

**BOROUGH OF MILLSTONE
MASTER PLAN OF 2005**

**Adopted December 15, 2005
Millstone, New Jersey**

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- Mark Imbriani - Alternate

Millstone Borough Council

- Mary Patrick, Mayor
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INTRODUCTION

The Master Plan provides a comprehensive guide for the future development and preservation of areas of Millstone Borough in order to enhance the overall quality of life for its residents. The key element in defining the difference between a Master Plan and other planning studies is the Master Plan's comprehensive approach to planning issues. It considers many factors having an impact on community life, with the focus on its physical, social, economic and aesthetic needs. Current pressures on this community emphasize the urgent need to devise a plan for the future which will ensure the preservation of the Borough's very valuable Revolutionary War history and create design standards for new development which will further reflect and safeguard the fundamental character of the original village. The Master Plan must consider all aspects of the community, and policy proposals should recognize the importance of taking into account the needs of all residents.

The Legal Requirement for Planning

The New Jersey Land Use Law (c.291, N.J. 1975) establishes the legal criteria for a Master Plan and each community must be certain that its plans comply with the legal requirements of the law. The following is a summary of these requirements:

Preparation and Adoption

Master plan policies and recommendations are based on a community's characteristics and goals at a certain point in time. As time goes by, conditions change, laws are amended, and the characteristics of the community changes. Master plans must be revised to reflect these changes.

The responsibility for the preparation of a Master Plan rests with the local Planning Board. A plan may be adopted (or amended) only by the Planning Board and only after a public hearing, and must be reviewed at least once every six years.

Content

The Master Plan must include a statement of objectives upon which the plan is based. It must include a land use plan indicating: natural conditions, extent and intensity of land to be used for varying types of future development, the location of existing or proposed airports and airport hazard areas and a statement of recommended population density and development intensity. A specific policy statement indicating the relationship of plan proposals to the plans of neighboring communities, the County, and other appropriate jurisdictions must also be included.

Enforcement and Implementation

The Master Plan, after adoption by the Planning Board, gives the community the legal basis for control over future development. The major means of implementation are as follows:

All of the provisions of a zoning ordinance, or any amendment or revision thereto, shall either be substantially consistent with the Land Use Element of the Master Plan or designed to effectuate such plan element (N.J.S.A. 40: 550-62).

The location and design of new streets created through the process of land subdivision or site plan

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approval may be required to conform to the provisions of the circulation plan element of the Master Plan (N.J.S.A. 40: 55D-38b (2)).

Where the Master Plan provides for the reservation of designated streets, public drainage ways, flood control basins, or public areas, the Planning Board may require that such facilities be shown and reserved in subdivisions and site plans in locations and sizes suitable for their intended use. The reservation powers are effective for a period of one year after approval of a final plan. The municipality must compensate the owner for such action (N.J.S.A. 40:550-44).

Whenever the governing body or other public agency proposes to spend public funds, incidental to the location, character or extent of a capital project, such proposal must be referred to the Planning Board for review and recommendation. No action shall be taken without such recommendation or until 45 days have elapsed (N.J.S.A. 40:55D-31).

Master Plan Development

The last comprehensive revision to the Millstone Master Plan was adopted in 1997. A subsequent reexamination report was developed in December 16, 2003. The current Master Plan update has been developed in two sections. The Assessment describes current regional changes and relationships with local, County and State planning efforts, and also describes the existing status of the various elements of the Plan. The 1997 Plan made recommendations, which took into consideration the then current needs of the community for each of the Plan elements, and contained suggestions for implementation. Since the adoption of the last Master Plan, the community has undergone an extensive planning process to plan for the eventual build out of the community. This new Master Plan is a culmination of these many years of extensive planning and negotiation with landowners, adjacent municipalities, county and state governmental agencies, and local non-profit agencies. During this extensive process, questionnaires were sent to residents and there were extensive public hearings to review alternative proposals. What results is a culmination of a very comprehensive process that has redefined what Millstone is and what Millstone can accomplish for the betterment of all the residents, landowners and businesses within the community.

EXECUTIVE SUMMARY

Millstone Borough is situated along the Millstone River in the heart of Somerset County between Princeton and Somerville. Recently designated as a scenic corridor, the Millstone River valley is one of the last remaining nineteenth century landscapes within the state of New Jersey. Because of its location, it was once the county seat of Somerset County and the site of one of the few river crossings between New York and Philadelphia. Consequently, it played an important part during the Revolutionary War and has since been recognized as one of three communities within New Jersey where anyone who was anyone during the Revolutionary war was at one time during the war.

Millstone is a small community consisting of only three hundred and sixty acres. It is as small as many housing developments that are built in many communities today. Surprisingly, it also remains over sixty percent vacant. But, as the region has changed due to development pressures, so has Millstone Borough. Recently the community has been challenged as to how it will be built out. Part of this pressure is due to pressure from the Council on Affordable Housing, a State agency responsible for setting minimum standards for developing low and moderate housing in all of the communities within the State of New Jersey. Another pressure has been from two major local landowners who wish to develop the majority of remaining developable land within the Borough.

These conflicting interests (COAH and two developers) and several plans have been discussed and reviewed over the past three years. Many plans were discussed and rejected; some included a total of 360 dwelling units and over 400,000 square feet of commercial and office space. After much review and discussion, the Planning Board has adopted this new Master Plan fitting Millstone's Historic Village character. This Plan addresses a number of conflicting goals:

- Meeting the Borough's affordable housing obligation,
- Designing a buildout strategy that would create a ratable base to make the Borough sustainable,
- Limiting development to a scale that would be compatible with the existing community;
- Preserving the historic lands that tell the story of the Revolutionary War;
- Setting up partnerships that would provide public sewers for all of the residents within the Borough; and
- Establishing new environmental controls for flood plain and storm water management.

The plan that follows attempts to meet all of these goals. When finally implemented, it is the intent that Millstone will be built out and meet all of its COAH obligations past, present and future. Millstone will not only have a stable tax base that will last for generations. It is the intent of this plan that the developed and developable areas of the Borough will eventually be sewered. The result will be a slightly expanded commercial village that will fit within the existing historic district, a total increase of one hundred and fifty two homes that will be nestled into areas that will

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have the least impact upon the character of the Borough, a heritage park that will celebrate the historic significance of Millstone, and open space that will surround the Borough to the north and east. New environmental standards will help to protect the Borough residents from flooding due to the new storm water management and flood mitigation standards. This Master Plan was developed after many public meetings, surveys, and delicate negotiations. It is the culmination of the combined efforts of dedicated community members, land owners, professionals, Hillsborough Township, and supportive State and County agencies.

PART ONE: ASSESSMENT

A. HISTORIC PRESERVATION AND COMMUNITY DESIGN

Historic District and Historic District Commission

The Municipal Land Use Law (MLUL), c.291. N.J. 1975 that governs local planning and zoning authority in New Jersey has as one of its purposes "the promotion of historic sites and districts, open space, energy resources and valuable natural resources in the State." To this end, the MLUL allows for the creation of a Historic Preservation Plan Element as part of a municipality's overall Master Plan. The MLUL specifies content that should be included in this element. The Historic Preservation Plan should:

- (a) Indicate the location and significance of historic sites and historic districts
- (b) Identify the standards used to assess worthiness for historic site or district identification; and
- (c) Analyze the impact of each component and element of the master plan on the preservation of historic sites and districts.

The Millstone Historic District was created on June 8, 1965 to preserve the Borough's local heritage, culture, history, and architecture, utilizing the authority provided by the State and National Register programs as well as the Municipal Land Use Law.

The Borough also has a Historic District Commission, established on November 10, 1970, which has the power to review applications for development in the Historic District. The Commission reviews all applications for exterior changes in the District against the U.S. Secretary of the Interior's Standards for Rehabilitation, which provides guidelines for the rehabilitation of historic buildings and the maintenance of historic district. In summary, the guidelines address the identification, retention and preservation of all historic buildings, providing specific guidelines on various aspects of alterations and additions to historic buildings, historic sites, historic district streetscapes and landscape features. Based on their review of development applications in the District, the Commission may award a Certificate of Approval regarding proposed development or building alteration. A certificate of approval is needed before a building permit may be issued for construction in the District.

Millstone's historic district and a proposed extension of the present district 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.

Historic Preservation in Millstone: Background and Overview

Since its inception, the citizens of Millstone have worked to preserve their village and its heritage. More recently, government programs have aided in this endeavor. Since the village of Millstone is located in the Millstone River Valley, with its rich historic and scenic heritage, and since efforts to protect this heritage have a crucial affect on our village, it is appropriate to recognize efforts to protect surrounding areas, as well as Millstone itself. State and Federal laws also have an impact

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on preservation efforts.

- 1933: Millstone Dutch Reformed Church is listed nationally in the Historic American Buildings survey. Library of Congress Item title: "Dutch Reformed Church". Call #: HABS, NJ, 18-MIL,2- ; Survey #: HABS NJ-295

John Van Doren House is listed nationally in the Historic American Buildings survey. Library of Congress Item title: "John Van Doren House". Alternate title: "Washington's Headquarters" Call #: HABS, NJ, 18-MIL, 1-8; Survey #: HABS NJ-293
- June 8, 1965: Millstone creates the Millstone Borough Historic District. The ordinance establishing the District prohibits exterior alterations to the buildings that would change their architectural character.
- 1966: National Historic Preservation Act passes US Congress.
- 1966: The NJ State Legislature establishes the New Jersey Historical Commission to advance public knowledge and preservation of the history of New Jersey through research, public programs, publications and assistance to other agencies.
- During the 1960s, area citizens form the River Road Association to promote historical preservation in the Valley and to fight a major highway that NJ proposed to build in the Millstone Valley. Plans to build the highway, which would have crossed the Millstone River just south of Millstone, were dropped, largely due to public opposition.
- 1970: With the creation of the Department of Environmental Protection and passage of the New Jersey Register of Historic Places Act, New Jersey's historic preservation program becomes a formal component of state government. Since that time, the New Jersey State Historic Preservation Office (SHPO) has been located within DEP's Division of Parks and Forestry. This state agency has been a major proponent for preserving historic properties in New Jersey.
- Nov.10, 1970: Millstone Historic District Ordinance is amended to establish a Historic District Commission.
- 1973: The Delaware and Raritan Canal is listed on the National Register of Historic Places. (District #73001105) The canal and towpath are part of the National Recreational Trail System. The 70-mile linear park is a valuable wildlife corridor connecting fields and forests. Nearly 36 miles of the main canal and 22 miles of the feeder canal still exist, with many historic structures along the canal. The canal runs adjacent to the Millstone River where the river borders Millstone, and is an important part of Millstone's history.
- October 1974: Governor Byrne signs a bill creating the Delaware and Raritan Canal State Park and establishing the Delaware and Raritan Canal Commission with veto power over proposed land use on or near the canal. The Canal Park is made up of over 60 miles of canal, a narrow strip of land on both banks, and the land between the Millstone River and the canal. This parkland provides Millstone with a historically important state park on its eastern boundary.
- October 4, 1974: The Millstone Historic District is listed in the New Jersey Register of Historic Places.
- September 13, 1976: The Millstone Historic District is listed in the National Register of Historic Places. (District #76001188)

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- 1976: Hutcheson Memorial Forest (Mettler's Woods), a 525-acre open space area in Franklin Township, managed by Rutgers University and the Nature Conservancy, is listed in the National Park Service Registry of Natural Landmarks. This property contains a 65-acre woodlot with original-growth trees. It is located immediately east of East Millstone on Amwell Road. The forest and East Millstone's historic houses line Amwell Road just before the road crosses the canal and river. Together, they provide an appropriate entrance into Millstone.
- August 10, 1977: The Millstone Valley Agricultural District, comprised of 5730 acres, 28 buildings, and 5 structures, is listed in the National Register of Historic Places. (District #77000907) South of Millstone, on the Millstone border. This listing provides historic recognition of many houses and other structures on Millstone's southern border.
- 1981: From October 9-16, hundreds of re-enactors trace the route from Newport (RI) to Yorktown (VA) to commemorate the bicentennial of the siege. At various locations along the route, including Millstone, bicentennial events are held. The re-enactors camp in Millstone in the Green Acres area in the south of the village.
- 1983: East Millstone Historic District is listed in the National Register of Historic Places, (District #83001613) providing recognition of the historic value of Franklin Township's East Millstone area, located on the D&R Canal directly to the east of Millstone.
- 1985: Amendments to New Jersey's Municipal Land Use Law (MLUL) formally enable local historic preservation ordinances.
- 1991: (Millstone) River Road Historic Rural District (District - #91000256) is listed in the National Register of Historic Places. This District is comprised of the area of Millstone River Rd. south from Hillsborough Rd. to Van Horne Rd., Hillsborough and Montgomery Townships, Griggstown.
- 1992: The Delaware and Raritan Canal State Park's trail system is designated a National Recreation Trail.
- 1992: New Jersey State Development and Redevelopment Plan includes historic preservation in its goals, objectives, and strategies.
- 1995: Six Mile Run Historic District is listed in the National Register of Historic Places. (District #95001191) South of East Millstone. Roughly bounded by Grouse Rd., Amwell Rd., Bennetts Ln., NJ 27, Bunker Hill Rd. and the Millstone R., Franklin Park, this District adds to the recognition of the historic importance of the area immediately to the east of the D&R Canal.
- 1992: The Somerset County Scenic Corridor and Roadway Study identifies the Millstone River Road Corridor through Montgomery and Hillsborough, (Main St. in Millstone), as a Scenic Corridor. The County defines a Scenic Corridor as a "public thoroughfare, which traverses areas which provide travelers a substantial opportunity to view distinctive natural and man-made environments unique to Somerset County."
- 1998 The Millstone Historic District Commission commissions a comprehensive review of Millstone's historic preservation ordinance and the historic preservation element of the Borough's Master Plan. Nancy L. Zerbe Historic Preservation Consulting, Inc of Metuchen, NJ was retained to do the review. The report she submitted has been used as a guide in drafting this plan.

- 2000: Congress directs the National Park Service (NPS) to study Revolutionary War sites in 15 NJ counties to determine if the Crossroads of the American Revolution meets its criteria for designation as a National Heritage Area (NHA). Millstone is located in the area of interest.
- Nov. 2000: the 106th Congress of the United States passes The National Heritage Act of 2000, H.R. 479. The law directs the Secretary of the Interior to complete a resource study of the 600-mile route used by the allied armies of generals George Washington and the Comte de Rochambeau in their epic march that led to the victory at Yorktown. Millstone was the site of two encampments on this march, and national recognition of this route would reinforce efforts to call attention to the role played by the village during the Revolutionary War.
- 2001: The New Jersey NJ Department of Transportation-Landscape and Urban Design designates the Millstone River Valley Scenic Byway as a State Scenic Byway. The Millstone Valley Preservation Coalition (MVPC), and its partners - Somerset and Middlesex Counties, Hillsborough, Franklin, Montgomery and South Brunswick Townships, Rocky Hill and Millstone Boroughs and the D&R Canal Commission, worked to attain this designation. It will help to maintain the scenic and historic quality of a 25-mile loop of road linking the King's Highway at Laurel Avenue in Kingston with Amwell Road in Millstone and Franklin Township, where it spans the Millstone River and Delaware & Raritan Canal. In Millstone the scenic corridor extends from the southern boundary of the Borough, turns right at the intersection of Rt. 514 and Rt. 533, and crosses into East Millstone.
- July 9, 2002: Congressmen Frelinghuysen and Holt introduce a bill (HR-5080) to establish the Crossroads of the American Revolution and to provide funding for developing and implementing a management plan to preserve and protect important Revolutionary sites, buildings, vistas, and landscapes for conservation, educational and recreational purposes. The Crossroads of the American Revolution National Heritage Area would include all or part of fourteen counties in New Jersey, stretching from the Delaware River to the Atlantic Ocean, and from Gloucester County in the south-central part of the state almost to the New York border in Bergen County. The area is based on George Washington's retreat across New Jersey to Pennsylvania, the re-crossing of the Delaware and advance across New Jersey with victories in Trenton and Princeton, 296 military engagements in New Jersey, and several National Historic Landmarks related to the Revolution. This bill has not passed the Congress.
- 2003: The Millstone Valley Preservation Coalition is awarded a grant of \$135,176 from the Department of Transportation's Scenic Byways program to create a management plan, which, when accepted, will give federal status to the Millstone River Valley Scenic Byway.
- 2003: Millstone River Valley Scenic Byway receives federal status. The announcement states: "The National Scenic Byways Program recognizes highways that are outstanding examples of our nation's beauty by designating them as All-American Roads and National Scenic Byways. The roads being featured were designated by the Secretary of Transportation from nominations submitted by the states and federal land management agencies," and, "Located in the narrow Millstone River Valley which lies in north central New Jersey, this byway offers a glimpse into the past when skirmishes between the local militia and British troops played a key role in the Revolutionary War." There is only one

other Scenic Byway in New Jersey.

- October 5, 2004: The Millstone Historic Preservation Commission votes to recommend expanding the Millstone Historic District by local ordinance to include the encampment area across Main St. from the present Borough Hall, based upon known military activity that took place in this area during the American Revolution.
- 2005: The Millstone Historic Preservation Commission retains Ernest Bower as Historical Consultant to provide a summary of American Revolutionary War history for the Borough of Millstone, particularly as it pertains to Block 1.01, Lot 1, the area thought to have contained British, French, and American Militia encampments during the Revolution.
- June 2005: \$400,000 Matching Grant Award from the NJ Department of Environmental Protection Green Acres Program for Open Space Acquisition and Park Development Recommended for Funding to purchase approximately 44.13 acres of the Rezem Tract in Millstone Borough. One of the purposes of the acquisition is to preserve an important encampment site dating from the American Revolution Millstone Borough.

Borough History

Millstone Borough is located in the southern third of Somerset County, between Hillsborough and Franklin Townships. The Millstone River and the Delaware and Raritan Canal bound the eastern edge of the Borough, forming a corridor between New Brunswick to the east and Bound Brook to the north, and Princeton to the south. This corridor has significant scenic and historic value. Millstone itself has a rich historical heritage, closely entwined with the civic, religious, and commercial history of New Jersey and the United States. The evidence of this heritage consists of existing historic structures, roads, and potential archaeological sites, as well as the proximity of the historically significant Millstone River and the Delaware and Raritan Canal.

Present-day Millstone was shown variously on early maps and documents. A 1766 map based on the “Plan of Somerset County in the Province of New Jersey” labels the village “Hillsborough” and Corwin refers to early deeds and transactions in “Middleburgh.” But in 1738 Somerset County citizens voted to make the village the new County Seat and it began to be called “Somerset Court House”. Somerset Court House was the seat of justice for Somerset County residents from 1738 to 1784. The courthouse was burned in 1779 during the Revolutionary War, but the village continued as the county seat until 1784, when the Court was moved to Somerville. After this the village became known as “Millstone.”

Millstone is located at the intersection of two important colonial-era roads, the road between north Jersey and Princeton, and between West Jersey and New Brunswick. This strategic location made it the scene of extensive military activity during the Revolutionary War. Millstone is unique in Somerset County as the only locale in the county that was occupied by all the major belligerent forces in that war at one time or another. Sites associated with American, British, Hessian, Loyalist and French forces, spanning a period from at least 1776 to 1782, are located within Millstone’s present boundaries.

In an effort to simplify an overview of Millstone’s history and development, six historic periods can be identified: Paleo-Indian Period; Early Dutch and English Colonial Period, beginning 1623; Early Settlement Period, beginning 1699; Revolutionary War Period, 1775–1783; Country Town Period, 1783 – 1932; Modern Period, 1932–present

Paleo-Indian Period

Before colonists from Europe settled New Jersey, the Lenni Lenape tribe of the Eastern Algonquin Confederacy occupied the area along the Millstone River, including a sizeable settlement in or near the present boundaries of Millstone. An Indian mortar (originally used for grinding corn, was discovered locally on the Van Doren farm and is now located in front of the Hillsborough Dutch Reformed Church. The plaque accompanying the mortar states that there was once an Indian village "one thousand feet south of the Church," probably the same village referred to as "Hunters' Wigwam" in the property deed and bill of sale acquired by Lady Elizabeth Carteret in 1631. A similar mortar in front of the Forge on North River Street is dedicated to the "first American mechanic."

Early Dutch and English Colonial Period, beginning 1623

The Dutch West India Company established New Netherlands (which included northern New Jersey) in 1623. When the English took over the area from the Dutch, New Jersey was formed with a 1664 grant issued by the Duke of York to Sir George Carteret and Lord Berkeley. The grant was divided into East and West Jersey in 1674. In 1675 East Jersey was divided into four counties, with the Millstone area being part of Middlesex County. Millstone became part of Somerset County when Somerset County was set off from Middlesex County on May 14, 1688.

When Sir George Carteret died, East Jersey became the property of 12 Quaker gentlemen led by William Penn. On June 10, 1688, William Dockwra received patents from of the 12 proprietors for 2000 acres in the valleys of the Millstone and Raritan. In 1690, Captain Clement Plumstead obtained a large grant of this land, including the territory of the present Borough of Millstone, and extending along the river's west side to Blackwell's Mills. A boundary dispute between Plumstead and his neighbor, John Royce of Roycefield, was resolved when both agreed that the brook flowing through the disputed land should serve as a boundary. They named the brook "Peace Brook". The brook bisects Millstone and flows into the Millstone River; it is still called "Peace Brook".

Early Settlement Period, beginning 1699

The Raritan and Millstone area began to be permanently settled after 1682. In 1699, the Hockenberry house was built in Millstone. The new-world descendants of the New Netherland Dutch began settling the Millstone valley around 1700. The Dutch, mainly farmers, were attracted by the fertile farmland of the Millstone River Valley. Other ethnic groups settled the Valley, including the Scots and some English and Germans, but the Dutch community was predominant. Dutch surnames such as Van Doren, Vanderveer, Van Cleef, Cortelyou, Van Neste, Beekman, Veghte and Hageman are still prominent in Somerset County today.

A bridge over the Millstone River connecting Somerset Courthouse with New Brunswick probably existed in 1738. The Amwell Road crossed the river here, extending on to settlements further west. In 1738 there were about fifty families within three miles of the present borough. Farmers in this vicinity came to the village to ship their produce to market, using the Millstone River to connect to the Raritan River. The original settlement around Somerset Courthouse consisted of large farms, but by the end of second quarter of the 18th century several structures were clustered near the river by the bridge. During the "Court House" years the village developed into a bustling rural center with diverse tradespeople. Ledgers from the Van Neste–Van Lieu store for 1772-1775 list customers by occupations: 3 weavers, 4 coopers, 3 blacksmiths, 6 tailors, 2 hatters, 2 shoemakers, 4 carpenters, a doctor and a miner. John Coffee, a "free Negro," did business here. There was an inn in the village in the 1730's. By the time of the Revolution there

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were two taverns, both said to do a prosperous business.

In 1760, the Millstone Dutch joined with the Presbyterians to erect a church on land to the northeast of the present Dutch Reformed Church in Millstone. Another church was built in 1766–1768, when the Dutch parishioners built their own church on the present church property. This church was damaged by fire during the Revolution, but stood until the congregation voted to replace it with the present church, which was dedicated in 1828. Early pastors of the Dutch church, the Rev. Christian Frederick Foering and the Rev. Solomon Froeligh were both ardent patriots, and championed the revolutionary cause in New Jersey.

Revolutionary War Period, 1774–1783

The history of Somerset Court House (Millstone) during the Revolutionary War years may be divided into different event periods of varying intensity and importance.

1. Events leading up to the Revolution, 1774–1776
2. American Retreat and British Pursuit to the Delaware River, November 1776
3. British Occupation & the Trenton-Princeton Campaign, December 1776–January 4, 1777
4. Forage War, January–March 1777
5. Spring New Jersey Campaign, April–June 1777
6. Middlebrook Winter Encampment, December 1778–September 1779
7. Simcoe's Raid, October 1779
8. Queens College and Somerset Court House 1780–1781
9. Yorktown Campaign, 1781–1782

See Map # 3: “Millstone in the Revolutionary War”,

Events leading up to the Revolution, 1774–1776

Dissatisfaction over British rule set the tenor for events to come in pre-Revolutionary Somerset Court House. The pro-independence sentiments of the area were evident in a series of events preceding the onset of battle. On July 4, 1774, the freeholders and inhabitants of Somerset County met in Somerset Court House to select a County Committee of Correspondence. In May 1775, the Somerset County Committee of Correspondence met here to consider the question of raising troops. Four militia companies were organized: the "Millstone Minutemen" with Hendrick Probasco, Captain, and John Smock, Lieutenant of the 60-man group. A Grenadier Company was formed with Cornelius Lott, Captain. Hillsboro and Shannick each raised a Company.

The town provided leadership to the growing independence movement. Abraham Van Neste, Frederick Frelinghuysen and Peter Schenck represented the county in the Revolutionary Provincial Congress. When New Jersey's first Provincial Congress met on May 23, 1775, to raise militia, Frelinghuysen was elected Secretary of the body. He and Schenck were appointed to the 11-man Committee of Safety for continuing resistance to the British. The fourteen Somerset County delegates were considered among the most zealous spokesmen against reconciliation with the Crown. Relations with Britain became more strained and in February 1776 the Eastern New Jersey Treasury was moved to the Somerset Courthouse for safekeeping.

American Retreat and British Pursuit to the Delaware River, November 1776

In late 1776 military activity in the Revolutionary War shifted to New Jersey. American forces, having lost many battles in New York and northern New Jersey, retreated across the state. On December 1, 1776 a portion of the retreating American Army moved through Somerset Courthouse along the Princeton (River) Road. On December 7 the pursuing British/Hessian Army marched through the town. The Crown force consisted of the 42nd Regiment of Foot, two troops of the 16th Light Dragoons, Hessian Grenadiers and Jagers, all under command of General Cornwallis. The American Army withdrew across the Delaware River into Pennsylvania on December 8, 1776. On December 11, General Washington directed Millstone resident Frederick Frelinghuysen, who had joined the Continental Army, to re-cross the river into New Jersey to form a militia. At the age of 26, Frelinghuysen formed and led the Somerset County Militia. It is said that it was a shot from his pistol that mortally wounded Colonel Rahl, the commander of the Hessian forces, at the Battle of Trenton. Frederick Freylinghuysen later became the first U.S. Senator from New Jersey (1793-96).

British Occupation & the Trenton-Princeton Campaign, December 1776–January 4, 1777

After Washington's main American army withdrew across the Delaware into Pennsylvania, Crown forces occupied New Jersey. During the first two weeks of December, American forces under command of General Charles Lee moved south from New York State, attempting to join Washington's main army at the Delaware near Trenton. In response, the British stationed several brigades along the right flank of their army's central Jersey encampments. An infantry brigade of approximately 765 men under Lt. Col. Charles Mawhood was stationed at Somerset Courthouse. On December 13, 1776, Colonel Harcourt, commander of dragoons camped just south of the village at Schenk's Mill, led 20 of his mounted dragoons northward through Somerset Court House on a patrol toward General Lee's force. The British captured General Lee at White's tavern in Basking Ridge and returned with this important prisoner to Mawhood's headquarters at Somerset Court House.

On December 26, 1776, the tide of war finally turned against the British with Washington's victory over Hessian troops at Trenton. The subsequent second battle of Trenton on January 2, 1777, and the surprise march on Princeton on January 3, 1777, where the American Army scored a major victory, ended the almost continuous string of defeats suffered by the Colonial troops during 1776. Most historians regard these battles as crucial turning points in the war.

After the Battle of Princeton, Washington decided not to attack the British in New Brunswick, but to march along the Millstone River toward Somerset Courthouse. By keeping the Millstone River between his army and the British, he could assure the safety of his troops as they marched north to the mountains of north Jersey. In Somerset Courthouse he could expect a welcome for his exhausted army. On the evening of January 3, 1777, the American army of about 3000 straggled into the village after dark, an hour after 150 British survivors of the battle retreated through the town toward New Brunswick, taking the 70 man outpost that had been camped in the village with them. The Americans camped in and around Somerset Courthouse. The Rev. Christian Frederick Foering, pastor of the Dutch Church in the village, and an ardent patriot, procured food for the army and converted the church into a military hospital. Washington himself is believed to have stayed at the Van Doren House, still standing just south of the center of the town. Years afterwards, an American soldier wrote:

“Ten or eleven o'clock at night we arrived at the Court-House, in which the prisoners were shut up. It will be remembered this was the third night's march, and under arms or marching all day. There were barely houses sufficient for the quarters of the Generals and their attendants. The troops took up their abode for the rest of the night on the frozen ground. All the fences and everything that would burn were piled in different heaps and burnt, and he was the most fortunate who could get nigh enough to smell the fires or smoke.”

The American Army left Somerset on January 4, marching toward Pluckemin and the relative safety of the Watchung Mountains.

Forage War, January–March 1777

After the American victories at Trenton and Princeton, the strategic situation in central New Jersey changed dramatically. In 1777 the Raritan and Millstone valleys became the scene of protracted military activity. General Washington's forces were at Morristown with outposts southward through Bound Brook to Princeton. There was an American militia post at Somerset Courthouse, with a small earthwork to guard the bridge across the Millstone. The British forces began to run low on supplies and to raid the American-controlled countryside for forage and food. At least two of these foraging raids resulted in battles at or near Somerset Courthouse. On January 20th 1777, 400 militia under the head of the New Jersey Militia, General Philemon Dickinson defeated a Crown force foraging out of New Brunswick, and captured 9 prisoners, 40 wagons, sheep, cattle, and almost 100 draft horses. This battle became known as “The Battle of Millstone”.

There is a record of another skirmish at Millstone on January 23, 1777.

Spring New Jersey Campaign, April–June 1777

In the spring of 1777 the British built up their forces in central New Jersey, making New Brunswick their frontline base. Washington moved his troops to the Watchung Mountains near Middlebrook. On June 14, 1777, as twelve-thousand British and Hessian troops under General Howe advanced west from New Brunswick with flatboats and cannon, 500-600 American militia under the command of Daniel Morgan guarded the crossings of the Millstone River at Van Nest's Mill, Somerset Courthouse, and Schenk's Mill. The force of 200 Americans in Somerset Courthouse destroyed the bridge over the Millstone and skirmished with some 6,000 Hessian Crown forces, killing 2 officers and killing or wounding 17 other men, before retreating before the superior force. Meanwhile, General Charles Cornwallis crossed the Millstone at Schenk's Mill, marched north to meet the Hessian troops, occupied Somerset Courthouse and erected fortifications. There is an excellent contemporary map made by Captain John Ewald showing Crown forces positions at Somerset Courthouse.

It appeared that the British army was intent on advancing to the Delaware River with the goal of capturing Philadelphia. Actually, Howe's strategy was to draw Washington's army from the mountains with the aim of dealing the American Army a decisive blow. The strategy failed. Unable to lure Washington from his strong defenses at Middlebrook and harassed in skirmishes with the local militia, the British evacuated to Perth Amboy on June 19, destroying two churches and revolutionaries' houses along the way. This strategic defeat forced Howe to move on Philadelphia via southern naval routes. Because of this delay he failed to join General Burgoyne, who was moving south from Canada towards Albany. Burgoyne had to surrender in October at Saratoga. Thus, the delaying tactics employed by the Americans in and around Millstone helped to foil the overall British plan for victory. The price paid by

Somerset Courthouse for its part in this cat-and-mouse strategy can be seen in an August 1777, description by Ebenezer Hazard:

"Great devastation was made by the enemy at Somerset Court House. The Dutch and Presbyterian Churches were stripped of their pulpits & pews, their doors & windows were broken & the boards torn off the outside, so as to leave the frames bare. Several dwelling houses were destroyed. The thatch was torn off barns and barracks & two orchards were cut down that booths might be made for the soldiers, of the branches of the trees. The enemy's advanced guard was kept in an orchard just back of the Court House, their main body laid about half a mile farther on a beautiful rising ground: their booths still remain there." (New Jersey in the American Revolution 1763-1783, A Documentary History)

Middlebrook Winter Encampment, December 1778–September 1779

The main Continental Army was camped in New Jersey during the winter of 1778-79. General officers were allowed to contract to stay in private homes. Several officers of the Pennsylvania Division stayed in or near Somerset Courthouse. Troops were also stationed in or near the village that winter. In March 1779, 51 men of Captain Bartholmew Von Heer's Marechaussie or Provost Corps were stationed in the village.

American military field hospitals were established during the winter of 1778-9 at six local sites: the two churches (Presbyterian and Reformed), the courthouse, and the barns of three homes, including the Van Doren house.

In September 1779, Somerset Courthouse briefly became a state governmental center, due to sporadic British threats to eastern New Jersey. The New Jersey Supreme Court decision in *Holmes Vs Walter* in which an act allowing 6-man juries was ruled unconstitutional was issued from Somerset Courthouse.

Simcoe's Raid, October 1779

On October 26, 1779 Colonel John Graves Simcoe led a force of 80 Tory light horse rangers dressed as Patriot militia into Somerset County from Perth Amboy. Their aim was to scuttle flatboats stored by Washington's army at Van Veghten's bridge. Many of the boats had been moved, but the Simcoe's raiders burned 25, as well as the Dutch meetinghouse at Van Veghten's. Then they continued on to Somerset Courthouse, where they destroyed Continental Army supplies, took some American officers prisoner, freed Loyalist prisoners held in the jail, burned the courthouse, the jail, several adjacent houses, and damaged the two churches.

The Tories crossed the Millstone, making their way toward New Brunswick. Simcoe was wounded and captured shortly thereafter. A Loyalist soldier, Stephen Jarvis, described the retreat:

"and a hazardous one it was, for by this time the whole country was alarmed, and from every house and copse of wood we were fired upon, and at last we fell into an ambuscade, where we lost Col. Simcoe and several of our men." ("An American's Experience in the British Army", Stephen Jarvis, Journal of American History, 1907)

Queens College and Somerset Court House 1780–1781

Queen's College, now Rutgers University, was founded in 1766 by a group of Dutch Reformed clerics with strong ties to the area around Millstone. The College opened in October of 1771, the eighth institution of higher learning to be founded in the colonies. Its close ties

with Somerset Court House are evident from the roster of the early trustees, which included nine natives from the town: Doctors Vanderveer and Van Buren; Reverends John Van Harlingen, Christian Foering and Solomon Froelich; and citizens Peter Schenck, Archibald Mercer, Ernestus Van Harlingen and John Bennett. The first tutor of the College was Millstone resident Frederick Frelinghuysen, the 18-year old grandson of the Rev. Theodorus J. Frelinghuysen, who fought tirelessly for the establishment of Queen's College. Theodorus J. Frelinghuysen had had the pastoral charge of the Church at Millstone, and of other neighboring parishes. George Whitfield and Jonathan Edwards spoke of him as "one of the greatest divines of the American Church." Jacob Hardenburg, Frederick Frelinghuysen's stepfather, served as Board Chairman of Queen's College and became the school's first president in 1785.

The Revolutionary War disrupted classes at Queen's College. Students, tutors, and trustees were caught up in the fight for independence. Frederick Frelinghuysen, the college's first tutor, served as a major of the Minute Men, Captain of Artillery, and then Colonel and aide-de-camp to General Philemon Dickinson in the Continental Army. As the war went on, it became too dangerous to hold classes in New Brunswick. Classes were held in North Branch from 1777 to 1779, and in 1780 to the spring of 1781 they were held in the Van Harlingen house in Somerset Court House.

Yorktown Campaign, 1781–1782

In July of 1780, France finally came to the aide of the American colonists in their fight against the British. French General Comte de Rochambeau landed in Newport, Rhode Island, with an army of 5,000 officers and men. In June and July of 1781, Rochambeau's army marched through Rhode Island and Connecticut to join General George Washington's Continental Army in Phillipsburg, New York. In the late summer of 1781, the combined American/French Army moved southward in order to operate in Virginia against the Crown forces under General Cornwallis. On August 30 the American baggage train passed through Millstone. Later that same day the first two of four regiments of Rochambeau's army arrived in the village. Two French Regiments and artillery encamped just southwest of the intersection of the Princeton (River) and Amwell Roads. Rumors of a British raid from New York caused Baron de Viomenil who was in command (Rochambeau had ridden ahead to Princeton) to encamp the cavalry of "Lazun's Legion" in the area south of the intersection of the Princeton and Coryell's Ferry (Hamilton) Roads north of town on high ground to defend against attack.

On August 31 the remaining two French regiments arrived, and on September 1 the rear guard of the American Army stopped for rest as it passed through the village. The French/American journey was an amazing feat of endurance and military achievement. Elements of the French Army marched 629 miles to Yorktown from Providence, Rhode Island. Americans made the march of over 400 miles from Philipsburg (Greenburg), New York, to the York River. With the French fleet blockading Chesapeake Bay, the Continental Army and the French force under Rochambeau cornered and forced the surrender of a large British army under the command of Lord Cornwallis. The defeat of Crown forces at Yorktown, Virginia, on October 19, 1781, forced the British to seriously negotiate for peace and to recognize American independence.

The French Army returned to New England in September 1782, camping in Millstone on September 8 and 9. There are excellent maps by Louis-Alexandre Berthier for Rochambeau documenting both French encampments in the village. After September 1782 large-scale military movements in the Somerset Court House area ended.

Country Town Period, 1783–1932

On April 16, 1783, Governor Livingston officiated at a great celebration to mark the end of the war, with the Rev. Solomon Froelich of the Somerset Courthouse Dutch Church leading a “divine service” for the assembled troops and citizens. But Millstone’s courthouse had been burned during the Revolution, and in 1784 the county seat was moved to Somerville. Somerset Court House became Millstone. While no longer the seat of government in Somerset County, Millstone retained its important location astride the old colonial roads and the Millstone River. Politically, it remained a part of Hillsborough until it was incorporated as a Borough on May 14, 1894. In fact it retained its own identity as a political, economic, social, and cultural hub in this largely rural part of New Jersey well into the 20th century.

The period between the end of the Revolution and the mid-nineteenth century was a period of growth and development in Millstone. In the 1800s, its residents included merchants as well as prominent intellectuals and politicians (e.g. General Frederick Frelinghuysen and his son Theodore, who ran for Vice-President of the United States with Henry Clay). Abraham Van Buren, who practiced between 1760 and 1813, was probably the village’s first physician. President Martin Van Buren, a relation, was a frequent visitor at the Van Buren homestead in Millstone when he was a boy. Other Millstone doctors in the 1800s include Peter I. Stryker, William D. McKissack, and James B. Elmendorf, all of who were instrumental in the organization of the Somerset County Medical Society in 1816.

The intellectual life of the community was not neglected as Millstone began the new century. A co-educational public school called the Academy opened in 1814 in a building next to the church. During the Civil War, the public school moved to what is now Borough Hall, where classes continued until about 1940. Starting in 1826 a Classical School for the study of Latin was held at the home of Dominie Zabriskie. Joseph P Bradlee, one of the early teachers at the Classical School, went on to become a United States Supreme Court Justice. Members of the Congregation of the Reformed Church at Millstone formed the Millstone Lecture Room Association in 1858. Lectures, readings, debates, and concerts were held in the old school building by the church.

Millstone was also noted for its artisans, in particular the Van Doren family of farmer-weavers. Peter Sutphen Van Doren and Isaac William Van Doren, grandsons of John and Marreyte Van Doren of Revolutionary War fame were both well-known weavers. George Van Doren, who had a shop in Millstone about 1830, is credited with the designing of the Liberty Coverlet. This reversible spread or blanket is graced with a floral design usually done in white and red or blue. The repetitive border design consists of a spread eagle alternating with the word "Liberty." Van Doren coverlets are collected today for their beauty, craftsmanship, and historical value.

When the Delaware and Raritan Canal opened in 1834, Millstone became a thriving business center. The D&R Canal was built through the Millstone River Valley in central New Jersey to provide an efficient and safe route for transporting freight between Philadelphia and New York. During the 1830s and 1840s mule-drawn barges proliferated as busy docks and basins dotted the canal banks. Farmers carted their grain to Millstone and other shipping points along the canal. Snell notes that in Millstone, large warehouses stored as much as 100,000 bushels of grain at a time, awaiting shipment. In 1834 there were four storehouses for grain, an extensive lumberyard, and a number of other establishments, such as hotels, a harness shop, and grocery and dry goods stores. The number and variety of stores escalated as canal traffic increased. At times, the D & R Canal carried more annual freight tonnage than its Erie counterpart. By 1860 the D&R was carrying nearly 2,000,000 tons of freight annually, with approximately 1400 operational boats, nearly all of 180-ton capacity. As late as 1871 profits continued above 10%. Its peak years were

the 1860s and 1870s when Pennsylvania coal was transported through the D&R Canal to feed the city of New York's industrial boom. During this period, 80% of the total cargo carried on the canal was coal. Later in the Nineteenth Century the Delaware and Raritan canal was sold to the Pennsylvania Railroad and, as use of the railroads increased, the canal lost its commercial importance. The D&R Canal's last year of operation at a profit was 1892, but it stayed open until 1932.

Although development of a number of railroads was started in the area, Millstone never became a stop on a completed and commercially viable rail line. With the decline of the canal, the commercial development of the community slowed. It became a small bucolic country town with a population of between 200 and 300. In 1930 a new, mostly flood-free bridge was built 100 yards south of the original one across the canal and the Millstone River, foreshadowing the importance of the automobile in the development of Somerset County. With its school, church, blacksmith and butcher shops, drug stores and business offices, Millstone remained an important center for its own citizens and for the many farming families in the area. After 1900, its architectural character scarcely changed until the post WW II building boom of the 1950s and '60s. Thus, at its core, Millstone reflects not only the 17th and 18th century history of the beginnings of the American Republic, but the 19th and early 20th century development of its architecture, commerce, and civic life.

Modern Period, 1932–present

Millstone was caught up in the residential building boom that started after the Second World War. Homes were built on Amwell Road and in Colonial Village on land that had been part of the Van Doren farm. More houses were built on Maple Terrace and Beardslee in the 1960's, and the population increased to more than 500. The village retains a small commercial area. Several of the businesses in the Village Commercial Zone are housed in structures built in the 18th and 19th centuries; others are in newer structures. In 2005 there were five businesses, a convenience store, a gas station, a mortgage company, liquor store, and a shop selling plants and other landscape supplies located in new structures in the town's center. Most commerce has moved to large shopping centers in surrounding towns.

In 2005, most of the newer homes in Millstone are now at least 40 years old. They are mostly one and two story houses, many built in the ranch style of the time. While many are similar in design, their owners have personalized them. Each development comprises only one or two streets, and has been comfortably absorbed into the village. With mature landscaping on tree-lined streets, these houses also have a history to tell. It is the history of an America that was expanding after its young men returned from two Wars: WWII and the Korean War, and were aided by the US government with loans for education and housing.

There is no longer a school in the community. Children attend the public schools in Hillsborough Township. Millstone remains a center of religious institutions. The Reformed Church still thrives in Millstone, with approximately 220 members. St. Joseph's Catholic Church was built in 1998 on open land in the southwest of town, now serving a congregation of 4,924. The number of surrounding farms has dwindled, and neighboring towns have eclipsed Millstone in economic importance. As the area grew and changed, families from diverse backgrounds were added to the original population of Dutch and English families in the Millstone Valley. Millstone's residents include people from many walks of life. Most work outside the town, but the village's small size still lends the Borough a cultural and political cohesiveness.

The physical setting of Millstone has presented both problems and benefits for the preservation of its historic village character. The north-south and east-west roads that made it an important center

in earlier times now carry traffic that threatens the character of the community. However, the location of the town next to the Millstone River and the Delaware and Raritan Canal still adds much to the historic ambience of the Borough and provides protection from development to the east. The historic community of East Millstone and the open spaces of Somerset County Colonial Park, Sterling Forest, and the Delaware and Raritan Canal Park extend the preserved area to the east of the river. To the south, flood plains, NJ Green Acres land by the river, 5 acre zoning in Hillsborough, and some remaining farms present a rural ambience. To the west, wetlands provide some protection, but it will be necessary for Millstone to work to preserve open space immediately to the west of the village in order to preserve its integrity in the face of encroaching development in Hillsborough.

Criteria and Standards used to Designate Local 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 are satisfied in the Borough of Millstone Historic District as follows:

1. Identification of the location and boundaries of historic district and sites: The boundaries of the historic district in the Borough of Millstone are summarized in the “Historic District and New Properties Listing” section below and were established in accordance with National and/or State Historic Register criteria.
2. Identification of historic significance. Historic significance has been shown for the Millstone Historic District through the State and Federal historic nomination and registration process. To qualify for registration, the State and National Registers of Historic Places require a detailed survey and documentation of the historic resources. The “Historic District and New Properties Listing” section below provides a summary of identified historic resources in the District.
3. Identification of the standards used to assess the worthiness of historic district designation:

The standards defined by the State and National Registers of Historic Places are those that were used to establish Millstone’s present Historic District, and should be met by any proposed extension of Historic District. The New Jersey Register is closely modeled after the National Register program. Both Registers have the same criteria for eligibility, nomination forms, and review process. According to these criteria, in order for a site or district to be eligible for historic preservation, the site or area must generally be more than (50) years old and be historically or architecturally significant on the national, state, or local level. It must also possess integrity (i.e. a high degree of character-defining features) from the period during which it earned its significance. The National Register of Historic Places Evaluation criteria are summarized as follows:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

That are associated with events that have made a significant contribution to the broad patterns of our history; or

That are associated with lives of persons significant in our past; or

That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

That have yielded or may be likely to yield, information important in prehistory or history.

According to National Register guidelines, cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria. Further information on qualifying properties can be found on the National Park Service National Register of Historic Places website.

In addition to the standards identified by the National Register of Historic Places, the Borough of Millstone considers the following criteria to be of importance in evaluating historic elements in the Borough:

- Geographically defined areas which contain structures, sites, objects, and spaces linked historically through location, design, setting, materials, workmanship, feeling and association; or
- Geographically defined entities whose individual structural components collectively convey a sense of time and place in history (which may relate to one (1) or more periods in history).

Significance of Present Millstone Historic District and Worthiness of Additional Areas for Historic Designation

A. Qualification of Existing District under National Register Criteria “C”

The Millstone Historic District encompasses approximately seventy acres, and 58 structures, fall within its boundaries. The District includes Ann Street, West Street, North River and South River Streets, Alley Way, Amwell Road, and Main Street/River Road (County Rt. 533). The primary land-uses within the District are single-family residential, commercial, institutional and open space (recreational).

The District is registered in both the New Jersey State (1974) and National (1976) Registers of Historic Places. The period of historic significance is 1700 to 1874. The District boundaries, which delineate groupings of historic resources, roads, and natural features, were established to reflect the settled area shown on maps of the Borough drawn in the 1860s, as well as historic farm-buildings and farmland in the southern part of the Borough. Forty-one structures shown on maps dated to the 1860s remain standing within the District.

The District boundaries are shown on Map # 5 , *Historic District*. Specific properties, which include over 58 contributing structures, are given in the Appendix to this document. Most of the contributing structures were built before 1900, and are dwellings. There are several important structures that are not dwellings:

Borough Hall, c 1850, on Main Street is a one-story wood frame building with a brick facing and was built as a one-room schoolhouse. Classes continued there until about 1940.

The Old Millstone Forge, c 1740, North River Street, is a two-story wood frame structure with a brick facade on the first floor level and wood shingles on the second. It served the area as an active blacksmith shop until the death in 1979 of the last blacksmith. The Millstone Forge Association now operates it as a museum. It contains an operational forge and many historic tools, including Dutch anvils dating to the late 1600s.

The Hillsborough Reformed Church, 1828, corner of Main Street and Amwell Road is one of the few true Federal-style meetinghouses in New Jersey. The building is listed nationally in the

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Library of Congress Historic American Buildings survey, Survey #: HABS NJ-295. The church is well maintained and has an active congregation.

Dutch Barn, c 1754, 1490 Main St. The original barn on the Van Doren farm, it is a large and extraordinarily well-maintained Dutch barn. Part of the structure has been converted to a dwelling, but the main section of the barn is largely unchanged.

Eighteenth and nineteenth century architecture in the District is represented by various architectural forms including Dutch Colonial, Gothic Revival, Georgian, Classic Federal, Victorian and Greek Revival. In addition, there is one important 20th century home, the Abraham Wilson House, c 1954-55, 1419 Main St., designed by the important 20th century architect Frank Lloyd Wright. Although a 20th century intrusion, it is an important building, and was designed to fit in with neighboring 19th century homes. The numerous historic resources in the Millstone Historic District dating from the 18th, 19th, and 20th centuries provide information illustrating the architecture, industry and community development pattern of early America. The District is thus historically significant in accordance with National Register Criteria C.

B. Qualification of Existing District under National Register Criteria “A”, “B” and “D”

The District encompasses several roads and sites that were of importance during the American Revolution. Routes 533 and 514, as well as North and South River Streets, are outgrowths of colonial roads. These roads were used many times by the American, British, Hessian, and French armies, as detailed in the Borough History section above. The routes taken by the various armies can be seen on Map #4: Millstone in the Revolutionary War. . Particular mention should be made of the encampment of the American Army under General George Washington on January 3, 1777, as it made its way north after the Battle of Princeton. The army stayed in fields, barns, and houses in the area of Millstone, notably on land owned by John Van Doren just south of the Dutch Reformed Church. That night, General Washington made his headquarters in the Van Doren House, which is within the District at 1488 Main St. This structure is listed nationally in the Library of Congress Historic American Buildings survey, Survey #: HABS NJ-293

On October 26, 1779 Colonel John Graves Simcoe and his raiding party burned the Courthouse in Millstone just before being captured en-route to New Brunswick. In August 1781, and again in September 1782, the French Army under French General Comte de Rochambeau camped in Millstone on the way to and from the Battle of Yorktown. The site of the August 1781 encampment is within the Historic District.

In addition to the famous military officers and engagements associated with the Millstone, other persons important to the early history of the nation lived and worked in the Borough. Among those mentioned in the *Borough History* section of this document Frederick Frelinghuysen, the Revs. Theodorus Jacobus Frelinghuysen, Jacob Rusten Hardenbergh, Christian Foering Solomon Froelich, John DeWitt, and Edward Tanjore Corwin, and the Van Doren family of farmer-weavers

As the foregoing demonstrates, the Millstone Historic District is historically significant in accordance with National Register Criteria A, “areas that are associated with events that have made a significant contribution to the broad patterns of our history”, and Criteria B, “areas that are associated with the lives of persons significant in our past.” In addition, the discovery within the village of artifacts associated with settlements of the Lenni Lenape Indian tribe in the area, the early date (1699) and importance of European settlement of the village, and the important military encampments in the village during the American Revolutionary War, qualify the District under Criteria D, “areas that have yielded or may be likely to yield, information important in prehistory or history.”

C. Village Character

The Millstone Historic District retains the scale, character and artifacts of a rural village and small-scale industrial center of the 18th and 19th centuries. The physical features of the community are a result of the way of its natural environment in the Millstone River Valley influenced the pattern of development from farming community to center of government and commerce to quiet village backwater. In addition to the 10 structures specifically described in Millstone's application for listing of its Historic District in the State and National Registers of Historic Places, the Historic District contains several streetscapes that are worthy of preservation because they represent the organic evolution of village development during the 19th century. The streets are residential in nature and are related to various income and lifestyles ranging from upper middle class to the middle class working family.

The aesthetic character of the area is marked by shallow residential setbacks and mature street trees that provide a shaded canopy for pedestrian activity. On Ann Street, West Street, North River and South River Streets, and Alley Way, street widths are modest in width (e.g. less than 28 feet) contributing a quality of peace and self-containment to the neighborhood. These street-scapes are important because they contain a selection of post-1800 to 1900 architecture that, although vernacular, represents a variety of architecture and historic lifestyles. The houses have varying, usually shallow, setbacks, and lots with varying sizes and configurations. Most of the houses on these streets have porches, many with turned or chamfered posts and balustrades. Although many residences have been altered in some way (e.g. chimney removed, porches removed, siding replaced, porch posts replaced, etc.), they retain most of their original features and much of the original detail is intact. Because there have been few intrusions on Ann Street, West Street, North River and South River Streets, and Alley Way, one can readily visualize the streets as they appeared during the previous 150-200 years.

Most of the houses on the south side of Ann St. are shown on maps of the Borough made in 1860. Several reflect the period of Greek Revival architecture (1825-1850). The houses on the north side of the street, built later in the 19th century, are more Italianate in style. The house on the north corner of Ann and Main Streets was built in the early 1800s, but was modified later in the century, giving it grander Victorian peak and brackets.

Amwell Road and Main Street (Rt. 533) are wider thoroughfares, and are tree-lined. There are brick sidewalks in some sections. Within the Historic District, these roads are bordered by many of the older homes in the Borough, ranging in date from the mid-1700s to the late 1900s. The structures are of various sizes and styles, showing a wide range in taste and financial means. Most of the contributing buildings are distinctive in the style and period of architecture they represent. Some were modified during the 19th century to reflect changing tastes, but many, such as the 1755 Georgian-style Van Doren House at 1488 Main St., and the Georgian/Greek Revival Van Buren house at 1403 Main St, built in 1838, remain much as they were built. The handsome Victorian Emmons house at 1336 Main Street has been maintained with few alterations. Thus, the Millstone Historic District represents a virtual catalog of American architecture, from early Dutch farmhouse to late 19th century Italianate Victorian.

Modern Intrusions

There are 3 major modern intrusions in the Millstone Historic District, a convenience store, and two commercial buildings, one originally a bank and one previously a car wash. The bank has been converted to office space, and the car wash has become a retail business selling flowers and

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landscaping materials. All three properties are located at the intersection of Main St. and Route 514, a historically important area that was once the center of government and commerce in Millstone. Another intrusion occurred when an historic Victorian residence burned, and was replaced by a reproduction Victorian residence that has maintained the character of the property. There is also an old barn on this property. All of these properties are on archaeologically sensitive land, and continue to qualify for historic listing under Criteria D.

Historic Preservation of Open Space and Undeveloped Land in Millstone

Preservation of the historic village character of the Borough of Millstone has been greatly enhanced by Borough and the State acquisition of Green Acres open space within the Borough. Preserved parkland and open space in Millstone are shown on the *Existing Land Use Map* and described in the *Parks and Open Space* section of this Master Plan. In addition, Millstone's location in the Millstone River Valley within a matrix of County, State, and National Park and Heritage areas, designated Historic Districts and Natural Landmarks, a National Recreation Trail and a State and National Scenic Byway, adds to the scenic and historic importance of the Borough. These designations and acquisitions are listed in detail above in the *Historic Preservation in Millstone I: Background and Overview* section of this document. The areas are delineated on the *Natural Heritage Priority Sites Map*.

Parks, open space, and scenic byways preserve natural beauty and provide areas for public recreation. They also help to conserve the historic character and archaeological potential of an area, and aid in public appreciation of our American heritage. Millstone's National Historic District is mostly confined to developed parts of the Borough. Records show that much of the open land remaining in the Borough, and not included in the Historic District, has historic significance. In June 2005, the Millstone Historic Preservation Commission retained Ernest Bower as Historical Consultant to provide a summary of American Revolutionary War history for the Borough of Millstone, particularly as it pertains to Block 1.01, Lot 1, an area of undeveloped fields and forest thought to have contained British, French, and American Militia encampments during the Revolution. Much of the historic data included in his report was used to prepare the *Revolutionary War Period* part of the *Borough History* section of this plan.

Recently, historians of the American Revolution have focused on the importance of military activity in New Jersey during 1776-1782. The 2002 National Park Service Crossroads of the American Revolution in New Jersey Feasibility Study concluded:

" Situated between British headquarters in New York City and the rebel capital of Philadelphia, the New Jersey landscape through which the Continental and British armies marched and battled was truly the crossroads of the American Revolution. According to The American Battlefield Protection Program Revolutionary War and War of 1812 Historical Preservation Study Database, New Jersey was the scene of more engagements than any other colony. As a result, her citizens suffered through some of the worst of the war.....Collectively, the events that occurred within the Crossroads of the American Revolution study area had a major impact on the ultimate British defeat and the subsequent history of the United States."

The Bower report concludes that Somerset Courthouse, as Millstone was then known, played an important role in this military activity, and that, in particular, Block 1.01, Lot 1 is shown by documentary and/or archaeological sources to be the site of activities related to the Spring New Jersey campaign, April-June 1777 (the British encampment under Lord Cornwallis) and the

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Middlebrook Winter Encampment, December 1778-June 1779. The property has a significant likelihood of being the site of activities related to the British occupation and Trenton-Princeton campaign, Dec. 1776-Jan 4, 1777, the Forage War, Jan. – Mar. 1777, Simcoe's Raid, Oct. 1779, and the Yorktown campaign (Rochambeau March) 1781-1782. The report also concludes that the site has considerable archaeological potential. As for a physical description of the site itself, the most compelling paragraphs in the Bower document are the following:

"The surface topography of the site remains much as it probably looked in the 18th century with the exception of disturbances resulting from the construction of the Millstone Bypass and the Amwell Road realignment.

One of the striking features of the site is the perspective that a visitor gets by standing on the ground occupied by the British in 1777 and looking west toward the Sourland Mountains or north toward the Watchung Mountains. It is an almost identical view that British soldiers and officers saw in June 1777 as they gazed upon the almost impregnable positions of their enemy. It well illustrates the dilemma of Howe's Army who found their incursion into New Jersey thwarted by Washington's forces who held the strategic high ground commanding the advance to the Delaware and the rear supply lines of the Crown forces. A simple view from this area provides better insight than any written line, as to why Howe's forces could neither advance or attack and why they were forced to abandon their offensive operations in central New Jersey."

In the light of these facts, the Millstone Historic Preservation Commission has recommended to the Planning Board that the Millstone Historic District be expanded to include historically significant but undeveloped areas in the Borough, using the National Register of Historic Places Evaluation criteria A, B, and D. It is the recommendation of this Master Plan that the Borough expand the Millstone Borough Historic District, including Block 1.01, Lot 1 as well as the nearby Green Acres land owned by Millstone, and seek State and Federal listing for the newly included area.

Historic District Commission (HDC): Responsibilities and Nomenclature

The MLUL allows the governing body of a municipality to establish a Historic Preservation Commission. The Historic District Commission fulfills role in Millstone. The Millstone ordinance establishing the HDC should be amended to change the nomenclature to conform to the State nomenclature. In addition, it is recommended that the ordinance establishing the HDC be amended to conform more strictly to the NJ Municipal Land Use Law, Certified Local Government requirements, the Preserving New Jersey recommendations, and the Open Public Meetings Act requirements, as detailed in the above-referenced 1998 Zerbe report that was commissioned by the HDC.

The responsibilities given to the Historic District Commission under the MLUL are to:

- A.** *Prepare a survey of historic sites of the community pursuant to criteria identified in a survey report;*
- B.** *Make recommendations to the Planning Board on the historic preservation plan element of the Master Plan and on the implication for preservation of historic sites of any other Master Plan elements;*
- C.** *Advise the Planning Board on the inclusion of historic sites in the recommended capital improvement program;*

- D. Advise the Planning board on applications for development pursuant to section 24 of P.L. 1985, c. 516 (C.40:55D-110)*
- E. Provide written reports pursuant to section 25 of P. L. 1985, c. 516 (C.40:55D-111) on the application of the zoning ordinance provisions concerning historic preservation; and*
- F. Carry out such other advisory, educational and informational functions as will promote historic preservation in the municipality.*

The HDC in Millstone plays an important advisory role in respect 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. 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 HDC should continue its study of historic properties. The information gathered 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. It allows the HDC to provide clear guidance to applicants and the Planning Board about how renovations, new construction and developments can be designed consistent with the Borough's historic heritage.

Benefits of Historic Preservation

In addition to protecting local heritage, preservation of historic, culturally and architecturally significant sites, cultural landscapes and important visual features plays an important role in maintaining the historic small town character of Millstone. Historic structures and areas are part of the inherent community design of the Borough and enhance the overall quality of life for all residents. The preservation of Millstone's heritage can also be a stimulus for protecting local property values through the continuous preservation and restoration of properties.

Historic preservation helps to support the local economic base through protection of unique and attractive buildings, which can provide an additional incentive to work and shop in the community. The preservation and revitalization of historic or architecturally significant buildings also generates continued interest in the renewal of commercial areas and stimulates economic improvement. Many new businesses, particularly those that are information oriented, can operate from historic commercial or residential buildings. In this way, historic preservation and the renovation of architecturally significant structures can contribute to the attractiveness of Millstone as a location for small business development.

Local Tools for Preserving Historic and Cultural Resources

There are various methods of increasing protection for historic, architecturally and culturally significant properties within municipalities. Millstone has already taken steps to protect these properties through the incorporation of historic sites and districts in the Master Plan, through historic district zoning and through the creation of a Historic Commission. A municipality can also apply for inclusion in the State or Federal Registry of historic places. Historic Registers recognize sites, structures, districts or objects identified as having historical, architectural or

archaeological significance. If approved, inclusion on the Registers provides a degree of protection from any publicly funded, assisted, or licensed project that may adversely affect a listed site. The Millstone Historic District is included in the State and National Registers. Listing and eligibility for listing may also enable owners of income producing properties (including residential-rental) to qualify for federal income tax credit of 20% for monies used for rehabilitation of historic properties under the Economic Recovery Tax Act of 1981 as amended under the Tax Reform Act of 1986. Listing on the Registers does not restrict the right of a private owner to alter or sell a designated property.

River Road Scenic Corridor

Main Street (regionally identified as River Road) has been identified by the County as a scenic roadway. Most of the area within Millstone, which is within this corridor, is either developed or preserved as part of Green Acres or State conservation land. The County defines a scenic corridor as "a public thoroughfare, which traverses areas which provide travelers a substantial opportunity to view distinctive natural and man-made environments unique to Somerset County. Scenic corridors and roadways possess elements of design which convey a sense of pleasing aesthetics or features which can include cultural, historic, recreational or other similar items which help to convey a sense of place or regional identity"¹. In the case of River Road, this area extends up from the southern boundary of the Borough, ending at the bridge to Franklin Township at County Rt. 514. The scenic designation in this area is limited to the adjacent properties along this right-of-way, concentrating on the visual foreground adjacent to the roadway's edge.

The County encourages the use of flexible development and subdivision regulations (such as clustering) to preserve key features, landscape management plans, signage controls and lighting controls to help preserve the scenic quality of the corridor. In Millstone, this corridor is identified within the Millstone Historic District.

¹ Somerset County Scenic Roadway and Corridor Study, 1992. Pg. 21

B. NATURAL RESOURCES

Millstone Borough encompasses only 0.6 square miles, and yet it includes a surprising variety of natural conditions that are described below. The Borough land use is a mix of open space, residences and businesses along Millstone River Road (County Rte 533). The majority of development is located along Amwell Road and Millstone River Road. There are large open space areas along the Millstone River, on the northwest and southwest portions of the Borough.

The Borough has recently undertaken two Management Plans that relate directly to environmental issues, the *Stormwater Management Plan* of April 26, 2005, and the *Flood Mitigation Plan* of 2005. General physical findings of these two documents are incorporated in Part One:

Assessment. Recommendations and goals established by the plans are detailed in Part Two: The Plan Section of this Master Plan Document. Both these documents remain in their entirety as originally adopted as separate documents.

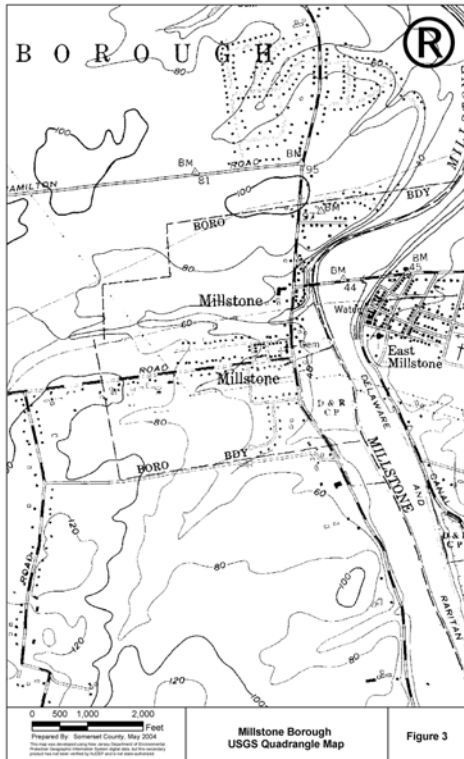
Geology, Topography and Soil Types

Geology

The Borough is located in the central portion of the Piedmont Physiographic Province. The province encompasses approximately one-fifth (1500 square miles) of the land area of the state. It occupies the southeastern portions of Hunterdon, Morris and Passaic counties, large areas of Mercer, Somerset and Middlesex counties; and all of Union, Essex, Hudson and Bergen counties. The province is underlain with northwestward dipping shales, siltstones and sandstones of Triassic and Jurassic age, and igneous basalt extrusions and diabase intrusions of Jurassic age. The sedimentary rocks form a broad, southeastward sloping piedmont plain, or gently rolling lowland, with an average elevation of 200 to 400 feet. Above this lowland surface, higher ridges of basaltic lava flows (450 to 879 feet above sea) make up the Watchung Mountains.

Topography

The Borough has an elevation differential between 30 feet at the Millstone River, to 90 feet at the southwest corner of the municipal boundary with Hillsborough. The 100 years flood plain has an elevation of 44.5 feet, which is why the floods of the Millstone River have such a detrimental impact upon the Borough.



The topography of the Borough can be divided into three general areas: riverine floodplain along the Millstone River, gentle to steep hills extending inland from the River and an undulating to gently sloping upland plateau area in the western portion of the Borough. The Peace Brook traverses the Borough in a west to east direction. Two natural streams are located south of Amwell Road in the Yorktown Road and Van Doren Drive areas. All three water courses drain into the Millstone River.

Steep Slopes

There have been no significant changes in the topography in Millstone Borough since the adoption of the Master Plan in December 1997. The slope are generally gentle in the 0-8 percent range, with a band of slightly steeper slopes in the 8-15 percent range running from southwest to northeast near the Millstone River.

Prime Agricultural Soils

The soils series in Millstone Borough are sorted into three primary classes: Class II (70%), Class III (25%), and Class IV (5%)-area percentages are approximate only (refer to *Prime Agricultural Soils* map). Class I soils do not exist within the Borough limits. Class II soils have moderate limitations, which reduce the choice of plants or may require moderate conservation practices. Class III soils have sever limitations, which reduce the choice of plants and/or require special conservation practices. Class IV soils have very severe limitations that reduce the choice of plants and require very careful management practices.

Class II soils in Millstone are all silt loams in the 0-8% slope range and consist of the Birdsboro, Dunellen, Lansdowne, Penn, Raritan, Royce and Rowland Series. This class group covers the most of the southern portion of the Borough and is scattered through portions of the north and west. A large portion of this group is currently undeveloped and should be protected. Class III soils in the Borough are only Penn-channery silt loams in the 8-15% slope range and consist of the Penn and Klinesville series. This class group runs in two separate prongs generally from the

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northeast along the Millstone River to the southwest edge of the Borough. Roughly fifty to sixty percent of this group is currently developed. The Class IV category only includes the Croton silt loam series in 0-3% slope range. This group is located near the northwestern edge of the Borough and covers a very small section of the Borough.

CLASS	SOIL TYPE	SLOPE
II	Birdsboro Silt Loam	3-8%
II	Dunellen Silt Loam	3-8%
II	Lansdowne Silt Loam	3-8%
II	Penn Silt Loam	3-8%
II	Raritan Silt Loam	0-3%
II	Rowland Silt Loam	0-3%
II	Royce Silt Loam	0-3%
III	Penn-channery Silt Loam	8-15%
III	Klinesville channery Silt Loam	8-15%
IV	Croton Silt Loam	0-3%

Wetlands

Wetland areas provide flood storage, nonpoint pollutant removal and habitat for flora and fauna. Wetlands in Millstone Borough are located along the Millstone River and two unnamed streams running through the southeastern portion of the Borough; some of these wetlands are located on lands in public use. It should be noted however that much of this information is based upon County GIS information, which is not subject to field determination; rather they are based upon the underlying soil characteristics. Therefore, these delineations are for illustrative purposes only and represent areas where wetlands may be present. Field determination studies have to be undertaken to indicate a more accurate extent of the wetlands.

The greater portion of wetlands lies in the northwestern portion of the Borough along Peace Brook on lands that are mainly in public use or are vacant. Wetlands in this section of the Borough abut residential lots located between Amwell Road and Millstone By-pass. A narrow strip of wetlands abuts the south boundaries of residential lots on the south side of Amwell Road.



It is important to note that major portions of the areas that are either farmland, woodlands, or vacant are in fact wetlands, which greatly reduces their value for development purposes.

Hydric Soils

Soils which exhibit wetland properties are also referred to as "hydric soils" and these are restrictive in terms of their relationship to wetlands. These soils are generally rated as having severe limitations relating to depth to seasonal high water and often correspond with freshwater wetland areas. Hydric soils, due to a seasonal high water table that ranges between two to four feet from the surface, limit the opportunities for basements.

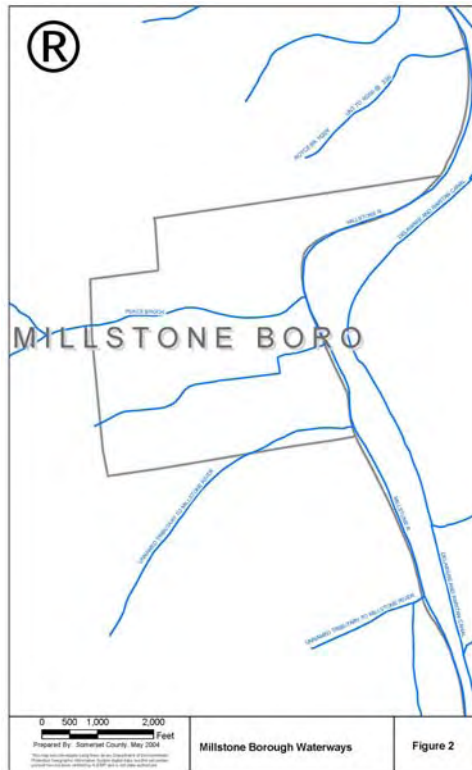
A hydric soil is defined under the Freshwater Wetland Protection Act as "a soil that in its undrained condition is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation. These soils may be on New Jersey's Official List of Hydric Soils developed by the United States Department of Agriculture Soil Conservation Service and the United States Fish and Wildlife Service National Wetlands Inventory." Alluvial land may also be considered a hydric soil for the purposes of wetland classification. Also, wet phases of somewhat poorly drained soils not on New Jersey's Official list of Hydric Soils may also, on occasion, be associated with a wetland and considered a hydric soil. Wetlands, floodplains and hydric soils are identified on the following exhibit.

Waterways and Water Quality

The Borough of Millstone is situated in the Raritan River Basin and is bounded on the east by the Millstone River and divided by a tributary of the river known as the Peace Brook. Surface water quality in the Raritan River Basin of Somerset County is generally considered to be a fairly good

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quality in comparison to surface waters in other parts of the State. However, there have been problem areas in the past relating to industrialization along or near the river. The Peace Brook and other tributaries to the Millstone River in Millstone are classified by the State DEP as FW-2 non-trout production waters. In accordance with emerging strategies that are being proposed by New Jersey DEP, it may be necessary to maintain a minimum riparian buffer of 75 feet as measured from the top of the bank of a stream of FW-2 non-trout production waters. It is intended that there be no loss of the area of the riparian buffer. NJDEP recommends that each municipality eventually adopt a riparian buffer ordinance.



Millstone is located in the New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area (WMA) 10. The Borough is located within two Hydrologic Unit Code (HUC) areas (02030105110140 and 02030105110170). These HUC14² areas are shown in Map # 12.

NJDEP has established an Ambient Biomonitoring Network (AMNET) to document the health of the state's waterways. There are over 800 AMNET sites throughout 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

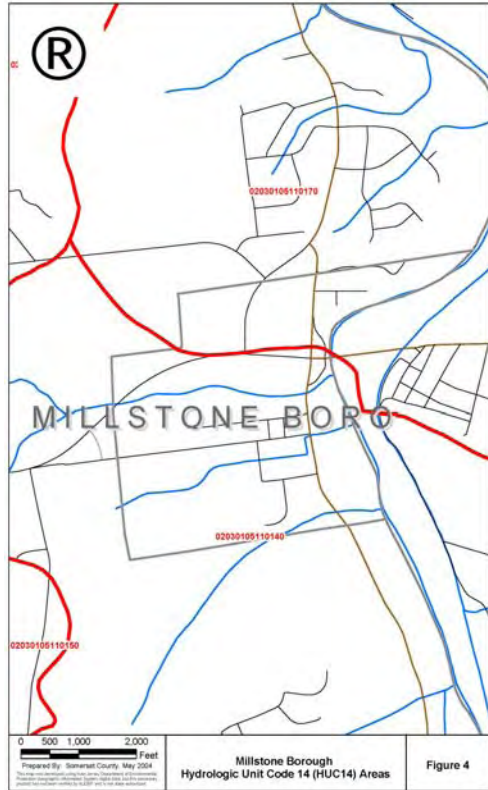
²² The term "HUC-14" is from the hydrologic unit code system developed by the United States Geological Service for delineating and identifying drainage areas. The system starts with the largest possible drainage areas and progressively smaller subdivisions of the drainage area are delineated and numbered in a nested fashion. A drainage area with a hydrologic unit code (HUC) designation with 14 numbers, or HUC-14, is one of several sub watersheds of a larger watershed with 11 numbers, or a HUC-11. There are 921 HUC 14 sub watersheds in New Jersey that range in size from .1 to 42 square miles. The average size of a HUC 14 is 8.5 square miles. There are 150 HUC 11 watersheds in New Jersey ranging in size from .1 to 143 square miles with an average size of 51.9 square miles.

Source: <http://www.nj.gov/dep/watershedmgt/stormwaterfaqs.htm#cone2>

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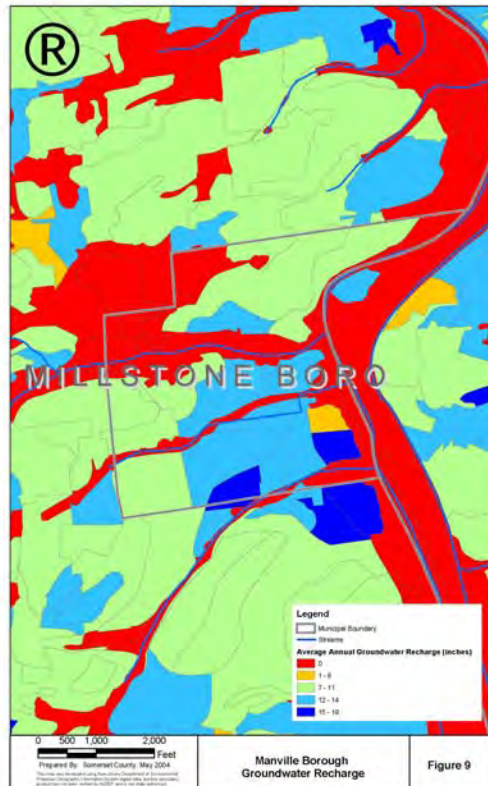
biometrics related to benthic macroinvertebrate community dynamics.

Based on the AMNET data, the Millstone River is moderately impaired. The closest AMNET sites are located upstream and downstream of the Borough on the Millstone River. This means that the river is an impaired waterway and the NJDEP is required to develop a Total Maximum Daily Load (TMDL) for these pollutants.



A TMDL, or Total Maximum Daily Load, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. The allowable load is allocated to the various sources of the pollutant, such as stormwater and wastewater discharges (which require an NJPDES permit to discharge) and nonpoint sources (which includes stormwater runoff from agricultural areas and residential areas) along with a margin of safety. Provisions may also be made for future sources in the form of reserve capacity. An implementation plan is developed to identify how the various sources will be reduced to the designated allocations. Implementation strategies may include improved stormwater treatment plants, adoption of ordinances, reforestation of stream corridors, retrofitting stormwater systems, and other BMPs (Best Management Practices).

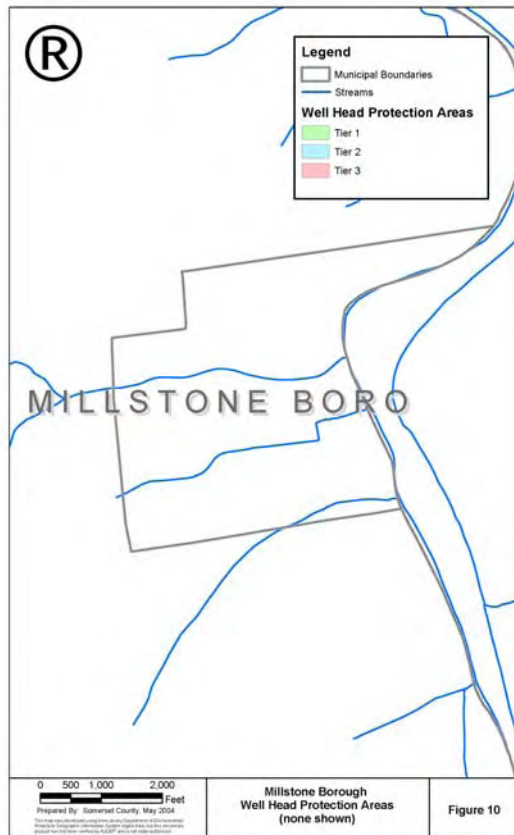
The New Jersey Integrated Water Quality Monitoring and Assessment Report (305(b) and 303(d)) (Integrated List) is required by the federal Clean Water Act to be prepared biennially and is a valuable source of water quality information. This combined report presents the extent to which New Jersey waters are attaining water quality standards, and identifies waters that are impaired. Sublist 5 of the Integrated List constitutes the list of waters impaired or threatened by pollutants, for which one or more TMDL's are needed. The Millstone River is listed in the proposed Sublist 5 (March 1, 2004). The Millstone at Blackwells Mills is non-attaining for benthic macroinvertebrates, arsenic and phosphorous.



The Borough has a small amount of developable land. A current aerial photo with parcel lot lines overlain on it is shown in Figure 8. The Borough is not within the State Plan Designation PA1 Metropolitan Planning Area or in a designated center. Groundwater recharge rates for native soils in this area are generally between 0 and 12 inches annually. The average annual groundwater recharge rates are shown graphically in Map # 13.

According to the NJDEP, “A Well Head Protection Area (WHPA) in New Jersey is a map area calculated around a Public Community Water Supply (PCWS) well in New Jersey that delineates the horizontal extent of ground water captured by a well pumping at a specific rate over a two-, five-, and twelve-year period of time for unconfined wells...The confined wells have a fifty foot radius delineated around each well serving as the well head protection area to be controlled by the water purveyor in accordance with Safe Drinking Water Regulations (see NJAC 7:10-11.7(b)1).”

WHPA delineations are conducted in response to the Safe Drinking Water Act Amendments of 1986 and 1996 as part of the Source Water Area Protection Program (SWAP). The delineations are the first step in defining the sources of water to a public supply well. Within these areas, potential contamination will be assessed and appropriate monitoring will be undertaken as subsequent phases of the NJDEP SWAP. As shown in Map # 14, a portion of the Borough is not in a well head protection area.



Millstone River Flood Plain

Millstone Borough has had a history of flood damage from the Millstone River. The river and its minor tributaries have an established flood plain that has been delineated by FEMA (Federal Emergency Management Agency) and which occupies the lower elevation area of the Borough, east of Main Street. The water surface elevation of the Millstone River during a 100 year flood is approximately 44.5 feet.

In conjunction with the USGS, Somerset County operates a flood information system for its 21 municipalities. The Somerset County Flood Information System (SCFIS) consists of a network of stream and precipitation gages throughout the County. Information from these gages is automatically transmitted to a central location via telephone, radio and satellite. The information is then processed and appropriate actions are taken. These actions include notifying municipal police, fire and emergency management personnel with flood potential and water level information.

There are several SCFIS stream and precipitation gages near Millstone Borough. The Borough has a stream gage along the Millstone River at Amwell Road. In addition, there are stream gages on the river at Griggstown and Blackwells Mills. Information from these latter gages is available on the United States Geological Survey (USGS) web site in real time (<http://waterdata.usgs.gov/nj/nwis>). Information from the Blackwells Mills Gage is available via the Millstone Borough web site (<http://www.millstoneboro.org>).

The Millstone River has a watershed of 283 square miles as measured at its confluence with the Raritan River. The Millstone River, Raritan River and Delaware and Raritan Canal provide water to the American Water Company, downstream of the confluence of the Raritan and Millstone Rivers.

Flood Plain Assessment

Currently there are approximately twenty structures located in the historic flood plain of the river. Repetitive flood-losses are those where two or more claims have been made under the National Flood Insurance Program for the same property during the 1977-2003 period. Six Borough properties have been identified as being in the Repetitive Flood-loss Area, accounting for 85 percent of all paid flood losses for claims made in Millstone.



Left- Map #16: First floor structural vulnerability

Right- Map # 17 Flood prone areas (Source: Millstone Borough Flood Mitigation Plan and FEMA Flood Insurance Study)

Impacts of Flooding

Beyond the disruption to Borough life and the damage to property, flooding has significant impact on public health and safety; the Flood Mitigation Plan identified a number of these. For example, Borough residents rely on wells and septic systems. People on well water can be affected if waters rise over the top of well heads.

Effects upon circulation and traffic by flooding have been significant. Route 514 crossing the Millstone River has been closed by severe floods, and South and North River Streets are closed several times a year, as is Route 533 on the southern edge of the Borough. The first aid squad building servicing the Borough is located in the 100-year flood plain of Franklin Township.



Left: January 20, 1996 Flood at 7 and 13 South River Street; Middle: October 20, 1996 Flood at 1403 Main Street; Right: August 27, 2004 Flood at Route 533 (South Main Street)

Millstone Borough Flood Mitigation Plan

A *Flood Mitigation Plan* was prepared for the Borough in June 2005 by the USDA Natural Resources Conservation Service, in cooperation with the Flood Mitigation Planning Committee (including representatives of Emergency Management, Planning Board, Environmental Commission, and property owners) organized by the Borough Council in 2004. Public involvement included public meetings, public information activities via the Borough newsletter, questionnaires sent to residents in flood prone areas, solicitation of comments, and meetings of the Flood Mitigation Committee. A significant component in the plan's development was coordination with a variety of other local and state agencies, including the NJ Office of Emergency Management, the NJ Department of Environmental Protection, the NJ State Preservation Office, and NJ Water Supply Authority.

The *Flood Mitigation Plan*, which is on file in the Borough office, in its total is hereby made a part of this Master Plan.

Development Trends Impacting the Flood Plain

Millstone Borough is nearly "built-out" and any remaining large tracts of land are expected to come under the State Stormwater Management Rule, which does not permit any increase in the volume or rate of run-off due to development from the pre-development condition. The Borough's recently enacted Stormwater Control ordinance covers any development or redevelopment over 5,000 square feet of disturbance, and thus most expansions or any replacement of an existing residence.

The major source of the impact of development and redevelopment has come and is likely to continue to come from areas outside Millstone Borough in the watersheds that drain into the Borough, including the Millstone River watershed. Development which pre-dates the existing Stormwater Rule will continue to have an impact on the Borough.

The removal of dams under the Dam Safety Act could reduce the current amount of floodwater storage in areas on the Millstone River upstream of the Borough. Due to the lack of funding for maintenance and rehabilitation of these dams by current dam owners, a number of structures are under review and could be breached where there is no desire or financial resources for their continued maintenance.

Natural Areas

There are many areas in Millstone Borough that function in ecologically beneficial ways and in the mitigation of flood damage. Forested areas and wetlands in watersheds improve water quality by intercepting rain water and reducing runoff, storing floodwaters for slower release, storing and recycling nutrients, and providing for the maintenance of biological diversity,

The NJ DEP "Landscape Project" compiled the following table of significant habitat type within Millstone Borough Master Plan

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the Borough, using 1995 aerial photos. The categories are not mutually exclusive; most areas classified as forested wetland wildlife habitats are also classified as forested wildlife habitat. The combined total for all types of significant habitat in 1995 was approximately 250 areas, almost 60% of the Borough's land area.

Significant Habitat Types	Approx. acreage
Forest	160
Forested wetland	96
Grassland	75
Emergent wetland	14



Source: Millstone Borough Flood Mitigation Plan

Large patches of critical forested wetland habitat are adjacent or proximate to the Millstone River and Peace Brook. Forested wetlands comprise about 23 percent of the total land area in the Borough. This is a significant percentage, especially within the heavily urbanized landscape of central New Jersey. These areas are widely distributed within the Borough, and the patches are large enough to provide significant benefits to water quality, as well as providing breeding and foraging habitat for some populations of birds, amphibians, and reptiles.

Non-wetland forested areas within the Borough also contribute valuable services. Forested areas provide greater potential for infiltration than any other type of landcover. This service reduces the amount of runoff within the Borough during periods of high precipitation.

Grassland areas are a diminishing resource in New Jersey as agricultural lands are converted to residential areas. Like forest, these areas contribute important ecological benefits, contributing far less runoff than developed areas. As of the writing of this Plan, there are approximately 75 acres suitable for grassland dependent species within the Borough.

Although there are only about 14 acres of critical emergent wetland habitat within the Borough , these areas are uniquely valuable in terms of the species of plants and animals that they can support.

Stormwater and Runoff

Land development can dramatically alter the hydrologic cycle (see Figure 1) 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. 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. This shortening of the transport or travel time quickens the rainfall-runoff response of the drainage area, causing flow in downstream waterways to peak faster and 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, volumes, 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.

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.

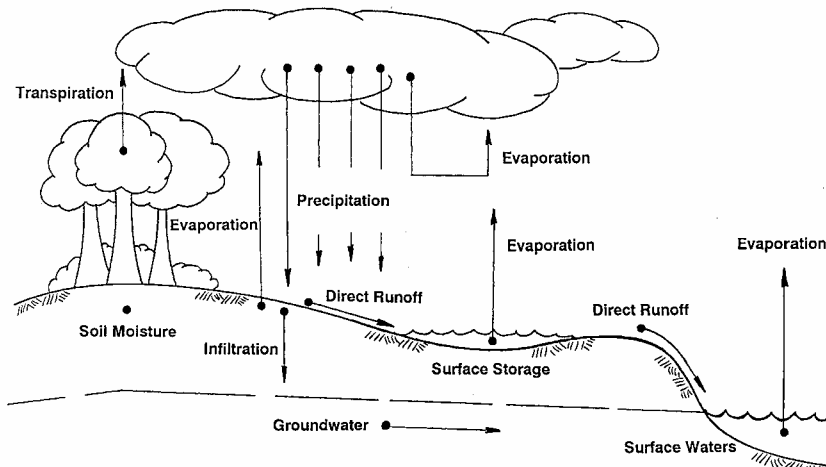


Figure 1 - Hydrologic Cycle

Millstone Borough Stormwater Management Plan

Millstone Borough was required by the N.J.A.C. 7:14A-25 Municipal Stormwater Regulations to create and adopt a Municipal Stormwater Management Plan to address strategies for stormwater related impacts. The plan contains all of the required elements described in N.J.A.C. 7:8 Stormwater Management Rules, and deals with 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.

As part of the plan, the Borough's existing stormwater ordinances were reviewed and updated, and a new Stormwater Ordinance was in the process for adoption by Borough Council in the late fall of 2005. In addition, the plan includes a mitigation strategy for when a variance or exemption of the design and performance standards is sought. As part of the mitigation section of the stormwater plan, specific stormwater management measures are identified to lessen the impact of existing development; these are discussed in *Part III: The Plan* of this document.

Wildlife Conservation Strategy

The NJ Division of Fish and Wildlife (DFW) is the lead agency involved in the development of the state Comprehensive Wildlife Conservation Strategy (CWCS). The plan divides the state into five physiographic regions, then further divides each of these regions into distinct Conservation Zones delineated by watersheds or other geographic features. Somerset County appears to be in three zones; the Southern Highlands Zone and the Central and Northern Piedmont Zones. The CWCS provides a comprehensive set of strategies for protecting particular species, groups of species and particular habitats. 'Wildlife of Greatest Conservation Need' are listed and ranked in table for each Landscape Region and Conservation Zone. The plan also includes detailed conservation goals and strategies for each of the wildlife species of greatest conservation need. The plan identifies the following specific focus areas and the individuals, agencies and groups that are best suited to implementing the strategies. The focus areas are as follows:

1. Habitat Destruction
2. Stewardship and Restoration

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3. Wildlife Management
4. Government-wide Invasive Species Policy
5. Recovery Plans for All Imperiled Species
6. Data and Scientific Updates
7. Challenges in Urban and Suburban Environments

Suburban sprawl and large lot zoning are identified as a major cause of extensive habitat loss and fragmentation. Such development fragments existing habitats, rendering remaining habitat remnants unsuitable for area sensitive forest and grassland species and introduces predators associated with humans, such as raccoons and foxes, increases point and non-point pollutants. Development may also isolate habitat patches and prevent habitat movement between patches. The impacts of development are identified to include:

- Impacts on waterways, including erosion and siltation; temperature changes increased in turbidity and decline in dissolved oxygen; nutrient loading; ecological disruption from pesticides, heavy metal, sewage, PCBs, etc.
- Changes in stream flow volumes resulting from direct flow draw-down and discharges, decreased seepage from ground water due to well withdrawals and loss of recharge due to increased impervious surface coverage disturb migration and reproduction cycles of many species.
- Deforestation of riparian areas, and increase of invasive species along stream corridors alter the ecological food chain, and increased water temperatures reduce species and diversity.
- Direct species impacts from canalization, dredging, bridge construction, dams and culverts
- Degradation and elimination of wetland habitats.

C. CIRCULATION

Transportation and traffic issues have a significant impact on the present and future development of a community. Roadways are basically permanent features and, as a result, are significant determinants of future land use and subsequently of a community's overall quality of life. The roadway system must convey local traffic from local streets to collector and regional arterial roadways, while providing basic access to adjacent properties in a manner that provides for the safe and efficient movement of traffic.

The impact of regional traffic is particularly relevant in Millstone. The Millstone Bypass, anticipated over 28 years ago to help solve these problems, is now complete. It has achieved most of what was needed, which was to eliminate the regional traffic which took a dogleg from Amwell Road to Main Street, then to the bridge over the Millstone River. There still remains a large amount of traffic that comes up Main Street (River Road) from the south to the intersection of Route 514 and Main Street, traffic that comes south from the north on Main Street to the same intersection. In the late fall of 2005 a traffic light was installed at the intersection of Amsterdam Road and C.R. 514. The new intersection will improve the access onto C.R. 514, but may impact the amount of traffic onto the historic Amwell Road.

Roadway Classification

The roadway classification system provides a graduated system of traffic flow based on the type of movement served by the roadway. On one end of the spectrum, local roads provide direct access to properties with movement involving travel to the nearest collector roadway. At the other end of the roadway spectrum is the arterial roadway, where the intent is to provide movement from local and collector streets to regional highways and regional population and employment centers. This type of roadway is intended to carry high volumes of through traffic and be excluded from residential neighborhoods; however, they often function as major collectors or as direct access roadways to older residential units built along their right-of-way. Many roadways serve more than one function as a result of previous land use practices. As is the case with any classification system, there may be an overlap as roadways in the Borough are placed in their respective categories.

There are only two categories of roadways located in the Borough; minor arterial and local streets. County Route 514 in Millstone, since the completion of the Bypass, and Main Street (County Road 533) are minor arterials with a designated County right-of-way of 66 feet. County Route 514 extends east / west from New Brunswick to Hillsborough where it intersects Route 206 and continues to Flemington where it intersects Route 202. Route 533 extends north-south from New Jersey Route 22 in Bridgewater Township through the Borough to Route 206 near Rocky Hill. The Millstone Bypass, which is called Somerset Court House Road, is also classified as a minor arterial and has a right-of-way of 60 feet. We question whether Main Street (County Route 533) is still a minor arterial and not a major collector, due to the new configuration of the bypass road.

All other roadways, including Amwell Road (now designated County Route 650), in the Borough are local streets; they have the primary function of providing access to abutting properties. Within Millstone, these streets are designed primarily as dead ends or cul-de-sacs. All local streets maintain a 50 foot right-of-way.

Main Street (County Route 533) has since been designated as a Scenic Highway. Despite the bypass there remains heavy truck traffic on Main Street.

The Millstone Bypass

The recently completed Millstone Bypass provides a new 5,600 linear foot arterial roadway running from the vicinity of Woods Road to the existing signalized intersection in the Millstone village center at Main Street. The road runs along the northerly edge of the Green Acres property and between the former Franklin Bank site and the former county garage site.

The 2,800 foot connector from this new bypass runs north to continue Route 533 Main Street (River Road) near its intersection with Hamilton Road in Hillsborough. Millstone is identifying this locally as Somerset Courthouse Road. This will serve as a major collector road and provide access to the area currently designated as LI-10/PVD District area (the area proposed within this Master Plan as a combination of park, residential, and village commercial) which has been the major concentration of continuous planning since the adoption of the last Master Plan.

As a result of the Bypass completion, Amwell road is largely cut-off from the major through traffic that used to be part of every day life for residents living along this roadway. Amwell Road now functions much more as a local collector street, a use which is compatible with the housing adjoining the street. Preliminary discussions with the County Engineer suggests that the County may be interested in assisting the Borough making Amwell Road a cul-de-sac in turn for transferring maintenance of the remainder of the road to the Borough. This would greatly reduce the amount of through traffic on Amwell Road and may also reduce the traffic onto South Main Street.

Traffic Safety

A total of ninety-three (93) accidents were recorded in the Borough between 1986 and 1993. Of these, ninety (90) occurred at the intersections of Main Street (Route 533) and Amwell Road, and of these, seventy-four (74) occurred at the southern intersection across from the Hillsborough Reformed Church. Sixty-three (63) traffic accidents reflected the impact of the continued regional traffic flow at the Amwell Road/Main Street dogleg, which is no longer a major problem, but the problem does still exist, since it is difficult to see motorists making a left hand turn into Amwell Road from the south. From 2001 to 2004, or half the time period as noted above, there were a total of one hundred four (104) traffic accidents within Millstone Borough. This reflects a 100 percent increase in the number of traffic accidents. Of these, a total of fifty-eight (58) occurred on Route 533 and 38 occurred on Route 514. While part of this can be attributed to an increase in regional traffic, it also shows that the safety problem continues to exist on Main Street and there are problems on the new bypass, Route 514. According to the County Engineer, the intersection of County Route 514 and Main Street (C.R. 533) is impacted by the existing gas station because it is located too close to the edge of the right-of-way.

Sidewalks

Since the last Master Plan there has been the installation of the sidewalks along Main Street and a small portion of Route 514 on the North side per the recommendations of the Master Plan of 1997. The proposed paths within the Green Acres open spaces have not yet been installed. There are no sidewalks to serve the ultimate build out of Millstone on the western border of the Borough. Sidewalks will also need to be established along Route 514 and Somerset Court House Road.

³ Traffic data from the Millstone Borough Planning Board

For those areas where sidewalks cannot be anticipated as part of new development, the Borough should pursue methods of independently improving the sidewalk system. Sidewalks in existing developed areas may be funded with State grants, special assessments or through general local funds.

Public Transportation

There is no scheduled bus or rail transportation service in Millstone. The County provides mini-bus service on Mondays on a first call, first serve basis to local shopping centers (Somerville) and will provide non emergency medical transportation given at least 48 hours notice and given the availability of transport units. The closest commercial bus and train service is located in Somerville.

Pedestrian Access

Millstone is small enough that all residents are within walking distance of all areas of the Borough. Sidewalks are found in some of the newer developments and along a portion of Amwell Road, however residential areas to the north along Main Street (Route 533) do not have adequate access to the existing commercial area along portions of Main Street nor is access available to the area proposed for village retail along Route 514. Main Street and West Amwell Road have become substantially more pedestrian friendly with the elimination of substantial amounts of through travel resulting from the Bypass, however, these connecting streets need to have sidewalks.

Within the Borough, traffic is to yield within designated crosswalk areas. It is recommended that these crosswalks be more clearly marked through additional painting, pavers, signage or other means to alert and potentially slow traffic on their approach. Crosswalks exist at the signalized intersection of Route 515 and Main Street which are marked by parallel white lines. There is also a designated crosswalk at the intersection of Amwell Road and West Street, Amwell and Main Street at the Church.

The Millstone River Causeway provides Millstone residents with bicycle and pedestrian access to the D&R Canal State Park system. There is not adequate pedestrian access to the County's Colonial Park. Currently, a sidewalk is available on the north side of the causeway. However, there is no separation between this walkway and the adjacent roadway which is also narrow. In addition, the sidewalk is worn. As part of any substantial reconstruction of the causeway, consideration should be given to improving this pedestrian and bicycle pathway to better access both side of the river. It is recommended that a new bridge be constructed either on the old abutments of the former bridge, or the existing C.R. 514 bridge be widened to accommodate the needed bike and pedestrian path. Any such improvement must be developed in accordance with the Millstone Borough and East Millstone (Franklin Township) historic districts.

The Green Acres property located along the Peace Brook may be improved to include bicycle and pedestrian pathways which could connect to sidewalks anticipated along the Millstone Bypass. As part of improving this area for circulation and recreation, a meandering bicycle and walking trail could be developed along the stream corridor, connecting with both the municipal park and the bypass road.

Traffic Calming

According to the County, they are not very receptive to innovative traffic calming techniques along County routes. Specifically they are not interested in having traffic calming techniques installed along Amwell Road, although this is basically now functioning as a local road. As far as they are concerned Amwell Road is a major arterial (Route 650). They would be happy to forward the road to the Borough, which could then instigate traffic calming measures. If this were done, it

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may be appropriate to make the road a dead end and not connect to Amsterdam Road. This is a decision that should not wait until Amsterdam Road is functioning at full capacity.

On-Street Parking

There is a limited amount of parking in the center of Millstone. In order to facilitate economic development and spur on new commercial development that is in keeping with the historic character of the Borough, it will be necessary to encourage on-street parking. On-street parking is important because retail establishments greatly suffer if there is not the perception that one can park in front of a store. On-street parking also acts as traffic calming and it serves as a needed buffer between the ongoing traffic and the pedestrians in the adjoining sidewalk, thereby making a safety zone along the sidewalk. The County would not be opposed to allowing on-street parking along Route 514 roads if the Borough felt that this were necessary. There is currently on-street parking along Main Street south of the intersection. However, according to the County, no such on-street parking should be located where it would have any impact upon special turning lanes at the intersections.

New Regional Roads

West of the Borough Amwell Road intersects with Amsterdam Road. Amsterdam Road is scheduled to extend further to the south where it can connect to County Route 533 south of the Borough. This new road will offer access to currently vacant lands within the southwestern portion of the Borough and if planned properly, could discourage through traffic on the southern portion of Main Street.

Proposed Scenic By-way

Somerset County initiated in late 2005 a National Scenic By-way Corridor Management Plan study that includes River Road and Canal Road; a loop drive that will incorporate Millstone Borough, East Millstone, the village of Kingston, Rocky Hill, Griggstown, and the Hillsborough historic district. If the national designation is granted, the region will qualify for grants that will allow for signs, road maintenance, vegetation management, the purchase of open space and scenic vistas, and the needed pedestrian and bicycle bridge across the Millstone River along the existing C.R. 514 bridge or from the existing abutments of the historic bridge.

D. UTILITIES AND RECYCLING

Sewage Treatment

According to the soils survey for Somerset County and the information available from the Somerset County GIS datum, the vast majority of the soils within Millstone Borough show severe limitations for on-lot sewage disposal. Most of the areas within the Borough that show slight limitations are already built upon. What remains are areas with severe limitations. These soil constraints will have a negative impact upon the future development opportunities for the remainder of the Borough since Millstone does not have public sewers.

Until 1996, the closest sewer trunk line to Millstone was in Hillsborough Township or in Manville, 1.8 miles away from the Borough border. During 1995-96, public sewers were installed in East Millstone, in Franklin Township, directly across from the Millstone River and the Delaware and Raritan Canal from Millstone. The East Millstone area is part of a sewerage authority based in Middlesex County. The Millstone River is the line between the Middlesex County authority and the Upper Raritan Wastewater Authority. In November of 2005 the Township of Hillsborough and the Borough of Millstone jointly proposed this amendment to the Upper Raritan Wastewater Management Plan. The existing homes in the Claremont Section of the Township of Hillsborough and in the Borough of Millstone have experienced septic system failures. The existing developed lots are relatively small and are located in an area with a high ground water table. Replacement of failing systems has been a burden to the homeowners, both financially and with respect to the large percentage of existing yard area that is needed for a replacement mounded type septic system. Location of replacement systems is also a problem due to the required separation between septic systems and potable water wells, which serve the area. The Township and the Borough have been planning to provide sanitary sewers to these areas by revising their respective Master Plans. The Somerset County Cross Acceptance Plan includes an amendment to change the existing developed residential and commercial areas from PA5 to PA3 to reflect the plan to provide sanitary sewer service to these areas.

The Borough of Millstone has experienced problems with failing septic systems in the existing residential and commercial areas in the Borough. In addition, there are proposed developments within the Borough that include the preservation of open space by clustering development. It is noted that these new developments have been required to meet the Borough's COAH requirements. Sanitary sewers are required to service the proposed developments as well as the existing homes and buildings experiencing septic problems. These two new developments include the following: a 72 units located in a cluster development west of Somerset Court House Road along with approximately 31,000 sq. ft. of commercial space with approximately seventeen apartments above located north of County Route 514; and a 80 unit development located in a cluster development in the south west corner of the Borough where it will take access off Amsterdam Road in Hillsborough Township. The Borough proposes to include all existing and proposed lots, noted above, to be developed in the HTMUA sewer service area. It is anticipated that this proposed sewer service area would include the build out of all developed or proposed developable land within the Borough.

The Borough is currently in the Environmentally Sensitive Planning Area (PA5), however, the Borough is proposing to change the area to PA3 to reflect the Borough's plans to provide sanitary sewer service in response to problems with failing and aged septic systems. The total estimated wastewater flow to be contributed to the HTMUA system from Millstone is approximately 113,400 gpd. Due to the Borough's limited size, the proposed waster water flow needed for the Borough is the equivalent of small development in surrounding Townships. A breakdown of the

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flow estimate is :

According to Somerset County, recent changes by NJ DEP in October of 2005 will require the County to update the County Waste Water Facilities Plan starting in early 2006. It is anticipated that the joint request of Millstone Borough and Hillsborough Township will be incorporated into the new County Waste Water Plan, which may be completed by early 2007. Until the Borough is sewered, the current reliance on septic disposal will continue to limit development, particularly where the soil type is poor for septic absorption. In addition, chronic septic problems have affected several homes on Beardslee Road, and possibly more. In a number of instances, Borough residents have been forced to install a mound system when percolation tests on the property were inadequate or their existing system has failed.

Water

Approximately 44 percent of the homes and businesses in the Borough are served by the American Water Company, which takes from the Raritan River and Delaware and Raritan Canal, just below the confluence of the Raritan and Millstone Rivers. Many residents have not connected to the public water supply as a matter of choice, including a fair percentage of homes in the densely settled historic district. Approximately 35 homes on Beardslee Road and off-road areas are served by private wells. Groundwater quality has been generally good, however, benzene contamination of a well on South River Street in 1994 forced the extension of a water main to serve that residence (Block 4, Lot 4). The source of the benzene has not been determined.

Solid Waste Disposal

Millstone has an annual contract with a solid waste disposal company in effect from January 1, through December 31. During the past five or more years, the contract has included weekly garbage pickup, an annual "clean-up" day scheduled in the spring and an annual leaf pick-up. The 1997 contract, under which the Borough is operating, is with Raritan Valley Disposal.

Recycling

The New Jersey Statewide Mandatory Source Separation and Recycling Act adopted on December 11, 1986 was enacted to promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to complement municipal recycling programs. The Act requires that municipal master plans include a recycling plan element which incorporates the goals of the State Recycling Plan. The Act also requires that local development regulations include provisions for the collection, disposition and recycling of materials for most development proposals within the municipality.

In 1987, the Municipal Land Use Law was amended to provide for the development of a Recycling Plan Element to the municipal master plan. The Recycling Plan Element is required to incorporate the goals of the State Recycling plan and to include: "provisions for the collection, disposition and recycling of recyclable materials designated in the municipal recycling ordinance, and for the collection, disposition and recycling of recyclable material 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." (NJ.S.A. 40:55D-28b(12))

The Borough maintains an annual contract with Somerset County for curbside pickup and recycling of mixed glass, aluminum and bi-metal cans; newspaper; junk mail; corrugated cardboard; textiles; magazines; PET and HOPE plastics and dry-cell batteries. The Borough has adopted recycling ordinances addressing this issue.

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Expanding Recycling Activities

In 1991, the New Jersey Solid Waste Management Act was amended to require that all Solid Waste Management Districts, including Somerset County, achieve a 60 percent overall recycling rate and a 50 percent municipal recycling rate by the end of 1995. Somerset County is at about the 50 percent level. The County does not keep records as to individual municipal recycling rates. According to Somerset County, the County recycled 3,707 tons of material in 2004. Of this, about 9 tons came from Millstone.

Relationship to the District Solid Waste Management Plan

The Borough of Millstone is located in the Somerset County Solid Waste Management District. The Somerset County Solid Waste Management Plan was originally developed in 1988. This was developed in accordance with the New Jersey Solid Waste Management Act (NJ.S.A. 13:1E-1 et seq.) which established a comprehensive system for the management of solid waste in New Jersey and designated all of the State's 21 counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts. The Act required the Freeholders in each county and the Hackensack Meadowlands Commission to develop comprehensive plans for solid waste management in their respective districts. Somerset County is charged with supervising the implementation of the Somerset County Solid Waste Plan.

The Borough of Millstone is a participant in the County Solid Waste Management Plan. Solid waste is picked up once a week by a private waste hauler and hauled to the County Transfer Station in Bridgewater. Recycling is picked up every two weeks by a private waste hauler as contracted by Somerset County. As part of the County solid waste collection plan, hazardous wastes (oil, anti-freeze, etc.) may be brought to the County recycling center on Polhemus Lane in Bridgewater Township on the first Saturday of each month.

E. LAND USE

Existing Land Use

An inventory of existing land use was conducted using 1996 Borough tax records. The tax records indicate a total of 186 separate properties⁴ of which all but 33 are assessed for residential purposes. Existing land use, by category is listed below as a percentage of total acreage⁵ and as a percentage of total number of properties. Since that date, there have been no appreciable changes or requests for building permits, so for the purposes of this study the existing land use remains the same.

TABLE 11
Existing Land Use

Assessed Category Properties	Total Acreage	Percent (%) Total Acreage
Agriculture	83.6	18.7
Commercial	2.0	0.0045
Public/Quasi Public	85	19.0
Religious Use	13.5	3.0
Residential	145	32.0
Vacant	84.8	18.9
Water	5.0	1.1
Other/Roads	29	6.5

Source: Somerset County GIS and Carter van Dyke Associates GIS (2005)

As illustrated by this table, even though the majority of individual properties are developed for residential purposes, the total acres found in remaining vacant and agricultural land exceeds that found in all residential properties (37.6 percent vs. 34.2 percent). While the developability of this remaining land is tempered by environmental constraints and zoning, there remains a significant amount of land for development within the Borough. By contrast, properties assessed as commercial use make up only 1 percent of acreage. This amount is exceeded by the amount of property devoted to religious purposes and parsonages. There are no properties in the Borough classified as industrial, despite a large industrially zoned area. Existing land uses are located on the following "Existing Land Use" map.

As illustrated, the majority of residential use is found north and south along the eastern portion of Amwell Road, with frontage on Ann Street, Van Doren Drive, Amwell Road and Yorktown Road. A residential concentration is also found in the northeastern portion of the Borough along Beardslee Road and Maple Terrace. Main Street area also contains a number of residential dwellings, most of which are located in the historic district.

⁴ Excludes Texas Eastern Pipeline and Bell Telephone tax roll designations. Also excludes property not assessed in Millstone.

⁵ Total acreage identified as per available tax records equate 375.7 acres, not including acreage in road right-of-ways, waterways, or other non-tax designated, fee simple properties.

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Commercial uses are restricted to only a few properties located near the intersection of the Millstone Bypass (Rt. 524) and Main Street and along North River Street. There are two residential properties that are being used for business purposes. At present, the commercial properties consist of: *The Millstone Sports Shop*, *Blooming Elegance*, *Gaia's Gate*, *Millstone Wine and Liquor*, *Appleseed Mortgage Agency*, *Gardener to Gardener*, *Your Town Garage*, and *Stop 'n Buy Convenience Store*. There are a few existing commercial sites that are no longer in business. The two residential businesses are a music studio and a taxidermist workshop.

Public/Quasi Public uses are made up of public oriented properties such as the municipal building, Borough Park, County property, municipally and state owned open space. Most of this land is concentrated in the "Green Acres" property located south of the Millstone Bypass and between Main Street and the Millstone River in the southeastern portion of the Borough.

There is a scattering of small vacant parcels located in the northeastern portion of the Borough, however, the majority of this property (about 37 acres) is located in the southern portion of the Borough in one tract owned by St. Joseph's Church. Although not yet reflected in the tax records, recent, approval has been granted to expand church facilities on part of this property which will leave about 19.5 acres remaining as "vacant."

The second largest land use category, agricultural land, is located at the northwestern and southwestern periphery of the Borough. Most of this land is concentrated north of the Millstone Bypass in the current LI-10 zone. Combined with Borough open space and vacant lands, this area forms a virtual ring of open space as one views the Borough from the north, south or western boundaries.

Current Zoning

There are currently seven designated zoning districts identified in the Borough Land Development Ordinance. These are the Rural Agricultural District (R-A), the R-1, Residential District, the R-2 Residential District, the R-20 Residential District, the R-8 Residential District, the Village Commercial District (VC), the Light Industrial District/Planned Village Development District (LI-10/PUD) and the Institutional District (I). There is also an overlay Historic District.



Borough of Millstone Zoning Map

- R-A Rural Agricultural
- R-2 Residential
- R-1 Residential
- R-20 Residential
- R-8 Residential
- VC Village Commercial
- LI-10 / PVD Light Industrial / Planned Village Development
- Historic District Overlay Area

NOTE:
1. Millstone Bypass: approximate location

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FLEMINGTON, NEW JERSEY

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R-A Rural Agricultural - The developable portion of the Rural Agricultural District is located almost entirely in one lot (Block 1, Lot 6) located along the Borough's western boundary. A large portion of RA land is composed of land owned by the Borough and purchased with Green Acres funding. This is located primarily along the Peace Brook, south of the Amwell Road Bypass.. The district permits farming, the processing and/or sale of farm products, the raising of farm animals, municipal buildings and residential dwellings (as accessory uses). The current minimum lot size is 5 acres. Under the Green Acres contract, those portions of the zone owned by the Borough can only be developed with open space and recreation uses.

R-1 Residential - The R-1 District is located in the portion of the Borough west of Main Street and

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in the central and central south portions along Ann Street, Amwell and Yorktown Road and Van Doren Drive. The zone permits one family dwellings, public libraries, schools, churches and other places of worship, parish houses, country clubs, museums, art galleries, municipal buildings, parks and playgrounds. The minimum lot area is one acre. With the exception of a few small parcels, this zone is entirely developed.

R-2 Residential - The R-2 District is located primarily in the southwestern corner of the Borough and between River Road and the Millstone River south of the commercial district. There is also a small portion that borders Hillsborough to the south just west of River Road. This zone permits all uses permitted in the R-1 zone but also permits farm buildings and farm produce stands. The minimum lot size is 2 acres. This zone permits the reduction of lot sizes down to one acre provided that the overall density for a development tract remains at one unit per 2 acres. Much of this area remains in agricultural use.

R-20 Residential - The R-20 District is located primarily in the northern portion of the Borough between Main Street and the Millstone River. This zone permits all of the uses within the R-1 District. The minimum lot size is 20,000 sq. ft. with public water and 1 acre without public water. Much of the area has been developed.

R-8 Residential – The R-8 District is located west of Main Street in the vicinity of Ann Street and Amwell Road. This zone permits all of the uses within the R-1 District. The minimum lot size is 20,000 sq. ft. with public water and 1 acre without public water. Much of the area has been developed. Lots in this zone of at least 8,500 square feet in existence at the time of adoption of this ordinance shall be considered conforming with regard to size, however, no amendment may be made to these lots which would further reduce lot size or decrease setbacks unless in conformance with the standards above for 20,000 square foot lots.

VC Village Commercial - The Village Commercial District is located in the area defined by the intersections of Route 514, Main Street, North and South River Road. The "District" is actually made up of 8 lots, most of which are unconnected and separated from each other by R-1 designated parcels. The District permits a variety of retail sales and service establishments, commercial and professional offices, personal services, banks, restaurants, laundries, upper story residences, child care services and parks. The minimum lot area in the District is 20,000 square feet. Architectural design considerations apply to ensure that any development meets Historic District guidelines.

LI-1 Light Industrial/Planned Village Development - The Light Industrial District is located entirely within 2 lots in the northern portion of the Borough. The area is substantially undeveloped and currently used for agriculture. The principal uses permitted in the District include various manufacturing and related uses, associated laboratories and office buildings, municipal or public utility uses and farms. The minimum lot area in the District is 10 acres.

Significant Vacant / Agricultural / Underdeveloped Lands

The present survey indicates a total of 167.1 acres of privately owned vacant, agricultural or underdeveloped land (excluding land recently approved for development at St. Johns Church) considered significant in terms of development potential. Parcels included in this category are at least five acres or more. For the purposes of this analysis, agricultural land, including the area of any existing farmhouse, is included. Underdeveloped land includes residentially designated properties of 5 acres or more; these have the greatest potential for further subdivision under the ordinance.

Significant vacant, agricultural and underdeveloped parcels identified include the following

TABLE 12
Vacant/Agricultural/Underdeveloped Land

Parcel	Parcel I.D.	Block	Lot	Acres (approx)	Land Use
9	148	2.0	50	2	Vacant
27	119	1.0	1.0	27	Agriculture
29	7	1.0	1.0	26	Vacant
59	140	1.01	7.0	2	Vacant
63	147	1.02	6	18	Vacant
68	136	1.0	7.01	5	Vacant
92	143	1.0	6.0	20	Agriculture
70	139	1.0	7.0	2	Residential
179	51	8.0	1.0	23	Agriculture
181	62	8.0	1.0	1	Residential
182	24	8.0	4.0	31	Religious (estim.)
190	50	8.0	3.0	8	Agriculture
Total				<i>approx. 165</i>	

Source: Somerset County GIS

Theoretically under current zoning, up to 32 new single family homes and up to 784,080 square feet of industrial/warehouse use could be generated under current zoning provisions. These estimates, however, do not factor in environmental conditions, specific site design constraints or the potential market for such development; for example, despite long term zoning for industrial/warehouse, the industrially zoned area remains undeveloped. Also, without sewers, the amount of actual nonresidential development would be limited by septic system capacities. In short, the nonresidential buildout figure far exceeds near-term realistic development potential. In contrast, the potential for residential development is far more likely under current market and development conditions. Based on the development of 32 new, 4-bedroom single family homes, one can anticipate about 4 persons per household. When applied to new residential development, there is a potential for between 85 and 128 new residents.⁶

Significant Changes Impacting Future Land Use

Millstone's pattern of land use has not significantly changed in the last 25 years, however, there are two significant changes that will impact this existing character and have a significant impact on future development. The first concerns the recent completion of the Millstone Bypass by Somerset County. The second concerns local policy with regard to planning and sewer availability.

⁶ The low of 85 persons is based on the current average number of persons per household which is 2.65. New construction is likely to have a greater number of persons per household, i.e., new family housing.

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1. The long awaited Millstone Bypass was completed in September of 1997. This realignment has significantly altered local traffic patterns and has had a dramatic impact on local land development pressures. Since adoption of the last Master Plan, the Borough has undertaken extensive studies with numerous developers and the principal landowners of the remaining vacant land within the Borough. Regional traffic now uses the Bypass when traveling east toward Franklin or south along County Route 533. The new alignment has provided new access, frontage and visibility to the largest remaining parcel of undeveloped land in the Borough, which is located in close proximity to the existing village commercial area. This change in circumstances has brought new development pressure to this area and to the existing commercial area located in the vicinity of the newly created intersection of the Route 514 and Main Street (County Route 533). The completion of the new Bypass has instigated a reassessment of prior planning assumptions for the area. It has also initiated the opportunity for the Borough to reexamine past zoning policies, plan for, and direct the course of development in this area in a manner compatible with the current goals and objectives of the municipality.

F. HOUSING AND DEMOGRAPHICS

See **Housing Elements and Fair Share Plan** in Subsection C of the *Plan* section of this document.

G. COMMUNITY FACILITIES, PARKS AND OPEN SPACE

Police

The Borough does not have its own police department. It is served by NJ State Police, Somerville Barracks.

Rescue Squad

The Millstone Valley Rescue Squad (a volunteer squad) based in East Millstone serves Millstone. Each year, the Millstone Borough Council makes a donation to the Millstone Valley Rescue Squad, however, there is no formal contract. Each year, the Millstone Valley Rescue Squad solicits donations from Millstone residents as they do from the remainder of the area they serve.

Fire Department

There is an annual contract with the Commissioners of Fire District #1 in the Franklin Township for fire services. The Millstone Valley Fire Department (a volunteer company) in East Millstone provides the first response. The cost of each annual contract is based on the assessed valuation of properties in the Borough of Millstone and is calculated at the same rate as is Fire District #1. Since Millstone is not in that fire district, residents cannot vote in the election for that district. With the new Master Plan these conflicts should be resolved.

Schools

Millstone is a sending district to the Hillsborough Public Schools. School tax rates are determined from the number of pupils enrolled at each level. The current number of students enrolled in the Hillsborough Public Schools is 55. Over the past the number of school children has greatly fluctuated. Due to the current aging population, the number of school children is at a low, thereby creating a current low tax assessment to the Borough residents. As the population changes and the number of children increase, as it will invariably will, the school taxes to Borough residents will increase. For this reason, planning for future residential units and the type of residential units has been a major discussion since the adoption of the last Master Plan.

Library

Millstone does not have its own library. The Somerset County Library and Hillsborough Township Public Library are available to Borough residents.

Municipal Building

The Millstone Borough Hall is located on the Main Street at the intersection of Main Street with North River Street (Block 2, Lot 19). The building is a historic brick one room school house, constructed in the nineteenth century. All public meetings are held there but there are no office facilities. Parking availability at this site is severely limited.

Public Works

The Borough does not maintain any independent facilities for public works. Traditional public works activities are conducted on an as needed basis by private contractors hired by the municipality.

Parks and Open Space

Millstone has one public outdoor recreation facility; a 2.31 acre playground located on Ann Street (Block 1, Lot 22). Facilities include a sandbox, swings, slide, teeter-totters, playground equipment

for small children, picnic table, benches. The play equipment is in moderate condition.

In addition to the Borough owned open space, there is an additional 27.24 acre parcel of preserved open space located between the Millstone River and Main Street in the southeastern portion of the Borough. This land is owned by the New Jersey Department of Conservation and Economic Development. This is an area where there have been numerous reenactments of the encampments during the Revolutionary War. Currently there is little maintenance of this land so the land is reverting to successional and invasive plant species.

In all, there are 67.6 acres of open space and 2.31 acres of developed parkland in the Borough for a total of 69.91 acres of open space and parkland. This area is located on the following map of Community Facilities, Parks and Open Space.

Borough Owned Open Space (developed)

Block 1, Lot 22 2.13 acres

Borough Owned Open Space /undeveloped)

Block 1, Lot 28 15.00 acres

Block 1, Lot 29 19.80 acres

Block 8, Lot 3 4.065 acres

Block 8-2, Lot 22 122 acres

State Owned Open Space (undeveloped)

Block 7, Lot 9 27.46 acres
(owned by NJ Dept. Conversation and Economic Development)

Source: Borough Tax Records

In addition to local facilities, major developed regional recreational opportunities are immediately available in neighboring Franklin at Somerset County's Colonial Park. The park includes facilities for golf, tennis, jogging, biking and walking and has playgrounds, picnic areas, gardens, fishing and other amenities.

In order to determine the minimum amount of open space needed to meet the current and future demands for recreation, the State utilizes two sets of standards as described in the New Jersey

ASSESSMENT

Statewide Comprehensive Outdoor Recreation Plan (SCORP)*. These are the, "acres per population" and the "balanced land use" standards. The acres per population methodology is used to determine the amount of recreational land needed to meet recreation demand based on the current and future population. The balanced land use standards are used to determine the ultimate public open space goals as a percentage of total developable land.

*New Jersey Statewide comprehensive Outdoor Recreation Plan, November 1984.

Acres per Population

The standard of 8 acres per 1,000 population is suggested for local parks and recreation lands by the following types:

Totlots and playgrounds:	1.5 acres/1,000
Playfields	1.5 acres/1,000
Neighborhood and community parks	5 acres/1,000
	<hr/>
	8 acres/1,000

Based on the acres per population standard for municipal recreational land (8 acres per 1,000 population), Millstone should have approximately 3.6 acres of developed municipal recreation area for its current (2000) population of 410 persons. 2.31 acres are contained in the existing Borough Park which provides a totlot/community park setting. There are no ballfields or other large playfields in the Borough.

Additional population based standards provided by the National Recreation and Parks Association (NRPA) recommend that between 6.25 and 10.5 acres of developed municipal open space be provided per 1,000 persons. Using these figures, between 2.8 and 4.7 acres would be required for the Borough's current population

Balanced Land Use

The State of New Jersey has adopted empirical guidelines on how much open space each level of government should ultimately provide in a community. It is recommended that local government set aside 3 percent of municipal land area for parks and open space. For Millstone, this would equal approximately 12 to 13 acres for total open space and recreational lands under the municipal jurisdiction. Excluding the land owned by the State, there are 42.41 acres of open space and recreation land.

H. RELATIONSHIP TO OTHER COMMUNITIES

The Master Plans and zoning ordinances of New Jersey municipalities bordering Millstone were reviewed to determine their relationship to Millstone's planning policies. In addition, current and proposed county and state planning policies were examined.

Regional Changes

Since the last Master Plan was adopted the following changes have occurred within the region that have had an impact upon the community of Millstone Borough:

1. The master plan road, Route 514 and Somerset Court House Road were completed, thereby eliminating the traffic conflicts caused by the extensive traffic along Amwell Road and southern Main Street. This new road has lessened the traffic on Amwell Road within the Borough, while it has opened up a vacant portion of the Borough to regional traffic, thereby creating strong development pressure in a an area where there was formerly little development opportunity.
2. New housing has been developed south and west of Millstone Borough in Hillsborough Township. Included within this new development, called Country Classics, will be approximately 600 residential units, as well as open space, a new elementary school, and detentions basins for storm water management. Access to this new development will be along Amsterdam Road, which will eventually create a connection from Route 533 to the south to Route 514 just west of the Borough. The Amsterdam Road connection will help to create another bypass that will shift traffic away from the heart of the Borough. The new housing development has been directed to the west of the Borough in order to preserve the historic houses and large lots located south of the Borough along Route 533, which is a scenic corridor that follows the Millstone River. This will preserve the historic and scenic corridor south of the Borough. With the new development to the south and west of the Borough brings the concern of storm water management and the impact that the new development will have upon the watershed that passes through the southern portion of the Borough, which is an area already known for experiencing flooding.

Adjacent Communities

Hillsborough Township

Hillsborough surrounds Millstone on all sides except in that area abutting the Millstone River. The zoning patterns in Hillsborough are generally consistent with those existing and proposed in the Borough.

Directly south along Main Street, Millstone's existing R-1 and R2 Districts abut the Hillsborough MZ Mountain / Valley Preservation District. The MZ District permits residential dwellings on lots of 5 acres and is similar to the RA District. Although the R-1 District permits lots on 1 acre, the abutting lots along Main Street are 2 to 3 acres in size and compatible with the MZ District. The 1997 Plan proposed that much of the area abutting Hillsborough Township to the south be zoned for 2 acre residential use to increase the compatibility of this area with Hillsborough. This area of Hillsborough also contains a Historic District Overlay Zone along Main Street, similar to that found in Millstone.

South and southwest of the Borough, Hillsborough's RA (Residential Agricultural) District abuts Millstone Borough Master Plan

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Millstone's current RA, R-2, R-1 districts. The Hillsborough RA zone permits agricultural uses, home occupations and residential dwellings on 2 acre lots with a cluster option reducing lot sizes to 1 Acre. The Millstone current RA, R-2 and R-1 Districts permit residential uses on lots from 1 to 5 acres, with a cluster option offered in the R-2 allowing one acre lot sizes. Churches are a permitted use in the Hillsborough RA District. To the northwest, the Borough's RA District abuts the Hillsborough CDZ Corporate Development Zone which is designed for the development of planned corporate development on tracts of 50 acres. The District permits corporate offices, conference centers, farms, fiduciary institutions, libraries, museums, medical centers, hotels/motels, transportation centers, child care, light manufacturing, and airports. While this is not directly compatible with the Borough's low density RA zone, it does permit agricultural uses.

Hillsborough's new Master Plan, which is being rewritten concurrent with Millstone's Master Plan amendment, recommends a change to this area of the Township that will better reflect the changes within this Plan. While this area will remain a Corporate Development Zone, it is intended that this become more of a corporate center that will also function as a receiving zone for development rights. In keeping with Millstone's proposed plan to preserve the areas along Route 514 and Somerset Courthouse Road as open space, Hillsborough is intending that there will be a buffer zone between the proposed corporate center and Millstone Borough. The Township plans to extend Amsterdam Road to Susquehanna Road; the area between Amsterdam Road and Millstone will remain as open space.

To the north and west of Main Street, the Borough's existing LI-10 District abuts Hillsborough's current O-5 Office Research Zone. Hillsborough Township's new Master Plan proposes changing this area to unsewered open space that will be compatible with the proposed open space within the Borough. The proposed open space area will extend south of Hamilton Road. North of Hamilton Road there is a golf course.

To the north and east of Main Street, Millstone's R-1 District abuts Hillsborough's RA District. The proposed R-20 zone will also be compatible with this district. The area is fully developed and residential use will continue to abut residential use.

Franklin Township

The Township of Franklin is separated from the Borough by the Millstone River. Directly opposite the County Route 514 bridge lies the village of East Millstone, with an historic overlay district. Along the river areas are designated as A Agricultural District and CP Canal Preservation District. Both Districts permit farm operations and single family homes on lots of 6 acres, resulting in a significantly lower density than permitted in Millstone Borough R-1 or VC zones. Franklin Township's zoning is compatible with many of the existing lots along the River on Main Street in Millstone that are proposed as R-2 or Park District. Due to the presence of the river as a buffer and the established development pattern in this area, the proposed changes indicated in the Land Use Plan will not have a negative impact on adjacent zoning in Franklin.

Somerset County

The Somerset County Master Plan identifies Millstone as a "Community Settlement" within a "Growth Management" area. Growth Management areas are proposed to have a wide range of development intensity with a mixture of residential, employment centers and an occasional convenience commercial area anticipated. The major areas of retail services in Growth Management Areas are anticipated to be in or near the "Community Settlement" areas.

Community Settlement areas are intended for a concentration of retail and business services,

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either because they already exist or because they should be anticipated to handle future population growth. A mixture of retail, business services and office uses is contemplated in Community Settlements. The County supports design in this area based on overall plans in order to control highway access, encourage shared parking and provide comprehensive plans for lighting, signage and plantings.

The County has identified the flood plain area running along Main Street as "environmentally critical" and also designates the Millstone River and areas along the River as suitable for open space and park development. In addition, the Somerset County Plan includes the now completed Millstone Bypass.

The Somerset County Planning Board is currently in the process of updating the County Master Plan. Guiding Principles and objectives associated with the new County Master Plan, entitled, "Somerset County Smart Growth Strategic Plan" have been developed. This new Master Plan for Millstone Borough is consistent with the County's Guiding Principles and Objectives. Work continues on the development of the County Smart Growth Strategic Plan, which will build upon the build-out and impact modeling work and system capacity analyses and needs assessments that are currently being prepared by the County Planning Board. State Planning Commission Endorsement of the County's Smart Growth Strategic Plan will be pursued by the County Planning Board. Completion is anticipated in late 2006.

State Plan

The New Jersey Office of State Planning adopted the State Development and Redevelopment Plan on June 12, 1992. The State Plan provides planning guidelines for five general Planning Areas, indicating the desired growth for various regions. The majority of this growth is to be encouraged in "Centers," i.e., towns, villages, etc. Millstone was initially identified by the Plan as being in Planning Area 5 "Environmentally Sensitive Planning Area", and is also identified as an "Existing Village" Center. As of the writing this Master Plan, the Office of State Planning is undertaking the production of a new Redevelopment Plan. During the current State Plan, Cross-acceptance Process, The Borough of Millstone, with support from the County Planning Board, has proposed amendments to the 2004 Preliminary State Plan Policy map that involve changing existing and future development areas within the Borough from PA5 to PA3. The Borough seeks this amendment to reflect its intention to extend sanitary sewer service available through Hillsborough Township and the Somerset Raritan Valley Sewerage Authority to existing and future development areas within the Borough. Existing development areas have been affected by failing septic systems, and the future development sites identified by the Borough to address its COAH obligations and are to be developed at densities that require sanitary sewer service due to environmental constraints. PA3 is believed to be more appropriate than PA2 for these areas of the Borough at this time, since development and redevelopment opportunities beyond that which is identified in this Master Plan are significantly constrained due to the Borough's small size, significant historic sites and districts; and critical environmental features located within, and surrounding the Borough. However, due to recent changes in the NJDEP regulations, it may be advisable to consider PA2 designation rather than PA3 in order to allow the provision of sanitary sewer service to the areas recommended for sewer within the Borough. This issue should be addressed during the upcoming Negotiation Phase of Cross-acceptance, and/or during the municipal plan endorsement process.

Planning Area 3 "Fringe Planning Area"

The Fringe Planning Area is described as being located at the edges of the developing Suburban Planning Area. The State Plan describes these areas as not having or not planned to have, during the current planning horizons, urban level infrastructure. These areas are primarily served by a rural, two-lane road network, on-site well water and wastewater systems. These areas have a predominantly rural landscape with scattered small communities and freestanding residential and commercial developments. This planning area may also have active agricultural operations.

It is the intent of the State Plan that development in these areas be concentrated in or at the edges of existing communities, or in well planned, self-sufficient new communities, as Centers for accommodating population and employment growth, taking into account the capacities of the natural and built environmental systems. In the environs of Centers, the landscape should remain open. In Centers, infrastructure should be extensions of infrastructure systems in Planning Areas 1 or 2, or be designed and planned to connect to those systems in the future. Infrastructure for Centers should be provided primarily by the private sector.

Planning Area 5 "Environmentally Sensitive Planning Area"

The Environmentally Sensitive Planning Area contains large contiguous land areas with valuable ecosystems, geological features and wildlife habitats. The future environmental and economic integrity of the state rests in the protection of these irreplaceable sources. Some of these lands have remained mostly underdeveloped or rural in character.

The Environmentally Sensitive Planning Area is extremely vulnerable to damage in many forms from new development, especially the fragmentation of landscapes, the degradation of aquifers and potable water, habitat destruction, extinction of plants and animal species, and destruction of other irreplaceable sources which are vital for the preservation and conservation of the ecological integrity of New Jersey's natural resources.

Village Center

Millstone is identified as an existing "Village" within the Fringe Planning Area. Villages are identified as compact, primarily residential communities, which offer basic consumer services for their residents and nearby residents. Villages are not meant to be Centers providing major regional shopping or employment for their regions.

PART TWO: THE PLAN

A. COMMUNITY GOALS AND OBJECTIVES

In devising the Master Plan of 1997, the Planning Board established the following prioritized Master Plan Goals and Objectives:

1. The use of land planning strategies to encourage the preservation of the historic village character of the Borough of Millstone by:
 - a. Protecting and enhancing the village's historic character by preservation of the aesthetic and structural fabric of historic buildings, and of the social, physical and economic characteristics of the community;
 - b. Designing and developing a vehicular circulation system which promotes the free flow of through and local traffic without sacrificing safety and historic village values;
 - c. Promoting the development of a pedestrian circulation network which is safe and functional for adults and children, yet which does not compromise the integrity of the Borough neighborhoods; and by
 - d. Providing adequate space and appropriate location within the Borough for all land uses to adequately meet resident needs, and to maintain the scale of the historic area.
2. The development of standards to ensure the compatibility of future development with the present community in all aspects of scale, density, architectural detail and land uses.
3. The protection and preservation of the Millstone Watershed and Millstone River Corridor by:
 - a. Seeking to prevent the unnecessary cutting of trees along the Millstone River and all stream corridors and by preserving all natural vegetation;
 - b. Controlling the rate and quality of storm water runoff, discharge of pollutants to ground and surface waters, by reducing impervious cover;
 - c. Retaining open space, trees and natural vegetation, and, as much as is possible, reducing disturbance within floodplain areas;
 - d. Prohibiting intrusion into the river by any construction which would inhibit water flow causing damage to the waterbody and its banks; and
 - e. Ensuring appropriate setbacks from the Millstone River and stream corridors.

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4. The promotion of appropriate sewerage and water systems to adequately meet the needs of population density and Borough environmental conditions.
5. The promotion of conservation of open space and valuable natural resources and the prevention of incompatible land uses.
6. The protection of environmental assets and neighborhoods by the establishment of appropriate densities and concentrations so as to adequately meet the needs of residents, and provide sufficient light, air and open space.
7. To ensure safety from fire, flood, panic and other natural and man-made disasters.

To summarize, the Master Plan concentrates on the following goals:

- Reconciliation of existing land uses, land use patterns and zoning controls.
- Addressing future development of remaining undeveloped land to meet Master Plan goals and objectives and at the same time achieve a favorable balance of land use.
- Preservation of the unique historic village character of the Borough of Millstone through both land use and design recommendations.

Since the adoption of the Master Plan of 1997, a number of key factors have occurred that have an impact upon the implementation of the goals and objectives of the Master Plan of 1997:

1. *New Transportation Improvements:* The Master Plan road has been developed and the significant impact it has had on the Borough can be seen. One aspect of the road is the manner of its design, which has been designed to highway standards with wide cartways and wide shoulders with curbs, all of which encourage high speeds. This design is suitable if the existing farmland, where the road has been located, remains as open space. However, if these areas of the Borough are to become developed to neotraditional village standards, then the road is not acceptable as it is currently designed. The new Master Plan road has had a positive impact by reducing the transportation impact upon the residential roads within the Borough; however, it may be appropriate to review the remaining roads for traffic calming. Sidewalks have been constructed within the historic section of the Borough, which now makes it safer to walk.
2. *New Housing Plan Element:* A new Housing Plan Element was adopted in November of 2002. Millstone's 1993-1999 calculated low and moderate housing unit obligation is for 22 units. This is to be met with eleven units built outside of the Borough through a Regional Contribution Agreement (RCA); eleven additional units will be satisfied with the establishment of a six bedroom group home, and one new low and moderate income unit constructed within the Borough.

3. *COAH*: There has been a challenge to the current COAH plan. Millstone's current COAH plan has been challenged by two potential developers.
4. *Open Space*: Millstone is interested in expanding the open space in the Borough. Millstone has approached Somerset County, Green Acres, and the D & R Greenway to purchase the development rights of some of the existing open space within the Borough. As this Plan is being reviewed, the acquisition funds for the acquisition of this area have been pledged. The area in question is the land between Somerset Courthouse Road and north Main Street, and areas on either side of County Route 514. A section of this property will be designated as a Heritage Park. This will be a significant addition to Millstone's Historic District.
5. *Proposed Concepts*: Two major concepts on the non-developed land have been proposed. These concepts would cover approximately forty-five percent of the land within the Borough and would significantly increase the population of the Borough. These concepts would also change the historic context of the surrounding farmland, which acts as a buffer and transition to the adjoining municipalities. One proposal would develop a traditional neighborhood community of mixed residential, including age targeted housing, commercial and recreational uses on approximately 68 acres in the western portion of the Borough. The second proposed concept for a site of 30+ acres in the southwestern portion of Millstone is for age-restricted housing that will take access off Amsterdam Road.
6. There are three major areas in Millstone that could be developed. Two of these areas have been discussed for several years. These areas are:
 - a. Sixty eight acres located east and west of Somerset Courthouse Road is zoned LI-10 under the current zoning, which permits industrial uses only. The Master Plan of 1997 recommended a PVD Planned Village Development "overlay" zone that would have permitted a variety of commercial (retail and office) uses. To explore the intent of the Master Plan recommendations, a total of five hypothetical alternatives have been reviewed since the adoption of the 1997 Plan with no prior resolution.
 - b. Within the R-2 District located in the southwest corner of the Borough, studies have been undertaken to review development alternatives under conventional zoning versus age-restricted housing alternatives on a 30 acre parcel.
7. *Sewers*: There have been discussions with Hillsborough Township, Somerset County, and the two developers involved with the two proposed development sites noted above to plan for and implement sewers that would serve all of the residents of Millstone Borough at no cost to Borough residents.
8. *New Historic Resources*: The Master Plan describes the existing National and State Historic District and the fact that a large portion of the undeveloped portions of the Borough were encampment sites for Washington's troops, the French troops of Rochambeau, the British troops, and the Hessians during the Revolutionary War. The Master Plan also mentions the

Delaware and Raritan Canal, which played an important role in the history of the Borough. Unfortunately, the encampment sites and the Delaware and Raritan Canal are not currently included within the historic district or any preservation plan. Mapping of these encampment sites is now available. Because of the documented importance that it played during the Revolutionary War, the Millstone Valley has been recognized as an area suitable for designation as a Heritage Corridor. The State of New Jersey, in cooperation with the Millstone Valley Preservation Coalition, has plans to prepare a management action plan for the preservation of the Millstone Valley beginning in 2004. Information is now available to expand the Historic District to include the cultural landscapes where the encampments once took place.

9. *Storm Water Management Plan*: The Borough has developed a new Storm Water Management Plan and Land Use amendments that are consistent with the new State Guidelines. This plan and the land use amendments will require the reduction of storm water from new development or alterations to existing sites; they will also require enhanced storm water quality. The Borough is in the process of adopting this.

REDEFINING GOALS FOR THE MASTER PLAN OF 2005

The Goals and Objectives that were developed within the 1997 Master Plan are still appropriate for the sustainable and balanced growth and preservation of the unique historic character of Millstone Borough and reflect the policies and the initiatives that have been undertaken since the adoption of the last Master Plan. To address the recent developments and control their impact on the Borough, these goals and objectives are further defined as follows:

1. The use of land planning strategies to encourage the preservation of the historic village character of the Borough of Millstone by:
 - a. Protecting and enhancing the village's historic character by preservation of the aesthetic and structural fabric of historic buildings, and of the social, physical and economic characteristics of the community;
 - b. Designing and developing a vehicular circulation system which promotes the free flow of through and local traffic while controlling volume and speed without sacrificing safety and historic village values;
 - c. Promoting the development of a pedestrian circulation network throughout the Borough, including all new developments. This pedestrian circulation plan must be safe and functional for adults and children, yet does not compromise the integrity of the Borough neighborhoods;
 - d. Providing adequate space and appropriate location within the Borough for all land uses to adequately meet resident needs, and to maintain or increase the scale of the historic area;

- e. Integrating new development so it is compatible with the existing development within the Borough;
 - f. Preserving the cultural landscapes which provide the context and setting for the historic buildings within the Borough. New development should be located where it has minimal impact on the existing development within the Borough.
 - g. Encouraging development where there will be no or minimal impact upon the existing historic roads within the Borough. New development should be directed toward new by-pass roads that route new traffic away from the existing street system within the Borough.
 - h. Providing for new land uses in both use type and intensity that will maximize financial benefits to the Borough by increasing the ratable base of the Borough.
 - i. Providing for new land uses in both use type and intensity that will insure the economic sustainability of the Borough by increasing the ratable base of the Borough while selecting those uses that will require minimum services in order to provide the increased revenue necessary to best meet the future needs of the Borough residents.
2. The development of standards to ensure the compatibility of future development with the present community in all aspects of scale, density, architectural detail and land uses by:
- a. Developing Design guidelines for both new residential and non-residential development that will be complimentary to and in contextual harmony with the character of the existing and expanded historic district.
 - b. The neotraditional village design approach is strongly encouraged in all new developments. Or TND which is described in the Development Guidelines.
3. The protection and preservation of the Millstone Watershed and Millstone River Corridor by:
- a. Seeking to prevent the unnecessary cutting of trees along the Millstone River and all stream corridors and by preserving all natural vegetation;
 - b. Controlling the rate and quality of stormwater runoff, discharge of pollutants to ground and surface waters, by reducing impervious cover;
 - c. Retaining open space, trees and natural vegetation, and, as much as is possible, reducing disturbance within floodplain areas;
 - d. Prohibiting intrusion into the river by any construction which would inhibit water flow causing damage to the waterbody and its banks; and
 - e. Ensuring appropriate setbacks from the Millstone River and stream corridors.

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4. The promotion of appropriate sewerage and water systems in partnership with Hillsborough Township and proposed developers to adequately meet the needs of the new Master Plan of 2005 and Borough environmental conditions.
5. The promotion of conservation of open space and valuable natural resources and the prevention of incompatible land uses.
6. The protection of environmental assets and neighborhoods by the establishment of appropriate densities and concentrations so as to adequately meet the needs of residents, and provide sufficient light, air and open space.
7. The assurance of safety from fire, flood, terrorism, and other natural and man-made disasters.
8. The National Park Service has used the 225th Anniversary of the American Revolution to enhance the public understanding of the various meanings and enduring legacy of the Revolution. There were numerous encampments within the Borough of Millstone, which were crucial to the nation's struggle for independence. These sites must be preserved for future generations by:
 - a. Including the historic encampment areas in the Historic District.
 - b. Developing partnerships with county, state and federal agencies to create The Heritage Park, a park of regional importance that will tell the story of the role that Millstone Borough played during the American Revolution.
9. Development of a strategy that will foster public/private partnerships to implement the Master Plan by:
 - a. Creating both zoning incentives and partnerships with other governmental agencies that that will encourage the preservation of historic lands with the minimal impact upon the Borough residents.
 - b. Creating positive zoning incentives for the private sector to implement the Borough's COAH obligation.
10. A focus on the Borough's rich historic resources to encourage economic redevelopment of the Borough's downtown by:
 - a. Developing the historic resources and preserved open space into an historic park that will become a regional destination.
 - b. Providing for new non-residential development in both use type and intensity that will be complimentary to Millstone Borough and the proposed park as an historic regional destination.

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- c. Developing design standards for the new residential and non-residential development that will be complimentary and contextually compatible to the proposed regional historic park within the Borough.
11. Development of transportation design standards that will foster a walkable community and increase traffic safety within the Borough.

B. LAND USE PLAN ELEMENT

The 2005 Land Use Plan retains much of the land use pattern of earlier plans developed for the Municipality. Establishing new development is recognized and supported where this continues to meet the current goals and objectives. In already developed residential and commercial areas, the Plan intent is to recognize existing conditions, while at the same time, modify land use designations so as to clarify intended use of certain areas. The Plan also includes recommended bulk and design changes to reflect existing conditions and new objectives of the Borough. Development guidelines for new development and redevelopment have been further developed within the Historic Preservation/Community Design Element.

The Land Use Plan recommendations are based on the anticipated development within the next six-year planning period, and is predicated upon the installation of public sewers within this period. If sewers are not available within the next six years, then the completion of the Land Use element will be delayed. The Land Use Plan is intended to cover the major portion of the remaining non-developed area in Millstone. Therefore, care has been taken to represent a balanced community, with new commercial and residential development that will support the tax base without creating an unnecessary tax burden.

The proposed Land Use Plan is delineated in the Future Land Use Plan map and the zoning districts and modifications are described below:

RESIDENTIAL AREAS

RA Rural Agricultural

The RA District is located north and south of Route 514 and adjacent to the western border of Millstone Borough. Because this district is directly adjacent to the area proposed as a heritage park, which may also include encampment sites dating from the Revolutionary War, this district is proposed for future acquisition as open space as a continuation of the regional park intended with the Borough. Until acquisition can be achieved, this district permits farms and farm related activity by right on a minimum lot size of five acres. Residential dwellings are permitted only as an accessory use to be constructed in conformance with cluster requirements. The proposed density is equivalent to one dwelling unit per five acres

As part of the Plan, clustering is permitted for residential uses in the RA District to increase design flexibility, reduce potential environmental disturbance, reduce road building and impervious cover, and preserve open space. The preserved land may also be used for agriculture in association with one of the permitted residential lots. Lots may be reduced in size to 1.5 acres provided that the minimum tract size for clustering is 10 acres. The number of lots permitted under a cluster arrangement would be no greater than that permitted for conventional development but would result in a large portion of the RA area being preserved as open space or agriculture. This district is not in Millstone's waste water facilities plan amendment that Millstone and Hillsborough have jointly submitted to Somerset County.

R-2 Residential

The existing R-2 District permits conventional single-family detached development on two acre lots. These areas include the lots bordering along the southwestern portion of Amwell Road where there are extensive wetlands in the rear of the lots. Another area of the district includes the existing large residential lots bordering along southern Main Street, where there is a high incidence of flooding. The open space area that is owned by the State of New Jersey is no longer part of this district.

The intent of this district is to preserve the character of the existing residential development patterns within the district. Impervious surface, bulk and building height criteria are added to discourage knockdowns and the potential development of large houses not in keeping with the character of the neighborhood or that would vastly increase the amount of impervious surfaces impacting the amount of flooding or water quality within the Borough.

Since the former large lots located in the south-west corner of the Borough are no longer included within this district, it is no longer appropriate to have a cluster option. Therefore it is proposed that the cluster development and required open space option be eliminated from this district.

R-1 Residential

The R-1 District is designed primarily for single-family residential development on lots of one acre. The district contains areas of existing residential development such as sections of Ann Street west of West Street, Amwell Road west of the existing R-8 District, and all of Yorktown Road and Van Doren Drive. A change occurs where a portion of the district, which formerly included the dedicated open space south of Route 514, is no longer R-1. The intent is to preserve the character of the existing residential development patterns.

The changes have been proposed to preserve the character of the existing residential development patterns. Impervious surface, bulk and building height criteria are added to discourage knockdowns and the potential development of large houses that are not in keeping with the character of the neighborhood or that would increase the amount of impervious surfaces that could impact the amount of flooding or water quality within the Borough.

R-20 Residential

The R-20 District is located in the northeastern area of the Borough in the vicinity of Beardslee Road and Maple Terrace. Lots in this area range in size from .37 acres to 3.12 acres with about half of the lots under $\frac{3}{4}$ acres and about one half over $\frac{3}{4}$ acres in area. This district allows a minimum lot size of 20,000 square feet (without public water). Until this area is sewered, no new lots under one acre would be permitted. A minimum of one acre will be required for any lots that do not have either public water or public sewer. If a lot is served with public sewers, or if a lot is served with public water, a lot area may be reduced to 20,000 square feet.

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The intent is to preserve the character of the existing residential development patterns for this district. Impervious surface, bulk and building height criteria are added to discourage knockdowns and the potential development of large houses that are not in keeping with the character of the neighborhood or that would increase the amount of impervious surfaces, affecting the amount of flooding or water quality within the Borough.

R-8 Residential

The R-8 District includes older development areas, particularly adjacent to Ann and West Streets and the alley between West and Main Streets, where the typical residential lot size ranges from a high of about 18,000 square feet to as small as 3,500 square feet. The average residential lot is less than $\frac{1}{4}$ of an acre or 8,500 square feet. Most of all these lots are historic sites that were built prior to zoning. Existing lots of 8,500 square feet in area would be considered as conforming lots. New lots of 8,500 square feet would be permitted with public water and sewer. However, no new lot would be permitted less than 20,000 square feet with only public water and no public sewer.

The intent here is to preserve the character of the existing residential development patterns. Impervious surface, bulk and building height criteria are added to decrease the possibility of knockdowns or the development of large houses not in keeping with the character of the neighborhood; as in other districts increases in the amount of impervious surface that could impact flooding or water quality within the Borough are discouraged.

Traditional Neighborhood Development 1 (TND-1)

The TND-1 District includes approximately nineteen acres located west of Somerset Court House Road and north of Route 514. The intent of this district is to provide for a traditional neighborhood with a diversity of dwelling unit types, lot sizes and green spaces in a compact arrangement that promotes walkability, encourages new development, which emulates the character found in the older and historic sections of the Borough of Millstone, and promotes a streetscape quality to neighborhoods that furthers the identity of the Borough of Millstone as a charming habitat in the historic Somerset County area. A maximum of 25 percent of the units may be a minimum of 5,400 square feet in area. The balance of the remaining lots must have a minimum area of 7,200 square feet in area. No more than 72 residential lots may be permitted within the district and all lots shall be served with both public water and sewer. The development of the TND-1 district shall be required to support a portion of the Borough's COAH obligations.

In order to maintain the architectural character of the older portions of the Borough, the residential buildings must relate to the context and fabric of existing places found within the National Historic District within the Borough. The size, proportion, and form of buildings shall emulate the historic character of these Millstone neighborhoods and shall follow the principals of appropriateness. Architectural drawings shall be reviewed before the Historic District Commission and the Borough Planning Board. All garages must be accessed from the rear of the lot. A minimum of 40% of the principal residential buildings shall include a front door accessing onto an unenclosed front porch with a minimum floor area of 72 square feet. Porches must be covered by a

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permanent roof and may not be enclosed in the future. No principal building shall include a flat roof. All buildings shall, at a minimum consist, of a portion of the building that is two stories. Significant roof pitches and variations in rooflines are required.

Since the district is directly adjacent to the Park District that is intended to be a future heritage park, it will be necessary to provide sufficient screening with fencing, walls and landscaping in order not to intrude upon the visual integrity of the park.

Traditional Neighborhood Development 2 (TND 2)

The TND-2 District includes approximately thirty-five acres located in the south-western corner of the Borough. Development is permitted provided that all vehicular access into the District is through Amsterdam Road located in Hillsborough Township, pedestrian access is provided to Amwell Road in Millstone Borough, and all of the permitted units within the district are limited to residents who are age qualified. This district will be connected with the rest of Millstone by sidewalks, which promotes walkability throughout the entire Borough.

The intent of this district is to provide for a traditional neighborhood with a diversity of dwelling unit types, lot sizes and green spaces in a compact arrangement that promotes walkability. This district will emulate the character found in the older and historic sections of the Borough of Millstone, and promotes a streetscape quality to neighborhoods that furthers the identity of the Borough of Millstone as a charming habitat in the historic Somerset County area. The minimum lot size is 7,200 square feet in area provided that there are no greater than 80 units proposed for this district. All lots shall be served with both public water and sewer. The development of the TND-2 district shall be required to support a portion of the Borough's COAH obligations.

In order to maintain the architectural character of the older portions of the Borough, the residential buildings must relate to the context and fabric of existing places found within the National Historic District within the Borough. The size, proportion, and form of buildings shall emulate the historic character of these Millstone neighborhoods and shall follow the principals of appropriateness. Architectural drawings shall be reviewed before the Historic District Commission and the Borough Planning Board. All garages must be accessed from the rear of the lot. A minimum of 40% of the principal residential buildings shall include a front door accessing onto an unenclosed front porch with a minimum floor area of 72 square feet. Such porch shall be covered by a permanent roof and may not be enclosed in the future. No principal building may include a flat roof. All buildings shall, at a minimum, consist of a portion of the building that is two stories. Significant roof pitches and variations in rooflines are required.

NON-RESIDENTIAL AREAS

Traditional Village Commercial (TVC)

The Village Commercial Zone is intended to provide for a Traditional Village Commercial development with a diversity of uses, and block sizes, and with second story dwelling apartments and green spaces in a compact arrangement that:

- Encourages new development in a scale and character that emulates the historic places within the Historic District of Millstone Borough;
- Promotes a streetscape quality to traditional village commercial development that furthers the identity of the Borough of Millstone as a charming habitat and worthy destination within the historic Millstone Valley area;
- Encourages a combination of business and apartment uses within the central area of the Borough, which enables jobs and employment opportunities close to home;
- Creates economic development opportunities for high quality recreation-related commercial uses within the Traditional Village Commercial District. Such limited commercial development as restaurants, museum shops, bookstores, realtors, offices, cafes, general store, and antique shops, will further define the center of the Borough. The intent is to create a destination for the general public that also provides opportunities for the residents; and
- Provide for mixed-use development that is in keeping with the historic district that will allow for apartments on the second floor, a portion of which will include affordable housing to meet the requirements of the Borough's COAH plan.

This plan amends the Village Commercial boundary location as defined on the land use map to include all of the area shown in the Master Plan of 1997 plus the following areas: an area on the north side of Route 514 to within fifty feet of Somerset Court House Road to the existing commercial area on the north-west corner of C.R. 514 and Main Street, and the areas on the south side of C. R. 514 including vacant lands currently owned by Somerset County

The minimum required lot size is 2,000 square feet with public water and sewer. An exception shall be special uses, such as a gas station which shall require a minimum of 30,000 square feet. Only one pharmacy shall be permitted within this District. Only one gas station shall be permitted within the district. It is intended that the gas station shall be relocated to the north side of C. R. 514 near the intersection of Somerset Court House Road. This plan permits only one gas station within the Borough.

All new development shall be based upon the following design standards:

- All new development shall be set within ten feet of the right-of way with all off-street parking placed in the side or rear of the building. Shallow setbacks helps to create an outdoor

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streetscape with two to two and ½-story buildings, typically from 90 to 95 feet across from one another on both sides of the street, thereby promoting for the pedestrian a human scale relationship as part of the public realm;

- All site planning shall provide for the continuity of retail establishments with retail entrances in close proximity to each other and facing the primary street;
- All development shall provide for on-street/parallel parking, thereby providing a separator between vehicular and pedestrian traffic and promotes effective traffic calming by slowing down the speed of vehicles, especially along major County highways. On-street parking may apply towards the minimum required parking requirement;
- As the historic commercial center of the Borough, all commercial and residential development in this district should be responsive to the Borough's architectural and historic character. In addition to those design standards reviewed by the Historic Commission, the Historic Preservation/Community Design Element, located within the Part Two, Plan section of this Master Plan, contains additional guidelines that should be considered in the development and redevelopment of this area;
- Apartments shall be required above the retail establishments, as stipulated by the Planning Board. A portion of these units shall be reserved to meet the Borough's affordable housing requirements;
- County Route 514 shall be widened to be sufficient in width to provide for two 11 foot wide on-street parking aisles plus three 11 foot wide travel lanes for a total cartway width of 55 feet, unless otherwise required by Somerset County. Provisions shall be made for traffic calming along County Route 514 including, but not limited to bumpouts, pedestrian walkways, and median islands, unless authorized otherwise by Somerset County.
- All parking areas shall be placed at the rear or side of the buildings and shall have cross easements to adjoining properties to provide for linked parking lots.

As part of this plan, the former Somerset County Garage Property, which is currently vacant, is within the Village Commercial area. It is recommended that the Borough explore the potential for obtaining this site from the County. This is a very prominent and important parcel that needs to be developed properly to set the character for the adjacent proposed Heritage Park. Its development will play a major role in setting the stage for cultural tourism and the success of the proposed park.

Light Industrial

In this Plan, the Light Industrial District is to be eliminated. The previous 1997 Master Plan proposed a Planned Village Development (PVD) as an overlay to the current Light Industrial district.. Under the PVD conditional use option, retail uses similar to those permitted in the VC District would have been permitted in accordance with an overall comprehensive plan. The minimum tract size required for this development was 40 acres, which provided for a far greater

amount of commercial development (almost 400,000 square feet) than would have fit into the character of an historic village. After numerous public hearings showing a wide range of development alternatives, the Borough of Millstone determined that a Planned Village Development District was not compatible with its vision for future land uses in this community, and therefore decided not to adopt zoning permitting such development, thereby allowing the land in question to remain zoned for light industrial uses only. Part of this decision was due to both the intensity of the development, but more importantly, because the area of the proposed development happened to be one of the most important historic sites within the State of New Jersey. The land use scheme described as TND-1 and TVC best address the needs of the Borough and the historic resources of the area.

Institutional District

Areas within the Borough, which are currently used for institutional uses, such as churches, nonprofits, social services, etc, are to be set aside within a separate district. Minimum lot size is to be one acre with out public water and sewer, 20,000 square feet with public water, and 10,000 square feet with both public water and sewer. A group home may be permitted on a limited basis within a single-family detached residence or duplex as a conditional use.

Park District

There are numerous open spaces within the Borough, some of which are owned by the Borough and other which are owned by the State of New Jersey. This is a new district that limits development of these areas to park and public uses. Due to the importance of the historic sites within the Borough, it is intended that the parks will be developed in such a manner to preserve and enhance the cultural landscapes within the Borough in order to bring back the historic landscape of the Revolutionary period. Elements of the parks and open space shall include the preservation of the rural landscapes, developing walking paths to experience the encampment sites, explore archeological digs of campsites and hospital sites, the elimination of invasive plant material, restoration of wildlife habitats, and the restoration of landforms, such as the existing detention basins along C. R. 514.

C. HOUSING ELEMENT AND FAIR SHARE PLAN

This section was prepared by: Shirley M. Bishop, P.P., Housing Consultant

While this is the full report, a separate bound report was prepared, signed and sealed by Shirley M. Bishop, P.P., License #2575 to certify that all copies of this document are in conformance with the one that was signed and sealed.

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HOUSING AND DEMOGRAPHICS ELEMENT

PREFACE:

According to the Fair Housing Act, a municipality's Housing Element must be designed to achieve the goal of access to affordable housing to meet present and prospective housing needs, with particular attention to low and moderate housing. The regulations of the Council on Affordable Housing (COAH), N.J.A.C. 5:94 et.seq. delineate a municipality's strategy for addressing its present and prospective housing needs, and, as such, each municipality's Housing Element must contain the following:

1. An inventory of the municipality's housing stock by age, condition, purchase or rental value, occupancy characteristics and type, including the number of units affordable to low and moderate income households and substandard housing capable of being rehabilitated;

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2. A projection of the municipality's housing stock, including the probable future construction of low and moderate income housing, for the six years subsequent to the adoption of the housing element, taking into account, but not necessarily limited to, construction permits issued, approvals for development and probable residential development of lands;
3. An analysis of the municipality's demographic characteristics, including, but not limited to, household size, income level and age;
4. An analysis of the existing and probable future employment characteristics of the municipality;
5. A determination of the municipality's present and prospective fair share for low and moderate income housing and its capacity to accommodate its present and prospective housing needs, including its fair share for low and moderate income housing;
6. A consideration of the lands that are most appropriate for construction of low and moderate income housing and of the existing structures most appropriate for conversion to, or rehabilitation for, low and moderate income housing, including a consideration of lands of developers who have expressed a commitment to provide low and moderate income housing;
7. A map of all sites designated by the municipality for the production of low and moderate income housing and a listing of each site that includes its owner, acreage, lot and block;
8. The location and capacities of existing and proposed water and sewer lines and facilities relevant to the designated sites;
9. Copies of necessary applications for sewer service and water quality management plans submitted pursuant to Sections 201 and 208 of the Federal Clean Water Act, 33 U.S.C. §1251, et seq.;
10. A copy of the most recently adopted municipal master plan, and where required, the immediately preceding, adopted master plan;
11. For each designated site, a copy of the New Jersey Freshwater Wetlands map where available. When such maps are not available, municipalities shall provide appropriate copies of the National Wetlands Inventory maps provided by the U.S. Fish and Wildlife Service;
12. A copy of appropriate United States Geological Survey Topographic Quadrangles for designated sites; and
13. Any other documentation pertaining to the review of the municipal housing element as may be required by the Council.

I. INVENTORY OF MILLSTONE HOUSING STOCK

A. Age

More than one-half or 54.9 percent of the Borough's housing stock was built between 1950 and 1970. Significant residential construction occurred before 1939 when 33.9 percent of the housing stock was constructed. Millstone has a total housing stock of 171 units.

TABLE 1
Age of Housing Units

Dates of Construction	Percent of Structures	Total 2000
1939 or earlier	58	33.92
1940 - 1949	5	2.92
1950 - 1959	54	31.57
1960 - 1969	40	23.39
1970 - 1979	10	5.85
1980 - 1989	4	2.34
1990 - March 2000	0	0
2000 TOTAL UNITS	171	99.99*

*** Total does not equal 100.0% due to rounding**

Source: 2000 Census of Population and Housing

Units built before 1939 and contain 1.01 or more persons per room are highly correlated with substandard housing indicators. This is an index utilized by COAH in determining the rehabilitation share. In Millstone, 58 units or 33.9 percent of the housing stock was built before 1939. This is generally an important indicator in calculating Millstone's rehabilitation share. However, the minimal overcrowding and the complete kitchen and plumbing facilities explain why Millstone's rehabilitation share is zero.

B. Condition

Rehabilitation share is the total deficient housing signaled by selected housing unit characteristics unique to each community. It is assumed that units so

indicated will be prime candidates for rehabilitation. Characteristics indicating a need for rehabilitation are:

- (1) *Persons per Room.* 1.01 or more persons per room is an index of overcrowding.
- (2) *Plumbing Facilities.* Inadequate plumbing is indicated by incomplete plumbing facilities i.e. lack of hot and cold piped water, flush toilet or bathtub/shower.
- (3) *Kitchen Facilities.* Inadequate kitchen facilities are indicated by the non-presence of kitchen facilities within the unit or the non-presence of any of three components: a sink with piped water, a stove or a refrigerator.

The age of Millstone's housing stock has been presented in Table 1. Tables 2 through 4 address the above surrogates of deficient housing.

TABLE 2
Persons Per Room

Persons Per Room	Owner Occupied	Renter Occupied
1.01 to 1.50	0	0
1.51 to 2.00	0	3
2.01 or more	0	0
TOTAL		

Source: 2000 Census of Population and Housing

TABLE 3
Plumbing Facilities

	Total Units
Complete plumbing facilities	171
Lacking complete plumbing facilities	0

Source: 2000 Census of Population and Housing

TABLE 4
Kitchen Facilities

Complete kitchen facilities	171
Lacking complete kitchen facilities	0

Source: 2000 Census of Population and Housing

C. Purchase and Rental Value

Approximately 53 percent of the owner-occupied housing units in Millstone had values over \$200,000. The median value was \$205,400.

TABLE 5
Owner-Occupied Housing
Unit Values

	Units	Percent
Less than \$15,000	0	
\$15,000 - \$19,999	0	
\$20,000 - \$24,999	0	
\$25,000 - \$29,999	0	
\$30,000 - \$34,999	0	
\$35,000 - \$39,999	0	
\$40,000 - \$44,999	0	
\$45,000 - \$49,999	0	
\$50,000 - \$59,999	0	
\$60,000 - \$74,999	0	
\$70,000 - \$99,999	6	4.65
\$100,000 - \$124,999	7	5.43
\$125,000 - \$149,999	4	3.10

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\$150,000 - \$174,999	16	12.40
\$175,000 - \$199,999	27	20.93
\$200,000 - \$249,999	42	32.56
\$250,000 - \$299,999	11	8.53
\$300,000 - \$399,999	14	10.85
\$400,000 - \$499,999	0	
\$500,000 or more	2	1.55
TOTAL	129	100

Median Value \$205,400

Source: 2000 Census of Population and Housing

Nine of the 20 rental units with cash rent in Millstone were rented for more than \$750 per month. The median contract rent was \$688 per month.

TABLE 6
Contract Rent Values

With cash rent:	Units
\$0 - \$ 99	0
\$100 - \$149	0
\$150 - \$199	0
\$200 - \$249	0
\$250 - \$299	0
\$300 - \$349	0
\$350 - \$399	0
\$400 - \$449	2
\$450 - \$499	0
\$500 - \$549	0

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\$550	- \$599	0
\$600	- \$649	5
\$650	- \$699	4
\$700	- \$749	0
\$750	- \$999	4
\$1,000	or more	5
Total	20	
No cash rent	3	
Median contract rent		\$688

Source: 2000 U.S. Census of Population and Housing

D. Occupancy Characteristics and Types

Eighty-four percent of the housing in Millstone is owner occupied. Approximately 13 percent of the housing stock is rental.

TABLE 7
Tenure and Vacancy

	Housing Units	PCT
Total	171	99.8*
Occupied:		
Owner occupied	144	84.2
Renter occupied	23	13.4
Vacant:	0	0
For rent	2	1.1
For sale only	0	0
Rented or sold, not occupied	0	0
For seasonal, recreational, or occasional use	0	0
For migrant workers	0	0
Other vacant	2	1.1

** Does not add up due to rounding*

Source: 2000 Census of Population and Housing

E. Units Affordable to Low and Moderate Income Households

Units are affordable to low and moderate income households if the maximum sales price or rent is set within a COAH specified formula. A moderate income household is a household whose gross family income is more than 50 percent of median income, but less than 80 percent of median income for households of the same size within the housing region. A low income household is a household whose gross family income is equal to or less than 50 percent of median gross household income for a household of the same size within the housing region for Millstone. Millstone is in Region 3, which encompasses Middlesex, Hunterdon and Somerset counties.

Using current regional income limits adopted by COAH, a four person Somerset County median household income is estimated at \$92,000. A moderate income four person household would earn a maximum of \$73,600 (80 percent of regional median) and a four person low income household would earn a maximum of \$46,000 (50 percent of regional median).

Income levels for one, two, three and four person households as of 2005 are given below:

TABLE 8
2005 Low and Moderate Regional Incomes

Income	1 person	2 persons	3 persons	4 persons
Median	\$64,400	\$73,600	\$82,800	\$92,000
Moderate	\$51,520	\$58,880	\$66,240	\$73,600
Low	\$32,200	\$36,800	\$41,400	\$46,000

Source: COAH, 2005 Income Limits

Based on the qualifying formula in N.J.A.C., the monthly cost of shelter which includes mortgage (principal and interest), taxes, insurance and homeowners or condominium association fees, may not exceed 28 percent of gross monthly household income based on a five percent downpayment. In addition, moderate income sales units must be available for at least three different prices and low income sales units available for at least two different prices. The maximum average sales price must now be affordable to households earning 55 percent of median income.

The maximum average rent must now be affordable to households earning 52 percent of median income. The maximum rents must be affordable to households earning no more than 60 percent of median income. In averaging 52 percent, one rent may be established for a low income unit and

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one rent for a moderate income unit for each bedroom distribution. The utility allowance must be consistent with the utility allowance approved by HUD and utilized in New Jersey.

Under COAH regulations, rents including utilities, may not exceed 30 percent of gross monthly income. In addition, in inclusionary rental developments, 10 percent of the rental units must be affordable to households earning no more than 35 percent of median income.

Millstone currently has no low or moderate income units that are deed restricted or funded through a government program.

II. PROJECTION OF HOUSING STOCK

A. Building Permits

According to the New Jersey Department of Labor, Residential Building Permits Issued, (2000-July 2005), no new building permits were issued in Millstone during this period.

B. Approvals of Development Applications

According to the Millstone planning consultant, no new development applications generating additional development were approved between 1990 and the present.

C. Probable Residential Development

Projection of Residential Growth Share addresses this section.

D. Future Construction of Low and Moderate Income Housing

Millstone will address the future construction of low and moderate income housing in the Fair Share Plan.

III. DEMOGRAPHIC CHARACTERISTICS

A. Population

The population in Millstone decreased by nine percent between 1990 and 2000. Table 9 illustrates the figures.

TABLE 9
Population

Year	Population
1990	462
2000	410

Sources: 1990 and 2000 Census of Population and Housing

TABLE 10
Population Characteristics

SELECTED POPULATION CHARACTERISTICS FOR MILLSTONE BOROUGH

	Number	Percentage
TOTAL POPULATION	417	100
SEX		
Male	204	
Female	213	
AGE		
Under 5 years	5.8	
5 to 17 years	71	17.0
18 to 20 years	8	1.9
21 to 24 years	9	2.2
25 to 44 years	111	26.6
45 to 54 years	80	19.2
55 to 59 years	31	7.4
60 to 64 years	28	6.7
65 to 74 years	23	5.5
75 to 84 years	25	6.0
85 years and over	7	1.7

Source: 2000 Census of Population and Housing

B. Household Size and Type

A household profile of Millstone shows that there were 164 households with a total household population of 417 in 2000. The average number of persons per household was 2.50.

TABLE 11
Household Profile 2000

	Total Number
Households	169
Population of households	410
Persons per household	2.43

Source: 2000 Census of Population and Housing

TABLE 12
Household Type and Relationship

In family households:	377
householder:	131
male	102
female	29
spouse	101
child:	125
natural-born/adopt	123
step	2
grandchild	4
other relatives	13
non-relatives	7
In non-family households:	40
householder living alone	23
householder not alone	10
non-relatives	7
In group quarters	0
institutionalized persons	0
other persons in group quarters	0

Source: 2000 Census of Population and Housing

TABLE 13
Type of Housing Units by Structure

Units in Structure	Total Units	PCT
1, detached	144	84.2
1, attached	0	0
2	18	10.5
3 or 4	9	5.3
5 to 9	0	0
10 to 19	0	0
20 to 49	0	0
50 or more	0	0
Mobile home or trailer	0	0
Other	5	2.9
TOTAL	171	100

Source: 2000 Census of Population and Housing

C. Income Level

Approximately, 50 percent of the households in Millstone earn between \$60,000 and \$149,000 according to the 2000 census.

TABLE 14
Borough Of Millstone Household Income

Household Income	Number	Percent
\$0 - 9,999	11	6.7
\$10,000-\$14,999	2	1.2
\$15,000-\$19,999	4	2.4
\$20,000-\$24,999	11	6.7
\$25,000-\$29,999	4	2.4
\$30,000-\$34,999	4	2.4
\$35,000-\$39,999	9	5.5
\$40,000-\$44,999	6	3.7
\$45,000-\$49,999	0	0
\$50,000-\$59,999	14	8.5

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\$60,000-\$99,999	53	32.3
\$100,000-\$149,999	29	17.7
\$150,000 and over	17	10.4
Total Households	164	99.9*
Median Household Income	\$76,353	

** Does not add up due to rounding*

Source: 2000 Census of Population and Housing

D. Age

The age of the Millstone population has been discussed under Section III, Demographic Characteristics, A. Population.

E. Marital Status

In 2000, there were 18 more women than men over the age of 15 years in Millstone. There were 13 more males that never married. There were more widows than widowers and more divorced females than males. In addition, the total number of females widowed was 89 percent of the total widowed population.

TABLE 15
Sex by Marital Status - Persons 15 Years and over

Marital Status	Total	Male	Female
Total	342	162	180
Never Married	81	47	34
Now Married	217	109	108
Separated	9	4	5
Widowed	19	2	17
Divorced	25	4	21

Source: 2000 Census of Population and Housing

IV. EXISTING AND PROBABLE FUTURE EMPLOYMENT CHARACTERISTICS

Of the 240 Millstone residents employed in the civilian labor force, 71 percent are in educational, health and social service occupations and construction, manufacturing, wholesale trade, retail trade and transportation fields.

TABLE 16

Occupation

Employed Persons 16 Years and Over

Construction, manufacturing, wholesale trade, retail trade, transportation	98
Information	11
Arts, entertainment, recreation, accommodation and food services	25
Professional, scientific and technical services	25
Educational, health and social services	73
Public administration	8
Total	240

Source: 2000 U.S. Census of Population and Housing. As to future employment activity within Millstone, there may be minimal in the future.

According to the New Jersey State Data Center, Millstone had a covered employment number of 14 in 2003.

V. DETERMINATION OF TOTAL OBLIGATION FROM PRIOR ROUNDS

A. Rehabilitation Share

Millstone's Rehabilitation Share is zero

B. Re-calculated Prior Round Obligation

Millstone's recalculated prior round obligation is 22 units.

VI. PROJECTION OF MUNICIPAL GROWTH SHARE OBLIGATION

RESIDENTIAL GROWTH SHARE OBLIGATION

STEP 1: The projections in Table R-1 were provided by the Metropolitan Planning Organization (MPO) and will be utilized until the Plan Projections for 2015 in the final State Development and Redevelopment Plan are released. The MPO growth projections show population projections in five-year intervals from 2000 through 2025. These projections show total population, not just the population projected to reside in market rate units. To determine how many affordable units will be provided to address residential growth, the increase in population was determined by subtracting the population in the year 2005 from the population in the year 2015. This provided a 10-year population increase that closely parallels the 2004 to 2014 period on which the growth share is based. This result was then divided by the average household size for Millstone Borough as determined by the 2000 Census. This resulted in a total number of 123 new households, which is also the number of new housing units that are projected as shown in Table R-1 below. This is the figure that will be compared to the total net residential growth as projected by Millstone Borough in Steps 5 and 6.

TABLE R-1
MPO Residential Growth Projection

2015 MPO Population	-	2005 MPO Population	=	Population Change	÷	2000 Household Size	=	Household Growth
760	-	460	=	300	÷	2.43	=	123

STEP 2: Next, there is a review of the historic data for the last 10 years that were collected on certificates of occupancy (CO) and demolitions issued. Table R-2 provides the 10-year historic CO and demolition permit data that were collected. This assists in projecting likely future growth and also provides for actual growth since January 1, 2004. COs issued minus demolitions that have taken place since January 1, 2004 comprise the first component of the growth share calculation.

Actual figures are used for growth in 2004 and projections are used for growth from 2005 to 2014. It is noted that Millstone had no residential COs or demolitions over the past 10 years.

TABLE R-2
10-year Historic Trend of Certificates of Occupancy and Demolition Permits

	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04
COs Issued	0	0	0	0	0	0	0	0	0	0
Demolitions	0	0	0	0	0	0	0	0	0	0
Net	0	0	0	0	0	0	0	0	0	0

STEP 3: *This section includes projections from the housing element of future residential construction based on a site-specific analysis of development applications, both approved and anticipated. Developments that are expected to be constructed before 2014 were utilized to project residential growth. Yield calculations gave consideration to wetlands, steep slopes, access to utilities, etc. Also included in this projection were all anticipated development, including affordable housing developments from the second round housing plan that have not yet been constructed. Table R-3 lists those developments and provides an estimate of the number of units that could be constructed and the year COs would be issued.*

Table R-3 represents other development that is anticipated to occur based in part upon the historic rate of development.

By looking at historic trends, there was no residential activity and no demolitions from 1995-2004. However, Millstone will have two mediation agreements from the second round that will result in residential activity. The mediation agreements are discussed in the Fair Share Plan.

TABLE R-3
Anticipated Developments & Number of Residential Units
by the Year that COs are Anticipated to be Issued

	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Approved Development Applications										
NONE										
Future Development										
Apartments				13						13
Van Cleef Age-Restricted		0	0	80						80
Matzel & Mumford -Family			0	72						72
Group Homes			2							2

Pending Development Applications										
	0									0
Other Projected Development (Isolated Lots)										
NONE	0									0
Total	0	0	2	165	0	0	0	0	0	167

STEP 4: Anticipated demolitions are subtracted from the total COs projected, as shown in Table R-4:

TABLE R-4
Projected Miscellaneous COs and Demolition Permits

	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Total COs Issued (from Table R-3)	0	0	2	165	0	0	0	0	0	167
Demolitions	0	0	0	0	0	0	0	0	0	0
Net	0	0	2	165	0	0	0	0	0	167

STEP 5: The actual net residential growth from 2004 (Table R-2) is added to the projected net residential growth from 2005 to 2014 (Table R-4) to arrive at the total 10-year total residential growth as shown in Table R-5:

TABLE R-5
Total Net Residential Growth (Sum of Actual and Projected Growth)

	<i>Actual</i> → ← <i>Projected</i> →										
	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Total COs Issued (from Table R-3)	0	0	0	2	165	0	0	0	0	0	167
Demolitions	0	0	0	0	0	0	0	0	0	0	0
Net	0	0	0	2	165	0	0	0	0	0	167

STEP 6: The net residential growth from Step 5 is compared to the MPO housing unit growth as projected in Step 1. Because the net residential growth of 165 is greater than the MPO

household growth projection of 123, the projection has a presumption of validity in the petition for substantive certification.

STEP 7: *COAH has proposed a new rule, N.J.A.C. 5:94-2.4(a)4, that clarifies that inclusionary developments and mixed use developments that address a municipality's prior round obligation are excluded from calculating a municipality's growth share obligation regardless of whether the municipality received substantive certification before December 20, 2004 or receives substantive certification for the cumulative 1987-2014 fair share obligation after December 20, 2004.*

Millstone is treating this proposed rule as guidance and will develop the plan accordingly.

From the total net residential growth, affordable housing units are subtracted that are included in the second round plan that are projected to receive COs after January 1, 2004. In addition to affordable units, market-rate residential units off-site in an inclusionary development that are part of a second round plan are also subtracted.

All of the sites listed in Table R-6 are now included in the second round plan (prior round) and have not received COs. The Van Cleef site will contain 80 age-restricted, for sale units and is providing affordable units off-site (two group homes with 10 bedrooms in total and 11 RCA units in conjunction with the Rezem site) that Millstone will be treating as an inclusionary development. This site is the focus of a settlement agreement that will be the result of a COAH mediation of Millstone's second round plan.

The Rezem tract is also the focus of a settlement agreement that will be the result of a COAH mediation of Millstone's second round plan. The Rezem tract will contain a total of 72 non-age-restricted market rate units, affordable units off-site (the 10 bedrooms in two group homes and 11 RCA units referred to above) and four affordable apartments on-site with nine market rate apartments in an inclusionary development. Together, the two sites contain 161 market rate units plus 14 affordable units on-site and off-site but within Millstone (four apartments and 10 group home bedrooms.) As a result, the 14 units of affordable housing are multiplied by 5.67 (15 percent) for an exclusion of 79 market rate units. Thus, the 79 market rate units and the six affordable units (two group homes and four apartments) are subtracted in Table R-6.

While Millstone believes that N.J.A.C. 5:94-2.4 (a) 4. should be interpreted to permit RCA units and rental bonus credits to be treated as affordable units for purposes of including market units from second round sites for growth share purposes, the borough has taken the more conservative approach of not doing so.

The two group homes should be constructed in 2007 once they have obtained financing. Ten bedrooms are proposed, five in each home, and will be available for low-income individuals. It is highlighted because even though COAH credit will be given for each bedroom in the group home, only two COs will be excluded that will be issued for the two buildings as a whole.

There are also 13 apartments to be constructed over the retail component on the Rezem tract. Four of the apartments will be affordable to low and moderate-income households and nine will be market rate units.

TABLE R-6
Second Round Affordable and Market-Rate Units To Be
from Growth Projection, by the Year that COs are Anticipated to be Issued

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Rezem & Van Cleef sites					83						83
Group Home				2							2
Total	0	0		2	83	0	0	0	0	0	85

STEP 8: The total number of second round units to be excluded from the growth projection as calculated in Step 7 (Table R-6) is subtracted from the net residential growth projection as calculated in Step 5 (Table R-5). Table R-7 shows the net residential growth projection after excluding all allowable second round affordable and market-rate units.

TABLE R-7
Net Residential Growth Projections After Subtracting
Second Round Affordable and Inclusionary Market-Rate Units

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Net Residential Growth (Table R-5)	0	0	0	2	165	0	0	0	0	0	167
Second Round Units (Table R-6)	0	0	0	2	83	0	0	0	0	0	85
Final Net Growth	0	0	0	0	82	0	0	0	0	0	82

STEP 9: *The net projected residential growth of 82 units is divided by eight, with a resulting growth share obligation of 10.25 affordable units.*

TABLE R-8
Affordable Housing Unit Growth Projections

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Table R-7 Total	0	0	0	0	82	0	0	0	0	0	82
Divided by 8	0	0	0	0	10.25	0	0	0	0	0	10.25

Therefore, the total affordable housing obligation generated by residential development is 10 new construction units over the 10-year certification period.

B. NON-RESIDENTIAL GROWTH SHARE OBLIGATION

STEP 1: The projections in Table NR-1 were provided by the MPO and will be utilized until the Plan Projections for 2015 in the final State Development and Redevelopment Plan are released. The MPO growth projections show employment projections in five-year intervals from 2000 through 2025. To determine how many affordable units will be provided to address non-residential growth, the increase in employment is determined by subtracting the number of jobs in the year 2005 from the number of jobs in the year 2015. This provides a 10-year employment increase that closely parallels the 2004 to 2014 period on which growth share is based. This figure is then compared for consistency to the employment growth projected for Millstone Borough in Step 6. See the example shown in Table NR-1 below:

TABLE NR-1
MPO Non-Residential Growth Projection

2015 MPO Employment	-	2005 MPO Employment	=	Employment Change
100	-	20	=	80

STEP 2: The historic data for the last 10 years that were collected on COs and demolitions issued were reviewed. Table NR-2 provides the 10-year historic CO and demolition permit data that was collected. This assisted in projecting likely future growth and also provided actual growth since January 1, 2004. COs issued minus demolitions that have taken place since January 1, 2004 comprise the first component of the growth share calculation.

Actual figures are used for growth in 2004 and projections are used for growth from 2005 to 2014.

TABLE NR-2
10-year Historic Trend of Certificates of Occupancy
and Demolition Permits by Square Feet

	'95 Sq Ft	'96 Sq Ft.	'97 Sq Ft	'98 Sq Ft	'99 Sq Ft	'00 Sq Ft	'01 Sq Ft	'02 Sq Ft	'03 Sq Ft	'04 Sq Ft
COs Issued B - Office	0	0	0	0	0	0	0	0	0	0
COs Issued M - Retail	0	0	0	0	0	0	0	0	0	0
COs Issued S - Warehouse	0	0	0	0	0	0	0	0	0	0
COs Issued A-2 - Restaurant	0	0	0	0	0	0	0	0	0	0
Demolitions B - Office	0	0	0	0	0	0	0	0	0	0
Demolitions S- Warehouse	0	0	0	0	0	0	0	0	0	0
Demolitions R1 – Motel	0	0	0	0	0	0	0	0	0	0

STEP 3: The actual growth that has occurred was then converted into the square footage to jobs using Appendix E. These conversions were made for each of the relevant use groups.

TABLE NR-3
“B” USE GROUP: Actual Developments
by Year that COs Were Issued (three jobs per 1,000 square feet)

	'04	<i>Total Sq. Ft.</i>	<i>Jobs</i>
TOTAL NEW DEVELOPMENT	0		0
TOTAL DEMOLITIONS	0		0

TABLE NR-4
“S” USE GROUP: Actual Developments
by Year that COs Were Issued (.2 jobs per 1,000 square feet)

	'04	<i>Total Sq. Ft.</i>	<i>Jobs</i>
TOTAL NEW DEVELOPMENT	0		0
TOTAL DEMOLITIONS	0		0

STEP 4: Projections from the housing element of future non-residential construction based on a site-specific analysis of development applications, both approved and anticipated, are

included. Developments that are expected to be constructed before 2014 are used to project non-residential growth. Yield calculations gave consideration to wetlands, steep slopes, access to utilities, etc. Included in this projection were all anticipated development, including future developments that will be approved and will have COs issued by 2014. Table NR-5 lists those developments and provides an estimate of the square footage anticipated and the year COs would be issued. Table NR-5 includes a row for Other Projected Development, which represents other development that is anticipated to occur based in part upon the historic rate of development.

Millstone had no non-residential activity from 1995 to the present. The reason that Millstone has future non-residential development is because of a settlement agreement on one site, the Rezem Tract. There is no other non-residential development expected to occur before 2015. This is validated by Millstone's historic trend in Table NR-2.

These projections were made for each of the relevant use groups.

Any adjustment to the non-residential growth projections by demolitions that resulted in job loss calculation was based upon the most recent use group of the building prior to its demolition.

Once tabulated, the appropriate use group factor listed in Appendix E to the projected net gross square footage of new non-residential development is applied to determine the projected job growth. Appendix E was the standard used to determine jobs per square feet.

TABLE NR-5

“B” USE GROUP: Developments and Anticipated Developments
by the Year that COs are Anticipated to be Issued (three jobs per 1,000 square feet)

	'05	'06	'07	'08	'09	'10	'11	'12	'13	<i>Total Sq. Ft.</i>	<i>Jobs</i>
Approved Development Applications											
NONE											
Pending Development Applications											
NONE											
Anticipated Development Applications											
Commercial Tract				3,000						3,000	9
(Rezoning)											
Other Projected Development											
NONE											
TOTAL NEW DEVELOPMENT										3,000	9
TOTAL DEMOLITIONS										0	0

TABLE NR-6

“M” USE GROUP: Developments and Anticipated Developments

by the Year that COs are Anticipated to be Issued (one job per 1,000 square feet)

	'05	'06	'07	'08	'09	'10	'11	'12	'13	<i>Total Sq. Ft.</i>	<i>Jobs</i>
Approved Development Applications											
NONE											
Anticipated Development Applications											
Rezem Retail				27,770						27,700	27.77
Rezem Gas Station				3,000						3,000	3
Demolitions											
NONE											
Other Projected Development											
NONE											
TOTAL NEW DEVELOPMENT				30,770						30,770	30.77
TOTAL DEMOLITIONS											

TABLE NR-7

“A2 – A4” USE GROUP: Developments and Anticipated Developments
by the Year that COs are Anticipated to be Issued (three jobs per 1,000 square feet)

	'05	'06	'07	'08	'09	'10	'11	'12	'13	<i>Total Sq. Ft.</i>	<i>Jobs</i>
Approved Development Applications											
NONE											
Pending Development Applications											
											0
Anticipated Development Applications											
TOTAL NEW DEVELOPMENT											0
TOTAL DEMOLITIONS											

STEP 5: Tables NR-5 through 7 were merged once the number of jobs created (new construction) or lost (demolitions) by use group was determined. Jobs lost (as evidenced by demolitions) were subtracted from jobs created (new construction) to arrive at net projected employment growth.

TABLE NR-8
Net Projected Employment Growth

	'05	'06	'07	'08	'09	'10	'11	'12	'13	<i>Total</i>
Table NR-5 TOTAL NEW DEVELOPMENT				9						9
Table NR-6 TOTAL NEW DEVELOPMENT				30.77						30.77
Table NR-7 TOTAL NEW DEVELOPMENT										
Subtotal New Development				39.77						39.77
Table NR-5 TOTAL DEMOLITIONS										
Table NR-6 TOTAL DEMOLITIONS										
Table NR-7 TOTAL DEMOLITIONS										
Subtotal Demolitions										
Total Projected Net Employment Growth				39.77						39.77

STEP 6: The actual net non-residential growth from 2004 was added to the projected net non-residential growth from 2005 to 2014 to arrive at the total 10-year net non-residential (employment) growth as shown in TABLE NR-9.

TABLE NR-9

Total Net Non-Residential (Employment) Growth (Sum of Actual and Projected Growth)

Actual → ← *Projected* →

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	<i>Total</i>
Total New Development	0	0	0	0	39.77	0	0	0	0	0	39.77
Total Demolitions	0										0
Total Net Employment Growth	0	0	0	0	39.77	0	0	0	0	0	39.77

STEP 7: The net non-residential growth from Step 5 is compared to the MPO employment growth as projected in Step 1. The net non-residential growth of 39.77 jobs is less than the MPO employment growth projection of 80 jobs. Based on historic trends, Millstone should have zero new jobs. The only reason that Millstone has any non-residential growth is due to a mediation agreement that will be discussed in the Fair Share Plan.

STEP 8: The net non-residential growth of 39.77 jobs is divided by 25, with a resulting non-residential growth share obligation of two affordable units.

TABLE NR-10

Affordable Housing Unit Obligation Generated by Non-Residential Development

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Table NR-9 Total				0	39.77						39.77
Divided by 25				0	1.59						1.59

Therefore, the total non-residential affordable housing obligation is two new construction units over the 10-year certification period.

FINAL STEP: The net residential component of growth share projection from Step 9 of the Residential Growth Projection Example is added to the net non-residential growth share projection from Step 8 above and determines Millstone Borough's third round growth share obligation to be 12 units.

TABLE T-1

Total Projected Affordable Housing Obligation Generated
by Residential and Non-residential Development 2004-2014

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	Total
Table R-8 Residential	0	0	0	0	10.25	0	0	0	0	0	10.25
Table NR-10 Non-Residential	0	0	0	0	1.59	0	0	0	0	0	1.59
Total	0	0	0	0	11.84						11.84

The projections are not equally divided between the years. Accordingly, consideration is given to providing for the affordable units to be constructed in proportion to the market-rate residential and non-residential construction as it occurs.

VII. ANALYSIS OF EXISTING AND FUTURE ZONING TO ACCOMMODATE GROWTH PROJECTIONS

A. Availability of Existing and Planned Infrastructure

Millstone does not have public sewers to date but has entered into an agreement with Hillsborough Township to prepare an amendment to the 208 sewer service area plan. Both communities have also requested that Somerset County include the Van Cleef and the residential and commercial portions of the Rezem site, among other areas in the plan, in the proposed 2006 amendment. The county has favorably received this request. Two mediation agreements with two developers will fund the provision of sewer to the borough from presently existing facilities in Hillsborough Township. Most of the homes and businesses in Millstone are served by the American Water Company. A small percentage of residences are served by private wells.

B. Anticipated Demand for Types of Uses Permitted by Zoning Based on Present and Anticipated Future Demographic Patterns.

Millstone is entering into two mediation agreements that will provide both market rate, age-restricted and family for sale housing in Millstone together with market rate and affordable apartments over retail. There will also be two group homes. As a result, anticipated uses and future demographic patterns are being permitted. There will be zoning changes to accommodate the growth.

C. Anticipated Land Use Patterns

There will be land use changes in Millstone because of the two mediation agreements. These anticipated land uses will accommodate a range of new housing types that have not been seen in Millstone during the last 10 years.

D. Economic Development Policies

There are no known economic development policies at this time.

E. Constraints on Development

- 1. State and federal regulations: Millstone Borough is not in the Highlands area.*
- 2. Land ownership patterns: The majority of the land in the borough is either residential or agriculture. Properties assessed as commercial uses make up only one percent of the acreage. Approximately 88 percent of the 169 occupied housing units are owner-occupied while 12 percent are rentals.*
- 3. Incompatible land uses: There are no known incompatible land uses.*
- 4. Sites needing remediation: There are no known sites needing remediation.*
- 5. Environmental Constraints: The Millstone River and its minor tributaries have an established flood plain. Wetlands were delineated along various stream corridors and*

along low lying areas abutting the Millstone River. In addition, Millstone has no public sewer system but is contemplating one via developer's agreements.

6. Existing or planned measures to address any constraints: As stated above, Millstone is involved in bringing a sewer system into the borough via the Hillsborough system.

FAIR SHARE PLAN

PREFACE

A municipality's affordable housing obligation is cumulative and includes affordable housing need for the period 1987 to 2014. The affordable housing obligation consists of three components:

- Rehabilitation Share (2000)
- Prior Round Obligation (1987-1999)
- Growth Share (1999-2014)

Under growth share, municipalities determine their 1999 to 2014 new construction or "growth share" obligation, by applying the following ratios:

- For every eight market-rate residential units constructed from January 1, 2004 to January 1, 2014, a one-unit affordable housing obligation is generated.
- For every 25 jobs resulting from new or expanded non-residential construction within the municipality from January 1, 2004 to January 1, 2014, based on the conversion factors found in Appendix E of the third round rules, a one-unit affordable housing obligation is generated.

These two components are then added together to arrive at the total growth share obligation.

A municipality's Rehabilitation Share is a measure of old, crowded, deficient housing that is occupied by low- and moderate-income households. These rehabilitation numbers are based on 2000 census data. Rehabilitation Share numbers from each prior round are replaced with the latest round number because the numbers are updated with each decennial census.

A municipality may receive credit for rehabilitation of low- and moderate-income deficient housing units completed after April 1, 2000 provided the units were rehabilitated up to the applicable code standard, the average capital cost spent on rehabilitating a unit was at least \$8,000 and the units have the appropriate controls on affordability to ensure the unit remains affordable during the required period of time.

Rehabilitation credits cannot exceed the Rehabilitation Share and, generally speaking, can only be credited against the rehabilitation component, not the new construction component.

The prior round obligation is the municipal new construction obligation from 1987 to 1999. Obligations from the first and second rounds have been recalculated to include the most recent data from the 2000 census. All municipalities participating in the COAH process must use these updated figures. COAH continues to offer credits, reductions, and adjustments that may be applied against the Prior Round Obligation (1987-1999) for affordable housing activity undertaken from 1980 to 1999.

I. REHABILITATION SHARE

The purpose of a rehabilitation program is to renovate deficient housing units. Deficient housing units are defined as units with health and safety code violations that require the repair or replacement of a major system. A major system includes weatherization, roofing, plumbing, (including wells), heating, electricity, sanitary plumbing (including septic systems), lead paint abatement and/or load bearing structural systems. Upon rehabilitation, the housing deficiencies must be corrected and the unit must comply with the applicable code standard.

A municipality must demonstrate that it has the capability to administer a rehabilitation program by either designating an experienced employee to administer the program or entering into an agreement with a governmental agency or private consultant to administer all or some of the program. A municipality must provide the consultant or municipal employee's credentials to administer the program as well as a procedures manual. If the county is administering the rehabilitation program, the municipality must submit a statement from the county agreeing to adhere to applicable COAH rules and acknowledging sufficient funding.

Rental units cannot be excluded from a municipal rehabilitation program. There must be at least 10-year affordability controls placed on both owner-occupied units and rental units. For owner-occupied units, these controls may be in the form of a lien filed with the appropriate property's deed. For rental units, the controls must be in the form of a deed restriction and may also include a lien. Units rehabilitated after April 1, 2000 are eligible for credits against the third round Rehabilitation Share.

The municipal investment for the rehabilitation of a unit must average at least \$10,000 per unit, of which no more than \$2,000 can be used for administration costs. Documentation must also be submitted demonstrating adequate funding source(s) and a resolution of intent to bond in the event there is a shortfall of funds. Financing of rehabilitation programs must be structured to encourage rehabilitation and continued occupancy.

A municipality is also required to prepare and submit a rehabilitation manual to COAH that summarizes the administration of the rehabilitation program including an affirmative marketing plan. The affirmative marketing program must clearly describe the outreach efforts to be used in implementing the program. COAH expects that a combination of media approaches – cable television, radio and print – plus appropriate mailing to residents, local civic, social and religious groups will be included in the marketing program.

Millstone has a Rehabilitation Share of zero.

II. PRIOR ROUND OBLIGATION

Millstone filed an adopted Housing Element and Fair Share Plan on November 22, 2002 and petitioned COAH on November 18, 2003. Subsequent to the filing of the plan, Millstone Borough was sued for exclusionary zoning. The matter was transferred to COAH and Millstone entered into mediation with both the litigant, Van Cleef Family Limited Partnership (Van Cleef) and the owner of the site in Millstone's adopted plan, the Rezem Family Trust (Rezem). From July 12, 2004, when mediation began, until now, there have been ongoing discussions and negotiations that will result in settlement agreements. Thus, the second round negotiated plan will address Millstone's prior round obligation and growth share.

COAH has determined that Millstone Borough's Prior Round Obligation is 22 units.

With a Rehabilitation Share of zero units, Millstone Borough has a pre-credited need of 22 units.

Rental Obligation and Rental Bonuses

The rental component is calculated as follows:

.25 (pre-credited need-prior cycle credits-rehabilitation component)

.25 (22-0-0)

.25 (22) = 5.5

Therefore, Millstone Borough has a rental obligation of six units.

Pursuant to N.J.A.C. 5:93-5.15, the maximum number of units for which a municipality may receive rental bonuses is also calculated in the formula above. One bonus is granted for non-age restricted rental units and a 0.33 bonus is granted for age-restricted units.

Maximum Age-restricted Units.

Pursuant to N.J.A.C. 5:93-14, a municipality may receive credit for age-restricted units according to the following formula:

.25 (pre-credited need-prior cycle credits-rehabilitation credits)

.25 (22-0-0)

.25 (22) = 5.5

Based on this formula, Millstone Borough is eligible to age-restrict six units for COAH credit.

Regional Contribution Agreement (RCA) Maximum

A municipality may transfer one-half of its obligation to another willing municipality within the COAH housing region. The formula for calculating the maximum RCA is as follows:

.50 (pre-credited need-prior cycle credits-credits pursuant to N.J.A.C. 5:93-3.4)

.50 (22-0-0)

.50 (22) = 11

Based on this formula, Millstone Borough may enter into an RCA not to exceed 11 units.

Status of Mediation Agreements

Millstone expects that the mediation agreement settling both the litigation and COAH mediation will be approved simultaneously with the adoption of this Housing Element and Fair Share Plan, which the agreements endorse. The agreements also address development of the Rezem and Van Cleef sites; preservation of a substantial portion of the Rezem tract as a heritage park; and funding of infrastructure improvements that, at least in part, will serve affordable housing in the borough, of professional costs with respect to affordable housing planning and the litigation and COAH proceeding and settlement, and of other municipal costs regarding land use matters that do not address affordable housing.

Implementation

1. Regional Contribution Agreement (RCA)

Millstone has proposed an 11-unit RCA with the City of New Brunswick in Middlesex County, which is within Region 3. The RCA is 50 percent of Millstone's prior round obligation. Millstone has an executed Memorandum of Understanding with the City of New Brunswick. (Exhibit A) The Memorandum of Understanding stipulates that Millstone will transfer 11 units at a per unit cost of \$25,000 for a total of \$275,000.

New Brunswick has received RCA Recipient Certification in two categories:

1. Limited or moderate housing rehabilitation of one to four family dwellings and
2. Substantial rehabilitation/new construction/adaptable re-use of non-residential uses into multi-family residential buildings containing more than four units.

New Brunswick will apply RCA funds to its substantial rehabilitation/new construction/adaptive re-use projects.

There is an RCA contract that was negotiated between the two municipalities and executed. (Exhibit B) The RCA contract stipulates when the RCA funds will be transferred. The RCA has not been approved by COAH, to date, but was included in the second round plan.

2. *Two Group Homes (Duplex)*

Two group homes will be provided on a site known as the St. Joseph's Church site. There will be at least 10 bedrooms in the two alternative living arrangements (ALA). Six of the bedrooms will address the prior round obligation and will yield six second round bonus credits. Three of the surplus bedrooms will be applied to Millstone's growth share obligation and satisfy the third round rental obligation ($12 \times .25 = 2.75 = 3$). There is a firm commitment from the provider, Allies, Inc. that there will be 10 bedrooms available for group home usage. (Exhibit C) The group home will not be age-restricted. Millstone Borough will enter into a formal agreement with the provider of the facility. The group homes will be licensed by the New Jersey Division of Developmental Disabilities (DDD). The contract will remain in place for 30 years. The sponsor will adhere to the marketing provisions of DDD and will also address all monitoring and reporting requirements as outlined in N.J.A.C. 5:80-26.

Millstone is in negotiations with St. Joseph's Church (Block 8, Lot 4) to purchase church property for the two group homes. Located at Yorktown Road and Colonial Road, the entire site is 40 acres. One developable acre will contain the group homes. The present zoning is Special Church – R1. The surrounding land uses are open space, PSE&G right of way and residential. There is street access onto county roads. There are no known environmental constraints. The land will be purchased by Millstone from the church with funding from the developers of the Van Cleef and Rezem sites. Allies, Inc. is securing financing from the New Jersey Housing and Mortgage Finance Agency (HMFA) and the New Jersey Department of Community Affairs (DCA).

3. *Two Sites*

Rezem

The owners of the Rezem tract are in negotiations with Millstone Borough. Located at the corners of Route 514 and Somerset Courthouse Road (Block 1.02, Lot 1 and Block 1.01, Lot 1), the tract contains approximately 67.17 acres. However, only Block 1.01, Lot 1 is planned to be developed as a residential development and totals 26.35 acres. Of that acreage, only 19.1 will be developed.. An additional 3.8 acres will be developed with retail, apartments and offices. The balance of the tract of approximately 44.27 acres is to become open space to be used as a heritage park. The present zoning is Light Industrial L1-10 and the site will be rezoned to TND-1 and TVC after the mediation agreement is executed. The rezoning ordinances are attached hereto as Exhibits D and E. There is access from a county road, Somerset Courthouse Road, and the surrounding uses are open space and residential. The Rezem tract has wetlands on the west side that will not impact the proposed development. The net area of the development has no environmental constraints. There is a 70 foot-wide Texas

Eastern gas line right of way (ROW) that passes through the site. As mentioned above, there is a wetlands buffer that borders the development area. This is a mixed-use development that will contain 72 non-age restricted, market-rate units and 33,770 square feet of retail and office uses. There will be 13 apartments over the first floor of which four will be affordable to low and moderate income households. The low and moderate-income apartments will contain a mix of bedrooms that will be consistent with N.J.A.C. 5:80-26. The 72- unit Rezem residential development will have a 15 percent low and moderate income requirement that must be addressed on site or, with Millstone's concurrence, off-site. The mediation agreement provides for some of the affordable units in the mixed-use area (the four apartments) and some off-site.

Van Cleef

The Van Cleef property owner is also in negotiations with Millstone. The site (Block 8, Lot 3) will not contain any low and moderate income units on site but will provide the units off-site as per the mediation agreement. Van Cleef is proposing 80 age-restricted for sale units in Millstone across from Amsterdam Road in Hillsborough Township. The 80 units will be built on approximately 31.5 acres. The implementing ordinance creating a new TND-2 zone, attached hereto as Exhibit F, mandates a set-aside of 15 percent on site or, with Millstone's concurrence, off-site.

Sewers

Proposed sewers will be built after Millstone is in an approved sewer service area. Millstone will apply to the New Jersey Department of Environmental Protection (DEP) through Somerset County as part of an update of the County plan and in cooperation with Hillsborough Township to bring sewer to Millstone.

There will be a gravity feed to a pumping station that will be located at or near the existing gas station. The force main will continue up Route 514 to Hillsborough Township and eventually connect to the Hillsborough Municipal Utility Authority (MUA). The details are being developed in coordination with Hillsborough Township and Somerset County.

This is a partnership with Hillsborough Township, which will be sharing the pumping station to serve approximately 200 units in Hillsborough that are located directly north of the borough. The entire system that is being developed will serve all the existing residences and businesses within Millstone together with any unanticipated future development. The capacity will be designed to include the buildout of the borough and the 200 units from Hillsborough.

The current 208 plan shows that no sewers are planned for the borough. However, as mentioned above, Millstone and Hillsborough have entered into a joint agreement to update the 208 plan. Millstone will seek a PA2 designation for much of the Borough, including the two sites, through negotiations between the County and State as part of the cross-acceptance

process, and possibly through a center designation application, to enhance DEP approval to the plan amendment.

4. Planning Area

Millstone is in Planning Area (PA) 3 of the State Development and Redevelopment Plan (SDRP) that was adopted on March 1, 2001. PA 3 is described as the “Fringe” Planning Area in that it is predominately a rural landscape that is not prime agricultural or environmentally sensitive land.

For COAH purposes, according to N.J.A.C. 5:93, Millstone did not need center designation for a site in PA3. However, N.J.A.C. 5:94-4.5 only exempts sites in PA1 and 2 from center designation, N.J.A.C. 5:94-4.5(a)2 provides that sites located in PA 3,4, 4B, 5 or 5B that are not in a center must demonstrate that the site is consistent with sound planning principles and the goals, policies and objectives of the SDRP. The Rezem site will accommodate a traditional neighborhood development around a heritage park. The preservation of part of this site as a heritage park preserves and enhances this area with its historic, cultural, scenic, open space and recreational values.

There will be design standards for the new development which will reflect and safeguard the fundamental character of the original Revolutionary War village. It also ensures sound and integrated planning and implementation in that Millstone has prepared a new Master Plan that reflects a new vision for the borough while at the same time preserving its historic and small town quality of life for Millstone’s present and future residents. The development of the site is not piecemeal but rather a thoughtful process of negotiation with Millstone Borough officials, the owner of the site, COAH and the Green Acres Program.

The site will promote socially and ecologically beneficial economic growth and thus improve the quality of life for Millstone’s present and future residents. The heritage part will highlight Millstone’s significant role during the Revolutionary War and will spur economic development with its proposed commercial uses.

Finally, there will be a mix of housing types for both market rate households and affordable households.

The Van Cleef site is also consistent with sound planning principles and the SDRP goals, policies, and objectives. It is contiguous to a developed portion of the Borough and will also be designed consistent with traditional neighborhood development principles, thus harmonizing with and reinforcing the Borough’s historic character. The abutting Hillsborough neighborhood is suburban in character and is classified PA2. Development in a rural pattern would thus be inconsistent with the character of the adjacent areas of both Millstone and Hillsborough.

5. Water

Approximately 44 percent of the homes and business in the borough are served by the American Water Company. Discussions will take place with American Water Company for the provision of water to this site.

6. Prior Round Obligation Plan

To summarize, as a result of mediation, the following is Millstone Borough's plan to address its 22-unit prior round obligation:

Project	Number	Type
RCA	11	Executed RCA Contract with New Brunswick
ALA	10 Bedrooms	Two Group Homes
	6	Rental Bonuses
Apartments over Retail	4	Non-Age Restricted
TOTAL	31	
Surplus	3 Bedrooms	
	4 Apartments	
	2 Rental Bonuses	

III. GROWTH SHARE OBLIGATION

The Fair Share Plan includes the projects, strategies and funding sources, if applicable, to address an affordable housing obligation and any municipal ordinance in draft form that a municipality is required to adopt as a requirement of certification. The Fair Share Plan is based upon the municipal fair share obligation developed in the housing element. The planning board adopts the Fair Share Plan, and it is endorsed by the governing body prior to the petition for substantive certification. The proposed implementing ordinances may be adopted prior to substantive certification but in any event must be adopted no later than 45 days after COAH grants substantive certification.

The Fair Share Plan consists of a detailed proposal on how a municipality intends to provide for its affordable housing obligation. Once certified, the plan will be monitored by COAH to verify that the construction or provision of affordable housing is in proportion to the actual residential growth

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and employment growth at the end of third, fifth and eight year after the filing date for substantive certification. Zoned sites addressing a prior obligation will also be reviewed at these intervals.

COAH rules have a number of different provisions regulating the development of affordable housing. The options available to meet the 1999-2014 fair share obligation include:

- Municipal zoning
 - Zoning for inclusionary developments
 - Adoption of a growth share ordinance
 - Redevelopment districts/sites
- Municipally sponsored new construction and 100 percent affordable developments
- Regional contribution agreements (RCAs)
- Alternative living arrangements
 - Permanent supportive housing (where the tenant has a lease and support services are provided)
 - Group homes
 - Congregate housing
 - Transitional facilities
 - Residential health care facilities
- Accessory apartments
- Buy-down program of for-sale market-rate units
- Municipally sponsored rental program
- ECHO (elder cottage housing opportunities) housing
- Assisted living residences
- Affordable housing partnership program
- Expanded crediting opportunities
- Extension of affordable units with expiring controls
- Age-restricted housing
- Rental housing with bonus credits
- Very low-income housing with bonus credit

The Fair Share Plan must include the following information:

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- Descriptions of operational and financial feasibility of any specific project intended to provide affordable housing. This includes any of the new construction options described above intended to address the Growth Share obligation with the exception of inclusionary zoning. A municipality must submit a financial plan for each project, a municipal resolution appropriating funds from general revenue or a resolution of intent to bond in the event there is a shortfall of funding from the identified source.
- Draft Fair Share Ordinance necessary for the implementation of the programs and projects identified as providing affordable housing. The governing body is required to formally adopt the final version of this ordinance within 45 days after receiving substantive certification. Provisions of such an ordinance may include a Growth Share or other zoning requirement, an accessory apartment conditional use, phasing requirements, affordability controls or payment in lieu stipulations. A municipality must also provide an affirmative marketing plan, which is referenced in the fair share ordinance.

A. Implementation

Millstone Borough is projecting a 12-unit growth share obligation.

With an 12-unit growth share obligation, Millstone has a three-unit rental obligation and may age-restrict three units if there is no RCA. Millstone may enter into an RCA for no more than six units. However, an RCA will reduce the number of age-restricted credits.

Millstone is proposing to address its growth share obligation by applying surplus credits from the borough's prior round obligation and securing rental bonus credits for family rental units open to the general public (the apartments) not needed to satisfy the prior round obligation. The following chart summarizes the 12-unit growth share obligation:

Project	Number	Type
ALA	3 Bedrooms	Surplus
Rental Bonus	2	Surplus
Apartments Over Retail	4	Surplus
Rental Bonus	4	New (for the apartments)
TOTAL	13	

One in excess of third round obligation.

B. FUTURE DEVELOPMENT

After mediation is completed with the two developers, only one major area will be left undeveloped. This property is Block 1, Lot 6 and Block 1.02, Lot 6 and is approximately 30 acres. It is not being included in the sewer service area and is currently zoned R-A (five acres per home and septic systems). A major power line passes through a section of this property, which makes it unsuitable for home construction, and there are substantial wetlands. Even if the site is developed, the maximum number of homes is seven.

Millstone will adopt a growth share ordinance prior to any discussions on any development proposal. The growth share ordinance will require that any affordable units generated by any new market rate units be addressed on-site or within Millstone. Millstone, however, intends to partner with Hillsborough to acquire this land as part of a broader open space acquisition effort.

There are lots within Millstone that could be subdivided after the sewers are completed, but they would have minimal impact and each sub-division would be assessed a development fee.

IV. AFFORDABLE HOUSING ORDINANCE

This section of the Millstone Borough Code sets forth regulations regarding low and moderate income housing units in Millstone that are consistent with the provisions of N.J.A.C. 5:80 et seq. effective December 20, 2004 and N.J.A.C. 5:94 et seq. as effective on December 20, 2004. These rules are pursuant to the Fair Housing Act of 1985 and Millstone's constitutional obligation to provide for its fair share of low and moderate income housing.

1. Millstone's fair share obligation will be divided equally between low and moderate income households.
2. Except for inclusionary developments constructed pursuant to low income tax credit regulations:
 - a. at least half of all units within each inclusionary development will be affordable to low income households; and
 - b. at least half of all rental units will be affordable to low income households; and
 - c. at least one-third of all units in each bedroom distribution will be affordable to low income households.
3. Inclusionary developments that are not age-restricted will be constructed in conjunction with realistic market demands so that:

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- a. the combined number of efficiency and one bedroom units is no greater than 20 percent of the total low and moderate income units; and
 - b. at least 30 percent of all low and moderate income units are two bedroom units; and
 - c. at least 20 percent of all low and moderate income units are three bedroom units; and
 - d. low and moderate income units that are age-restricted may utilize a modified bedroom distribution. At a minimum, the number of bedrooms will equal the number of age-restricted low and moderate income units within the inclusionary development.
4. In conjunction with realistic market information, the following criteria, as per N.J.A.C. 5:80-26, will be used in determining maximum rents and sale prices:
- a. studio units will be affordable to a one person household; and
 - b. one bedroom units will be affordable to 1.5 person households; and
 - c. two bedroom units will be affordable to three person households; and
 - d. three bedroom units will be affordable to 4.5 person households; and
 - e. four bedroom units will be affordable to six person households; and
 - f. median income means the median income by household size for an applicable county, as adopted annually by COAH as per N.J.A.C. 5:80-26; and
 - g. the maximum sales prices of low and moderate income units within each inclusionary development will be affordable to households earning no more than 70 percent of median income as per N.J.A.C. 5:80-26. In averaging an affordability range of 55 percent for sales units, the municipal ordinance will require moderate income sales units to be available for at least three different prices and low income sales units to be available for at least two different prices as per N.J.A.C. 5:80-26; and
 - h. for both owner-occupied and rental units, the low and moderate income units will utilize the same heating source as market units within an inclusionary development; and
 - i. low income units will be reserved for households with a gross household income less or equal to 50 percent of the median income approved by COAH; moderate income units will be reserved for households with a gross household income less than 80 percent of the median income approved by COAH; and
 - j. the regulations outlined in N.J.A.C. 5:80-26 will be applicable for purchased and rental units.

5. For rental units, developers and/or municipal sponsors may:

- a. establish one rent for a low income unit and one for a moderate income unit for each bedroom distribution; as per N.J.A.C. 5:80-26; and
- b. gross rents, including an allowance for tenant-paid utilities, will be established so as not to exceed 30 percent of the gross monthly income of the appropriate household size as per N.J.A.C. 5:80-26. The tenant-paid utility allowance will be consistent with the utility allowance approved by HUD for use in New Jersey; and
- c. the maximum rents of low and moderate income units within each inclusionary development as per N.J.A.C. 5:80-26 will be affordable to households earning no more than 60 percent of median income. In averaging an affordability range of 52 percent for rental units, developers and/or municipal sponsors of rental units may establish one rent for a low income unit and one rent for a moderate income unit for each bedroom distribution. Within inclusionary rental developments, 10 percent of the rentals must be affordable to households whose income is no higher than 35 percent of median income.

6. For sale units:

- a. the initial purchase price of a low and moderate income owner-occupied for-sale housing unit will be established so that the monthly carrying costs of the unit, including principal and interest (based on a mortgage equal to 95 percent of the purchase price and a market rate of interest) the taxes, homeowner and private mortgage insurance, and condominium or homeowner fee do not exceed 28 percent of the eligible gross monthly income of an appropriate household size as determined under N.J.A.C. 5:80-26 including the range of affordability as per N.J.A.C. 5:80-26; and
- b. master deeds of inclusionary developments will regulate condominium or homeowner association fees or special assessments of low and moderate income purchasers at the same percentage of those paid by market purchasers as per N.J.A.C. 5:80-26; and
- c. Millstone will follow the general provisions concerning uniform deed restriction liens and enforcement through certificates of occupancy or reoccupancy on sale units as per N.J.A.C. 5:80-26; and
- d. upon the expiration of the control period for a restricted ownership unit established in N.J.A.C. 5:80-26, the owner of the unit shall be entitled to sell it to any purchaser at the fair market value as per N.J.A.C. 5:80-26; and
- e. eligible capital improvements prior to the expiration of controls on sale units will be consistent with N.J.A.C. 5:80-26; and

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- f. the regulations detailed in N.J.A.C. 5:80-2 will be applicable to low and moderate income units that are for sale units.

7. In zoning for inclusionary developments, the following is required:

- a. low and moderate income units will be built in accordance with N.J.A.C. 5:94:

Minimum % of Low/Moderate Income Units Completed	% of Market Housing Units Completed
0	25
10	25 + 1 unit
50	50
75	75
100	90
	100

- b. a design of inclusionary developments that integrates low and moderate income units with market units is encouraged.

8. To provide assurances that low and moderate income units are created with controls on affordability over time and that low and moderate income households occupy these units, Millstone will designate an experienced administrative agency with the responsibility of ensuring the affordability of sales and rental units over time. The experienced administrative agency will be responsible for those activities detailed in N.J.A.C. 5:80-26; and

- a. In addition, the administrative entity will be responsible for utilizing the verification and certification procedures outlined in N.J.A.C. 5:80-26 in placing households in low and moderate income units; and
- b. newly constructed low and moderate income sales units will remain affordable to low and moderate income households until the Borough opts to release the unit from such requirement, but for at least 30 years; and
- c. the experienced administrative entity will require all conveyances of newly constructed units to contain the deed restriction and mortgage lien referred in the Technical Appendixes of N.J.A.C. 5:80; and
- d. housing units created through the conversion of a nonresidential structure will be considered a new housing unit and will be subject to 30-year controls on affordability. The experienced administrative agency will require COAH's appropriate deed restriction and mortgage lien.

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9. Regarding rehabilitated units:

- a. rehabilitated owner-occupied single family housing units that are improved to code standard will be subject to affordability controls for at least 10 years; and
- b. rehabilitated renter-occupied housing units that are improved to code standard will be subject to affordability controls for at least 10 years.

10. Regarding rental units:

- a. newly constructed low and moderate income rental units will remain affordable to low and moderate income households until the Borough opts to release the unit from such requirement, but for at least 30 years. The experienced administrative agency will require the deed restriction and lien and deed of easement referred in the Technical Appendix in N.J.A.C. 5:80; and
- b. affordability controls on accessory apartments will be for a period until the Borough opts to release the unit from such requirement, but at least 30 years, and accessory apartments must be available for low income households only;
- c. alternative living arrangements will be controlled in a manner suitable to COAH, that provides assurances that such a facility will house low and moderate income households for at least 30 years.

This ordinance will apply to all developments that contain proposed low and moderate income units and any future developments that may occur.

11. No low- or moderate-income unit shall be age-restricted unless the Planning Board permits units to be reserved for senior citizens based on the need therefore, the Borough's housing stock, the location of the project, the nature of the market units and other appropriate factors.

V. AFFIRMATIVE MARKETING PLAN

This Affirmative Marketing Plan applies to all developments that contain low and moderate income units within Millstone. This Affirmative Marketing Plan is a regional marketing strategy designed to attract buyers and/or renters of all majority and minority groups, regardless of race, creed, color, national origin, ancestry, marital or familial status, gender, affectional or sexual orientation, disability, age or number of children to housing units which are being marketed by a developer/sponsor, municipality and/or designated administrative agency of affordable housing. The plan addresses the requirements of N.J.A.C. 5:94-7 and N.J.A.C. 5:80-26. In addition, the plan prohibits discrimination in the sale, rental, financing or other services related to housing on the basis of race, color, sex, affectional or sexual orientation, religion, handicap, age, familial status/size or national origin.

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Millstone Borough is in COAH Housing Region 3 consisting of Middlesex, Somerset and Hunterdon Counties. The affirmative marketing program is a continuing program and will meet the following requirements:

- The affirmative marketing process for available affordable units shall begin at least four months prior to expected occupancy. Advertising and outreach shall take place during the first week of the marketing program and each month thereafter until all available units have been leased.
- One advertisement will be published in the following newspapers of general circulation within the housing region:
 - Courier News
 - Home News
- The advertisement will include the following:
 - The location of the units;
 - Directions to the housing units;
 - A range of prices for the housing units;
 - The size as measured in bedrooms, of the housing units;
 - The maximum income permitted to qualify for the housing units;
 - The location of applications for the housing units;
 - The business hours when interested households may obtain an application for housing units and
 - Application fees, if any.
- One advertisement will be broadcasted on the following regional radio and/or cable television station(s):
 - 101.5
- Additionally, all advertisements will appear in and press releases, announcements and requests for applications for low and moderate income housing will be sent to the following:
 - Hunterdon County Democrat
 - Lambertville Beacon
 - Housing Resource Center, www.njhousing.gov
- Applications will be mailed to prospective applicants upon request.

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- The following is the location of applications, brochure(s), sign(s), and/or poster(s) used as part of the affirmative marketing program:
 - The county administrative building and/or the county library for each county within the housing region.
 - The Millstone administrative building
 - The developer's sales/rental office.
- The following is a list of community and regional organizations that will aid in soliciting low and moderate income applicants:
 - Housing Coalition of Central Jersey
 - Somerset County Coalition on Affordable Housing
 - Hunterdon County Housing Corporation
- The following is a description of the random selection method that will be used to select occupants of the low and moderate income housing units.
 - Advertisements will be placed in the appropriate newspapers with a deadline for filing applications. Applications will be received and each application will be assigned a number. There will be a lottery, which will prioritize the application. The application will then be reviewed for certification in order which resulted from the lottery.
 - A waiting list of all eligible candidates will be maintained in accordance with the provisions contained in N.J.A.C. 5:80-26 et seq.

Millstone is ultimately responsible for administering the affordability controls and affirmative marketing plan and will appoint a Millstone employee as the Housing Officer. However, Millstone will delegate this responsibility to an experienced administrative entity such as the Somerset County Coalition on Affordable Housing (SCCOAH) or Piazza & Associates, which will administer the affordable housing program, including administering and enforcing the affordability controls and this affirmative marketing plan. Allies, Inc. will handle the administration of the two group homes including monitoring procedures.

For rental units, the advertising and administration shall be paid by the developer/owner on an on-going basis.

D. CONSERVATION PLAN ELEMENT

STORMWATER MANAGEMENT PLAN

The Stormwater Management Plan is a new component of the Millstone Master Plan. In accordance with N.J.A.C. 7:8-5, a new Stormwater Control Ordinance to minimize the adverse impact of stormwater runoff on water quality and water quantity and loss of groundwater recharge in receiving water bodies has been prepared and introduced at the November 19, 2005 Borough Council Meeting. Final passage will be at the January 16, 2006 meeting. It incorporates new standards from the state that are concerned with both the quality and quantity of runoff. The ordinance outlines specific stormwater design and performance standards for new development; proposes stormwater management controls to address impacts from existing development; establishes preventive and corrective maintenance strategies to ensure long-term effectiveness of stormwater management facilities (N.J.A.C. 7:8-5-8); and outlines safety standards for stormwater infrastructure to be implemented to protect public safety (N.J.A.C. 7:8-6). The ordinances were submitted to the County for review and approval within 24 month of the effective date of the Stormwater Management Rules.

Stormwater Management Goals

- 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 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.

STORMWATER MANAGEMENT RECOMMENDATIONS

To achieve these goals, this Plan has recommended a number of changes in land use, detailed in the Land Use Plan Element, that are designed to minimize land disturbance and stormwater runoff.

The Borough should take further steps to ensure that the problems caused by stormwater runoff remain in the public eye even when flooding is not an issue.

- Storm catch basins to be labeled “No dumping” and ordinance to impose a fine on violations.
- Brochures to be handed out with recycling notices that a stormwater management plan is in place.
- Revisions to be adopted in the ordinances mentioned above such as using grass swale in lieu of curbing, reduced pavement area by allowing the use of paver blocks on parking lots and smaller Roadway Right of way widths.
- Start requiring a mitigation plan for each variance approved.
- Encourage non-structural approaches.

Design and Performance Standards

In accordance with 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 Borough intends to adopt in the Fall of 2005 the required design and performance standards for stormwater management measures. 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 were submitted to the County for review.

PLAN CONSISTENCY

The Borough is not within a Regional Stormwater Management Planning Area and no TMDLs (total maximum daily loads) have been developed for waters within the Borough; therefore this plan does not 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 will be updated to be consistent.

The Borough is within the Raritan Basin and much information on the basin and about its characteristics has been developed as part of the Raritan Plan. Additional information concerning this plan can be found at: <http://www.raritanbasin.org>. The Borough supports the Raritan Plan.

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

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

NONSTRUCTURAL STORMWATER MANAGEMENT STRATEGIES

The Borough has reviewed the master plan and ordinances, and has provided a list of the sections in the Borough land use and zoning ordinances that are to be modified to incorporate nonstructural stormwater management strategies as shown below. These are the ordinances identified for revision. Once the ordinance texts are completed, they will be submitted to the county review agency for review and approval within 24 months of the effective date of the Stormwater Management Rules. A copy will be sent to the Department of Environmental Protection at the time of submission.

Proposed Ordinance Revisions

- D-115. A Parking and Loading and Solid Waste Standards
 - (1) Off-Street Parking - General
*consider shared parking, non-traditional paved parking areas such as grass pavers, etc.
consider not requiring curbs: use grass swales, etc.*
 - (2) Parking Requirements
same as D-115. A (1)
 - (3) Parking Lot Design
same as D-115. A (1)
- D-123 Improvements Required
 - Subsection A. Streets
less structural drainage, curbs such as grass swales, recharge pits, etc.
 - Subsection E. Curbs
consider not requiring curbs: use grass swales, etc.
 - Subsection L. Storm Drainage
comply with new stormwater rules for runoff control, recharge, water quality

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- D-127 Design Standards
comply with RSIS (Residential Site Improvement Standards: New Jersey Administrative Code)
comply with new stormwater rules

Easements: grass swales between lots and structures, seepage pits, etc.

- D-128 Off Tract Improvements
comply with RSIS (Residential Site Improvement Standards: New Jersey Administrative Code)
comply with new stormwater rules

LAND USE/BUILD-OUT ANALYSIS

Since the Borough of Millstone has does not have a combined total of more than one square mile of vacant lands (the whole Borough is 0.6 square miles), the Borough is not required to do a build-out analysis.

Stormwater Management Mitigation Plans

New Jersey's stormwater management regulations allow a municipality to grant a variance or exception from stormwater management measure design and performance standards if the municipality has a Mitigation Plan in their Municipal Stormwater Management Plan. The purpose of the Mitigation Plan is to enable approval of an otherwise acceptable development that cannot achieve the stormwater management design and performance standards. By allowing the developer to provide equivalent stormwater mitigation in the same drainage area for the same standard (i.e., groundwater recharge, water quality or water quantity) a variance can then be granted.

Mitigation Project Criteria

1. The mitigation project must be implemented in the same drainage area as the proposed development. The project must provide additional 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

Developers seeking a variance or exemption from the stormwater management design and performance standards are encouraged to discuss potential mitigation projects with the municipality early in the development application process.

2. If a suitable site cannot be located in the same drainage area as the proposed development, as discussed in Option 1, the mitigation project may provide mitigation that is not equivalent to the impacts for which the variance or exemption is sought, but that addresses the same issue. For example, if a variance is given because the 80 percent TSS (total suspended solids)

requirement is not met, the selected project may address water quality impacts that impact aquatic life along Peace Brook.

The Borough may allow a developer to provide funding or partial funding to the Borough for an environmental enhancement project that has been identified in a Municipal Stormwater Management Plan, or towards the development of a Regional 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.

If the municipality grants a variance or exemption from the stormwater design and performance standards that will be offset by a mitigation project, the municipality shall submit a written report describing the variance or exemption and the required mitigation to the county review agency (Somerset County Planning Board) and to the NJDEP.

FLOOD MITIGATION PLAN

FLOOD MITIGATION RECOMMENDATIONS

The Millstone Borough Flood Mitigation Planning Committee recommends that the Borough implement the following activities:

Public Safety

1. Continue cooperative relationship with Somerset County regarding maintenance of gage at Route 514 crossing of the Millstone River and early warning of low-lying residents.
2. Establish by Borough ordinance a form of egress (by foot and for emergency vehicles) to higher ground from private properties which are inaccessible by public roadways during a flood event.
3. Conduct a study of the effectiveness and capacity of existing Borough detention basins to operate as originally designed and to determine their capability for handling additional stormwater.
4. Millstone Borough will work with Hillsborough Township as well as private property owners in the Borough to assure that adequate stormwater detention and maintenance is performed to minimize flooding of Millstone River Road/Main Street (County Route 533) on the southern edge of the Borough.
5. The Borough will continue the “angel” program whereby individual property owners who live outside of the flood plain look after specific, individual property owners in the flood plain.

6. Millstone Borough will require that property owners in the flood plain will secure any hazardous material containers. Hazardous containers that individual property owners may have could contain gasoline, oil, pesticides or other toxic materials.

Public Participation

1. *Public Information:*

The Borough should implement a web-site based program to inform their residents of the threats of flooding and the benefits of flood insurance as well as provide links for weather and flood information.

2. *Community Rating System*

The Borough, working through the Flood Mitigation Planning Committee in an ongoing manner, should implement measures to address one or more of the 18 activities in the Community Rating System (see Appendix) to reduce or minimize property owner flood insurance premiums. The Community Rating System offers an effective way to reduce/minimize flood damages and flood insurance premiums as well as many other benefits.

3. *Elevation Certificates*

During the 2001 NRCS structure survey, it was found that a benchmark shown on the Millstone Borough Flood Insurance Study map was in error by approximately eight feet lower than the actual elevation (See Appendix). The elevation had been used to develop Elevation Certificates for the National Flood Insurance Program rating for several structures there. As a result, a number of property owners may be paying more than necessary for their flood insurance. As a result of this finding, Borough officials will contact all NFIP policy holders to ascertain that their individual elevation certificates are correct. If not correct the elevation certificates will be amended accordingly and a commensurate adjustment in the flood insurance premium for those structures will take place.

4. *Existing Easement Maintenance*

Where existing easements call for maintenance of a channel or other water conveying infrastructure, the Borough will ensure that the easement will be properly maintained for public health, safety and welfare.

Incorporation of Flood Mitigation Planning into Local Ordinances, Emergency Management Plan and Master Planning

1. *Revision of Flood Damage Prevention Ordinance*

The Borough should revise its existing Flood Damage Prevention Ordinance to incorporate the suggested recommendations (see Appendix) from the State Flood Plain Management Program.

2. *Incorporation of Flood Mitigation Planning in Master Plan*

The Flood Mitigation Plan should be incorporated by reference into the Borough Master Plan.

3. *Incorporate Flood Overlay Zone into Borough Zoning Ordinance*

Identify and incorporate the FEMA Flood Insurance Study Flood Zone boundaries (and future amendments) as an overlay zone (using a similar approach to the current Historic zoning overlay) in the Borough Zoning ordinance. The Flood Zone overlay would add additional regulations to the underlying residential or commercial zoning.

4. *Stormwater Management Ordinance for Land Development and Redevelopment in Residential and Commercial Areas*

The Borough should require that stormwater detention be installed for all residential and commercial development and redevelopment. This would include single lot development/redevelopment including so-called “tear-downs”. The Borough should require that development and redevelopment of land, defined as “major development” in the NJDEP Stormwater Management Rules (NNJAC7:8) have adequate stormwater measures to recharge all runoff generated by all planned impervious surfaces so that no increase in off-site runoff occurs. Further, the ordinance should identify the parties responsible and the source of funding for future operation, maintenance and replacement of the key components of any stormwater management facility.

5. *Regional Cooperation and Coordination to Reduce Flooding Impacts*

Millstone Borough will encourage Franklin Township and Hillsborough Township to consider and require performance standards to result in no net increase in runoff due to development upstream of Millstone Borough.

6. *Prioritize Riparian Areas for Open Space Acquisition and Conservation*

The Borough should make riparian areas a priority for open space acquisition and conservation easements.

7. *Identification of Flood Emergency Technical and Financial Assistance Sources in Emergency Operations Plan*

The Borough should include the NRCS Emergency Watershed Protection (EWP) Program in its Emergency Response Plan. The purpose of the EWP program is to undertake emergency measures to safeguard lives and property from floods, drought, and the products of erosion on any watershed whenever fire, flood or any other natural occurrence is causing or has caused a sudden impairment of the watershed. These funds are provided for measures to restore channels to their preexisting condition and to stabilize eroding streambanks. Measures to restore channels may include debris removal, streambank stabilization, revegetation, purchase of floodplain easements and repair of water control structures and public infrastructure.

Private Property Flood Mitigation

1. Initiate Flood Mitigation Measures for Repetitive Loss Structures

The Borough and property owners will work together to create and implement flood mitigation measures, particularly those that will reduce or eliminate repetitive flood loss structures (those which have made two or more claims to the National Flood Insurance Program). Flood mitigation measures may include elevation, relocation or buyout of individual properties. Based on public input at Flood Mitigation Planning Committee meetings, there is public support for elevation of existing repetitive flood loss structures and, in some cases, an interest in relocation of existing repetitive flood loss structures. Prior to implementation of this measure, consultation should be made with the State Historic Preservation Office.

2. Require Utility Relocation as Condition for Any Renovation/Building Permit

The Borough should require, where feasible, the raising of all incoming utilities (electric, phone, cable, etc.) above the 100 year flood elevation as a condition for approval of any permit for structure renovation, addition or other alteration. Input will be sought from the Franklin Township Fire District #1 with whom Millstone Borough has a contract for fire protection services.

3. Identify and Contact Funding Sources (See Appendix)

Applications to Agencies

The Borough should apply, when appropriate, for funding from the State Office of Emergency Management, Natural Resources Conservation Service and other agencies to implement applicable aspects of this Plan.

Implement Long Term Funding Mechanism

The Borough should consider investigating various means for the generation of the necessary funds for long-term implementation of needed stormwater management facilities and programs.

New Flood Damage Prevention Ordinance

Millstone Borough adopted a new Flood Damage Prevention Ordinance in September 2005. The ordinance set forth the following goals:

- To protect human life and health
- To minimize expenditure of public money for costly flood control projects
- To minimize the need for rescue and relief efforts associated with flooding and generally undertake at the expense of the general public
- To minimize prolonged business interruptions

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- To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains
- To help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas
- To ensure that potential buyers are notified that property is in a flood area
- To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

MISCELLANEOUS CONSERVATION PLAN RECOMMENDATIONS

1. Establish a defined greenway/open space network by identifying desired protection areas on a greenway map as part of the Master Plan. Such a plan would link current developed and undeveloped open space with other environmentally sensitive areas such as stream corridors and woodlands. The establishment of a greenway plan will help protect various environmental features, improve overall stormwater control by reducing tree cutting and help to preserve significant visual amenities, which contribute to the historic character of the community. Greenways are further discussed in the Community Facilities, Parks and Open Space Element.
2. It is recommended that an increased buffer area be provided along all streams. For lands not already owned by the Borough, this may be accomplished in the form of a conservation riparian easement. It is recommended that the Borough Land Use Code be amended to require riparian buffers. This will help protect surface water resources from sedimentation, allow for nutrient removal, protect woodlands along streams, protect wildlife habitat and provide for a natural “greenway” corridor along streams connecting the various open space parcels in the Borough. Of course, where associated with wetlands, State requirements may significantly increase these setbacks to as much as 150 feet from edge of wetland. Riparian buffers may vary, but due to the stream classification, may be measured 75 feet back from the top of the stream embankment.
3. Where possible, the layout and design of new development should avoid environmentally sensitive areas such as stream corridors and significant wooded areas. Where available, clustering is strongly encouraged to reduce site disturbance and protect these areas.
4. Cutting of existing trees along collector and higher order roadways should be limited to preserve a wooded view from the roadway, except in those situations where traffic safety requires vegetation removal. New street trees should be provided in association with all new subdivisions and site plans in accordance with local requirements.
5. Development on slopes of over 15% should be avoided.

6. In accordance with the proposed state wildlife strategy, the Borough Development Ordinance should be later amended to:

- Identify and protect breeding, migration, wintering habitats and landscapes essential for long-term viability of wildlife populations
- Maintain connectivity of habitats at the landscape scale
- Encourage the creation and enhancement of wildlife habitat on both public and private lands
- Promote “smart growth” strategies such as clustered and infill development that maximizes infrastructure efficiency and minimizes habitat loss
- Establish growth areas and provide incentives for development within growth areas
- Mitigate the impacts of development by identifying and implementing greenway and riparian corridor protection initiatives, creating/restoring habitat, etc.

E. CIRCULATION PLAN ELEMENT

Plan Recommendations:

1. The current Borough circulation, street design and parking standards should be examined by the Borough Engineer and revised where necessary to bring these standards into conformance with the recently adopted State Residential Site Improvement Standards. These mandatory street standards now supersede local municipal standards for residential development.
2. Within the Traditional Village Commercial District, the ordinance should be amended as necessary to require close on-street frontage along the County Route 514 in keeping with the historic sections of the Borough. The road frontage of County Route 514 should be widened to include two eleven foot wide parking aisles, two eleven foot wide travel lanes and one eleven foot wide left hand turning lane for a total cartway width of 55 feet, unless otherwise amended by the County Engineer. Shared access drives may also be used to reduce the number of curb cuts. According the County Engineer, it will be important to provide for traffic controls into the commercial properties. It is also intended that between the traffic light at Somerset Court House Road and Main Street there be on-street parking on the southern side of C.R. 514. While some of the area for the new proposed parking would be adjacent lands owned by Green Acres, it is intended that this additional parking would provide better access to the Green Acres lands for recreational purposes.
3. Speeding in the Borough is a safety problem. The Borough should work closely with the County to create traffic calming gateways, such as chicanes with a planted island, at the entrances to the Borough along County Route 514 as approaching the Borough from the west, and along the northern and southern stretches of Main Street (County Route 533). These gateways should incorporate signage and specialty landscaping that identifies the Borough's historic heritage and indicates that all vehicles must yield to pedestrians. This work should include a study of Amwell Road and how Millstone can work with the County to control traffic both volume and speed on Amwell through Millstone. One alternative may be to convert Amwell Road into a cul-de-sac to eliminate through-traffic.
4. If the Borough obtains the former County garage property, any proposed use should allow some additional spaces to meet other parking needs within the Borough since parking in this area of the Borough is very limited. If this site can be used successfully for commercial redevelopment, a condition may be that a portion of the parking be open to the general public to serve existing uses. This area may also be used to provide a stop for bus service, particularly if County mini-bus or another service is expanded in the future.
5. Parking standards should be reexamined during the zoning amendment process to determine if parking requirements reflect actual need. Additional parking categories may be added to reflect the parking needs of individual uses. The Planning Board may consider reducing requirements where a shared parking arrangement is adequately demonstrated. Provisions should be made to include on-street parking for meeting the required parking need.

6. In the Traditional Village Commercial Center area, off-site parking, within prescribed limits, may be permitted in association with nonresidential uses. “TVC” uses are within walking distance and allowing flexibility on this issue will help prevent the destruction of historic structures to accommodate on-site parking. This type of arrangement would require adequate and safe pedestrian access between uses.

Pedestrian Access

7. Millstone is small enough that all residents are within walking distance of all areas of the Borough. Adequate access to the existing commercial area should be made available to the proposed Traditional Village Commercial area along County Route 514.
8. A sidewalk development program should be initiated by the Borough, which would identify a general program of sidewalk development and improvements. As part of this plan, sidewalks should be required along streets in connection with any new subdivision or site plan. This will include sidewalks from the existing developed area of the Borough along Amwell Road to the TND-2 development at the southwest corner of Millstone. This will require the widening of Amwell Road for a sidewalk, which will have to be done in cooperation with the County. This sidewalk will connect to the TND-2 age-restricted development.
9. For those areas where sidewalks cannot be anticipated as part of new development, the Borough should pursue methods of independently improving the sidewalk system. Sidewalks in existing developed areas may be funded with State grants, special assessments or through general local funds.
10. Within the Borough, traffic is to yield within designated crosswalk areas. It is recommended that these crosswalks be more clearly marked through additional painting, pavers, signage or other means to alert and potentially slow traffic on their approach. Crosswalks exist at the intersection of the Bypass Road and Main Street which are marked by parallel white lines. There is also a designated crosswalk at the intersection of Amwell Road and West Street, Amwell and Main Street at the Church and Amwell Road and Amsterdam Drive.
11. The Millstone River Causeway provides Millstone residents with bicycle and pedestrian access to the D&R Canal State Park system as well as the County’s Colonial Park. Currently, a sidewalk is available on the north side of the causeway. However, there is no separation between this walkway and the adjacent roadway which is also narrow. In addition, the sidewalk is worn. As part of any substantial reconstruction of the causeway, consideration should be given to improving this pedestrian and bicycle pathway with a new bridge that could be located on the abutments of the old bridge or on a restored walkway on the existing bridge.
12. The Green Acres property located along the Peace Brook may be improved to include bicycle and pedestrian pathways, which could connect to sidewalks anticipated along County Route 514. As part of improving this area for circulation and recreation, a meandering bicycle and

walking trail could be developed along the stream corridor, connecting with both the municipal park and the bypass road as well as bike lanes on C.R. 514 and Amsterdam Drive.

F. UTILITIES PLAN ELEMENT

SEWAGE DISPOSAL PLAN

Millstone Borough Council continues to weigh the economic and social costs and benefits associated with bringing sewers to the Borough. The Borough is currently pursuing a cost analysis to determine developing a partnership with Hillsborough Township, which has shown interest in placing a force main and pump station within the Borough. Such a system would serve both communities. As a follow up to this initiative, the Township and the Borough have petitioned Somerset County to include both communities within a new proposed sewer service area that will include all of the existing and proposed developed areas within the Borough. The Borough is also in the final negotiations with two developers who have shown an interest in partnering with the Borough to install sewers that will serve both the proposed development and the existing developed area of the Borough.

The goals of the sewage disposal plan are as follows:

- Provide sewers that will serve all of the existing and proposed properties within the Borough.
- Partner with Hillsborough Township and two developers to reduce the costs associated with the installation of the sewers.
- Require all proposed COAH units to be served by public sewers..

According to Somerset County Planning Board staff, the joint petition for the sewer extensions by Hillsborough Township and Millstone Borough will be incorporated into a new Somerset County Waste Water Management Plan. The Plan will commence in the spring of 2006 and should be complete no later than the spring of 2007. The County will then submit the plan to DEP with their recommendations for Hillsborough and Millstone.

New regulations are being considered by DEP. These regulations may require Millstone and Hillsborough to change their respective proposed areas to PA2 from PA3. The County will work with the DEP to make the decision between PA2 and PA3. Millstone and Hillsborough prefer PA3 but will petition for PA2 if required to get sewers.

WATER PLAN

The goals of the water plan as follows:

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- Millstone Borough will continue to be served by the American Water Company;
- New developments within the proposed Traditional Village Commercial District and the two Traditional Neighborhood Development Districts should be served with public water;
- Public water should be used to serve all COAH housing units; and
- All new development should provide for fire hydrants in accordance with the local fire marshal.

G. HISTORIC PRESERVATION ELEMENT

HISTORIC PRESERVATION GOALS

1. To promote and encourage the preservation and enhancement of those buildings, structures, cultural landscapes and areas of historic and aesthetic value that reflects the cultural, economic, social and architectural history of Millstone and conversely discourage the demolition of historic structures and landscapes
2. To insure that the overall scope of new development, traffic flow, visual impact, and physical proximity of development does not threaten directly or indirectly the Millstone Borough Historic District, or any historic site, landmark, or cultural landscape within the Borough. Historic preservation is undertaken in order to retain buildings and such cultural landscape areas for the education, pleasure, and welfare of the people of Millstone.
3. Preserve the historic context and the cultural landscape of the area surrounding the vicinity of the proposed Heritage Park. Buildings, landscapes, streetscapes, etc. should be sensitively developed so as not to diminish or threaten the historic and cultural heritage of the Borough or the areas of the Revolutionary War encampment sites.
4. Incorporate and enforce design guidelines that will ensure that all new development, redevelopment, and renovations are in keeping with the context of the historic district.

Policies of Master Plan Components that have an effect on the Preservation of Historic Sites and Districts

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*. By re-examining the existing 1997 Millstone Master Plan, and incorporating revisions consistent with the goals and policies outlined in the above Historic Plan, compatibility with other elements of the master Plan has been achieved.

The following policies contained in two elements of this Master Plan have additional implications for historic preservation. They are discussed below:

Circulation Plan

The design and character of streets and bridges has a major impact upon the preservation of the integrity of the historic districts within the Borough.

Roads: Road design standards are an area of public policy that can have a profound effect on historic preservation. Roads designed to typical modern engineering standards, which ignore the historic integrity of an area, can unalterably damage historic character. The historic integrity of streets and roads in historic districts should be preserved, in particular their historic

widths. Roads within the Borough should be designed to encourage on-street parking and traffic calming in order to create a walkable community that will reinforce the character of the historic district. The major roads within the Borough are under the jurisdiction of the County. The Borough should coordinate with the County to resist design standards that would convert roads within and outside the Historic District in any manner from the unity of the village character of Millstone.

Bridges: Public bridges are also important to historic preservation, within or outside historic districts. 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. Bridges in the Borough are under the jurisdiction of the County. The Borough should cooperate with the County to assure that decisions regarding bridge refurbishment and replacement are made consistent with the integrity of historic districts.

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: 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 Millstone Borough, historic districts are closely associated with village-style development in the rest of the Borough, within the context of a rural landscape of the Borough's borders. Development that changes this context, even outside historic districts, will be detrimental to the historic character, integrity and significance of the districts. New development should be carefully reviewed for its ability to complement Millstone's historic village character. Good design that is consistent with the character of the historic buildings in the town should be encouraged for any new buildings that are constructed, whether they be adjacent to in or adjacent to the Historic District, or elsewhere in the community. Reference should be made to the Community Design Element within this Plan.: 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, such as institutional and public utility uses, have received special legal status. 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 that 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 and Design of Buildings: The traditional pattern of building size in relation to property size in the historic districts is consistent with buildings smaller in scale than is common in much newer developments. New structures that are substantially larger in scale than has been traditional in the Borough should be discouraged. This is particularly important in the Historic District, but the principle should be extended to all new development in the Borough. New buildings should be compatible with the size, scale heights, proportion, color, materials, setback, and setting of existing buildings, as well as with the neighborhood and environment. Design standards are further developed

Size and Design of Signs: Signs in the Borough should be sized and designed to be consistent with its historic character.

Historic Preservation Tools

The following historic preservation tools are encouraged to assist in the implementation of the Plan:

Preservation Easements

Preservation easements are private legal agreements, which can be tailored to protect the unique features of individual properties. They operate in the same manner as conservation easements, which protect sensitive environmental resources. Easement agreements with local property owners may limit exterior alterations of buildings, limit changes in use, and provide agreement on the manner of future subdivision or development. The most commonly used preservation easement is the facade or exterior easement, which controls alterations to a building's exterior thereby protecting a historically or architecturally significant facade.

An easement may also be donated to a non-profit organization by the property owner, and the value of the easement may be deductible for income tax purposes. An easement which relinquishes developable rights may also qualify the property for a reduction in assessed value for property taxes. Easements offer long-term protection of privately held historic and/or natural resources and are often more effective than local preservation ordinances due to the constant changes in local attitudes toward preservation and variability in the enforcement of local ordinances. Easements are particularly suitable in situations where historic district zoning is inappropriate. Easements can ensure long term preservation since they are recorded in the deed.

Density Shifts and Site Design

Historic resources can be protected from the impacts of new development through the use of ordinances, which permit the shifting or transfer of density away from historic features. Through clustering provisions, the development potential of an entire site can be concentrated on a portion of the site, which would least impact historic or culturally significant resources. Site plan review requirements can also be used to influence the location of structures and screening and landscaping of sites. This process can be used to encourage quality design of new development, which might impact historic resources. Within this Plan there are no specific provisions for this type of transfer of development. However, if the need arises, the Planning Board may wish to address this option on an individual site basis.

Restrictive Covenants and Sale/Leaseback programs

Restrictive covenants can be used by a local government or preservation group to preserve historic properties. In this situation, a property is purchased, renovated (if necessary) and sold back to the original owner or another party with a restrictive covenant recorded in the deed which prevents the significant alteration or demolition of the property. In a sale/leaseback program a government or preservation group purchases and renovates a building and then leases the building to a tenant. The rent in turn, pays for the cost of restoration, or can become part of a revolving fund to be used toward the purchase or restoration of other historic buildings.

Historic Preservation Plan Recommendations:

The following Historic Preservation policy recommendations are made for the implementation of the Plan:

1. Continued support for the Historic District and the Historic Commission should be provided for this type of activity to help preserve the character of the community and its historic qualities.
2. The list of historic sites should be reviewed periodically, preferably at the time of each Master Plan update.

3. Consider the “Main Street New Jersey” Program as a potential resource for developing historic preservation, village renewal and redevelopment strategies. The Main Street program provides assistance for comprehensive downtown economic revitalization program sponsored by the New Jersey Historic Preservation Office. It provides technical assistance in the development and implementation of preservation and downtown design strategies. The program encourages historic preservation within the context of economic development.
4. Historic preservation review should be applied to all uses in all zones located in the Borough Historic District and especially within the proposed Traditional Village Commercial, TND-1 and TND-2 Districts. Where the subject of development is not an existing historic or architecturally significant building, but a new structure or addition, Development Guidelines should be followed to support architectural compatibility and sensitivity to the Historic District. The Architectural Development Guidelines, which may be used to review new development in this area, both residential and nonresidential, are identified below and illustrated on the following pages under Community Design Guidelines. These guidelines may also be considered in review of new construction in non-historic areas since they relate to the overall development character of the community and to the general community design guidelines indicated in this Element.

H. COMMUNITY FACILITIES, PARKS AND OPEN SPACE ELEMENT

Plan Recommendations:

1. The municipality should continue to pursue a possible link with adjacent local police. State police response time is very slow and Hillsborough and Franklin police only respond on the request of State Police. Under the current arrangement, they do not patrol in the Borough. If a formal arrangement could be reached, these units would not only patrol but include in their facilities and manpower planning, the need to cover the Borough. The need for more localized service will only increase as development continues.
2. Other than the municipal building with its limited space, there are no other municipal offices. Public works functions are currently provided by private contractors. While this arrangement is currently satisfactory, there may come a time when additional space is needed for various municipal needs. As part of any future planning efforts, the Borough should explore potential sites that may accommodate municipal needs.
3. The potential for adding parking to the municipal building site should be investigated. The existing parking lot may be redesigned and expanded to accommodate additional parking. Federal or other State grants or loans may be available to help develop needed facilities. Options for providing some parking at the existing park should also be explored.
4. The Community Facilities, Parks, and Open Space Plan map include a future “Heritage Park” area for the Borough. This open space or “Heritage Park” area is shown on both public and private lands, with the majority of area formed by Township owned “Green Acres” property, by State conservation lands and by existing easement areas. These areas fortunately comprise most of the encampment sites that are described within the historic section of this Plan. Therefore these areas remain available for future interpretive purposes and provide an excellent opportunity for the Borough to work in conjunction with State and Federal agencies in the development of a heritage park of Statewide and National importance that would tell the story of the Revolutionary War. Included within the Open Space Plan map is the future acquisition of the area shown as RA Residential. This area has limited development potential due to environmental constraints. But most importantly, it provides an important contextual relationship with the area with the highest concentration of encampment sites. It is of prime importance to preserve the contextual relationship of the central area of the encampment sites with the surrounding areas. Because of this importance, negotiations have also been undertaken with Hillsborough to preserve the lands to the north of Millstone Borough, which also include some of the encampment sites. It is intended that a joint application will be made by Hillsborough Township and Millstone Borough for the future acquisition of these described lands that abut the area of the proposed heritage park.
5. The area described above can also be described as a “greenway” which includes stream corridors, stream corridor buffer areas, wetlands and hydric soils, most of which is precluded

from development due to State law. The preservation of these areas will provide a continuous open space linkage throughout the Borough, a wildlife corridor, increased stream/water quality protection and help preserve portions of the Borough's natural beauty. The maintenance of open space and native vegetation also helps to preserve the natural heritage of a community, while enhancing the value of property located near or adjacent to open space. While the greenway designation alone cannot preclude development short of public acquisition or dedication, most of the area contained within the delineated greenway is not practical for most forms of development, due to its relationship to natural and man-made features. A first priority will be to acquire Green Acre funds for the acquisition of these remaining lands. However, if development should occur in these areas, the Board should attempt to obtain conservation easements in these areas through the subdivision and site design process, including clustering.

6. There are no playfields for softball, soccer or similar activities; however, Green Acres property may also be used for active recreation purposes and Green Acres grants or loans are available for recreation facilities. If additional recreation facilities are desired, the potential availability of this resource should be explored.
7. Opportunities should be provided to cross the Green Acres property to link Anne Street with the Bypass Road and potential new commercial development in this area. This would provide a more direct alternative to Main Street for residents traveling by bicycle or foot between the residential developments in the southern portion of the borough to the commercial area. In addition, these crossings would provide access to the upland portions of the Green Acres tract that could be developed for active recreational activities. This is depicted in the Circulation Plan. Green Acres funding may also be pursued to provide recreational pathways through the Borough Open Space areas.

I. COMMUNITY DESIGN GUIDELINES ELEMENT

PLAN RECOMMENDATIONS:

1. Architectural Design Guidelines

The following is a list of architectural design guidelines, which should be considered for all new development:

Height - Relationship of overall height of new construction to that of adjacent structures;

Scale - Relationship of the size and proportions of new structures to the scale of existing buildings;

Massing - Breaking up uninteresting box-like forms into smaller, varied masses such as are common on most buildings from the historic period represented in an area.

Directional Expression - Relationship of the vertical, horizontal or non-directional facade character of new buildings to the predominant direction expression of nearby buildings.

Setback - Maintenance of the historic facade lines of streetscapes by locating front walls of new buildings in the same plane as the facades of adjacent or nearby buildings.

Sense of Entry - Articulating the main entrances to the building with covered porches, porticos and other pronounced architectural forms.

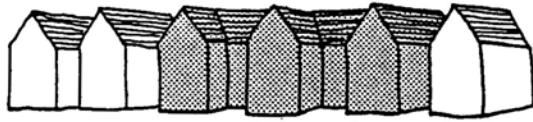
Roof Shapes - Relationship of the roof forms of new buildings to those found in the area.

Rhythm of Openings - New buildings should respect the recurrent alternation of wall areas with door and window elements in the facade.

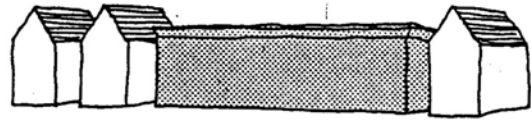
Also consider: relationship of landscaping, relationship of texture and building materials and rhythm of solids to voids in front facades, ground covers, etc. These and other architectural guidelines are further illustrated in this Element.

THE PLAN

DIRECTIONAL EXPRESSION

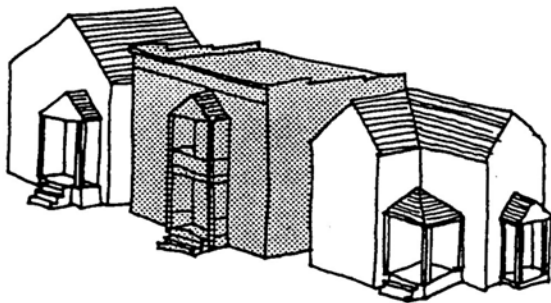


Relate the vertical, horizontal or non-directional facade character of new buildings to the predominant direction expression of nearby buildings. Horizontal buildings can be made to relate to the more vertical adjacent structures by breaking the facade into smaller masses.

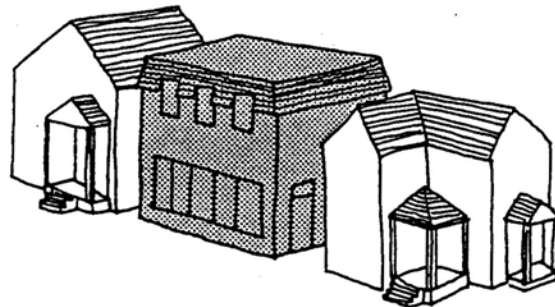


Avoid horizontal or vertical facade expressions unless compatible with the character of structures in the immediate area.

SENSE OF ENTRY



Articulate the main entrances of building with covered porches, porticos and other architectural forms. The primary entry should be raised above grade and made a prominent visual feature where this is the dominant form in the surrounding area except in those instances where disabled and handicapped access cannot be otherwise accomplished.

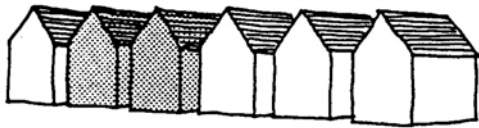


Avoid facades with no strong sense of entry.

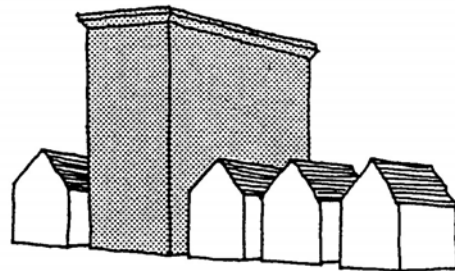
Source(s): Utah State Historical Society and Cooper, W., Architects and Associates. Historic District Design Guidelines for Salt Lake City, Salt Lake City: Zoning and Planning Commission. 1979. Modifications by master plan consultants.

THE PLAN

HEIGHT

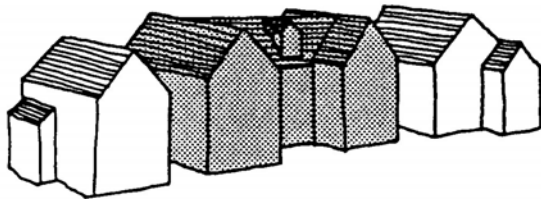


Relate the overall height of new construction to that of adjacent structures. The height of new construction should be roughly equal to the average height of existing buildings in the surrounding area.

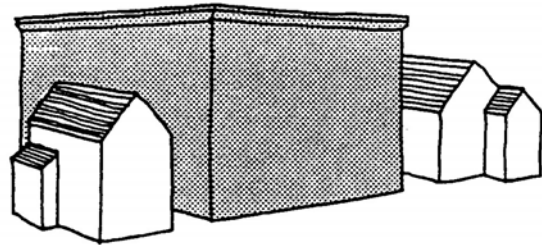


Avoid new construction which greatly varies in height from older buildings in the surrounding area.

SCALE



Relate the size and proportions of new structures to the scale of adjacent buildings. Although larger in square footage than the adjacent properties, the depiction illustrates how a larger building can maintain the same scale and rhythm as structures in the surrounding area.

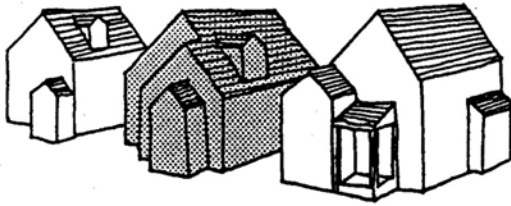


Avoid buildings which in mass, width or height violate the existing scale of the area.

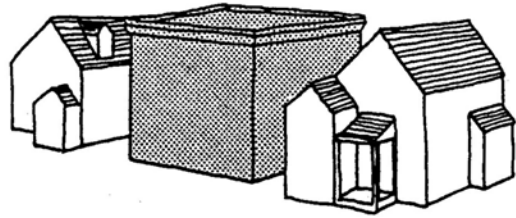
Source(s): Utah State Historical Society and Cooper, W., Architects and Associates. *Historic District Design Guidelines for Salt Lake City*. Salt Lake City: Zoning and Planning Commission. 1979. Modifications by master plan consultants.

THE PLAN

MASSING



Break up uninteresting boxlike forms into smaller, varied masses. Variety of form and massing add interest to the streetscape and are elements essential to preserving the character of historic streetscapes.

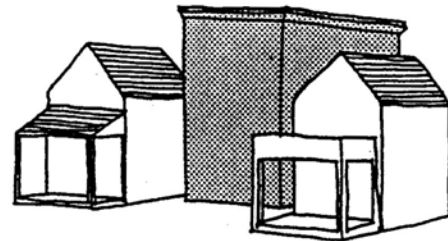


Avoid single, monolithic forms which are not relieved by variations in massing. Such structures are especially intrusive when placed in a streetscape of older buildings which have varied massing and facade articulation.

SETBACK



Where appropriate, maintain existing facade lines of streetscapes by locating front walls of new buildings in the same plane as the facades of adjacent buildings. Where there are varied setbacks, the maximum setback of new construction should harmonize with the average setbacks of existing adjacent buildings except where increased and/or varied setbacks are necessary to preserve street trees or rural character along roadways.

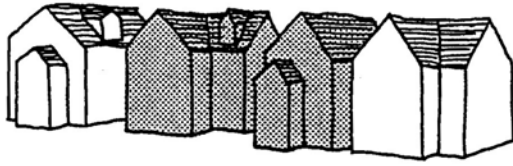


Avoid violation of existing setback patterns especially in village or historic district areas. Avoid placing buildings at odd angles to the street, unless in an areas where diverse siting already exists.

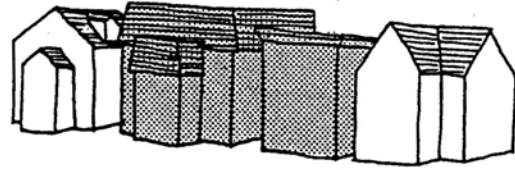
Source(s): Utah State Historical Society and Cooper, W., Architects and Associates. *Historic District Design Guidelines for Salt Lake City*. Salt Lake City: Zoning and Planning Commission. 1979. Modifications by master plan consultants.

THE PLAN

ROOF SHAPES



Relate roof forms of new buildings to those found in the surrounding area. The use of traditional roof shapes, pitches and materials on new construction makes new structures more visually compatible.

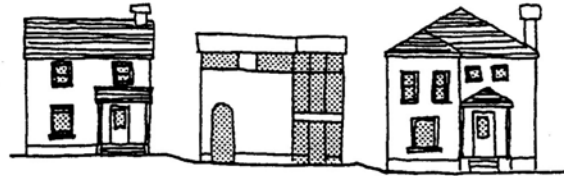


Avoid introducing roof shapes, pitches or materials not traditionally used in the area.

RHYTHM OF OPENINGS



Respect the recurrent pattern concerning the number and spacing of windows and doors in a facade. Also consider the width to height ratio of bays in the facade. New construction should show the predominant rhythm of buildings in the surrounding area.



Avoid introducing incompatible facade patterns which upset the rhythm of opening established in surrounding structures.

Source(s): Utah State Historical Society and Cooper, W., Architects and Associates. *Historic District Design Guidelines for Salt Lake City*. Salt Lake City: Zoning and Planning Commission. 1970. Modifications by [illegible].



2. As part of the Master Plan, a future study should identify specific design and streetscape improvements for the portion of the Historic District that contains the Traditional Village Commercial area. A Traditional Village Commercial Improvement Plan could be developed to identify the type and location of desired street furniture (benches, trash receptacles) street trees and landscaping, sidewalk treatments and crosswalks. Once identified, improvements could be made over time as part of a capital improvement program or in conjunction with redevelopment of existing properties.
3. It is recommended that all applicants for major subdivisions and site plan come to the Planning Board for a pre-application informal review prior to making a formal application before the Board. In this manner, the Board can provide subdivision and site plan design guidance before the applicant undertakes costly engineering. A subcommittee of the Planning Board may be formed for this purpose.
- 4. Community Design Guidelines.**

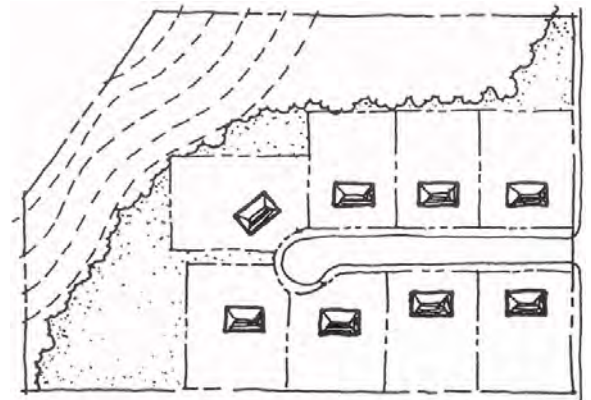
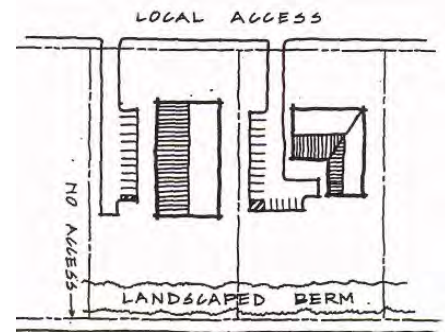
Good community design can support existing historic areas by maintaining a higher quality of development in and near historic resources and by encouraging development reflective of the historic character of the community. Community design guidelines are also important in non-historic area and can encourage aesthetic and functional linkages between residential, nonresidential and mixed use areas. Most importantly, these design guidelines promote the historic context that is critical for maintaining the historic integrity of the proposed Heritage Park. The use of design guidelines also help to: minimize land use conflicts; encourage quality architectural and landscape design; clarify the objectives of the Township; reduce delays in the approval process and promote dialogue between the Borough decision makers, planners, residents and developers. In this manner, they support and are integrally linked to the successful implementation of the land use plan.

It is recommended that all subdivisions and site plans incorporate design elements which are indicative of and support the village character of Millstone. The Borough Development Ordinance currently promotes general design considerations which this Plan seeks to reinforce and expand upon. Design elements which should be considered, where applicable, are noted below.

General Subdivision and Site Plan

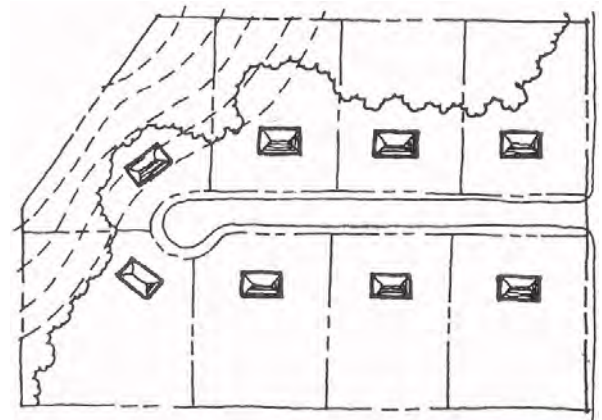
- Natural features should be integrated into the site plan where possible. Maintenance of streams, slopes, natural vegetation and other features will strengthen the quality of landscape design and preserve critical environmental resources.

- Scenic views can be protected and enhanced by careful placement of new structures. Where possible, avoid the placement of structures in open fields and locate them adjacent to existing tree lines and wooded field edges.
- Utilities for all new projects should be installed underground.
- Where possible, new residential development proposed on tracts of 10 acres or more should be encouraged to use “density zoning,” i.e., cluster development, as a means of protecting the Borough’s rural / village character, environmentally sensitive areas, open space and scenic corridors.
- Discourage developments along collector road frontages which destroy panoramic views and scenic roadways. Encourage new developments to be built on roads perpendicular to existing major public roads or to use setback frontages with parkland between the street and the proposed development to protect scenic roadways.



Vehicular Circulation

- Curb cuts should be located a safe distance from street intersections and should not create dangerous situations for pedestrians or motorists. Adequate sight distance should be maintained at all curb cuts.
- Curb cuts should be minimized wherever possible to increase efficiency of traffic flow. Commercial establishments should be connected by interior access roads and shared parking areas.



Pedestrian Circulation

- Secure and efficient pedestrian walkway systems should be integrated into overall site plans. Pedestrian connections should be provided to residences, recreation areas, commercial areas, parking areas, and other public facilities.

Open Space/Cluster development preserves open space and environmentally sensitive areas while reducing infrastructure and community maintenance costs. This method of development maintains rural character without increasing the permitted density on site.

- In residential developments, sidewalks should be located along at least one side of the public right-of-way.
- All pedestrian circulation systems should be barrier free and meet American with Disability Act (ADA) requirements.

Landscape Design

- Comprehensive landscape plans should be presented with all major development proposals. These plans should be prepared by a certified landscape architect.
- The removal of trees of over three inches in diameter should be minimized, especially along roadways. The ordinance currently requires new trees to be planted every 50 feet. The Board may consider increasing this requirement to reinforce rural character. Permit flexibility in the siting of new residential and nonresidential uses on lots where such flexibility will preserve exceptional trees or tree groupings.
- Use landscaping to create boundaries and transition areas between differing development intensities and areas of incompatible land use. Buffer areas should be used to lessen adverse visual impacts between different land uses, reduce noise levels, mitigate effects from fumes and increase privacy levels. Landscape buffers may take the form of buffer plantings of various heights and types, berms and fences.
- The preservation of existing vegetation and topography should be integrated into comprehensive site and landscape design wherever possible. Disturbance for the construction of roads, detention basins and other improvements should be kept to a minimum.

Architecture

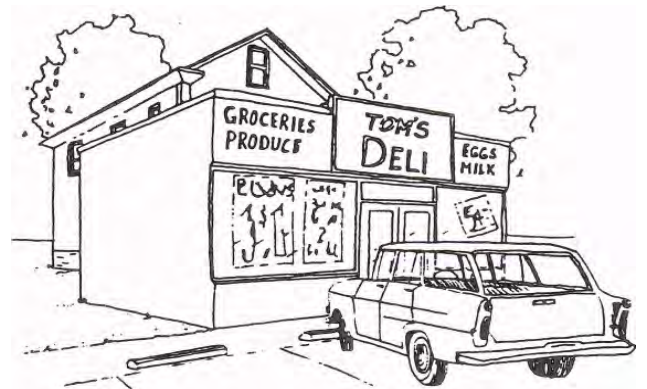
- Support architectural compatibility for any new development adjacent to historic or architecturally significant structures. Where applicable, encourage the preservation of existing agricultural (barns, silos) or historic structures to protect the scenic character of an area.
- The architectural design criteria identified for review in the historic district can be applied with equal effectiveness to areas which may not be historically defined, but in which there is a positive character of development which the municipality seeks to maintain or create. These guidelines should be used to help assure that new development is compatible with the general scale and architectural character of the community and with the surrounding area.
- Building form and siting should respond to the topography and be consistent with significant landforms. Landforms may be used to create boundaries and buffer separations

between differing land uses. Each phase of a phased development project should be able to stand alone as architecturally and visually complete.

- Rooftop mechanical equipment should be screened from public view by the use of architecturally compatible materials. Ground level mechanical equipment such as air conditioning equipment, utility boxes and meters should be screened from public view by landscaping, walls or fencing.
- Conversion of residential uses to nonresidential uses should be accomplished in a manner which preserves the residential character of the building and surrounding area. This includes maintaining the residential appearance, using appropriately scaled signage, providing parking in the rear yard (with the side yard as an option), and using shared driveways and cross-easements to reduce points of egress and ingress and limit impervious coverage required.
- Where older buildings are located in the commercial zone and proposed for commercial use, conversions or modifications should be accomplished in a manner consistent with the historic and architectural character of the area and the residential scale of the existing structure. Considerations include: maintenance of existing residential facade and character, expansions consistent with existing and surrounding architecture, parking only in side and rear yards, adequate screening of parking areas from adjacent properties, village scaled signage, shared access and parking with adjoining nonresidential properties.



Existing residence



Inappropriate nonresidential conversion



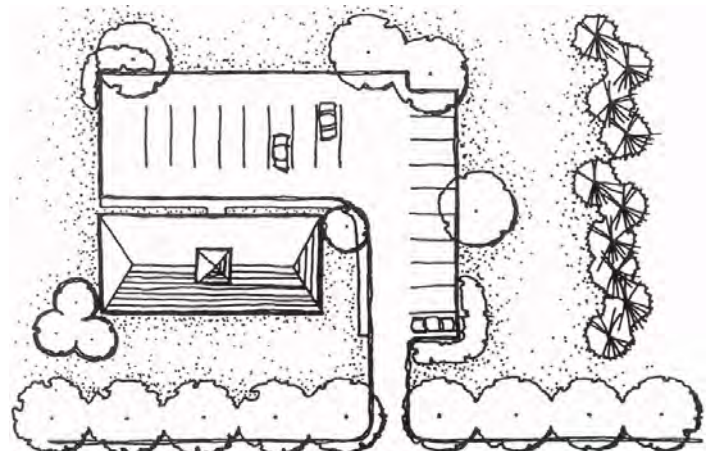
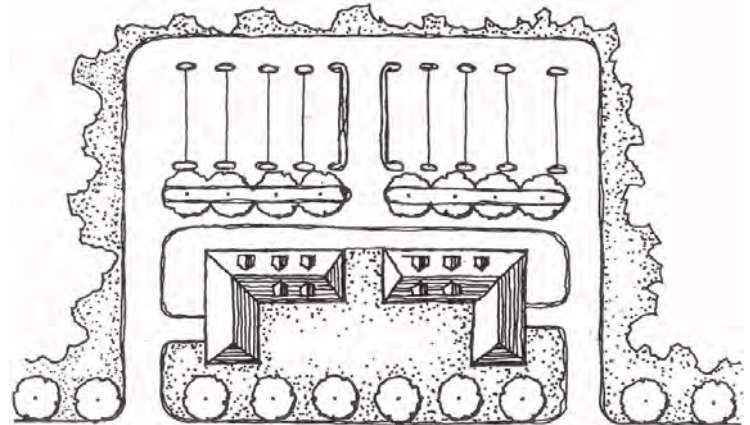
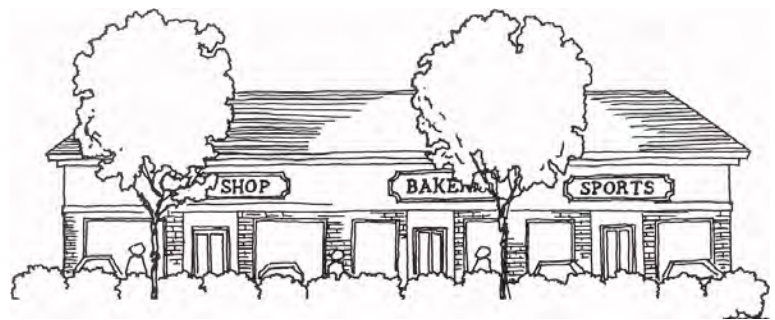
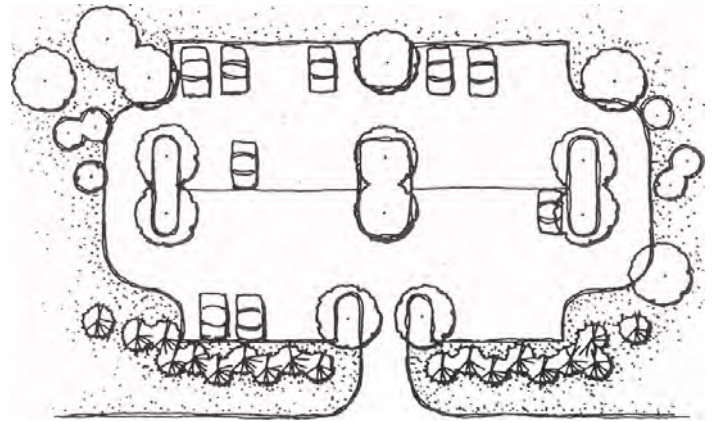
Appropriate nonresidential conversion

Off-Street Parking

- The design of parking lots should avoid conflicts between vehicular and pedestrian traffic while creating visual attractiveness within and around the site.

THE PLAN

- Cross Easements should be encouraged between nonresidential uses to minimize disruption of traffic flow, reduce points and reduce conflict with pedestrian traffic.
- Wherever possible, locate parking to the rear or sides of buildings.
- The paved areas of large parking lots should be interspersed with landscaped islands containing trees and/or shrubbery.
- Where located in view of the public right-of-way, parking should be screened from public view by evergreen planting, fencing, wall, berm or combination of these located in a landscape buffer area.
- All vehicular maneuvering requirements for entry and exit to and from individual parking spaces should be executed entirely on site.
- Adequate exterior lighting should be provided within parking areas with particular emphasis on appropriate lighting at parking lot entrances, exits and barriers. All lighting should be positioned to minimize glare and illumination beyond the development.
- Wherever possible, nonresidential parking should be located to the rear or side of buildings. It should be the building and not the parking which present the primary view from the public right-of-way. This is equally applicable to large scale (above) and small scale (below) nonresidential uses. Where practical, parking in the rear is favored over side yard parking.

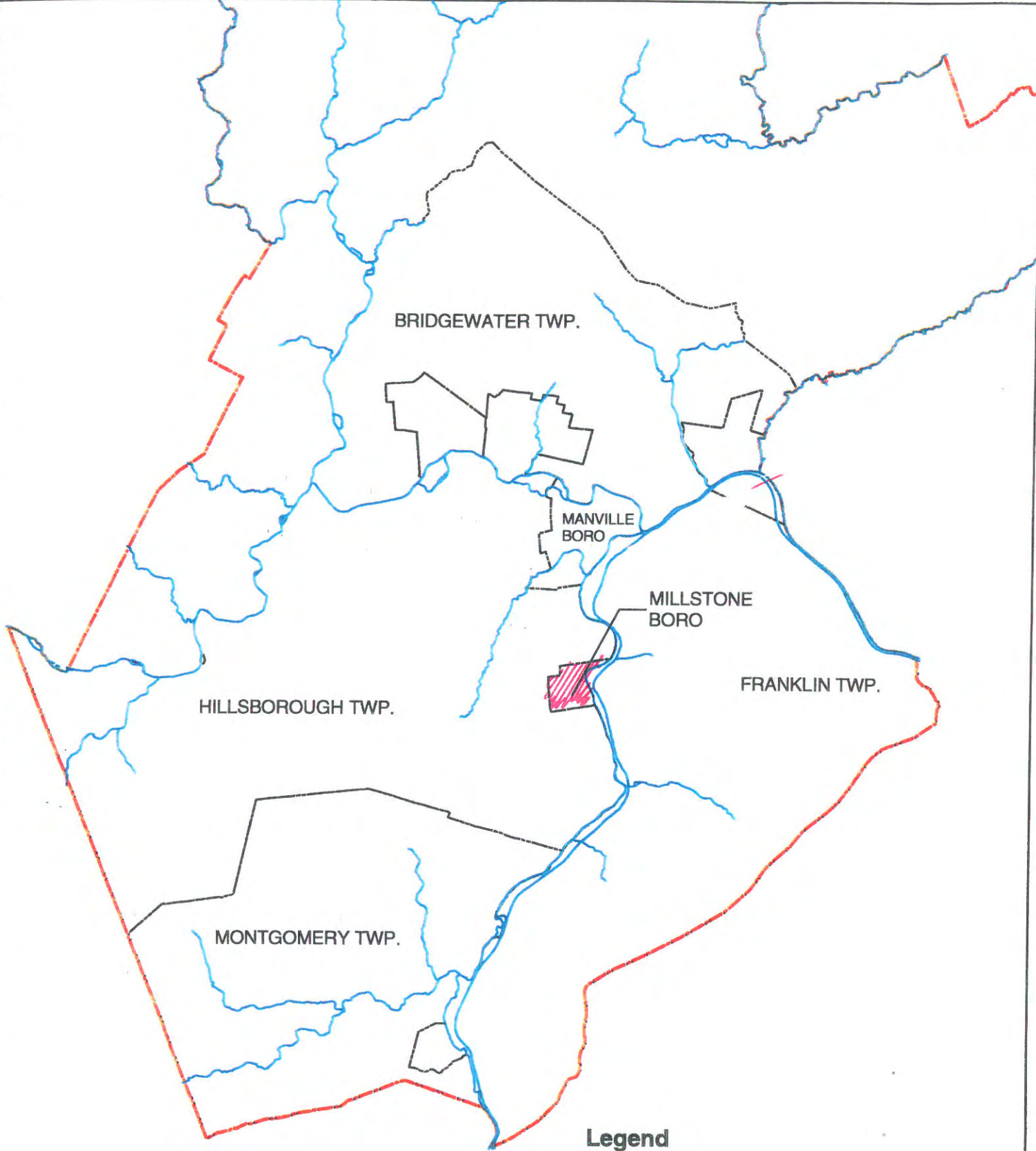


Signage

- Special design considerations for signs should be employed in the historic district. Signage should be consistent with the historic character of the area. Outside of the Historic District, signage should reflect the historic character of the Borough.
- Signs should be compatible with a building's style in terms of location, scale, color and lettering. Where attached to a building, signs should be an integral design element of the building's architecture.
- Signs should be considered within their setting and designed according to the scale, texture and proportion in which they will ultimately be viewed. Sign materials, color and design should be compatible with related building architecture. Signs made of natural materials such as wood and stone are encouraged.
- Wall signs should not be more than 15 feet above grade level. Ground or monument signs should be integrated with the landscaping for the site.
- Freestanding signs relating to any assemblage of businesses, should be grouped in an aesthetically compatible and visually coordinated manner to reduce confusion and maintain a pleasing view from the roadway.

Streetscape Design

- Promote the development of unified streetscape, signage, landscape and architectural styles in nonresidential development.
- Lighting fixtures should compliment the character of the area in which they are placed. Fixtures in residential and mixed - use areas should be scaled to compliment pedestrian usage. Lighting in all areas should be shielded to prevent light shining onto neighboring properties or public ways.



BRIDGEWATER TWP.

MANVILLE
BORO

MILLSTONE
BORO

FRANKLIN TWP.

HILLSBOROUGH TWP.

MONTGOMERY TWP.

Legend

- REGIONAL RIVERS AND STREAMS
- SOMERSET COUNTY
- MUNICIPAL BOUNDARIES



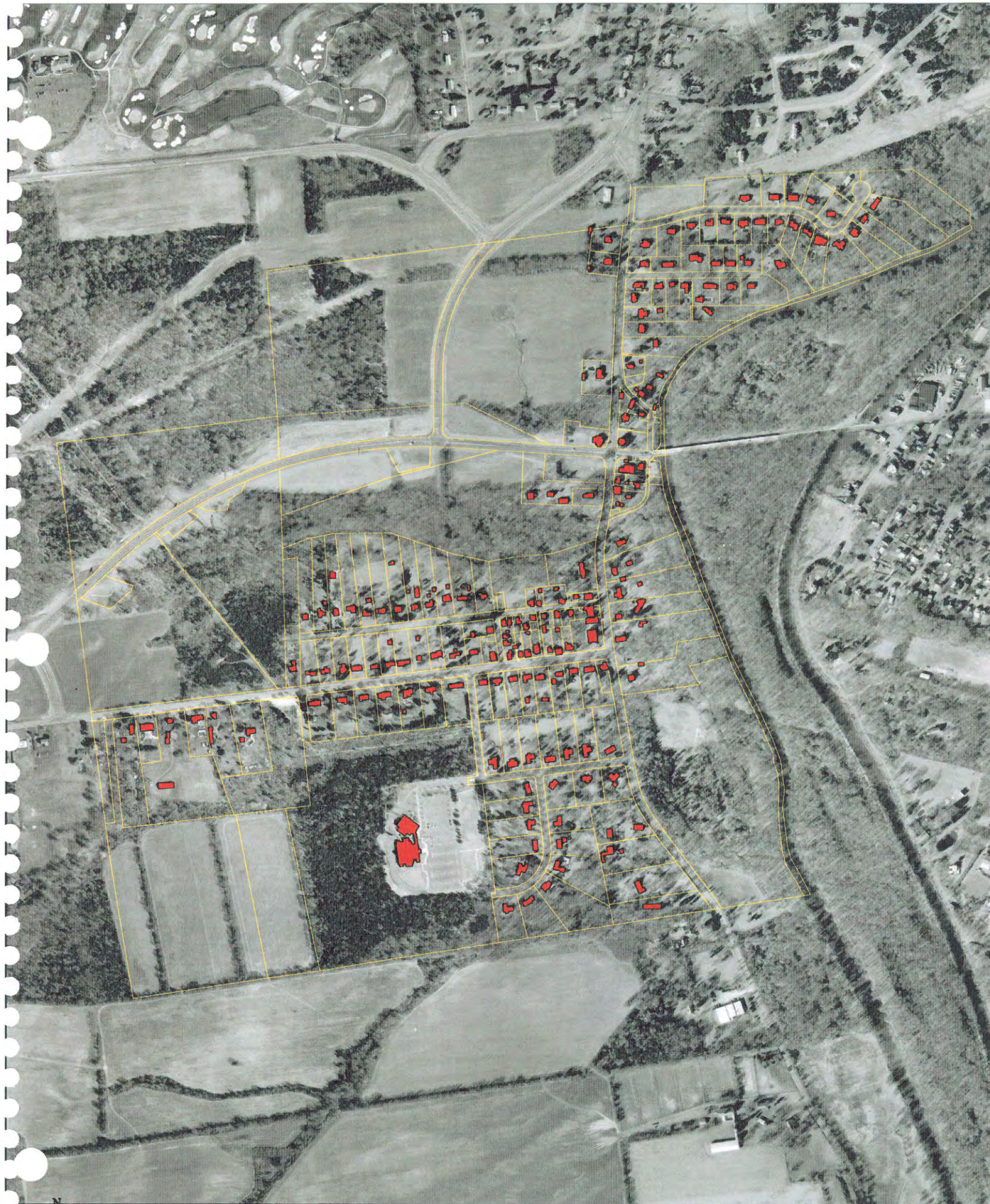
REGIONAL CONTEXT MAP

Map #1

CVDA

MILLSTONE BOROUGH
Carter van Dyke Associates, December 2003

NORTH SCALE: 1"=2.5 MILES

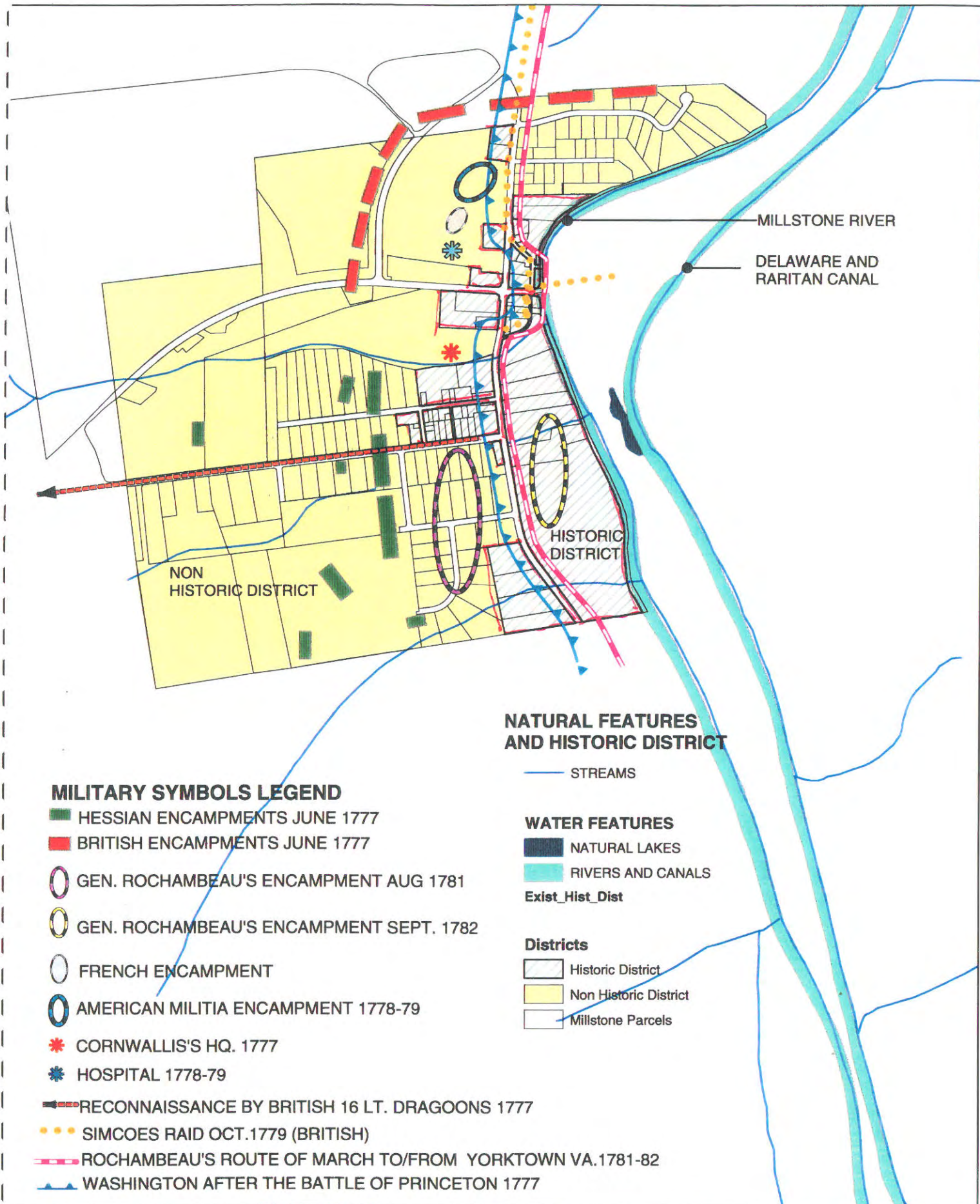


NORTH SCALE: 1"=800 FEET

**AERIAL ORTHO IMAGES, PARCELS AND BUILDINGS
MILLSTONE BOROUGH**

Map # 2 CVDA

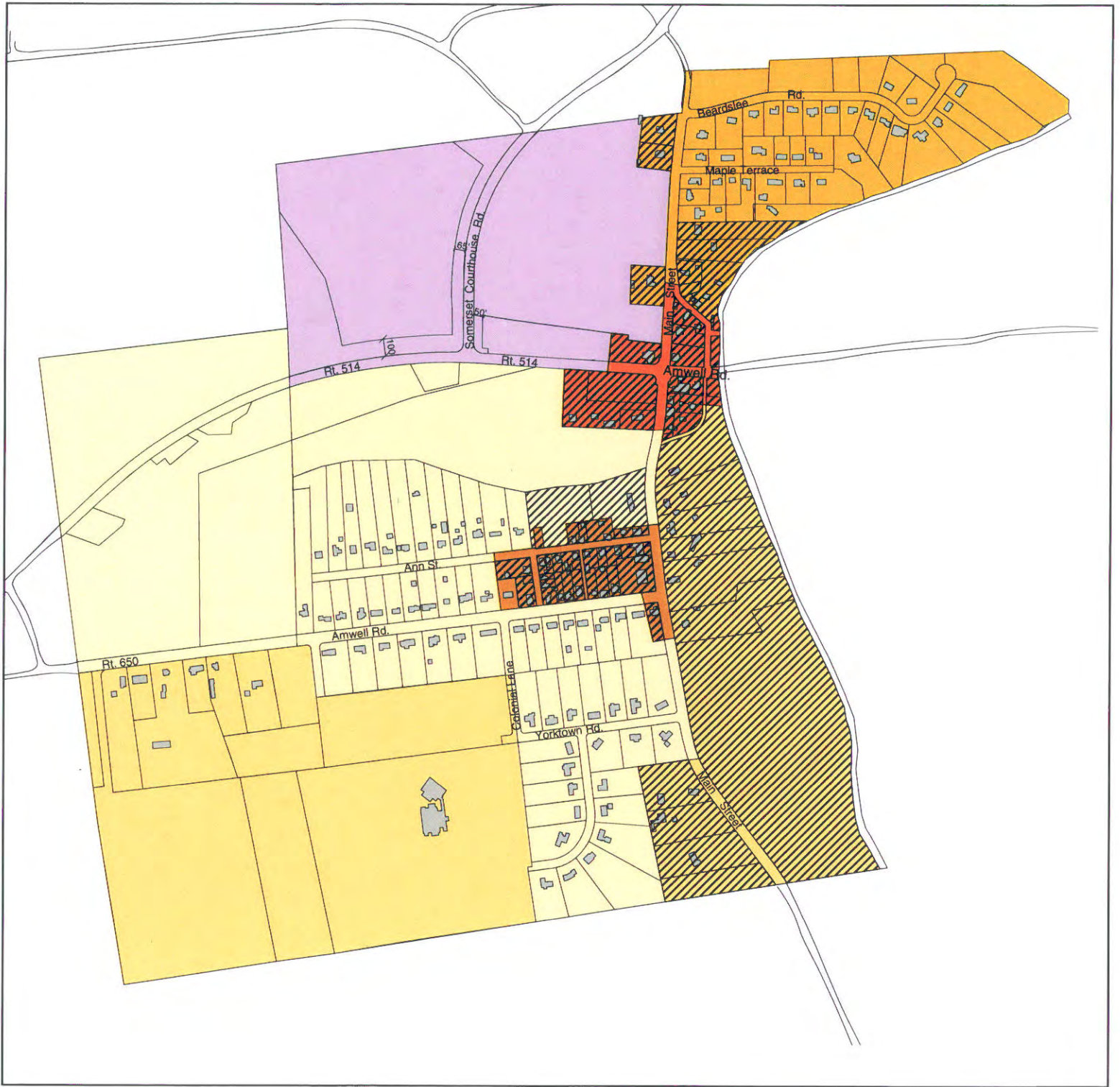
Carter van Dyke Associates, December 2003



NORTH SCALE: 1"=1000 FEET

HISTORIC RESOURCES MILLSTONE BOROUGH

Map # 3 CVDA Carter van Dyke Associates, December 2003



HISTORIC DISTRICT

- Rural Agricultural
- R-1 Residential
- R-2 Residential
- R-20 Residential
- R-8 Residential
- Village Commercial
- Light Industrial / Planned Village Development

Historic District

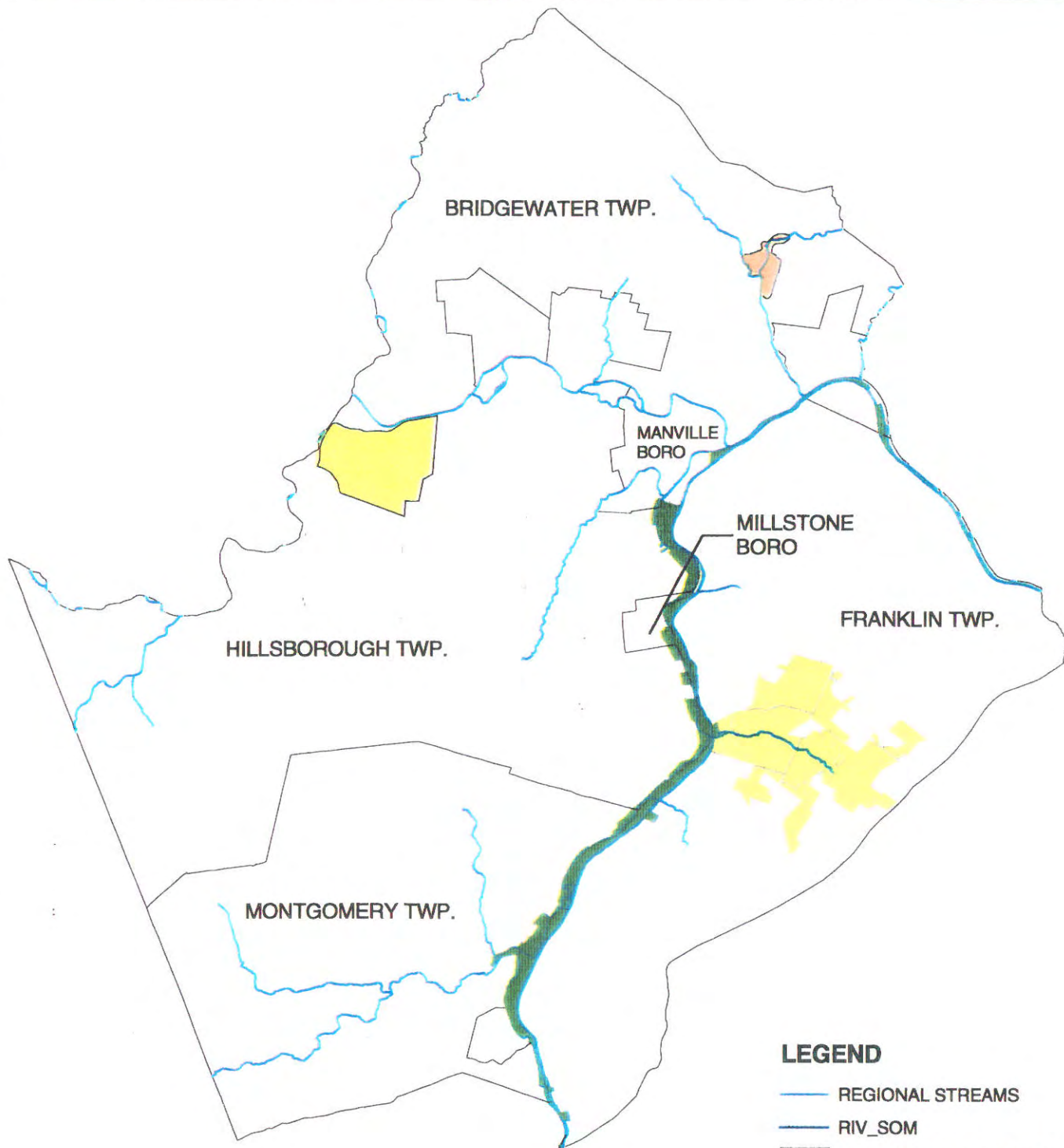
MILLSTONE BOROUGH

CVDA

Carter van Dyke Associates, November 30th, 2005



NORTH SCALE: 1"=800 FEET



LEGEND

- REGIONAL STREAMS
- RIV_SOM
- MUNICIPAL BOUNDARIES

NATURAL HERITAGE PRIORITY SITES

- Chimney Rock
- Orchard Drive Grasslands

STATE OWNED PARKS AND CANALS

- D&R CANAL
- SIX MILE RUN RESERVOIR

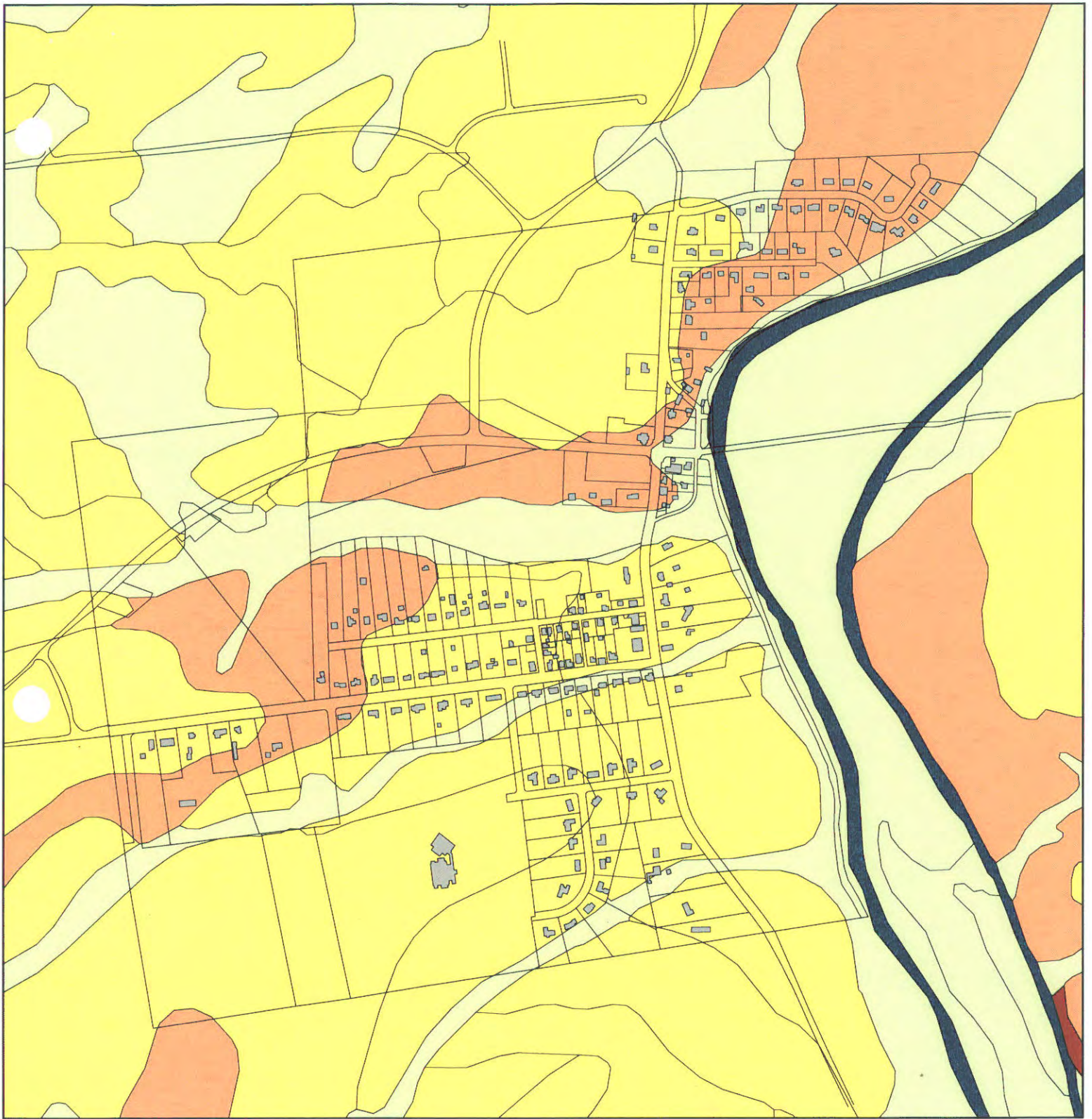


NORTH SCALE: 1"=2.5 MILES

STATE OWNED OPEN SPACE AND NATURAL HERITAGE PRIORITY SITES

MILLSTONE BOROUGH

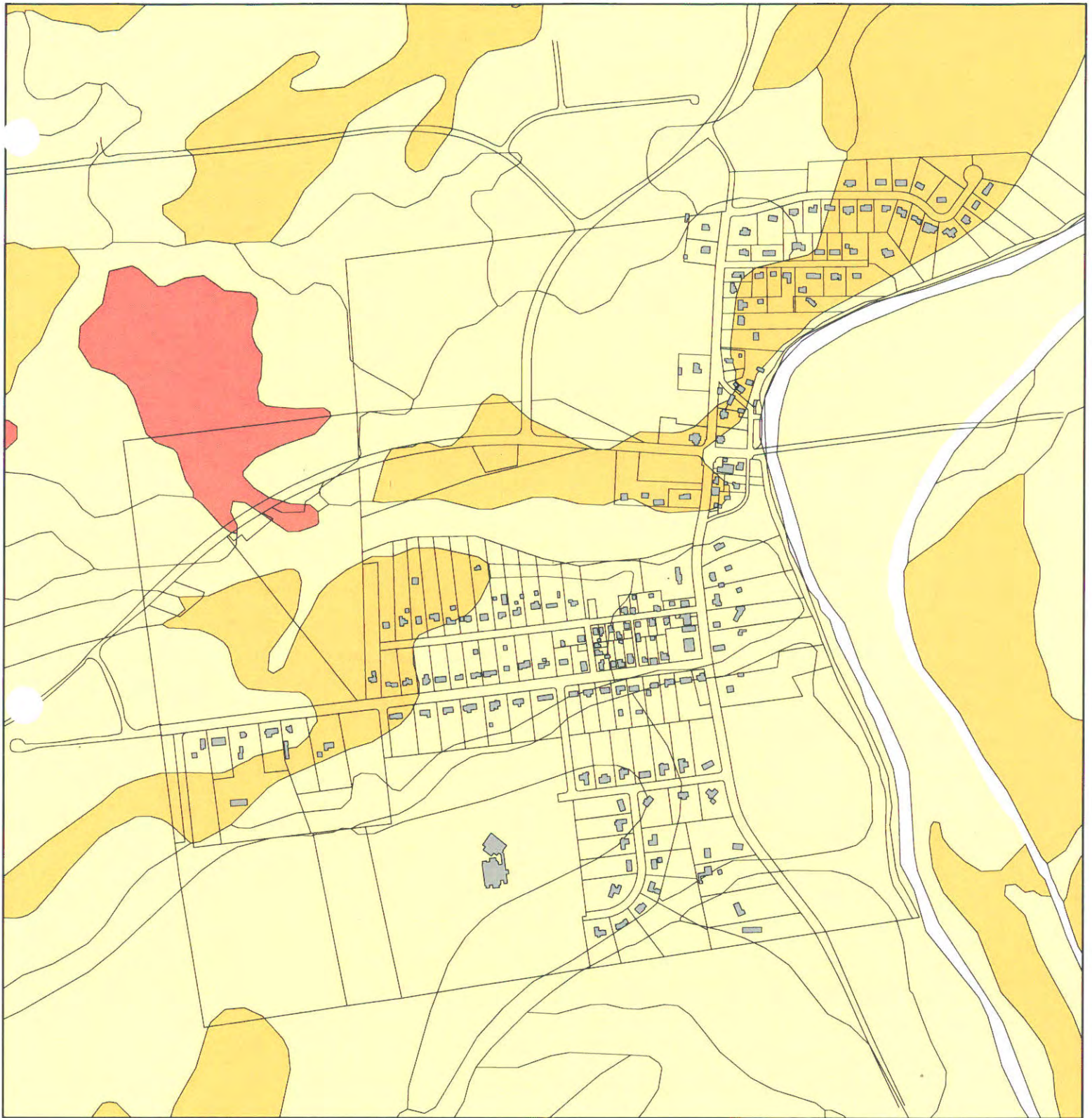
CVDA Carter van Dyke Associates, December 2003



NORTH SCALE: 1"=1000 FEET



- 0-3% SLOPE
- 3-8% SLOPE
- 8-15% SLOPE
- 15-25% SLOPE
- 25-45% SLOPE
- NOT CLASSIFIED
- WATER
- MILLSTONE PARCELS
- MillstoneBldgs

STEEP SLOPES MILLSTONE BOROUGH



NORTH SCALE: 1"=1000 FEET

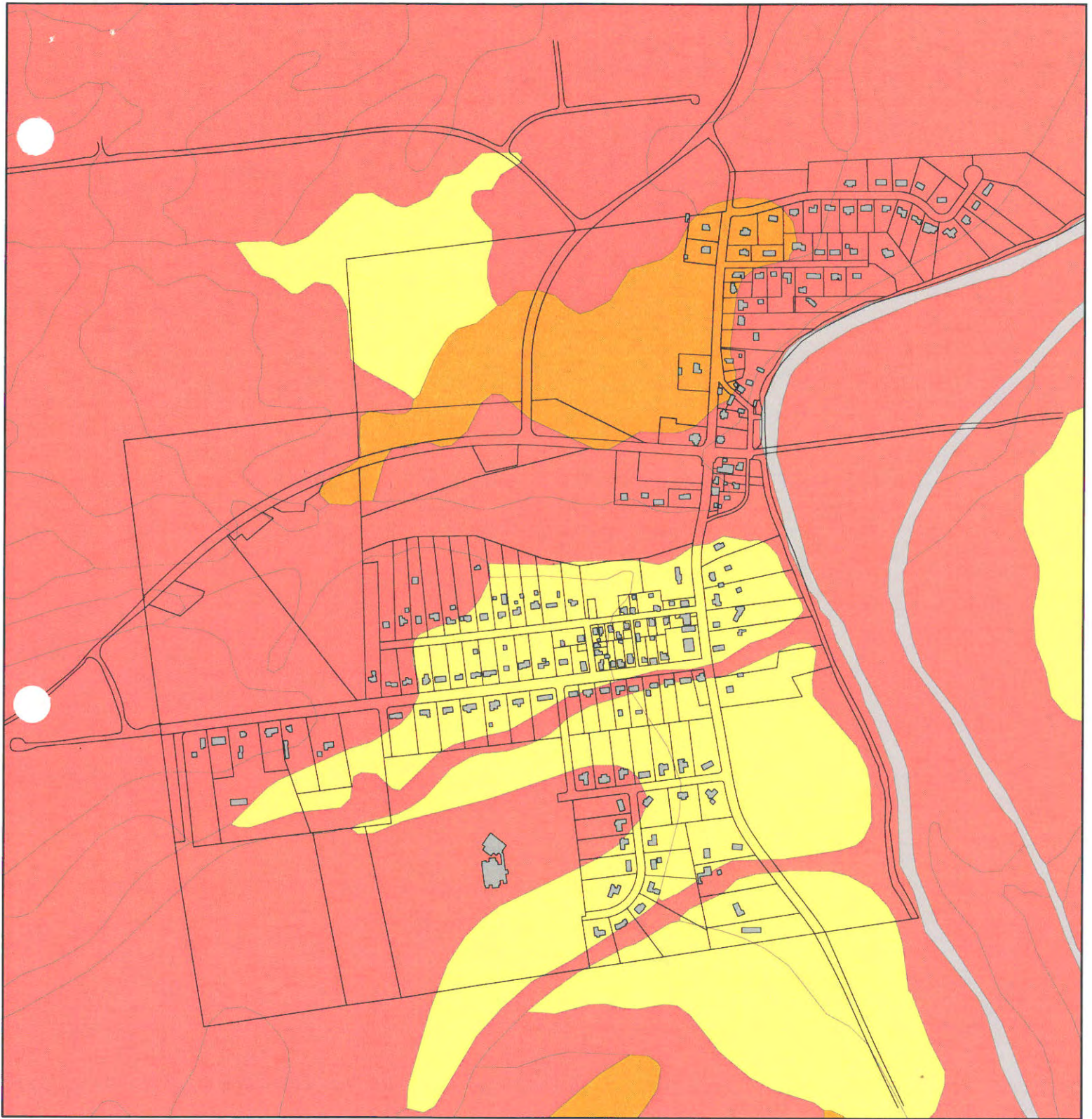
SOIL CLASSIFICATIONS

-  CLASS II
-  CLASS III
-  CLASS IV
-  MILLSTONE PARCELS
-  millstone bldgs

PRIME AGRICULTURAL SOILS

MILLSTONE BOROUGH

CVDA Carter van Dyke Associates, December 2003



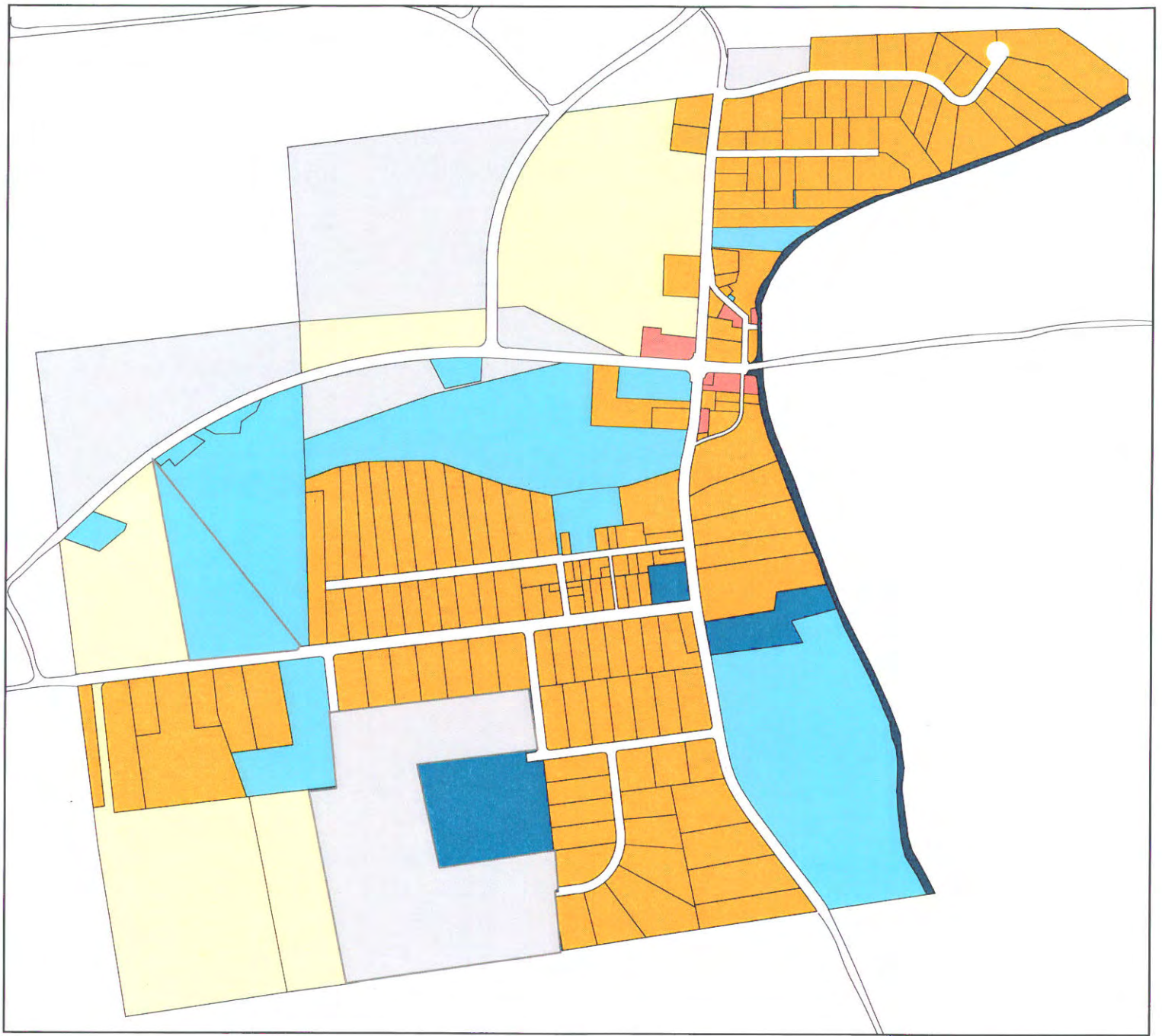
- SLIGHT LIMITATIONS
- MODERATE LIMITATIONS
- SEVERE LIMITATIONS
- NOT CLASSIFIED
- MILLSTONE PARCELS
- MillstoneBldgs

**ON LOT
DISPOSAL SUITABILITY**
MILLSTONE BOROUGH



NORTH SCALE: 1"=1000 FEET

CVDA Carter van Dyke Associates, December 2003



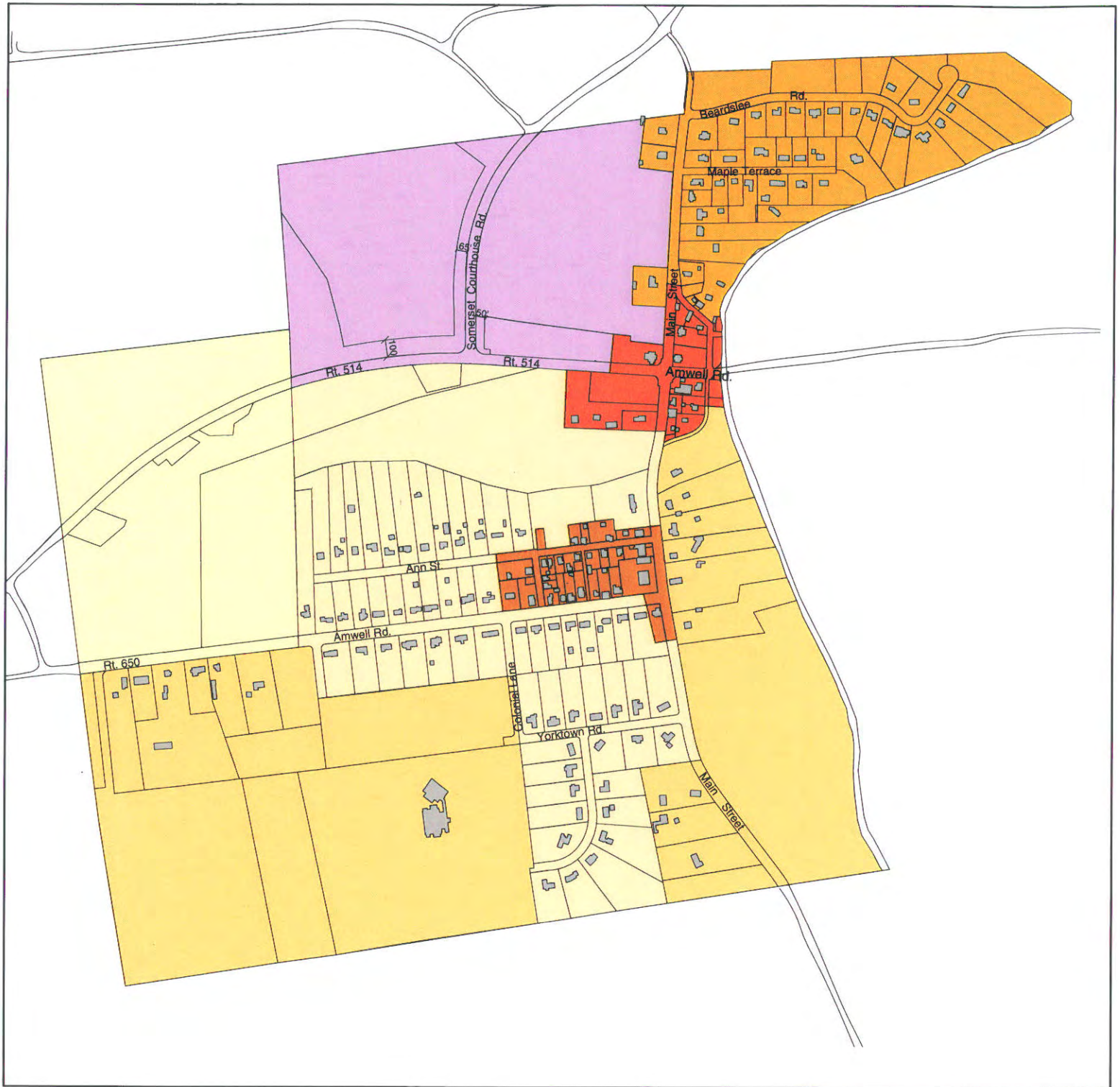
- AGRICULTURE
- COMMERCIAL
- PUBLIC/QUASI-PUBLIC
- RELIGIOUS
- RESIDENTIAL
- VACANT
- WATER

EXISTING LAND USE
MILLSTONE BOROUGH



NORTH SCALE: 1"=800 FEET

CVDA Carter van Dyke Associates, December 2003



CURRENT ZONING

- Rural Agricultural
- R-1 Residential
- R-2 Residential
- R-20 Residential
- R-8 Residential
- Village Commercial
- Light Industrial / Planned Village Development

MILLSTONE BOROUGH

CVDA

Carter van Dyke Associates, November 30th, 2005



NORTH SCALE: 1"=800 FEET



EXISTING PARKS AND OPEN SPACE

- Millstone Borough Tot Lots
- Millstone Borough Open Space
- State Open Space

MILLSTONE BOROUGH

CVDA

Carter van Dyke Associates, November 30th, 2005



NORTH SCALE: 1"=800 FEET



PROPOSED STATE PLANNING AREAS

TIER ZONES

- Tier 2
- Tier 3
- Tier 5
- Tier 6

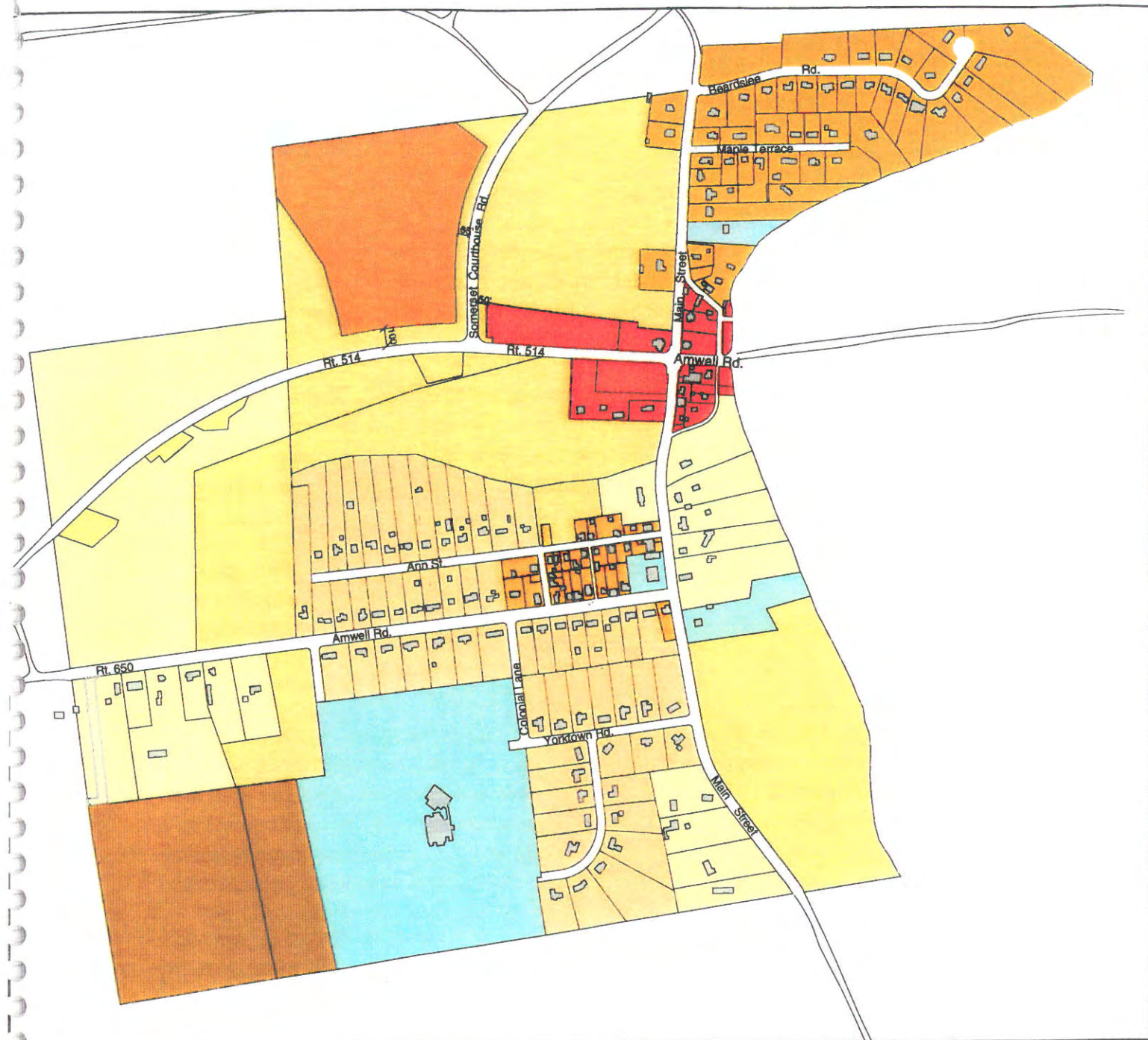
MILLSTONE BOROUGH

CVDA

Carter van Dyke Associates, November 28th, 2005



NORTH SCALE: 1"=800 FEET



FUTURE LAND USE Planning Areas

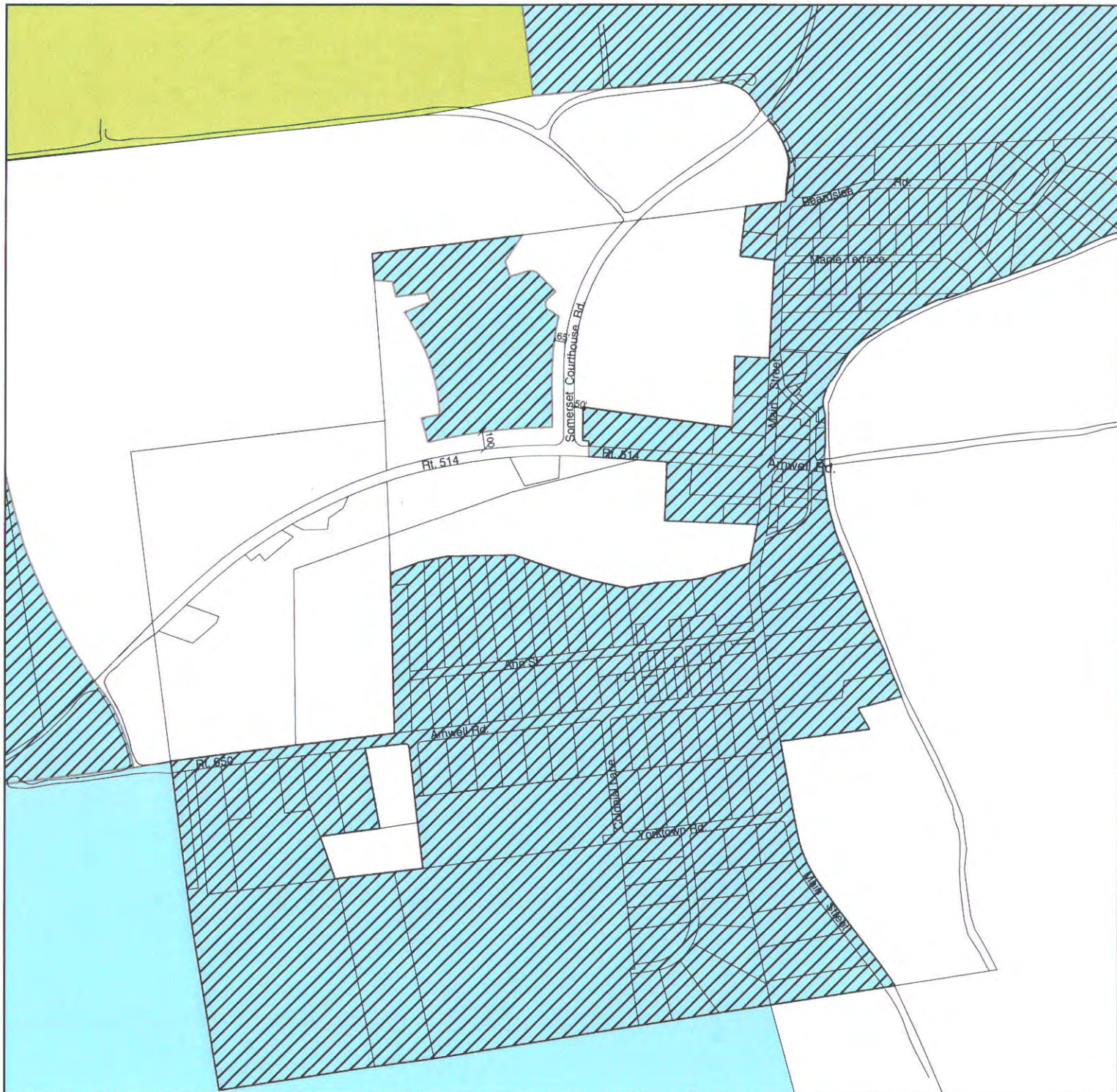
- RA
- R-2
- R-1
- R-20
- R-8
- TND-1 Traditional Neighborhood Development 1
- TND-2 Traditional Neighborhood Development 2
- TVC Traditional Village Commercial
- Institutional
- Park
- Millstone buildings

MILLSTONE BOROUGH

CVDA Carter van Dyke Associates, October 25th, 2005



NORTH SCALE: 1"=800 FEET



FUTURE SEWER SERVICE

- SEPTIC
- SEWER
- AREAS ADDED TO SEWER SERVICE
- GW 20

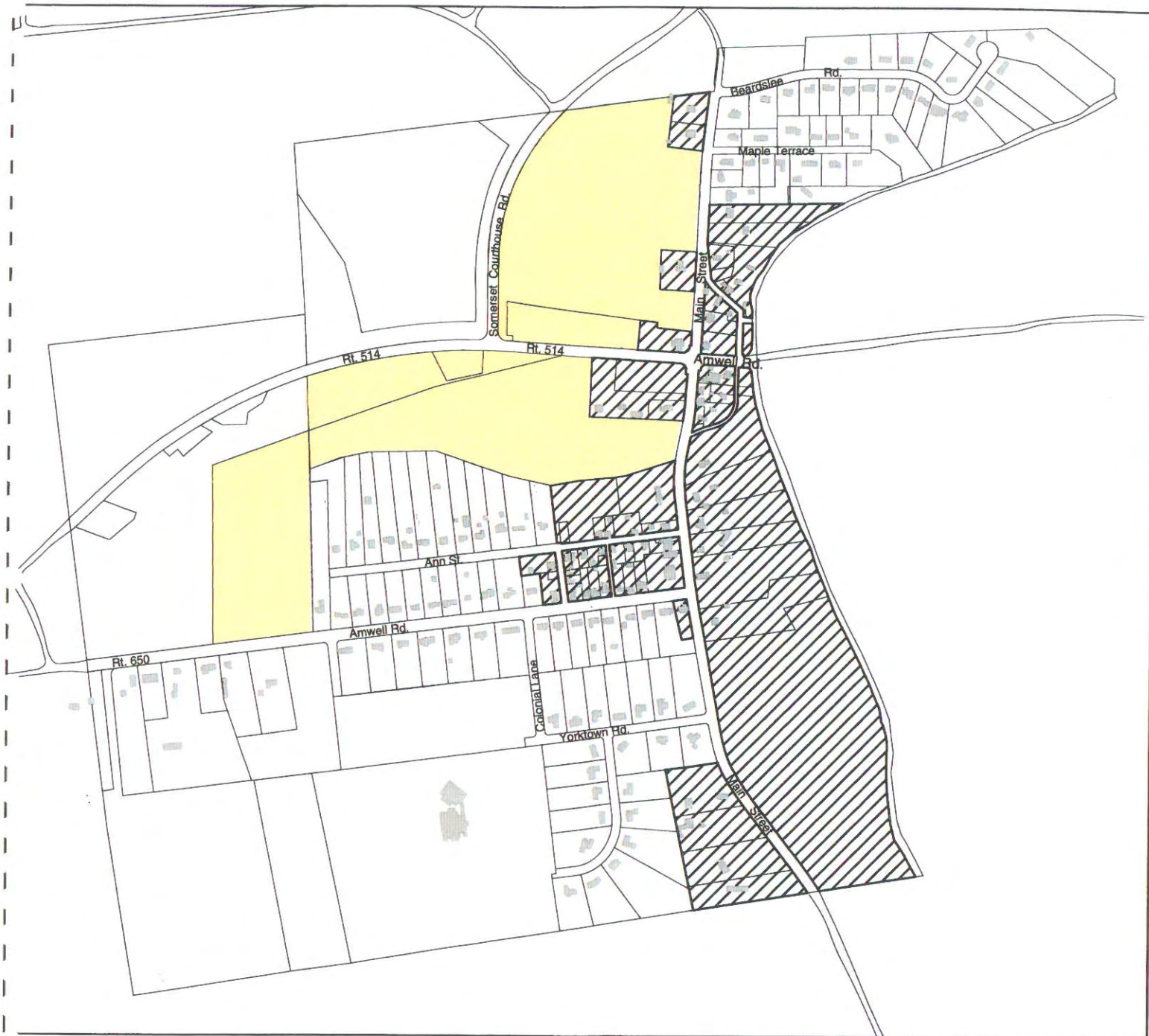
MILLSTONE BOROUGH

CVDA

Carter van Dyke Associates, November 30th, 2005








NORTH SCALE: 1"=800 FEET



PROPOSED HISTORIC DISTRICT

Districts

-  Existing Historic District
-  Non Historic District
-  Proposed Historic District
-  Millstone Borough Parcels
-  Millstone Buildings

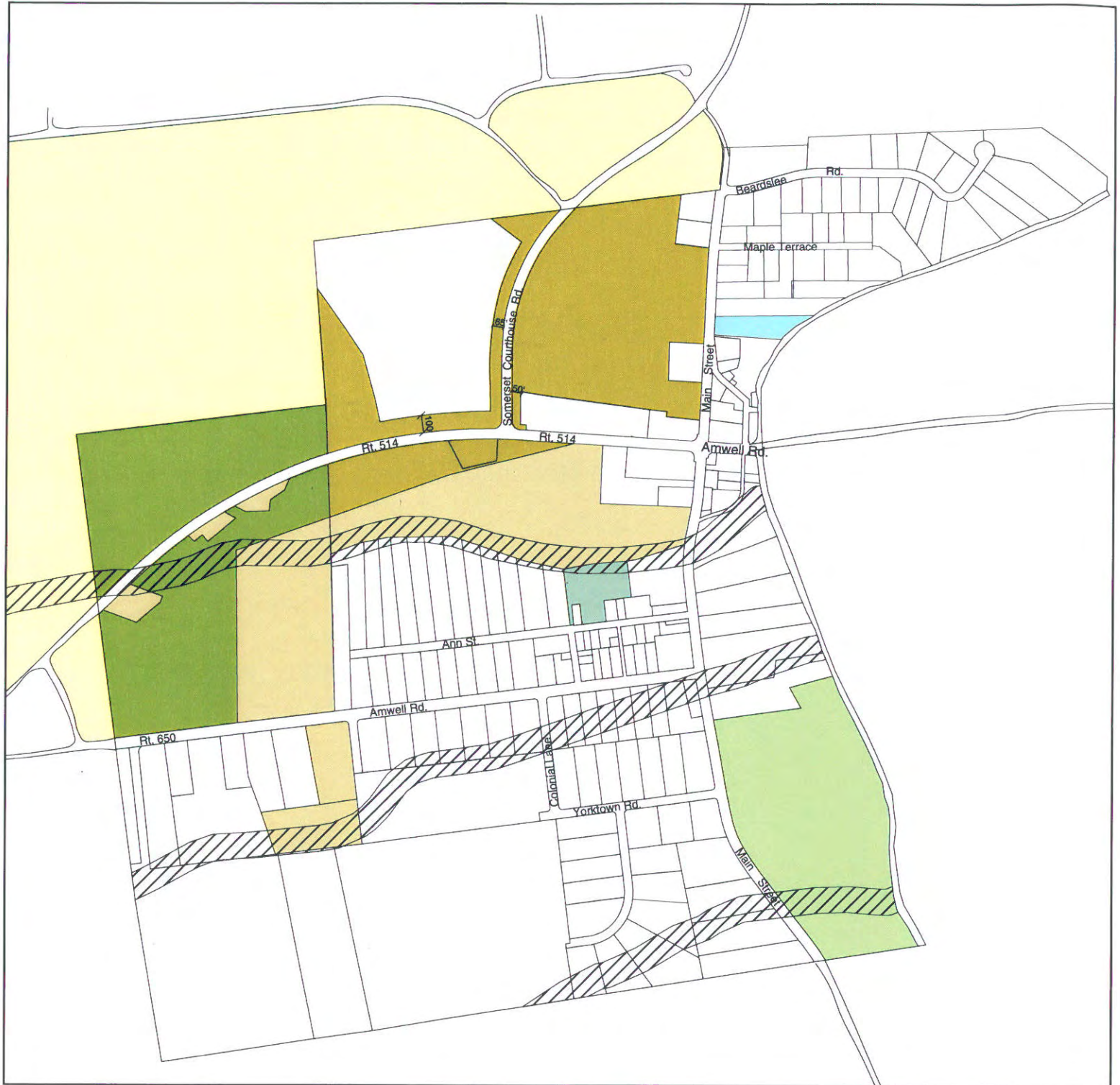
Source: Millstone Borough Map:
Based on historic map referenced
in zoning ordinance establishing the
historic district Ordinance 38c,
Published Oct. 8, 1970, Adopted Nov. 10, 1970

MILLSTONE BOROUGH

CVDA Carter van Dyke Associates, October 26th, 2005



NORTH SCALE: 1"=800 FEET



PROPOSED PARKS AND OPEN SPACE

- Municipal Buildings
- Millstone Borough Tot Lots
- Millstone Borough Open Space
- State Open Space
- Proposed Heritage Park
- Proposed Future Aquisitions-Millstone Borough
- Proposed Future Aquisitions-Hillsborough Township
- Other

Proposed 75' Riparian Greenway

MILLSTONE BOROUGH

CVDA

Carter van Dyke Associates, October 25th, 2005



NORTH SCALE: 1"=800 FEET



View of potential Traditional Village Commercial on C.R. 514