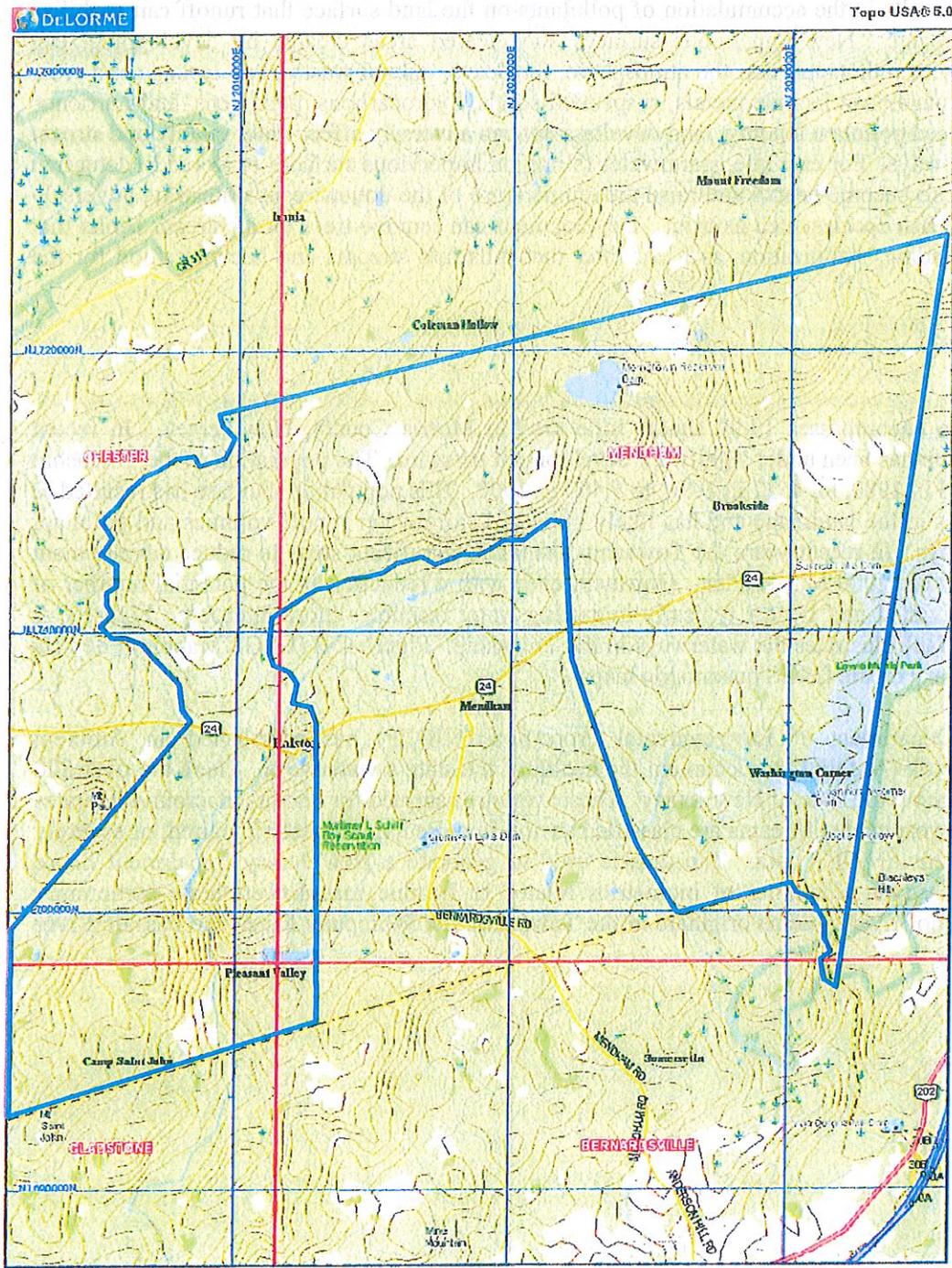
In addition to increases in runoff peaks, runoff volume, and loss of groundwater recharge, land development often results in the accumulation of pollutants on the land surface that runoff can mobilize and transport to streams. New impervious surfaces and cleared areas created by development can accumulate a variety of pollutants from the atmosphere, fertilizers, animal wastes, and leakage and wear from vehicles. Pollutants can include metals, suspended solids, hydrocarbons, pathogens, and nutrients. In addition to increased pollutant loading, land development can adversely affect water quality and stream biota in more subtle ways. For example, stormwater falling on impervious surfaces or stored in detention or retention basins can become heated and raise the temperature of the downstream waterway, adversely affecting cold water fish species such as trout. Development can remove trees along stream banks that normally provide shading, stabilization, and leaf litter that falls into streams and becomes food for the aquatic community.

BACKGROUND

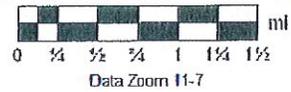
Mendham Township encompasses 17.91 square mile area in Morris County, New Jersey. In recent decades, the Township has been under significant development pressure. The population of the Township increased from 4,488 in 1980, to 4,537 in 1990, to 5,400 in 2000. This population increase has resulted in considerable changes in the landscape and has likely increased stormwater runoff volumes and pollutant loads to the waterways. In recent years the Township has taken significant steps to reduce development potential initiated by the 2000 Master Plan. However, even with a reduction in the potential number of new units, each individual unit is now typically impacting water resources more intensely. Figure C-2 (Surface Drainage Map) illustrates the waterways in the Township. Figure C-3 (USGS Mapping) depicts the Township boundary on the USGS quadrangle maps.

The New Jersey Department of Environmental Protection (NJDEP) has established an Ambient Biomonitoring Network (AMNET) to document the health of the state's waterways. There are over 800 AMNET sites throughout the state of New Jersey. These sites are sampled for benthic macroinvertebrates by NJDEP on a five-year cycle. Streams are classified as non-impaired, moderately impaired, or severely impaired based on the AMNET data. The data is used to generate a New Jersey Impairment Score (NJIS), which is based on a number of biometrics related to benthic macroinvertebrate community dynamics. Three major river systems originate in the Township, the Whippany River, the Passaic River and the Raritan River.

Figure C 2. USGS Mapping

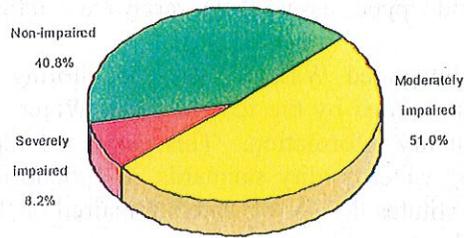


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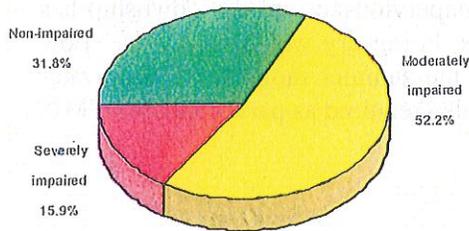


Watershed Management Area #6 includes forty-nine AMNET sites in the upper Passaic, Whippany, Rockaway and Dead River watersheds. The chart to the right shows that 40.8% of the sites were non-impaired, the majority of sites (51%) were moderately impaired, and the remaining sites (8.2%) were rated as severely impaired. A significant improvement was seen at twelve sites, and a significant decline, at four sites.

Watershed Management Area 6
1998 Bioassessment Results



Watershed Management Area 6
1993 Bioassessment Results

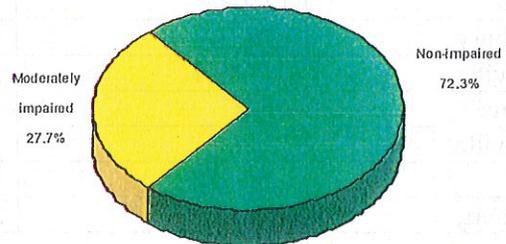


The chart on the left depicts the results of the same sites sampled during the 1993 survey for comparison. The number of non-impaired sites is considerably increased over that of the earlier sampling, while the number of severely impaired sites is reduced by a similar percentage, and the proportion of moderately impaired sites remains fairly constant. The trend for both NJIS and habitat scores is relatively constant, with both at suboptimal levels. Abnormalities in chironomid larvae were found to be chronic at one site, while four additional sites, although not chronic at

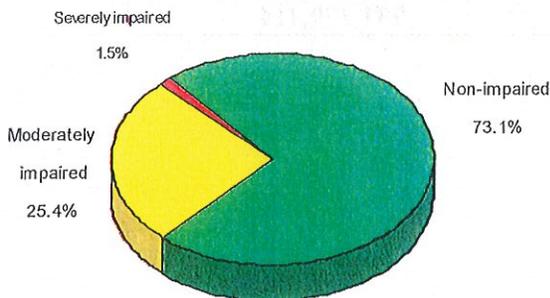
this time, exhibited significant levels of abnormalities in chironomid larvae only.

Watershed Management Area #8 includes both the North and South branches of the Raritan River and their tributaries, with a total of 67 AMNET sites sampled currently, and 3). The chart to the right shows that the majority (49 or 73.1%) of sites in WMA #8 were rated non-impaired; 17 or 25.4% were rated as moderately impaired, and only one site (1.5%) was rated as severely impaired. A chart depicting the results of the earlier (1994) survey are also included for comparison. In WMA #8, the habitat trend remains fairly constant at near optimum levels throughout; NJIS scores, in the non-impaired range

Watershed Management Area 8
1994 Bioassessment Results



Watershed Management Area 8
1999 Bioassessment Results



throughout, increase somewhat from northwest to southeast, from the South Branch to North Branch sub-basins. Thus, while there may be some localized degradation from agricultural or residential sources, stream biotic integrity in WMA #8 is generally quite favorable. Only three sites (4.5% of sites sampled), exhibited significant numbers of chironomid abnormalities in the current data.

The ten tributaries that flow through the Township to these major rivers are also

unimpaired based on AMNET data. In addition to the AMNET data, the NJDEP and other regulatory agencies collect water quality chemical data on the streams in the state. These data show that the instream total phosphorus concentrations and fecal coliform concentrations of the Upper Raritan River, Whippany River and Upper Passaic River rarely exceed the state's criteria.

The New Jersey Integrated Water Quality Monitoring and Assessment Report (305(b) and 303(d)) (Integrated List) is required by the federal Clean Water Act to be prepared biennially and is a valuable source of water quality information. This combined report presents the extent to which New Jersey waters are attaining water quality standards, and identifies waters that are impaired. Sub-list 5 of the Integrated List constitutes the list of waters impaired or threatened by pollutants, for which one or more TMDLs are needed.

As the imperviousness increases in the Township, the peak and volumes of stream flows also increase. The increased amount of water can result in stream bank erosion, which results in unstable areas at roadway/bridge crossings, and degraded stream habitats. The low imperviousness of the Township has preserved groundwater recharge, maintaining base flows in streams during dry weather periods. Low base flows can have a negative impact on instream habitat during the summer months. Groundwater recharge capability is shown in Table 1. Wellhead protection areas, also required as part of the MSWMP, are shown in Figure C-4 (Wellhead Protection Areas).

Table 1. Groundwater Recharge Capability

Soil Family	Acreage	Recharge Inches Per Year	Recharge Cubic Feet Per Year
Alluvial Land	468.85	0.00	0
Annandale	20.83	16.30	1,235,704
Bartley	436.87	16.40	25,987,922
Califon	1250.01	16.40	74,347,532
Cokesbury	409.12	0.00	0
Edneyville	3,114.91	20.20	228,121,213
Hibernia	4.61	17.00	283,939
Kliensville	15.96	18.10	1,051,372
Parker	4,657.82	19.60	331,310,038
Pattensburg	538.51	20.10	39,315,740
Penn	91.55	17.30	5,750,910
Ridgebury	50.06	0.00	0
Turbotville	186.46	16.70	11,316,929
Urban	69.74	0.00	0
Washington	172.61	20.00	12,558,115
Total	11,487.91	17.50	731,279,414

DESIGN AND PERFORMANCE STANDARDS

Mendham Township should adopt the design and performance standards for stormwater management measures as presented in N.J.A.C. 7:8-5 to minimize the adverse impact of stormwater runoff on water quality and water quantity and loss of groundwater recharge in receiving water bodies. The design and performance standards include the language for maintenance of stormwater management measures consistent with the stormwater management rules at N.J.A.C. 7:8-5.8 Maintenance Requirements, and language for safety standards consistent with N.J.A.C. 7:8-6 Safety Standards for Stormwater Management Basins. The ordinances should be submitted to the county for review and approval.

During construction, Township inspectors should observe the construction of the project to ensure that the stormwater management measures are constructed and function as designed.

PLAN CONSISTENCY

Mendham Township is not within a Regional Stormwater Management Planning Area and no TMDLs have been developed for waters within the Township; therefore this plan does neither need to be consistent with any regional stormwater management plans (RSWMPs) nor any TMDLs. If any RSWMPs or TMDLs are developed in the future, this Municipal Stormwater Management Plan should be updated to be consistent.

The Municipal Stormwater Management Plan is consistent with the Residential Site Improvement Standards (RSIS) at N.J.A.C. 5:21. The municipality will utilize the most current update of the RSIS in the stormwater management review of residential areas. This Municipal Stormwater Management Plan should be updated to be consistent with any future updates to the RSIS.

The Township's proposed Stormwater Management Ordinance requires all new development and redevelopment plans to comply with New Jersey's Soil Erosion and Sediment Control Standards. During construction, Township inspectors should observe on-site soil erosion and sediment control measures and report any inconsistencies to the Morris County Soil Conservation District.

Nonstructural Stormwater Management Strategies

The Township has reviewed the master plan and ordinances, and has developed a list of the sections in the Township Land Use and Zoning ordinances that should be modified to incorporate nonstructural stormwater management strategies. These are the ordinances that should be made consistent with the goals of this plan and then submitted to the county review agency for review and approval. A copy should be sent to the Department of Environmental Protection at the time of submission. Following are examples of provisions from the existing Land Use Ordinance that promote the goals of this plan. Any future changes to the LUO should continue this consistency.

Chapter 10 Streets and Roads

Section 10-4 Specifications, Subsection 10-4.6 Clearing

This subsection limits the extent of clearing to a maximum of five (5) feet beyond that which is required for grading and construction. The 2000 Master Plan Revision sets forth the goals of minimizing roadway width from the traditional 24 to 30 feet to 18 feet reflecting the rural nature of the community.

Subsection 10-4.9 Drainage

This subsection requires that drainage systems comply with accepted sizing standards (RSIS) and with Chapter 16 (Subdivision & Site Plan) and Chapter 18 (Flood Hazard Control) of the Township's Ordinance.

Subsection 10-4.10 Curbs

This subsection sets forth for the requirements for curbs along roads. Generally curbing will only be required along Regional Arterial Roadways and Arterial Collector Roadways. All other new roads will comply with RSIS standards. Roadways without curbs are encouraged to provide for sheet flow off of impervious surfaces and utilization of roadside bioretention swales for water quality enhancement.

Chapter 16 Subdivision and Site Plan

Subsection 16-10.2.u. Street Storm Drainage & Water Control

The subsection requires separate seepage pits for all roof top runoff for all new construction. This section should also provide for groundwater recharge requirements consistent with the Stormwater Management Rules

Subsection 16-10.8 Protection of Critical Areas

This subsection limits disturbance and vegetation removal on areas defined as Steep Slopes in the Township's Ordinance.

Subsection 16-10.9 On-site Stormwater Management

This subsection requires use of stormwater BMP's and requires that the rate of runoff be no greater than the pre-development rate of runoff and volume of runoff be reduced to predevelopment volumes as much as practicable. This section should be consistent with the RSIS standards.

Subsection 16-10.10 Public Use and Service Areas

This subsection allows the Planning Board to impose Conservation Easements on environmentally sensitive areas including: wetlands, wetland transition areas, flood hazard areas, riparian corridors and steep slopes.

Chapter 17 Environmental Impact Statement

This chapter requires an Environmental Impact Statement for all land development in the Township and with respect to surface water protection and stormwater requires that non-point source pollution in stormwater runoff be reduced to the maximum extent possible, requires that developers demonstrate that antidegradation policies that apply to Category 1 waters are applied throughout the Township and requires that nitrate loading in groundwater as a result of development activities will not adversely impact groundwater nitrate concentrations.

Chapter 19 Soil Erosion and Sediment Control

This Chapter requires strict compliance with the Standards for Soil Erosion and Sediment Control in New Jersey.

Chapter 21 Zoning

This chapter has been changed to reflect the principals and goals of the 2000 Master Plan Revision. The changes incorporated into the new Zone Plan reflect the concerns with overuse and protection of groundwater resources with the intent to limit the total population of the Township to supportable levels.

Chapter 23 Tree Conservation

This chapter limits removal of trees on private property in furtherance of the goals stated in the 2000 Master Plan Revisions.

Chapter 24 Unimproved Lot Ordinance

This chapter requires that development of unimproved lots comply with all requirements of the Land Use Ordinance including Chapters 16, 18 and 19.

Chapter 24 A Environmental Permit

This chapter requires protection of environmentally sensitive and critical areas in all construction permit applications. Conservation easements can be required when deemed prudent for the protection of wetlands, wetland transition areas, steep slopes and riparian corridors.

| Section |
|---------|---------|---------|---------|---------|---------|---------|---------|
| 24-1 | 24-2 | 24-3 | 24-4 | 24-5 | 24-6 | 24-7 | 24-8 |
| 24-9 | 24-10 | 24-11 | 24-12 | 24-13 | 24-14 | 24-15 | 24-16 |
| 24-17 | 24-18 | 24-19 | 24-20 | 24-21 | 24-22 | 24-23 | 24-24 |
| 24-25 | 24-26 | 24-27 | 24-28 | 24-29 | 24-30 | 24-31 | 24-32 |
| 24-33 | 24-34 | 24-35 | 24-36 | 24-37 | 24-38 | 24-39 | 24-40 |
| 24-41 | 24-42 | 24-43 | 24-44 | 24-45 | 24-46 | 24-47 | 24-48 |
| 24-49 | 24-50 | 24-51 | 24-52 | 24-53 | 24-54 | 24-55 | 24-56 |
| 24-57 | 24-58 | 24-59 | 24-60 | 24-61 | 24-62 | 24-63 | 24-64 |
| 24-65 | 24-66 | 24-67 | 24-68 | 24-69 | 24-70 | 24-71 | 24-72 |
| 24-73 | 24-74 | 24-75 | 24-76 | 24-77 | 24-78 | 24-79 | 24-80 |
| 24-81 | 24-82 | 24-83 | 24-84 | 24-85 | 24-86 | 24-87 | 24-88 |
| 24-89 | 24-90 | 24-91 | 24-92 | 24-93 | 24-94 | 24-95 | 24-96 |
| 24-97 | 24-98 | 24-99 | 24-100 | 24-101 | 24-102 | 24-103 | 24-104 |
| 24-105 | 24-106 | 24-107 | 24-108 | 24-109 | 24-110 | 24-111 | 24-112 |
| 24-113 | 24-114 | 24-115 | 24-116 | 24-117 | 24-118 | 24-119 | 24-120 |
| 24-121 | 24-122 | 24-123 | 24-124 | 24-125 | 24-126 | 24-127 | 24-128 |
| 24-129 | 24-130 | 24-131 | 24-132 | 24-133 | 24-134 | 24-135 | 24-136 |
| 24-137 | 24-138 | 24-139 | 24-140 | 24-141 | 24-142 | 24-143 | 24-144 |
| 24-145 | 24-146 | 24-147 | 24-148 | 24-149 | 24-150 | 24-151 | 24-152 |
| 24-153 | 24-154 | 24-155 | 24-156 | 24-157 | 24-158 | 24-159 | 24-160 |
| 24-161 | 24-162 | 24-163 | 24-164 | 24-165 | 24-166 | 24-167 | 24-168 |
| 24-169 | 24-170 | 24-171 | 24-172 | 24-173 | 24-174 | 24-175 | 24-176 |
| 24-177 | 24-178 | 24-179 | 24-180 | 24-181 | 24-182 | 24-183 | 24-184 |
| 24-185 | 24-186 | 24-187 | 24-188 | 24-189 | 24-190 | 24-191 | 24-192 |
| 24-193 | 24-194 | 24-195 | 24-196 | 24-197 | 24-198 | 24-199 | 24-200 |

Table 2. HUC-14 Su-Watersheds in Mendham Township

Sub-Watersheds (HUC14)								
Sub-Watershed Name	Sub-Watershed ID	Hydrologic Unit Code (14 digit)	Watershed Name	Watershed ID	Watershed Management Area	Management Area ID	Water Region	Water Region ID
Peapack Brook (above/incl Gladstone Bk)	08CA05	2030105060050	Raritan River North Branch (above Lamington)	08CA	North & South Branch Raritan	8	Raritan	2
Raritan River North Branch (Peapack Bk to McVickers Bk)	08CA04	2030105060040	Raritan River North Branch (above Lamington)	08CA	North & South Branch Raritan	8	Raritan	2
Raritan River N. Branch (incl McVickers to India Bk)	08CA03	2030105060030	Raritan River North Branch (above Lamington)	08CA	North & South Branch Raritan	8	Raritan	2
Burnett Brook (above Old Mill Rd)	08CA02	2030105060020	Raritan River North Branch (above Lamington)	08CA	North & South Branch Raritan	8	Raritan	2
Raritan River N. Branch (above/incl India Bk)	08CA01	2030105060010	Raritan River NB (above Lamington)	08CA	North & South Branch Raritan	8	Raritan	2
Passaic River Upper (above Osborn Mills)	06AA01	2030103010010	Passaic River Upper (above Pine Brook bridge)	06AA	Upper Passaic, Whippany and Rockaway	6	Northeast	1
Whippany River (above road at 74d 33m)	06BA01	2030103020010	Whippany River	06BA	Upper Passaic, Whippany and Rockaway	6	Northeast	1
Whippany River (Lake Pohohontas to Washington Valley Rd)	06BA04	2030103020040	Whippany River	06BA	Upper Passaic, Whippany and Rockaway	6	Northeast	1
Whippany River (Washington Valley Rd to 74d 33m)	06BA02	2030103020020	Whippany River	06BA	Upper Passaic, Whippany and Rockaway	6	Northeast	1
Primrose Brook	06AA02	2030103010020	Passaic River Upper (above Pine Brook bridge)	06AA	Upper Passaic, Whippany and Rockaway	6	Northeast	1

LAND USE/BUILD-OUT ANALYSIS

A detailed land use analysis for the Township was conducted in accordance with the Stormwater Management Rules. Figure C-5 (Existing Land Use) illustrates the existing land use in the Township based on 1995/97 GIS information from NJDEP. Figure C-6 (Hydrologic Units within Mendham Township) illustrates the HUC14s within the Township. The Township's future land use plan is included within the Land Use Plan element of this Master Plan. Figure C-7 (Mendham Township Wetland & Areas of High Water Table) illustrates the constrained lands within the Township. The build-out calculations for impervious cover are shown in Table 2. As expected when developing agricultural and forest lands, the build-out of these two HUC14s will result in a significant increase in impervious surfaces. The table presents the pollutant loading coefficients by land cover. The pollutant loads at full build-out are presented in Table 3.

Please Note: This analysis was conducted for stormwater management purposes only and as such does not take into account all factors that may affect future development.

Table 3. Build-Out Calculations¹

Map ID	HUC14	Zoning	Total Area (Ac.)	Average Impervious Per Lot (Ac.)	Dwellings	Existing			Wetlands, Water & Open Space (Acres)	Developable Area (Acres)	Total Possible Dwellings	Build Out Impervious (Acres)	Build Out Impervious (%)
						Impervious (%)	Impervious Area	Impervious Space (Acres)					
3	2030105060030	R-5	381	0.30	44	3.46%	13.20	8	373	48	14.40	3.78%	
		R-10	73	0.38	0	0.00%	0.00	0	73	0	0.00	0.00%	
		R-5	166	0.30	18	3.26%	5.40	4	162	24	7.20	4.34%	
		R-10	447	0.38	5	0.42%	1.88	20	427	28	10.54	2.36%	
		R-1	7	0.14	13	27.57%	1.82	0	6	13	1.82	27.57%	
		R-3	82	0.13	54	8.81%	7.24	1	81	58	7.77	9.46%	
		R-5	82	0.18	43	9.42%	7.74	71	11	47	8.46	10.30%	
		R-10	788	0.30	124	4.72%	37.20	50	739	131	39.30	4.99%	
		CR-1	700	0.38	15	0.81%	5.65	197	502	28	10.54	1.51%	
		R-5	445	0.16	86	3.10%	13.76	335	110	86	13.76	3.10%	
4	2030105060020	R-5	270	0.31	52	5.97%	16.12	5	264	52	16.12	5.97%	
		R-10	265	0.38	10	1.42%	3.76	107	158	10	3.76	1.42%	
		R-3	512	0.18	123	4.33%	22.14	13	499	130	23.40	4.57%	
		R-5	230	0.30	33	4.30%	9.90	12	218	33	9.90	4.30%	
		R-10	433	0.38	4	0.35%	1.51	318	115	8	3.01	0.70%	
		R-3	71	0.18	16	4.08%	2.88	2	69	21	3.78	5.36%	
		R-5	572	0.30	86	4.51%	25.80	83	488	88	26.40	4.62%	
		R-10	952	0.38	13	0.51%	4.89	584	369	44	16.57	1.74%	
		CR-2	67	0.14	80	16.83%	11.20	17	50	80	11.20	16.83%	
		G	161	0.31	1	0.19%	0.31	161	0	1	0.31	0.19%	
7	2030103020010	R-1	140	0.14	203	20.31%	28.42	8	132	234	32.76	23.41%	
		R-2	299	0.13	208	9.32%	27.87	9	290	245	32.83	10.98%	
		R-3	373	0.17	147	6.70%	24.99	26	347	170	28.90	7.75%	
		R-5	445	0.18	104	4.21%	18.72	8	437	117	21.06	4.74%	
		R-10	103	0.30	16	4.64%	4.80	4	99	16	4.80	4.64%	
		CR-2	1,136	0.38	1	0.03%	0.38	1,107	29	29	1.13	0.10%	
		B	45	0.14	46	14.38%	6.44	19	25	46	6.44	14.38%	
		R-3	1	0.10	3	29.29%	0.30	0	1	3	0.30	29.29%	
		R-2	54	0.18	15	5.02%	2.70	0	54	15	2.70	5.02%	
		R-3	54	0.17	23	7.25%	3.91	3	51	27	4.59	8.52%	
9	2030103020020	R-3	844	0.18	198	4.22%	35.64	52	791	218	39.24	4.65%	
		R-10	489	0.38	1	0.08%	0.38	431	58	4	1.51	0.31%	
		R-10	17	0.38	0	0.00%	0.00	17	0	0	0.00	0.00%	
Total	2030103010020		10,701			3,249%	346.94			404.50	3.78%		

¹ Developable acres includes areas within public open space, conservation easements and farmland preservation.

Table 4. Nonpoint Source Pollutant Loads by Land Cover At Build Out

Land Cover	Pollutant	Nonpoint Source Pollution Loading (lbs/acre/year)	Land Area	Annual Pollutant Load (Lbs/Year)
High/Medium Density Residential	Phosphorous Load	1.4	1231.52	1,724.128
	Nitrogen Load	15	1231.52	1,8472.8
	Suspended Solids Load	140	1231.52	172,412.8
Low Density/Rural Residential	Phosphorous Load	0.6	9846.79	5,908.074
	Nitrogen Load	5	9846.79	4,233.95
	Suspended Solids Load	100	9846.79	984,679
Commercial	Phosphorous Load	2.1	0	0
	Nitrogen Load	22	0	0
	Suspended Solids Load	200	0	0
Open Space/Wetlands/Water	Phosphorous Load	0.1	3631.81	363.181
	Nitrogen Load	3	3631.81	10,895.43
	Suspended Solids Load	40	3631.81	145,272.4
Total Phosphorous Source Load				7,995.383
Total Nitrogen Source Load				78,602.18
Total Suspended Solids Source Load				1,302,364.2

* Source: NJDEP Stormwater and Nonpoint Source Pollution Best Management

MITIGATION PLANS

This mitigation plan is provided for a proposed development that is granted a variance or exemption from the stormwater management design and performance standards. A hierarchy of options is being developed in cooperation with Mendham Township's headwaters watershed river system associations.

Mitigation Project Criteria

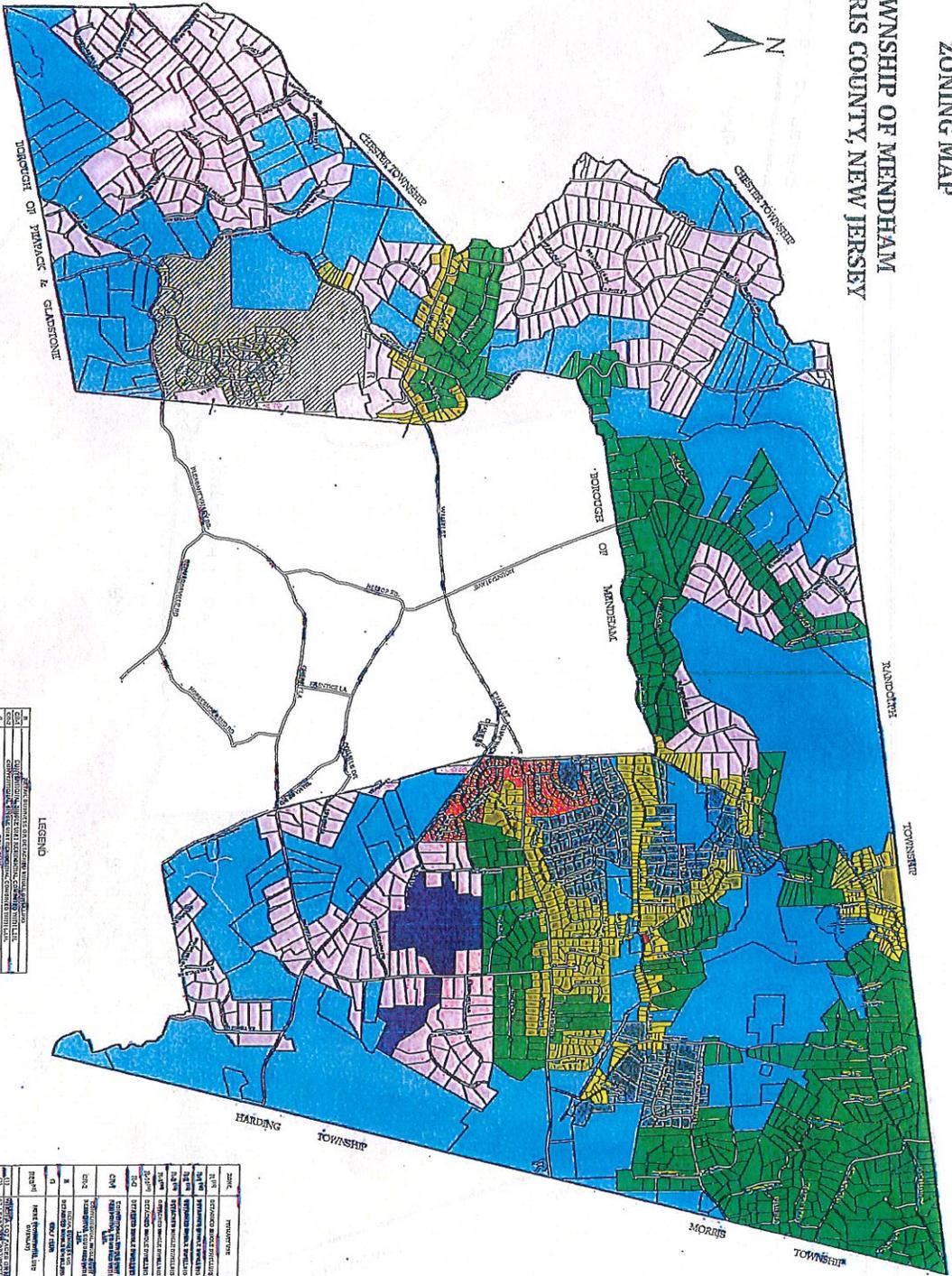
The mitigation project must be implemented in the same drainage area as the proposed development. The project must provide additional groundwater recharge benefits, or protection from stormwater runoff quality and quantity from previously developed property that does not currently meet the design and performance standards outlined in the Municipal Stormwater Management Plan. The developer must ensure the long-term maintenance of the project, including the maintenance requirements under Chapters 8 and 9 of the NJDEP Stormwater BMP Manual.

The municipality may allow a developer to provide funding or partial funding to the municipality for an environmental enhancement project that has been identified in a Municipal Stormwater Management Plan. The funding must be equal to or greater than the cost to implement the mitigation outlined above, including costs associated with purchasing the property or easement for mitigation, and the cost associated with the long-term maintenance requirements of the mitigation measure.

ZONING MAP

TOWNSHIP OF MENDHAM

MORRIS COUNTY, NEW JERSEY



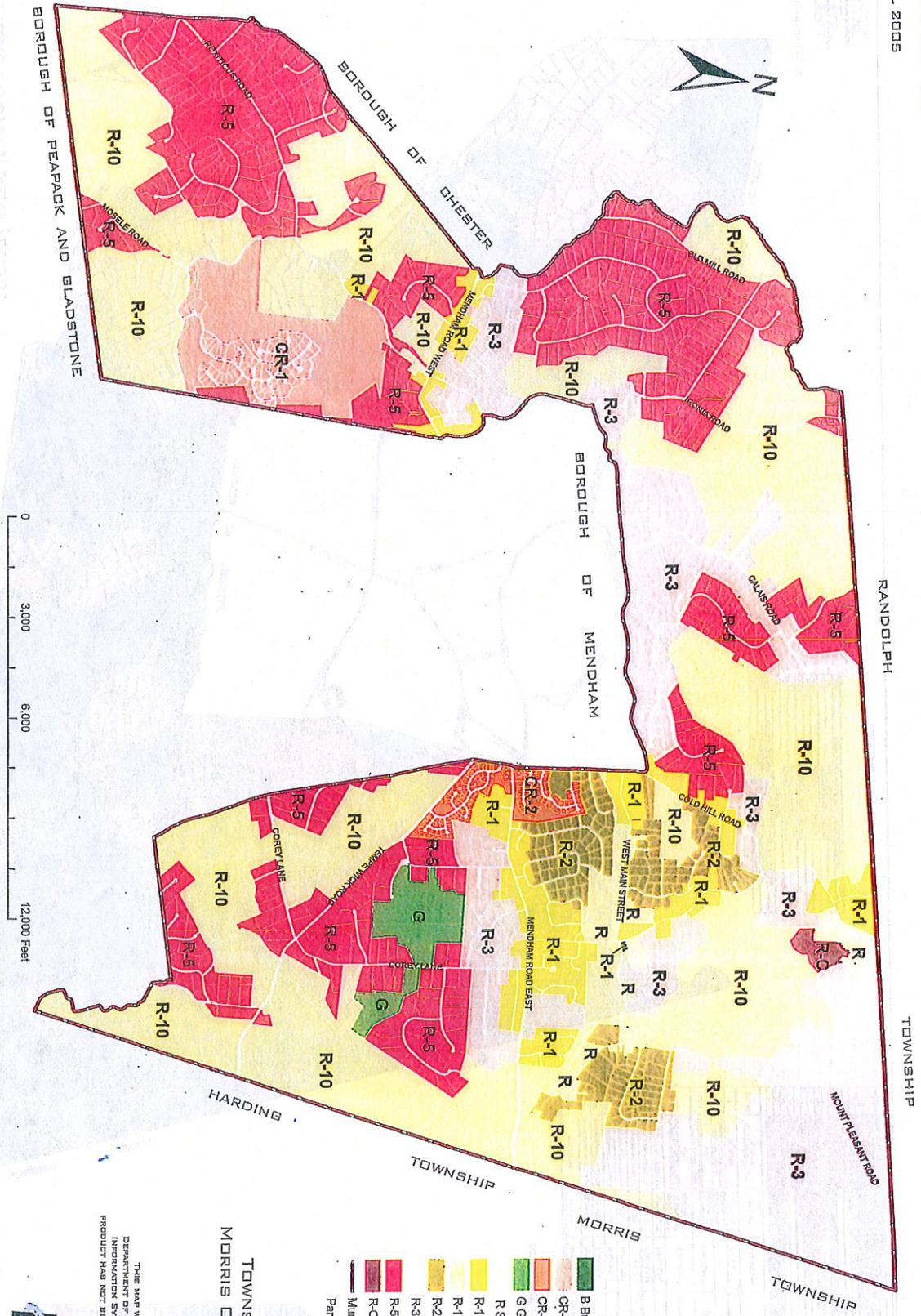
LEGEND

1	AGRICULTURE
2	AGRICULTURE - INTENSIVE
3	AGRICULTURE - MEDIUM DENSITY
4	AGRICULTURE - LOW DENSITY
5	AGRICULTURE - VERY LOW DENSITY
6	AGRICULTURE - OPEN SPACE
7	AGRICULTURE - OPEN SPACE - PRESERVE
8	AGRICULTURE - OPEN SPACE - PRESERVE - PRESERVE
9	AGRICULTURE - OPEN SPACE - PRESERVE - PRESERVE - PRESERVE
10	AGRICULTURE - OPEN SPACE - PRESERVE - PRESERVE - PRESERVE - PRESERVE
11	AGRICULTURE - OPEN SPACE - PRESERVE - PRESERVE - PRESERVE - PRESERVE - PRESERVE
12	AGRICULTURE - OPEN SPACE - PRESERVE - PRESERVE - PRESERVE - PRESERVE - PRESERVE - PRESERVE
13	AGRICULTURE - OPEN SPACE - PRESERVE
14	AGRICULTURE - OPEN SPACE - PRESERVE
15	AGRICULTURE - OPEN SPACE - PRESERVE
16	AGRICULTURE - OPEN SPACE - PRESERVE
17	AGRICULTURE - OPEN SPACE - PRESERVE
18	AGRICULTURE - OPEN SPACE - PRESERVE
19	AGRICULTURE - OPEN SPACE - PRESERVE
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21	AGRICULTURE - OPEN SPACE - PRESERVE
22	AGRICULTURE - OPEN SPACE - PRESERVE
23	AGRICULTURE - OPEN SPACE - PRESERVE
24	AGRICULTURE - OPEN SPACE - PRESERVE
25	AGRICULTURE - OPEN SPACE - PRESERVE

1:10000 Scale
 1/4" = 1000 Feet
 1/8" = 500 Feet
 1/16" = 250 Feet
 1/32" = 125 Feet
 1/64" = 62.5 Feet
 1/128" = 31.25 Feet
 1/256" = 15.625 Feet
 1/512" = 7.8125 Feet
 1/1024" = 3.90625 Feet
 1/2048" = 1.953125 Feet
 1/4096" = 0.9765625 Feet
 1/8192" = 0.48828125 Feet
 1/16384" = 0.244140625 Feet
 1/32768" = 0.1220703125 Feet
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ZONING

APRIL 2005



- Legend**
- B Bushness Zone
 - CR-1 Single-Family Residential Zone
 - CR-2 Single-Family Residential Zone
 - G Golf Club Zone
 - R Single-Family Residential Zone
 - R-1 Single-Family Residential Zone
 - R-10 Single-Family Residential Zone
 - R-2 Single-Family Residential Zone
 - R-3 Single-Family Residential Zone
 - R-5 Single-Family Residential Zone
 - R-C Single-Family Residential Zone
 - Municipal Boundary
 - Parcel Lots

TOWNSHIP OF MENDHAM
 MORRIS COUNTY, NEW JERSEY
 ZONING MAP
 APRIL 2005

This map was prepared by Maser, Jersey Department of Environmental Planning and Information System Digital Data, but the secondary product has not been verified and is not state-authorized.



XIV. RECYCLING PLAN Adopted 6/2/08

INTRODUCTION

The Municipal Land Use Law (NJSA 40:55D-28) provides for a recycling plan element as part of a municipal master plan.

“A recycling plan element which incorporates the State Recycling Plan goals, including provisions for the collection, disposition and recycling of recyclable materials designated in the municipal recycling ordinance, and for the collection and recycling of recycling materials within any development proposal for the construction of 50 or more units of single-family residential housing or 25 or more units of multi-family residential housing and any commercial or industrial development proposal for the utilization of 1,000 square feet or more of land.”

The Statewide Mandatory Source Separation and Recycling Act (NJSA 13:1E-99.16.c) also requires a recycling plan:

The governing body of each municipality shall, at least once every 36 months, conduct a review and make necessary revisions to the master plan and development regulations adopted pursuant to P.L. 1975, c.291 (C.40:55D-1 et seq.), which revisions shall reflect changes in federal, State, county and municipal laws, policies and objectives concerning the collection, disposition and recycling of designated recyclable materials.

NJSA 13:1E-99.13.a provides for a model ordinance, developed by NJDEP, to be used by municipalities in regulating recycling with their jurisdictions. The model specifies the following:

The model ordinance shall set forth standards governing the inclusion, in all new multifamily housing developments which require subdivision or site plan approval, of collection or storage facilities which allow for the source separation of all recyclable materials required by the district recycling plan.... For the purposes of this section, ‘multifamily housing’ shall mean housing in which three or more units of dwelling space are occupied, or are intended to be occupied, by three or more persons who live independently or one another.

Morris County has adopted a Morris County Morris County Solid Waste Management Plan (MCSWMP) that sets forth requirements for “source separation” as the primary method of separating the recyclable waste stream from the solid waste stream.

This Plan addresses these requirements.

PURPOSES OF THIS PLAN

It is the purpose of this plan to generally:

- Comply with the requirements of the Municipal Land Use Law and Statewide Mandatory Source Separation and Recycling Act and the Morris County Solid Waste Management Plan by incorporating a Recycling Plan element into Mendham Township’s Master Plan.
- Outline the Materials to be Source Separated and Recycled as required by the MCSWMP.
- Make general recommendations for recycling facilities and procedures in relation to future single family, multifamily and non-residential development improvements in the Township.

BACKGROUND AND ASSUMPTIONS

The collection of recyclable materials from solid waste is of increasing importance in order to reduce the amount of solid waste and to recover valuable reusable materials. Mendham Township supports these goals. However, by law the scope of a recycling plan element is primarily focused on future commercial, industrial, and large residential developments. Mendham Township does not anticipate future industrial or large residential developments and only a limited amount of commercial development. As requested by the Morris County Recycling Coordinator, this Plan includes recommendations for all such future developments in the unlikely event that any such developments would occur in the Township.

OVERVIEW OF RECYCLING IN MENDHAM TOWNSHIP

Mendham Township is almost entirely a single family residential community. The Future Land Use Plan element of this Master Plan seeks to perpetuate that pattern. There are four existing small multi-family developments in the Township which have on-site facilities for the separation and storage of recyclable materials. The residents of individual single family dwellings voluntarily separate their recyclable materials for curb-side pick up. It is anticipated that the applicability of this Plan will be primarily limited to the redevelopment of the former Sisters of Saint John The Baptist convent on Mosele Road. However, if other now unforeseen commercial or large residential development occurs, the policies recommended in this plan should be followed.

MATERIALS MANDATED TO BE SOURCE SEPARATED AND RECYCLED BY MORRIS COUNTY

The Morris County Morris County Solid Waste Management Plan requires that the following materials be source separated and recycled in Morris County.

Aluminum Cans	Cans made from aluminum that was manufactured to hold a serving of a beverage. Specifically omitted are aluminum foil and aluminum pie plates.
Glass Bottles and Jars	Bottles and jars made from glass including clear, brown and green glass. A bottle is defined as a receptacle having a narrow neck and a mouth that can be corked or capped. A jar is defined as a wide mouthed container that can be capped. Caps and lids not included. Specifically omitted are drinking glasses, windows, mirrors, light bulbs, and anything made of Pyrex or ceramic.
Plastic Bottles	Plastic bottles coded to indicate that they are comprised of the specific types of plastic compounds (polymers) known as polyethylene terephthalate (PEPE) or high density polyethylene (HDPE). A bottle is defined as a receptacle having a narrow neck and a mouth that can be corked or capped. Caps and lids not included.
Steel (tin) Cans	An air-tight container for the distribution or storage of goods, composed of thin, usually ferrous metal. Examples include soup cans and tuna fish cans.
Newspaper	A publication containing news, information and advertising, usually on low-cost paper called newsprint. Newspaper may include glossy inserts which come with the paper, dependent upon the market conditions at the time.
Corrugated Cardboard	Shipping containers made with Kraft paper linerboard and corrugated medium.
Mixed Paper	Various categories of recyclable paper including, but not limited to white and colored paper used in printers, photocopiers and fax machines, white and colored ledger paper, carbonless copy paper, undeliverable mail, mail promotional letters/ advertisements/ circulars, magazines, catalogues, envelopes, soft cover books.
Leaves	Vegetative material generated when grass (lawns) are cut.
Brush	Branches, woody plants and other similar vegetative material. Leaves and grass do not constitute brush.

Natural Wood Waste	Logs, stumps, branches and other wood tree parts. Dimensional lumber is omitted.
Oil-Contaminated Soil	Non-hazardous soil that contains petroleum hydrocarbons (gasoline, diesel, kerosene, jet fuel, # 4 & #6 heating oil and certain other refinery products including coal tar). This type of soil shall be determined to be non-hazardous in accordance with the standard set forth in N.J.A.C. 7:26.
Used motor oil	Motor oil from motor vehicles, lawn mowers, boats, etc., which has served its intended useful purpose.
Lead-Acid Batteries	Storage batteries in which the electrodes are grids of lead containing lead oxides that change in composition during charging and discharging, and the electrolyte is sulfuric acid. These include starting batteries such as car batteries that deliver a short burst of high power to start the engine. In addition, they may include deep cell batteries found on boats or campers used to power accessories like trolling motors, winches or lights.
Hazardous Dry Cell Batteries	Rechargeable batteries, such as nickel-cadmium, nickel-iron, nickel, metal hydride, lithium ion, small sealed lead acid, etc. These are often used as substitutes for non-rechargeable batteries in standard sizes such as AAA, AA, C, D and 9v. Rechargeable batteries are commonly found in cordless tools, cellular and cordless phones, laptop computers, cameras, remote control, toys, etc. Also included are non-chargeable batteries that are hazardous as defined by the Resource Conservation Recovery Act regardless of the exclusion of household waste from the definition of hazardous waste pursuant to 40 C.F.R. 261.4(b). Non-rechargeable, hazardous batteries include older alkaline and carbon zinc batteries as well as silver oxide, mercury and magnesium button-type batteries, etc. It should be noted that domestically manufacture alkaline and carbon zinc non-rechargeable batteries made after circa 1994 eliminate mercury content to the point that they should not be considered hazardous and therefore are not included in this material category.
Metal Appliances	Appliances composed predominantly of metal, and may include stoves, washing machines and dryers, for example, if the appliance is predominantly metal. Also included are air conditioners, refrigerators and dehumidifiers if they are predominantly made of metal. If these appliances on the latter list contain refrigerants that are prohibited by the Clean Air Act from being knowingly vented, the refrigerant must be recovered accordingly.
Whole Tires	Tires that are whole, not chipped into small pieces. Tires are allowed to be recycled and/or incinerated for energy recovery.

PROVISIONS FOR THE COLLECTION AND DISPOSITION OF RECYCLABLE MATERIALS

Recommended Containers.

Recyclable materials containers should be used for commingled aluminum cans, glass bottles, glass jars, plastic bottles coded 1 and 2, and steel and tin cans properly prepared. Recyclable materials containers should be any light-gauge steel, plastic or galvanized receptacle, closed at one end and open at the other, furnished with a top or lid, and weighing not more than 30 pounds when full of recyclables. All receptacles and dumpsters used for the storage of recyclable materials should be kept in a clean and safe manner.

Recommendations for Residential dwellings.

The owner of any property should be responsible for compliance with recycling regulations. For multi-family units, the management or owner should be responsible for setting up and maintaining the recycling system, including collection of recycling materials in accordance with the Township Recycling Ordinance.

Recommendations for Non-Residential developments.

All non-residential generators, including commercial, industrial and institutional establishments, of solid waste should be responsible for compliance with the Township Recycling Ordinance. The arrangement

for collection of designated recyclables should be the responsibility of the commercial, institutional or industrial property owner or their designee. All non-residential facilities should report on an annual basis to the Municipal Recycling Coordinator on recycling activities at their premises, including the amount of recycled materials, by material type, collected and recycled and the vendor providing recycling service.

Recommendations for new developments of multi-family residential, commercial, institutional or industrial properties.

Any application to the Mendham Township Planning Board for subdivision or site plan approval for the construction of multi-family dwellings of three or more units, single family developments of 50 or more units or any commercial, institutional, or industrial development for the utilization of 1,000 square feet or more of land, should include a recycling plan. * This plan should contain, at a minimum, the following:

- A detailed analysis of the expected composition and amounts of solid waste and recyclables generated at the proposed developments, and
- Locations documented on the applicant's site plan that provide for convenient recycling opportunities for all owners, tenants, and occupants. The recycling area shall be of sufficient size, convenient location and contain other attributes (signage, lighting, fencing, etc.) as may be determined by the municipal recycling coordinator.

All uses other than single-or two-family homes that require subdivision of site plan approval should provide for an indoor and/or outdoor solid waste and recycling areas for the collection and storage of commercially and/or residentially-generated solid waste and recyclable materials. The number of sites and dimensions of the solid waste and recycling areas should be sufficient to accommodate solid waste and recycling bins or containers which are of adequate size and number, and which are consistent with anticipated usage and with current methods of collection. The number of sites and dimension of the solid waste and recycling areas and the bins or containers should be determined in consultation with the Board of Health and the Municipal Recycling Coordinator, and should be consistent with the Morris County Solid Waste Management Plan.

For existing developed sites, these requirements could be waived by the Planning Board or Board of Adjustment upon showing by the applicant that the site currently handles all solid waste and recyclable materials in an existing location not meeting these requirements, but in a satisfactory manner.

Recommendations for the design of solid waste and recycling areas.

Solid waste and recycling areas should be subject to the following minimum standards:

1. The solid waste and recycling areas should not be located within any front yard area.
2. The walls of each solid waste and recycling enclosure should be constructed of solid masonry material with decorative exterior surface finish compatible to the main structure(s). The walls should be at least six feet high.
3. Each enclosure should have decorative solid heavy gauge metal gates and cane bolts to secure the gates when in the open and closed positions.
4. One side should contain a gate of sufficient width to accommodate the containers.
5. A separate pedestrian entrance should be provided located such that it shields the view of the containers, or in alternative accommodated with a decorative solid heavy gauge metal gate.

* This plan recommends that the trigger for a recycling plan be three or more units for new multifamily developments consistent with the NJDEP model ordinance and the Morris County Solid Waste Management Plan.

6. A concrete apron (minimum of 10' x 20') should be constructed either in front of each enclosure or at the point of receptacle pick-up to minimize damage to the surrounding asphalt paving.
7. The location, size and shape of the storage area should be such that each container can be moved in and out of the storage area without interfering with other containers in the storage area or other adjacent land uses.
8. The storage area should be appropriately landscaped.
9. The solid waste and recycling area should be safely and easily accessible by solid waste and recycling vehicles without interference from parked cars or other obstacles.
10. Solid waste and recycling areas should be designed to provide protection against adverse environmental conditions which might render recyclable materials unmarketable, bins and containers should have lids.
11. Individual bins/containers should have signs indicating the materials to be placed therein.
12. No containers/bins should be maintained except in a solid waste and recycling area meeting these requirements.
13. If no outdoor storage area is proposed, the site plan should detail the methods proposed for accommodating the solid waste or recyclable materials with the structure.

APPENDIX (Adopted April 1, 2002)

LANDS RECOMMENDED TO BE RESERVED FOR PUBLIC PURPOSES

The following properties are recommended to be reserved for the public purposes described. These properties should be reserved in accordance with C.40:55D-44.

Property Description	Block	Lot(s)	Size	Public Purpose Statement
Adjacent to Schiff Nat. Preserve	100 104 107	37 22, 27 46	326.37	Expansion of the Schiff Nature Preserve – passive recreation
Mosele Road	102 103	1 12	91.47	Open space - conservation, adjacent to Schiff Nature Preserve
Pleasant Valley Road	103	4, 6,5	96.77	Open space - conservation, adjacent to Schiff Nature Preserve
Nesbitt Mill	107	1	3.94	Preservation of historic Nesbitt Cider Mill - open space
Ironia Road – West Mountainside	109	22, 23	83.45	Potential future school site – passive/active recreation
Route 510 West - Roxiticus Road	109	34	9.16	Expansion of Ralston Recreation – Natural Area
Land adjacent to Meadowood Park	113 113	3 2	29.11	Expansion of Meadowood Park
Washington Valley Rd.	127	150	8.09	Adjacent to Middle School – Future School Site
Adjacent to India Book Natural Area	116	49, 67	40.00	Expansion of India Brook Natural Area
Land adjacent to Lewis Morris Park	141 147 148 149	3 16, 17, 19, 20, 21, 22, 23, 24, 42 4 3, 6,7	369.20	Link to Lewis Morris County Park
Mountainside Road	117	42, 49	28.58	Passive recreation – home of Sagurton historic collection
Mount Pleasant Road	127	74.01	4.64	Buffer to municipal garage - conservation
Adjacent to Carriage Hill Dr.	100	17	131.60	Largest property in the southwestern part of the Township – active and passive recreation
Stream corridor easements	N/A	N/A	N/A	Recommended for all land adjacent to major water courses - conservation

**REPORT on the REEXAMINATION
of the MENDHAM TOWNSHIP
MASTER PLAN and
DEVELOPMENT REGULATIONS**

**MENDHAM TOWNSHIP
PLANNING BOARD**

**Adopted by Resolution # PB-08-06
June 2, 2008**

Prepared for the Mendham Township Planning Board by:

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INTRODUCTION

The Municipal Land Use Law requires the Planning Board to undertake a periodic reexamination of the Township Master Plan and development regulations at least once every six years. Mendham Township completed its last comprehensive reexamination in 2002, contemporaneous with the completion of a new Township master plan.

A reexamination report is a general reassessment of local land use policies and may contain generally broad recommendations for master plan or land use ordinance amendments to address new areas of concern. It is not by itself an amendment of the master plan or development regulations.

The statute requires the reexamination report to address the following criteria (NJSA 40:55D-89):

- 1. The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report.*
- 2. The extent to which such problems and objectives have been reduced or have increased subsequent to such date.*
- 3. The extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for the master plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives.*
- 4. The specific changes recommended for the master plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.*
- 5. The recommendations of the Planning Board concerning the incorporation of redevelopment plans adopted pursuant to the Local Redevelopment and Housing Law into the land use plan element of the municipal master plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.*

BACKGROUND

In the period between 1999 and 2002, Mendham Township completed a comprehensive updating of the Township's Master Plan. A number of sweeping changes to the Township's development regulations were also completed. Since that time, the Mendham Township Planning Board and Township Committee have actively attempted to keep the Township's land use planning up to date. Numerous amendments to the Master Plan and development regulations have been adopted since 2002. All of these amendments represent evolutionary changes in the Township's land use policies to address changing concerns and needs.

PART 1: THE MAJOR PROBLEMS AND OBJECTIVES RELATING TO LAND DEVELOPMENT IN THE MUNICIPALITY AT THE TIME OF THE ADOPTION OF THE LAST REEXAMINATION REPORT IN 2002.

The Mendham Township Master Plan and the 2002 Reexamination Report included the following as the major problems in Mendham Township relating to land development at that time.

- a) **Impact of development on the Township's character.** At the time of the adoption of the 2002 Reexamination Report the Township had experienced an extended period of development growth. It was apparent that this was eroding the Township's traditional historic rural residential character contrary to one of the fundamental goals of the Township Master Plan.
- b) **Trend for very large homes on relatively small lots.** The 2002 Reexamination Report identified a trend in housing development for very large homes on relatively small lots. This was changing one of the Township's traditional characteristics of relatively smaller homes on smaller lots.
- c) **Impact of development on the Township's high quality water resources.** The 2002 Reexamination Report noted strong evidence that development was compromising the Township's long term commitment to protecting the very high quality of its natural environment, particularly its water resources.
- d) **Council on Affordable Housing (COAH).** COAH was in the process of developing new "third round" rules and municipal affordable housing obligations published. The Township was aware that when the new rules were adopted by COAH, a new fair share plan would need to be developed to maintain its *substantive certification*.

PART 2: THE EXTENT TO WHICH SUCH PROBLEMS AND OBJECTIVES (IN PART 1) HAVE BEEN REDUCED OR HAVE INCREASED SUBSEQUENT TO SUCH DATE.

Following is a discussion of how each of the major problems or objectives identified in Part 1 have been reduced or increased since the adoption of the last reexamination report.

- a) **Impact of development on the Township's character.** The new Township Master Plan recommended rezoning much of the Township to substantially reduce the total amount of potential development. This occurred in 2002. The Township also has an ongoing active open space acquisition program. As a result of these initiatives, the amount of development has been substantially reduced in the Township. This trend is expected to continue thus reducing concern that the Township's character will be harmed by development.
- b) **Trend for very large homes on relatively small lots.** The new Township Master Plan recommended the enactment of floor area ratio standards designed to preserve the established pattern of house sizes related to lot size. This was accomplished in 2002. As a result, it is expected that future

new housing construction will be more compatible to the established pattern in the Township.

- c) **Impact of development on high quality water resources.** A number of important Township initiatives have been enacted with the intent, among other things, of protecting the high quality of the Township's water resources. The 2002 rezoning will substantially reduce overall future development. The Township's open space acquisition program has targeted environmentally important properties. In addition, the Township in 2006 adopted a Stormwater Management Plan element and new stormwater management regulations. Together these changes have substantially reduced concern that the Township's high quality water resources will be harmed by development.
- d) **Council on Affordable Housing.** COAH adopted new "third round" rules in 2004 and the Township began to consider the details of a plan to comply with them. The Township developed a plan based on COAH's determination that the previous obligation should have been lower, thereby resulting in surplus credits to apply to the third round obligation. While this was ongoing, the adopted rules were challenged by developers who succeeded in overturning the rules. COAH has now adopted new rules and proposed revisions that will dramatically increase the Township's affordable housing obligation. They have been questioned by Township officials, Morris County officials, and many other municipalities as being based on inaccurate data. In addition, they represent an unrealistic shifting of the entire burden for the provision of the State's affordable housing needs onto smaller communities. Compliance with the proposed rules would necessarily increase development and compromise the Township's environmental protection goals and those of the Highlands Council. The revised rules may also be challenged. As a result, the Township faces many dilemmas and uncertainties about how to respond to the affordable housing obligation established by COAH.

PART 3: THE EXTENT TO WHICH THERE HAVE BEEN SIGNIFICANT CHANGES IN THE ASSUMPTIONS, POLICIES AND OBJECTIVES FORMING THE BASIS FOR THE MASTER PLAN OR DEVELOPMENT REGULATIONS AS LAST REVISED, WITH PARTICULAR REGARD TO THE DENSITY AND DISTRIBUTION OF POPULATION AND LAND USES, HOUSING CONDITIONS, CIRCULATION, CONSERVATION OF NATURAL RESOURCES, ENERGY CONSERVATION, COLLECTION, DISPOSITION AND RECYCLING OF DESIGNATED RECYCLABLE MATERIALS, AND CHANGES IN STATE, COUNTY AND MUNICIPAL POLICIES AND OBJECTIVES.

This section of the Reexamination Report examines whether there have been changes in local conditions or state mandated policies that were not contemplated in 2002 which may have an effect on the Township Master Plan or development regulations. Following is a discussion of six significant changes that have occurred since 2002 in assumptions, policies and objectives forming the basis of Mendham Township's Master Plan or development regulations. These changes may require changes in the Master Plan and/or development regulations.

a) Highlands Legislation and Regional Master Plan

Mendham Township has been included as part of the *Highlands Planning Area* by the State Legislature. The newly created Highlands Council is in the process of developing a regional master plan. The provisions of the future Highlands Regional Master Plan (HRMP) will be optional for the Township. The overall intent of the HRMP is to promote the preservation of the high quality of water resources in this area, a goal consistent with Mendham Township's Master Plan. While the overall goals of the draft HRMP are entirely consistent with Mendham Township's Master Plan, the proposed Land Use Capabilities Map, setting forth zones to guide future development, is substantially inconsistent with the Township's future land use plan. As a result, the Township faces many uncertainties about how to respond to the recommendations in the Highlands Regional Master Plan.

b) Council On Affordable Housing Rules

The final outcome of COAH's revised rules will have important implications for the Township because it appears that the obligation will not be based upon the Township's realistic development potential. These implications will have to be carefully considered in preparing a revised Housing Plan Element and Fair Share Plan.

c) Environmental Protection

Since 2002, NJDEP has adopted increasingly stringent rules intended to protect wetlands and water resources. The rules have had a particularly important impact on development in Mendham Township because of the large number of very high quality water resources located throughout the Township. Some of the changes required amendments to the Township's Master Plan and Development Regulations. Additional changes may be required in the future.

d) Sisters of Saint John The Baptist Property (Block 100 Lot 17.03)

In 2008 the Township Master Plan and development regulations were amended to facilitate the reasonable reuse of the existing buildings on the property consistent with the Township's overall planning goals. If the site is redeveloped there will likely be an affordable housing obligation under COAH rules. However, by ordinance, any such obligation must be accommodated on site.

e) 2002 Rezoning

The 2002 rezoning has permanently and substantially decreased the amount of development and the number of development applications in the Township.

f) Recycling Plan and Ordinance

The Statewide Mandatory Source Separation and Recycling Act and the Morris County Wastewater Management Plan call for municipalities to adopt recycling plans and ordinances consistent with State law.

Other than in these specific areas, and as a general proposition, the Mendham Township Master Plan remains sufficiently up-to-date to form a solid basis for the Township's development regulations particularly in regard to the density and distribution of population and land uses, housing conditions, circulation, and conservation of natural resources. In addition, its basis of assumptions, policies and objectives remains valid.

PART 4: THE SPECIFIC CHANGES RECOMMENDED FOR THE MASTER PLAN OR DEVELOPMENT REGULATIONS, IF ANY, INCLUDING UNDERLYING OBJECTIVES, POLICIES AND STANDARDS, OR WHETHER A NEW PLAN OR REGULATIONS SHOULD BE PREPARED.

- a) No major or fundamental changes to the Mendham Township Master Plan or development regulations are needed at this time. Minor amendments or additions may be needed, such as provisions for recycling.
- b) The Township Committee has authorized a review of the Land Development Ordinance as part of a recodification of the Ordinance. Minor, albeit extensive, updating will be the focus of the review, all of which is expected to be consistent with the Master Plan.
- c) The Township Committee should pursue an adjustment of the Township's affordable housing obligation in light of the inflated *growth share* obligation based on the proposed rules, which does not take into account current zoning and environmental constraints. Inaccuracies in the vacant land data used by COAH to calculate the obligation, such as incorrect open space designations should be corrected. In addition, the Township Committee should cooperate with other municipalities to seek a modification of COAH rules, particularly:
 - New houses built to replace the demolition of an existing home should not count towards *growth share*.
 - The rules should allow the growth share obligation to be based in part upon current zoning.
 - The rules should allow the growth share obligation to be based in part upon environmental factors consistent with State Plan and/or Highlands designations.
 - The rules should allow for a reduction of the growth share obligation based upon the acquisition of open space which will reduce future development potential.
- d) When COAH's rules are finalized, the Planning Board and Township Committee should amend the Housing Element and Fair Share Plan pursuant to the amended COAH rules.
- e) It is premature for the Township to make a decision concerning "opting in" to the Highlands Regional Master Plan because the HRMP and implementing model ordinances have not yet been adopted by the Highlands Regional Council. At the appropriate time, the Township should weigh the costs/benefits, particularly if

COAH rules and fair share obligation remain unrealistic, and if the Highlands process provides protections.

PART 5: THE RECOMMENDATIONS OF THE PLANNING BOARD CONCERNING THE INCORPORATION OF REDEVELOPMENT PLANS ADOPTED PURSUANT TO THE LOCAL REDEVELOPMENT AND HOUSING LAW INTO THE LAND USE PLAN ELEMENT OF THE MUNICIPAL MASTER PLAN, AND RECOMMENDED CHANGES, IF ANY, IN THE LOCAL DEVELOPMENT REGULATIONS NECESSARY TO EFFECTUATE THE REDEVELOPMENT PLANS OF THE MUNICIPALITY.

There are no designated redevelopment areas in Mendham Township adopted pursuant to the Local Redevelopment and Housing Law.

GOAL areas and other related areas gain certain benefits, and if the following
process provides protection.

PART 3: THE RECOMMENDATIONS OF THE PLANNING BOARD CONCERNING
THE INCORPORATION OF REDEVELOPMENT PLANS ADOPTED PURSUANT TO
THE LOCAL PLANNING AND HOUSING LAW INTO THE LAND USE PLAN
ELEMENT OF THE MUNICIPAL MASTER PLAN, AND RECOMMENDED CHANGES,
IF ANY, IN THE LOCAL DEVELOPMENT REGULATIONS NECESSARY TO
EFFECTUATE THE REDEVELOPMENT PLANS OF THE MUNICIPALITY.

There are no designated redevelopment areas in Michigan Township which are subject
to the local development and housing law.