Village of Walden Comprehensive Plan

Village of Walden, New York

Prepared by the Village of Walden Comprehensive Plan Committee
With Planit Main Street, Inc. Draft Chapters 1-5 November 12, 2012

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Geographic Information Systems Mapping

Geographic Information Systems (GIS) maps were prepared by the Orange County Planning Department.

Vision Statement

This *Comprehensive Plan* for the Village of Walden looks to define the attributes that give Walden its unique sense of place, including its place within the region, and to provide a clear vision for guiding future growth and development in a manner that respects the Village's character, so that its unique sense of place within the region is enhanced, its historic, cultural, and natural resources protected, and its social and economic vitality ensured for years to come.[1]

[1] For the purposes of the Walden Comprehensive Plan, the following definitions are provided to further clarify the Vision Statement:

Community Character - Those attributes of the Village of Walden that make it unique in terms of it natural resources, built environment and its population. *Unique Sense of Place* – Locally special attributes, which differentiate the Village of Walden from other communities as expressed in its historic structures, public squares, civic and cultural resources and natural environment. *Quality of Life* – A statement that summarizes perceptions about physical, social, health, economic and environmental features of life. It is a composite measure that integrates many considerations about life, and is usually qualitative, not quantitative. Quality of Life is therefore a contextual concept, having no independent or absolute value. It is a statement about the relative well-being of an individual or group – in this case the Village of Walden.

Table of Contents
Village of Walden Comprehensive Plan

EXECUTIVE SUMMARY

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The Village of Walden's Comprehensive Plan was last updated in 2005. Nearly seven years have passed since the 2005 Plan was adopted and a number of issues discussed have either come to pass or are no longer relevant to the challenges facing the Village today. For these reasons, and others, the Village Board formed a Comprehensive Plan Review Committee in December 2010 to lead the effort to update the 2005 Comprehensive Plan. In 2011, the committee met monthly to work on the update.

The new Comprehensive Plan forms the basis for future land use regulations and subsequent zoning or subdivision revisions that may be necessary to implement the recommendations contained within this Plan. It is also intended to help guide other Village policies related to recreation, open space preservation, housing, historic preservation and business development. This Plan is intended to respond to challenges facing the Village today and during the next five to ten years.

Public participation in the development of the 2005 Plan was encouraged through a variety of public informational meetings, visioning sessions, and public hearings. Details of the public participation process and findings were included in Chapter 2.0 – Public Perceptions of the 2005 Plan. Through public outreach and discussion, the Comprehensive Plan Committee developed a "Vision Statement" for the Village's Comprehensive Plan that follows.

VISION STATEMENT

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Comprehensive Plan Committee

The Comprehensive Plan Review Committee recommended updates to the Comprehensive Plan, which are reflected in future land use policies intended to achieve the broad goal of preserving the character of the Village including its traditional neighborhoods, central business district, historic buildings and overall quality of life. These policies are discussed in the context of specific goals and objectives, which are discussed in greater detail below. Specific policies or actions, which are intended to help implement this Plan is provided in Chapter 10 – Plan Implementation.

Above (top to bottom): The Walker Building on Main Street within the Central Business District; single-family residence on Orchard Street; and view of High Falls and electric power generating plant on Wallkill River. Its historic buildings, residential neighborhoods and the natural beauty in which the community is situated define the unique character of the Village of Walden.

1.0 INTRODUCTION

The Village of Walden's Comprehensive Plan was adopted in 2005. The Plan recognized that community planning is an ongoing process and recommended additional action plans and detailed studies to pursue recommendations of the Comprehensive Plan. The 2005 Plan also recommended periodic updating of the Comprehensive Plan to incorporate results of subsequent plans and studies and to reflect any unanticipated events or new issues.

In December 2010, the Village Board appointed Comprehensive Plan Committee to lead the effort in updating the 2005 Comprehensive Plan. This 2012 update of the Village of Walden Comprehensive Plan is not a new departure. Rather it incorporates and builds upon goals, recommendations and policies set forth in the 2005 Plan. Therefore, it should not be viewed as a change of direction but, rather, as a refinement of a course already established.

This 2012 Comprehensive Plan was prepared in accordance with New York State Village Law, §7-722(2)(a) that states that the plan will "identify the goals and objectives, principals, guidelines, policies, standards, devices, and instruments for the immediate and long-range protection, enhancement, growth and development." The creation of a Comprehensive Plan is not required under NYS Village Law, §7-722(2)(a), but once adopted, all subsequent land use regulations must be in accordance with a community's adopted Comprehensive Plan.

Three distinct phases were involved in the development of the Village of Walden's updated Comprehensive Plan: 1) preparation of baseline data including population, housing, natural resources, community facilities, open space, and infrastructure, etc., 2) identification of issues facing the Village based upon baseline data, a review of existing land use regulations, monthly Comprehensive Plan Committee meetings, along with public input, and 3) the creation of broad goals, objectives and policies.

An analysis of baseline conditions along with public input was used to identify a list of challenges facing the Village. These include:

- Protecting the Village's wells through wellhead protection measures w/ Town;
- Zoning for commercial and industrial uses to enhance the tax base;
- Need for designated truck routes;
- Providing more off-street parking in the Central Business District" through improvements to existing municipal parking lots or the creation of new lots;
- Sustaining a vibrant business community within Downtown Business District;
- Maintaining the pedestrian-friendly feel and expanding the sidewalk network;
- Providing community services to serve growing community needs;
- Natural resource protection and open space preservation; and
- Providing housing opportunities for a range of household incomes.

Above (top to bottom): View of Millspaugh Furniture Store on Main Street; view of Sohn's Appliances at the corner of East Main Street and Orchard Street; and view of New York School of Music store and Quarter Note Cafe on the corner of Scofield and Orchard Street on the Village Square. The above-cited businesses are important anchors in the Central Business District or "Downtown."

1.1 Purpose of the Plan

This Comprehensive Plan is meant to build upon the 2005 Comprehensive Plan and is intended to guide the Village's growth for the next 5 to 10 years. The Comprehensive Plan serves as the Village's official policy document, providing a general set of planning principals relating to land use; natural, and historic resources; housing, parks & recreation, downtown revitalization and other related issues. The purpose of the Comprehensive Plan is to realize the community's vision for the future and to guide growth in a manner that fosters orderly, coordinated and beneficial development. It should also be periodically reviewed and updated to ensure that it continues to reflect the long-range goals of the community.

1.2 Implementation

In order for this Comprehensive Plan to be effective, the Village of Walden must actively apply the policies that are contained within this Plan. Furthermore, its Planning Board and Zoning Board of Appeals must use the Plan as a framework to guide their decisions with respect to the review of development proposals. Certain recommendations contained herein will require the subsequent action of the Village Board in order to enact recommended revisions to the Zoning Code and other land use regulations such as the Village's sign regulations or subdivision regulations and/or the creation of design guidelines for commercial development.

Other actions such as the preservation of historic resources, transportation improvements, or the development of park facilities or bicycle travel lanes will require the collaboration between the Village, Town, County, State and not-for-profit entities. These actions are outlined in Chapter 10 – Plan Implementation of this Plan along with the party responsible for taking a leadership role in the implementation of the policy or program.

Each member of the Village Board, Planning Board and Zoning Board of Appeals should have a copy of this Comprehensive Plan. The Village Board may want to appoint a Comprehensive Plan subcommittee to spend time each month reviewing progress on the implementation of this Comprehensive Plan and coordinating efforts with other entities where necessary.

The Village of Walden has a long-established tradition of respecting its history and protecting its historic resources. Its rich sense of history is defined by its residents, neighborhoods, institutions, parklands, business community, and community events such as Walden Harvest Fest that define its unique sense of place today.

If order to properly plan for the future, it is important to have an understanding and appreciation for the past. In Chapter 2 – Historic & Regional Context a brief summary of the Village's history and its relationship to the surrounding region is provided to help set the stage for the future of the Village of Walden.

VISION STATEMENT

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Comp Plan Committee

CHAPTER 2.0 - HISTORIC & REGIONAL CONTEXT

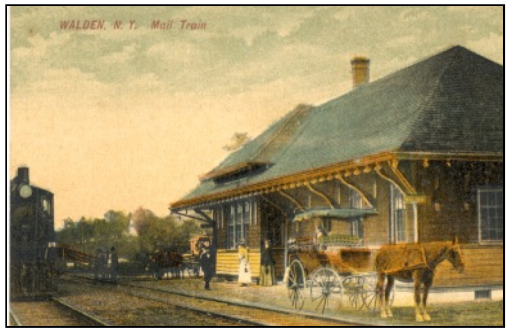
Native Americans were the first inhabitants along the banks of the Wallkill or Paltz River in the vicinity of present day Walden. These inhabitants followed the receding glaciers into the Wallkill River Valley, which was a transportation and trading route for early inhabitants as well as a place of settlement.

Europeans began to arrive within the Wallkill River Valley as early as the 1650's. By the early 1700's, Europeans began to establish homesteads and permanent settlements along the Wallkill. "On the east bank of the Wallkill, the first settlement was established in and around the high falls of the Wallkill. Henry Wileman received a grant of 3,000 acres of land upon which Wileman Town was built after 1713."[2]

Most of the early settlers were farmers, craftsmen, or traders. By the mid 18th century, the Wallkill River in the vicinity of the high falls was being harnessed for her waterpower. In 1813, Jacob Treadwell Walden, a New York City entrepreneur began purchasing land on both sides of the Wallkill to develop a manufacturing settlement that would harness the water power of the high falls of the Wallkill River.

Thereafter, maps were prepared, for a *planned community* of industrial, business and residential sites called the Village of Walden. "By the 1820's, Jacob T. Walden's mill was creating cotton and woolen cloth for New York consumers through the power of the mighty Wallkill."[3] By the 1840's Walden was a major woolen manufacturing center in Orange County. The focus of production shifted from textiles to cutlery when in 1856 the New York Knife Company moved to the idle cotton factory. Walden would see the establishment of two more knife factories with the Walden Knife Company in the 1870's and Schrade Cutlery in 1904.

Soon thereafter, Walden would earn its title as the "Little Sheffield" as it became the cutlery capital of the United States. Cutlery remained a major industry until the 1950's when Schrade Cutlery was relocated to Ellenville. Vestiges of the knife industry remain, from the dam at high falls to the McKinley Statue. The Village and historical society are hoping to create a *Village Museum* to preserve Walden's rich history and its contributions to the Nation. In the 1930's and 1950's Walden was also a center for the garment industry with sewing facilities on the upper floors of the Walker Building, the Wooster Building and other sites. Women comprised 90% of the garment workforce with workspace on upper floors of buildings.



Above (top to bottom): Post Card showing Walden Train Station in its original location (relocated to Wooster's Grove); view of President McKinley Statue and the historic Walden House circa early 1700's. The Village of Walden has a rich history, which is reflected in its people, civic buildings and historic structures.

[2] Source: Marc Newman: Images of America Walden & Maybrook, Arcadia Publishing, 2002.

[3] Source: Marc Newman: Images of America Walden & Maybrook, Arcadia Publishing 2002.

Walden is located within the Town of Montgomery, in Orange County, New York. In 1855, Walden was incorporated as a Village. During the 1870's, rail service also came to Walden, providing both passenger service for residents and freight access to markets for its manufacturing industries. By the early 1900's, Walden came into its own as a center for manufacturing, commerce, banking and retailing.

The early 1900's were a period of prosperity for the Village. During this time, the dense residential development pattern of single-family homes on small lots, coupled with residences above-the-store within the Downtown was established. Public buildings such as Municipal Hall were constructed during this period along with the Soldier's, Firemen's & McKinley monument's and the Volunteer Memorial. These architectural and cultural resources contribute to the vitality of Walden to the present day.

Throughout the 1940's, Walden continued on its path as a center for industry and commerce, serving not only the surrounding agricultural areas, but the greater region and national markets. By the 1950's, Walden's dominance as an industrial center began to decline as a result of competition from other markets. By the 1950's, the Village's last cutlery producer, Schrade Cutlery, moved its facility to Ellenville, New York. Even with these changes, the Village remains a center for manufacturing with such companies as Truffa Seed Co., AMPAC and Interstate Packaging Corporation.

These industries rely upon Walden's skilled workforce and access to markets using the Norfolk Southern freight rail line and proximity to major transportation corridors such as NYS Routes 52 and Route 208. The ease of mobility wrought by the rise of the automobile and the construction of the New York State Thruway and more recently I-84 meant that the Village had to compete with new and emerging automobile oriented retail centers in the region. During the 1980's and 1990's, the Village saw an increase in the vacancy rate in the Central Business District (CBD) or and a loss of market share.

During the 2000's, the business community adapted to regional shifts in consumer spending patterns. Significant streetscape enhancements and incentives for business owners through the New York Main Street program helped business owners to retain, expand or create business enterprises in the CBD. Walden Savings Bank and Hometown Bank of the Hudson Valley – along with retailers like Sohn's Appliances and Millspaugh Furniture – continue to anchor the CBD by serving local and regional demands.

Certain areas in Walden – such as its CBD, turn-of-century mill buildings along Elm Street and older neighborhoods nestled along the Wallkill River – look much like they did 100 years ago. Even though new development has grown around its historic core over time, Walden has sustained its unique sense of place. This Plan is intended to help retain its community character while preparing for future growth.

Above (top to bottom): Fireman's Square with Library and Municipal Hall in the background; former mill building on Elm Street, which was home to Nelco Industries; and single-family homes on Railroad Avenue in the vicinity of industrial buildings, which use to be major employers with the Village. The Village's rich history is reflected in its historic buildings.

2.1 Regional and County Plans

The Village of Walden is located within the metropolitan New York and Hudson Valley Regions. Regional agencies have developed long-range plans for these regions, which are advisory in nature.

In developing the Walden Comprehensive Plan, these plans were reviewed to provide insight into how the Village could best fit into this regional framework while preserving its unique character. A brief overview of the Regional Plan Association's (RPA) third plan, Hudson River Valley Greenway and Orange County Comp Plan are provided below:

2.1.1 RPA Regional Plan

The Regional Plan Association prepared its third plan for the metropolitan region including parts of New York, Connecticut and New Jersey in 1996. Orange County is part of the 31-county, tri state region and is located in the northern edge of the region.

The Village of Walden and Town of Montgomery are located within an area where the plan recommends the preservation of farmland and open space, limiting suburban sprawl, and focusing growth in existing centers as a means of reducing transportation congestion on regional roadways. This Plan supports land use policies, which preserve open space and encouraging growth within the Village.

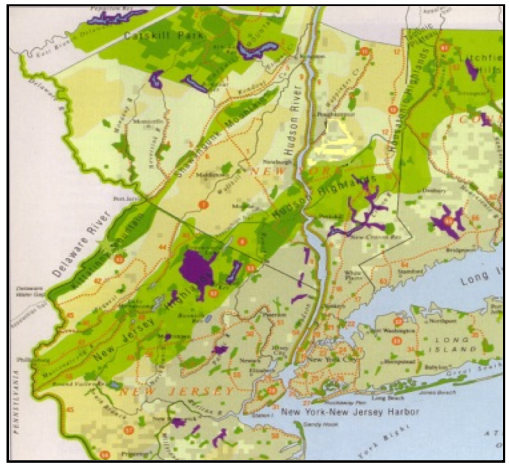
2.1.2 Hudson River Valley Greenway

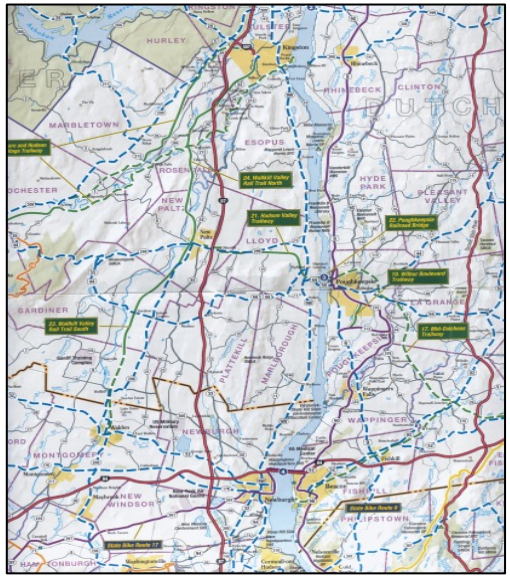
In 1991, the Hudson River Valley Greenway was established through the passage of The Hudson River Valley Greenway Act. The Greenway covers the areas of Bronx and New York counties, the counties of Westchester, Rockland, Putnam, Orange, Dutchess, Ulster, Columbia, Greene, Albany, Rensselaer and in Saratoga county the town and village of Waterford, but excluding any area of Greene and Ulster counties within the Catskill park.

In 2001, the Village of Walden voluntarily joined the Greenway's Community Council and officially became a Greenway Community. There are five (5) principles that Greenway Communities subscribe. What follows is a brief summary of Walden's plans for incorporating these principles into its Comprehensive Plan.

Natural and Cultural Resource Protection- Through the Comprehensive Plan update, the Village will inventory its existing Natural and Cultural Resources and develop goals and objectives for preserving these resources.

Regional Planning – The Village of Walden, Town of Montgomery and Town of Shawangunk recently worked together to complete the *Walden-Wallkill Rail Trail*, which opened on May 2, 2009. This Plan supports on-going coordination with the Town of Montgomery to create a wellhead protection plan for the Village's wells, which lie within the Town.





Above (top to bottom): Regional Plan Association's Greenward Map showing areas within the metropolitan New York Region where growth is recommended and where a greensward of lower density development is recommended; and New York State Department of Transportation's *Hudson Valley Bikeways and Trailways System Map*, which includes bikeways within Walden.

Economic Development - The Village of Walden's recognizes that the preservation and marketing of its natural, historic, civic and cultural resources could be the catalyst for tourism and economic development.

Resources include: the Wallkill River with upper and lower falls, three municipal squares, statues, historic Downtown; private, parochial and public schools; religious centers, quaint neighborhoods and an outstanding public park and library system. Walden is also at the crossroads of two State Highways, Route 52 and Route 208.

Public Access - Opportunities to enhance public access to the HRVG Trail System are being implemented. The *Walden-Wallkill Rail Trail* has made Walden the southern terminus of the *Wallkill Valley Rail Trail South* providing a direct link to two of the HVRG *Countryside Corridors* and the Hudson River via Kingston.

The Village of Walden is also pursuing efforts to create new public access points along the Wallkill River in the vicinity of Bradley Park and in other locations along this river. This Comprehensive Plan supports continuing efforts to enhance public access.

Heritage and Environmental Education - The policies noted above will help to preserve the history of Walden and create opportunities to market the Village to those interested in heritage tourism and natural resources such as the Wallkill River.

2.1.3 NYSDOT Regional Trail Plan

NYSDOT Region 8's proposed *Hudson Valley Bikeways and Trailways System* includes major bikeways and rail-trails in the Village of Walden. These include bikeways along NYS Route 52 and 208. This Plan supports the creation of such bikeways provided measures are put in place by NYSDOT to ensure bicyclist and motorist safety.

2.1.4 Orange County Open Space Plan

The Orange County Open Space Plan was adopted in June of 2004. The recommendations for open space preservation, trail development, and parkland development contained within the County Open Space Plan are supported through the recommendations contained within this Plan.

2.1.5 Orange County Comprehensive Plan

Orange County updated its 2003 Comprehensive Plan in October of 2010. "The County Plan emphasizes the concentration of development in and around "centers" – built up areas such as cities, villages, hamlets, and certain crossroads and interchanges – in order to maintain the County's rural countryside." This Plan supports a pattern of *sustainable development at a scale and density, which complements Walden's built environment;* that ensures infrastructure capacity is sufficient to accommodate new development; while assuring the ability of future generations to meet their own needs for such public services.

Above (top to bottom): Handicap Accessible access to the Walden-Wallkill Rail Trail from Woodruff Street; view of Wallkill River looking northwest from Westwood Drive; and view of public beach at James Olley Park off of Sherman Avenue, which leads to Wandering Park Drive. Walden has an extensive public park system, which enriches its residents' quality of life.

2.2 Conclusions

This Column Reserved.

The Village of Walden's rich history, place as a regional employment center, proximity to other employment centers, and ease of access to the regional transportation network including: the Thruway, I-84, rail, and Stewart Airport all combine to make Walden a very attractive place to live. The greatest evidence of this is the steady population increase, new housing growth and the establishment of new religious buildings such as the Buddhist Temple on Edmonds Lane.

Additionally, Walden is experiencing continued reinvestment in its CBD. Many downtown business owners have participated in the *New York Main Street* grant program. They have recently completed façade and interior building renovations, which have enhanced the vitality of the Central Business District. The *New York School of Music* has moved into the former Gridley Furniture Store on Municipal Square providing an important cultural anchor within the downtown. The *Walden Farmer's Market* and other special events continue to draw residents and visitors to the Central Business District.

This new investment reflects the desirability of Walden as a place to live and do business. As Walden plans for growth and redevelopment, this Plan supports a pattern of *sustainable development* at a scale and density, which complements Walden's built environment. Such measures will ensure the unique desirability of Walden is maintained for years to come.

Above (top to bottom): The recently constructed Sechen Kunchab Ling, Temple of All-Encompassing Great Compassion on Edmunds Lane; scene from Tsechen Kunchab Ling's annual prayer flag raising festival; and view of Secret Garden Flower Market, which is located in the Walker Building on Main Street. These new investments are part of a pattern of sustainable development, which is encouraged by this Plan.

CHAPTER 3.0
POPULATION & HOUSING

3.1 Population Characteristics

Between 1960 and 2010, the Village's population increased from 4,851 to 6,978 persons – a forty percent increase. This was lower than the two-fold population increase of Orange County during this period of time, but was still a significant increase. Between 1990 and 2000, the Village population increased 5.6%, half the Orange County rate of increase of 11.0%. The 2010 Census data shows the Village's population grew by 13.2% between 2000 and 2010, faster than the County rate of 9.2%. This represents the first time the Village growth rate has outpaced the County's.

Between 2000 and 2010, the Village was the fastest growing municipality in the Town of Montgomery with a growth rate of 13.2%. During this time, the Town's population grew by 10.6%, the Village of Montgomery by 4.8% while the Village of Maybrook saw a population decrease of -4.0% (see Table 3-3). Walden's population by age group is comparable to that of Orange County (see Table 3-2). Roughly 27% of the Village's population is 50 years of age or older. As this population ages, services to meet the needs of its senior population will grow. In 2010, 27% of the population was under 18 years of age suggesting the existing need for services for children and young adults.

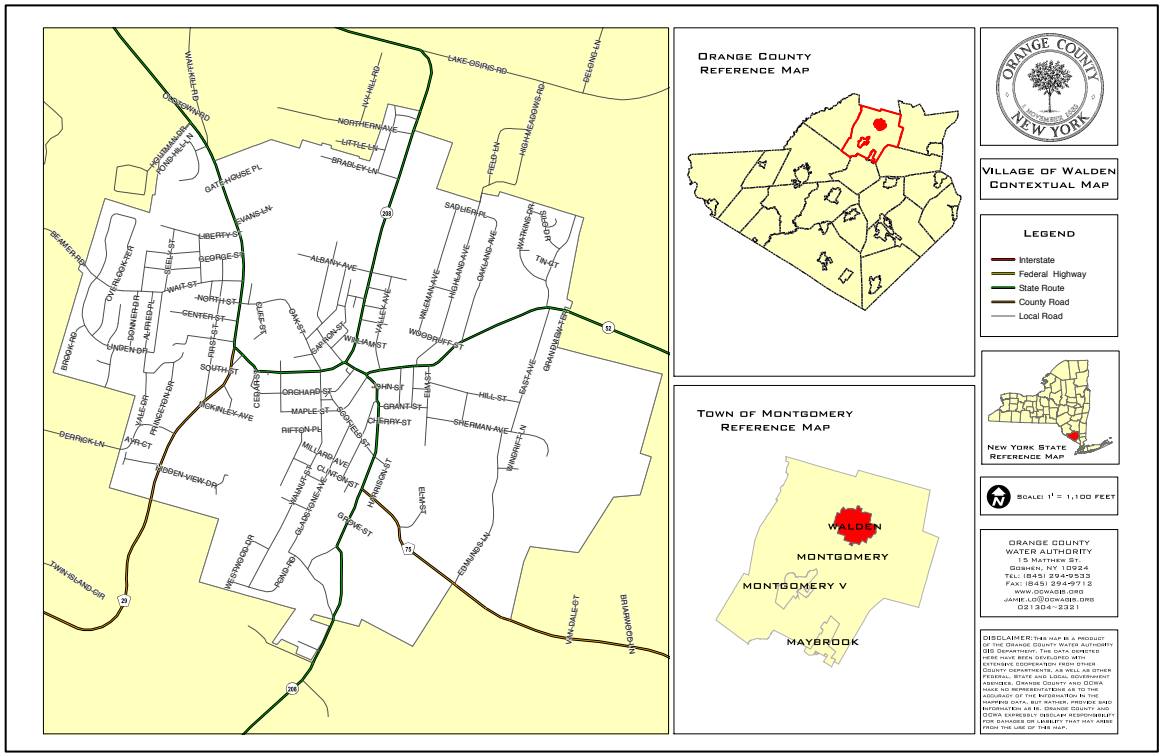


Table 3-1 Population Trends

Year	Village of Walden		Orange County	
	Population	Change	Population	Change
1960	**4,851**		**183,734**	
1970	**5,659**	8.8%	**221,657**	20.6%
1980	**5,536**	7.2%	**259,603**	17.1%
1990	**5,836**	3.1%	**307,647**	18.5%
2000	**6,164**	5.6%	**341,367**	11.0%
2010	**6,978**	13.2%	**372,813**	9.2%

Looking ahead, the Village of Walden is likely to continue to experience population growth during the next decade due the quality of life that it offers its residents. Walden has an excellent public park system and the recently completed *Walden-Wallkill Rail Trail* are the type of facilities, which have and will continue to attract new residents. Walden's access to the metropolitan New York region, coupled with its historic charm and quaint neighborhoods make it an attractive place to reside.

However, it will be increasingly important to focus on the design of new development as the few remaining vacant sites are built upon. How these properties are designed will affect the future character of the Village and whether it remains an attractive destination for new residents. Ensuring new buildings complement historic properties will help to preserve Walden's charm. Further discussion regarding design is provided in the Chapter on Land Use & Zoning.

Table 3-2
Population by Age, 2010
Village of Walden vs Orange County

Years	Village of Walden	%	Orange County	%
Under 18	*1,891*	*27%*	*101,529*	*27.2%*
18 -19	*199*	*2.9%*	*11,420*	*3.1%*
20-24	*471*	*6.7%*	*24,724*	*6.6%*
25-34	*927*	*13.4%*	*41,671*	*11.2%*
35-49	*1,619*	*23.2%*	*82,526*	*22.1%*
50-64	*1,244*	*17.9%*	*69,958*	*18.8%*
65 & over	*627*	*8.9%*	*40,985*	*11%*
Total	***6,978***	***100.0%***	***372,813***	***100.0%***

Note: Source U.S. Bureau of the Census 2010

"It will be increasingly important to focus on the design of new development as the few remaining vacant sites in the Village are built upon. How these properties are designed will affect the future character of the Village and whether it remains an attractive destination for new residents."

Table 3-3 Population Change 1960-2010

	1960	1970	%Chg. '60-70	1980	%Chg. '70-80	1990	%Chg. '80-90	2000	%Chg. '90-00	2010	%Chg. '00-10	Persons per Sq. Mi.
New York State	16,782,30	18,236,967	**8.7%**	17,558,165	**-3.7%**	17,990,778	**2.5%**	18,976,457	**5.5%**		**%**	402
Orange County	183,734	221,657	**20.6%**	259,603	**17.1%**	307,647	**18.5%**	341,367	**11.0%**		**%**	418
Village of Maybrook	1,330	1,536	**15.5%**	2,007	**30.7%**	2,802	**39.6%**	3,084	**10.1%**	2,958	**-4.0%**	2,306
Village of Montgomery	1,312	1,533	**16.8%**	2,316	**51.1%**	2,696	**16.4%**	3,636	**34.9%**	3,814	**4.8%**	2,616
Village of Walden	4,851	5,277	**8.8%**	5,659	**7.2%**	5,836	**3.1%**	6,164	**5.6%**	6,978	**13.2%**	3,129
Town of Montgomery*	11,672	13,995	**19.9%**	16,576	**18.4%**	18,501	**11.6%**	20,891	**12.9%**	22,606	**8.2%**	414
Town of Montgomery*	*4,179*	*5,649*	***35.2%***	*6,594*	***16.7%***	*7,167*	***8.7%***	*8,007*	***11.7%***	8,856	***10.6%***	190

Source: U.S. Census *Town Population Count Includes Villages **Reflects Town of Montgomery Population less the Village Population.

The Village of Walden is becoming more diverse with respect to Race & Hispanic Origin. According to the 2000 Census; 90.1% of the Village's population was white. The 2010 Census revealed that 79% of the Village's population is white, 11% black, 0.2% American Indian, 1.4% Asian, 4.7% some other race and 3.7% two or more races. This mirrored the County's population. According to the 2010 Census, 18.5% of the Village's population is of Hispanic Origin. This mirrors statistics for the County where 18.0% were of Hispanic Origin in 2010. This growing diversity is a strength, which enriches the fabric of the Village.

Table 3-4
Village of Walden, New York
Population by Age 2000 & 2010

Age Cohort	2000		2010	
	Population	%	Population	%
Under 18			*1,891*	*27%*
*18 -19**	2,011	32.6%	*199*	*2.9%*
20-24	350	5.7%	*471*	*6.7%*
25-34	849	13.8%	*927*	*13.4%*
*35-44/35-49**	1,090	17.7%	*1,619*	*23.2%*
*45-64/50-64**	1,236	20%	*1,244*	*17.9%*
65 & over	628	10.2%	*627*	*8.9%*
Total	**6,164**	*100.00*	***6,978***	***100.0%***
Median Age				35

Source: U.S. Census Bureau 2000 & 2010
*Age cohorts recorded varied between 2000 & 2010

Table 3-5
Race and Hispanic Origin Year 2010

	Village of Walden		Town of Montgomery		Orange County	
	Population	%	Population	%	Population	%
Total	**6,978**	**100.00**	**22,606**	**100.00**	**372,813**	**100.00**
White	5,509	79.0	19,133	84.7	287,802	77.2
Black	767	11.0	1,620	7.2	37,946	10.1
Asian	96	1.4	322	1.4	8,895	2.4
American Indian	15	0.2	44	0.2	1,748	0.5
Native Hawaiian or PI	1	0.0	3	0.0	125	0.0
Some Other Race	327	4.7	842	3.7	24,615	6.6
Two or more	*263*	*3.7*	*642*	*2.8*	*11,682*	3.1
*Hispanic***	*1,288*	*18.5*	*3,167*	*14.0*	*67,185*	18.0
Average Household Size	2.81		2.78		2.86	

Source: U.S. Census Bureau *Town Population Including Village **Description of ethnicity not race. A person may consider themself white/Hispanic, black/Hispanic, or other combination thereof. The percentages of all racial categories will add up to 100%.

"The Village of Walden is becoming more diverse with respect to Race & Hispanic Origin. This growing diversity is a strength, which enriches the fabric of the Village."

Between 1990 and 2000, the Village of Walden saw significant increases in the level of *educational attainment* of Village residents. In 1990, nearly 30% of Village residents had less than 12 years of education. By 2000, this number had decreased to 22%, slightly higher than the County average of 18.1%.

The percent of persons with 2+ Years of College in the Village increased to 8.4%, higher than the County average of 8.2%. The Village also saw increases in the percentage of persons with four or more years of college, which increased from 9.5% in 1990 to 13.2% in 2000. In Orange County, the percentage of those with four or more years of education was 22.5%. The Village will likely continue to see increased in educational attainment during this decade and increased demand for related library services.

The most dramatic trend in educational attainment related to the percentage of persons possessing an associate's degree in the Village. Between 1990 and 2000, the number of persons in the Village with an associate's degree increased from 187 to 315, a 68.4% increase. The number of residents with a bachelor's degree increased by 52.2% between 1990 and 2000, increasing from 6.2% to 9.1% of persons 25 years and over.

There are two factors influencing educational attainment within the Village. The first factor is residents who may have pursued higher education between 1990 and 2000. The second factor is the educational attainment of new residents who have moved into the Village between 1990 and 2000. Both factors have contributed to a more educated population.

"Percent of residents with a Bachelor's Degree – 9.1%.

Percent of village resident's with a graduate or professional degree 4.1% - with a percent increase of 28.1% between 1990 and 2000."

Table 3-6 Trends in Educational Attainment

Educational Attainment	Village of Walden, New York Trends from 1990-2000				Orange County Trends from 1990-2000				Percent Change	Percent Change
	1990		2000		1990		2000		VILLAGE	COUNTY
		%		%		%		%		
Total *Persons 25 Years and over*	3,633	**100.0%**	**3,746**	**100.0%**	**189,949**	**100.0%**	**212,816**	**100.0%**	3.1%	12.0%
Less Than 9th Grade	355	9.8%	212	5.7%	15,656	8.2%	11,942	5.6%	-40.3%	-23.7%
9th-12th, no diploma	722	19.9%	609	16.3%	27,695	14.6%	26,687	12.5%	-15.6%	-3.6%
High school graduate	1,372	37.8%	1,369	36.5%	61,134	32.2%	66,119	31.1%	-0.2%	8.2%
Some college, no degree	652	17.9%	745	19.9%	34,913	18.4%	42,767	20.1%	14.3%	22.5%
Associate's degree	187	5.1%	*315*	8.4%	*13,498*	7.1%	*17,348*	8.2%	68.4%	28.5%
Bachelor's degree	224	6.2%	341	9.1%	21,900	11.5%	28,169	13.2%	52.2%	28.6%
Graduate or professional	121	3.3%	155	4.1%	15,162	7.9%	19,784	9.3%	28.1%	30.2%
Percent high school graduate or higher		70.3%		78.1%		77.2%		81.9%		
Percent Bachelors Degree or higher		9.5 %		13.2%		19.5%		22.5%		

Source: U.S. Census Bureau STF3 Data

3.1.1 Employment by Industry

In 2000, the largest industry in the Village of Walden was in Educational & Health Services, representing 19.4% of all employment in the Village. This was slightly lower than the County where 23.83% of all workers were employed in this industry. The second largest industry in the Village in 2000 was in Retail Trade - comprising 18.4% of the local economy. The number of jobs in the Construction Industry declined from a 226 in 1990 to 124 in 2000, representing a 45.13% decrease. The sectors with the largest percentage growth were in Arts & Entertainment, Education & Health Services, and Wholesale Trade - increasing by 391.1%, 44.3%, and 34.91% respectively. Fourteen (14) jobs in agriculture were reported in 2000.

"Between 1990 and 2000, the Village saw a 391% increase in the Arts & Entertainment industry."

Table 3-7 Labor Force & Employment by Industry

Employment Characteristics (Age 16 and over)	Village of Walden, New York Trends from 1990-2000				Orange County Trends from 1990-2000				Percent Change	Percent Change
	1990	%	2000	%	1990	%	2000	%	VILLAGE	COUNTY
Total										
Persons 16 Years and Over	4,331	100.00%	4,410	100.00%	231,001	100%	252,668	100.00%	1.82%	9.38%
In Labor Force	**2,950**	68.1%	**3,014**	68.3%	**156,346**	67.65%	**164,858**	65.20%	2.16%	5.44%
Civilian Labor Force	2,950	68.1%	3,009	68.2%	150,001	64.91%	159,946	63.30%	2.00%	6.63%
Employed	***2,816***	65.0%	***2,876***	*65.2%*	***141,415***	61.19%	***151,744***	*60.10%*		
Not Employed	134	3.1%	133	3.0%	8,586	3.72%	8,202	3.20%		
Not In Labor Force	1,381	31.8%	1,396	31.7%	74,655	32.30%	87,810	34.80%		
Industry										
Educational & Health Services	386	13.7%	557	*19.4%*	27,740	19.62%	36,167	23.83%	44.30%	30.38%
Retail Trade	608	21.6%	530	*18.4%*	23,769	16.81%	20,399	13.44%	-12.83%	-14.18%
Manufacturing	468	16.6%	399	*13.9%*	21,343	15.09%	15,404	10.15%	-14.74%	-27.83%
Public administration	196	6.7%	247	*8.6%*	8,603	6.08%	11,457	7.55%	26.02%	33.17%
Professional services	204	7.3%	216	*7.5%*	8,979	6.35%	11,579	7.63%	5.88%	28.96%
Transportation, warehousing & utilities	255	9.2%	215	*7.5%*	7,322	5.18%	9,081	5.98%	-15.69%	24.02%
Arts, Entertainment & Recreation	*34*	1.2%	*167*	*5.8%*	*1,650*	1.17%	*8,379*	5.52%	391.18%	407.82%
Wholesale Trade	106	3.8%	143	*5.0%*	6,708	4.74%	6,146	4.05%	34.91%	-8.38%
Other Services (except public admin).	116	4.2%	127	*4.4%*	9,132	6.46%	6,332	4.17%	9.48%	-30.66%
Construction	226	8.1%	124	*4.3%*	9,977	7.06%	10,297	6.79%	-45.13%	3.21%
Finance, Insurance & Real Estate	125	4.4%	81	*2.8%*	8,307	5.87%	9,702	6.39%	-35.20%	16.79%
Communications and Information	92	3.2%	56	*1.9%*	4,889	3.46%	5,255	3.46%	-39.13%	7.49%
Agriculture, forestry and mining	0	0%	14	*0.05%*	2,996	2.12%	1,546	1.02%	NA	-48.40%

Source: U.S. Census Bureau STF3 Data

Within the Village, sixty-nine (69) jobs were lost in the Manufacturing Industry during the 1990's, representing a 14.74% decrease. While this decrease was significant, it was only half the rate of the County decrease of 27.8%. Between 1990 and 2000, there was also a decline in the Transportation, warehousing & utilities industry – showing a decrease of nearly 15.7%. Retail Trade experienced a loss of 78 jobs between 1990 and 2000 – a 12.8% decrease. The decline in Retail Trade was likely influenced by growing competition from big-box retailers that where developed along Route 208 and Route 17K outside of the Village of Walden.

The Village has still been able to retain a vibrant Central Business District (CBD) in the face of growing competition. Millspaugh Furniture's recent expansion and that of the New York School of Music within former Gridley Building speak to the attractiveness of Walden as a place to do business. However, if the CBD is to remain competitive, public/private efforts to promote and market downtown to customers and businesses alike must be sustained in the future.

Between 1990 and 2000, there were a number of industries that increased their employment numbers in the Village. Employment in Public Administration grew from 196 jobs in 1990 to 247 in 2000 – a 51-job or 26.02% increase. Jobs in the Other Services grew from 116 jobs in 1990 to 127 jobs in 2000 – an 11-job increase. Growth in these industries helped to offset the loss in employment in the other industries.

In 1990, the top three industries in the Village comprised 51.9% of all employment. In 2000, the top three industries provided 51.7% of employment opportunities in the Village. These trends show little in the way of a diversification of the local economy as it relates to the top three industries. However, in 2000 there was a more even distribution in the remaining industries than in 1990 suggesting more diversification among smaller employers.

While many residents' work within the Village, a significant number commute to work each day. The mean travel time to work for local residents is 24.8 minutes, significantly lower than the average for Orange County, which was 32.5 minutes according the 2000 Census.

Table 3-8
Mean Travel Time to Work 2000

	Village	County
Mean Travel Time - Minutes	24.8	32.5

3.1.2 Occupation

Table 3-9 provides a breakdown of the Village of Walden's workforce (persons 16 years of age and over) by occupation. Twenty-three percent of Village resident's are employed in Management or Professional occupations. This reflects the educational attainment of the community as reported in Table 3-6.

A total of 19.0% of residents were employed in Services and another 28.6% in Sales and Office jobs. A total of 10.4% of residents worked in Construction with another 18.6% employed in Production and Transportation. Less than one percent of Village residents were employed in the Farming, Fishing or Forestry industry.

Table 3-9
Village of Walden
Occupation 2000

	#	%
Management, professional	662	23.0
Service	546	19.0
Sales and office	822	28.6
Farming, fishing & forestry	14	0.5
Construction, extraction	298	10.4
Production, transportation	534	18.6
Total	**2,876**	**100**

3.2 Housing Characteristics

In 2000, the Village of Walden had a total of 2,264 housing units. The majority of these housing units, 53.9%, are single-family detached dwelling units (see Table 3-10). In 2010, there were 2,686 dwelling units, an 18.6% increase from 1990. In 2010, 92.1% of dwelling units were occupied and 7.9% were vacant. The Village vacancy rate was slightly lower than the County's rate of 8.1%. The higher rate for the County is, in part, due to the higher percentage of second homes and seasonal dwelling units in the County that are counted as vacant when the Census is taken in April. The Village has a relatively small second home population.

The 2010 Census also showed a slight shift in owner versus renter occupied housing units within the Village. In 2000, 63.3% of all *occupied* housing units were *owner occupied*. By 2010, this number increased to 65.4%. The County owner occupancy rate in the Year 2010 was of 68.9% (see Table 3-11 and Table 3-12).

Table 3-10

Housing Units In Structure 1990 - 2000	Village of Walden, New York				Orange County 2000	
Year Round	1990 Units	%	2000 Units	%	2000 Units	%
1-unit detached	1,221	53.9	1,359	58.9	76,454	62.3
1-unit attached	70	3.1	103	4.4	8,012	6.5
2-4 units	593	26.2	612	26.0	19,763	16.1
5-9 units	160	7.1	114	4.8	7,244	5.9
10 or more units	148	6.5	97	4.1	7,624	6.2
Mobile Home	72	3.2	43	1.8	3,608	2.9
Boat, RV, Van, Etc.	0	0	0	0.0	49	0.0
Total	**2,264**		**2,359**		**122,754**	

Source: U.S. Census Bureau STF 3. There is some variation between STF1 and SFT3 data.

Table 3-11

	Village of Walden, New York Tenure by Occupied Units 2000 - 2010				Orange County, New York Tenure by Occupied Units 2000 - 2010			
Year Round	2000		2010		2000		2010	
	Units	%	Units	%	Units	%	Units	%
Owner Occupied	1,388	63.2%	1,617	65.4%	76,959	67.5%	86,756	68.9%
Renter Occupied	809	36.8%	856	34.6%	37,829	32.5%	39,169	31.1%
Total	**2,197**	**100%**	**2,473**	***100%***	**101,506**	**100%**	**114,788**	*100%*

Source: U.S. Census Bureau SFT1 Data

Table 3-12

Housing Characteristics	Village of Walden, New York Trends from 2000-2010				Orange County, New York Trends from 2000-2010				Percent Change	Percent Change
	2000		2010		2000		2010		TOWN	COUNTY
Housing Units	Units	%	Units	%	Units	%	Units	%		
Total	**2,352**	**100%**	**2,686**	**100%**	**122,754**	**100%**	**137,025**	**100%**	14.2%	11.6%
Occupied	2,197	93.4%	2,473	92.1%	114,788	93.4%	125,925	91.9%		
Owner Occupied	*1,388*	*59.0%*	*1,617*	*60.2%*	*76,959*	*62.7%*	*86,756*	*63.3%*		
Renter Occupied	*809*	*34.4%*	*856*	*31.9%*	*37,829*	*30.8%*	*39,169*	*28.6%*		
Vacant	*155*	*6.6%*	*213*	*7.9%*	*7,966*	*6.5%*	*11,100*	*8.1%*		
Seasonal			*4*	*0.1%*	*2,215*	*1.8%*	*2,427*	*1.8%*		

Source: U.S. Census Bureau * Seasonal units are part of the vacant unit count.

Summary

As the Village's population continues to grow, so too will the demand for community services such as fire, police, ambulance, water, and sewer services. New residential construction will likely increase the demand for public education that may necessitate capital improvements in the Valley Central School District. Continued competition from regional retailers will require ongoing cooperation between the Village and the local business community in order to maintain a vibrant Central Business District.

As the community's population grows so too will the demand for parks & recreational services. It is important that the increase in demand for such services are anticipated and carefully analyzed during the environmental review process for development projects. The Village can use the environmental review process to assess such impacts and to ensure that appropriate measures are put in place to mitigate potential adverse impacts to the community.

As is the case in most communities, the most suitable sites for development in the Village of Walden were the first to be developed. These sites are becoming increasingly scarce - leaving less desirable sites (i.e. those with environmental or other site constraints) for development. Development on such sites will require careful review to protect natural resources such as steep slopes, wetlands, and water resources. In some cases remediation may be necessary.

Care must also be taken to protect important vistas that help to define Walden's small-town character. Infill development on vacant parcels within the CBD must be carefully reviewed in order to protect the integrity of historic business district. New infill buildings should respect the mass & scale of the traditional building stock in the Central Business District and align to the edge of the sidewalk to maintain a building line along the street.

The desirability of the Village (demonstrated by its strong population growth) will also continue to put pressure on the housing market. Looking ahead, policies to ensure that housing opportunities are made available to meet the needs of a variety of household incomes in the community (including volunteer fire department & ambulance corps members, teachers, and its growing workforce) may be necessary.

The Village has many assets and with careful planning it is well positioned to grow in a manner that will strengthen the community's economic and social vitality for years to come. The following chapters provide a broader discussion of natural resources, transportation, cultural and historic resources, parks and recreation, community facilities and downtown revitalization. Each of these chapters will frame the challenges facing Walden in the years ahead as well as policies that it can put in place to help the Village of Walden to meet these challenges.

Above (Top to Bottom): Recently developed single-family home at the corner of Galloway Lane and South Montgomery Street, which is in the southwest quadrant of the Village; newer single-family residence off of Gate House Place in the northwest quadrant of the Village; and view of Winding Brook condominium development, which is also situated in the northwest quadrant of the Village of Walden.

CHAPTER 4.0 – NATURAL RESOURCES

The Village of Walden has a rich and diverse natural environment that offers its residents an abundance of open space and recreational opportunities. The physical characteristics of land are some of the most important factors, which will influence land development. Physical characteristics such as topography, drainage, or soil conditions will control or limit both the rate and intensity of growth.

It is for these reasons that the Village of Walden's natural resources need special consideration in helping to determine the manner in which development should be controlled or limited in various areas of the Village. One of the key goals of this Comprehensive Plan shall be to avoid disturbance of environmentally sensitive lands, to preserve important vistas and other natural resources and to guide growth in areas that are best suited for development.

This chapter provides a brief overview of the Village's many natural resources and those areas with environmental constraints. It also includes a variety of policy recommendations to guide land use decisions in order to conserve these natural resources while allowing for growth. The terrain and rivers within the Village of Walden provide a dramatic backdrop to the built environment. The natural resource discussion begins with an overview of elevation and terrain.

4.1 Elevation and Terrain

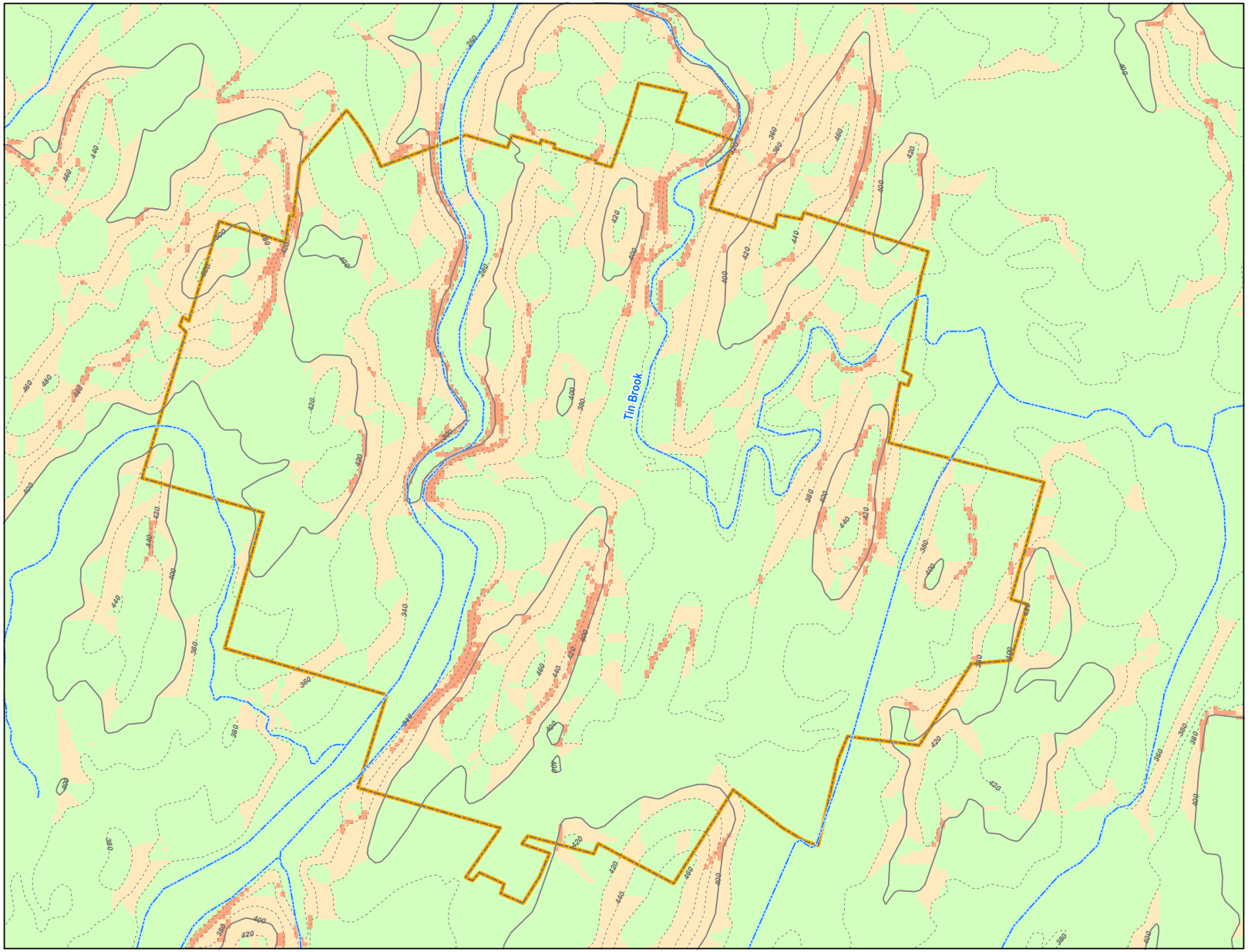
Topography is defined as the relief of land surface describing terrain, elevation and slope. An important measure of topography is range of elevation. In the Village of Walden, the range of elevation is 260 feet. The lowest point is 260 feet above mean sea level (msl) in the vicinity of Bradley Park along the Wallkill River. The highest point is 520 feet above *msl* in the vicinity of Overlook Terrace. In recent years, low-lying areas along the Wallkill River and Tin Brook have been more susceptible to periodic flooding than previously realized. Care must be taken with respect to any development, which is proposed in these low-lying flood-prone areas.

4.2 Steep Slopes

Comprehensive slope information is an essential element in the planning process. Relating land use to topography can help to minimize damage to the environment and to avoid extensive site alterations that can cause destabilization of banks and erosion. Development on slight slopes usually presents the fewest limitations allowing land to be developed with few engineering problems or harm to the environment. In contrast, development on steep slopes can mean higher construction costs, unstable soils and sewage disposal problems. Development on steep slopes should be avoided to mitigate the potential for erosion and impacts on water quality due to erosion and sediment runoff. This is particularly true within riparian zones.

"A RIVER IS MORE THAN AN AMENITY. IT IS A TREASURE. IT IS A NECESSITY OF LIFE THAT MUST BE RATIONED AMONG THOSE WHO HAVE POWER OVER IT."

Oliver Wendell Holmes



ORANGE COUNTY NEW YORK

VILLAGE OF WALDEN
SLOPE MAP

LEGEND

100' Interval
20' Interval
Streams
Municipal Boundary

Slope
(In Degrees)

0 - 5
5.000000001 - 15
> 15.00000001

TOWN OF MONTGOMERY
REFERENCE MAP

SCALE:
1" = 1,000 FEET

ORANGE COUNTY
WATER AUTHORITY
15 MATTHEW ST.
GOSHEN, NY 10924
TEL: (845) 294-9533
FAX: (845) 294-9712
WWW.OCWAGIS.ORG
JAMIE.LO@OCWAGIS.ORG
050104-2321

Slope indicates the percentage of incline of the land. Those areas with a slope of greater than 8.5º or 15% are generally considered to be too steep for development purposes.

Within the Village of Walden, there are many areas with slopes that are greater than 15%. These are found along the Wallkill River, Tin Brook and in the vicinity of Overlook Drive. There are also steep slopes to the west of NYS Route 208. The steep slopes are shown in orange on the Slope Map on the preceding page. Those areas with slopes greater than 35% are found along the Wallkill River. Disturbance of such areas, including existing vegetation, should be avoided. Three of the most common difficulties associated with disturbance of steep slopes are:

1) Sewage disposal – soils on steep slopes are shallow, making it impractical to install subsurface disposal systems;

2) Drainage – the removal of trees, grading, and erection of buildings will destabilize the bank while increasing runoff. These factors contribute to erosion and sediment control problems; and

3) Driveway and street layout – as a general rule, the slope of driveways and roadways should not exceed 6.8º or 12%. Development on steep slopes makes alignments and safe intersections very difficult. They also may result in rapid runoff onto adjoining roads causing erosion and icing problems in the winter.

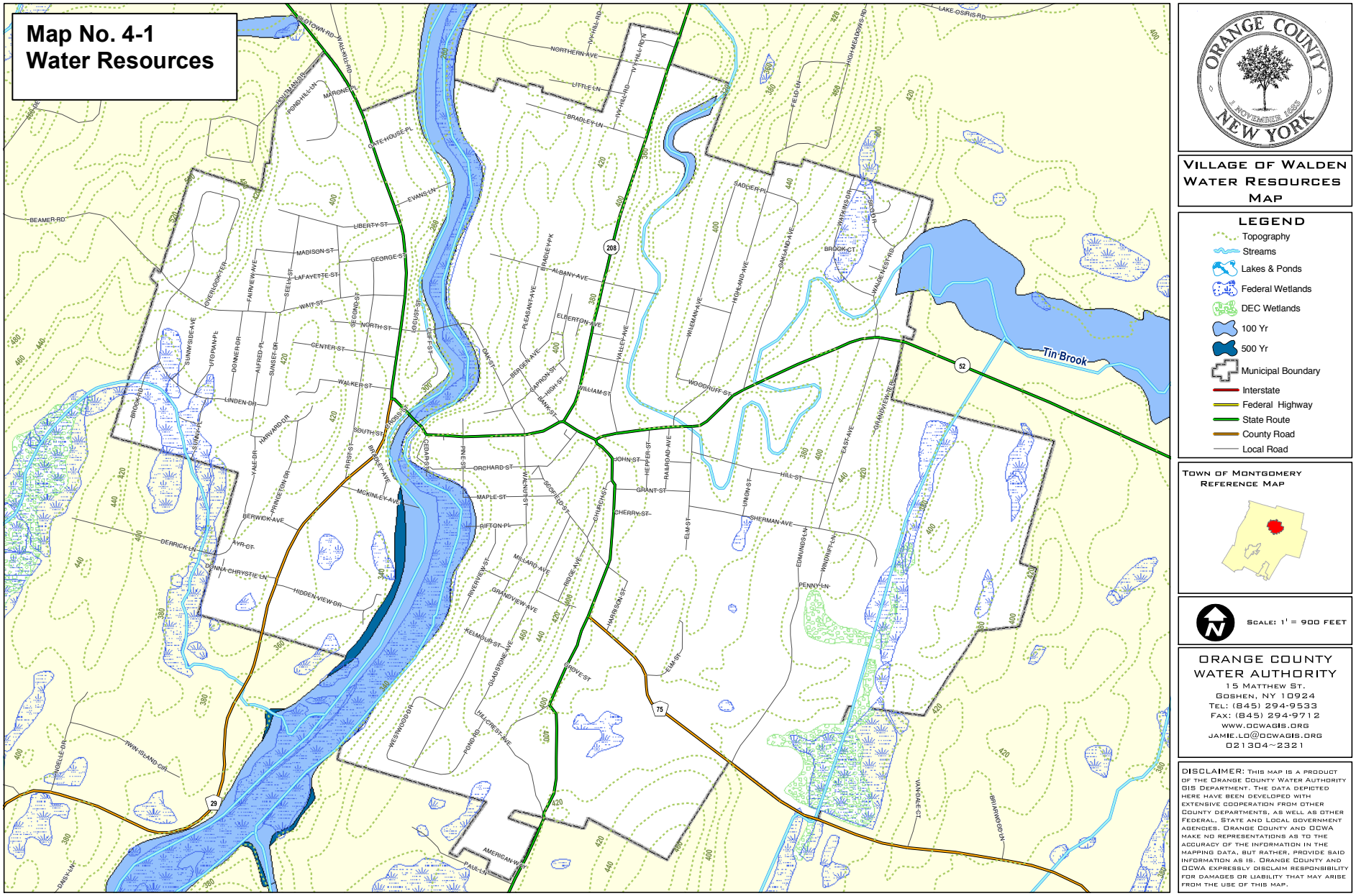
4.3 Water Resources

The Wallkill River is the primary surface water body in Walden and it flows from south to north through the center of the Village. The Wallkill is classified as a "Class B" stream, meaning it is suitable for swimming and other forms of primary contact. The Tin Brook is a major tributary to the Wallkill and meanders through the northeast quadrant of Walden. There is also another unnamed tributary to the Wallkill, which traverses the Village's southwest quadrant and enters the Wallkill just south the Village.

The Village obtains its potable water supply from wells, which are situated in the Town of Montgomery. Additional steps must be taken to protect its potable water supply by limiting certain land uses within close proximity to its wells and/or developing additional standards for land uses within its aquifer recharge areas.

This Plan supports efforts by the Village Board to work with the Town of Montgomery to create wellhead protection and aquifer protection overlay districts in the vicinity of its wells. Land uses around the wells must be carefully regulated in order to avoid contaminants from being unintentionally introduced into the groundwater. It is also important to protect wetlands in the vicinity of the wells. Wetlands serve as a point of absorption for ground water reserves and aquifers on which many public and private water supplies depend. A more detailed discussion on wetlands follows in Section 4.3.1.

"This Plan supports efforts by the Village Board to work with the Town of Montgomery to create wellhead protection and aquifer protection overlay districts in the vicinity of the Village's wells."


Map No. 4-1
Water Resources
Tin Brook
Village of Walden
Water Resources
Map
LEGEND
Topography
Streams
Lakes & Ponds
Federal Wetlands
DEC Wetlands
100 Yr
500 Yr
Municipal Boundary
Interstate
Federal Highway
State Route
County Road
Local Road
Town of Montgomery
Reference Map
Scale: 1" = 900 feet
Orange County
Water Authority
15 Matthew St.
Goshen, NY 10924
Tel: (845) 294-9533
Fax: (845) 294-9712
www.ocwagis.org
jamie.lo@ocwagis.org
021304~2321
DISCLAIMER: This map is a product of the Orange County Water Authority GIS Department. The data depicted here have been developed with extensive cooperation from other County departments, as well as other Federal, State and local government agencies. Orange County and OCWA make no representations as to the accuracy of the information in the mapping data, but rather, provide said information as is. Orange County and OCWA expressly disclaim responsibility for damages or liability that may arise from the use of this map.

4.3.1 Wetlands

Wetlands are perhaps the most critical of all water resource considerations due to their extreme sensitivity to development. These areas are subject to periodic or continual inundation by water and are commonly referred to as bogs or marshes. The New York State Department of Environmental Conservation has mapped these resources and regulates these water resources. In addition to NYSDEC wetlands, there are also Federal wetlands that are protected under Section 404 of the Federal Clean Water Act. These are regulated by the United States Army Corps of Engineers and are shown on the National Wetland Inventory maps.

In Walden, there are several NYSDEC regulated wetlands as well as a number of federally regulated wetlands. These wetlands are located along the banks of the Wallkill, Tin Brook, and other tributary rivers to the Wallkill and along the eastern edge of the Village, particularly in the vicinity of James Olley Park (see Map No. 4-1 Water Resources).

These wetlands provide natural wildlife habitat for a variety of birds, waterfowl, and other plant and animal species. The enforcement of the Village's land use regulations and concurrent SEQR review must be the primary tools used to protect these resources. Allowing clustered development on sites to avoid disturbance of these sensitive areas is one measure, which could be encouraged to mitigate impacts on wetlands.

Wetlands serve an important function cleansing water. They also serve a vital function in retaining large amounts of runoff during the spring thaw or major storm events. In this respect, wetlands help to reduce peak flood flows and decrease flood damage. All proposed development within the vicinity of NYSDEC and federal wetlands must comply with the regulation of the respective authority. Within the Village, both types of wetlands are found. The Planning Board must ensure that applicants adhere to these standards when reviewing site plans or subdivision proposals that are in the vicinity of regulated wetlands.

4.3.2 Flood Hazard Areas

The Federal Emergency Management Agency has identified potential flood hazard areas in the Village of Walden. Areas in the Village that are subject to flooding include those lands adjoining the Wallkill River and Tin Brook where flooding results from snow melt, heavy rains or other weather conditions. By identifying these areas, it is possible to restrict development to open space uses, including passive recreation, which don't obstruct water flow and are tolerant of flooding.

It is important to do this in order to mitigate both financial loss and the potential loss of life that might occur as the result of periodic flooding. FEMA defines the likelihood of flooding into two broad categories: 1) lands within the 100-year floodplain; and 2) those within the 500-year floodplain.

Above (top to bottom): Wetlands within and along the Wallkill River just above the High Falls, view of Tin Brook as it meanders through Wooster's Grove Park which was flooded during Hurricane Irene in 2011 and view of wetland along Tin Brook east of Edmunds Lane.

Lands within the 100-year floodplain have a 1% probability of a flood exceeding a certain depth in any given year. Where the threat exists, the construction of houses and other buildings, including civic buildings, should be avoided.

It is recommended that the Village Planning Board factor in the presence of floodplains when they review site plans and subdivision applications. The Planning Board must insist on appropriate mitigation measures for any development within floodplains.

4.3.3 Stormwater Management

Stormwater is water that accumulates on land as a result of storms or melting snow. The porous and varied terrain of natural landscapes like forests, wetlands, and grasslands trap rainwater and snowmelt and allow it to slowly filter into the ground. Runoff tends to reach receiving waters gradually. In contrast, nonporous landscapes like roads, bridges, parking lots, and buildings don't let runoff slowly percolate into the ground. Water remains above the surface, accumulates and runs off in large amounts.

The Village's stormwater management system includes its storm sewers and ditches that are designed to quickly channel runoff from roads and other impervious surfaces. These devices are important to control high flows that may be a threat to public safety. Unfortunately, there are adverse environmental impacts associated with traditional stormwater management.

Runoff gathers speed once it enters the storm sewer system and when it leaves the sewer system and empties into the Wallkill River. During storm events, large volumes of high velocity runoff can erode streambanks, damage streamside vegetation and widen stream channels. In turn, this will result in lower water depths during non-storm periods, higher than normal water levels during wet weather periods, increased sediment loads and higher water temperatures. It is thus important to control stormwater runoff associated with development.

In New York State, any construction operation that will disturb or expose one or more acres of soil requires a State Pollutant Discharge Elimination System (SPDES) Permit for Stormwater Management Discharges from Construction Activity. Soil disturbance includes clearing vegetation, grubbing, filling, grading, excavation, demolition and any current or proposed construction activity. If the proposed action is anything other than a single-family home it will also require the development of a Stormwater Pollution Prevention Plan (SWPPP).

A SWPPP addresses both construction and pos-construction activities. During construction activities, erosion & sediment control devices such as silt fences are used to prevent silts from soils from be carried off the site during storm events. Detention and retention basins are used to ensure that post-development runoff rates from a site do not exceed pre-development rates. Bioretention basins are becoming more common.

"A Stormwater Pollution Prevention Plan, in accordance with NYSDEC regulations, is required for any construction operation that will disturb one or more acres if constructing something other than a single-family residence."

Detention basins are dry basins that fill with water during a storm event. They work by delaying the storm water so that it is released at a rate that mimics predevelopment flow. Retention basins hold water in a pool and release water through an overflow spillway during storm events. These basins provide for the release of runoff at controlled rates to protect the quality of surface waters and to prevent flooding during storm events.

Detention and retention basins are also important stormwater treatment systems. Stormwater treatment is the capture and reduction of pollution in stormwater runoff prior to discharge into receiving waters such as the Wallkill River and groundwater aquifer. By capturing the runoff, the basins allow particulates to settle to the bottom that removes pollutants from the runoff before it is discharged.

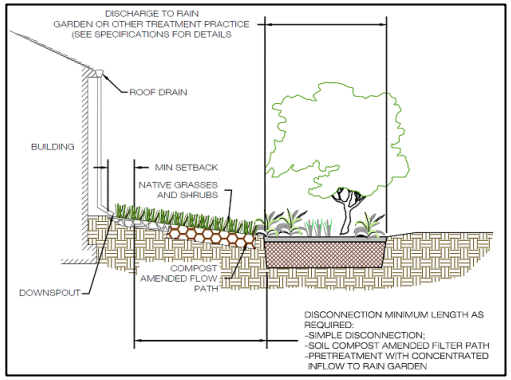
Within off-street parking areas, catch basins are used to retain and filter contaminants before they leave the site. Other measures that can be employed include the use of infiltration trenches that capture runoff and treat it through a soil medium and pea gravel filter layer before it is discharged. Bioretention basins are a variation of these systems, with planting intended to also absorb nutrients. As the Planning Board reviews development applications it must ensure that appropriate stormwater management measures are put in place. Such measures will help to protect water quality and mitigate potential damage during major storm events.

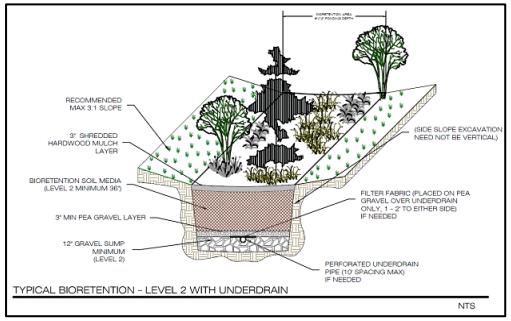
4.4 Soils

Proper siting of development must include an analysis of soil types within a community. Soils differ according to variations in composition, particle-size gradation, and compaction; factors which control permeability, porosity and strength. Each of these factors and depth to bedrock is important in determining how much and what kind of development the land is capable of supporting.

Soil porosity and permeability is a major consideration in determining development capability. Hydric soils have poor potential for building development since wetness and frequent ponding are severe problems that are difficult and costly to overcome. Soils associated with steep slopes are also not well-suited to development as they are prone to erosion.

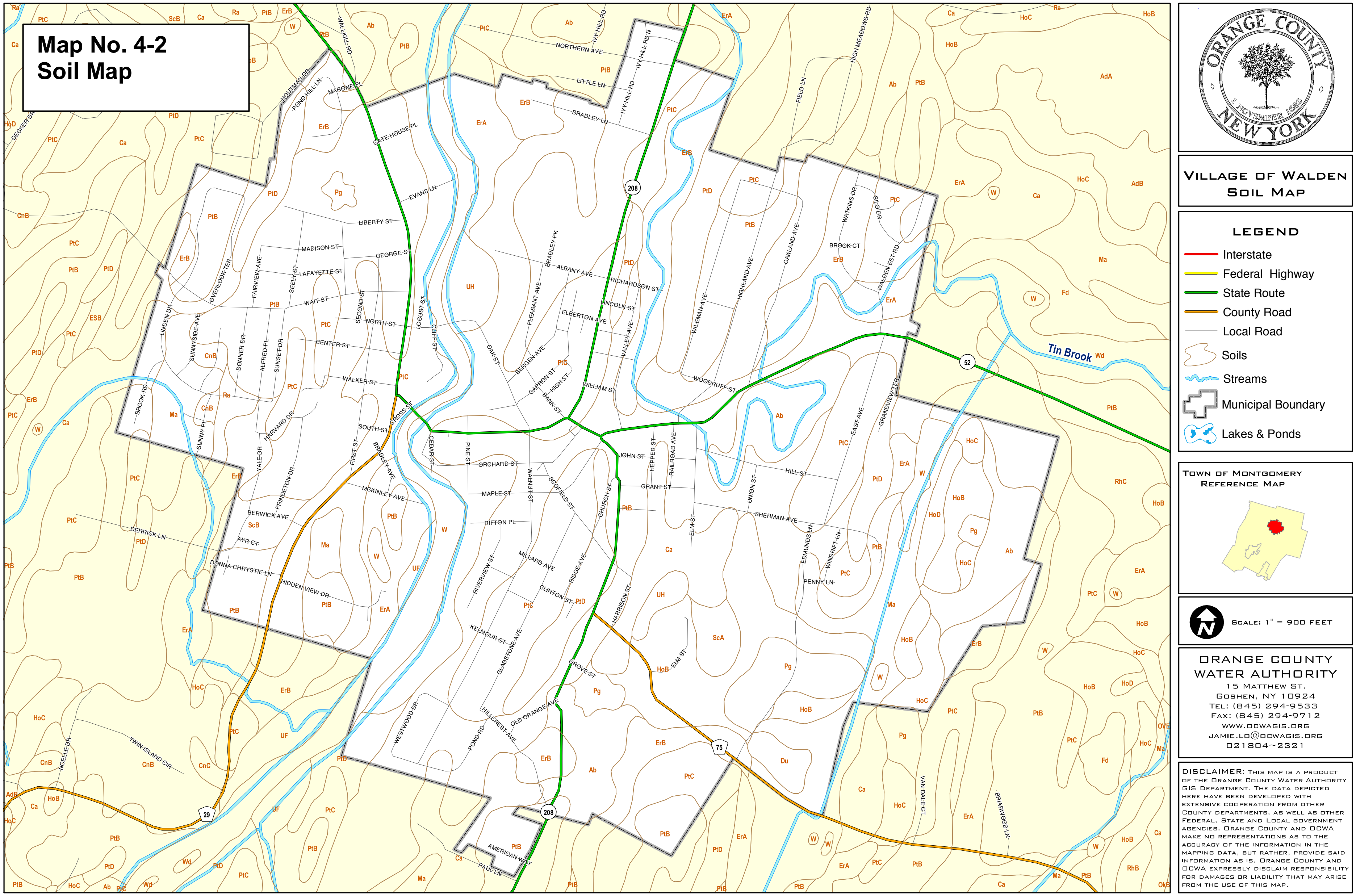
The U.S. Department of Agriculture & Natural Resources Conservation Service has mapped and classified soil types (see Map 4-2 and Map 4-3). However, these soil classifications are not site specific. It is useful to consider the specific soil conditions in a community in directing growth to areas that can support development without high construction costs. Therefore, any classification system needs to allow for detailed on-site soils testing by engineers for purposes of finding pockets of more suitable soils for development. A detailed description of the soil groups within the Village of Walden is available in the USDA Orange County Soil Survey.





Above (top to bottom): Illustration showing residential rooftop bioretention system; view of bioretention system with plantings, which are intended to absorb nutrients from runoff and a typical biotetention system. This Plan supports the use of bioretention and other Best Management Practices approved by the NYSDEC.

Source: Illustration from Virginia Department Conservation & Recreation.


Map No. 4-2
Soil Map
ORANGE COUNTY NEW YORK
Village of Walden
Soil Map
Legend
Interstate
Federal Highway
State Route
County Road
Local Road
Soils
Streams
Municipal Boundary
Lakes & Ponds
Town of Montgomery
Reference Map
Scale: 1" = 900 feet
Orange County
Water Authority
15 Matthew St.
Goshen, NY 10924
Tel: (845) 294-9533
Fax: (845) 294-9712
www.ocwagis.org
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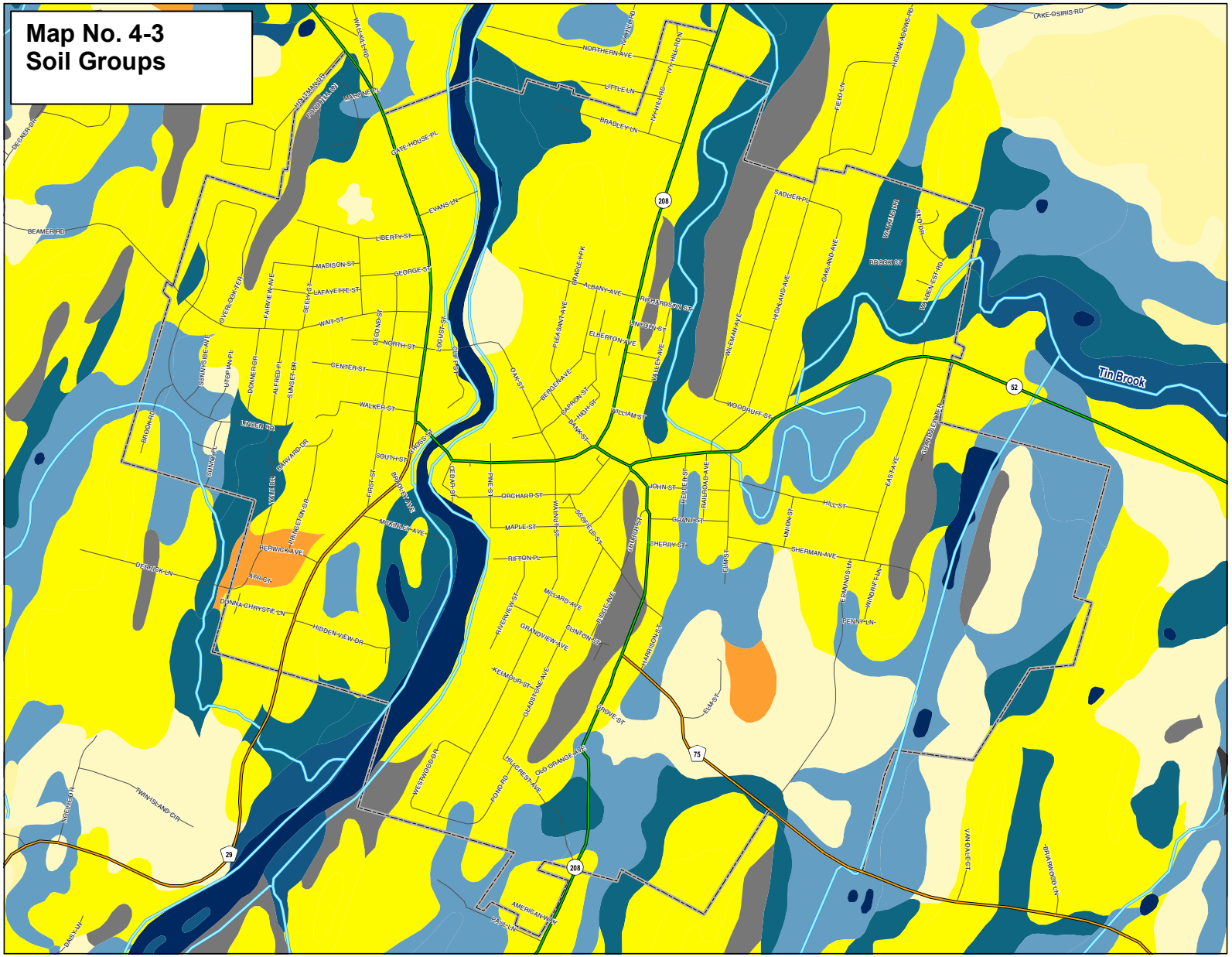
021804~2321
Disclaimer: This map is a product of the Orange County Water Authority GIS Department. The data depicted here have been developed with extensive cooperation from other County departments, as well as other Federal, State and Local government agencies. Orange County and OCWA make no representations as to the accuracy of the information in the mapping data, but rather, provide said information as is. Orange County and OCWA expressly disclaim responsibility for damages or liability that may arise from the use of this map.
Tin Brook



ORANGE COUNTY NEW YORK
1 NOVEMBER 1683

VILLAGE OF WALDEN
SOIL MAP

LEGEND

Municipal Boundary
Interstate
Federal Highway
State Route
County Road
Local Road
Streams
1 well to excessively well drained sands and gravels, nearly level through sloping
2 well drained, very fine sands and silts, nearly level to gently sloping
3 course silts and loam with a firm basal till sloping layer, nearly level through sloping
4 course silts and loam with a firm fragipan, nearly level through sloping
5 heavy silts and clays, nearly level to gently sloping
6 medium sands and silts with bedrock and surface stones, nearly level to through sloping
7 silts, clays and very fine sands that are wet (hydric or hydric inclusions) nearly level to sloping
8 silts influenced by bedrock, nearly level to sloping
9 silts, clays and very fine sands that pond, nearly level (hydric)
10 very fine sands and silts that flood, nearly level
11 very fine sands, heavy silts and clays, gently sloping
12 sands and silts that are influenced by steep slopes, moderately steep to steep (over 15 percent)
13 sands, silts a nd clay that are dominated by very steep slopes (over 25 percent)
14 organic material, nearly level (hydric)
15 waterbodies and marshland (hydric)

TOWN OF MONTGOMERY
REFERENCE MAP

SCALE: 1" = 900 FEET

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WATER AUTHORITY
15 MATTHEW ST.
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FAX: (845) 294-9712
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4.5 Riparian Zones

A riparian zone is the border between land and a flowing surface water body that is densely populated with plant species. There is a well-defined riparian zone along the Wallkill River and Tin Brook within the Village of Walden.

Perhaps one of the most important qualities of the riparian buffer zone is its ability to control erosion, and thus, to prevent sediment pollution. In a stream surrounded by a riparian zone, sediment pollution is controlled. Riparian zones are densely populated with plant species and thus have intricate root systems that prevent erosion and undercutting of banks. In addition, the woody stems and grasses help to physically trap sediment by slowing down the water runoff from the surrounding area, allowing the sediment to settle out.

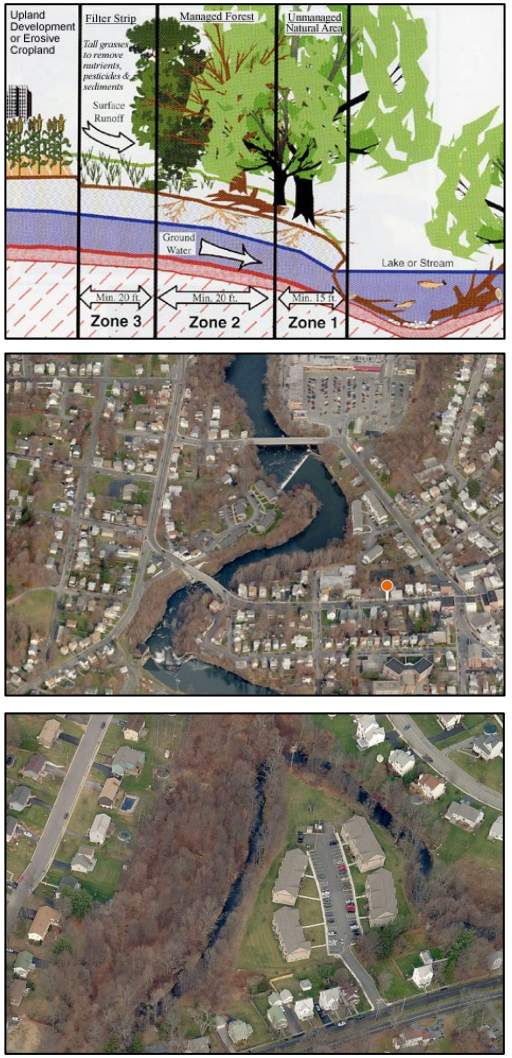
The branches, stems and leaves of these plants absorb the impact of raindrops. Decaying leaves and low-growing vegetation form a ground cover that further lessens the erosive force of raindrop impact. This groundcover slows runoff, increasing the amount of water absorbed into the soil and then released slowly into the stream, groundwater, or atmosphere. The water that is absorbed may contain nutrients, pesticides, and other pollutants that will eventually be taken up by plants or broken down over time. By slowing runoff, trapping sediments, and increasing absorption, these plants act as a living filter to protect water quality.

The riparian zones along the Wallkill River and Tin Brook thus play a vital function in helping to protect the water quality in these streams. The riparian zones also play a very important role in helping to prevent excessive erosion of the stream banks during periodic flooding. With the onset of Hurricane Irene in 2011, the Tin Brook experienced severe flooding and the riparian zone helped to reduce erosion along the stream.

Waterfront vegetation also enhances habitat for wildlife and increases opportunities for wildlife viewing. Plants along waterways provide food and shelter for a variety of insects, amphibians, reptiles, songbirds, mammals and fish.

Maintaining or developing an attractive riparian zone can:

- Increase property values;
- Reduce property loss from excessive erosion;
- Protect water quality by filtering sediments and other contaminants;
- Discourage geese congregation;
- Enhance wildlife habitat by providing shade that reduces water temperature;
- Contribute to the natural beauty of the land;
- Dissipate noise from traffic, roads, and nearby properties;
- Reduce maintenance time and related costs;
- Provide privacy;
- Screen unsightly views; and
- Enhance scenic views.



Above (top to bottom): Illustration showing unmanaged natural zone, managed forest zone and filter strip (i.e. Zone 1, 2 and 3) and aerial views of riparian zone along the Wallkill & Tin Brook. Riparian zones help to prevent excessive erosion of stream banks.

Source: Illustration from Southeast Michigan Resource Conservation & Development Council.

Research shows riparian zones are instrumental in water quality improvement for both surface runoff and water flowing into streams through subsurface or groundwater flow; particularly the attenuation of nitrate or denitrification of the nitrates from fertilizer. Riparian zones can play a role in lowering nitrate contamination in surface runoff from athletic fields, which runoff would otherwise damage ecosystems and human health by potentially infiltrating groundwater.

It is important to maintain the riparian zone along the Wallkill River and the Tin Brook in order to protect the quality of these streams.

4.6 Tree Preservation & Conservation

Trees, shrubs and other plant materials add four-season living color, texture and visual interest to the landscape of the Village of Walden. Street trees, landscaped lawns, shrubs and other plantings throughout the community help to define the Village's small town charm and make it an attractive community in which to live and visit. It is thus important that the Village Board play an active role in conserving this natural resource and encouraging new tree plantings.

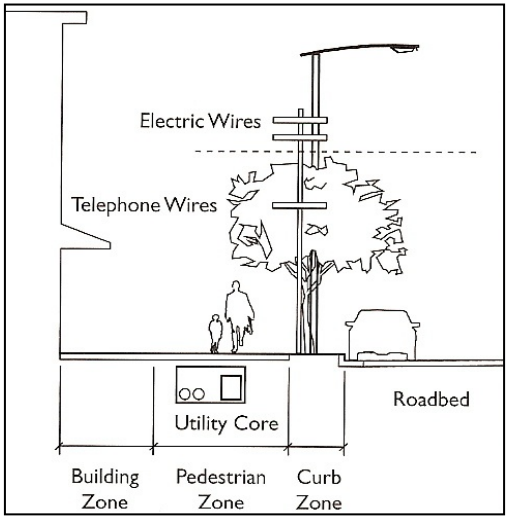
Throughout the Village, mature street trees are the most prominent form of plantings along the street. Street trees help to soften the hard surfaces of sidewalks, off-street parking areas and streets and help to define the pedestrian right-of-way by providing a buffer between the street and the sidewalk.

Over time the Village has lost a number of street trees due to age, disease and excessive pruning of branches away from overhead utilities. Trees were also lost with recent sidewalk improvements, but new street trees were planted with the new streetscape improvements.

This Plan recommends that the Village pursue conservation measures to conserve its existing inventory of street trees and that it also continue its ongoing street tree replacement program for both residential streets and the commercial streets within the Central Business District.

Within the Central Business District, the Village has planted street trees that, while still young, are beginning to provide an effective shade canopy in the summer, and visual interest during the stark winter months. These trees are appropriately sized for the Central Business District taking into consideration overhead wire and underground utilities. Street tree planting within the Downtown should continue as well as efforts to plant street trees in residential neighborhoods within the Village.

On residential streets, street trees should be planted within a planting strip between the sidewalk and the curb. When selecting a tree species, consideration must be given to the size of the mature canopy and root system, so that trees will not compete for light or nutrients. Species must also be selected that are hardy and tolerant of road salts deposited during the winter months.



Above: Trees should be selected such that mature tree height is less than the height of any wires, or trees should be pruned below wires. Do not plant over underground utilities.

Source: Illustration from Planning & Urban Design Standards.

Within the Central Business District, the existing buildings are in close proximity to the sidewalks and/or planting strips. It is important the shape of the mature crown of the street tree is taken into consideration to avoid the tree canopy from growing into the building wall and requiring severe pruning over time.

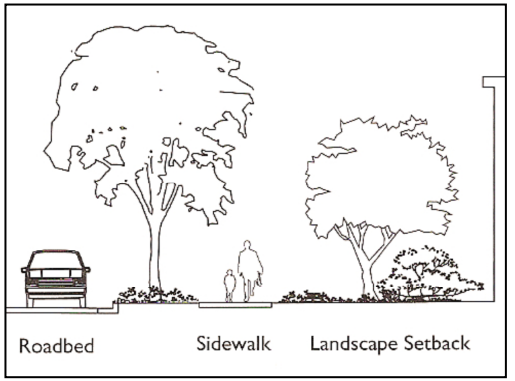
Street trees provide many community benefits. There are studies that show that drivers tend to drive slower on streets that are lined with street trees. The trees provide a canopy that encloses the street that creates a calming effect. Street trees also help to protect air quality by absorbing carbon dioxide from automobiles and releasing oxygen. A large mature canopy of leafy deciduous trees also helps to absorb noise generated from traffic that in turn reduces ambient noise levels within the Village. Trees also add to the natural beauty of the Village.

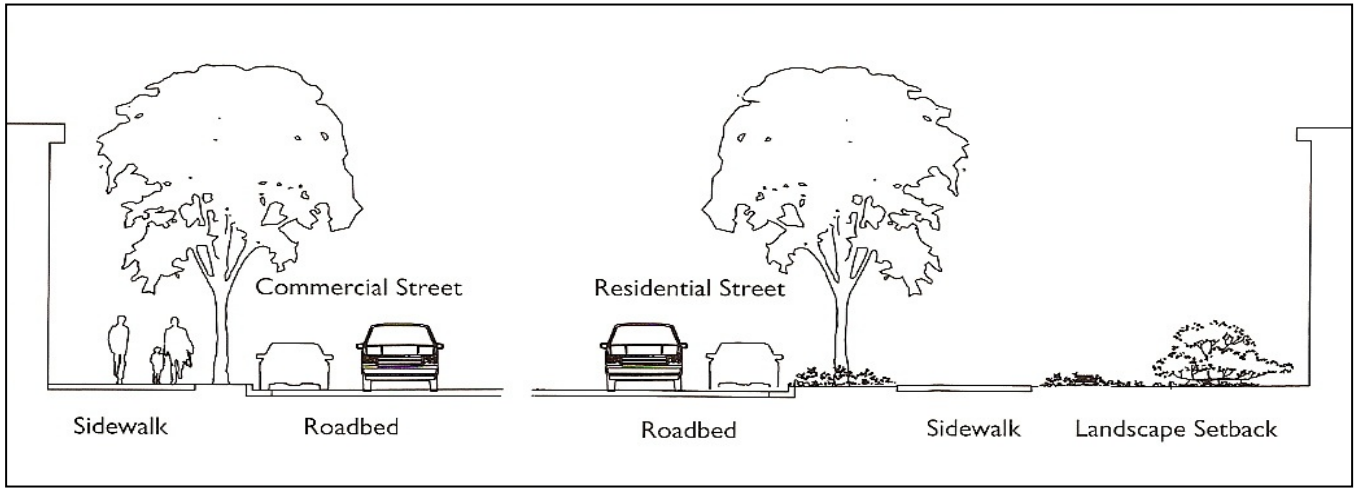
Street trees also provide a physical and psychological buffer between the sidewalk and the street that makes pedestrians feel safer which encourages walking.

In summary, street trees provide these benefits:

- Calm traffic;
- Protect air;
- Encourage walking;
- Contribute to Village's natural beauty;
- Reduce noise; and
- The International Society of Arboriculture estimates the improvement in curb appeal due to street trees increases real estate values by 20%.

Specific recommendations for conserving trees and encouraging new plantings are included in the summary of this chapter.





Above: The upper photo shows NYS Route 208 that is lined with street trees and the bottom photo a section Overlook Terrace without street trees. Street trees on residential streets are typically located in a planting strip between the sidewalk and the curb.

Source: Planning & Urban Design Standards.

4.7 Energy Conservation

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a voluntary standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council (USGBC), representing all segments of the building industry, developed LEED. LEED standards have been developed for the following:

- New commercial construction and major renovation projects;
- Existing building operations; and
- Commercial interior projects.

LEED defines quantifiable measures for rating development projects based upon the number of points achieved by a project, out of a 69 possible. The scale is as follows:

LEED certified: 26 to 32 points;
Silver level: 33 to 38 points;
Gold level: 39 to 51 points; and
Platinum level: 52 plus points.

Within the rating system six (6) general LEED categories: Sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation in design. Each of these categories impacts the overall LEED score. The following is a brief summary of each category, which determine the LEED level assigned to a project.

Sustainable sites. Credits are given for infill development, development near existing infrastructure and redevelopment of brownfield sites. Development on prime farmland, lands less than five feet above the floodplain, or closer than 100 feet from a wetland or stream are not considered sustainable.

Water efficiency. Points are given for water-efficient fixtures and landscaping that reduces the need for irrigation.

Energy and atmosphere. Emphasis is on energy savings through insulation, efficient mechanical systems, alternative energy sources and renewable energy.

Materials and resources. Focuses on the environmentally preferable materials.

Indoor environmental quality. Focus is on low or no volatile organic compounds materials.

Innovation in design. Given to performance above the five other categories.

The Village should encourage the use of LEED technologies in the design of new buildings. The Planning Board when reviewing developments should ask applicants to consider the placement of new buildings in a manner that maximizes energy efficiency and sustainability. The Village should provide education and outreach regarding LEED techniques in order to raise community awareness of its benefits.

"This Plan encourages Leadership in Energy and Environmental Design (LEED) within new developments, which are planned within the community as well as alterations to its existing buildings in order to conserve energy."

4.8 Night Sky

A number of residents have spoken of the *night sky* as a natural resource that must be protected. Residents were concerned with *light pollution* and the need to keep lighting from trespassing onto adjoining properties and into the night sky within the Village of Walden.

The Planning Board can do its part to preserve night sky by ensuring that lighting is sufficient for the proposed land use but not excessive. To this end, it is recommended that lighting be limited to 2.0 foot-candles within off-street parking areas and that lighting be designed in a manner that keeps the light entirely on the subject site, away from adjoining properties, and out of the night sky.

To accomplish this goal, the Planning Board should require developers to install lighting fixtures with a horizontal cutoff lens so that light is directed to the ground and not into the night sky. The Village should also encourage its residents and businesses to employ night sky-friendly lighting techniques such as adding hoods to area floodlights, replacing existing yard lights with those fixtures that include an opaque reflector and using downlit lighting for signage.

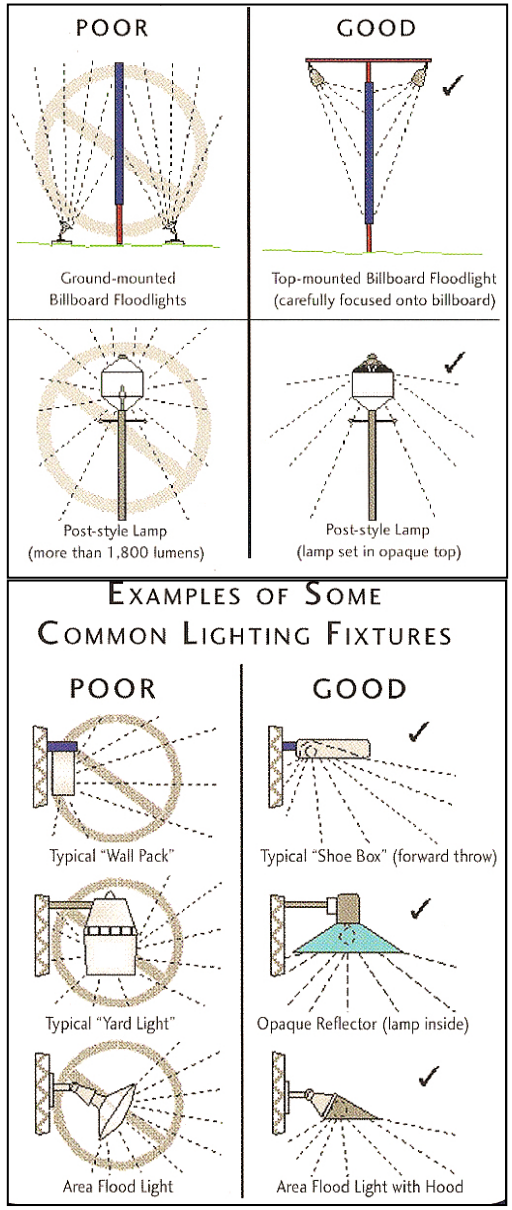
The *Otsego County Conservation Association* has developed a pamphlet that addresses light pollution called "Starry Nights in Otsego County." The Planning Board is encouraged to use the illustration from this pamphlet as a guide.

4.9 Invasive Plants & Animals

It is a policy of this Plan to support invasive plant and animal eradication efforts. Invasive species are non-native species that can cause harm to natural ecosystems resulting in a wide range of environmental, recreational and economic impacts. The NYSDEC has identified invasive species as a significant threat to the State's biodiversity - second only to habitat loss.

The Village's economy is dependent on the health of its ponds and streams that provide boating, fishing and swimming opportunities. Once introduced into water bodies, aquatic invasive plants spread rapidly, congest waterways and disrupt native fish populations. Invasive animals could decimate local fish populations. Once infested, ponds and rivers can become unusable and this could adversely affect the local economy as the quality of these natural resources is diminished.

It is recommended that the Village Board work with New York State Department of Environmental Conservation to identify threats related to invasive species. Examples include Japanese Knotweed, Purple Loosestrife and other invasive plants. When identified, the Village Board should reach out to partner with the NYSDEC to secure funding through their *Invasive Species Eradication* grants to help eradicate invasive species. State funds can be used to pay for up to one half of the total costs of a selected eradication project.



Above: Examples of "Poor" and "Good" lighting fixtures.
Source: Otsego County Conservation Association "Starry Nights in Otsego County"

4.10 Recommendations

There are a variety of land use policies that the Village can employ to protect its natural resources including the following:

4.10.1 Steep Slopes

Identify steep slopes (over 15%) as part of a site assessment prior to developing the building site and road design in order to acknowledge and maintain the hillside character and natural features of the site. This approach can help to minimize site grading and retain the natural and topographic character of the site.

4.10.2 Water Resources

Create wellhead protection and aquifer protection overlay districts. The Village obtains its water supplies from wells that are situated within the Town of Montgomery. The Village must take additional steps to protect its potable water supply by limiting certain land uses within close proximity to its wells and/or developing additional standards for land uses within its aquifer recharge areas. This will require cooperation with the Town of Montgomery.

Follow NYSDEC requirements to maintain a 100-foot setback between development and adjacent wetlands. During the site plan and special permit review process, applicants must be required to show existing wetlands and required setbacks on site plans.

Restrict the development of buildings and impervious surfaces within the 100-year floodplain. Carefully review applications for development in the 100-year floodplain. Participate in FEMA programs to help prevent future loss of property and life due to flooding.

Require Storm Water Pollution Prevention Plans (SWPPP) in accordance with the NYSDEC State SPDES general permit for commercial developments or major subdivision applications. SWPPP's helps to ensure that post-development runoff rates from a site do not exceed pre-development rates. Such plans provide for treatment of runoff and release of runoff at controlled rates to protect the quality of surface waters and prevent flooding from storm events.

Encourage the use of detention/bio-retention basins that are an integral part of the overall site plan or subdivision plan. Detention and bio-retention basins should be used to ensure that post-development runoff from sites is not increased and nutrients absorbed from runoff.

4.10.3 Soils

Where proposed development involves grading of the site or cutting and filling operations require a Sediment & Erosion Control Plan. Generally, development on sites should work with the topography of the site and avoid excessive grading of the site. Where grading is proposed, a sediment & erosion control plan should be provided.

"Require Storm Water Pollution Prevention Plans (SWPPP) in accordance with the NYSDEC State Pollution Discharge Elimination System (SPDES) general permit for commercial developments, Planned Developments or major subdivision applications."

4.10.4 Riparian Zones

Restrict the cutting of trees along the banks of the Wallkill River. The clearing of trees on the banks of the Wallkill River should be prohibited.

Create a public information brochure regarding the importance of retaining the riparian zone along the Wallkill River and Tin Brook. The Village should take proactive measures to educate the public about the importance of retaining mature trees within the riparian zones.

4.10.5 Tree Preservation & Conservation

Enlist the services of an arborist to develop a coherent long-term plan for street tree conservation. Such a plan would identify existing trees with diseases, areas where trees are needed, tree pruning techniques, the desirable species of trees and tree planting schedule.

Enforce landscaping and street tree standards for new developments. Developers should provide a landscaping and street tree plan for the development and redevelopment of properties.

Strictly enforce tree survey and tree clearing permit laws. Require developers to provide a tree survey showing all trees with a caliper of over eight (8) inches when seeking site plan or subdivision approval. Use this tool to conserve as many mature trees on site as possible and should take the additional step of developing standards for the planting of street trees associated with all new development.

4.10.6 Encourage Leadership in Energy Conservation and Design (LEED). The Village should encourage the use of LEED technologies in the design of new buildings.

The Planning Board when reviewing developments should ask applicants to consider the placement of new buildings in a manner that maximizes energy efficiency and sustainability. The Village should provide education and outreach regarding LEED techniques in order to raise community awareness of its benefits.

4.10.7 Night Sky

Require developers to install lighting fixtures with horizontal cutoff lenses. This will protect night sky by directing light to the ground and avoid the spillover of light onto adjoining properties or into the night sky.

4.10.8 Invasive Plants & Animals

Support local efforts to eradicate invasive plants and animals. Invasive species can adversely affect the natural ecosystem if left unchecked. When identified it is recommended that these species be eradicated before they spread and cause greater harm to the local ecosystem.

There are a variety of grant opportunities through the New York State Department of Environmental Conservation (NYSDEC) to assist communities with the eradication of invasive species.

"GIVEN A LIMITED BUDGET, THE MOST EFFECTIVE EXPENDITURE OF FUNDS TO IMPROVE A STREET WOULD PROBABLY BE ON TREES. MOREOVER, FOR MANY PEOPLE TREES ARE THE MOST IMPORTANT SINGLE CHARACTERISTIC OF A GOOD STREET."

Allan B. Jacobs

CHAPTER 5.0 TRANSPORTATION

The Village of Walden's transportation system is comprised of its highways, streets, freight rail line, sidewalks, and recreational trails. The existing transportation system is highly effective in moving goods, vehicles and people within and through the community. Together, these transportation systems have helped to shape the character of the Village and will continue to influence its development into the future.

The components of the Village's transportation system often share the public realm across the entire public right-of-way resulting in the frequent interaction between pedestrians and drivers [e.g. streets and sidewalks]. It is thus important that all components of the transportation system be considered in relation to one another to ensure a safe and efficient transportation system.

We begin the transportation discussion with a focus on highways and streets. Each and every highway and street plays an important role in moving goods and people within and through the Village. The regional highways that traverse the Village (e.g. NYS Route 52 and NYS Route 208) are designed to carry traffic through the entire region. Its local streets are intended to channel traffic from local residences to collector streets. The function of each of the Village's highways and streets is discussed in Section 5.1.

5.1 Roadway & Highway Classifications

Highways are generally described by their functional classifications. The Institute of Transportation Engineers (ITE) has created a functional classification system for roadways that is described below.

Interstate and Limited-Access Highways: This type of highway moves large volumes of traffic at relatively high speeds to and from locations outside the region. Such highways have limited access via designated exits with no at-grade intersections. Examples include Interstate 84 and the New York State Thruway.

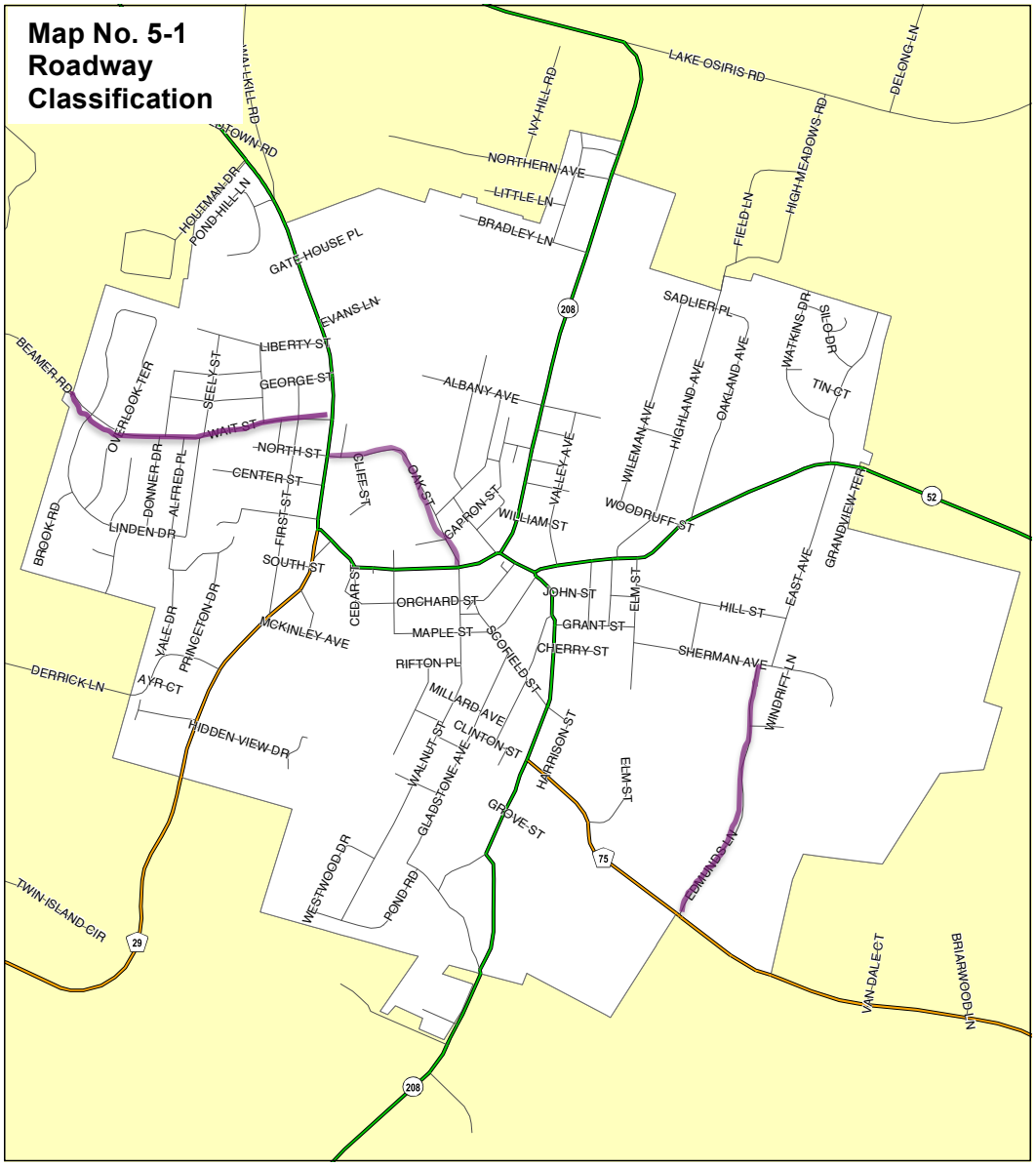
Arterial: The function of an arterial is to carry medium-to-heavy volumes of traffic at moderate to high speeds and provide access to major traffic generators. Examples include NYS Route 52 and NYS Route 208.

Major Collector: Provide connections between arterials and local roads at relatively higher speeds (e.g. Coldenham Road).

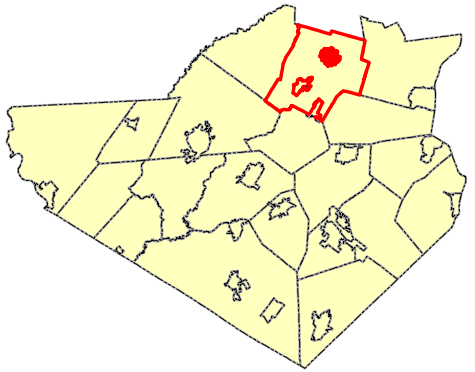
Minor Collector: These roads provide connections between arterials and local roads at comparatively slower speeds and carry moderate volumes of traffic. Edmunds Lane, Oak Street and Wait Street are examples.

Local: This type of road provides direct access to abutting properties and channels local traffic to collector roads (e.g. residential streets).

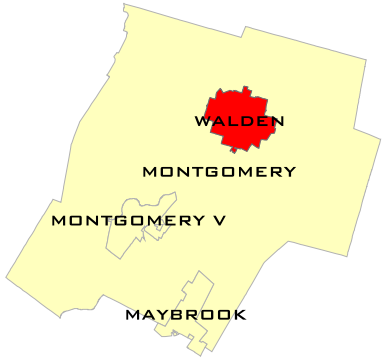
Above (top to bottom): Aerial view of NYS Route 52 and Route 208 intersection in vicinity of McKinley Statue; view of Wait Street and an aerial view of Village of Walden's well-defined grid street system, which plays an important role in moving people and goods and defining community character.



ORANGE COUNTY
REFERENCE MAP



TOWN OF MONTGOMERY
REFERENCE MAP



ORANGE COUNTY
NEW YORK
NOVEMBER 1, 1683

VILLAGE OF WALDEN
CONTEXTUAL MAP

LEGEND

- Interstate
- Federal Highway
- Arterial
- Major Collector
- Local Road
- Minor Collector

NEW YORK STATE
REFERENCE MAP

SCALE: 1" = 1,100 FEET

ORANGE COUNTY
WATER AUTHORITY
15 MATTHEW ST.
GOSHEN, NY 10924
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021304~2321

Understanding the Village's roadways in the context of the ITE system is helpful when analyzing transportation needs. For the purpose of this Comprehensive Plan, we have analyzed the major roadways from the perspective of the Village's existing land use regulations in order to ascertain whether zoning amendments and/or revisions to subdivision regulations are warranted. The goal is to ensure that specific land uses are directed to roadways that best serve their transportation needs.

5.2 Level of Service

The ITE Highway Capacity Manual provides a description of how well traffic flows along highways and roadways that is referred to as Level-of-Service (LOS). The LOS on roadways is described in accordance with a six-step scale from A-F. The LOS A represents the free flow of traffic and a LOS F represents traffic congestion on an area roadway.

LOS A: Free traffic flow, with low traffic volumes and speeds at the posted speed limit.

LOS B: Is in the zone a stable traffic flow, with operating speeds beginning to be restricted somewhat by traffic conditions, however, drivers still have reasonable freedom to select their speed and lane of operation.

LOS C: Is in the zone a stable traffic flow, but speeds and maneuverability are more closely controlled by higher traffic volumes.

LOS D: Approaches unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions due to traffic volumes.

LOS E: Level of Service E cannot be described by speed alone, but represents operations at even lower speeds than Level D, with volumes at or near the capacity of the highway. Flow of traffic is frequently interrupted with stop & go motion.

LOS F: Describes forced flow operation at low speeds, frequent stop and go motion, with high traffic volumes at capacity of the roadway. The number of travel lanes alone does not dictate traffic flow.

In 2011, a Traffic Impact Analysis was conducted for the Overlook at Kidd Farm Townhouse Development. Data from the study reveals the level-of-service (LOS) at several intersections is generally satisfactory (see Table 5-1). However, two intersections will experience diminished LOS under No-Build conditions due to projected growth in traffic volumes.

In 2009, the NYS Route 208 and NYS Route 52 *unsignalized* intersection was operating at a LOS "D" during morning peak hours and a LOS "D" during evening peak hours. The LOS of this intersection is projected to diminish to a LOS "F" during morning peak hours and a LOS "F" during evening peak hours by 2014. The anticipated decline in the LOS is related to projected traffic volume increases on these roads.

"The NYS Route 208 and NYS Route 52 *unsignalized* intersection is operating at a LOS "D" during morning peak hours and a LOS "D" during evening peak hours. The LOS of this intersection is projected to diminish to a LOS "F" during morning peak hours and a LOS "F" during evening peak hours by 2014."

Morning Peak Hours:

6:45 AM – 9:30 AM

Evening Peak Hours:

3:30 PM – 6:15 PM

Village of Walden, New York
Table 5-1 Level of Service Summary
Key Intersections

Intersection	Control	AM Peak Hour		PM Peak Hour	
		2009 Existing	2014 Build	2009 Existing	2014 Build
NYS Route 208/Coldenham Road* **					
AM peak period	TW	D	D	D	D
PM peak period		D	D	D	D
NYS Route 208/Old Orange Avenue	TW				
AM peak period		C	C	C	C
PM peak period		C	C	C	C
Coldenham Road and Edmunds Lane	TW				
AM peak period		B	B	B	B
PM peak period		B	B	B	B
NYS Route 208 and Route 52					
AM peak period		C	D	C	D
PM peak period	S	C	D	C	D
NYS Route 208 and Route 52**					
AM peak period		D	F	D	F
PM peak period	AW	D	F	D	F
NYS Route 52 and East Avenue					
AM peak period	TW	C	D	C	D
PM peak period		C	D	C	D
AM peak period					
PM peak period					

* With a traffic signal, this intersection would operate at a level of service "C."
**Intersection should be monitored to determine if signal warranted.

KEY: NB, SB, WB, EB = Northbound, Southbound, Westbound, Eastbound intersection approaches
TW, AW, S = Two-way stop controlled intersection, All-way stop controlled intersection, Signal controlled intersection.

Source: John Collins, Engineering, P.C. – Overlook at Kidd Farm DEIS Traffic Study 2011.

The poor level-of-service at this intersection is also influenced by poor roadway geometry. Presently, there isn't a dedicated truck route to enable westbound truck traffic on NYS Route 52 to turn south on NYS Route 208 without having to go through the "Y" intersection near the McKinley monument. The result is traffic delays and periodic damage to McKinley Square, as trucks try to maneuver through the turn and end up riding over the curbing to make the turn. A dedicated truck route to avoid this intersection is recommended. This intersection should be also be monitored in the future to determine if signalization would be warranted.

The NYS Route 208 and Coldenham Road intersection is another part of the transportation system, where future improvements may be necessary to maintain an acceptable LOS. Coldenham Road intersects with NYS Route 208 at a "stop" sign controlled "T" intersection and all approaches consist of one lane. Presently, the intersection operates at a LOS "D" during AM and PM peak periods. The LOS here is anticipated to continue to operate at a LOS "D" based upon the 2014 No-Build traffic volumes.

The 2011 Traffic Study by John Collins, Engineering, P.C. analyzed how this intersection would perform with signalization and it was determined it would operate at a LOS "C" or better with a signal. This Plan recommends on-going coordination between the Village and NYSDOT to monitor these intersections for measures to improve traffic flow in the future.

5.3 Traffic Impact Analyses

The State Environmental Quality Review (SEQR) Act process should be utilized to effectively evaluate potential traffic impacts associated with development along with the appropriate mitigation measures. The Planning Board should require *traffic impact analyses* by an independent engineer for any application involving an activity likely to generate a significant traffic volume.

The Planning Board should approve the scope of the traffic study in advance with the final product incorporated into the State Environmental Quality Review (SEQR) Act submission. The Planning Board should also identify key intersections, which are more likely to be adversely affected by a development based upon their local knowledge of the community and understanding of traffic flow. The traffic impact analysis should then analyze the LOS at these key intersections under existing, no-build and build conditions. The guidelines set forth for such studies by the Institute of Transportation Engineers (ITE) should be followed in each case.

In addition to assessing existing and future LOS, the traffic impact analyses should also identify factors contributing to diminished LOS such as roadway geometry or the need for signalization. Recommended measures to mitigate potential traffic-related impacts should be provided within the traffic impact analysis. Such measure might include roadway or signalization improvements, which the developer would help to fund.

Above (top to bottom): Views of Route 52-Route 208 unsignalized intersection showing wear on curbing caused by tractor-trailer turning movements; view of pick-up truck stopped within the "Y" intersection preparing to turn left onto Main Street; view from McKinley Square looking west toward Route 52-208 signalized intersection. The Route 52-Route 208 unsignalized intersections should continue to be monitored to determine if signalization is warranted.

5.4 Traffic Calming & Access Management

The Institute of Transportation Engineers (ITE) defines traffic calming as the combination of mainly physical measures that reduce the negative effects of motor vehicle use and improve the conditions for non-motorized street users. Traffic calming includes the "three Es" – education, enforcement and engineering.

Education involves public outreach programs that are intended to raise public awareness of traffic calming measures being employed within a community and why such measures are needed. Traffic calming policies – such as yielding to pedestrians - are enforced by the Village's Police Department. Engineering measures include a variety of traffic calming devices that can be built into developments proposals or public improvements. Such measures are used to reduce traffic speed and volume. The engineering aspects of traffic calming are also intended to control driver habits.

Other traffic calming measures include raised crosswalks or textured surfaces that are used to alert drivers when they are approaching a pedestrian crossing. Raised crosswalks are speed humps with flat tops marked for pedestrian crossings. They are designed to slow traffic down as they approach a crosswalk. Textured surfaces are installed flush with the roadway surface and are used to accent the pedestrian crosswalk. These are usually used in conjunction with electronic crossing signals.

Access management is a tool, which is used to improve the flow of pedestrian and vehicular traffic within a community. For example, if you provide an opportunity for drivers to travel between adjacent sites you can effectively reduce traffic volume on area roadways and simultaneous reduce the number of vehicle conflicts on roads.

One of the most effective means of affecting access between adjacent sites is through the provision of *cross access easements*. Cross access easements provide a mechanism to link adjacent parking lots to one another via a shared driveway, which allows traffic to flow between sites without having going back out onto the public right-of-way. Other access management techniques include consolidation of existing driveways, prohibition of left turn out driveways and dedicated turning lanes into sites.

The Planning Board should identify opportunities where traffic calming and access management measures could be employed within a proposed commercial or residential development. Such measures will help to ensure that new development does not significantly reduce traffic safety and traffic carrying capacity along the arterial roadways.

This Plan recommends the painted crosswalks in the Downtown be upgraded with textured surface crosswalks to both improve pedestrian safety and to enhance aesthetics. Traffic calming measures should also be included in the redesign of Municipal Square to improve pedestrian safety.

Above (top to bottom): Illustration showing *mini round about*, which could be utilized to calm traffic entering the Village from arterials; image showing *textured surface crosswalk* to alert drivers when they are approaching a pedestrian crossing and view of a *midblock median island* with textured surface crosswalk to provide safe crossing for pedestrians. These types of traffic calming measures are recommended for the Village of Walden.

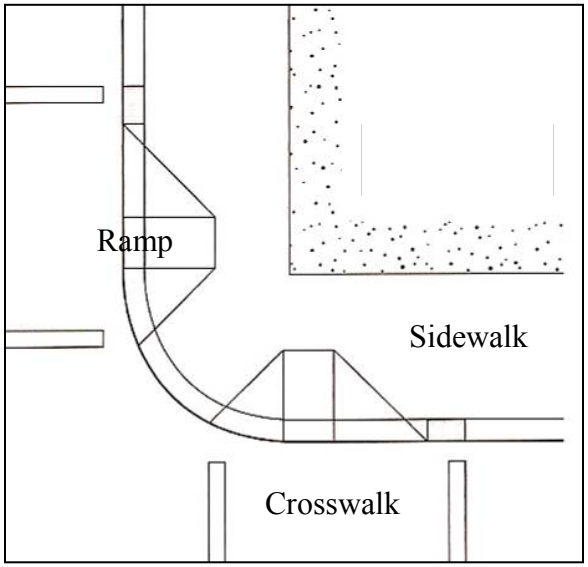
5.5 Pedestrian Policy

The Village of Walden is a very pedestrian-oriented community. This can be attributed, in part, to its higher density of development in which most neighborhoods are only a short walking distance from the Downtown and/or to local institutions or parks It can also be attributed to an extensive sidewalk system that provides a comfortable and safe environment for pedestrians to travel. Village residents also enjoy an extensive trail system (including the Walden-Walkill Rail Trail), which provides opportunities for walking, biking, strolling or hiking. The sidewalks and trails provide a safe and comforting environment for the pedestrian.

It is important that pedestrians are able to move safely throughout the Village and one of the best ways to ensure safe movement of pedestrians is through a well-maintained and comprehensive system of sidewalks. Sidewalks share the public right-of-way with the street and the walkability of the street relies on the pedestrian's comfort.

There are a number of measures that can be employed to enhance pedestrian comfort. For example, street trees can be planted in a median between the street and the sidewalk to provide a buffer between the pedestrian and motor vehicles. Planter boxes can also be placed along the edge of the sidewalks to help distinguish the pedestrian and vehicular environments. Each of these measures will increase the pedestrian comfort and sense of security.

It is also important that the Village's sidewalk system be accessible to persons with disabilities. To this end, curbing at intersections should be ramped to provide access to wheelchairs as is shown in the illustration below.



Most of the sidewalks within the Downtown have ADA compliant ramps and crosswalks. However, there are many areas within the residential neighborhoods where ADA compliant ramps are needed. An inventory should be conducted of those intersections where ADA compliant ramps are needed so they can be upgraded over time.

Wherever feasible, new developments should include new sidewalks. As development occurs, these sidewalks should be integrated into the Village's existing sidewalk system. Doing so will ensure that the Village retains a pedestrian-friendly environment in the future.

Above (top to bottom): Residential street with sidewalk system in good condition; ADA compliant ramp at corner of NYS Route 52 and Elm Street; and view of bluestone sidewalks, which need to be re reset, repaired or replace due to tree uprooting sidewalk segments.

Streets and sidewalks that are accommodating to pedestrians enhance the liveliness of the street, encourage people to walk and enhance the sense of community. Sidewalks also provide a space for public gathering and social interaction.

Providing more benches and street trees throughout the Downtown can enhance the streetscape. Street furniture such as benches increases pedestrian comfort by providing opportunities for pedestrians to rest and to sit and interact with other people. Street trees provide shade. The Village should also coordinate with NYSDOT to install textured surfaces for its crosswalks on NYS Route 52 and 208. The contrast in texture and color, which are a different color from the road surface will draw attention to the crosswalks.

The illustration to the right shows the ideal streetscape where the pedestrian and vehicular environments are well-defined, street trees provide shade and street furniture is provided to give pedestrians a place to rest and congregate. In this illustration, adequate space is reserved within the sidewalk width for the pedestrian as well as persons with disabilities. The use of an awning also helps to enhance pedestrian comfort by providing shade and shelter during inclement weather. As improvements in business areas are made, careful attention should be paid to incorporate these principles into the design of street improvements. Doing so will enhance the pedestrian environment and vitality of the Downtown Business District.

5.6 Bikeway and Trailway Policy

The Village of Walden, Town of Montgomery and Town of Wallkill recently collaborated to fund and construct the *Walden-Wallkill Rail Trail,* which opened on May 2, 2009. The rail-trail is widely utilized by residents and visitors since its completion. This Plan encourages the expansion of bikeways and recreational trails within the community and through cooperation with state and local governments.

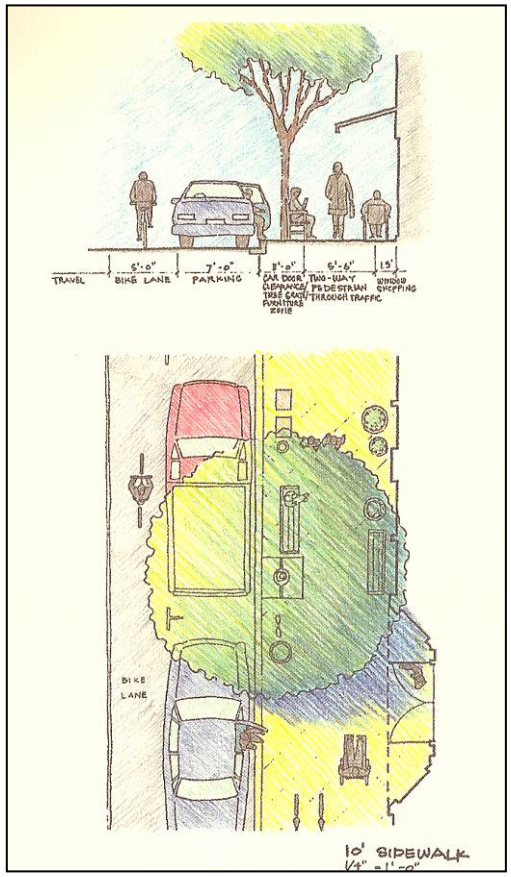
The NYSDOT has proposed designated bikeways along Route 52 and Route 208, which would be accommodated by widening the shoulders along these roadways. The provisions of well-defined bikeways within the community will enhance the safety of bicyclist. This Plan supports efforts by the NYSDOT to create bikeways along NYS Route 52 and 208.

There are opportunities within James Olley Park and Bradley Park to create extensive trail systems. Efforts to expand the trail system within the Village of Walden should be supported. Trails established in the Village could then be linked with trails within neighboring communities in order to create a regional trail network. Such cooperation benefits all communities involved.

Specifically, this Plan supports efforts to act cooperatively with neighboring communities to integrate the *Walden-Wallkill Rail Trail* with the Wallkill Valley Rail Trail so one day the rail trail connects Walden to the City of Kingston.

"STREETS AND THEIR SIDEWALKS, THE MAIN PLACES OF A CITY, ARE ITS MOST VITAL ORGANS."

Jane Jacobs



Source: Creating Livable Streets – Metro 2002, Portland Oregon

5.7 Public Transportation

Presently, public transportation within the Village is very limited and the frequency of service makes it inconvenient for most people to use it. There is a Dial-A-Bus service that is primarily used by senior residents. Short Line (Coach USA) also provides bus service that allows residents to travel to nearby Scotts Corners, Crystal Run Galleria and the City of Middletown. However, the frequency of service is very limited making it impractical for commuting or shopping needs. The Short Line Company provides a George Washington Bridge Express. The express route provides weekly commuter service to New York City, Paramus and Ridgewood with stops at Scotts Corners and the Villages of Maybrook and Montgomery.

Enhancing the provision of public transit would benefit its residents. As the Village's population grows and its population ages so too will the need for public transit. The expansion of service to Orange County and regional destinations is needed. It is recommended the Village Board coordinate with Orange County Transportation Council (OCTA) and Short Line to identify opportunities to expand public transportation service to serve commuters and senior residents.

A bus shuttle service to nearby train stations, such as Beacon or Campbell Hall, should also be pursued with OCTC and MTA. The Village should also explore grant opportunities to expand these bus services.

5.8 Rail Service

Norfolk Southern presently provides freight rail service to Walden along the former New York Central rail line. The freight line operates from Campbell Hall and terminates in Walden just to the south of NYS Route 52. As was described in previous chapters, Walden has a number of long-established and presently operating industrial and manufacturing companies including: Truffa Seed Co., AMPAC and Interstate Packaging Corporation. Presently, freight service along this line is provided three days a week: Monday, Wednesday and Friday.

The freight rail line to Walden provides a competitive advantage for certain industries that other communities do not have. It is thus important that the Village work with Norfolk Southern to maintain this vital industrial link to ensure the future viability of its few remaining manufacturing industries.

The Orange County Transportation Council and MTA-Metro North funded a *Passenger Rail Feasibility Study* to assess the feasibility of re-establishing passenger service on the Wallkill Valley Branch Line runs from Campbell Hall to the Village of Walden. If passenger service were to be re-established, significant improvements would be required to bring the tracks and signals up to modern standards. Additionally, a new train station platform would have to be created as well as an area for off-street parking. This Plan supports efforts to re-establish passenger service.

Above (top to bottom): View of Norfolk Southern freight line looking south from Grant Street; view of rail yard looking south from John Street; and view of rail yard looking north from Grant Street. This Plan supports continued use and upgrade of freight service to the Village and supports efforts to re-establish passenger rail service to Walden.

5.9 Recommendations

The primary goal of the following transportation policies is to facilitate smooth traffic flow, ensure pedestrian safety and ample parking.

5.9.1 Transportation Improvements

Monitor L-O-S at key intersections to determine if signalization or dedicated turn lanes are warranted. The NYS Route 208 and Coldenham Road intersection should be monitored to determine if signalization is warranted. Similarly, the NYS Route 52 and 208 intersections should also be monitored.

Create Designated Truck Route. Improve traffic circulation by establishing a truck route system that avoids the intersection of Route 52/208.

Support creation of Walden-Wallkill Rail Trail Pedestrian Bridge. As Phase II of Walden-Wallkill Rail Trail, apply for NYSDOT or other State and federal funding to create a pedestrian bridge from the rail-trail across NYS Route 52 in order to link the rail-trail to Railroad Avenue.

Expand off-street parking opportunities. Identify opportunities and financing to expand *municipal* off-street parking within Downtown.

Develop pedestrian & vehicular improvement plan for Central Business District. These must enhance the pedestrian and vehicular realms.

5.9.2 Traffic Impact Assessment

Require a traffic impact analysis for uses with high-trip generation rates. Where such uses are likely to affect the LOS on a roadway, a traffic impact analysis should be provided.

Use the SEQRA Process to Mitigate Potential Traffic Impacts. When a proposed development poses significant adverse impacts to the transportation system, require developer to contribute to improvements to mitigate impacts.

5.9.3 Traffic Calming

Create cross access easements. Where feasible, the Village Planning Board should require cross access agreements between adjacent commercial properties in order to reduce the number of curb cuts onto area roadways.

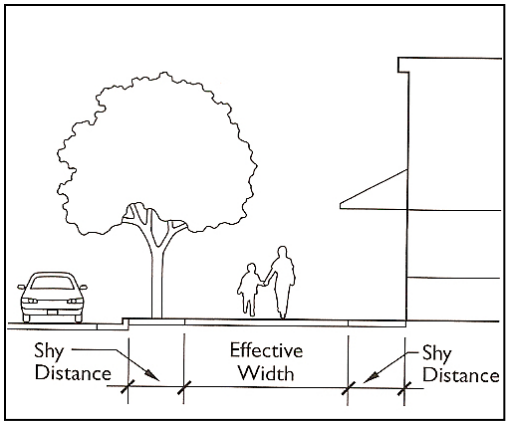
Use textured surfaces for crosswalks to draw motorist's attention to the crosswalk. When used in conjunction with electronic crossing signals, textured surfaces can enhance pedestrian safety as well as the aesthetics of the streetscape.

5.9.4 Pedestrian Policy

Create sidewalk improvement program. Conduct and inventory and assess the conditions of all sidewalks in the Village. Rate the condition of sidewalk segments in order to establish a long-term sidewalk improvement program based and established upgrade and replacement schedule.

"GREAT STREETS DO NOT JUST HAPPEN. OVERWHELMINGLY, THE BEST STREETS DERIVE FROM A CONSCIOUS ACT OF CONCEPTION AND CREATION OF THE STREET AS A WHOLE. THE HANDS OF DECISION MAKERS ARE VISIBLE."

Allan B. Jacobs



Wherever feasible, require new residential and commercial developments to construct sidewalks with ADA ramps. A 5-foot width for residential sidewalks and 6-8 feet within the Downtown.

Provide for a sidewalk along South Montgomery Street. These improvements would provide a safe pedestrian environment for local residents and schoolchildren. *Safe Routes to Schools* grants could be sought for this purpose.

Improve sidewalks and curbs from Highland Avenue to Hess Station along NYS Route 52. These improvements would provide a safe pedestrian environment for local residents.

Integrate bicycle paths and walkways into a multi-modal trail system. A multi-modal pedestrian-bicycle system will reduce the dependence on driving while encouraging a healthy lifestyle of its residents.

5.9.5 Bicycle and Trail Policy

Work with Orange County, neighboring towns, and the NYSDOT to develop linear trails that tie into Village of Walden trail system. Expand regional trail system through intermunicipal cooperation with other municipalities.

Coordinate with Region 8 of NYSDOT to advance the plans for the NYS Route 52 and Route 208 bike routes. The Village could show its support for these efforts by reaching out to NYSDOT to help bring these projects to fruition.

Place bicycle racks in key locations within the Downtown and near community and institutional uses. Placement of bicycle racks will help to promote bicycle use.

5.9.6 Public Transportation

Coordinate with the OCTC and Short Line (Coach USA) to provide public transit, which meets the needs of residents and businesses. The Village Board needs to play an active role in ensuring regional agencies provide necessary services to meet resident needs.

Coordinate with OCTC and MTA-Metro North to establish bus shuttle service to nearby train stations, such as Beacon or Campbell Hall. This will serve commuter needs short-term while efforts to re-establish rail service is pursued.

5.9.7 Rail Service

Recognize the importance of freight service to the economic viability of manufacturers and support efforts to upgrade service. Support efforts by Norfolk Southern to secure funds to upgrade the freight rail line.

Coordinate with OCTC, MTA-Metro North and Norfolk Southern Railroad to bring passenger rail service to Walden along the Wallkill Valley Line. Pursue funding for Phase II Passenger Rail Feasibility Study for service along the New York Central R-O-W with Norfolk Southern and Metro North. This could be a catalyst for reinvestment.

Above (top to bottom): View of Walden's "Little Lombard Street," which is the ADA compliant trailhead to the Walden-Wallkill Rail Trail at Woodruff Street; view of family enjoying a stroll along the rail trail; view of trailhead in Walden with benches for pedestrian comfort. This Plan supports continued efforts to expand bikeways and trails within the Village and the region.