



Village of Swamico Comprehensive Plan

Brown County Planning Commission
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Green Bay, Wisconsin 54301-5025
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CHAPTER 1

Issues and Opportunities

Introduction

The Village of Suamico Comprehensive Plan is a component of a multi-jurisdictional planning effort with Brown County, the City of De Pere, the Villages of Allouez and Wrightstown, and the Town of Ledgeview. Funding for a large portion of the plan was provided by the Wisconsin Department of Administration-Division of Intergovernmental Relations Comprehensive Planning Grant program. The intent of this multi-jurisdictional effort is to promote coordinated and consistent planning across governmental boundaries and through governmental layers.

Until fairly recently, the Village of Suamico was the Town of Suamico. The former Town of Suamico began the incorporation process in 1997 in order to better plan for its residents and to recognize that the growth within the community called for the next logical step in the Town's development. Suamico received approval for incorporation of roughly the southern one-half of the Town by referendum vote of the electors on June 10, 2003. Later in 2003, the Village of Suamico completed its process of incorporation by annexing the remnant part of the Town of Suamico.

The Village of Suamico is located in northwestern Brown County adjacent to the Village of Howard to the south, Town of Pittsfield to the west, the Oconto County Town of Little Suamico to the north, and the bay of Green Bay to the east.

The Village has a relatively dense development pattern near the USH 41/CTH B interchange with an increasingly rural development pattern as one continues outward, which is characterized by large, single-family homes, active farming operations, and large wetland areas. The most defining natural characteristic of the Village is the presence of large wetland areas and peninsulas of land adjacent to the bay of Green Bay, which provide critical habitat for a large number of endangered and threatened plants and animals and spawning areas for fish.

Purpose and Intent

A comprehensive plan is an official public document adopted by ordinance by the local government that sets forth its major policies concerning the future physical development of the community. The primary purposes of this plan are to generate goals for attaining a desirable development pattern, devise strategies and recommendations the Village can follow to achieve its desired development pattern, and meet the requirements of the State of Wisconsin Comprehensive Planning Law. It is intended that the recommendations reflect the following 14 local comprehensive planning goals, prescribed in state statute:

1. Promotion of the redevelopment of lands with existing infrastructures and public services and the maintenance and rehabilitation of existing residential, commercial, and industrial areas.

2. Encouragement of neighborhood designs that support a range of transportation choices.
3. Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces, and groundwater resources.
4. Protection of economically productive areas, including farmland and forests.
5. Encouragement of land uses, densities, and regulations that promote efficient development patterns and relatively low municipal, state governmental, and utility costs.
6. Preservation of cultural, historic, and archeological sites.
7. Encouragement of coordination and cooperation among nearby units of government.
8. Building of community identity by revitalizing main streets and enforcing design standards.
9. Providing an adequate supply of affordable housing for individuals of all income levels throughout each community.
10. Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial, and industrial uses.
11. Promoting the expansion or stabilization of the current economic base and the creation of a range of employment opportunities at the state, regional, and local levels.
12. Balancing individual property rights with community interests and goals.
13. Planning and development of land uses that create or preserve varied and unique urban and rural communities.
14. Providing an integrated, efficient, and economical transportation system that affords mobility, convenience, and safety and that meets the needs of all citizens, including transit-dependent and disabled citizens.

The Village of Suamico Comprehensive Plan is adopted as an ordinance and should be used by Village officials when revising and administering its zoning and other ordinances. The plan should be the basis for siting future developments and extending public services. The plan is designed to be a guiding vision so that there is a consistent policy to follow and a clear goal for the future for the residents of the Village of Suamico.

Comprehensive Planning Process

The most recent comprehensive plan for the Village of Suamico was adopted in 2000. Although the plan was developed relatively recently, Village leaders decided to work with Brown County to take advantage of the State of Wisconsin Department of Administration–Office of Land Information Services Comprehensive Planning Grant program to develop a new plan that would conform to the requirements of the Comprehensive Planning Law and better reflect the Village residents’ vision of how Suamico should develop over the next 20 years.

As administrator of the Comprehensive Planning Grant, the Brown County Planning Commission (BCPC) was contracted to provide professional planning assistance. Staff from BCPC prepared the background information and the recommendations of this plan based upon the consensus opinions of the citizens advisory committee, Village-wide visioning session, and the Comprehensive Planning Law. The planning process involved one year of work and about 15 public meetings of the citizens advisory committee.

This document is comprised of nine parts reflecting the requirements in the Comprehensive Planning Law: Issues and Opportunities; Housing; Transportation; Utilities and Community Facilities; Natural, Cultural, and Agricultural Resources; Economic Development; Intergovernmental Cooperation; Land Use; and Implementation. Although all of these chapters have their own goals, objectives, and recommendations, the elements are all interrelated, and therefore, the goals, objectives, and recommendations are also. This plan was developed with the interrelationships of the elements in mind.

The future land use plan contained within the Land Use chapter of the comprehensive plan provides the vision of how the Village of Suamico can look 20 years from now. There are recommendations regarding the location, density, and design of future development, and these recommendations are the cornerstone of the overall plan. The future land use plan is the composite of the goals, objectives, and recommendations contained in all of the chapters.

The final part of the plan involves implementing the recommendations. A comprehensive plan is only effective when it is actually used. This includes both using the plan on a routine basis when making policy and administrative decisions and when creating and revising municipal ordinances, such as the zoning ordinance, to control and guide development consistent with the plan. An action plan with assigned responsibilities and timelines is included within the Implementation chapter.

This document, however, is not the end of the planning process. For the Village of Suamico to succeed in achieving its vision for the future, planning must be a continual, ongoing exercise. Just as this plan replaces the 2000 Village of Suamico Comprehensive Plan, planning within the Village must continue to evolve to reflect new trends and concepts.

Community Goals and Objectives

A major element of the comprehensive planning process is the identification of goals and objectives that are reflective of the community as a whole. This identification is often difficult because values held by citizens are highly elusive and complex. People vary widely in their choice of values and the degree to which they will accept or tolerate differing attitudes.

In order to identify the Village's priorities for community development, as well as address key issues and concerns, the Brown County Planning Commission facilitated a public visioning session utilizing the nominal group method on October 29, 2003, at Bay Port High School. Approximately 50 residents attended to provide their insights into the future of the Village. The results of the session were sent out in survey form to the visioning session participants, as well as to a representative sample of the Village's residents, to obtain a ranked listing of the issues. It is recognized that there are limitations within comprehensive planning to directly address some of the issues from the visioning session, such as issues dealing with taxes. However, it is hoped that through the implementation of the comprehensive plan, efficiencies in the provision of

public services may be gained, thereby indirectly resulting in positive tax benefits for Village residents. This section includes the top ten issues derived from the survey.

Rank

1. Identify methods of reducing taxes.
2. Preserve the Village's rural character and atmosphere.
3. Make property tax ceiling no higher than what it is today.
4. Maintain the natural beauty of the Village by preserving the wetlands, woodlands, open spaces, and wildlife areas in the Village.
5. Sewer and water should not be placed into areas where it is not needed/wanted.
6. Keep single-family residential and minimize duplex and multifamily development.
7. Developers should pay for sewer/water facilities to their developments.
8. Develop and enforce a comprehensive land use plan to eliminate uncontrolled growth.
9. Maintain large lot sizes, such as a 2-acre minimum in non-sewered areas.
10. Create a "business friendly" atmosphere by developing a comprehensive business plan and recruiting businesses to the Village's industrial park to relieve tax burden.

The nominal group session, survey results, input from the citizens advisory committee, the State of Wisconsin Comprehensive Planning Law, and sound planning principles formed the basis for the development of the goals and objectives.

Goals and objectives each have a distinct and different purpose within the planning process. Goals describe desired situations toward which planning efforts should be directed. They are broad and long-range. They represent an end to be sought; although, they may never actually be fully attained. Objectives describe more specific purposes, which should be sought in order to advance toward the achievement of the overall goals. The third part of the planning process, policies and programs, is discussed in each chapter specific to that comprehensive plan element.

The comprehensive plan and future development of the Village are based on the following goals and objectives.

Land Use Goal

To manage the future growth and land uses within the Village to ensure orderly, balanced development that maintains or improves quality of life, maximizes the efficient provision of municipal services, enhances the village center, and promotes neighborhood centers that integrate mixed land uses and a variety of transportation choices.

Objectives

- Identify future service areas in 5-year increments based on projected growth rates and the ability to efficiently provide services.
- Continue the development of the village center that serves as the major node for civic and governmental activities, characterized by a more compact, pedestrian-friendly mixed-use design.

- Encourage specialty retail, tourism-oriented services, governmental services, and more dense residential development in the village center area.
- Identify appropriate uses for the areas along the Suamico River and harbor while preserving the area's natural beauty.
- Strive for a compact, efficient land use pattern by encouraging the development of existing vacant and underutilized lots.
- Identify and reserve appropriate areas along USH 41/141 for future light industrial and business park expansion and seek ways to better integrate these uses into the community.
- Ensure the compatibility of adjoining land uses for both existing and future development.
- Maintain the rural character of the Village by encouraging the preservation of large tracts of woodlands, wetlands, floodplains, open spaces, barns, fences, hedgerows, rivers, and creeks.
- Require new commercial, light industrial, and multifamily residential development and encourage existing development to meet architectural and landscape design standards to promote the desired character of the Village and to ensure compatibility of adjoining uses.
- Discourage strip commercial development in favor of clustering commercial activities at designated nodes or selected locations that can service nearby neighborhoods.
- Promote traditional neighborhood design (TND) as a viable mixed-use development option near and within the village center.
- Encourage conservation by design developments in the Village where this development approach is appropriate.
- Coordinate the layout of new developments with the need for traffic circulation and pedestrian facilities.
- Provide for a mix of residential uses and housing types within neighborhoods through the establishment of flexible zoning standards and the promotion of planned developments.
- Require the installation of neighborhood facilities within new subdivisions where appropriate, such as street trees, sidewalks/trails, and sites for playgrounds.

Transportation Goal

To develop a safe and efficient multi-modal transportation system that serves all Suamico residents.

Objectives

- Continue to develop the village center as an area that contains a mix of residential, commercial, and institutional uses to make walking and bicycling viable transportation options and minimize traffic on the existing street system.
- Encourage the development of neighborhoods that may contain a mix of residential, neighborhood-scale commercial, recreational, and institutional uses that serve as formal and informal meeting places and allow all residents to easily reach them.
- Create connected street patterns to distribute traffic evenly and to maximize mobility and accessibility for all residents.
- Preserve future street corridors and connections through area development plans and official mapping activities.
- Maximize safety and accessibility at the Village's intersections and rail crossings.
- Improve pedestrian circulation in the village center by calming traffic and making street and railroad crossings safer.
- Utilize traffic calming techniques on many of the Village's other existing streets to improve safety and minimize the impacts of vehicles on residential neighborhoods.
- Continue to develop the Village's pedestrian system by developing a system of sidewalks in the village center and trails and bicycle facilities throughout the Village to encourage alternative modes of transportation.
- Enable developers to build narrow streets to slow traffic through neighborhoods, minimize construction and maintenance costs, and maximize safety for all residents.
- Provide safe and convenient pedestrian and bicycle connections to destinations, such as parks, schools, employment centers, shopping areas, and between/within subdivisions.
- Enhance the appearance of the Village's entrances and thoroughfares.
- Work with Brown County, WisDOT, the Howard-Suamico School District, and other agencies to develop the Village's multi-modal transportation system.
- Promote the utilization of the freight rail line running through Suamico for economic development activities.
- Apply for grants to help fund the development of the Village's multi-modal transportation system.

Economic Development Goal

Broaden the tax base and strengthen Suamico's economy and employment base through the expansion of commercial and light industrial activity in a way that does not detract from the Village's rural character.

Objectives

- Continue the implementation of the USH 41/141 Corridor Land Use Plan adopted January 1998.
- Encourage businesses and industries to promote environmentally-friendly practices, such as recycling, erosion control, and pollution controls.
- Identify additional appropriate areas for light industrial and commercial activities within the Village.
- Continue to develop a pedestrian-friendly village center to help foster community identity and to serve as a focal point for local economic development.
- Encourage a mix of residential and specialty retail and tourism-oriented commercial uses within the village center.
- Identify and utilize government programs to aid in the retention of existing and attraction or promotion of new light industrial or commercial activities.
- Encourage the redevelopment of underutilized, vacant, and brownfield commercial and industrial areas.
- Encourage commercial development in smaller neighborhood centers and the downtown area rather than in strips along main thoroughfares.
- Promote economic activities that incorporate views and uses of the Suamico River and harbor.
- Continue to develop the Village's economic development partnerships with agencies, such as Advance, Brown County Planning, Bay-Lake Regional Planning Commission, and the Wisconsin Department of Commerce.

Housing Goal

Develop and maintain neighborhoods that offer a variety of quality housing opportunities for Suamico residents of all ages and a variety of income levels.

Objectives

- Promote reinvestment in the existing housing stock in order to maintain property values and strong neighborhoods.
- Promote an adequate supply and mix of housing types for individuals of different life stages, physical abilities, and income levels.
- Encourage the development of additional special-needs residential facilities to help care for a diverse population.
- Identify residential Smart Growth areas next to existing development to take advantage of existing utilities and public services.
- Promote traditional neighborhood design (TND) as a viable mixed-use development option near the village center.

- Encourage the development of conservation by design subdivisions in the more rural parts of the Village.
- Develop and implement residential maintenance standards.
- Identify and utilize government programs, such as the Brown County Housing Authority and the Wisconsin Housing and Economic Development Authority (WHEDA), to diversify the Village's housing stock.

Community Facilities and Utilities Goal

Promote a quality living environment through the timely provision of adequate and efficient recreation, utility, emergency, and other public facilities and services affecting the health, safety, and well-being of Suamico residents and businesses.

Objectives

- Work with the Howard-Suamico School District to identify sites for future schools within and near the Village.
- Develop and maintain a long-term viable supply and distribution system of high quality public water.
- Continue to provide quality police, fire, and rescue services for all residents and businesses and identify sites for future facilities as the Village grows.
- Expand the amount of greenspace within the Village by providing small neighborhood parks within residential areas.
- Plan, locate, and develop new recreational facilities and expand the activities within existing parks to respond to the changing needs and desires of all segments of the population.
- Maintain the Village's existing public facilities and replace aging/obsolete infrastructure and equipment in a timely fashion.
- Promote the efficient use of existing community facilities, such as streets, sewers, and water, through infill development and planned outward expansion.
- Expand the Village's public sewer and water services in a manner consistent with the identified 5-year service increments in order to allow residents to accurately plan for the future.
- Continue the development of the Village's community-wide trail network that will allow residents to walk, bike, and engage in other similar activities.
- Coordinate development efforts and the use of recreational facilities between Suamico, local schools, churches, and nonprofit organizations.
- Implement the recommendations in the Village's comprehensive stormwater management plan to address water quantity issues (such as flooding) and water quality issues (through the protection of wetlands and stream habitats).

Natural, Cultural, and Agricultural Resources Goal

Capitalize on the amenities offered by the Village's natural, cultural, and agricultural resources and integrate these features into future development in order to enhance the character of Suamico and the quality of life of its residents.

Objectives

- Support agricultural and erosion control programs designed to improve water quality in the Suamico River, the waters of Green Bay, and other surface waters in the Village.
- Identify and protect major drainage corridors through watershed planning in order to aid in the management of stormwater runoff.
- Preserve wetlands, floodplains, and other environmental areas to link various parts of the Village and to serve as wildlife corridors, pedestrian trails, and stormwater management areas.
- Utilize the existence of significant natural resources as a key factor when identifying locations for future parks.
- Maintain and enhance the accessibility of public lands along the waters of the Suamico River and bayshore.
- Coordinate future parks and greenspace with adjoining communities and the recommendations in the Brown County Open Space and Outdoor Recreation Plan.
- Promote a more harmonious relationship between the natural landscape and future development through the use of conservation subdivisions and other flexible land development techniques.
- Continue to maintain and enhance the appearance and community identity of the Village through the use of commercial and light industrial building design standards, landscaping, attractive signage, and other beautification techniques.
- Identify historic buildings in the Village and encourage their maintenance, rehabilitation, or adaptive reuse.
- Preserve archeological sites by incorporating them into the greenspace requirements of conservation subdivisions or other parklands.

Intergovernmental Cooperation Goal

To work with the surrounding communities, Howard-Suamico School District, Brown County, Bay-Lake Regional Planning Commission, and State of Wisconsin to cooperatively plan and develop the Village and region.

Objectives

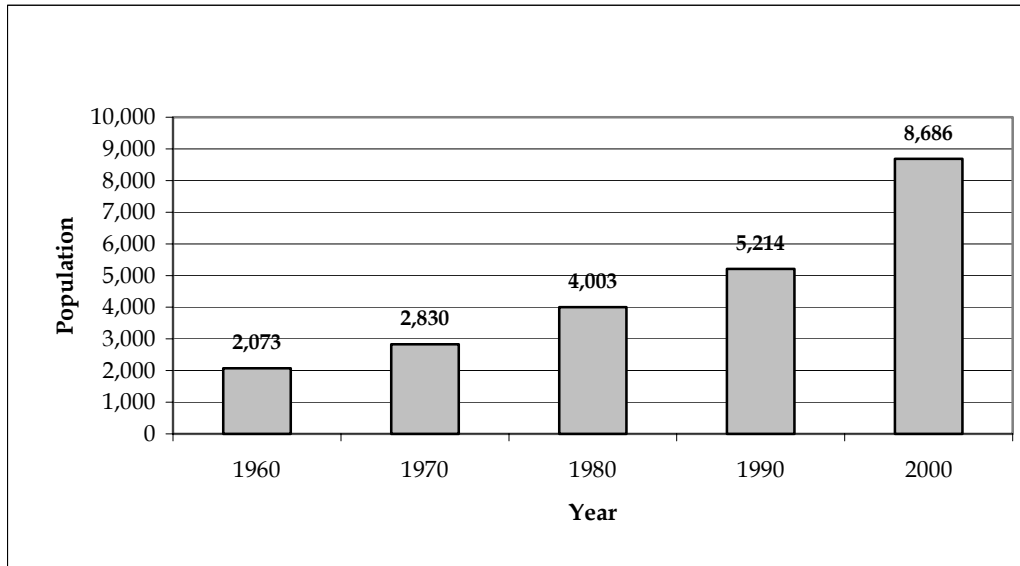
- Work with the Howard-Suamico School District to identify potential school locations.

- Work with the surrounding communities to proactively resolve boundary issues, coordinate municipal services, and address other issues of mutual concern.
- Continue to work with the surrounding communities, Brown County, Oconto County, and WisDOT to appropriately plan for the USH 41/141 highway corridor.
- Identify existing conflicts with the surrounding communities and work with the communities and Brown County Planning Commission to resolve these conflicts.
- Utilize the Village's extraterritorial review authority to ensure that development immediately outside the Village limits is compatible with development within the Village.
- Cooperate with the other area communities to attract businesses to the area.
- Continue to work with the surrounding communities, Brown County, and Oconto County to develop an off-street trail system that serves the Village and region.

Demographic Trends

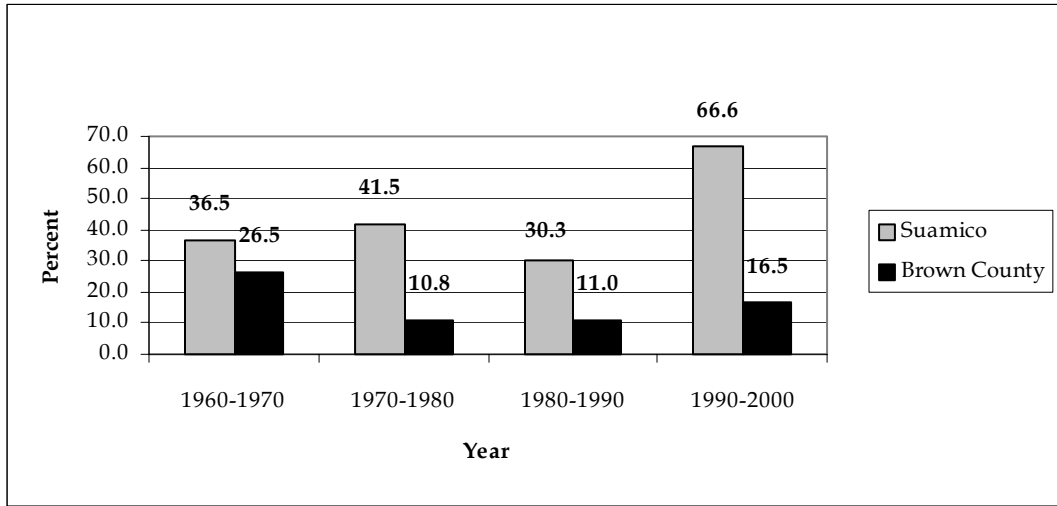
As shown in Figure 1-1 and Figure 1-2, between the years of 1960-1990, the Village of Suamico grew at a steady rate, adding 3,141 residents over a 30-year time-period, which equates to 1,047 residents per decade. However, between the years of 1990 and 2000, the Village population spiked upward, adding 3,472 new residents in a 10-year timeframe, for an increase of 66.6 percent. The state population estimates for the years 2001-2003 indicate that the strong population growth in the Village is continuing with an estimated 1,038 new residents being added over just three years.

Figure 1-1: Village of Suamico Historic Growth Trend, 1960-2000



Source: U.S. Census of Population, 1960-2000

Figure 1-2: Village of Suamico and Brown County Percent Population Increase, 1960-2000

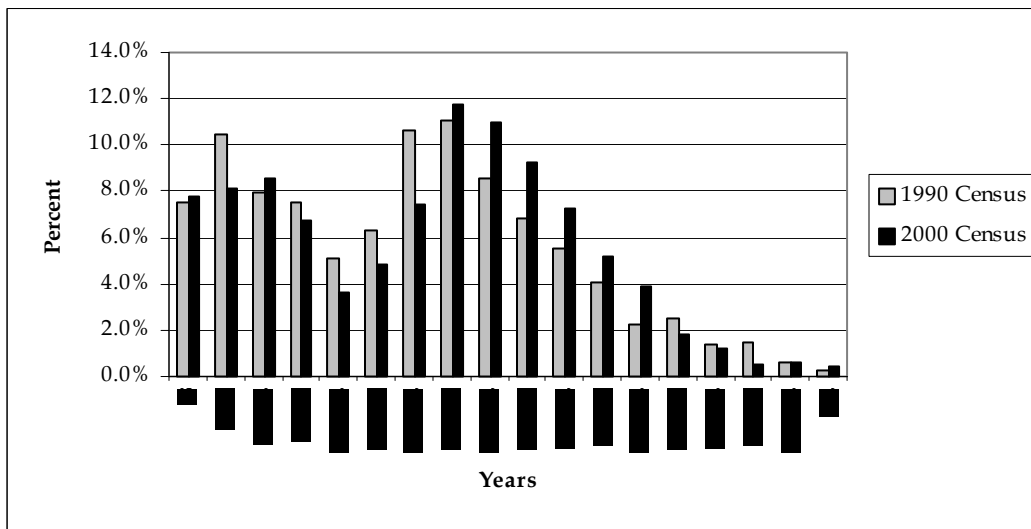


Source: U.S. Census of Population, 1960-2000.

Age Distribution

Census figures show that the 2000 median age of Village of Suamico residents was 36.2 years as compared to 32.4 years of age in 1990, which indicates an aging population. This trend is depicted in Figure 1-3, where the age group of 60-64 experienced a high increase between 1990 and 2000; although, it is still a relatively small part of the overall population. The overall aging of a community is fairly typical due to the aging of the “baby boomer” population. This trend is again evident in the graph as the largest segments of the population continue to age.

Figure 1-3: Village of Suamico Age as a Percentage of Population, 1990 and 2000



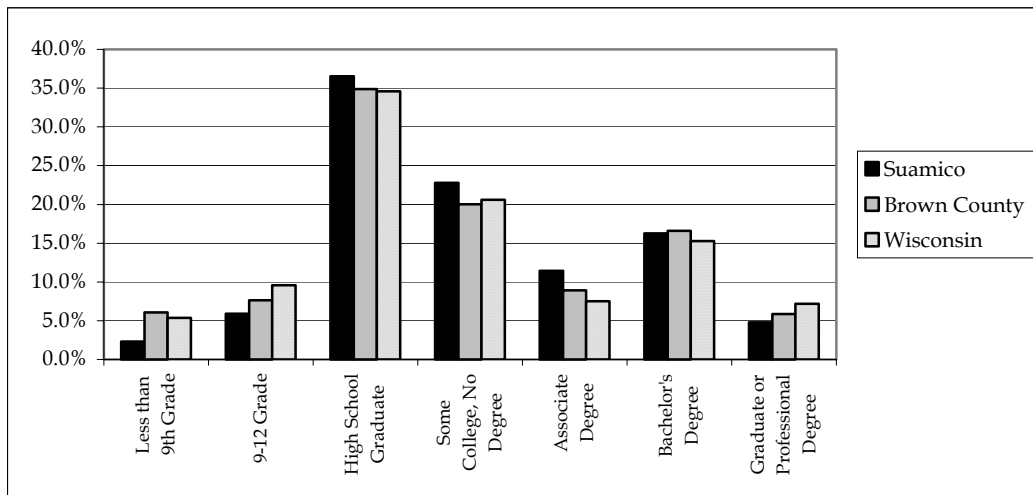
Source: U.S. Census of Population, 1990 and 2000.

The total number of school aged children (5-19) increased by 50.3 percent between 1990 and 2000, while residents of working age (20-64) increased by 77.1 percent, and those residents of retirement age (65 or greater) increased by 24.0 percent. All of these sharp increases reflect the rather dramatic growth that has taken place in Suamico between 1990 and 2000. As the Village continues to age while growing at such a fast rate, Suamico should ensure that adequate facilities exist within the Village to care for an aging population. Conversely, the Village is also experiencing very high percentages of its population being of school age. The Village will need to work with the Howard-Suamico School District to ensure properly sized and placed school facilities for school-aged children.

Education Levels

As is evident from Figure 1-4, the largest percentage of Village of Suamico residents has earned a high school diploma. This is very similar to both Brown County and the State of Wisconsin. In terms of advanced education beyond high school, the Village has a higher percentage of residents with some college – no degree earned – and associates degrees than either the county or state. Suamico has a slightly greater percentage of residents with bachelor’s degrees than the state and a slightly lower percentage of residents with graduate or professional degrees than either the county or state.

Figure 1-4: Educational Attainment of People 25 and Over, Village of Suamico, Brown County, and State of Wisconsin, 2000



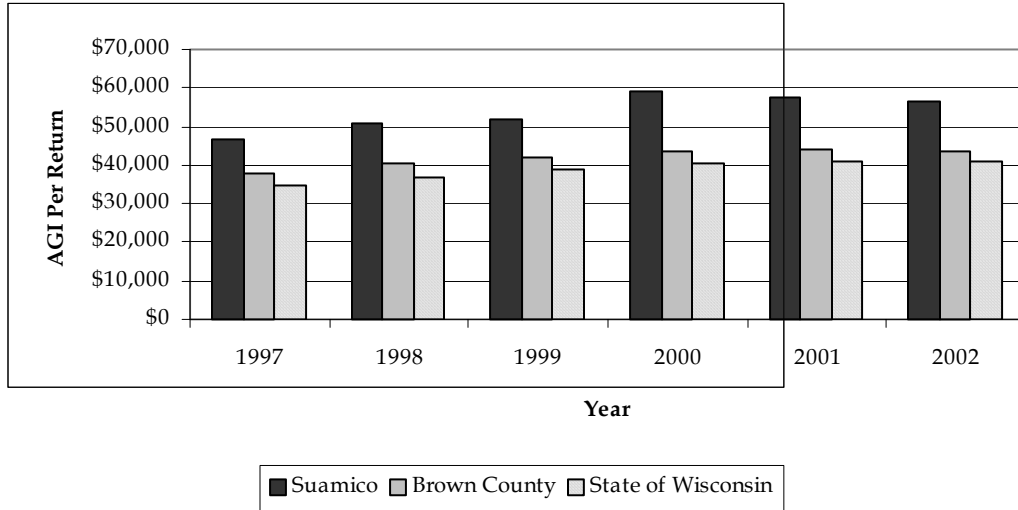
Source: U.S. Bureau of the Census, 2000

Income Levels

According to the Wisconsin Department of Revenue-Division of Research and Analysis, the Village of Suamico’s adjusted gross income (AGI) per tax return is significantly higher than both the county and state. The most recent year for which information is available lists the year 2001 AGI for the Village of Suamico at \$57,728, which is a \$1,450

decrease from the 2000 AGI after a \$7,347 increase between 1999 and 2000. Figure 1-5 displays the AGI trend over the past six years.

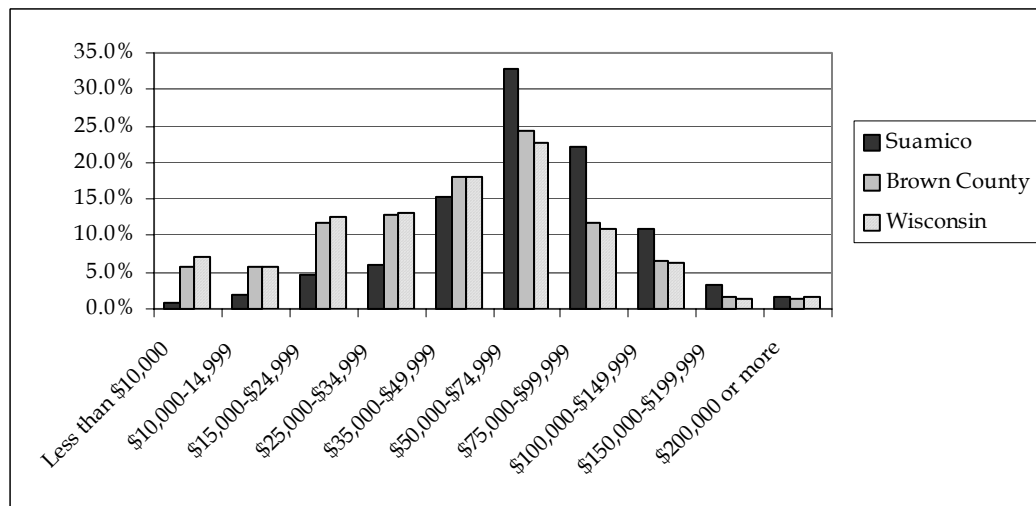
Figure 1-5: Municipal Per Return Income, 1997-2002



Source: State of Wisconsin Department of Revenue, *Municipal Per Return Income Report, 1997-2002*.

The 2000 census also provides ranges for income levels. As is evident from the graph, the largest percentage of Suamico households are within the \$50,000-\$74,999 income range at 32.9 percent, which is similar to the state and county. However, the Village has significantly higher percentages of households in the upper ranges of income levels as compared to the county and state. The household income percentages are displayed in Figure 1-6.

Figure 1-6: Household Income in 1999.



Source: U.S. Bureau of the Census, 2000.

Employment Characteristics

As displayed in Figure 1-7, management, professional, and related occupations and sales and office occupations are the largest two occupation categories for Village of Suamico residents with 33.0 percent and 26.3 percent of the population, respectively. These occupations correspond to the generally higher income ranges found in the Village as compared to Brown County and the State of Wisconsin as a whole.

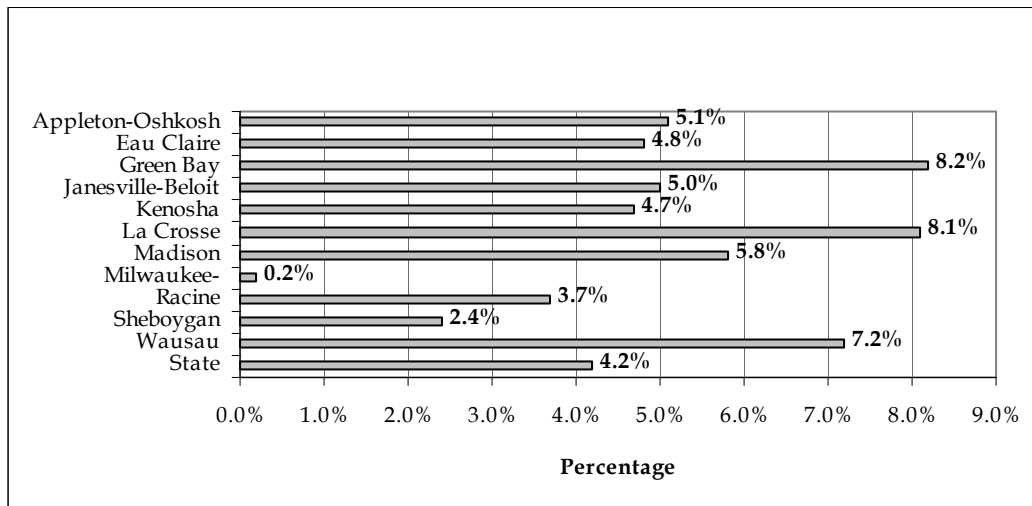
Figure 1-7: Village of Suamico Employment by Occupation

Occupation	Number	Percent
Management, professional, and related occupations	1,668	33.0
Sales and office occupations	1,332	26.3
Production, transportation, and material moving	1,019	20.1
Construction, extraction, and maintenance occupations	680	13.4
Service occupations	337	6.7
Farming, fishing, and forestry occupations	26	0.5

Source: U.S. Census Bureau, Table DP-3 Profile of Selected Economic Characteristics: 2000.

Employment Forecast

Figure 1-8: Total Non-Farm Employment Forecasts by MSA, 2002-2006



Source: Wisconsin Dept. of Revenue—Division of Research and Policy *Metropolitan Area Outlook 2002-2006*.

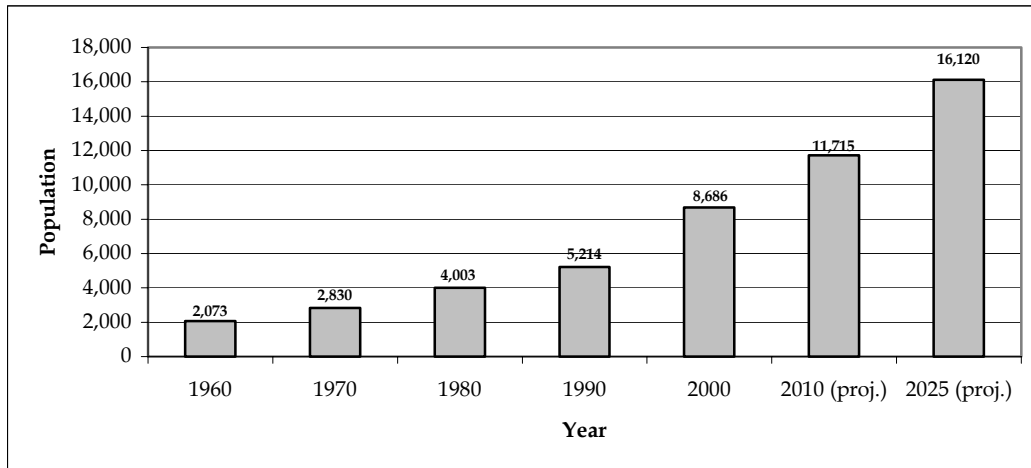
The Green Bay Metropolitan Statistical Area, where the vast majority of Suamico residents work, is projected to continue employment growth. According to the State of Wisconsin Department of Revenue—Division of Research and Policy, the most recent *Metropolitan Area Outlook* states that employment in the Green Bay Metropolitan Area (MSA) grew slightly by 0.1 percent in 2002, following 0.3 percent growth in 2001. From 2002 to 2006, the Green Bay MSA is projected to grow by a total of 8.2 percent, which is the highest growth rate among the state's MSAs. The printing and publishing sector is expected to recover after losses in 2001 and 2002, while strong growth is also expected in

the finance, insurance, and real estate sector, as well as in the services and wholesale trades sectors. Although employment growth within the Green Bay MSA will not be as great as during the 1990s, forecasted employment growth will continue to be comparatively stronger than most other areas in the state. Figure 1-8 displays total non-farm employment forecasts by Wisconsin MSA for 2002-2006.

Population and Housing Forecasts

In March of 2004, the Wisconsin Department of Administration released updated population projections for communities in the state through 2025. According to the projections, the Village of Suamico is forecasted to grow to 11,715 people by 2010 and to 16,120 residents by 2025. This trend results in a projected 85.6 percent population growth rate from 2000 to 2025, or roughly 3.4 percent per year for the Village of Suamico. The historic and projected population of the Village from 1960 through 2025 is displayed in Figure 1-9.

Figure 1-9: Village of Suamico Historic and Projected Population



Source: U.S. Census Bureau 2000; Wisconsin Dept. of Administration, 2003.

In order to determine an approximate number of required housing units that will be needed by 2025, the projected populations for 2010 and 2025 were divided by the average of 2.92 people per household in the Village. This results in a projected need for another 1,037 housing units required by 2010 and 2,546 housing units by 2025 in addition to the 3,078 units the Village already contained in 2000. The Housing chapter will go into more detail regarding the housing market, values, and current trends in Suamico.

Summary

The Village of Suamico has experienced very rapid population increases over the past ten years. This is very likely due to its natural beauty and easy access to the Green Bay Metropolitan Area via USH 41. Over the next 20 years, the Village is projected to add at least 7,434 new residents, increasing the total population to over 16,120. In order to

house the projected increase in population, a minimum of 2,546 new housing units are needed by the year 2025.

As the demographic trends indicate, the median age in the Village increased over the past ten years from 32.4 years of age in 1990 to 36.2 years of age in 2000. As the Village's population continues to age, providing a range of housing and other opportunities for the elderly will become an increasingly important issue. Conversely, the Village is also experiencing a rather large influx of families with children, creating the need for very close coordination with the Howard-Suamico School District when siting schools and recreation facilities. As new developments are platted in the Village, ensuring accessibility for the elderly and children in the design of new neighborhoods will also become increasingly important.

Although the strong population, employment, and housing growth in the Village will provide an opportunity to implement many of the stated objectives in the comprehensive plan, providing services to the growing population while protecting the Village's unique natural resources in the face of development pressures must also be considered and planned.

CHAPTER 2

Land Use

As presented in the Issues and Opportunities chapter, the Village of Suamico has experienced tremendous growth in recent years, which has greatly altered the character of the community. The high rate of growth is projected to continue through the course of this plan. Thus, it is extremely important that Suamico set growth policies and standards to guide future development so that the plan's goals and objectives are met. This section of the plan identifies the Village's existing land uses, and based on Suamico's identified goals and objectives, it provides recommendations for the Village to implement in order to attain its desired future land uses and patterns.

Existing Land Use

In order to plan for future land use and development in Suamico, it is necessary to consider existing land uses and development trends. A land use inventory, which classifies different types of land use activities, is an important means of identifying current conditions. In addition, by comparing land use inventories from previous years, various trends can be discerned that are helpful in establishing the plan for future land use.

The Brown County Planning Commission conducts a countywide land use inventory every decade. Fieldwork for the most recent inventory was completed in June 2000 and updated in January 2004. Using this data, the various land use categories were broken down by acreage. Figure 2-1 describes the land use composition of the Village, and Figure 2-2 identifies the location of the various land uses within the Village.

Figure 2-1: Village of Suamico January 2004 Land Use Acreage

Land Use	Total Acres	Percent of Total
Single-Family	5,439.7	23.06%
Two-Family	65.2	0.28%
Multifamily	13.7	0.06%
Total Residential	5,518.6	23.40%
Retail Sales	62.2	0.26%
Retail Services	35.3	0.15%
Total Commercial	97.5	0.41%
Manufacturing	56.5	0.24%
Wholesaling	3.5	0.01%
Extractive (Sand/Gravel Pits)	82.3	0.35%
Storage	42.0	0.18%
Total Industrial	184.3	0.78%

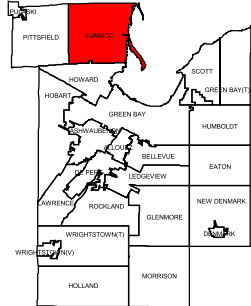
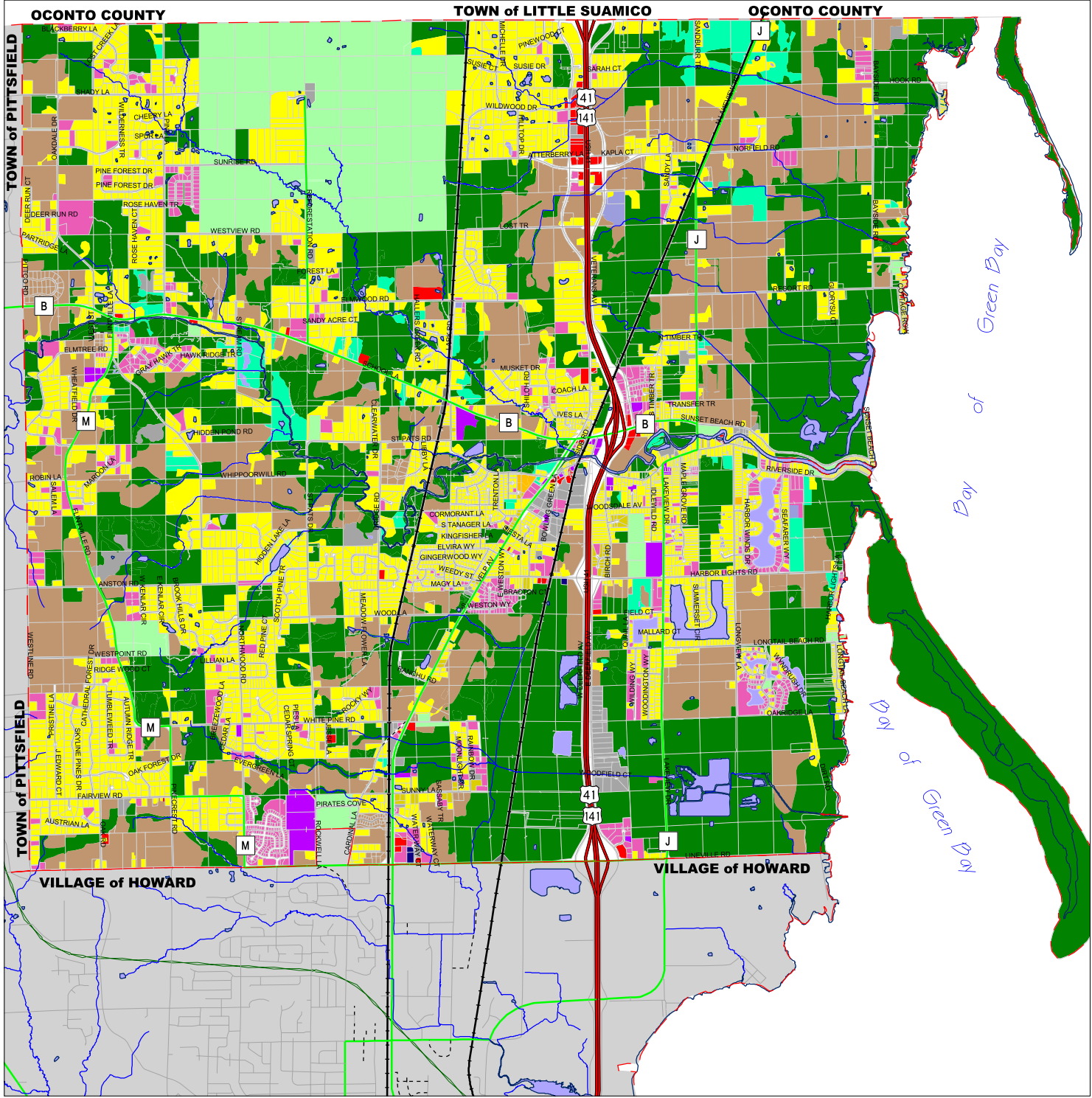
Land Use	Total Acres	Percent of Total
Streets and Highways	1,511.6	6.41%
Railroads	153.9	0.65%
Total Transportation	1,665.5	7.06%
Generation/Processing of Comm./Util.	3.9	0.02%
Transmission of Communication/Utilities	1.3	0.01%
Waste Processing/Disposal/Recycling	19.7	0.08%
Total Communication/Utilities	24.9	0.11%
Administrative/Governmental Facilities	20.6	0.09%
Safety Institutions/Facilities	2.9	0.01%
Educational Facilities	116.0	0.49%
Assembly Institutions	2.4	0.01%
Religious and Related Facilities	20.2	0.09%
Total Institutional/Governmental	162.1	0.69%
Zoos	37.2	0.16%
Parks/Playfields/Picnic Areas	1,523.1	6.46%
Golf Course Driving Range	7.4	0.03%
Archery/Gun/Skeet Ranges	8.9	0.04%
Water Access Sites/Marinas	24.1	0.10%
Total Outdoor Recreation	1,600.7	6.78%
Open Space/Cropland/Pasture	4,668.4	19.79%
Agricultural Buildings	145.6	0.62%
Total Agricultural	4,814.4	20.41%
Water Features	369.8	1.57%
Wildlife Refuges	420.3	1.78%
Woodlands	2,268.0	9.61%
Other Natural Areas	5,490.5	23.27%
Total Natural Areas	8,548.6	36.23%
Land Under Residential Development	851.9	3.61%
Land Under Commercial Development	39.4	0.17%
Land Under Industrial Development	86.0	0.36%
Total Land Under Active Development	977.3	4.14%
GRAND TOTAL	23,593.9	100.01*%

Source: Year 2000 Brown County Land Use Inventory; 2003 Update. Totals do not add up to 100 percent due to rounding.



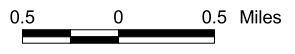
Figure 2-2 Existing Land Use

Village of Suamico, Brown County, WI



- | | |
|---|---|
| Single-Family Residential | Communications/Utilities |
| Two-Family Residential | Governmental/Institutional |
| Multifamily Residential | Parks and Recreation |
| Group Quarters | Open Space/Fallow Fields |
| Mobile Homes | Agricultural |
| Commercial | Natural Areas, Woodlands, Undeveloped Open Space |
| Industrial | Water Features |
| Road Rights-of-Way | Land Under Development |
| Transportation-Related | |
| Rail Related | |

Scale: 1 inch = 1 mile



This is a compilation of records and data located in various Brown County and City of Green Bay offices and is to be used for reference purposes only. The map is controlled by the field measurements between the corners of the Public Land Survey System and the parcels are mapped from available records which may not precisely fit field conditions. Brown County/City of Green Bay are not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

Map prepared by Brown County Planning Department, December 2004.

Source: Brown County Land Use Inventory, January, 2004.

Residential Land Uses

Of the developed land uses, residential is the dominant category. In January of 2004, the Village of Suamico had 5,518.6 acres devoted to residential land use (which is 23.4 percent of the Village's total acreage), as compared to 2,418 residential acres in 1990. Residential uses are predominantly single-family homes with 98.6 percent of the overall housing stock. However, a number of recently approved subdivision plats provide areas for condominium, duplex, and multifamily units as a response to the growing and diversifying population in Suamico. As Suamico continues to grow, it may wish to consider further diversification in its housing stock in order to account for continued changes in its demographics and housing choices.

The amount of land dedicated to residential development has increased by 128 percent over the past 13 years, while the Village's population has increased by 86 percent. This is indicative of the larger nature of the residential parcels in the Village, particularly the unsewered lots in the western and northern portions of Suamico. The presence of developable land, downturn in the agricultural economy, availability of public services, and the Village's location adjacent to the Green Bay Metropolitan Area have all helped contribute to the dramatic increases in residential lands as most residents live in Suamico and commute to their jobs.

In terms of location, the highest concentration of sewerred residential development is south of the USH 41/141 and CTH B interchange adjacent to Velp Avenue. The majority of homes in this area are suburban-style single-family residences with lots generally one-third to one-half acre in size. Recently, a number of condominium and duplex units have been developed in this area, as well, helping to diversify the Village's housing stock.

The Village has a number of homes concentrated near the numerous water features that exist in Suamico. The Suamico River from the village center area east to the bayshore is developed on both sides with a wide range of single-family homes and formerly seasonal cottages. The bayshore is experiencing a change in residential development, as formerly seasonal cottages on very small lots are being bought and demolished in favor of new, very large year-round homes. The Village has also experienced the construction of a number of private lakes for residential development east of USH 41/141.

There are a large number of subdivisions in Suamico that rely on onsite sewage disposal systems. These subdivisions are primarily located in the western part of the Village along CTH M (Flintville Road) and around the Brown County Reforestation Camp and NEW Zoo. Lots in these subdivisions generally range from 1 to 4 acres in size. Within the past few years, there has been increased platting activity (Hawk's Nest Subdivision, Church Hill Estates) with onsite systems near the unincorporated community of Flintville at the intersection of CTH B and CTH M. The lots in the Village with onsite systems are almost exclusively single-family homes.

In addition to the areas of the Village that have existing residential developments, there are a number of subdivisions that have been recently approved and are in the process of developing the roads, stormwater management ponds, etc. before homes are built or

there are existing developments that contain vacant lots. These areas account for another 851.9 acres of potential residential lands in the Village.

Commercial Land Uses

Commercial land uses occupy 97.5 acres, or 0.41 percent of the Village. There are three primary areas of commercial activities within Suamico. The primary area is the historic village center at the CTH B and USH 41/141 interchange. There is a mixture of retail and service businesses serving the local residents, as well as travelers on USH 41/141. This area is envisioned in the village center plan to become the commercial heart of the Village and to cater to tourists and local residents alike.

The second area of commercial development is along USH 41/141 at the Norfield Road overpass. Before USH 41/141 was converted to a freeway, Norfield Road had at-grade access to the highway, thereby creating a favorable location for highway-oriented land uses, such as gas stations. Since the conversion from at-grade access to an overpass, the gas stations have left, and commercial activities are now primarily sales and service activities (auto sales, boat sales and services, etc.) utilizing the highway visibility for advertising purposes rather than for access. This part of the highway corridor also has a number of large billboards.

The third area of commercial activity is the USH 41/141 and Lineville Road interchange on the Village's southerly border. It currently contains a gas station/convenience store and hardware store. However, with recent upgrades to East Deerfield Road, which runs parallel to USH 41/141, this area may become increasingly attractive for commercial and/or light industrial development.

In addition to 97.5 acres of existing commercial lands, the Village contains another 39.4 acres of commercial land that are currently undergoing development or are platted for commercial uses.

Industrial Land Uses

The Village of Suamico Industrial Park located near the center of Suamico east of Velp Avenue and south of Riverside Drive dominates industrial activity. Started in 1979, the park consists of 15 lots totaling 39 acres. All of the lots are presently occupied. Businesses within the industrial park primarily consist of small, light manufacturing shops and warehousing.

A second developing area of light industrial land uses is along East Deerfield Avenue adjacent to USH 41/141 and north of Lineville Road. Existing uses consist of construction offices, outdoor equipment and supply storage, and other small businesses. Due to the high degree of visibility from USH 41/141 and the street improvements completed on East Deerfield Avenue, additional light industrial and business enterprises can be expected to locate here over the course of the plan.

Additionally, the Village has a few small sand and gravel pits located within its boundaries, including the ones located on Pine Lane just north of CTH B and one located on Northwood Road just west of Hidden Pond Road.

Existing industrial uses occupy 184.3 acres of land (0.78 percent) in the Village with another 86.0 acres of land undergoing or available for industrial development.

Institutional/Governmental Land Uses

Educational uses are the largest institutional/governmental land use accounting for 116.0 acres. The two public schools in Suamico include Bay Port High School on Lineville Road and Suamico Elementary at the corner of CTH B and Riverside Drive. Additional large institutional/governmental uses include the Suamico Village Hall and offices on CTH J, as well as a number of religious-related and other institutional/governmental uses scattered throughout the Village. The institutional/governmental land use total of 162.1 acres represents about 0.69 percent of the Village.

Outdoor Recreation Uses

The land use inventory update indicates that Suamico contained 1,600.7 acres of outdoor recreation uses in January of 2004, which comprised 7.06 percent of the Village. This figure includes a number of Village parks, Howard-Suamico School District athletic fields, and large natural areas owned by either Brown County or the Wisconsin Department of Natural Resources. The two largest park/recreation sites include the NEW Zoo/Reforestation Camp in the north-central part of the Village and the Sensiba/Long Tail Point Wildlife Areas in the east-central part of the Village. Parks and other outdoor recreational uses are discussed in detail in the Utilities and Community Facilities chapter of the plan.

Agricultural Land Uses

As Suamico continues to grow, agricultural uses in the Village continue to decrease. In 1990, the Village contained 6,771 acres (28.8 percent) of agricultural land. However, by January of 2004, this total decreased to 4,814.4 acres (20.41 percent). The remaining agricultural lands are becoming increasingly fragmented by new subdivisions throughout the Village. The largest area of contiguous agricultural land is located in the northeastern part of the Village. However, much of this land is lying fallow and is not actively farmed. Agricultural land totals are expected to continue to decrease as the Village's development continues to increase.

Natural Areas

Suamico contains a number of natural areas associated with the Suamico River, bay of Green Bay, Haller Creek, and a number of wetlands that dot the landscape. The natural areas shown on the existing land use map may include wetlands, woodlands, floodplains, and former agricultural areas in the early stages of converting back to woodlands or prairies.

The Village of Suamico has the largest amount of woodlands and wetlands of any municipality in Brown County. The Wisconsin Department of Natural Resources Wetlands Inventory Map classifies approximately 22 percent of the Village as wetlands.

Patches of woodlands are intermixed throughout Suamico. However, the northwestern

and southeastern portions of the Village have the largest contiguous blocks of woodlands. These woodlands are anchored by the Brown County Reforestation Camp and Barkhausen Waterfowl Preserve and are, therefore, likely to remain wooded. Other woodlands in the Village are being lost or threatened by residential subdivisions and (to a lesser extent) business development.

In addition to the woodlands located in these areas, the Village also contains two very unique natural areas associated with the bay of Green Bay. Both Long Tail Point/Sensiba Wildlife Area and Little Tail Point/Little Tail Point Management Unit are very important wetland areas on the bay of Green Bay's west shore. These areas provide vital wildlife and bird habitats, as well as critical fish spawning grounds.

Natural areas are a critical element of the rural character desired by the Village's residents. Thus, an important consideration of this plan is to seek ways to accommodate additional growth while still maintaining the woodlands and wetlands that are at least partially responsible for attracting new residents to Suamico.

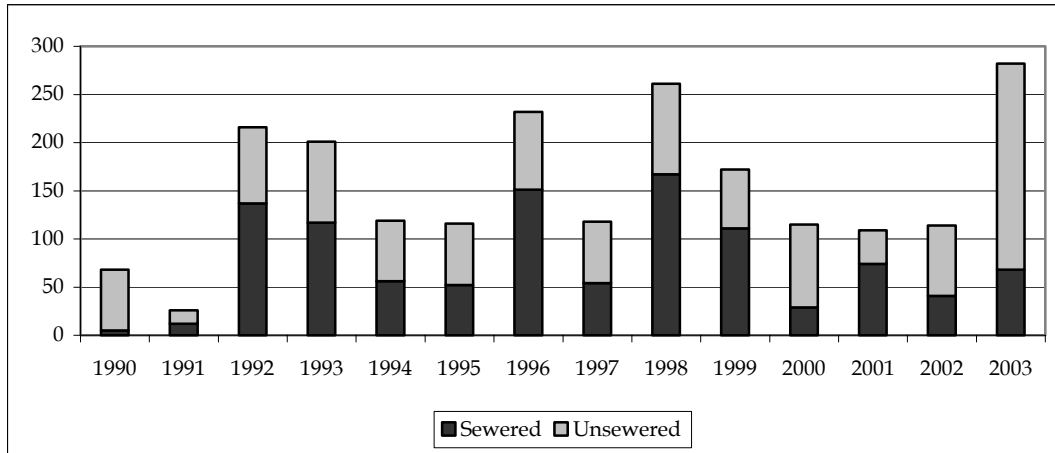
Land Use Trend Analysis

Supply and Demand

As displayed in Figure 2-3, there have been 1,171 new lots created in Suamico since 1990, with an average of 154 new lots per year. Historically, the Village has allowed both sewerred and unsewerred lots at roughly equal percentages. The 2000 comprehensive plan identified a goal of allowing 75 percent sewerred development and 25 percent unsewerred development. However, since the plan was adopted in 2000, the Village has not met that goal, and most recently in 2003, the Village actually approved 75.9 percent unsewerred lots to 24.1 percent sewerred lots. During the years of 2000-2003, Suamico was undertaking a large facility planning effort to determine the best option for the Village in terms of increasing capacity at its sewage plant or connecting to the Green Bay Metropolitan Sewerage District (GBMSD). During this time-period, the Village was not able to approve new publicly-sewerred subdivisions due to effluent capacity constraints at the Village's sewage plant, resulting in a proportionally much larger number of onsite sewage system lots being approved.

The largest number of new lots in any given year was 282 in 2003, while the lowest number of new lots created was 26 in 1991. Based on the number of proposed sewerred plats currently in the review process and Suamico's connection to GBMSD, the future ratio of sewerred to unsewerred development will likely be closer to the Village's stated goal.

Figure 2-3: Number and Type of New Lots Created, 1990-2003.

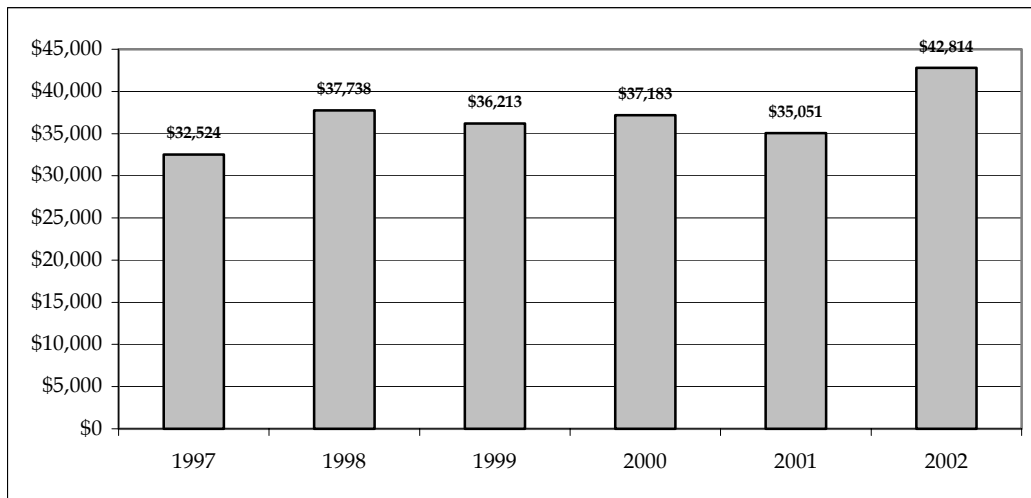


Source: Brown County Planning Commission, 2003.

Land Prices

Figure 2-4 identifies the average selling price of vacant residential parcels for 1997-2002, which was extracted from the Brown County Property Listing database. As is evident from the graph, home site prices remained rather stable between 1997 and 2001, while 2002 saw the largest increase in vacant residential land prices. The increase in lot prices during 2002 may be due to a couple of factors, including historically low interest rates for home mortgages and a decreasing supply of smaller lots as a number of larger lots came on the market, such as the Hawk’s Nest subdivision and Church Hill subdivision. The addition of a number of new smaller lots in the Whisper Ridge and Harbor Lights Reserve subdivisions will help to increase the diversity of home sites in the Village.

Figure 2-4: Average Price of Vacant Residential Parcels Sold, 1997- 2002



Source: Brown County Property Listing and Brown County Planning Commission, 2003.

Opportunities for Redevelopment

Although the majority of the development in the Village has occurred within the past 20 years, sites within the village center and east along the Suamico River and bayshore have the potential for infill and redevelopment opportunities. The village center contains a number of homes and businesses that could use extensive rehabilitation or renovation in order to bring them up to the standards of more recent development in the Village. The village center area of the Village of Suamico has historically provided Village and area residents with goods and services necessary for everyday activities, as well as the cultural center for people to meet for entertainment. Currently, the village center is not very conducive to pedestrians or bicyclists, thereby discouraging people from using alternative means of transportation to visit local businesses. Creating a more pedestrian-friendly downtown (or, in Suamico, a village center) through traffic calming techniques, streetscaping, and demonstrating an overall Village investment has proven to be an effective first step of downtown revitalization in places as near as the Broadway District in Green Bay and downtown De Pere. Of course, the scale of redevelopment projects may not be as large in Suamico as in De Pere or Green Bay, but both provide examples of how a municipal investment in the downtown streetscape can provide the impetus for new private investment.

Traffic calming techniques and pedestrian amenities, including curb extensions, roundabouts, sidewalks, and narrower streets, can provide for a safer and more enjoyable pedestrian experience by slowing traffic. These and other traffic calming techniques should be included in any reconstruction or redesign of CTH B , CTH J, and/or CTH HS through the village center.

In addition to calming traffic through the village center, making the area more visually interesting through streetscaping techniques, including architectural street light fixtures, benches, planters, banners, and building façade improvements and standards, would be consistent with the recommendations contained in the village center plan. These features could make the village center more inviting for both residents and visitors to park their cars, walk around, and visit the local businesses.

There are a number of state programs that Suamico can utilize in order to help fund improvements to the Village's streetscape and village center. The programs are discussed in detail in the Implementation chapter.

Existing and Potential Land Use Conflicts

Agricultural and Residential Uses

Currently, the major land use conflict experienced by many suburbanizing communities is dealing with the sights, smells, and other activities that characterize active farming operations both within and adjacent to the Village. The Village of Suamico should continue to work with the remaining farmers in Suamico and the Village of Howard, Town of Pittsfield, and Town of Little Suamico to ensure that future development, either agricultural or residential, does not negatively impact existing residents or farms. This can be accomplished through setting yearly facilitated meetings to discuss issues, such as farming and residential development, and to try to work toward a compromise or

solution that both sides find agreeable. The Intergovernmental chapter provides additional policies and programs that the Village can utilize to help minimize or resolve conflicts between Suamico and its neighbors.

Sand/Gravel Pits and Residential Uses

An area of potential conflict is between the existing active sand/gravel pit operations and future residential development. Active pits with heavy truck traffic, blasting, and machinery operations are not typically compatible with residential development. Up to this point, conflicts have been kept to a minimum due to the distance between the active quarries and homes and the relatively small scale of the operations. However, as the Village continues to grow and expand, it should be aware of the existing quarries and ensure that developments (if not kept from locating near the quarries) provide adequate buffers and notification to potential homeowners that there are active quarries located nearby. Conversely, new sand or gravel pit operators should be aware of the increasingly residential nature of the Village and make every attempt possible to locate new operations away from existing development.

General Land Use Compatibility

As Suamico continues to develop, it needs to ensure that new land uses are compatible with each other. Many uses, such as neighborhood commercial, institutional, recreational, and different housing types, should be integrated into new residential developments so long as they are designed to a scale and architecture that is compatible with a residential neighborhood. However, uses, such as industries with heavy semi-trailer traffic, noise, or odors and "supercenter" retail, are typically not compatible with residential developments and should be sited in appropriate locations, such as the proposed business park on Norfield Road, in an expanded light industrial park, or along the Deerfield Drive East frontage road.

20-Year Projections in 5-Year Increments

The State of Wisconsin Comprehensive Planning Law requires communities to project in their future land use needs for residential, commercial, industrial, and agricultural lands for a 20-year period in 5-year increments. In order to determine how much land the Village of Suamico will need to continue to grow at its current rate, the land use inventories for 1980 and 2000 were first compared.

Figure 2-5: Changes in Suamico Land Use, 1980 - January 2004

Land Use	1980 (Total Acres)	2004 (Total Acres)	Difference 1980-2004	Percent Change
Residential	1,708 acres	5,519 acres	+3,811 acres	+223.1%
Commercial	72 acres	98 acres	+26 acres	+36.1%
Industrial	30 acres	184 acres	+154 acres	+513.3%
Agricultural	11,967 acres	4,814 acres	-7,153 acres	-59.8%

Source: *Brown County Farmland Preservation Plan, 1990 Update*; Brown County Planning Commission, 2004.

In order to provide a historical perspective on land uses in Suamico, the land use acreages from 1980 were compared to the January 2004 update. Figure 2-5 identifies the changes in land uses over this 24-year period. As is evident from the chart, Suamico has seen a large amount of land developed between 1980 and 2004, with much of it occurring in the latter half of the time-period.

While the population of the Village has increased from 4,004 residents in 1980 to an estimated 9,724 residents in 2003 (increase of 142.9 percent), the amount of land consumed by residential development has increased by 223.1 percent. This is reflective of the predominance of the large, single-family lots that have typified development in Suamico.

The Village's population projection of 16,120 residents by 2025 is an increase of 7,434 people from the 2000 census population of 8,686 residents. Based upon the Village's average people per household of 2.92, another 2,546 residential units will be needed between 2000 and 2025 to house the Village's projected population. Based on a review of recently approved subdivisions in Suamico, new lots that are developed on public sewer generally vary between 0.25 acre and 1 acre, resulting in an average 0.63-acre lot, while those developed on private sewer generally vary between 1 and 3 acres, resulting in an average of 2 acres.

When applying the Village's policy of striving for 75 percent sewered development and 25 percent unsewered development to the projected residential growth and average lot sizes, there is a need for 1,203 acres of additional sewered residential development and 1,272 acres of unsewered residential development. Adding the two totals together results in a total of 2,475 acres of residential land at a minimum required over the next 20 years.

Suamico has indicated a desire to maintain the development of larger lots (14,000 square feet minimum and larger) within the sewered areas of the Village. As a means to better spread out the costs of improvements to the Village's sanitary sewer and water system, Suamico should strive for the target in the Village's previous plan of requiring 75 percent of the newly platted lots to be served by public sewer and allowing 25 percent of the new lots to be served by private sewer.

The land use inventory found that the ratio of land uses in the Village is currently approximately 56 acres of residential development for every 1 acre of commercial development and 2 acres of industrial development. Applying the ratios to the 2,475 acres needed for residential development yields the need for another 44 acres of commercial land and 88 acres of light industrial land during the 20-year planning period. However, Suamico is intending to develop a light industry/business park near the Norfield Road - USH 41/141 overpass, which may significantly increase the acres of light industrial and commercial development in the Village over the next 20 years. Therefore, Suamico will need a minimum of 2,607 additional acres (2,475 acres residential, 44 acres commercial, and 88 acres light industrial), and the plan should reflect the Village's intent of increasing the light industrial and commercial activities in Suamico.

Since street rights-of-way were not included within the acreage totals, it was necessary to determine the approximate street rights-of-way acreage needed to serve the developing areas. To determine the street acreage, several recently approved subdivision plats within

the Village were reviewed and the percentage of land devoted to street rights-of-way was identified. Based on this analysis, an average of 17.55 percent of a subdivision plat is used as street rights-of-way, resulting in an additional 458 acres of street rights-of-way over the 20-year timeframe.

Based on the past 20 years of population growth within the Village and associated land use changes, it is assumed that a minimum of 3,065 additional acres will be needed to accommodate the Village's growth over the next 20 years. This total includes 2,475 acres for residential development, 132 acres for combined commercial/industrial development, and 458 acres for street rights-of-way. In order to account for market factors, such as the readiness of property owners to sell land, an additional 10 percent of the required acreage was added for a total of 3,372 acres over the next 20 years. However, the intent of this plan is to promote mixed land uses, conservation subdivisions, narrower streets, and other similar concepts instead of the standard segregated "pods" of single land uses served by wide streets. Therefore, the total of 3,372 acres needed for 20 years is more important than the individual acreage allocations for residential, commercial, and light industrial uses. For the purposes of ensuring that the Village is planning for an adequate supply of developable land, all the currently platted lots (lands under development in the existing land use table) in the Village are counted as developed, and the projections build from this base.

5-Year Service Increments

The 5-year service increments identify where services, such as sewer and water, currently exist, where extensions of the services are planned, and where they can be most cost-effectively extended when warranted by development pressures, while staying consistent with the direction provided by the State of Wisconsin's Comprehensive Planning Law. The mapped increments are not intended to be growth boundaries. Rather, they indicate where Suamico is planning for the extension of public utilities and services based upon sound planning through the promotion of the efficient, logical growth of the Village instead of far more costly and inefficient "hop-scotch" development patterns. Identifying where and when the Village is intending to extend public utilities and services in conjunction with the projected growth of the community shows all parties involved Suamico's intended development pattern, thereby providing additional information to the property owner who can then make more informed decisions regarding future utilization of his land.

A sufficient supply of vacant lands that can be provided with public services should be maintained in order to allow for continued orderly growth. The supply should be based on the projected growth for 5-year service increments but should be flexible enough to allow for market conditions. In order to provide the Village with some flexibility, the acreage projections are weighted toward the first 10 years of growth, while still maintaining the overall projection of approximately 3,372 acres required in total for the next 20 years. These areas should be considered Smart Growth areas and are identified on the 5-Year Service Increments map. Figure 2-6 identifies the tabular 5-year service increment acreage projections for the Village of Suamico, and Figure 2-7 maps the increments.

Figure 2-6: 5-Year Service Increment Acreages for the Village of Suamico

Use	Year				
	2003 (existing)	2010	2015	2020	2025
Residential	6,371 acres	8,281	9,110	9,371	9,598
Commercial	137 acres	176	194	199	204
Light Industrial	270 acres	352	388	399	408
Agricultural	4,814 acres	It is expected that agricultural land uses within the Village will continue to decrease as they are converted to other uses and as the Village continues to grow.			

Properties that can be more easily serviced and that are more strategically located in relation to existing municipal services should be a top priority for sewer development. Unsewered development should be strongly discouraged within the 5-year service increments, rather than allowing unsewered development for a relatively short amount of time and then trying to retrofit these areas with public sewer and water when these services are available. Extending public sanitary sewer and water service into areas with existing development is politically very difficult and economically quite expensive. Existing residents are oftentimes reluctant to expend money for public sewer and water service when they have existing systems that, in their estimations, work adequately. In addition, the lot sizes and widths of such developments are typically much larger in unsewered areas than in sewer situations. Buildings are oftentimes set back much farther from the road in non-sewered situations, creating higher costs to homeowners when converting to public sewer and water service because of the need for more lineal footage for lateral connections to the homes. Future street designs are also often out of skew because of the different lot sizes required for unsewered versus sewer lots.

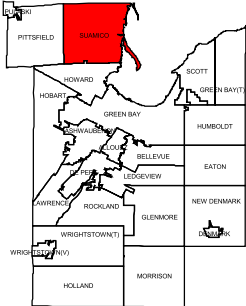
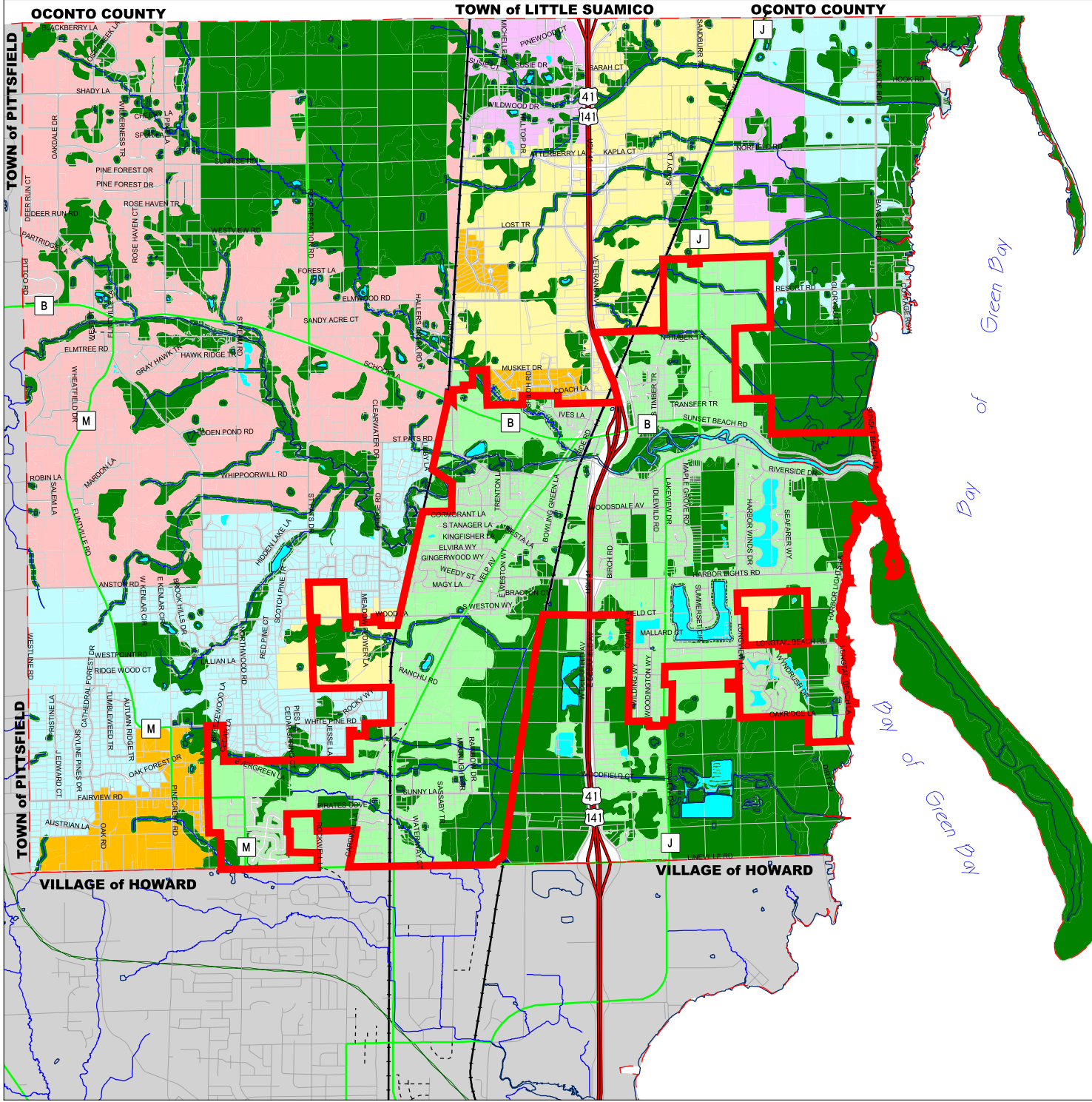
Since public sewer and water will be extended in a relatively short period of time to many parts of the Village, new unsewered development should not be permitted in the 0- to 5-year service increments and should be strongly discouraged in the 5- to 10-year service increments. For those areas outside the 0- to 5-year service increments, the Village should carefully review and consider the future impact any proposed new unsewered development may have on the efficient and logical extension of public sewer and water. If new unsewered lots are allowed, the road frontage and depth to the new structure should be minimized, and the septic field should be located in a way to enable the cost-effective provision of public sewer and water when they become available. Additionally, the Village should require a note on all new unsewered subdivision plats and Certified Survey Maps in the other service increment areas that public sewer and water will be available in the near future, and at that time, all buildings with septic systems and/or wells will be required to connect to the public system.

The northwestern part of the Village is not expected to be served by public sewer or water due to capacity and geographic limitations in the interceptor sewers that will serve the other three-quarters of the Village, as identified in the Village's most recent facilities plan. Therefore, this area is identified for continued rural residential development with onsite sewage disposal systems and wells. As rural residential development continues in this part of Suamico, Village officials should keep in mind the Village's sewer/unsewered target for the number of new lots of 75 percent sewer and 25 percent unsewered.



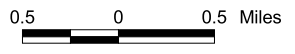
Figure 2-7 5-Year Service Increments

Village of Suamico, Brown County, WI



- 0-5 Years
- 5-10 Years
- 10-15 Years
- 15-20 Years
- Greater than 20 Years
- Rural Residential
- Environmentally Sensitive Area or Recreation
- Water
- Railroad
- Sewer Service Area

Scale: 1 inch = 1 mile



This is a compilation of records and data located in various Brown County and City of Green Bay offices and is to be used for reference purposes only. The map is controlled by the field measurements between the corners of the Public Land Survey System and the parcels are mapped from available records which may not precisely fit field conditions. Brown County/ City of Green Bay are not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

Map prepared by Brown County Planning Department, January 2005.

Service Increment Amendments

In order to account for unexpected growth or Village opportunities, the service increments and, therefore, the plan may be amended if consistent with the goals, objectives, and intent of the plan. Because there is a local plan amendment process to go through, it gives the Village a chance to determine whether the action is consistent with the plan before making a large public investment in terms of the extension of utilities and services. The amendment process also gives the property owner and/or developer an indication of whether utilities and services will be extended before making a large private investment outlay.

Consistency with Brown County Sewage Plan

It is important for the Village to keep in mind that the 5-year service increments do not take the place of the sewer service areas identified in the Brown County Sewage Plan. The increments identify where Suamico is planning to extend sewer and water services over the next 20 years along with an associated timeline, while the sewer service area is a regulatory tool under Wisconsin Administrative Code NR121. As Suamico looks to expand its sewer service area, it must have a corresponding amount of new development to enable the expansion to occur in a manner consistent with the policies set forth in the Brown County Sewage Plan. In order to more smoothly facilitate sewer service boundary amendments consistent with the 5-year service increments, the Village should maintain a running tally of the acres of new development that have occurred in the sewer service area since the sewage plan was developed.

Future Land Use Recommendations

Suamico's growth should be orderly and cost-effective, while making maximum use of existing and planned services. For instance, the plan recommends that the areas most easily serviced by municipal sewer and water develop first and infill areas and areas contiguous to existing development be given priority before other more costly areas are developed.

Future development decisions should also be integrated with the other elements and recommendations of the comprehensive plan, which include utilities and infrastructure, transportation, community facilities, and natural resources. To be effective, the recommendations for future land use must be consistent with the recommendations for other aspects of the plan, such as the location and timing for new public utilities or future streets.

Although it may be assumed that conventional subdivision activity will continue in the Village, the strict separation of compatible uses should be minimized. The Village's development policies should focus more on mixing and joining compatible land uses rather than the conventional method of separating residential, commercial, and other land uses from one another. For example, the plan's residential recommendations encourage the development of neighborhoods that include mixed housing types rather than single-use residential subdivisions.

The idea of creating diverse neighborhoods rather than stand-alone single-use developments is a common theme throughout the Future Land Use section of this chapter. Figure 2-8 shows the future land use plan for the Village.

Sewered Residential

As discussed in the 5-year service increment section, the entire Village (except for the identified rural residential portion of the Village) is planned to eventually be served by public sewer and water. The infrastructure is in place, in terms of properly sized interceptor sewers to serve this entire area. Therefore, permitting unsewered development in these areas for a relatively short period of time may not be in the Village's best interest. Therefore, the Village should not permit new unsewered development within the 0-5 increment areas, but the Village wishes to keep available the option for new unsewered development in the other increment areas. However, the Village should keep in mind that retrofitting unsewered development to public sewer lines is oftentimes politically difficult and expensive for the homeowner. Additionally, the more residents who choose to live in unsewered developments results in fewer potential sewered customers who are available to help defray the costs of the existing public sewer and water system. Therefore, the Village should take care in deciding where it will allow the development of unsewered lots so that they do not interrupt the logical, efficient extension of public utilities consistent with the 5-year service increments. The Village should require a note on all new unsewered subdivision plats and Certified Survey Maps within the 5-year service increments that public sewer and water will be available in the near future, and at that time, all buildings with septic systems and/or wells will be required to connect to the public system.

Based upon the previous comprehensive plan and input from the citizens advisory committee, the Village wishes to maintain larger sewered lots in Suamico and has identified three minimum lot sizes for new home-site development: 14,000 square feet, 20,000 square feet, and 25,000 square feet. The smaller 14,000-square-foot-minimum lots are to be encouraged near the village center and existing development in the area. The 20,000-square-foot-minimum lots are generally located near the Village's southwestern boundary and extend from the village center to the north, while the 25,000-square-foot-minimum lots take into account the existing unsewered development in the southwestern part of the Village and the area with a very high water table in the far northeastern part of Suamico. However, those developments with approved preliminary plats should be allowed to proceed with their approved lot sizes.

An exception to the aforementioned minimum lot sizes is when a conservation subdivision with large, contiguous preserved greenspace areas (including such features as scenic vistas, upland woodlands, and cultural features, in addition to unbuildable areas) is proposed. These developments may be allowed to reduce their lot sizes to a 10,000-square-foot minimum

In order to help maintain Suamico's rural feel, conservation subdivisions should be encouraged in those parts of the Village where there may be future trail connections or where there are critical environmental features that the Village wishes to maintain. Conservation subdivisions should take advantage of the hills and ravines in the western part of Suamico, the many wetland and floodplain areas in the east, and woodlands and

Figure 2-8

Future Land Use

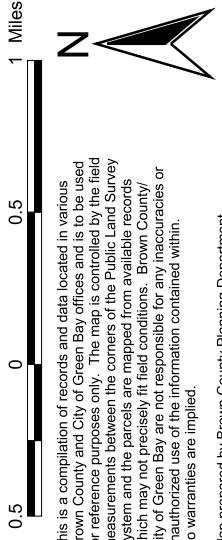
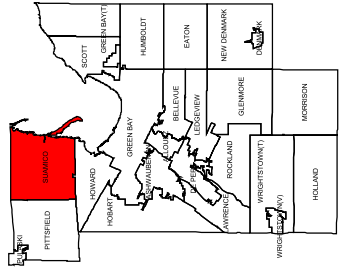
Village of Suamico, Brown County, WI

- Existing Commercial
- Existing Industrial
- Existing Institutional
- Existing Recreational
- Existing Transportation
- Existing Utilities
- Existing Water Features
- Waterfront Residential
- Future 14,000 Sq Ft Residential
- Future 20,000 Sq Ft Residential
- Future 25,000 Sq Ft Residential
- Future Business Park
- Future Highway Commercial
- Future Light Industrial
- Future Neighborhood Center
- Future Recreational
- Future Rural Residential
- Future Village Center
- Future Institutional
- Railroad
- Future Road
- Future Trail
- * General Location of Future Neighborhood Park
- ⊕ General Location of Future Community Park
- ⚡ General Location of Future School

Note: Future school and neighborhood or community park sites are general in nature. Their inclusion on the Future Land Use Map indicates a future need for a park in this region of the village. Specific park locations and improvements will be identified in the Village's Park and Outdoor Recreation Plan.

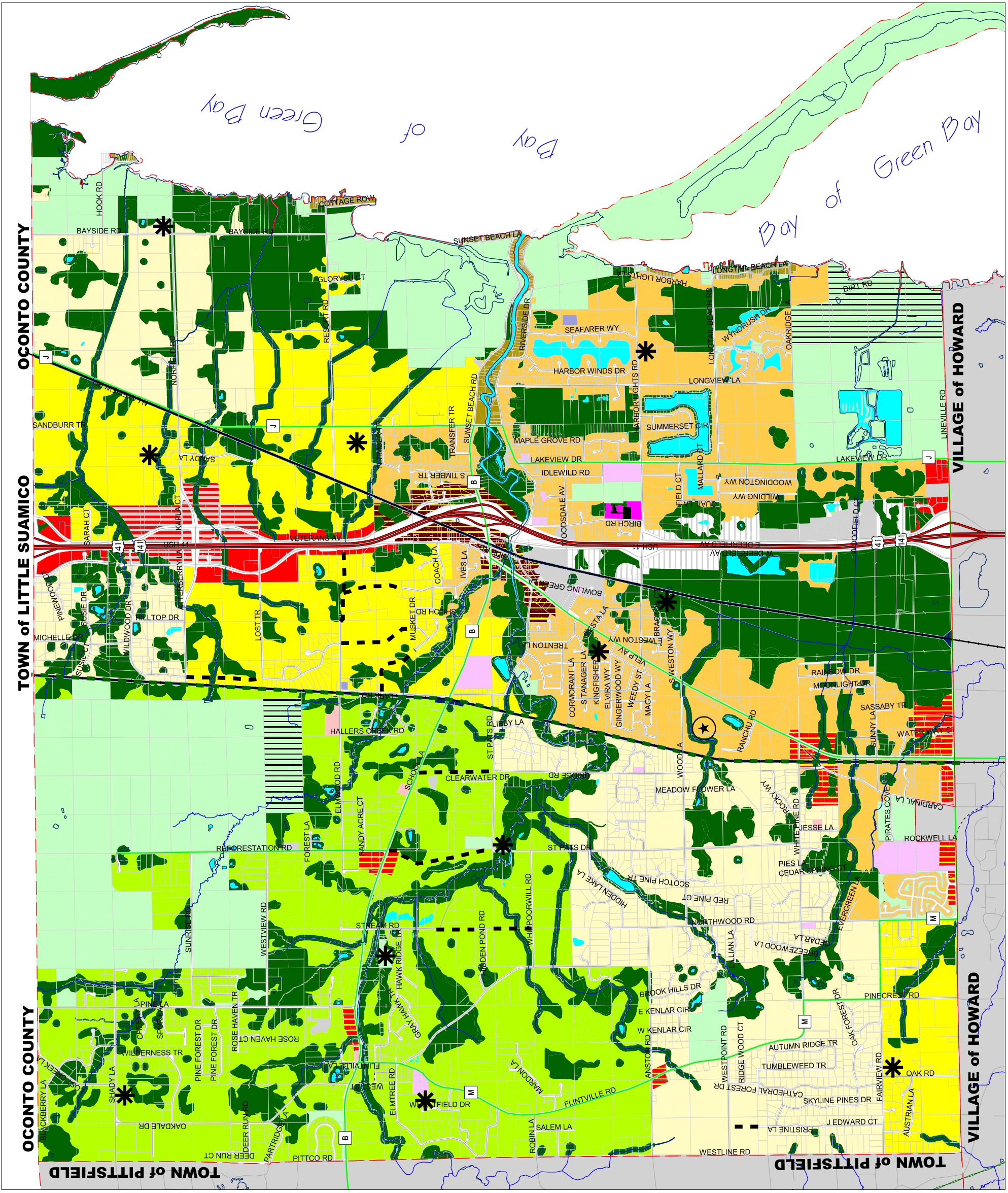
Environmentally Sensitive Area

Note: ESAs are generally privately owned and may be developable



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Map prepared by Brown County Planning Department. January 2005.



other rural cultural features (farm homes, fencerows, orchards, etc.) throughout the Village.

As much as possible, future sewered residential development in Suamico should be based upon the concept of neighborhoods. A neighborhood should be more than just a housing development by itself. It should include recreational uses, such as a neighborhood park, institutional uses, such as churches or schools, and neighborhood commercial uses that provide goods and services geared primarily for the surrounding residents. The recommendations for future land use within the Village emphasize characteristics that can help make any neighborhood walkable, livable, and varied. In addition to the concepts discussed in this chapter, the review of future development proposals should consider the following broad characteristics:

- *Walkable*, meaning that pedestrians can easily reach everyday destinations and that an area can be traversed in about 10 minutes. Several enjoyable route choices should also be available for pedestrians.
- *Livable*, meaning that a neighborhood is safe with a focused center and easy access by various means of travel to schools, shopping, and services that meet many of the needs of its residents.
- *Varied*, meaning that a variety of buildings, spaces, and activities are included and are designed and operated in harmony with the residential character of the neighborhood without disruption from highly contrasting buildings or activities that relate only to themselves.

Mix of Housing Types and Lot Sizes

Forms of housing within neighborhoods should be mixed so people of different ages and incomes have opportunities to live in the area of the Village that they choose. The recommendation for most of the future residential development is to encourage variation and a mixing of residential types. Townhouses, duplexes, and smaller apartment buildings can be strategically interspersed with single-family residences. Design standards and the creation of open space and other buffers can help integrate different residential intensities. Large expanses of strictly one residential type should be avoided, while variation in house models should be encouraged to avoid monotonous streetscapes.

Builders and developers are encouraged to use their ingenuity to combine and distribute a variety of housing types to make an attractive marketable neighborhood with housing for people of various income levels and preferences. Although the current preference for the Village of Suamico is to maintain its single-family residential character, there may be an increased demand for single-family attached homes, multifamily homes, and aged-care facilities as the community continues to age. In order to account for this trend, at least two housing types should be included in any sewered residential project encompassing more than 30 acres. As the acreage of the residential project increases, the number of housing types should also increase. This can be achieved in various ways. Some examples include:

- Sewered single-family house lots (lots over 14,000, 20,000, and 25,000 square feet depending on the area of the Village).
- Duplexes.
- Townhouses/condominiums.
- Accessory dwelling units.
- Group homes.
- Apartments (provided they are compatible in scale and character with other dwellings in the proposed neighborhood and limited to a maximum of eight dwelling units in a building).

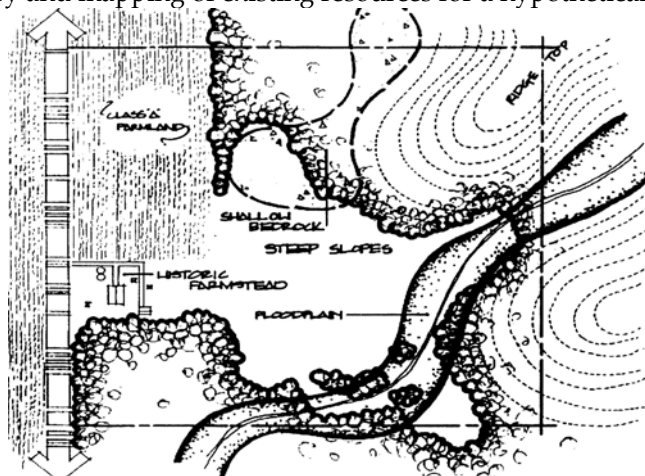
Duplexes are often appropriate on corner lots since these lots usually need to be wider and larger for them to be appropriately situated next to two streets. Because each unit can face a different frontage, the visual impact of the larger building and garage façade is often lessened.

Conservation Designed Development

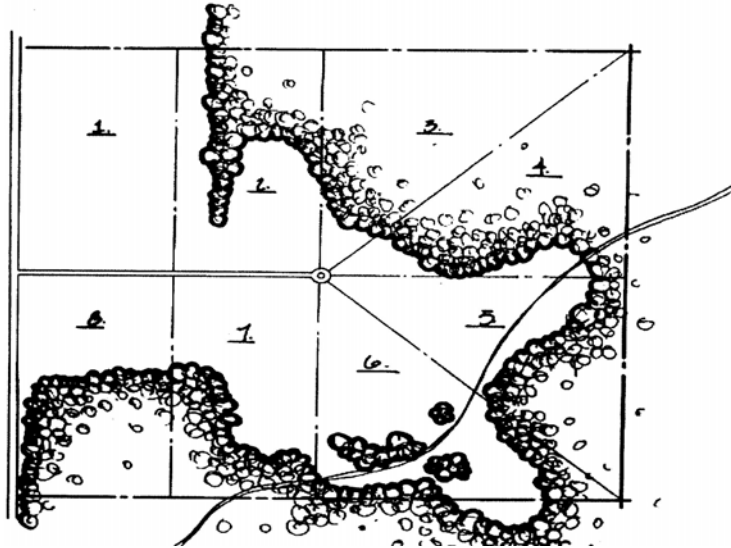
Conservation designed development is a subdividing method that focuses on maintaining open space and conserving significant natural and cultural features. This is accomplished by preserving a significant portion of a development site as undivided open space with the remaining land uses for the house lots and necessary roads. The open space is permanently preserved through conservation easements. Conservation subdivisions provide the landowner with the same number of lots, or possibly more, than could be accomplished through a conventional subdivision.

The conservation example below uses the same number of house lots from the conventional layout but completely alters the design by simply reducing the lot size and being sensitive to the environmental features in order to preserve farmland. The following sketches are from “A Model Ordinance for a Conservation Subdivision,” prepared by the University of Wisconsin Extension.

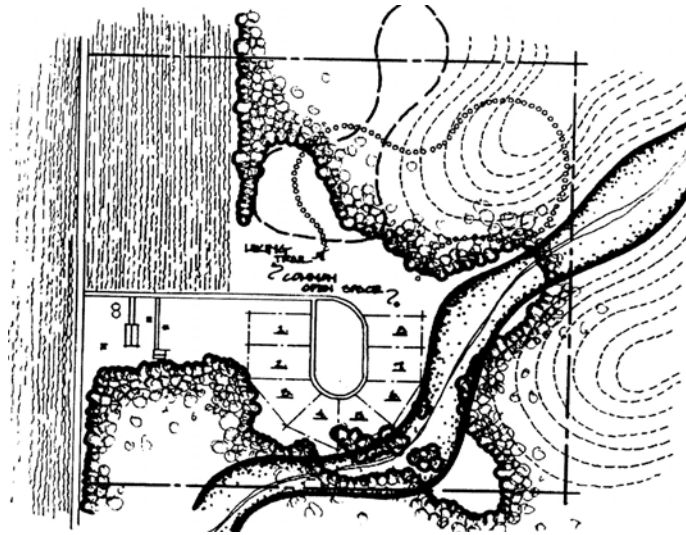
Step 1: Inventory and mapping of existing resources for a hypothetical 16-acre site.



Step 2: Development yield as permitted under existing ordinances (zoning, etc.) for the 16-acre site and assuming a 2-acre minimum lot size zoning standard. Eight lots would be permitted under this scenario.



Step 3: Concept map of the conservation subdivision showing the eight lots that would be permitted, plus the historic farmhouse, which would be preserved, for a total of nine dwelling units.



The following are some observations from comparing the conventional subdivision to the conservation by design subdivision:

- Conventional layout - all parts of the tract are either house lots or roads.
- Conservation layout - close to half of the site is undivided open space or agricultural land that can be permanently preserved.

- Conventional layout – view from across the road to the trees and creek is disrupted, and houses can be seen in all parts of the development.
- Conservation layout – view from across the road to trees and creek is almost entirely preserved.
- Conventional layout – only four property owners have access to parts of the creek.
- Conservation layout – all property owners have access to the length of the creek.
- Conventional layout – no common space; each lot owner only has use of his own 5-acre parcel.
- Conservation layout – creates a number of common open space areas with a large area remaining for active agricultural use.
- Conventional layout – no pedestrianways unless sidewalks are included in the construction of the roads.
- Conservation layout – trail network can be completed and can link with neighboring subdivisions.
- Conventional layout – no area for neighborhood facilities.
- Conservation layout – central green area can include children’s play area, shelter, or other amenities.

Given the strong desire of Suamico’s residents to retain the Village’s rural character and preserve its natural features, the conservation by design subdivisions offer a preferable alternative to typical subdivisions with large house lots blanketing entire tracts of land. With the number of areas of wetlands, upland woodlands, and shorelines in Suamico, conservation subdivisions provide a means to protect and preserve those unique or critical wildlife features on each site to help maintain the Village’s rural character. Although conservation subdivisions may not be appropriate in all areas, such as in the village center area, they should be considered as a preferred method of subdivision in the majority of Suamico. The current Village of Suamico Subdivision Ordinance provides incentives to developers for the creation of conservation subdivisions, including relaxed design standards for street widths, cul-de-sac lengths, and lot shape and width. The Village of Suamico Planning Commission and the Village Board should actively encourage the development of conservation subdivisions that meet the requirements set forth in the Village’s subdivision ordinance.

The current subdivision ordinance for the Village of Suamico does not identify a minimum lot size for conservation subdivisions, which causes confusion for residents, Village officials, and developers alike when a conservation subdivision is proposed. Therefore, the Village should update the subdivision ordinance with a 10,000-square-foot minimum lot size for publicly-sewered conservation developments to ensure that all parties know what to expect at the beginning of the platting process.

Neighborhood Centers

In addition to residential uses, a neighborhood should be planned to include other neighborhood-serving uses and features. To make neighborhoods more livable, it is

recommended that neighborhood centers be placed at strategic locations. Each area would serve one or more neighborhoods and would provide a year-round gathering place accessible to all residents. Features of the development area may include a recreation facility, a school, a daycare for children and adults, a place of assembly and worship, a small civic facility, a neighborhood-oriented market, shops, small professional offices, medical clinics, or other small businesses.

These uses should have minimal signage and should attract a limited amount of vehicular traffic. The inclusion of rooms or indoor space for meetings and neighborhood functions is encouraged, as is a square, plaza, park, pavilion, or other outdoor space that is accessible to all residents.

The neighborhood centers should be located within walking distance of residential uses. These centers should be relatively small and should preferably be located at a crossroads, should encourage mixed uses, and should provide goods and services geared toward the immediate neighborhood rather than the region as a whole. Not only should retail uses be permitted in the neighborhood centers, but other non-retail uses, such as schools or daycare facilities, should be considered for other portions of a neighborhood, as well. The neighborhood centers should be designed to reinforce the positive identity, character, comfort, and convenience of their surrounding neighborhoods, and access for pedestrians and bicyclists must be a priority.

Neighborhood and Street Connectivity

The Village of Suamico has a number of natural resources that may present barriers to traditional street connectivity among neighborhoods. The abundance of small streams, wetlands, and existing development in some instances may preclude some neighborhoods from a fully connected street network. Where there are natural or existing developmental barriers to street connections, cul-de-sacs may be used. However, they should only be utilized when a through street connection is not practical due to existing developmental impediments or the aforementioned natural barriers.

The natural features may provide areas for potential pedestrian and bicycle paths. Pedestrian and bicycle connections utilizing the natural drainageways and features of the Village should be utilized to connect within and between new neighborhoods in Suamico, which is consistent with the Village's adopted trail plan.

Where natural barriers do not exist, neighborhoods should have many ways to get into and through them by driving, walking, and bicycling with the development of a well-connected street pattern. Streets should form a connected network to knit neighborhoods together rather than form barriers. The intent is for residential developments to form neighborhoods that evolve to be part of the broader community by avoiding "islands" of separate subdivisions or freestanding individual complexes attached to the rest of the community strictly by one or two entrances for auto traffic.

Pedestrian Network

Neighborhoods should have a connecting network of pedestrianways and bike paths leading to small neighborhood parks, open spaces, schools, shopping and service

activities, and other public and quasi-public spaces. On long blocks, providing mid-block pedestrian crossings should be included in order to help make walking a more viable transportation option. Pedestrian connections are a great benefit to neighborhoods and should be given greater consideration in new developments. Suamico should retrofit the village center with sidewalks to encourage the development of this area as a pedestrian-friendly area for tourists and locals alike to browse, shop, and spend time.

Other areas where the Village should require the placement of sidewalks is near Bayport High School and Lineville Intermediate/Forest Glen Elementary Schools along Lineville Road and Cardinal Lane to ensure a safe walking environment for students. Suamico should coordinate with the Village of Howard and Brown County Highway when placing sidewalks, particularly along Lineville Road (but also on Cardinal Lane north of Lineville). Additionally, sidewalks should be placed along Harbor Lights and Birch Roads when the new elementary school is developed.

Outside of the village center and school zones, Suamico should implement the development of its comprehensive trail network consistent with the recommendations contained in the Village of Suamico Trail Plan. The trail network is envisioned to link the large parks and other publicly-owned areas in the Village, thereby creating a chain that links the “jewels” of the community. The greenspace requirements of conservation subdivisions provide an excellent opportunity to make the identified trail connections. The Transportation chapter provides greater detail regarding pedestrian, traffic calming, and street patterns and should be referred to when making transportation network decisions.

Parks and Open Spaces

Suamico has large areas of wildlife and natural and passive recreation sites, including the Brown County Reforestation Camp, Sensiba Wildlife Area, and Barkhausen Waterfowl Preserve. These large tracts of woodlands, wetlands, and other natural areas help to maintain Suamico’s rural characteristics while the Village is developing at a very fast rate. As the Village continues to grow, there will be a need for additional active park and recreation facilities, in addition to the large passive sites previously cited. The future neighborhood and community park sites identified on the Future Land Use Plan are general in nature and are not meant to be site-specific. Rather, they identify regions of the Village where parks should be planned and considered to serve existing and/or future residential populations.

As sites for new facilities are evaluated and designed, they should be designed in conjunction with streets and walkways to be a primary feature of land development and not merely areas left over from site planning for other purposes. They should also be situated along streets instead of tucked behind house rows in order to maintain safety, accessibility, and visibility.

Wetlands, watercourses, and other natural features should be integrated into new park and open space developments rather than ignored, redesigned, or destroyed. These areas can be utilized for the treatment of stormwater through the use of retention or detention ponds or infiltration fields. Creeks and other linear features can be a common feature that links individual adjoining developments through the development of rustic

hiking trails or paved bicycle paths. The Village of Suamico Trail Plan should be consulted when deciding where to place trails in the Village and how to link the many natural areas and parks in Suamico.

The Suamico Comprehensive Outdoor Recreation Plan was last updated and adopted in 1997. Its identified mission is to “establish a Town park system that will economically provide Suamico residents and visitors of all ages with adequate, convenient, safe, and high quality recreational opportunities on a year-round basis.” The plan notes that Suamico is currently well served by community parks, including Calavera Springs Park, Idlewild Park, and the Brown County Reforestation Camp. However, it recommends that the Village seek to acquire and develop four smaller neighborhood parks to serve the developing areas of the Village. The Future Land Use map identifies additional areas where the Village should consider the development of small neighborhood parks to help create an identity for the surrounding neighborhood. Suamico should update its comprehensive outdoor recreation plan on a 5-year cycle (at a minimum) to account for changes in the Village and its population and to ensure eligibility for WDNR stewardship program grants. Additionally, the Village should coordinate future park and recreation planning with the Howard-Suamico School District, particularly when the district is looking to site future schools.

The Brown County Open Space and Outdoor Recreation Plan identifies a proposed 5-acre County boat landing and park on the Suamico River just west of the bay. Due to budgetary constraints and the amount of development that already exists along this section of the Suamico River, it is not likely that a new park will be constructed. However, the existing state-owned boat ramp should be maintained and improved to function as both a boat ramp and neighborhood park with amenities, such as picnic tables and a small playground.

The Brown County plan also identifies potential additions to the Reforestation Camp and Barkhausen Waterfowl Preserve properties. The Reforestation Camp is proposed to add approximately 120 acres of land south of the present boundaries in order to protect the high quality woodlands located there. Potential improvements include a campground, picnic area, picnic shelter, storage building, and parking lot.

Barkhausen Waterfowl Preserve is proposed to add about 320 acres of land to the east and north of the present boundaries for water control, resource protection, and future expansion of the wildlife programs. These lands have been identified as potential natural areas due to their high quality wetlands and wildlife habitat. Proposed improvements include an overlook deck, a storage/service building, and water control structures.

Community Design Characteristics

The Village should encourage design elements, such as streetscaping, flags, banners, seasonal decorations, and signage controls, to aesthetically integrate individual land use areas. It is recommended that Suamico also concern itself with the design of the main entrance corridors of the Village (USH 41/141, CTH HS, CTH B, CTH J, etc.). These entrances help to establish the overall character of Suamico and provide the first impression to visitors and potential residents or businesses. Therefore, the Village should make them as attractive as possible.

Utilizing design criteria for new businesses is another effective way of ensuring high quality development. In commercial areas, reducing the expanse of parking areas should be accomplished. Parking lot landscaping standards should be enforced, and these standards should include landscaped “islands” within large parking lots, the placement of parking behind buildings instead of between the buildings and sidewalks/streets, and other features.

The Natural, Cultural, and Agricultural Resources chapter of this comprehensive plan identifies a number of ways Suamico can enhance its image through community design improvements.

Infill and Redevelopment Opportunities

Village Center

The Village should continue to encourage the infill development of lands between existing sewer service areas, such as along Longview Lane between Harbor Lights Road and Longtail Beach Road. This part of Suamico is already within the Village’s sewer service area and can be efficiently served by public sewer and water. Within the village center area, there are a number of vacant lots that could be very easily infilled with more dense residential development, thereby helping to reinforce this area’s identity as the Village’s “downtown” area. Suamico should continue the logical extension outward from its existing sewer service areas as a means to avoid the inefficient extension of services across large tracts of land without providing service. In the areas of the Village not planned to be served by public sewer, a number of new subdivisions have recently been platted. Suamico should encourage that these new subdivisions be filled with homes before new large unsewered subdivisions are approved.

Although the vast majority of the development in Suamico is very new, the village center has areas and buildings that may be in need of redevelopment or rehabilitation. The Village should actively work with the owners of the buildings to ensure that they are properly maintained and that they contribute to the positive image of Suamico. Suamico should continue to implement the recommendations contained in the Town Center Plan to make the village center the focal point for local businesses, tourism businesses, and social activities in the Village.

Riverfront and Harbor Redevelopment

The majority of the existing lots along the Suamico River east of USH 41/141 and the bay of Green Bay shoreline were developed for small seasonal cottages. However, an increasing number of people are purchasing the cottages with the intent of completely renovating them or tearing them down and instead placing a year-round home on the lot. Although this is desirable in terms of infill and redevelopment, new homes on these small lots are typically not in conformance with the existing zoning requirements in terms of lot size and setbacks. Therefore, a variance to the ordinance would have to be approved in order to build new structures on these lots.

In order to avoid situations where variances are continually requested, the Village of Suamico should create a new “Waterfront Residential” zoning district that would bring

these lots into conformance. A new zoning district would, in addition to bringing these lots into conformance with the zoning ordinance, relieve the Zoning Board of Appeals from continually meeting to review variances for these areas.

USH 41/141 Corridor

There are a number of former highway-related uses along USH 41/141 that discontinued business after USH 41/141 was converted to a freeway with limited access. Since they have been largely abandoned, the structures are falling into disrepair and do not create a very good image for the Village. Some of these former businesses were large gas stations and are considered brownfields because of the actual or perceived environmental contamination generally associated with these uses. Suamico should proactively seek out the owners of these properties and work with the WDNR to gain access to grant funds or low interest loans to help clean up any contamination that may be present to prepare these sites for redevelopment.

Suamico Industrial Park

The existing industrial park is located between Velp Avenue and the railroad tracks just south of the village center. The industrial park is currently filled to capacity, creating a need for the Village to ensure retention of the businesses already there and improvements to the overall appearance of the area. The Village should ensure that there is an open line of communication with the existing businesses (possibly through a periodic meeting) to address any concerns or provide assistance for opportunities. Additionally, the Village should continue to enforce its design ordinance in the industrial park to create a visually pleasing area for people to work and do business.

Since the existing industrial park is filled, the Village should consider purchasing land east of the railroad tracks to expand the industrial park and take advantage of the USH 41/141 frontage from West Deerfield Road. The availability of the railroad tracks for shipping or delivery of goods should be actively marketed as an amenity for potential businesses. Because of the high degree of visibility from the highway, the Village should actively enforce its design review standards so that future development of this area sets a positive tone for the highway corridor and the Village. In order to further maintain Suamico's rural feel, existing vegetation and tree cover should be maintained as much as possible to soften the potential light industrial uses in this area.

East Deerfield Drive

East Deerfield Drive from Lineville Road north to Harbor Lights Road was recently improved to include curb and gutter and is proposed to be within the Village's first tax-increment financing (TIF) district, thereby improving its potential for business development. Since public sewer and water do not currently serve this area, businesses locating here tend to be low-density uses, such as contractor shops/yards and landscaping businesses, which typically require outdoor storage of vehicles, equipment, and supplies. However, when public sewer and water services are extended to this area, it will become much more attractive to higher use businesses and light industries, particularly because of the easy access to and visibility from USH 41/141. Because of the high degree of visibility from the highway, the Village should actively enforce its design

review standards for screening of outdoor storage so that future development of this area sets a positive tone for the highway corridor and the Village. In order to further maintain Suamico's rural feel, existing vegetation and tree cover should be maintained as much as possible to soften the present and future light industrial uses in this area.

In order to place sewer lines in this area, the Village's sewer service area will first need to be amended. Therefore, Suamico should update its land use inventory to account for development that has occurred since the last Brown County Sewage Plan update and reallocate those available acres to this area. This should be completed prior to the designation of a tax increment district to ensure there are adequate acres available to provide sewer service to this area.

Proposed Norfield Road Business Park

The Village of Suamico is proposing to develop a business park on the 70 acres it owns on the east side of the Norfield Road overpass of USH 41/141. The site is bisected by the Veterans Avenue frontage road paralleling the freeway and providing easy access to the interchanges at West Brown Road to the north and CTH B to the south. Although the site provides very desirable access and visibility, public sewer and water facilities are not yet available. Development should not proceed until public sewer and water facilities are available to allow for the more intensive use of the land for greater tax base generation. Suamico is planning to extend sewer and water north from its existing lines along CTH J and then traversing to the west along Norfield Road to serve the business park. In order to provide public sewer and water to this part of the Village, Suamico will need to first amend its sewer service area (SSA) based on growth from 2000-2003. This would include using the new 2025 WDOA population projections and updating the Village's existing land use map. This area should be the primary priority for the Village in identifying new sewer service area acreage and, therefore, extending public sewer and water.

Suamico should stringently enforce its design standards and site review ordinance for buildings in this area to create a positive first impression for travelers and potential entrepreneurs or investors traveling on USH 41/141. The Village should also consider the inclusion of higher density housing and commercial uses near the fringes of the business park so that people have the option to walk or bike to their place of work and so that people working in the business park are able to walk or bike to nearby commercial establishments for lunch or other commercial activities.

Since this part of Suamico is relatively flat, stormwater does not flow as well as in the western part of the Village. Therefore, as the business park is developed, stormwater management should be a focal point in the review process for new buildings and sites. Minimizing large expanses of parking and utilizing wet detention ponds are a couple of ways the Village could accomplish this. Incorporating other natural features, such as trees and drainageways, into the design of the business park would also help to maintain the more natural setting that Suamico residents appreciate.

Since there are a few residential areas near the proposed business park, the stream and wetlands south of Sarah Court should be maintained as a buffer for the residents of that area. There is a large wooded area south and west of the Sandy Lane neighborhood that should be used as a buffer. In addition, safeguards to minimize the impacts associated

with a business park on existing residents of Norfield Road/Kapla Court should be implemented, such as greater setbacks or vegetative barriers.

Rural Development – Unsewered Areas

The Village of Suamico has a target ratio of allowing 25 percent of its new lots to occur on unsewered systems. Therefore, unsewered rural residential development has been allowed to occur for those regions that were not within the Suamico Sanitary District or Brown County sewer service area. This will make it more difficult to efficiently and logically expand public sewer service into these regions at a later time due to the high cost and neighborhood opposition.

The Village has invested quite heavily in public sewer and water infrastructure. However, the Village has not been recapturing the costs associated with this investment due to the large number of new unsewered rural lots that do not pay the initial connection fee or ongoing fees. In order to help pay for these past and future facility improvements and maintain stable sewer and water rates, Suamico should strive as much as possible to attain its target sewer/unsewered goal of 75 percent of the lots on public sewer and water and 25 percent of the lots on private systems. If at all possible, an even higher percentage of sewer lots as compared to unsewered lots should be encouraged.

Suamico does not plan to serve the area of the Village identified on the Future Land Use map as rural residential with public sewer and water. Therefore, the Village has decided to require 2-acre minimum lot sizes within this area as a means to maintain the existing large lot trend in this area. The 2-acre lot size should be a strict minimum and should not be an average of larger and smaller lots in a conventional subdivision. Additionally, the Village should ensure that the lot frontage requirement in the subdivision ordinance is large enough to provide adequate space between rural residential lots.

As an alternative to the 2-acre minimum lot sizes in the rural residential areas, conservation designed subdivisions should be encouraged as a means to maintain the many natural features and rural character of the area and may have lots that are smaller than 2 acres, as long as the overall density does not exceed that of the 2-acre minimum yield plan. An exception to this may be made when there are bonus lots included in a conservation subdivision that act as an incentive to the development of conservation subdivisions. In order to properly design a conservation subdivision, it is important to preserve more than just those areas of the property that are “unbuildable” (wetlands, floodways, steep slopes, etc.). Therefore, Suamico’s subdivision ordinance should be revised to ensure that lands that are potentially “buildable” are also included in the open space requirements. This may involve determining a maximum percentage of the open space that is considered to be unbuildable (for example, no more than X% of the dedicated open space may be environmentally sensitive or other unbuildable areas).

Natural Areas

The natural resource features provide Suamico with a large part of its identity as a community. The bayshore, Suamico River, large stands of upland woodlands, and numerous streams and wetlands all contribute to the Village’s rural feel and should be

protected as much as possible. Features of the Village that are identified as environmentally sensitive areas (ESAs), such as wetlands, floodways, and steep slopes, should not be developed and should be placed in a conservancy zoning district or as part of the greenspace requirements of conservation subdivisions. These features should be included in the design of developments as integral amenities and maintained in common ownership, and they could be utilized in the design of stormwater management facilities.

The Suamico bayshore contains a number of large wetland complexes that, when included with Long and Little Tail Points, provide critical habitat to a number of rare and endangered plants and animals. These areas have been classified as rare species habitat by WDNR, and many are under WDNR ownership. The Village should actively work with the WDNR to mitigate the potential direct and secondary impacts that development near the bayshore may have on the flora and fauna of this unique area.

The Suamico Lacustrine Flats, a large wetland complex located between Velp Avenue and USH 41/141, is identified in the Brown County Open Space and Outdoor Recreation Plan as a natural area of local significance. Discussions with WDNR staff indicated that this is a critical area for northern pike spawning habitat and should be preserved as much as possible in a natural state.

The bayshore wetlands and Suamico Lacustrine Flats provide critical habitat for rare and endangered plants, birds, fish, and animals and should be maintained as much as possible in a natural state. Although the wetlands and flats are already identified as environmentally sensitive areas, the Village should work with the WDNR and private property owners to develop in a way that minimizes the impact on these areas.

Agriculture

As previously noted, agriculture in Suamico has steadily declined. The long-term viability of continued agricultural uses in the Village is not likely, and the comprehensive plan does not support indefinite agricultural preservation. However, agricultural lands should not be encouraged to develop where existing farmers wish to continue operations. As the Village grows, these lands should be allowed to convert to developed uses in an orderly fashion consistent with the recommendations and vision in the comprehensive plan.

Summary of Recommendations

- Continue to redevelop the village center as a mixed-use focal point of the Village. Development in this area should be pedestrian-friendly and should include amenities, such as park benches, sidewalks, plantings, and a mixture of higher density housing, commercial, institutional, and recreational uses. Buildings should be placed close to the street with parking in the rear or offsite.
- Encourage commercial uses in the village center that take advantage of the views or use of the Suamico River for recreational purposes.

- New residential lots should be a minimum of 14,000 square feet, 20,000 square feet, or 25,000 square feet in the sewerred areas of the Village and a minimum of 2 acres in the unsewerred areas as identified in the future land use map.
- Future sewerred residential development should be based on the concept of neighborhoods with varying housing types, neighborhood commercial uses, parks, and institutional uses, particularly within and near the village center.
- New sewerred residential developments of greater than 30 acres should contain at least two housing types, including single-family homes, duplexes, condominiums, multifamily units, and group homes, to account for a diversifying population.
- Develop mixed-use neighborhood centers to serve the surrounding neighborhood at the areas identified on the Future Land Use Plan map.
- Multifamily buildings should reflect (as much as possible) the characteristics and amenities associated with single-family residences.
- Continue to utilize Suamico's design review standards ordinance to ensure that new commercial, light industrial, and multifamily developments contribute to the overall rural character of the Village.
- Expand Suamico's existing light industrial park to the east in order to take advantage of the rail line and highway visibility.
- Begin planning for the development of a business park at the USH 41/141 Norfield Road overpass area by identifying specific design criteria and street layouts.
- Update the land use inventory and initiate a sewer service area amendment for the East Deerfield Road area prior to its designation as a tax increment district to ensure that sewer service will be available.
- Incorporate as much as possible the existing natural vegetation into site designs when developing along the USH 41/141 corridor to maintain the Village's rural character.
- Emphasize neighborhood connectivity for pedestrians, bicyclists, and vehicles.
- Utilize narrow streets in combination with pedestrian amenities and traffic calming techniques to slow vehicular traffic.
- Include a mid-block pedestrian crossing easement between lots in blocks that exceed 700 feet in length, as appropriate.
- Each neighborhood should contain a small neighborhood park.
- Develop smaller neighborhood parks to provide an identity and focal point for the neighborhoods. Parks should be situated along streets rather than tucked behind houses.
- Integrate natural features into new developments and parks as trails, bike paths, greenspace, etc.

- Actively work with private property owners and the WDNR to mitigate the direct and secondary impacts of development on the critical habitat areas of the bayshore wetlands.
- Encourage the development of conservation by design subdivisions coordinated with the Village's many natural areas to create an interconnected trail network.
- Develop parkways with trails as linear parks along waterways, especially along the Suamico River.
- Pursue grants to aid in the acquisition of lands along the bayshore and other critical natural areas.
- Strive to maintain a 75 percent to 25 percent ratio of sewerred lots to unsewerred lots at a minimum in order to better capture the revenue and efficiencies associated with lots on public sewer and water.
- Create a "Waterfront Residential" zoning district to bring the existing lots along the Suamico River and the bay of Green Bay shoreline into conformance with the zoning ordinance.
- Utilize the 5-year service increments to indicate where and when public services should be expanded.
- Suamico should not permit new unsewerred development within the 0- to 5-year service increment area and should strongly discourage it in the 5- to 10-year service increment area because public sewer and water will be extended to these areas in the very near future.
- The Village should carefully review and consider the future impact any proposed unsewerred development outside of the 0- to 5-year service increments may have on the cost-effective and logical expansion of public sewer and water to the north and west. This would not pertain to the areas identified as Rural Residential on the Future Land Use and 5-Year Service Increments maps.
 - If unsewerred development outside of the 0- to 5-year service increments is permitted, lots, homes, and septic fields should be positioned in a way that public sewer and water may be cost-effectively connected in the future.
 - For unsewerred developments outside of the 0- to 5-year service increments, a note should be placed on the subdivision plat or Certified Survey Map stating that public sewer and water may be available in the near future, at which time all structures served by a private sewer system or well will be required to connect to the public system.
- Permit unsewerred subdivision plats and Certified Survey Maps with a minimum of 2 acres per lot in the areas identified as Rural Residential on the 5-year Service Increment and Future Land Use maps. Conservation subdivisions that preserve viewsheds, upland woodlands, and other natural or cultural features (in addition to wetlands) should especially be encouraged in these areas.
- Revise the Village's subdivision ordinance to ensure that its requirements for conservation subdivision open space includes potentially buildable lands in addition to environmentally sensitive areas.

CHAPTER 3

Transportation

This section of the plan discusses the existing transportation system and recommends methods of creating a more comprehensive multi-modal transportation system in the Village.

Existing Transportation System

Streets and Highways

Suamico currently contains one federal highway, five county trunk highways, and many local streets. These streets and highways are currently the primary means of reaching the Village's residential, commercial, institutional, and other destinations (see Figure 3-1 for the Village's street and highway system).

Functional Classification System

A component of a street and highway system is the functional classification network. This network is typically based on traffic volumes, land uses, road spacing, and system continuity (see Figure 3-2 for the Village's functional classification system). The four general functional classifications are freeways, arterials, collectors, and local streets. These classifications are summarized below.

Freeways: Freeways are controlled-access highways that have no at-grade intersections or driveway connections. US 41/141 is an example of a freeway in Suamico.

Arterials: Principal and minor arterials carry longer-distance vehicle trips between activity centers. These facilities are designed to provide a very high amount of mobility and very little access.

Collectors: Collectors link local streets with the arterial street system. These facilities collect traffic in local areas, serve as local through routes, and directly serve abutting land uses.

Locals: Local roads and streets are used for short trips. Their primary function is to provide access to abutting land uses, and traffic volumes and speeds are relatively low.

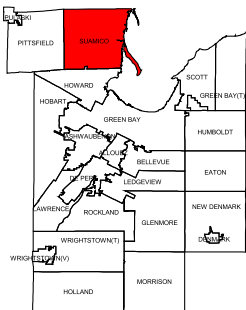
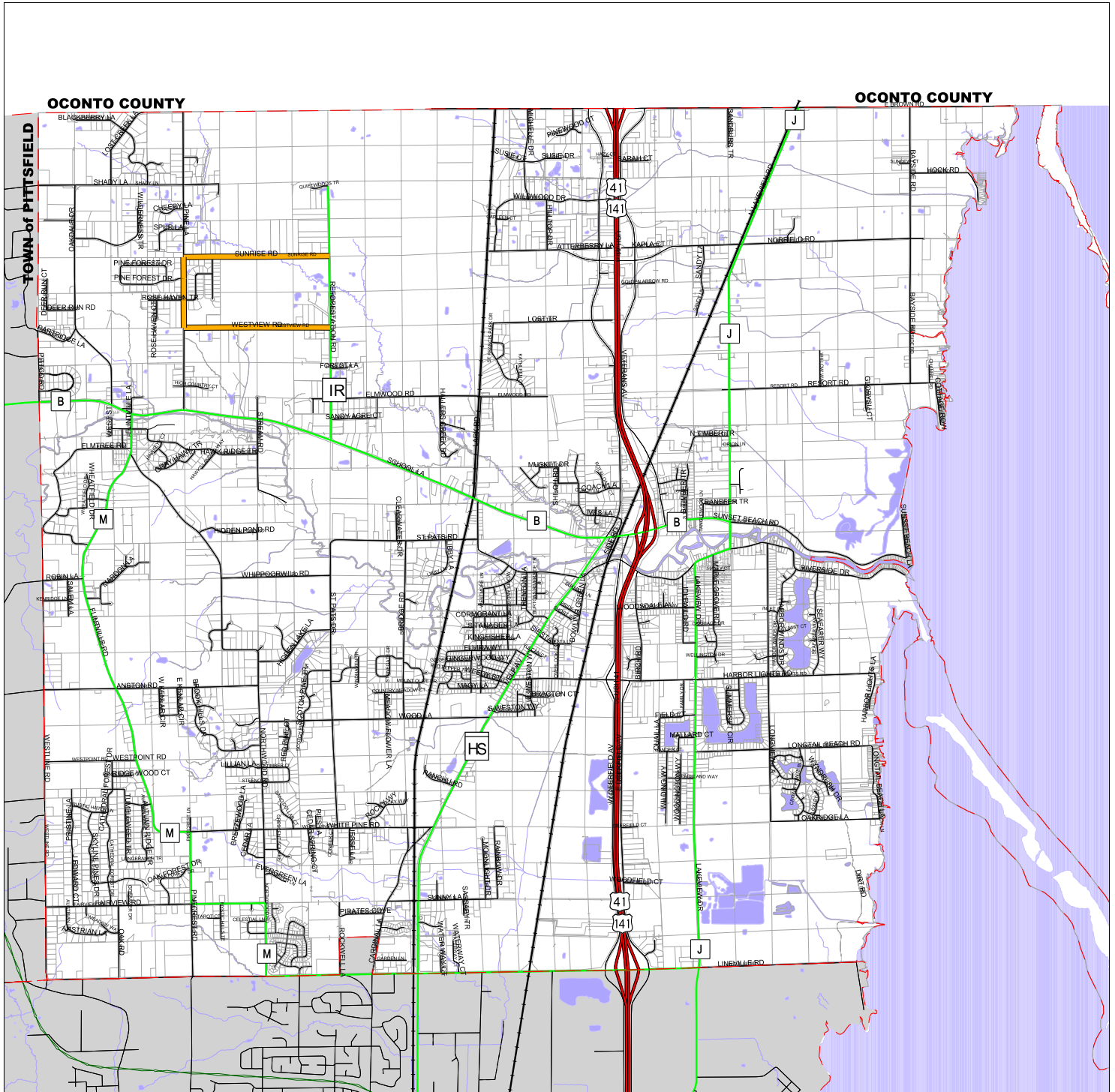
Rustic Roads

The Wisconsin State Legislature created the Rustic Roads System in Wisconsin in 1973 in an effort to help citizens and local units of government preserve what remains of Wisconsin's scenic and lightly traveled county roads for the enjoyment by bicyclists, hikers, and motorists.



Figure 3-1 Street Network / Rail Lines

Village of Suamico, Brown County, WI



- US Highway
- CTH
- Local
- - - Vacated
- + + + + + Railroad
- Rustic Road

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



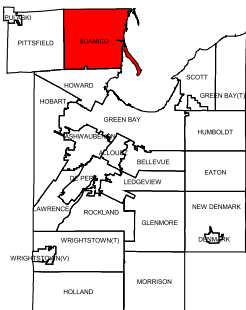
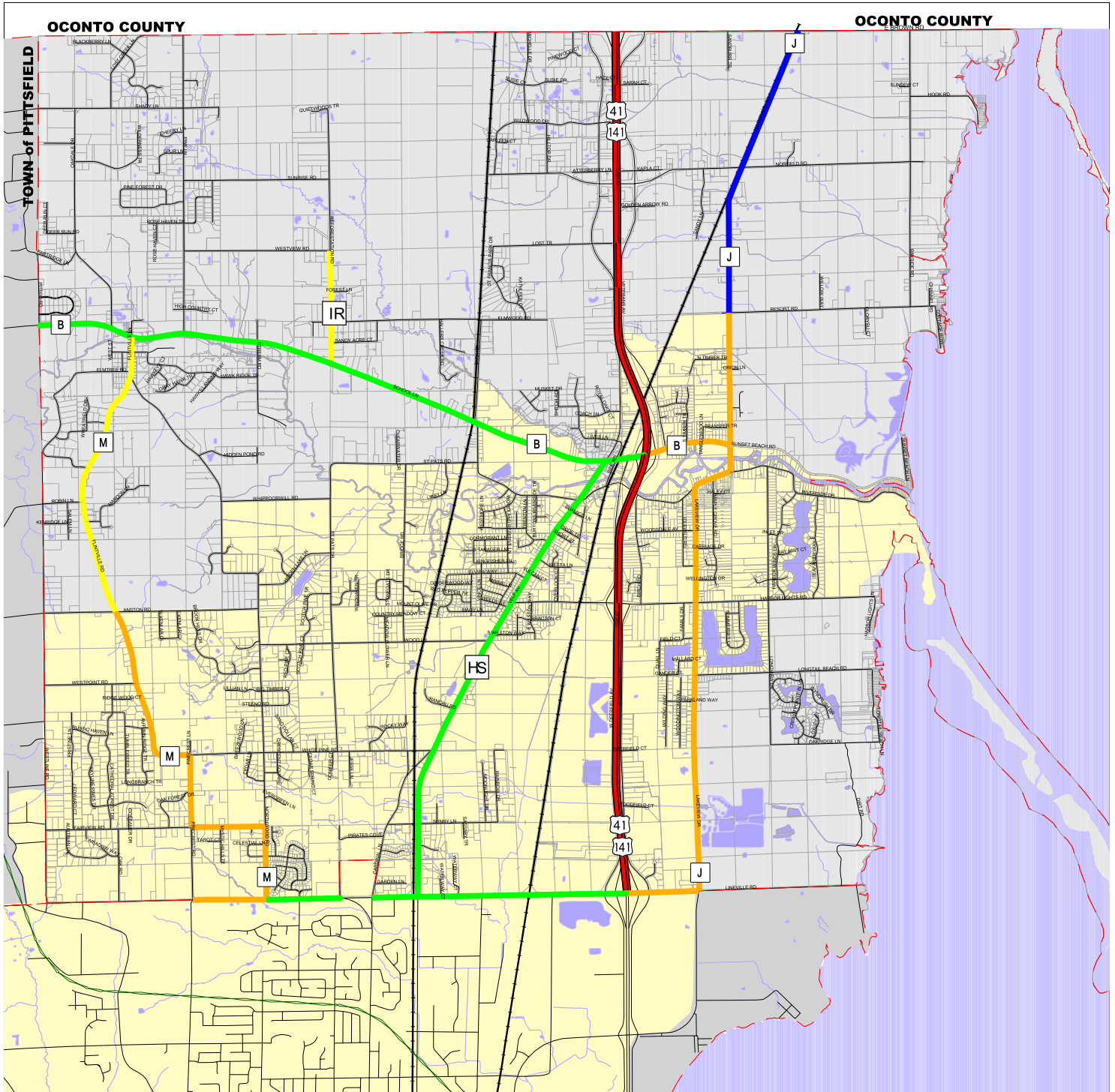
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January 2004.



Figure 3-2 Functional Classification

Village of Suamico, Brown County, WI



- Freeway
- Minor Arterial
- Major Collector
- Minor Collector
- Collector
- Local
- Railroad
- Municipal Boundary
- Urbanized Area
- Rural Area

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Sunrise Road, a portion of West Pine Road, and Westview Road make a loop off of CTH IR to form the only designated Rustic Road in the Village. Hardwood and coniferous trees characterize this stretch of roadway. These roads were recently reconditioned with asphalt by the Brown County Highway Department and transferred to the Village of Suamico for future maintenance, while maintaining their rustic road designations.

The goals of the Rustic Roads program include:

- To identify and preserve in a natural and essentially undisturbed condition certain designated roads having unusual or outstanding natural or cultural beauty.
- To produce a linear, park-like system for vehicular, bicycle, and pedestrian travel for quiet and leisure enjoyment by local residents and the general public.
- To maintain and administer these roads to provide safe public travel while preserving the rustic and scenic qualities through use of appropriate maintenance and design standards and encouragement of zoning for land use compatibility, utility regulations, and billboard control.

Street System Summary

The current street pattern in Suamico enables some vehicle trips to occur on the local and collector streets because a few of them are well-connected. However, the Village also contains several cul-de-sacs, horseshoe roads, and other streets that do not provide convenient connections to surrounding streets. This lack of street connectivity in many parts of the Village forces motorists to use the arterial streets at some point during nearly every trip, and this concentration of traffic can create barriers to other transportation modes (such as walking and bicycling).

Pedestrian and Bicycle Facilities

As previously mentioned, Suamico's existing transportation system is largely comprised of local streets, county highways, and state/federal highways. Only CTH M on the south boundary of the Village currently has a sidewalk and bicycle lane on the north side of the road between Rockwell Lane and Cardinal Lane.

In 2003, the Village of Suamico Trail Plan was approved by the Village Board. The plan details potential on- and off-street bicycle lanes and trails. The recommendations outlined in the plan can be seen in Figure 3-3. The Village's existing pedestrian and bicycle system is shown in Figure 3-4.

Transit

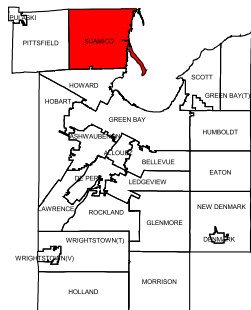
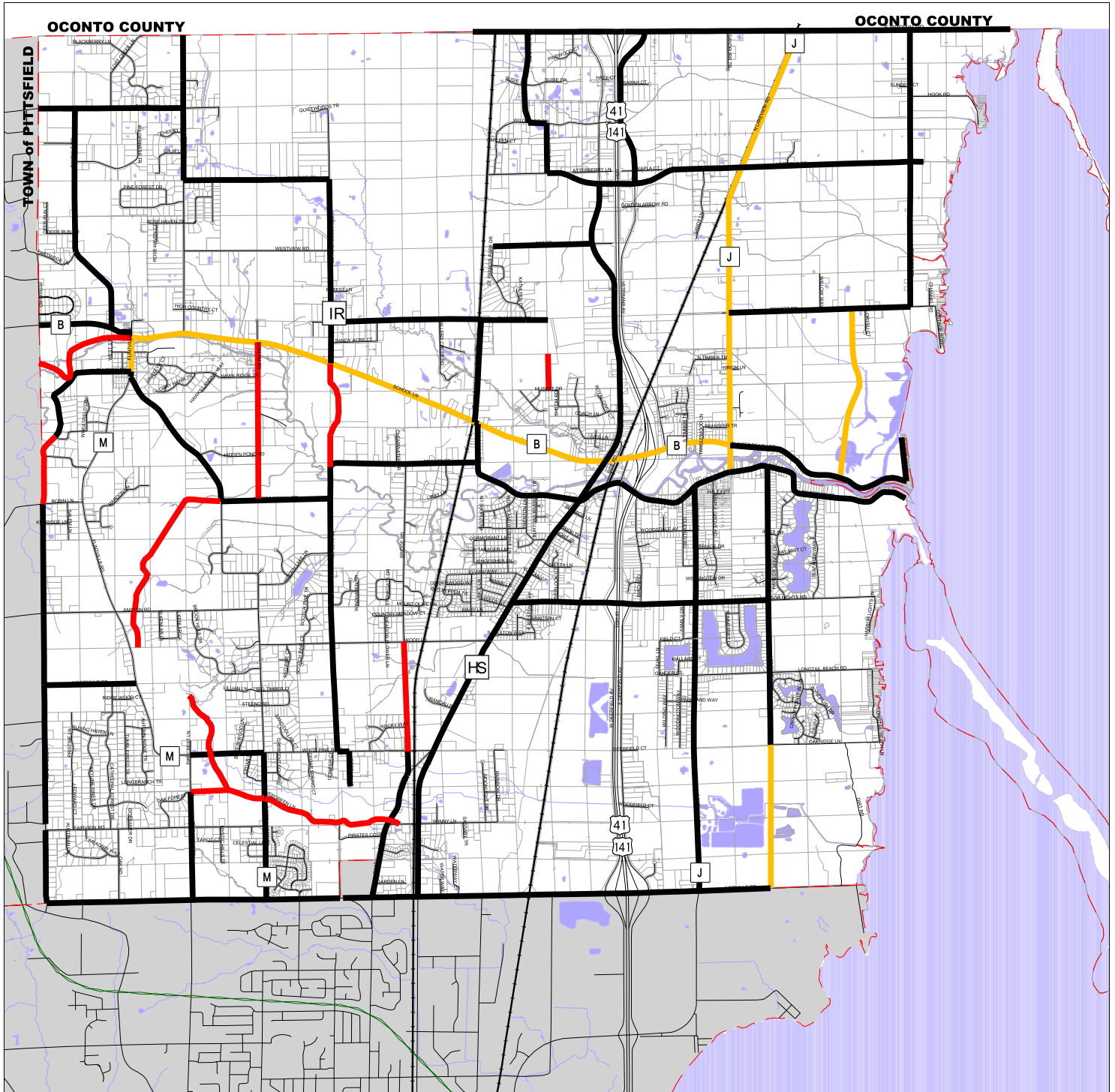
Green Bay Metro Fixed Route Service





Suamico is not currently included in the Green Bay Metro service area. It is unlikely, but possible, that fixed-route transit service could be extended into the Village within the long-range planning period. However, due to the relatively low density of development



Figure 3-3 Recommended Bicycle Facilities

Village of Suamico, Brown County, WI



-  County or DNR Trails
-  Roadside Trail
-  Trails to Construct
-  Railroad

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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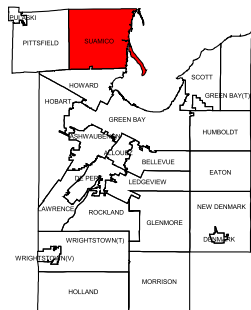
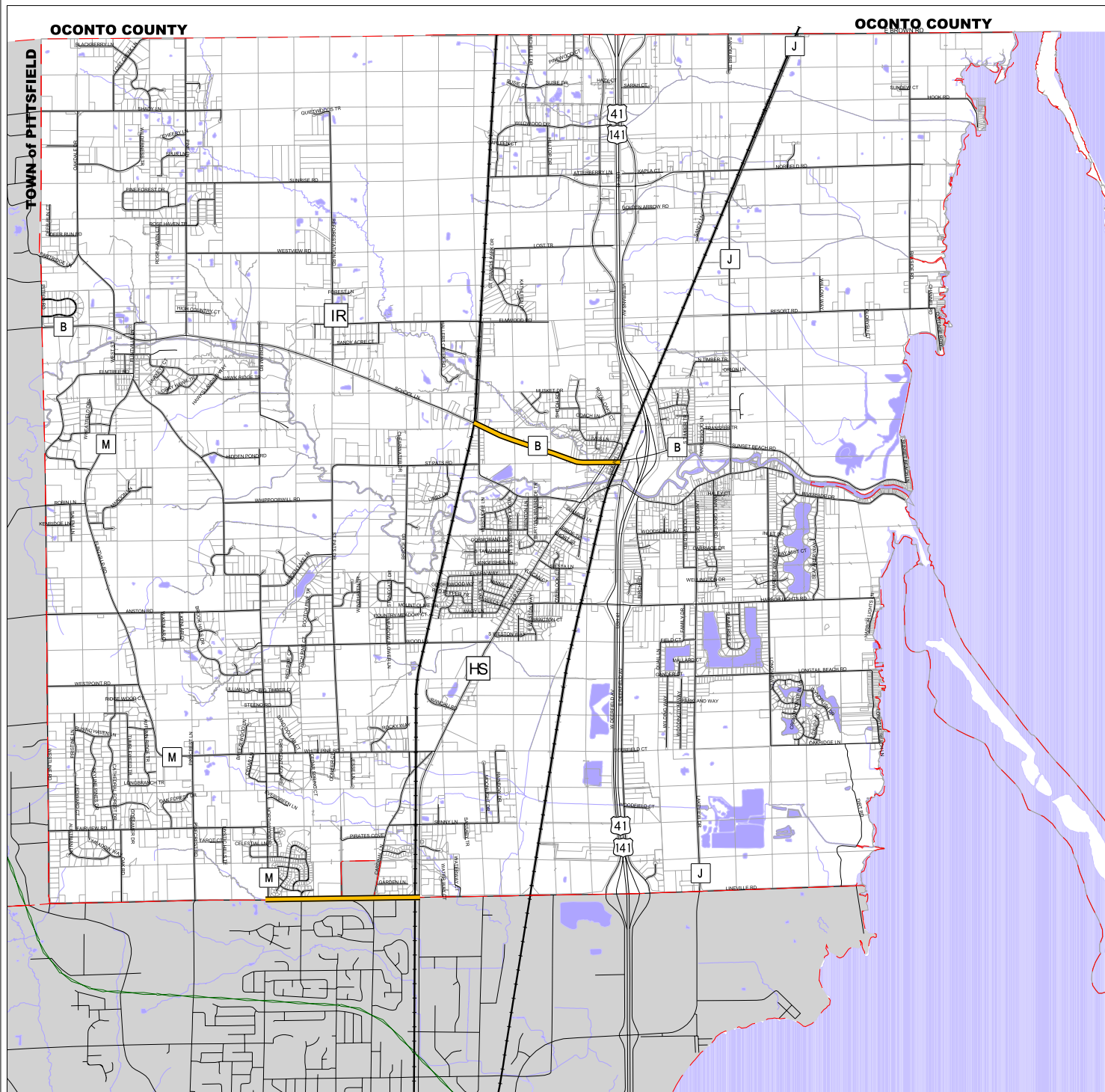
Map prepared by Brown County Planning Department.
January 2004.



Figure 3-4

Existing Bicycle Facilities

Village of Suamico, Brown County, WI



- Existing Bicycle Lanes
- Municipal Boundary
- Railroad

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
January, 2004.

and the distance from the existing system, the Village's payment to provide this service would be cost-prohibitive over the next 20 years.

Specialized Transportation Services for the Elderly and Disabled

Green Bay Metro Paratransit Program

Joining the Green Bay Metro service area would allow the Village to be served by Metro's paratransit provider. Metro's paratransit service would allow clients in Suamico to be picked up at their homes and taken directly to their destinations in vehicles that accommodate wheelchairs, scooters, and qualifying riders with disabilities who do not require mobility devices. This service would provide another transportation option to elderly and disabled Suamico residents who need assistance to reach medical appointments, grocery stores, and other destinations throughout the Metro service area.

Although there are private companies in Brown County that offer the same service, Metro's paratransit provider is able to offer clients a very low per-trip rate that is largely subsidized by Green Bay Metro.

American Red Cross Transportation Service

The Lakeland Chapter of the American Red Cross provides transportation services to people with disabilities and to those who are 60 years of age or older in portions of Brown and Door Counties. The service is available to qualifying individuals for employment, nutrition, and medical purposes. A \$1.00 per one-way trip donation is accepted.

Currently, Red Cross services reach as far north as the Village of Howard/Village of Suamico border at the Lineville Road (CTH M)/US 41 interchange. In the near future, the Red Cross is planning to implement transportation services throughout the Village. The Red Cross will be allocating one wheelchair-accessible van to Suamico and Howard two days per week from 8:00 a.m. to 4:30 p.m. The van will be housed in Suamico or Howard and will be operated by a volunteer driver.

Rail Transportation

Suamico currently has two active rail lines (see Figure 3-1 for the location of these lines). The lines are located approximately one mile apart and run parallel to each other and US 41/141. Canadian National and Escanaba and Lake Superior (ELS) operate the lines. Rail traffic is moderate at this time, and the lines do not currently serve any destinations in Suamico.

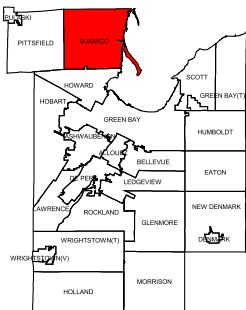
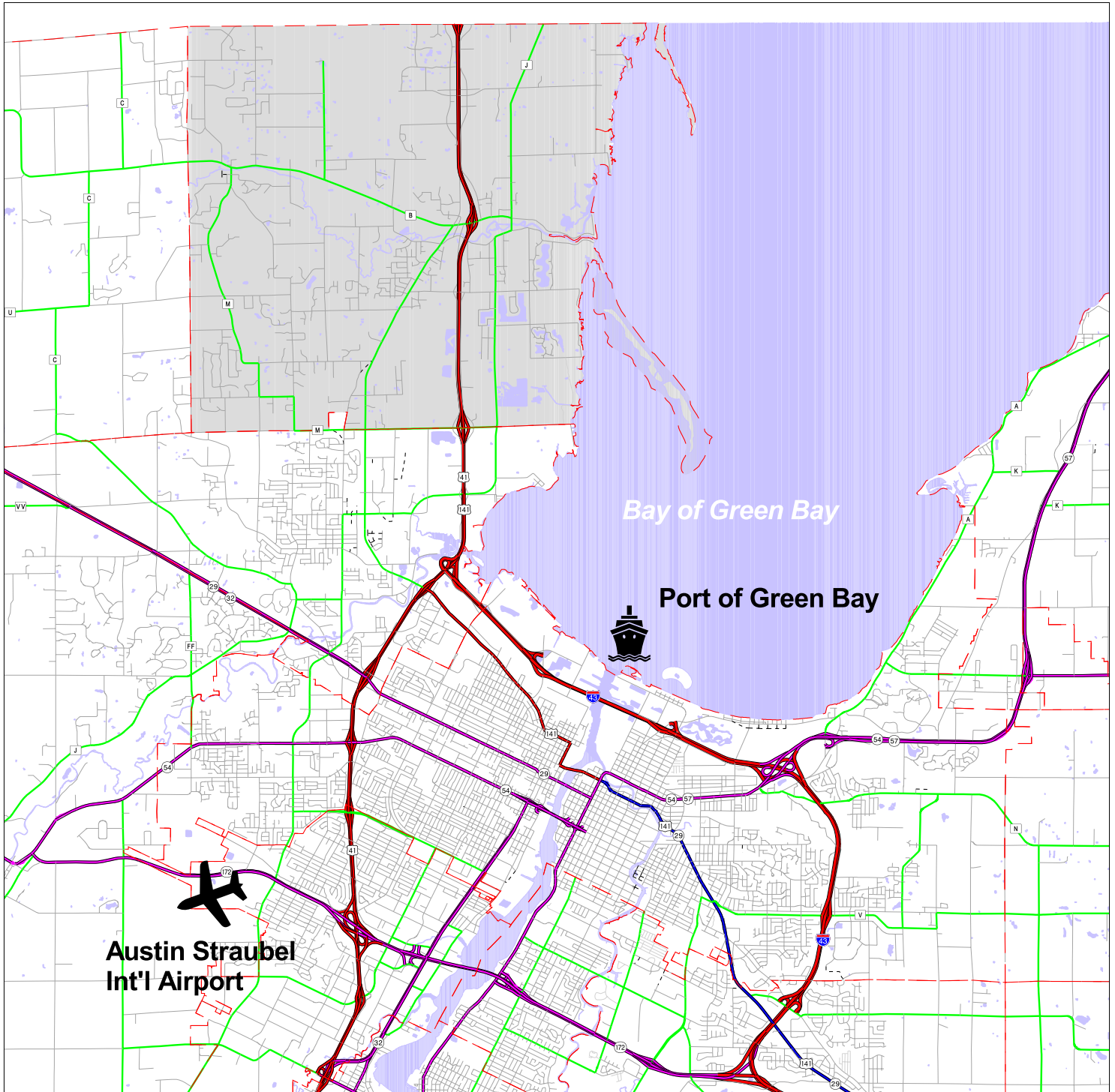
Air Transportation

Austin Straubel International Airport is approximately six miles south-southwest of Suamico (see Figure 3-5 for the airport's location). Commercial service is currently provided by Northwest Airlines, American Airlines, United Airlines, Skyway Airlines, and ComAir Delta. Charter service is provided by Executive Air and Titlevillage Jet Center. Air cargo service is provided by Northwest Cargo. The Village's economy is not significantly affected by the airport at this time.

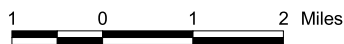


Figure 3-5 Port and Airport Facilities

Village of Suamico, Brown County, WI



Scale: 1 inch = 1 mile

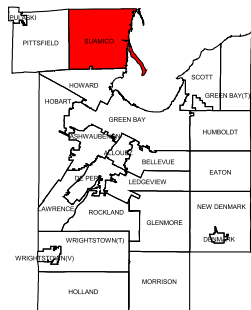
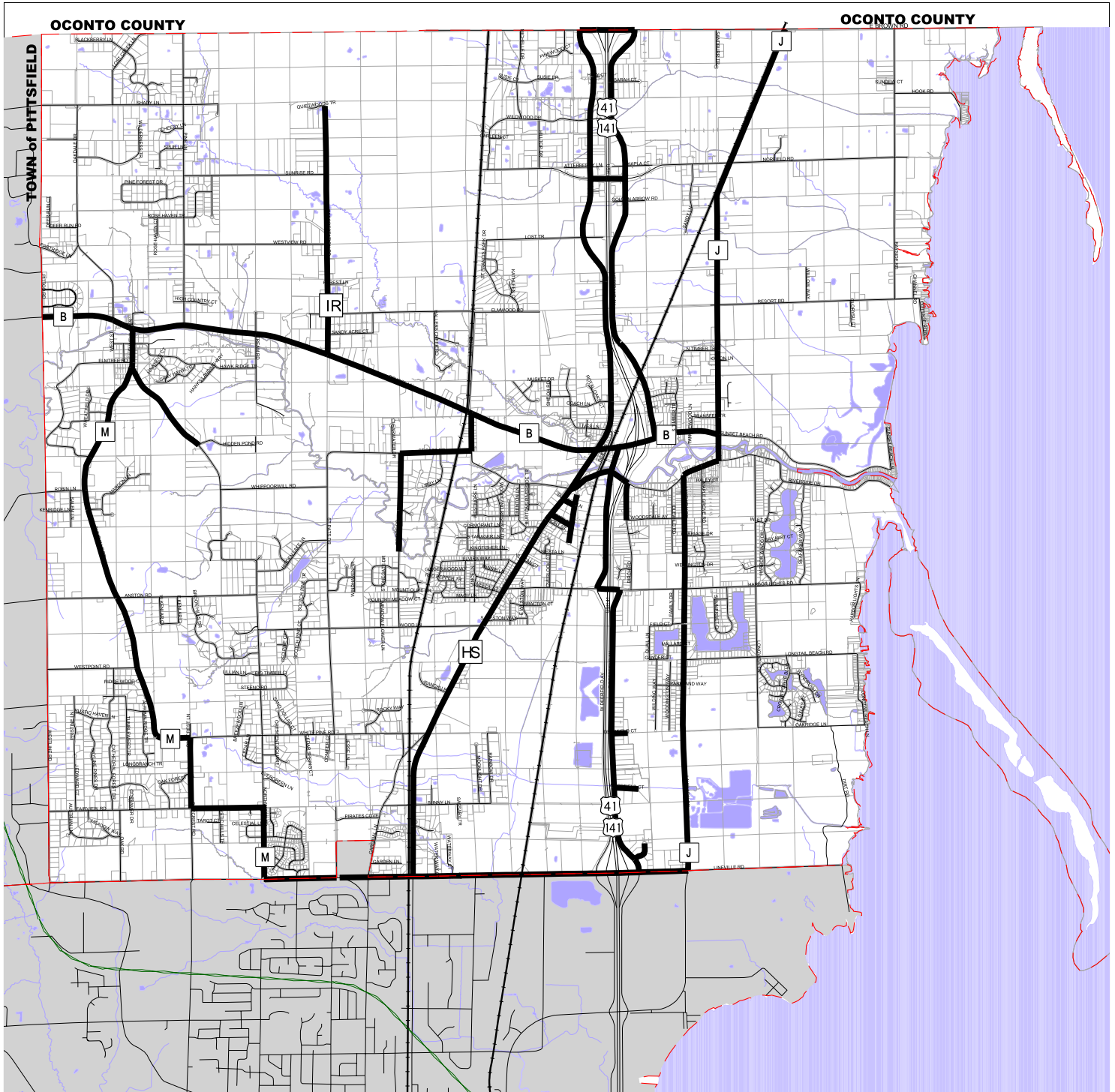





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Map prepared by Brown County Planning Department. January 2004.



Figure 3-6
Heavy Truck Routes
 Village of Suamico, Brown County, WI



-  Heavy Truck Route
-  Street Centerline
-  Railroad

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
 January 2004.

Truck Transportation

Because Suamico contains few industrial developments and commercial activity is relatively low, much of the heavy truck traffic in the Village is attributable to trucks passing through on US 41/141. However, various businesses and industries within the Village still rely on occasional truck trips to import and export goods. These trips typically occur on county highways, but trucks occasionally need to travel on Village streets to reach their destinations. (See Figure 3-6 for the Village's truck route system.)

Water Transportation

The Village does not currently rely on the Port of Green Bay to import or export goods. The port's location is shown in Figure 3-5.

Future Transportation System

Suamico's land use pattern and transportation system are largely oriented toward motorized vehicles. This section of the Transportation chapter identifies the major aspects of Suamico's transportation system and recommends methods of developing them over the next 20 years to create a comprehensive multi-modal transportation system. This chapter also discusses the land use patterns that should be promoted during this period to create this system.

Streets and Highways

Suamico's numerous cul-de-sacs, lack of sidewalks and bicycle facilities, and separation of land uses force many people to drive from place to place because other transportation modes are not practical. To enhance everyone's ability to safely and efficiently navigate the Village's street system with and without personal vehicles, the Village needs to:

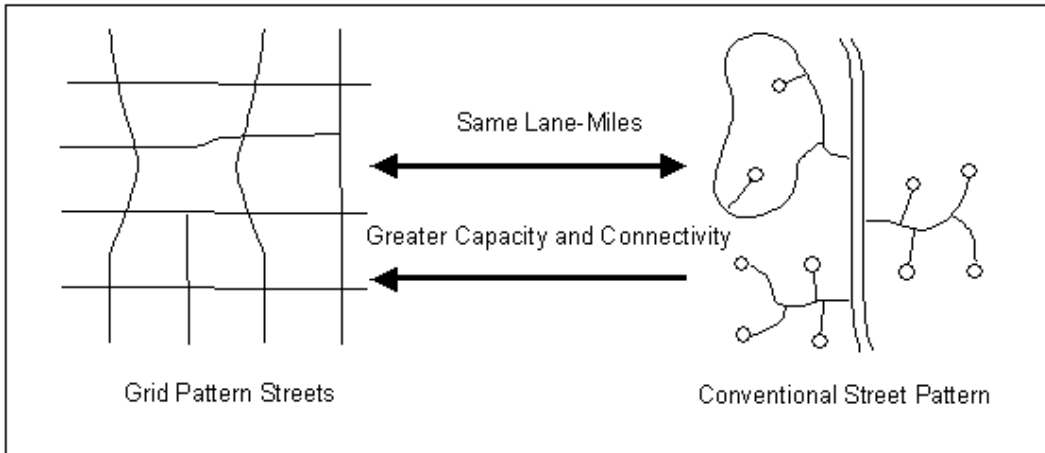
- Increase street connectivity and intersection frequency when possible.
- Minimize barriers to pedestrian and bicycle travel and encourage people to drive at appropriate speeds by installing traffic calming devices on existing streets.
- Improve accessibility and safety at intersections and other potential conflict points.

Methods of achieving these aims are addressed in this section.

Develop a Well-Connected Street Pattern in the Village, Including the Village Center

To enable and encourage people to walk and bicycle to and within the Village's urban areas, Suamico should require well-connected street patterns within new urban developments that have frequent connections to the existing street system. These kinds of street patterns would also provide motorists several route options and avoid concentrating traffic on relatively few streets. A comparison of well-connected and conventional street patterns is shown in Figure 3-7.

Figure 3-7: Comparison of Well-Connected and Conventional Street Patterns



Although well-connected street patterns enable traffic to be distributed evenly, are very accessible to a variety of transportation system users, are easy for public works departments to plow and maintain, and enable communities to create efficient sewer and water systems (that do not have several stubs), situations will arise where streets cannot be connected due to physical or environmental constraints. If constraints prohibit street connections, the Village should allow the development of cul-de-sacs near the constraints. However, to maximize connectivity in these neighborhoods, the cul-de-sacs should have public rights-of-way or easements reserved at the bulbs to enable pedestrians and bicyclists to travel easily throughout the area. This connectivity concept is discussed further in this chapter.

Enable Developers to Build Narrow Streets in Urban Areas

The Village currently requires urban streets to be between 28 and 32 feet wide and rights-of-way to be at least 70 feet wide. However, this right-of-way width is not often necessary (especially in the Village's neighborhoods), and it forces the Village to maintain a significant amount of land that could instead be taxable property.

The subdivision ordinance should be amended to establish right-of-way width standards that do not require the acquisition of more right-of-way than necessary. A summary of street and right-of-way standards that should be considered by the Village is included in Figure 3-8. These standards are based on recommendations in *Residential Streets* (third edition), which was developed by the Urban Land Institute in conjunction with the Institute of Transportation Engineers, National Association of Homebuilders, and American Society of Civil Engineers.

The implementation of these standards will enable the Village to reserve only the land it needs to accommodate its streets, sidewalks, and terraces.

Figure 3-8: Street and Right-of-Way Width Standards Summary

Street Type	Right-of-way Width *	Pavement Width (curb face to curb face)	Driving Lane Width	On-Street Parking	Parking Areas Defined by Curbs?
Collectors	60 feet	34 feet	9-10 feet	Both sides	Yes
Local Streets					
No parking allowed	40 feet	18 feet	9 feet	None	No
Parking on one side	46-48 feet	22-24 feet	14-16 feet travel lane	One side	If needed
Parking on both sides	50-52 feet	26-28 feet	10-12 feet travel lane	Both sides	If needed
Alleys	16 feet	12 feet	---	---	---

* The right-of-way width includes the widths of the driving area, parking area, curbs, terraces (between the sidewalk and street), and sidewalks.

Define the Parking Areas of Urban Streets

The parking areas of urban streets should be defined by curb extensions at many of the Village’s intersections. If a block is relatively long, extensions should also be placed at other points along the street. The curb extensions will prohibit drivers from using the parking lanes as passing or turning lanes at intersections and will encourage people to drive slowly when parked vehicles are not present. The curb extensions will also minimize pedestrian crossing distances at the Village’s intersections. Pictures of curb extensions that were recently built in De Pere and in the City of Middleton (near Madison, Wisconsin) are shown in this section.



Curb extensions in Middleton, Wisconsin

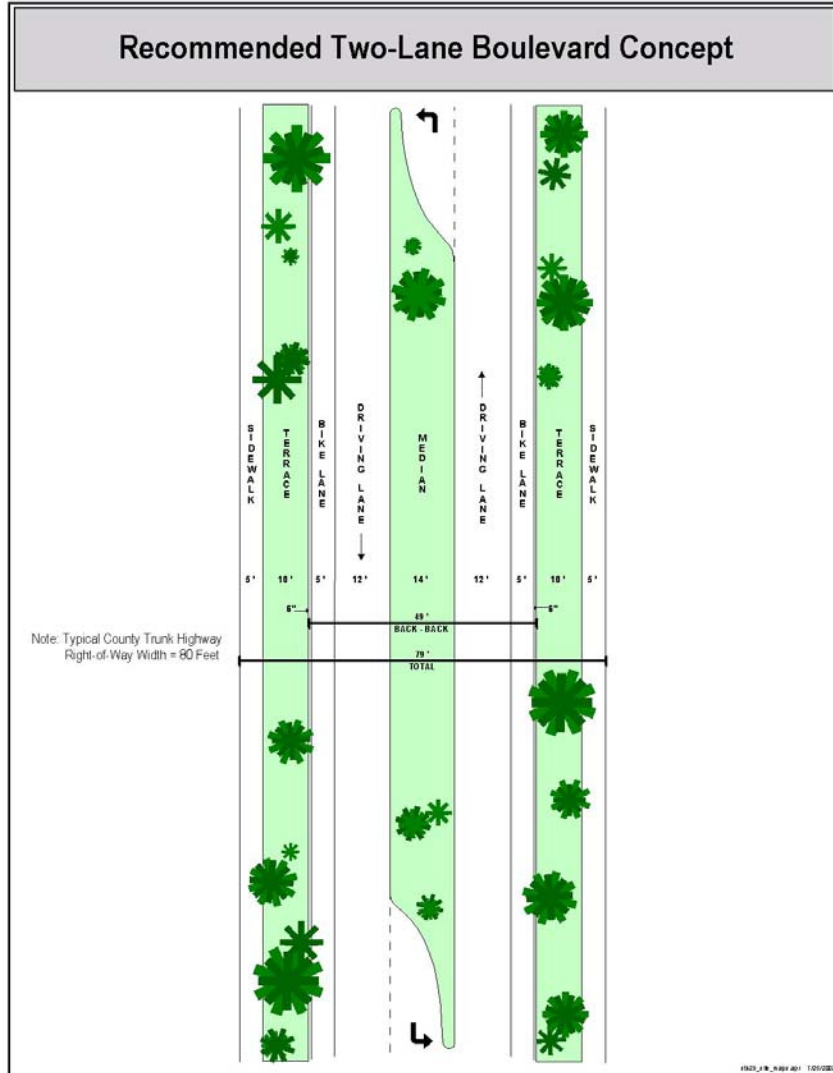


Curb extensions along Grant Street in De Pere

Avoid Expanding Streets to Four or More Lanes

Although it is unlikely that most of the Village’s streets would be considered for widening in the future, some two-lane streets might be seen as candidates for widening as traffic levels rise over the next 20 years. However, street widening has proven to not be an effective long-term method of relieving traffic congestion. Maintaining streets as

two-lane facilities would also minimize barriers to pedestrian and bicycle travel and encourage people to drive at appropriate speeds through the Village's neighborhoods.



One way to move traffic efficiently while minimizing barriers to pedestrian and bicycle travel and encouraging people to drive at appropriate speeds is the construction of a system of two-lane arterial boulevards that are complemented by an interconnected collector and local street system, mixed land uses, and efficient traffic control techniques at intersections. The street interconnectivity and mixing of land uses make walking and bicycling viable transportation options and help to avoid forcing traffic onto a system of relatively few large arterial streets. Building narrower arterial boulevards instead of the standard wide arterial streets would also make the Village's thoroughfares more attractive.

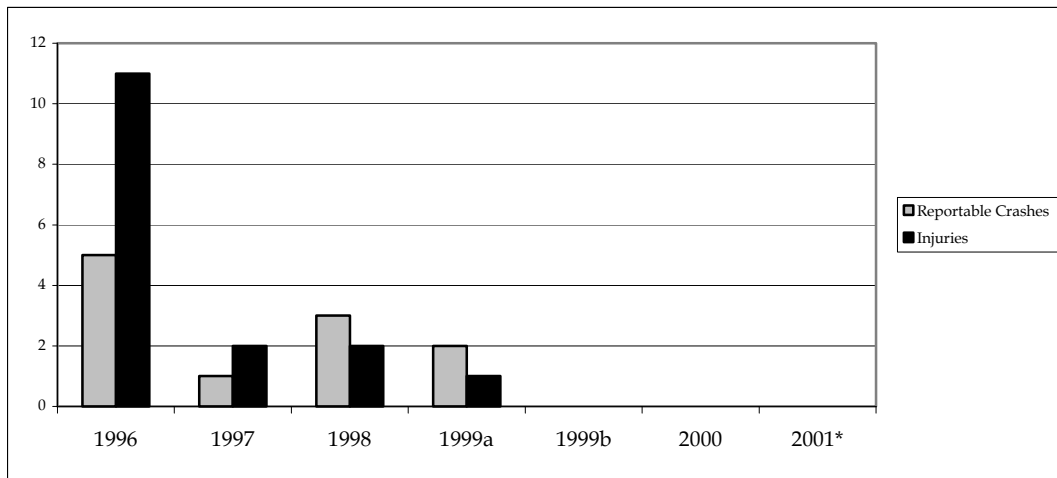
Design Intersections to Maximize Safety and Accessibility

The Village should utilize street design techniques that reduce vehicle speeds, minimize the possibility of conflicts, and enhance traveler awareness to maximize pedestrian, bicyclist, and motorist safety and accessibility at the Village's intersections. Techniques that should be used include roundabouts, curb extensions at intersections, and other street design features. The narrower street widths recommended for the Village would also help make intersections safer by controlling the speed of vehicles as they approach the intersections.

Roundabouts in Brown County

There currently are four roundabouts in the Village of Howard (two of which are partially located in Suamico), three roundabouts in the City of De Pere, and one roundabout in the Town of Ledgeview. The two roundabouts on Lineville Road were recently featured in a Brown County Planning Commission study that examined their safety, efficiency, and other impacts between 1999 and 2001. This study found that the Lineville roundabouts have made the intersections more accessible to pedestrians and bicyclists and safer for everyone. An example of this safety improvement is shown in the study and in Figure 3-9, which identifies the number of reportable crashes and injuries at the Lineville/Cardinal intersection before and after the roundabout.

Figure 3-9: Reportable Crashes and Injuries at the Lineville Road/Cardinal Lane Intersection (1996-2001)



Source: Brown County Sheriff's Department crash records: 1996 - 2001

1999a: January 1, 1999 - July 31, 1999 (before roundabout - still a two-way stop)

1999b: August 1, 1999 - December 31, 1999 (during and after roundabout construction)

2001*: Through October 1, 2001

The De Pere and Ledgeview roundabouts have not been studied because they were completed more recently than the Lineville Road roundabouts. However, representatives of the De Pere Police Department, De Pere Department of Public Works, and De Pere School District have indicated that the roundabouts are operating very efficiently and that they are unaware of any reportable crashes at the intersections.

Observations by the Brown County Planning Commission and Highway Department have also found that pedestrians, bicyclists, and motorists interact well at the roundabouts.



Lineville/Cardinal roundabout in Howard/Suamico



Chicago/Swan roundabout in De Pere

Potential Roundabout Locations in Suamico

The Village should work with the Brown County Planning Commission and the Brown County Highway Department to study the possibility of installing additional roundabouts at various intersections in Suamico. Some intersections that are scheduled to be reconstructed with roundabouts and others that should be studied include (planned and programmed, as per the Brown County Highway Department 6-Year Highway Improvement Plan, 2004 to 2009):

- Velp Avenue (CTH HS) and Lineville Road (CTH M) located on the Howard/Suamico border (programmed for 2005).
- Belmont Road and Lineville Road (CTH M) located on the Howard/Suamico border (programmed for 2005).

Considerations:

- Velp Avenue (CTH HS) and School Lane (CTH B).

The Village should also investigate the installation of smaller neighborhood traffic circles at minor intersections throughout Suamico to calm traffic and enhance the appearance of neighborhoods.

Pedestrian and Bicycle Facilities

Because only one of the Village's streets include sidewalks on either side, many activities that normally occur on sidewalks are occurring in the driving areas. On an average day, a person can see residents walking on the Village's streets, neighbors talking to one another in front of their homes while being avoided by passing vehicles, and people doing other activities that should occur outside of the street. Many less-experienced bicyclists may also have trouble sharing many of the Village's major streets with motorized vehicles because the motorists and bicyclists are not sure where they are

supposed to travel. To create a pedestrian and bicycle system that complements the Village's street system, the Village needs to:

- Begin implementing the Village of Suamico Trail Plan developed in 2003.
- Expand the development of land use patterns that enable and encourage walking and bicycling.
- Create a safe, continuous pedestrian system throughout the Village.
- Enable people to easily reach developments in the Village on foot or by bicycle.

Methods of achieving these aims are addressed in this section.

Mixing Land Uses Throughout the Village

To enable and encourage people to make additional walking and bicycling trips in Suamico, the Village should implement the Land Use chapter's recommendations for mixing land uses to create destinations that can be easily reached by pedestrians and bicyclists. The mixing of residential, commercial, institutional, and recreational uses will enable people of all ages and physical abilities to travel from place to place without a motorized vehicle, which will significantly improve mobility for all Village residents and minimize traffic on the existing street system.

Figure 3-10: Segregated Land Uses vs. Mixed Uses with High Connectivity

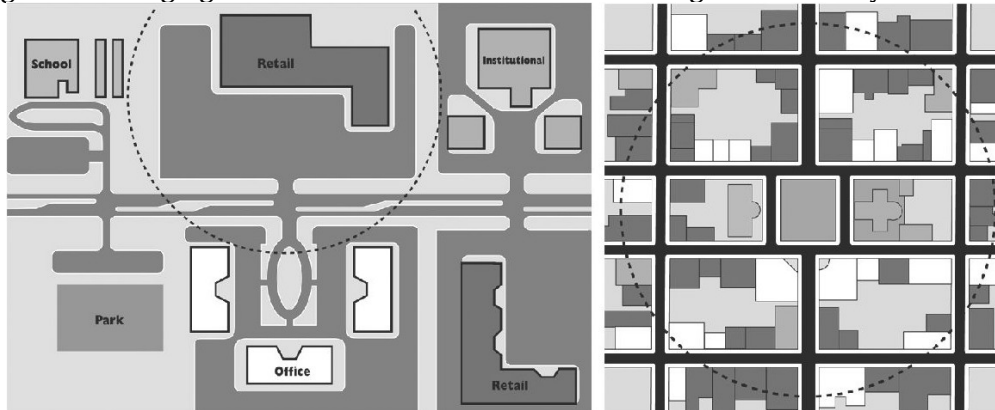
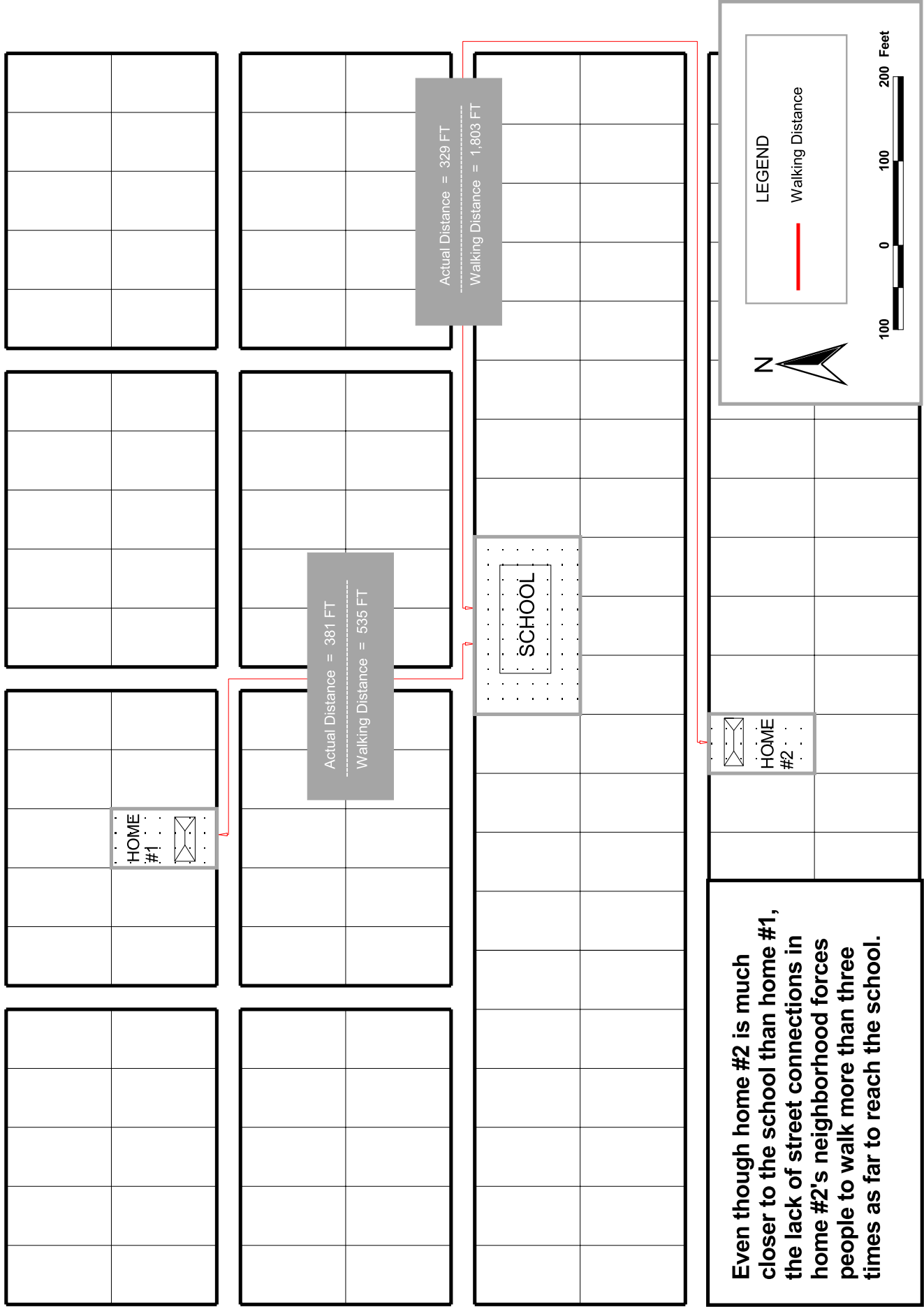


Figure 3-10 compares a conventional land use and street pattern with a mixed land use and well-connected street pattern. The dotted circle on the diagram represents a 500-foot radius, which is a distance that most people feel comfortable walking. This diagram demonstrates that a greater number and variety of destinations are easily reachable on foot (and by bicycle) when land uses are mixed and streets are frequently interconnected. The benefits of street connectivity in neighborhoods are also illustrated in Figure 3-11, which demonstrates that a well-connected street system requires people to travel much shorter distances to reach their destinations than a system with few connections. Although this type of mixed land use pattern and highly connective street system would not likely be possible in those parts of Suamico with numerous topographic and environmental constraints, this pattern should be encouraged in the village center and possibly elsewhere to enable people to easily reach several destinations.

Example of Neighborhoods With and Without Street Connectivity

Village of Suamico, WI



Even though home #2 is much closer to the school than home #1, the lack of street connections in home #2's neighborhood forces people to walk more than three times as far to reach the school.

Developing a Continuous Pedestrian System in the Village's Urban Areas

In the Village Streets section, the transportation plan recommends methods of calming traffic and making the Village's intersections safer and more accessible for motorists, pedestrians, and bicyclists. These improvements should be accompanied by a continuous pedestrian system that can be created through the following process:

Step 1: Require sidewalks within the village center and near Lineville Road school campus. The Village should begin the process of creating its sidewalk system by requiring developers to install sidewalks on both sides of streets as the village center develops and in developments near schools. The only situation where sidewalks should not be required on both sides of a street within the village center or near the Lineville Road school campus is when physical or environmental constraints exist. In these situations, sidewalks should be required on at least one side of the street.

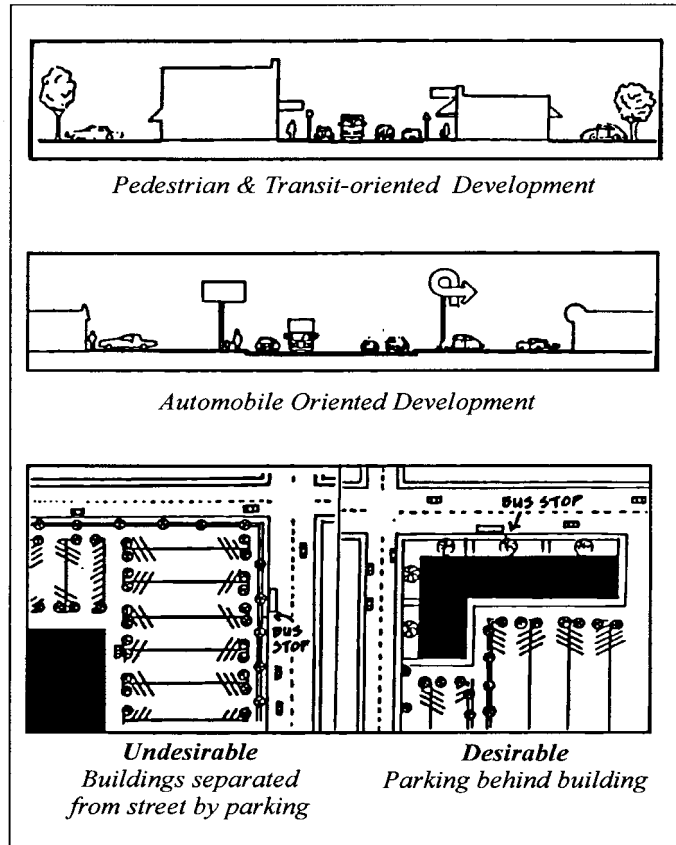
Step 2: Develop a pedestrian and bicycle trail system throughout the Village. The Village should pursue the recommendations outlined in the Village of Suamico Trail Plan by purchasing land, cooperating with area utility companies to utilize utility easements, and requiring developers to dedicate land for trails before approving subdivisions or other development proposals in locations where trails are planned. The Village should also work with the Wisconsin Department of Natural Resources and Brown County to acquire and develop trails on the railroad corridors that pass through the eastern portion of the Village if they are proposed for abandonment in the future.

Step 3: Ensure new subdivisions connect to the trail system. The Village should require developers to dedicate land for connections to the Village's trail network prior to approving their subdivisions. The Village should also encourage developers to install the connections.

Designing Developments that Provide Direct Access to Sidewalks and Streets in the Village Center

To enable and encourage people to travel to destinations in the village center with and without motorized vehicles, the Village should design developments that have zero or minimal setbacks, parking in the rear, and other features (see Figure 3-12). People will still be able to reach these destinations with motorized vehicles, but these design features will also enable and encourage people to travel to them using other transportation modes.

Figure 3-12: Pedestrian-Oriented Development vs. Automobile-Oriented Development



Ensuring That All Transportation Structures Have Pedestrian and Bicycle Facilities

The Village should continue to work with the Wisconsin Department of Transportation and Brown County Highway Department to ensure that all of the Village's bridges, interchange overpasses, and other transportation structures have adequate pedestrian and bicycle facilities when they are constructed or reconstructed.

Enabling People to Travel Easily Between Subdivisions and Other Developments

In some parts of the Village, the well-connected street pattern recommended earlier in this chapter will not be feasible due to the presence of existing development or physical constraints. When cul-de-sacs must be built and development and physical barriers are not present, the Village should require the designation of public rights-of-way at or near the end of the cul-de-sacs for multi-use paths that connect to neighboring subdivisions, schools, parks, and other destinations when feasible. These paths should be between 10 and 12 feet wide and paved to accommodate pedestrians, bicyclists, skaters, and other non-motorized uses. This width and surface will also be able to handle authorized service vehicles.

Developing land use patterns that enable and encourage walking and bicycling, create a safe and continuous pedestrian system, and enable people to easily reach developments from the streets and walkways will increase mobility for everyone in Suamico. This enhanced mobility and choice of viable transportation modes will also help attract new residents to the Village, improve access to Village businesses, and allow the Village's existing and future street system to handle traffic efficiently.

Highways

Although several highway projects of various sizes will occur in and around Suamico during the long-range planning period, the following projects will likely be the most significant.

Improvements programmed:

- Lineville Road (CTH M) – 2005 from Velp Avenue (CTH HS) to CTH J. Recondition and roundabout construction at the Lineville/Velp intersection.
- Lineville Road (CTH M) – 2005 at Belmont Road intersection. New roundabout construction.
- Lakeview Drive (CTH J) – 2006 from Harbor Lights Road to Suamico River. Reconstruction to three-lane urban section.
- Lakeview Drive (CTH J) – 2007 Sunset Beach Road (CTH B) to the north county line. Recondition two-lane rural section.
- Flintville Road (CTH M) – 2008 School Lane (CTH B) to Lineville Road. Recondition and bridge replacement at the Suamico River to a two-lane rural.
- Lakeview Drive (CTH J) – 2008 from Harbor Lights Road to Lineville Road (CTH M). Recondition to two-lane rural section.
- School Lane (CTH B) and village center area – 2009 School Lane (CTH B) from Velp Avenue (CTH HS) to CTH J. Reconstruction to a four-lane undivided urban section. Although the current plan calls for a four-lane undivided urban section, further study may be needed to determine if that is necessary.

Suamico should begin discussions with the Brown County Highway Commission regarding a jurisdictional transfer that would move the County Highway M designation from Fairview Road and Northwood Road to Pinecrest Road between Lineville Road and Fairview Road. This would eliminate a dangerous 90-degree curve where Northwood and Fairview Roads meet. Additionally, Suamico should work with the Brown County Highway Commission to address the other dangerous 90-degree curve on CTH M at White Pine Road and Pinecrest Road.

Rail Transportation

Freight Rail

The Canadian National (CN) rail line, which runs next to the Village's light industrial park, is very active, and the Escanaba and Lake Superior (E&LS) rail line farther west is

also active but at a much lower rate than the CN. The Village should work with WisDOT and CN to develop a rail spur into the proposed expanded area of the Village's light industrial park in order to accommodate any potential new businesses that would utilize rail access.

Since the E&LS line is currently very lightly used, the Village should monitor activity on the rail line and contact the Wisconsin Department of Natural Resources if the line is proposed for abandonment in the future. If abandonment is proposed by the railroad, the Village should urge the DNR to purchase the right-of-way to enable the rail bed to be converted to a multi-use trail.

Passenger Rail

The Green Bay Metropolitan Area does not currently have access to passenger rail service, but the Midwest Regional Rail Initiative (MRRRI) report includes discussion of a high speed passenger rail line to be extended to Brown County. Although this service is unlikely to be implemented any time soon, it would provide another means for Suamico residents to travel throughout the Midwest without using their personal vehicles.

Air Transportation

Austin Straubel International Airport will continue to provide air service to people traveling to and from Suamico, and the expansion of Suamico's commercial base over the life of the plan could increase the demand for air freight service at the airport. Suamico should work with representatives of the airport over the next 20 years to support the retention and, if possible, expansion of air carriers that offer passenger and freight service.

Truck Transportation

The Village recently adopted a formal system of truck routes. The truck routes have been designed to minimize impacts on residential areas and to inform truck drivers of the most efficient routes into and out of the Village. The truck routes are designated by yellow street signs.

Water Transportation

To ensure that Suamico's current and future interests are considered by Port of Green Bay representatives, the Village should participate in the port's plan implementation process. Participating in this process would enable the Village to inform the port planners of its intentions to utilize the port over the next 20 years and ensure that modifications to the port's policies and facilities are consistent with the Village's long-term economic development strategy.

Funding to Help Develop the Village's Transportation System

To help the Village fund the development of its multi-modal transportation system, it should apply for transportation grants from various sources over the next several years. Some examples of these programs are identified in this section.

SMIP and Stewardship Program

The Village should apply for grants from Wisconsin's Statewide Multi-Modal Improvement Program (SMIP) to help fund the development of the recommended bicycle and pedestrian system. The Village should also continue to apply for funds from Wisconsin's Stewardship Program to assist in funding the construction of the recommended off-street trail system. Information about the SMIP can be obtained from the Brown County Planning Commission or Wisconsin DOT, and the Village can contact the Wisconsin Department of Natural Resources for information about the Stewardship Program.

Statewide Enhancement Program

The Wisconsin DOT offers enhancement funds for transportation-related projects that are within the right-of-way of highways controlled by the state. These funds can be used to implement enhancement projects on or along US 41/141.

Hazard Elimination and Safety (HES) Program

The Village should apply for grants from the Hazard Elimination and Safety (HES) Program administered by WisDOT to correct existing or potential transportation safety problems. Other grant programs through WisDOT's Bureau of Transportation Safety should also be investigated by the Village to address safety issues.

CMAQ Program

If Brown County is designated as an air quality non-attainment area in the future, the Village should seek funds from the Congestion Mitigation and Air Quality (CMAQ) Program administered by WisDOT to implement projects that will improve the area's air quality.

The Village should also investigate other grant opportunities as they arise in the future.

Consistency With State and Regional Transportation Plans

State and Regional Bicycle and Pedestrian Plans

The bicycle and pedestrian system recommendations in the Suamico plan are consistent with the goals of the Wisconsin and Brown County bicycle and pedestrian plans. Like the state and regional bicycle and pedestrian plans, many of the recommendations in the Suamico plan are designed to increase the number of people using these transportation modes and to ensure that walkers and bikers are able to travel safely throughout the area.

State and Regional Highway Plans

Several aspects of the state and regional highway systems in this area are addressed throughout the chapter.

State and Regional Rail Plans

The Suamico plan acknowledges the Midwest Regional Rail Initiative (MRRI) and recommends that Village residents use the passenger rail service as an alternative to their personal vehicles.

State Airport Plan

The Wisconsin State Airport System Plan 2020 recognizes Austin Straubel International Airport as an important component of the state's airport system, and the Suamico plan recommends that the Village work with representatives of the airport over the next 20 years to support the retention and, if possible, expansion of air carriers that offer passenger and freight service.

Regional Waterway Plans

The importance of Suamico's participation in the implementation of Brown County's port plan is addressed in this chapter.

Summary of Recommendations

This chapter recommends the following policies:

Streets and Highways

- To enable and encourage people to walk and bicycle to and within the Village's urban areas, Suamico should require well-connected street patterns within new developments that have frequent connections to the existing street system. These kinds of street patterns would also provide motorists several route options and avoid concentrating traffic on relatively few streets. However, if physical or environmental constraints prohibit street connections, the Village should allow the development of cul-de-sacs near the constraints.
- The subdivision ordinance should be amended to establish right-of-way width standards that do not require the acquisition of more right-of-way than necessary.
- The parking areas of urban streets should be defined by curb extensions at many of the Village's intersections. If a block is relatively long, extensions should also be placed at other points along the street.
- To move traffic efficiently, minimize barriers to pedestrians and bicyclists, and make the Village's thoroughfares more attractive, the Village (in cooperation with Brown County) should construct two-lane arterial boulevards that are complemented by an interconnected collector and local street system, mixed land uses, and efficient traffic control techniques at intersections rather than expanding these roads to four lanes.
- The Village should utilize street design techniques that reduce vehicle speeds, minimize the possibility of conflicts, and enhance traveler awareness to maximize pedestrian, bicyclist, and motorist safety and accessibility at the Village's

intersections. Techniques that should be used include roundabouts, curb extensions at intersections, and other street design features.

- Suamico should contact the Brown County Highway Commission regarding a potential jurisdictional transfer for CTH M to Pinecrest Road.

Pedestrian and Bicycle Facilities

- To enable and encourage people to make additional walking and bicycling trips in Suamico, the Village should implement the Land Use chapter's recommendations for mixing land uses to create destinations that can be easily reached by pedestrians and bicyclists. Although this type of mixed land use pattern and highly connective street system would not likely be possible in some portions of the Village, this pattern should be developed in the Village's urban areas to enable people to easily reach several destinations.
- The Village should install sidewalks along streets in the village center and near the Lineville Road school campus to ensure the safety of pedestrians and children walking to school in these areas.
- The Village should continue developing its off-street pedestrian/bicycle trail system by purchasing land, cooperating with area utility companies to utilize utility easements, and requiring developers to dedicate land for trails before approving their development proposals.
- The Village should ensure that new and redevelopment projects in the village center have buildings with zero or minimal setbacks, parking in the rear, and other features similar to those recommended in the plan's Land Use chapter.
- The Village should continue to work with the Wisconsin Department of Transportation and Brown County Highway Department to ensure that all of the interchange overpasses and other transportation structures have adequate pedestrian and bicycle facilities when they are constructed or reconstructed.
- When cul-de-sacs must be built and development and physical barriers are not present, the Village should require the designation of public rights-of-way at or near the end of the cul-de-sacs for multi-use paths that connect to neighboring subdivisions, schools, parks, and other destinations. These paths should be between 10 and 12 feet wide and paved to accommodate pedestrians, bicyclists, skaters, and other non-motorized uses.

Transit

- The growth and population density of the Village should be monitored over the long-range planning period to determine if a bus route should serve the Village in the future.

Rail Transportation

Freight Rail

- Suamico should work with WisDOT and the Canadian National rail line to extend a rail spur in the proposed expansion of the Suamico Light Industrial Park if a business looking to locate in the Village would utilize rail service.
- The Village should monitor activity on the Escanaba and Lake Superior rail line and contact the Wisconsin Department of Natural Resources if the line is proposed for abandonment in the future. If abandonment is proposed, the Village should urge the DNR to purchase the right-of-way to enable the rail bed to be converted to a multi-use trail.

Passenger Rail

- The Village should monitor the progress of the Midwest Regional Rail Initiative (MRRRI).

Air Transportation

- The Village should work with representatives of the airport over the next 20 years to support the retention and, if possible, expansion of air carriers that offer passenger and freight service.

Truck Transportation

- Continue to utilize yellow street signs to identify designated truck routes.

Water Transportation

- To ensure that Suamico's current and future interests are considered by Port of Green Bay representatives, the Village should participate in the port's plan implementation process.

Funding to Help Develop the Village's Transportation System

- To help the Village fund the development of its multi-modal transportation system, it should apply for transportation grants from various sources over the next several years.

CHAPTER 4

Economic Development

Local governments play an increasingly critical role in promoting private sector economic development because economic strength is critical to the vitality of a community. Economic development is the process by which a community organizes and then applies its energies to the task of creating the type of business climate that will foster the retention and expansion of existing businesses, attract new businesses, and develop new business ventures.

Economic development efforts to create jobs are important beyond generating additional income for the Suamico residents. These efforts can help to generate additional tax base for the provisions of local services and may assist in establishing an environment for long-term economic vitality.

Success in economic development today requires a significant change in how economic development is done. It is important to think more broadly than was done in the past when it was believed that it was most important to attract factories and companies and when economic development was all about being the cheapest place to do business. Today, it is realized that physical and cultural amenities are critical to attracting and retaining people to fill these positions. In the past, it was believed that economic development was the government's job. However, a successful transition into the new information-based economy will come only through partnerships among government, businesses, and nonprofit organizations.

The key to an economic development strategy is having a quality product/community to market. The Village of Suamico Comprehensive Plan is geared toward promoting future development in Suamico in a manner that supports a high quality community that is attractive to existing and new businesses.

Labor Force Analysis

Figure 1-4 in the Issues and Opportunities chapter indicates that the Village of Suamico residents are generally more educated than the populations of Brown County and the State of Wisconsin as a whole, with 55.2 percent of the population ages 25 and over having advanced beyond high school compared to 51.4 percent and 50.5 percent for the county and state, respectively. However, there are fewer people with advanced graduate or professional degrees than either the county or state. Figure 4-1 shows that the percentage of Village residents 16 years of age and older who are in the labor force is much higher than the percentage of people in the labor force in Brown County and Wisconsin, indicating that many of the households in Suamico are likely dependent on two incomes. Suamico's 2000 unemployment rate of 0.9 percent is also significantly lower than Brown County's 2.7 percent and the State of Wisconsin's 3.2 percent. With such a high labor force participation rate and low unemployment rate, the Village will likely have to bring workers in from other parts of the County and region to help fill new jobs as the Village's economy continues to grow and diversify.

Figure 4-1: Employment Status by Percentage of Population 16 Years and Older

Status	Wisconsin	Brown County	Village of Suamico
In the labor force	69.1%	72.0%	79.8%
Civilian labor force	69.0%	71.9%	79.8%
Employed	65.8%	69.1%	78.9%
Unemployed	3.2%	2.7%	0.9%
Armed Forces	0.1%	0.1%	0.0%
Not in the labor force	30.9%	28.0%	20.2%

Source: U.S. Bureau of the Census: Table DP-3 Profile of Selected Economic Characteristics: 2000.

Figure 4-2: Employed Civilian Population as a Percentage of People 16 Years and Above

	Wisconsin	Brown County	Village of Suamico
OCCUPATION			
Management, professional, and related occupations	31.3	30.6	33.0
Sales and office occupations	25.2	28.5	26.3
Production, transportation, and material moving occupations	19.8	18.7	20.1
Construction, extraction, and maintenance occupations	8.7	9.2	13.4
Service occupations	14.0	12.6	6.7
Farming, fishing, and forestry occupations	0.9	0.5	0.5
INDUSTRY			
Manufacturing	22.2	21.1	26.9
Educational, health, and social services	20.0	17.6	16.0
Finance, insurance, real estate, and rental and leasing	6.1	8.1	10.5
Retail trade	11.6	12.6	10.3
Transportation and warehousing and utilities	4.5	6.2	8.8
Construction	5.9	6.2	6.6
Professional, scientific, management, administrative, and waste management services	6.6	6.3	5.6
Wholesale trade	3.2	4.0	4.4
Other services (except public administration)	4.1	4.5	3.5
Arts, entertainment, recreation, accommodation, and food services	7.3	7.3	3.3
Public administration	3.5	2.9	1.9
Information	2.2	2.0	1.3
Agriculture, forestry, fishing and hunting, and mining	2.8	1.2	0.9

Source: U.S. Bureau of the Census: Table DP-3 Profile of Selected Economic Characteristics: 2000.

When compared to the state and county, the Village of Suamico has a higher percentage of people employed within the management, professional, and related occupations; production, transportation, and material moving occupations; and construction, extraction, and maintenance occupations than either the county or state. The Village is significantly lower in service occupations, which is likely due to few service-oriented jobs being located within the community. (See Figure 4-2)

As for individual industries, by far the largest employment sector is the manufacturing industry, which is much higher than either the county or state, while the arts, entertainment, recreation, accommodation, and food services sector employs significantly fewer. As the Village continues to grow and diversify its industries and businesses, the disparities in employment percentages among the Village, Brown County, and State of Wisconsin will likely begin to decrease.

The low numbers of residents working within the service occupations or retail trade industries are likely a result of there being relatively few retail businesses within the Village. However, with a population currently estimated at over 10,000 residents and forecasted to top 16,000 residents in 20 years, there may be a growing market for retail businesses and, accordingly, for those service occupations.

Economic Base Analysis

The economic base of the Village of Suamico is intricately tied to that of the Green Bay Metropolitan Area in terms of employment and business opportunities. The vast majority of Suamico residents work within the Green Bay Metropolitan Area and, therefore, depend on a sound economy throughout Brown County for their financial well-being. Key industry groups in the Green Bay Metropolitan Area include healthcare; paper and related products; insurance, financial services, and government offices; hospitality; food processing; and logistics (trucking, warehousing, and related services). Due to the Village's dependencies on the Green Bay Metropolitan Area, a Location Quotient Analysis to determine basic and non-basic sector employment was performed utilizing Brown County as the local level for analysis as compared to the United States.

Basic sector employment typically produces goods or services that are exported out of the local economy and into the larger national economy. These goods and services and, therefore, employment are thus less likely to be affected by a downturn in the local economy. Non-basic sector employment includes those industries that produce goods or services that are consumed at the local level or are not produced at a sufficient level to be exported out of the local market.

The Location Quotient Analysis compares the local economy (in this case Brown County) to the United States. This allows for identifying basic and non-basic sectors of the local economy. If the location quotient (LQ) is less than 1.0, all employment is considered non-basic, meaning that local industry is not meeting local demand for certain goods or services and may be more subject to downturns in the local economy. An LQ equal to 1.0 suggests that the local economy is exactly sufficient to meet the local demand for given goods or services. However, the employment is still considered to be non-basic. An LQ of greater than 1.0 suggests that the local employment industry produces more goods

and services than the local economy can consume, and therefore, these goods and services are exported to non-local areas and considered to be basic sector employment. The Location Quotient Analysis for Brown County is displayed in Figure 4-3.

Figure 4-3: Employment by Industry Group, 2000; Brown County and the United States Location Quotient Analysis

Employment by Industry	Brown County	United States	Location Quotient
Agriculture, Forestry, Fishing	1,503	2,426,053	0.67
Construction and Mining	7,436	8,801,507	0.91
Manufacturing	25,449	18,286,005	1.50
Wholesale Trade	4,808	4,666,757	1.11
Retail Trade	15,245	15,221,716	1.08
Transportation, Warehousing, Utilities	7,455	6,740,102	1.19
Information	2,425	3,996,564	0.65
Finance, Insurance, and Real Estate	9,805	8,934,972	1.18
Professional, Scientific, Management, etc.	7,546	12,061,865	0.67
Educational, Health, and Social Services	21,228	25,843,029	0.88
Arts, Entertainment, Recreation, etc.	8,789	10,210,295	0.93
Other Services	5,377	6,320,632	0.92
Public Administration	3,464	6,212,015	0.60
Total Employees	120,530	129,721,512	

Source: U.S. Bureau of the Census, 2000; Brown County Planning Commission, 2003.

According to the LQ analysis, there are five industries in Brown County that can be considered to be basic employment sectors: manufacturing; wholesale trade; retail trade; transportation, warehousing, utilities; and finance, insurance, and real estate. Therefore, these industries are most likely exporting goods and services to other parts of the country and contributing to a more stable local economy. Those industries that are below 1.0, such as information and professional fields, indicate that there may be demand within Brown County's local economy to support increases in these industry sectors.

The Village should also continue to develop, recruit, and retain those businesses that contribute to existing industrial "clusters" within Brown County and the greater Fox Valley region. The State of Wisconsin Department of Commerce defines clusters as "...geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region." Clusters greatly enhance a particular industry's competitiveness in several ways. First, clusters help improve productivity by providing ready access to specialized suppliers, skills, information, training, and technology. Second, clusters help to foster innovation by increasing opportunities for new products, new processes, and meeting new needs with a full range of local suppliers and research institutions. Last, clusters can facilitate the commercialization of innovation through the creation of new firms via

startups, spin-offs, and new business lines with needed inputs, such as banks and venture capital.

Within the Fox Valley region, business clusters include the paper, food processing, transportation, and insurance industries. The Village should actively develop, recruit, and retain those industries within the aforementioned clusters that take advantage of advanced technologies in the processing of their products as a means to continue to bridge the gap toward the new economy. The Village of Suamico may also wish to focus a portion of its business creation and recruitment efforts on those businesses that are part of information or professional, scientific, and management sectors to begin filling some of the potential local demand for these services while still maintaining communication and retention efforts with those existing businesses in the manufacturing sector.

Economic Development Assessment and Recommendations

There are four primary economic activity areas in the Village, of which all are located on or near USH 41/141. The Village's existing industrial park is located on Velp Avenue (CTH HS) south of the village center. The industrial park's location provides easy access to both highway and rail facilities for the movement of goods produced or required in the industrial park. Just north of the industrial park at the USH 41/141/CTH B interchange is the commercial heart of the Village. There are a number of retail sales and service establishments catering to both local residents and visitors traveling on USH 41/141. Further north along USH 41/141 near the Norfield Road overpass is the proposed Village of Suamico Business Park and proposed commercial development at the USH 41/141/Brown Road interchange. The existing and proposed commercial uses are intended to take advantage of the high visibility and frontage roads that USH 41/141 provide. At the southern edge of the Village at the Lineville Road interchange and along the East Deerfield frontage road are a number of new businesses that have located there to also take advantage of visibility and easy access from USH 41/141.

At the visioning session, the residents expressed a strong desire to maintain the Village's rural atmosphere and natural beauty, while encouraging some additional commercial and industrial activity as a means to increase the overall tax base of the community. As a rapidly growing community, the Village will need to weigh the pros and cons of the commercial services a proposed business can provide with the potential impact on the Village's natural features and rural feel.

Industrial Park

The Village's industrial park is located between Velp Avenue and the railroad tracks just south of the village center. The park is a mix of manufacturing, construction-related, and warehousing facilities. Since the park is at or near capacity, the Village is looking to develop a business park on the 70 acres it owns at the USH 41/141/Norfield Road overpass. The future business park would have very easy access to USH 41/141 via Veterans Way north to the Brown Road interchange or south to the CTH B interchange, as well as very good visibility from the freeway.

As the new business park develops, the Village should encourage businesses that do not require expanses of parking or intensive lighting but do provide natural landscaping, quality onsite signage, minimal parking, and adequate stormwater management. The buildings should be designed to blend in with the rural character of the community by utilizing architectural features typically found on homes and earth-tone exteriors.

The Village may wish to consider expanding the industrial park to the immediate east of the existing industrial park across the railroad tracks. This would allow for access to the West Deerfield Avenue frontage road and railroad line and would provide visibility from USH 41/141. If the opportunity arises to purchase the property immediately to the east of the current industrial park for an expansion, the Village might consider utilizing a tax increment finance district to assist in financing improvements to this area for industrial development.

Village Center

In the spring of 2003, the Village of Suamico, facilitated by OMNNI Associates, completed a plan for the village center encompassing the area surrounding the CTH B/USH 41/141 interchange and the historic center of the Village. The plan recommends four different “theme areas” (Historic Hamlet, Northwoods Development, Velp Corridor, Highway and Community Service) and recommends economic development activities for each of the areas.

The intent of the plan is to create a renewed mix of pedestrian-scale commercial, residential, recreational, and institutional uses within the historic center of the Village to recreate a sense of “place” for the Village. The plan envisions a number of small-scale commercial retail and service shops catering to both local residents and tourists on their way to northern Wisconsin in the Historic Hamlet, Northwoods, and Velp Corridor areas, while the Highway and Community Service Area would be more highway-oriented. Similar architectural and site design elements will help to tie the four areas together in one unifying theme for the village center. The Village should continue to implement the recommendations contained in the village center plan in order to re-establish a sense of community identity for Suamico and its residents.

USH 41/141 Corridor

For most visitors traveling to or through Suamico, the USH 41/141 corridor will provide the first impression of the Village. Therefore, development along the corridor should be of a design and quality that provides a favorable first impression to visitors since they are all potential customers and/or residents of the Village. As the corridor runs north to south through the eastern part of the Village, it provides a number of economic development opportunities for Suamico. However, the Village will need to ensure that the development is of a quality that meets the expectations of the residents and makes a good first impression on visitors.

The USH 41/141 Corridor Land Use Plan, adopted in January 1998 and authored by Foth & Van Dyke, was completed prior to the conversion of USH 41/141 from a four-lane divided highway with at-grade access points to freeway status. As part of the conversion, frontage roads were constructed along both sides of the freeway to provide

local access to existing homes and businesses. Office, commercial, and light industrial development should be encouraged to take advantage of the excellent visibility offered from USH 41/141. However, new development should be done in a scale and design that blends in with nearby residential areas through utilization of the Village's design review ordinance.

As the lands adjacent to the corridor are developed, care should be taken to prevent the degradation of the nearby sensitive wetland areas. This is particularly crucial south of Harbor Lights Road where the wetlands provide critical northern pike spawning habitat for the bay of Green Bay. Additionally, landscaping of parking lots and areas fronting USH 41/141 should be accomplished utilizing a variety of native plants, shrubs, and trees in order to reinforce the rural feel of Suamico.

Neighborhood Center Areas

The neighborhood center areas are envisioned to be the focal point around which the surrounding neighborhoods are developed, primarily around major intersections. They will likely include a mix of higher density residential, commercial, institutional, and recreational uses. The intent of encouraging commercial uses in these areas is to create places to which neighborhood residents can walk or bike for goods or services rather than having to drive to Green Bay or Howard. However, the Village must ensure that the development of commercial and institutional uses in these areas is designed to blend in with residential uses and does not diminish development opportunities in the village center.

Strengths and Weaknesses for Attracting/Retaining Business and Industry

It is necessary to look at the factors that influence the economic climate in the Village of Suamico. The most obvious factor is the Village's location adjacent to the Green Bay Metropolitan Area and the ease of access to USH 41/141 for commuting. Business owners in Suamico can easily tap the metropolitan area's large population base for employees, and residents of Suamico can just as easily commute to jobs in the metropolitan area and enjoy the benefits of living in a more rural setting.

Although the easy access to USH 41/141 is a definite benefit for residents of Suamico who work in the Green Bay Metropolitan Area, it is a potential detriment to the sustainability of local retail and service businesses. Many residents find driving to Green Bay for goods or services that one might typically find in a community of almost 10,000 residents to be more of a minor inconvenience than a major problem. However, the input received from the Village-wide visioning session indicated that there is a demand for businesses in the Suamico village center that would provide local goods and services, such as a hardware store, pharmacy, or small cafe. For local businesses to succeed in providing goods or services, it is necessary for the local residents to choose to patronize them instead of driving to the Green Bay area.

From a quality of life perspective, the Village has a number of natural resource amenities that provide the "rural feel" that Suamico's residents value. As the Village looks to

recruit and grow businesses, Suamico should emphasize the high quality of life and proximity to the cultural amenities located in the Green Bay Metropolitan Area, such as the Weidner Center, Neville Public Museum, and Downtown Green Bay, that the business owners and their employees can enjoy. Additional points of emphasis should be a quality school system and lower housing prices as compared to other larger metropolitan areas around the Midwest.

The state and national economy are in the process of transitioning from a goods-based economy to an information-based economy. As this transition and advances in communications technologies continue, businesses will begin to be more influenced to locate in places where their existing employees will be comfortable living, where there is a high quality potential employee pool, and where there are good transportation connections rather than a proximity to raw materials for production. The Village of Suamico appears to be well-positioned to make this transition. However, the Village must continue to strive to maintain or improve those quality of life amenities that potential businesses and their employees are looking for when deciding where to locate.

The Village is in the process of connecting its sewer lines to the Green Bay Metropolitan Sewerage District's in order to replace its aging sewage plant. The connection will alleviate any potential effluent capacity issues that may have prevented large commercial users from locating in Suamico in the past.

The Village owns a large area of undeveloped land for the development of a business park at the Norfield Road/USH 41/141 overpass. Suamico can actively market this land and as owner be selective in deciding what type of business may locate there, as well as the site planning and building architecture. In addition to the Village-owned land, there are a number of other sites along the USH 41/141 corridor and throughout Suamico that are available for business development.

Economic development services to assist businesses with location or relocation are provided throughout Brown County by Advance, which is the economic development section of the Green Bay Area Chamber of Commerce. Training services for businesses are provided by UW-Green Bay, St. Norbert College, the UW-Extension services, and Northeastern Wisconsin Technical College (NWTC). While none of the main buildings of these educational institutions are located in the Village of Suamico, NWTC holds outreach classes at Bay Port High School, and the others are all within a 30-minute drive.

Industrial and Commercial Design Standards

Design standards provide a means for Suamico to maintain the rural character of the Village by reviewing commercial buildings. The Village of Suamico maintains the *Rural Character: Ordinance for Design Review Standards for Commercial, Multifamily, and Industrial Development*, which was developed by Foth & Van Dyke. The ordinance was developed to encourage growth and development that is consistent with the Village's rural character and that protects against standard urban and suburban design approaches. The ordinance applies to the following:

- All new commercial, multifamily, and industrial development.

- Landscaping when new buildings, exterior alterations, signage, or parking is proposed.
- Exterior wall and roof alterations to existing commercial, multifamily, and industrial development not previously subject to design review.
- Prior to site clearance activities, such as tree removal, grading, excavation, or filling.

The Village should continue to enforce the ordinance in order to help retain Suamico's rural character. Business site plans should include pedestrian amenities, such as sidewalks or trails (where appropriate), parking (preferably behind the building), and parking lot landscaping standards, including landscaped islands within large parking lots that break up the expanse of asphalt. In the village center, buildings should also have minimal or no setbacks with parking in the rear or on the street to provide for more direct pedestrian access to the businesses.

Sensitivity to Natural Areas

The west shore wetlands, Long Tail Point and Little Tail Point, Suamico River, interior wetlands, and large stands of upland woodlands all combine to create the rural character that Village of Suamico residents treasure. Business development should be designed with consideration and integration of these natural features to help maintain the rural atmosphere of the Village. The natural areas where properly integrated into business development can help to create the trail linkages the Village is working to develop, provide wildlife corridors, and help to facilitate stormwater management. Where consistent with the identified trail plan, the Village should require the dedication of land for trails or parkways before approving commercial development proposals.

Special care should also be taken to ensure that commercial and industrial activities are not located within environmentally sensitive areas (ESAs) by placing the ESAs in a conservancy zoning district. These features should be included in the design of business developments as integral amenities and, if possible, maintained in common ownership.

Brownfield Redevelopment

For commercial and industrial uses, the Village should complete and maintain an inventory of existing vacant buildings and land identified as potentially contaminated (brownfield) with industrial or petroleum-based pollutants. This information can be used to encourage infill development and redevelopment opportunities to take advantage of existing infrastructure and services and to prevent blight created by vacant and dilapidated buildings and parcels. Once identified, brownfields should be cleaned and promoted for redevelopment through the use of state and federal brownfield cleansing funds.

Village, County, Regional, and State Economic Development Programs

This section contains a brief explanation of local economic development actions and a description of various agencies and programs that could potentially help the Village and Village's businesses achieve their stated economic development goals and objectives. The Implementation chapter contains a comprehensive listing and description of

programs the Village may wish to utilize in achieving its economic development objectives.

Village

The Village can continue to make positive planning and financial management decisions that can result in the community being an attractive place for people and businesses. The most important economic activity that Suamico can pursue is the creation of an environment that encourages entrepreneurs to engage in business activities. Encouraging entrepreneurs involves attracting new businesses and assisting existing businesses. The three types of programs most relevant to the Village are business attraction, business retention, and commercial development.

Business Attraction

Business attraction involves letting businesses know what a community has to offer. For example, some of the activities that are involved in a business attraction program include:

- Providing information on available sites.
- Identifying labor and community characteristics.
- Marketing sites to businesses that would be complementary to existing businesses or would provide diversity to the local economy.
- Offering low-cost land, state or federal grants, or other incentives to encourage businesses to locate in the community.

Business Retention

Since a good portion of the economic growth that occurs is from businesses already in a community, business retention is essential. Activities associated with business retention programs include:

- Helping businesses learn about potential sites for expansion, offering low-cost loans, and identifying state and federal grant funds to finance business expansions.
- Providing business areas with efficient, reliable public services, such as snow removal, road repair, and sewer and water utilities.
- Providing a contact person to answer business questions and solicit information from business leaders regarding local development problems.

Commercial Development

Commercial development activities allow communities to identify market needs and seek prospective businesses to fill the needs. In the future, the Village may be able to assist in this process by creating or modifying Tax Increment Finance (TIF) districts to encourage development by offering publicly-owned and improved land for sale to commercial developers. The Village can also encourage the redevelopment of existing structures and

the development of new structures and can ensure that the designs meet the standards established for the community. In addition, economic development incentive revolving loan fund programs can be established to assist in financing commercial projects that meet the goals of the Village.

The Village is presently a member of Advance, a branch of the Green Bay Chamber of Commerce. Advance acts in part as an informational and referral service for potential businesses and industries looking to locate in Brown County. This enables a potential business or industry looking to locate in Brown County to hear about Suamico when it otherwise may have no knowledge of the opportunities available in the Village. The Village should keep Advance informed of available buildings and business sites for potential matches.

County

Businesses can use economic development loan programs, such as the Brown County Economic Development Revolving Loan Fund administered through the Brown County Planning Commission, to obtain low interest loans that will generate new employment opportunities and encourage expansion of the tax base. Through Brown County's partnership with Advance, the Village of Suamico also has access to development and grant information, as well as to economic development marketing services.

Regional

Comprehensive Economic Development Strategy

The Bay-Lake Regional Planning Commission annually creates a Comprehensive Economic Development Strategy (CEDS) report, which evaluates local and regional population and economic activity. Economic development trends, opportunities, and needs are identified within the CEDS report. All communities served by the Commission, including the Village of Suamico, are invited to identify future projects for economic development that the community would like to undertake. Those projects are then included within the CEDS and may become eligible for federal funding through the Economic Development Administration (EDA) Public Works grant program.

Northeast Wisconsin Regional Economic Partnership

The combined Bay-Lake and East Central Wisconsin Regional Planning Commission areas were recently named as a technology zone by the Wisconsin Department of Commerce. The Northeast Wisconsin Regional Economic Partnership (NEWREP) Technology Zone provides \$5 million in tax credits to businesses certified by Commerce based on a company's ability to create jobs, to make capital investments, and to attract related businesses. The technology zone program focuses primarily on businesses engaged in research, development, or manufacture of advanced products or those that are part of an economic cluster and knowledge-based businesses that utilize advanced technology production processes in more traditional manufacturing operations. More information can be found at <http://www.eastcentralrpc.org/planning/economic.htm>.

Wisconsin Public Service

Wisconsin Public Service Corporation (WPS) also contributes a number of economic development services that the Village should be aware of for its businesses. WPS maintains an online searchable available industrial buildings database that the Village or Community Development Authority should ensure stays up-to-date through contact with WPS. The WPS economic development page can be a useful resource for the Village and is located at <http://www.wisconsinpublicservice.com/business/bcd.asp>.

State

Although the Implementation chapter provides a comprehensive list of state programs that the Village can consider utilizing to meet its stated goals and objectives, there are a few programs that the Village should strongly consider, and they are discussed in this section. The Department of Commerce District 3 Area Development Manager would be a good contact for these programs.

Community Based Economic Development (CBED) Program

The Community Based Economic Development (CBED) Program provides financing assistance to local governments and community-based organizations that undertake planning or development projects or that provide technical assistance services that are in support of businesses (including technology-based businesses) and community development. The program provides grants for planning, development, and assistance projects; business incubator/technology-based incubator; a venture capital fair; and regional economic development grants. Additional information regarding the CBED program can be found at <http://commerce.state.wi.us/CD/CD-bcf-cbed.html>.

Community Development Block Grant for Economic Development (CDBG-ED)

The CDBG-ED program is designed to assist businesses that will invest private funds and create jobs as they expand or relocate to Wisconsin. The Wisconsin Department of Commerce awards the funds to the Village, which then loans the funds to a business. When the business repays the loan, the Village may retain the funds to capitalize a local revolving loan fund. This fund can then be utilized to finance additional economic development projects within the Village. The businesses within the Village may also utilize the existing Brown County Economic Revolving Loan Fund, administered by the Brown County Planning Commission, to provide loans to Village businesses. Additional information regarding the CDBG-ED program can be found at the following website: <http://commerce.state.wi.us/MT/MT-FAX-0806.html>.

Federal

The Village of Suamico, by nature of it currently having less than 10,000 residents and primarily located outside of the Green Bay Metropolitan Area, meets the requirements of some of the U.S. Department of Agriculture-Rural Development Programs. Therefore, the Village may be eligible for Rural Development Economic Assistance Programs. However, there are typically strict income limits associated with the programs, so the Wisconsin Division of USDA-Rural Development should be contacted regarding

eligibility for certain programs. A complete listing of USDA-Rural Development programs can be found at <http://www.rurdev.usda.gov/wi/programs/index.htm>.

Recommendations

The following is a summary of economic development recommendations for the Village of Suamico:

General Recommendations

Village Center

- Continue implementation of the village center plan themes, particularly in making the streets and business facades more pedestrian-friendly.
- Promote businesses in the village center and harbor that incorporate public access or views of the Suamico River and bay of Green Bay.
- Encourage the development of small retail shops or services in the village center and neighborhood development areas to meet local demand.
- Encourage buildings that have commercial uses on the first floor and residential uses above, particularly in the village center.
- In the village center, buildings should have minimal setbacks that provide for more direct pedestrian access to structures.
- Consider creating a Tax Increment Financing (TIF) district to fund utility and street improvements in the village center.

USH 41/141 Corridor

- Ensure that commercial development along the USH 41 corridor is complementary rather than competitive with village center development efforts.
- Consider creating a TIF district to aid in the development of the new business park at the Norfield Road/USH 41/141 overpass and/or at the Deerfield Road East light industrial area.
- Continue to enforce the Village's design review ordinance for commercial, multifamily, and light industrial development, especially along the USH 41/141 corridor, to create a favorable first impression of Suamico for visitors traveling on USH 41/141.

Economic Development Funding/Programming

- Create a local Village of Suamico Revolving Loan Fund to assist businesses looking to expand in the Village. Funding for a revolving loan fund can come from CDBG-ED, CBED grants, or from local investment.

- Develop a comprehensive list of potential economic development funding mechanisms through the state and federal government.
- Create an economic development program to include business attraction and business retention programs.
- Develop a periodic meeting schedule with existing businesses in the industrial park to discuss future needs or potential problems.
- Ensure retention of existing industries while encouraging new businesses within the information or professional, scientific, and management industries.
- Recruit, retain, and encourage the development of businesses that utilize advanced technologies within regional cluster industries to locate in the Village.
- Utilize Advance, which is the economic development branch of the Green Bay Area Chamber of Commerce, to aid in marketing Suamico to desired potential businesses and industries.
- Complete and maintain an inventory of existing vacant buildings and land identified as potentially contaminated (brownfield) with industrial or petroleum-based pollutants. Brownfields should be cleaned and promoted for redevelopment through the use of state and federal brownfield cleansing funds.

Site Planning for Economic Development

- Business development should be designed with consideration of the sensitivity of the environmental features that this plan identifies along the Village's primary drainage corridors, which include the Suamico River and large wetland complexes.
- Business site plans should include pedestrian access (where appropriate), parking (preferably behind the building), and parking lot landscaping standards, including landscaped islands within large parking lots that break up the expanse of asphalt.
- Promote infill development and redevelopment opportunities to take advantage of existing infrastructure and services and to prevent blight created by vacant and dilapidated buildings and parcels.

CHAPTER 5

Housing

Formerly a rural community experiencing strong residential growth, the Village of Suamico's housing stock is relatively new and, therefore, does not contain much variability in the types or cost. However, as presented in the Issues and Opportunities chapter, the population, while growing, is also aging as the "baby-boomers" approach retirement age and the makeup of families continues to change. Identifying ways to provide more diversified housing choices for a changing population will become increasingly important in order to keep the Village growing and vibrant.

The Issues and Opportunities chapter of the plan contains the forecasts for new housing units within the Village of Suamico over the next 20 years. This chapter will build on these forecasts by identifying existing trends and characteristics of the housing market and providing recommendations on how to improve the existing housing stock and provide for the development of new and innovative housing practices.

Housing Characteristics

Age

Figure 5-1 shows that 79.1 percent of the housing units in the Village of Suamico are 30 or fewer years old, as compared to 55.4 percent for Brown County and 44.5 percent for the State of Wisconsin. By far, the majority of homes in Suamico were built within the past 10 years, accounting for 43.9 percent of the total housing stock, which indicates that the housing stock within the Village is very new and, therefore, in good condition. However, as the housing stock ages, it will be necessary for the Village to ensure that the housing units remain in good condition through code enforcement, rehabilitation, and selective redevelopment.

Figure 5-1: Age of Housing Units in the Village of Suamico, 2000

Year Structure Was Built	Suamico	%	Brown County	%	Wisconsin	%
1990-1999	1,246	43.9%	19,322	21.4%	389,792	16.8%
1980-1989	487	17.2%	13,292	14.7%	249,789	10.8%
1970-1979	510	18.0%	17,449	19.3%	391,349	16.9%
1960-1969	194	6.8%	11,400	12.6%	276,188	11.9%
1940-1959	235	8.3%	16,686	18.5%	470,862	20.3%
1939 or Earlier	164	5.8%	12,050	13.4%	543,164	23.4%
Total	2,836	100.0%	90,199	100.0%	2,321,144	100.0%

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, Table DP-4 Profile of Selected Housing Characteristics.

Structures

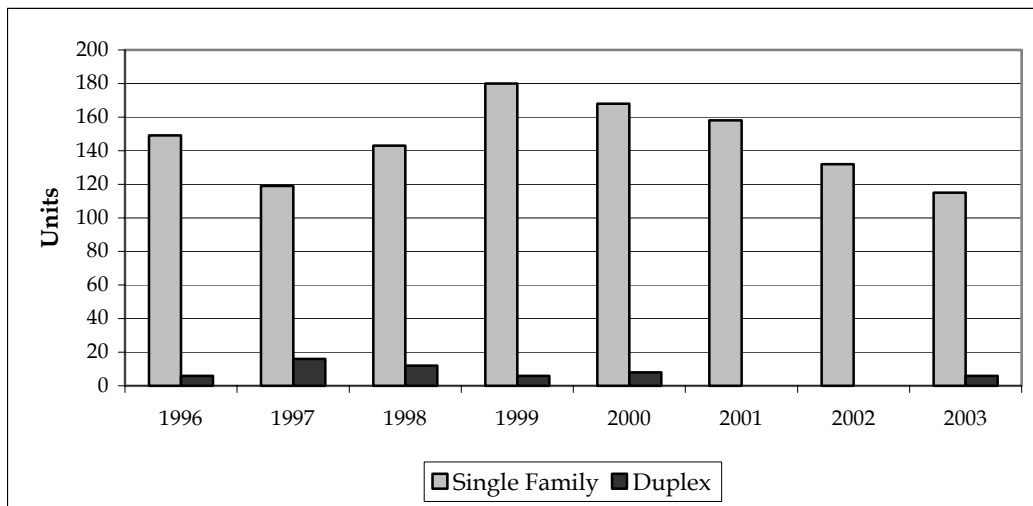
The Village of Suamico has a significantly higher percentage of 1-unit detached structures (typically single-family homes) at 89.4 percent than either Brown County or the State of Wisconsin at 63.2 and 66.0 percent, respectively. The Village has a proportionately much smaller percentage of duplexes and all types of multifamily units. Since the 2000 census, the Village has seen an increase in the number of condominium units, and a few new plats contain areas for multifamily and duplex units. As the Village continues to transition from a rural town to a more suburban village, it will need to ensure that its housing stock is diversified enough to account for the demographic changes identified in the Issues and Opportunities chapter. Figure 5-2 identifies the total number of units within each type of structure in Suamico.

Figure 5-2: Units in Structure for Suamico, Brown County, and Wisconsin

Units in Structure	Suamico	%	Brown County	%	Wisconsin	%
1-Unit Detached	2,757	89.4%	57,000	63.2%	1,531,612	66.0%
1-Unit Attached	124	4.0%	4,428	4.9%	77,795	3.4%
2 Units	87	2.8%	8,143	9.0%	190,889	8.2%
3 or 4 Units	60	1.9%	3,554	3.9%	91,047	3.9%
5 to 9 Units	0	0.0%	6,214	6.9%	106,680	4.6%
10 to 19 Units	22	0.7%	4,032	4.5%	75,456	3.3%
20 or More Units	0	0.0%	5,172	5.7%	143,497	6.2%
Mobile Home	35	1.1%	1,649	1.8%	101,465	4.4%
Boat, RV, Van, Etc.	0	0.0%	7	0.0%	2,703	0.1%
Total	3,085	100.0%	90,199	100.0%	2,321,144	100.0%

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, Table DP-4 Profile of Selected Housing Characteristics: Suamico Town, Wisconsin.

Figure 5-3: New Housing Unit Development, 1996-2003



Source: U.S. Census Bureau – Monthly New Privately-Owned Residential Building Permits, Suamico Town, Wisconsin 1996-2003.

Over the last eight years, the number of new single-family housing units developed increased to a high of 180 in 1999 and has since steadily declined to a low of 115 units built in 2003. The decline in issued building permits is likely due to a delay in the Village's ability to provide sewage service to new areas of the Village until the connection to GBMSD was finalized. With the approval of the connection, a number of new subdivision plats have been approved, and there will likely be a corresponding increase in the issuance of new residential building permits. Although there has been a decline in the trend of issued building permits, a total of 917 new single-family homes were constructed within the Village between 1996 and 2003. Typically, with such a high number of new single-family homes being constructed, there are some duplex and multifamily units being constructed, as well. However, a total of only 48 new duplex units and zero multifamily units were built over the past eight years. Figure 5-3 displays the number and type of unit constructed according to the building permits issued.

Occupancy

According to the 1990 U.S. Census, there were a total of 1,786 housing units within the Village of Suamico. This compares with 3,078 units in 2000, which is an increase of 1,292 units (72.3 percent) over the 10-year period. The breakdown of housing units into owner-occupied and renter-occupied shows that owner-occupied units accounted for 92.1 percent of the Village's dwelling units in 1990, and this percentage actually increased to 92.3 percent owner-occupied housing by 2000. The trend of having a very high owner-occupied percentage and actually increasing this percentage as a community experiences very strong housing growth runs contrary to the majority of other suburbanizing communities in Brown County. As Suamico continues to experience high rates of housing development, the Village should consider the inclusion of more rental units to ensure it has an adequate range of housing choices for all existing and future Suamico residents. Figure 5-4 summarizes the changes that occurred between 1990 and 2000.

Figure 5-4: Change in Housing Occupancy Characteristics in Suamico, 1990 and 2000.

	1990 Census	% of Total	2000 Census	% of Total	Increase or Decrease	Percent Change 1990 - 2000
Total Housing Units	1786	100.0%	3,078	100.0%	1,292	72.3
Occupied Housing Units	1700	100.0%	2,966	100.0%	1,266	74.4
Owner-Occupied	1565	92.1%	2,738	92.3%	1,173	75.0
Renter- Occupied	135	7.9%	228	7.7%	93	68.9

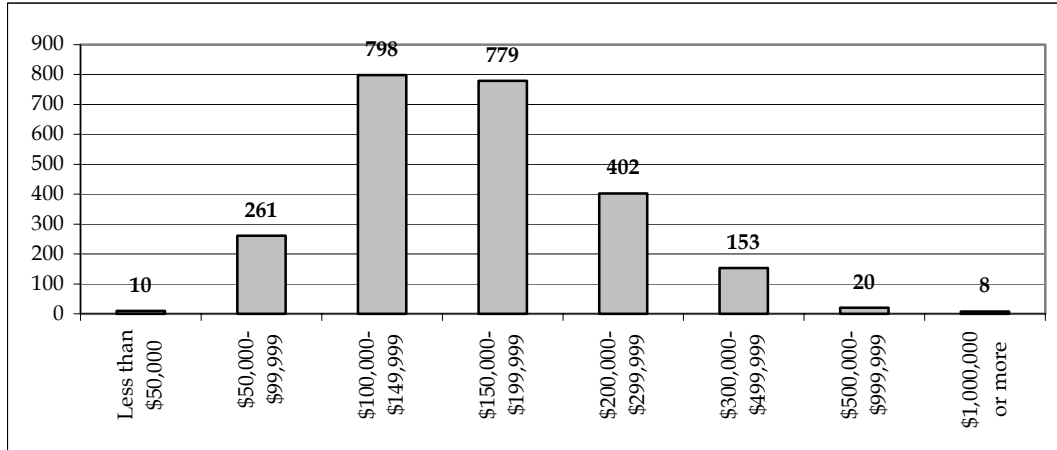
Source: U.S. Census Bureau Table DP-1 Profile of General Demographic Characteristics, 2000; and General Housing Characteristics, Table 67, 1990.

Value

According to the 2000 census, the largest segment of the Village's homes is valued between \$100,000 and \$149,000 (32.8 percent), while 32.0 percent of the homes are valued between \$150,000 and \$199,999. When reviewing the median home value for Suamico (\$157,800) compared to that of Brown County at \$116,100 and the State of Wisconsin at \$112,200, it is apparent that the homes in Suamico contain significantly more value. Much of this difference may be accounted for due to the locational amenities the Village

has to offer, such as proximity to the Metropolitan Green Bay Area, abundant natural features, and the majority of the housing stock in Suamico being relatively new. (See Figure 5-5.)

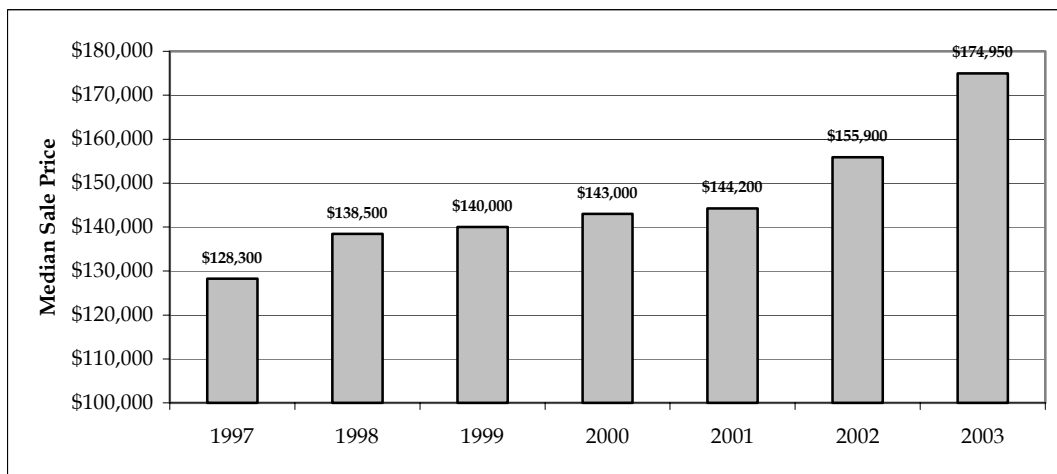
Figure 5-5: Village of Suamico Housing Values in 2000



Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, Table DP-4 Profile of Selected Housing Characteristics: Suamico Town, Wisconsin.

Based on an analysis of Brown County Property Listing data from 1997 to 2003, the median sale price of a single-family residential home has increased from \$128,300 in 1997 to \$174,950 in 2003. This is an increase of \$46,650, or 36.3 percent, in just seven years. The median sale price by year is displayed in Figure 5-6.

Figure 5-6: Median Sale Price of Existing Single-Family Residential Homes in Village of Suamico, 1997-2003.



Source: Brown County Property Listing, Brown County Planning Commission, 2004.

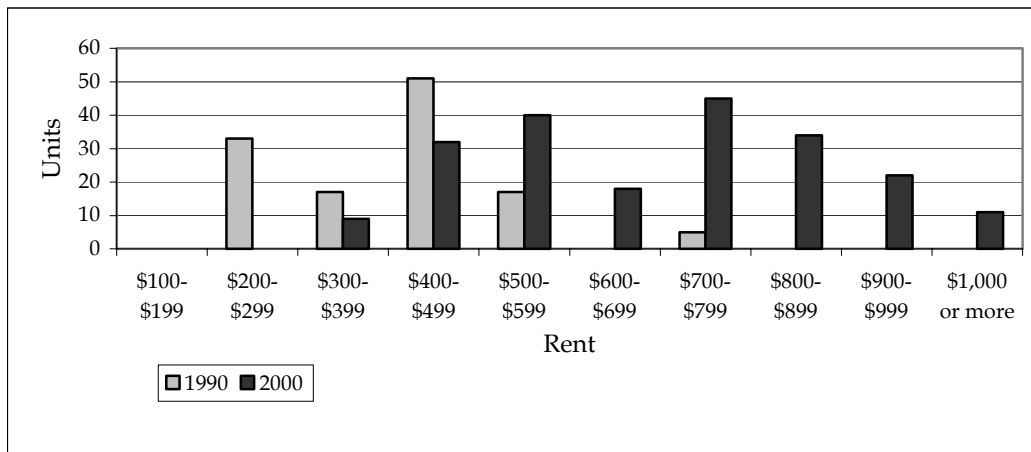
Housing Expenses

In order to compare housing costs across a set time-period, in this case 1990 to 2000, inflation must be taken into account. The Consumer Price Index (CPI-U-RS), created by the U.S. Bureau of Labor Statistics (BLS) and revised annually, was used to determine the appropriate inflation factor. The revised CPI-U-RS series, released in April 2002 by the BLS, shows that the index value for 1990 was 196.3 and 250.8 for 2000. Therefore, the factor to adjust to 2000 constant dollars is $250.8/196.3$ or 1.277636. In the following analyses of rent and mortgage expenses, the median values will be adjusted by the inflation factor of 1.277636.

Rent

Between 1990 and 2000, the median gross rent for a rental unit in Suamico increased from \$419 to \$716, which is an increase of 70.8 percent in ten years. When inflation is factored in and restated in terms of 2000 dollars, the 1990 rent is \$535. Even when adjusted for inflation, the median rent in Suamico has increased by 33.8 percent. This may be a market reaction to the relative lack of rental units in Suamico, thereby driving up the price of the existing rental units. Figure 5-7 compares the ranges of gross rent costs in 1990 and 2000.

Figure 5-7: Gross Rent in Village of Suamico, 1990 and 2000.

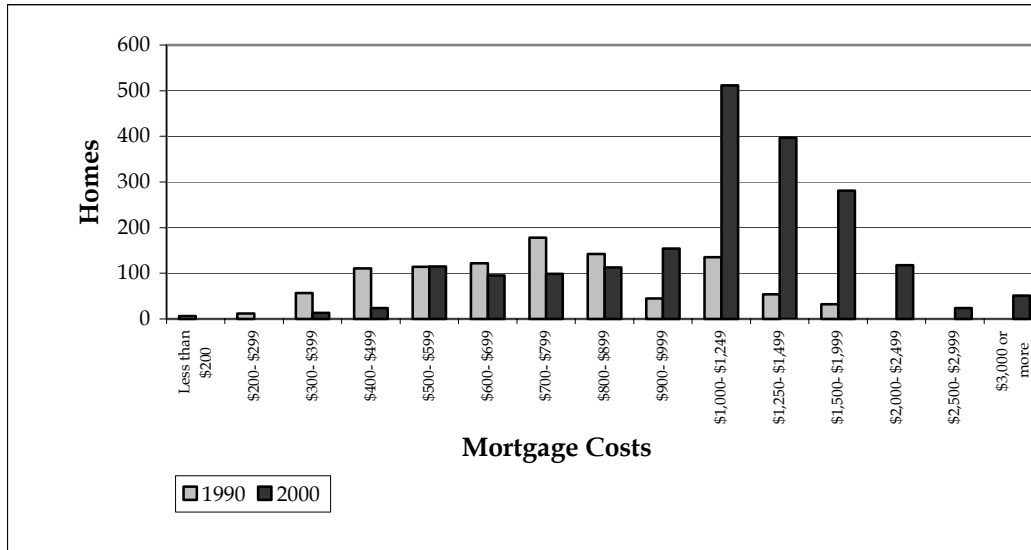


U.S. Bureau of the Census, 1990 and 2000 Census of Population and Housing

Mortgage

Coinciding with the number of new large homes that were built in Suamico between 1990 and 2000, the median monthly mortgage cost also increased significantly. In 1990, the median monthly mortgage cost for a home in Suamico was \$746. When inflation is factored in, the 1990 median monthly mortgage expense equates to \$953 in constant year 2000 dollars. The 2000 median monthly mortgage cost was \$1,188, which is \$235 (24.6 percent) more than the inflation-adjusted 1990 cost and is reflective of the investment value associated with owning a home. (See Figure 5-8.)

Figure 5-8: Mortgage Costs in the Village of Suamico, 1990 and 2000.



U.S. Bureau of the Census, 1990 and 2000 Census of Population and Housing

Housing Affordability Analysis

The Housing Affordability Analysis is based on the recommended process contained in *Housing Wisconsin: A Guide to Preparing the Housing Element of a Comprehensive Plan*, developed by the University of Wisconsin Extension. This process is being used to estimate if there is an adequate supply of affordable housing for Suamico residents with limited means. The analysis for Suamico is based on a 4-person family’s median income of \$67,528 per year, which was the median income for the Village of Suamico, according to the 2000 census.

The approach required by the U.S. Department of Housing and Urban Development (HUD) for consolidated plans is to look at the median income for a community and determine how many units are available to various low- and moderate-income households. Extremely low-income households are those with incomes below 30 percent of the area median household income. Very low income is defined as an income between 30 percent and 50 percent of the area median household income. Low-income households are those with incomes between 50 percent and 80 percent of the area median household income. Moderate-income households have incomes between 80 percent and 95 percent of the area median household income. HUD defines affordability as paying no more than 30 percent of household income for housing. The affordability threshold is not an underwriting standard and does not mean that households are unable to pay more than that amount. Households may choose to pay more to get the housing they need or want. However, according to HUD standards, people should have the choice of having decent and safe housing for no more than 30 percent of their household income.

The Suamico analysis found that a family of four within the 50th percentile bracket of median family income (\$33,764) looking for housing in the Village could spend up to \$844.10 per month in rent or mortgage/interest/property tax escrow if they allocate up

to 30 percent of their income to housing. According to the 2000 U.S. Census, there are approximately 403 homes in Suamico that currently have mortgage payments of \$850 or less and approximately 161 rental units that rent for less than \$850, which means that the Village contains a total of approximately 564 affordable housing units for a family of four within the 50th percentile bracket of median household income. This represents about 18 percent of Suamico's 3,085 total housing units in the year 2000.

As a means for comparison, the Wisconsin Housing and Economic Development Authority (WHEDA) housing calculator estimates that a family with an income at the 50th percentile of \$33,764, monthly debt of \$100 (car loan, student loan, etc.), a down payment of 5 percent of the purchase cost, and an interest rate of 6.5 percent could afford a home priced up to \$96,259.

In further interpreting the findings, there are 271 families in the Village that earn less than \$34,999. As stated in the previous paragraph, in 2000 there were 403 homes in the Village with mortgage payments of less than \$850 and would, therefore, be within the purchasing power of these households. Although it may appear that there is an adequate supply of affordable owner-occupied homes, it is also important to keep in mind that the average sale price of a single-family home in the Village of Suamico is currently over \$174,000. Therefore, a home that was purchased in 1990 may have a mortgage that would appear affordable, but if the same home were sold today, the selling price and, therefore, the mortgage would increase and would likely be taken out of the affordable range. Increasing the Village's supply of affordable owner-occupied and rental housing will be increasingly important as the Village continues to grow.

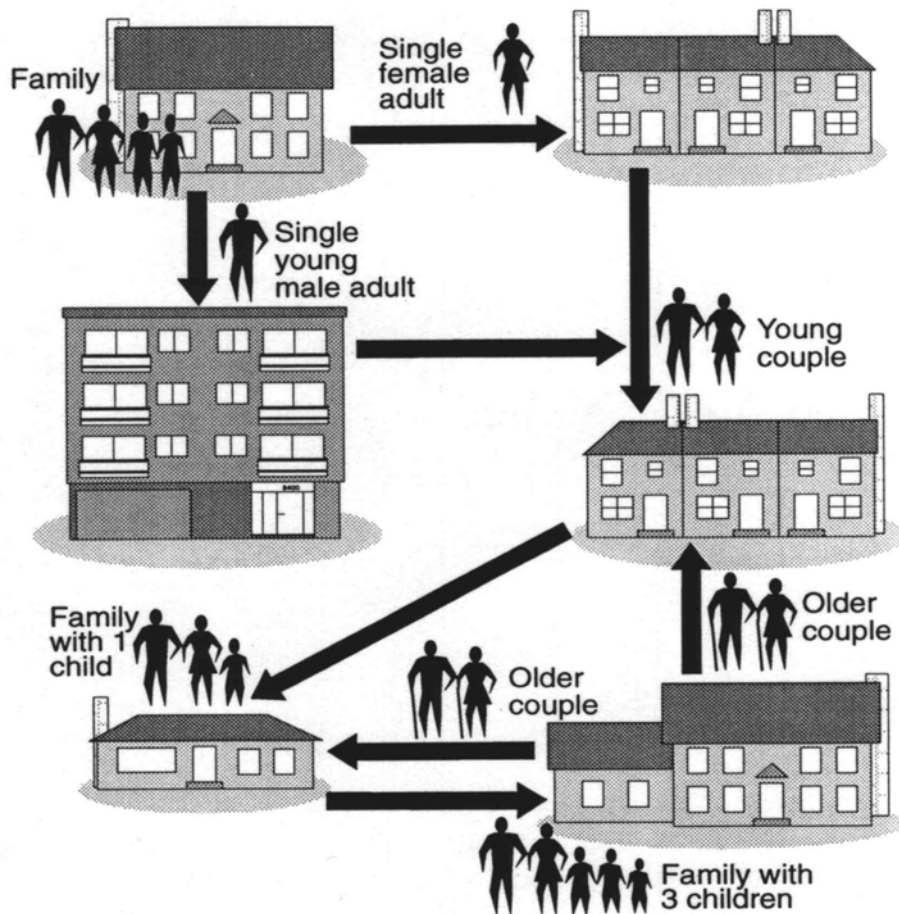
The Brown County Comprehensive Plan Housing chapter analyzed the amount of affordable housing each community in Brown County contained (based on year 2000 census data and on the Brown County 50 percent of median family income of \$28,946 per year resulting in \$700 being available per month for rent or mortgage, interest, and property taxes) as a percentage of its total number of housing units. According to the County plan analysis, the Village of Suamico contained 3,078 total housing units in 2000, accounting for 3.41 percent of the total number of Brown County housing units. Of the 3,078 total housing units in the Village, 247 owner-occupied units (4.50 percent of the total Brown County affordable owner-occupied housing) and 99 renter-occupied units (0.41 percent of the total Brown County affordable rental housing) were available for under \$700 per month. Of the owner-occupied and renter-occupied units, only the renter-occupied units are below the Village's percentage of total Brown County housing units of 3.41 percent, indicating a proportional shortage of affordable rental housing units within the Village.

The Brown County Comprehensive Plan states as one of its recommendations, "Challenge the local communities to provide a percentage of affordable housing proportional to their percentage of total housing units in Brown County." As the analysis indicated, the Village is below its proportional share of affordable rental housing units. Therefore, as the Village continues to grow, identifying and implementing development techniques or ordinance changes that promote the development of affordable rental housing units in the Village should be encouraged.

Range of Housing Choices

In order for the Village to continue to grow, working with developers to create a range of housing choices for existing Village residents and for those who may wish to move to the Village in the future will be necessary. A range of choices allows a young family to rent, purchase a starter home, move into a larger home as their family grows, move to a smaller home when they retire, and move to an assisted living facility, all without having to move out of Suamico. This section contains a series of recommendations the Village can implement to maintain its current housing stock and development pattern while creating more affordable housing units and a range of housing options. Figure 5-9 provides a representation of how a person's housing preferences might change over time.

Figure 5-9: Change in Housing Preferences Over Time



Source: Local Government Commission, 2003.

Smaller Residential Lot Sizes

Smaller minimum lot sizes and frontages (in addition to helping to keep housing costs down) provide for greater efficiencies in the delivery of such services as postal delivery, garbage, and school bus pickup. Also in terms of cost savings, the more homes that front

on a street, the less the impact on the individual homeowner when paying assessments for sewer main, water main, sidewalk, or street repairs. The Village has a number of smaller lots in the area near and within the village center. Suamico should strongly encourage the preservation of the smaller lots and rehabilitation of the homes in this area by ensuring that the Village's zoning ordinance does not make them nonconforming lots due to their small lot size.

Accessory Apartments on a Residential Parcel

As Suamico residents continue to age, there often comes a time when they might not want to maintain a separate home but do not want to be placed in a retirement or elderly care home. An alternative would be to allow small, secondary living quarters on one residential parcel. These "granny flats," as they are sometimes called, allow the elderly to maintain their own independent living quarters for sleeping and washing while being able to easily interact with their family for meals and socializing in the principal residence.

Traditional Neighborhood Development (TND)

Traditional neighborhood developments (TNDs) emphasize the neighborhood as a functional unit rather than the individual parcel or home. The State of Wisconsin formalized its support for this type of development when it required that all cities and villages with a population of over 12,500 residents develop an ordinance that permits these types of developments. Typical neighborhoods are about 100 to 160 acres, which is large enough to support retail services and amenities that meet some of the needs of daily life but small enough to be defined by pedestrian comfort and interest. The size of the neighborhood is based on a 5-minute walking distance (about a quarter-mile) from the neighborhood edge to the center and a 10-minute walking distance (about one-half mile) from neighborhood edge to edge. Each neighborhood typically has an identity that evolves from its public spaces, such as streets, parks and outdoor spaces, schools, places of worship, or other shared facilities. Automobiles do not take precedence over human or aesthetic needs. Instead, a neighborhood provides many ways of getting to, through, and between it and other parts of the community by driving, walking, and bicycling.

Forms of housing within a traditional neighborhood are mixed so people of different ages and income levels have opportunities to live in various parts of the community. The concept of mixed housing types is very important because many people prefer to remain in their neighborhoods as their incomes increase or decrease.

Traditional neighborhood development is particularly appropriate in areas of higher-density infill development or in areas directly adjacent to existing development. However, TNDs are more than just increased residential density. Traditional neighborhood development is a "package" of amenities, including public and institutional uses, integrated neighborhood commercial uses, a mix of residential types and styles, a connected street pattern, and an array of transportation options.

A series of photos taken in March of 2001 in the City of Middleton, Wisconsin, is included in this section to illustrate the concepts of traditional neighborhood

developments, mixed uses, and the architecture that supports these concepts. When viewing these pictures, please note that:

- The garage is either recessed on the side or behind the house.



Single-family home with rear attached garage.



Duplex on a corner lot.

- The front of the house is dominated by the presence of a front porch rather than the garage.
- The homes have minimal or zero setbacks from the right-of-way.
- Neighborhood streets are very narrow (approximately 18-24 feet between the curbs) to slow traffic.



Single-family homes on a narrow street with garages attached on the sides of the homes.



TND homes fronting a narrow street (the garages face the alleys behind the homes).

- Duplex and multifamily units are architecturally similar to the single-family homes and, therefore, blend into the overall neighborhood character.
- Although the architectural styles of the homes range from smaller bungalows to larger 2-story homes, they blend together to provide an architecturally pleasing neighborhood.
- Alleyways are used behind some of the homes to further enhance the home as the primary architectural feature rather than the garage and driveway.
- Narrower lots promote more of a neighborhood feel as opposed to an isolated home in the middle of a large lot.



Alleys and garages behind homes.



Apartment building across from a commercial use.

- Sidewalks are available throughout the development on both sides of the street to promote walking and interaction with neighbors.
- Small commercial uses are located at the entrance of the development to serve the neighborhood resident.
- Larger apartment homes and live/work units are also located within this area in easy walking distance to commercial uses and bus line.
- Commercial buildings have second floor residential uses.



Neighborhood deli and convenience store



First floor commercial and second floor residential uses

Conservation by Design Developments

The Village of Suamico has a number of places where there may be critical environmental or historical features that should be preserved even though the local property owner wishes to develop his or her property. In situations such as these, conservation by design subdivisions could accomplish both preservation and development. In terms of housing, the lots in conservation by design subdivisions are typically smaller and clustered together to prevent damage to the preservation feature(s). When first identifying the areas for preservation, it is made clear exactly who will own and be responsible for the care and maintenance of the preserved areas. Conservation by design developments are discussed more thoroughly within the Land Use chapter.

Mixing of Residential Types

One of the components of traditional neighborhoods that should be considered throughout new residential developments in the Village is the inclusion and mixing of different housing types. Historically, housing types were mixed. However, more recently, housing types other than single-family detached homes have been grouped together, thereby concentrating these uses. Mixing the housing types avoids the concentration of large tracts of rental properties and their perceived negative impacts. Residents and landlords of rental units are more apt to better maintain their properties if they are mixed with owner-occupied housing.

Mixed Uses in Residential Developments

The majority of residential subdivisions developed over the past 50 years consists almost exclusively of single-family detached homes separated from any commercial, institutional, or even recreational uses. This results in residents of these subdivisions having to utilize a vehicle to travel to a store, school, or park instead of having the opportunity to walk or bike a relatively short distance to these land uses. The separation of uses and reliance on a vehicle is especially difficult for the elderly, mobility-impaired, children, and others who may not want to or cannot drive.

In order to encourage people to walk and bike, uses other than only single-family residential uses should be encouraged within new neighborhoods. For example, corner lots are very good locations for small neighborhood commercial uses and higher density residential developments, while recreational and institutional uses should be located in places that provide a focus point, gathering place, and identity for the neighborhood and its residents.

In order for uses other than single-family detached homes to be palatable to surrounding property owners, the neighborhood commercial, higher density residential, and institutional uses all need to be of a scale and design that blend in with the residential character of the neighborhood. In order to achieve the desired seamless integration of these uses into the neighborhoods, strict commercial design standards should be employed. The design standards would let the developer know ahead of time what standards the neighbors would expect for the building, and the neighbors would know that the development would meet their expectations, as well.

Educate Residents and Homebuilders Regarding "Visitability" Concepts

As people age, their ability to move around their own home can become increasingly difficult. For a number of elderly and mobility-impaired residents, the simple presence of a single stair to enter a home could cause a great deal of difficulty. According to Green Bay-based Options for Independent Living, "visitability" applies to the construction of new single-family homes to make them "visit-able" by people with physical or mobility disabilities. Typically, visitable homes have:

- One entrance with no steps.
- A minimum 32-inch clear passage through all of the main floor doors and hallways.

- A useable bathroom on the main floor.

Although these improvements do not allow full accessibility, such as is promoted in universal design, they do allow (at a minimum) elderly and people with physical or mobility limitations the ability to visit a home or remain living in their home for a longer period of time.

Summary of Recommendations

It is very important for the Village to continue to monitor its progress in meeting the goals and objectives of the plan's Housing chapter. To attain the goals and objectives, the following recommendations were developed based on the input received from the Village-wide visioning session, survey, citizens advisory committee meetings, State of Wisconsin Comprehensive Planning Law, and sound planning principles:

- In areas of the Village with unique or critical natural or cultural resources, conservation by design developments should be encouraged. The natural or cultural resource areas should be preserved as part of the permanent greenspace and the development built around these resources.
- Expand the range of housing choices in the Village by including at least two housing types in any residential project containing more than 30 acres. As the acreage of the residential project increases, so should the number of housing types. This can be achieved with a variety of housing types, such as single-family homes, duplexes, condominiums, townhouses, apartments, and group homes.
- To increase the supply of affordable housing, the Village should work with developers to encourage the development of housing choices in traditional neighborhoods with smaller lots and homes near the village center. Smaller homes and lots may become increasingly important as the "baby boomers" approach retirement age and look to move into smaller, easier to manage homes. These homes would also offer first-time homebuyers the opportunity to enter the Village's housing market.
- Avoid concentrations of rental housing by encouraging a mixture of housing types and styles. Rental housing is vital to any community and should be distributed throughout the Village as public services become available rather than concentrated in a few areas.
- Multiple-family buildings should be designed to reflect, as much as possible, the characteristics and amenities typically associated with single-family detached houses. Examples of amenities include the orientation of the front door to a sidewalk and street and individual entries.
- Housing development lot width and depth, in conjunction with block size and shape, should be varied in order to reinforce variety in building mass, avoid a monotonous streetscape, and eliminate the appearance of a standardized subdivision.
- Variation in single-family housing models in large developments should be encouraged.

- To foster visual interest along neighborhood streets, the street frontage devoted to protruding garage doors and driveway curb crossings should be limited. Generally, garages should be recessed or, if feasible, tucked into side or rear yards using variety and creativity to avoid a streetscape dominated by the repetition of garage doors.
- Alleys and various forms of shared driveways are encouraged as an alternative to double-frontage lots along thoroughfares. Alleys and driveways can also serve as locations for ancillary buildings, utilities, service functions, and interior-block parking access.
- New residential developments should allow for mixed uses as additions to the community that provide a place for housing and allow secondary uses (commercial, recreational, and institutional uses) that serve the neighborhood and are in harmony with the residential character and scale.
- Educate homeowners and builders about the advantages of including the “visitability” concepts in new homes.
- Areas of the Village already served by public utilities that can be infilled with residential uses and land that can be efficiently served by public utilities should be priorities for development.
- The Village should contact the Brown County Housing Authority and Wisconsin Housing and Economic Development Authority (WHEDA) for additional information and resources to continue to diversify the Village’s housing stock.

CHAPTER 6

Utilities and Community Facilities

Introduction

The type and quality of services a community provides are two of the most important reasons why people and businesses are attracted to and choose to remain within a community. Healthcare, childcare, and schools are examples of services that are often most important to the residents of a community, while utilities, power supply, and power transmission capabilities are examples of services that are often most important to businesses and industries.

As a community grows and matures, so do its need for services. Most often considered in this regard are sanitary sewer, public water, and stormwater management. Most small rural communities do not provide such services, but at some point as they continue to grow, such services become essential to the continued health, welfare, and safety of the community. In addition, federal and state rules (such as the Clean Water Act) often govern various aspects of such services.

Of particular importance to the Village of Suamico and among the top ranked issues raised during the visioning session held for this comprehensive plan is how sanitary sewer and water service is to be provided and financed.

Experiences from across the country have shown time and again that to provide high quality services, a growing community like Suamico must maintain, upgrade, and reevaluate its utilities, facilities, and other services. This means that the Village should periodically evaluate its existing services to ensure their continued provision in the most cost-effective manner possible consistent with the community's long-term goals, trends, and projections, as well as consider the elimination of unnecessary services and the provision of new services when necessary. This process would also help address the issues that were raised at the visioning session. The analyses and recommendations within this chapter of the Village of Suamico Comprehensive Plan are the first step in that process, and this plan should be used to guide and direct, but not replace, detailed engineering studies, facility plans, and capital improvement programs.

For all of these reasons and more, the continued provision of quality services is very important to the Village of Suamico.

Background

The Village of Suamico is a moderately sized but rapidly growing suburban village within the greater Green Bay Metropolitan Area that provides a range of utilities, facilities, and other services.

The Village of Suamico currently provides:

- A volunteer fire department for the entire Village and two fire stations.
- A wastewater collection system for the central and southern portions of the Village.
- A public water supply and distribution system for the central portion of the Village.
- A park and recreation system.
- A village hall that houses the majority of the administrative functions of the Village.
- A recycling drop-off site.

The Village of Suamico currently contracts with:

- A private hauler for recycling collection for the entire Village.
- Brown County for solid waste, recycling, and household hazardous waste disposal for the entire Village.
- The Green Bay Metropolitan Sewerage District for sewage conveyance, treatment, and disposal for the central and southern portions of the Village.
- The Brown County Sheriff's Department for police service for the entire Village.
- County Rescue Services Inc. for rescue services for the western and eastern portions of the Village.

Private providers arrange telecommunication, power, cemeteries, healthcare, care for the elderly, and childcare services within the Village.

Opportunities and Challenges

Challenges associated with the Village's utilities, facilities, and other services are related to the proper timing, location, and construction of new infrastructure, the possible need for new or higher levels of services as resident and business populations and needs change, the number of factors impeding expansion of the Village's sewer and water systems, greater economic competition within the region and the metropolitan area, fiscal constraints, and new legislation and regulations. Opportunities include a healthy local population, economy, and business climate, efficiencies of scale, and possibilities for intergovernmental cooperation and shared services.

Inventory and Analysis

This section of the Utilities and Community Facilities chapter provides detailed information about the Village of Suamico's utilities, facilities, and other services and recommends actions to address identified concerns or issues. These recommendations are also summarized at the end of this chapter.

Sanitary Sewer Service

Of the infrastructure most urban and suburban communities provide to ensure the health, welfare, and safety of its citizens, sanitary sewer service is one of the more important and traditional ones. In addition, the 5th and 7th most commonly raised issues during the visioning session held for this plan were related to future water and sewer installation.

Several major federal laws have been enacted over the past 100 years to protect our nation's waters, and each of these laws imposed subsequently greater restrictions upon the discharge of pollution into lakes, rivers, and streams. With the passage of the 1972 Clean Water Act, all discharges of pollution required a permit, the use of best achievable pollution control technology was encouraged, and billions of dollars were provided for the construction of sewage treatment plants.¹

Suamico's first and only sanitary district, the Town of Suamico Sanitary District No. 1, was created in 1972 and encompassed lands in the central portion of the Town adjacent to the Suamico River. This area was subsequently included in the Brown County Sewage and Solid Waste Plan - 1972, prepared by the Brown County Planning Commission, as a future sewered area. The sanitary district's first facilities plan was prepared in 1978, and it recommended the construction of a wastewater treatment plant (WWTP) to serve the central portion of the Town. The WWTP was constructed in 1980, and public sanitary sewer service was provided to this portion of the Town shortly thereafter. In 1994, the Green Bay Metropolitan Sewerage District (GBMSD) constructed the Bayview Interceptor Sewer from the City of Green Bay to the Village of Pulaski to serve the Village of Pulaski, the western portion of the Village of Howard, and the southern portion of the Town of Suamico. This portion of Suamico was subsequently annexed into the GBMSD in 1998, and public sanitary sewer service was first provided in 2003. In 2002, the sanitary district completed a new facilities plan that recommended that the remainder of the Town's existing and future sewered areas be annexed into the GBMSD, the Suamico WWTP be abandoned, and public sanitary sewer service for all of these areas of the Town be provided by the GBMSD. The sanitary district was dissolved in 2003 when the Town of Suamico incorporated into the Village of Suamico, and as recommended in the 2002 facilities plan, the majority of the Village of Suamico was annexed to the GBMSD in 2004, with service provided by GBMSD beginning in 2005.

Figure 6-1: Sewered Population Trend

Year	Sewered	Percent	Non-Sewered	Percent	Total
1980	0	0	4,003	100.0	4,003
1987	1,807	40.1	2,694	59.9	4,501
1995	2,917	46.4	3,363	53.6	6,280
2000	3,373	38.8	5,313	61.2	8,686

¹ This law also required comprehensive water quality planning for both point and nonpoint sources of pollution. For Brown County and the Village of Suamico, this planning is currently contained in the *Upper Green Bay Basin Water Quality Management Plan*, prepared in January 1993 by the Wisconsin Department of Natural Resources (WDNR), and the *2002 Brown County Sewage Plan*, which was approved by the Brown County Planning Commission and endorsed by the Wisconsin Department of Natural Resources in March of 2003.

A review of the historic sewer population levels within the Village is provided in Figure 6-1. The current Suamico Sewer Service Area (SSA) is shown in Figure 6-2.

Sanitary sewer service is currently provided to the central and south-central portions of the Village of Suamico, generally south of Resort Road/Elmwood Road and east of Northwood Road/St. Pats Drive. The location of the Village's collection system is shown in Figure 6-3.

The GBMSD Wastewater Treatment Plant (WWTP), which will begin serving the Village in 2005, has a design hydraulic loading capacity of 49.2 mgd (million gallons per day) and received an average monthly flow rate of 27.53 mgd in 2000. The treatment plant also has a design BOD (biological oxygen demand) loading limit of 103,110 lb/day (pounds per day) and received an average monthly loading of 57,630 lb/day in 2000. This accounted for approximately 56 percent of the design hydraulic loading capacity and about 56 percent of the design BOD loading capacity of the treatment plant. In 2005, Suamico's flows and loads will be connected to the GBMSD WWTP.

As a regional facility, the GBMSD WWTP provides wastewater treatment at its plant to all of the City of Green Bay and the Villages of Allouez, Bellevue, Howard, and Pulaski, and to portions of the Villages of Ashwaubenon, Hobart, and Suamico and the Towns of Green Bay, Humboldt, Pittsfield, and Scott, as well as to portions of communities outside of Brown County, including the Oneida area and the Village of Luxemburg.

There are currently no known concerns or issues associated with the GBMSD's WWTP or the Village's collection system. The Village does have a regular inspection program of its sewerage system and is generally aware of the demands future growth will impose upon the treatment plant and collection system.

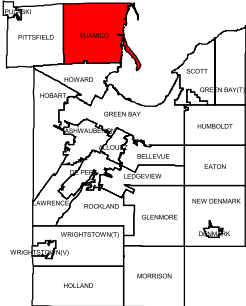
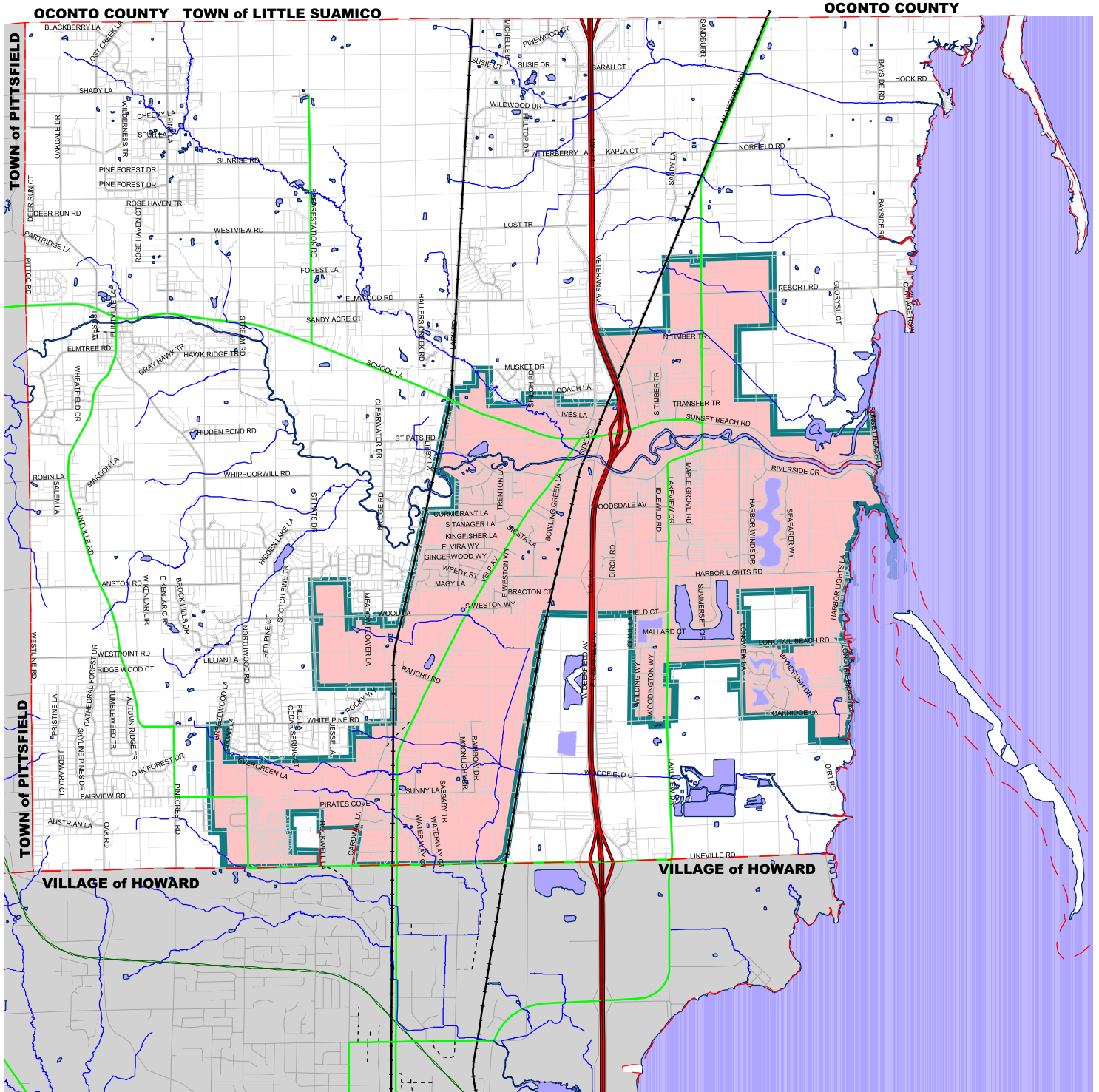
As discussed in the Land Use chapter of this plan, it is envisioned that the Village will continue to experience rapid growth and development. This rate of growth and development will greatly impact Suamico's infrastructure, including its sewerage system. Furthermore, the amount of growth and development that occurs with public sewer and water service will also greatly impact the Village's future infrastructure. In addition, in 2004, Foth & Van Dyke prepared a *Village of Suamico Sanitary Sewer and Water Rate Study* that indicated that operating revenues for the sanitary sewer system would need to increase by at least 95 percent to cover the existing and projected deficit in operating revenues.

Sewer service area planning is a state water quality program administered by the DNR pursuant to the Federal Clean Water Act. Wisconsin Administrative Code sections NR 121, NR 110, NR 113, and COM 82 require that wastewater facility plans, sanitary sewer extensions, and large onsite sewage disposal systems must be in conformance with an approved areawide water quality management plan. The Brown County Planning Commission is the designated areawide water quality management agency for sewer service area planning within Brown County. Thus, the BCPC determines sewer service areas, subject to approval by the DNR.

The 2002 Brown County Sewage Plan identifies the extent of sewer service areas in Suamico and the rest of Brown County. When determining sewer service areas,



Figure 6-2
Sewer Service Area
 Village of Suamico, Brown County, WI



 Sewer Service Area

Scale: 1 inch = 1 mile

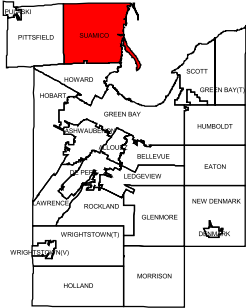
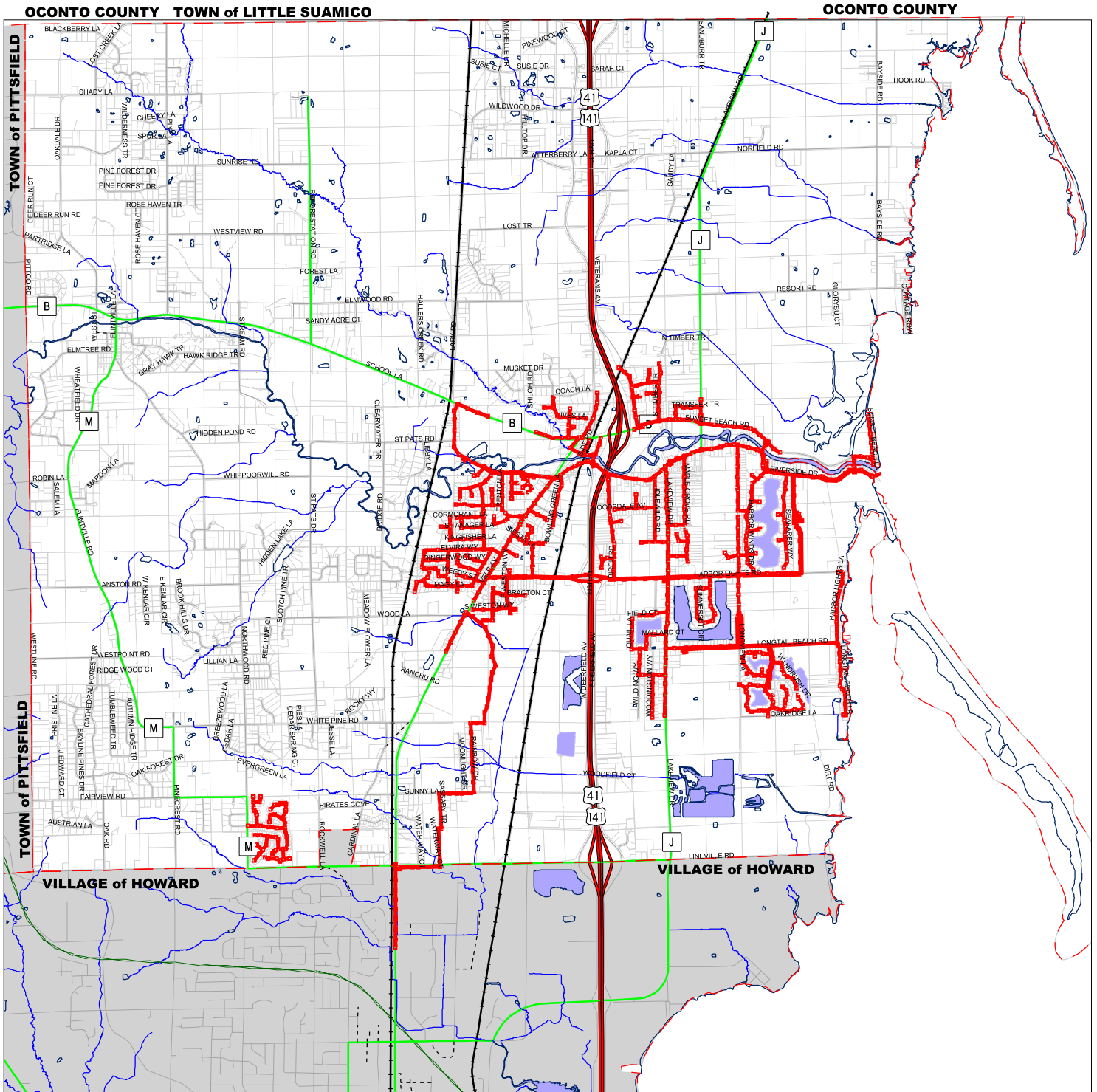


This is a compilation of records and data located in various Brown County and City of Green Bay offices and is to be used for reference purposes only. The map is controlled by the field measurements between the corners of the Public Land Survey System and the parcels are mapped from available records which may not precisely fit field conditions. Brown County/ City of Green Bay are not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

Map prepared by Brown County Planning Department. June 2004.



Figure 6-3
Sanitary Sewers
 Village of Suamico, Brown County, WI



Sanitary Sewers
 Source: Kaempfer and Associates, Inc.

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



This is a compilation of records and data located in various Brown County and City of Green Bay offices and is to be used for reference purposes only. The map is controlled by the field measurements between the corners of the Public Land Survey System and the parcels are mapped from available records which may not precisely fit field conditions. Brown County/ City of Green Bay are not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

Map prepared by Brown County Planning Department.
 October, 2004.

environmental protection and cost-effective provision of sewer and water services are key considerations for providing compact, easily serviced growth. The delineated sewer service area represents the area that should be sufficient to accommodate the community's projected growth for a 20-year timeframe, with some margin for allowing market conditions to operate.

Federal, state, and county rules require that the amount of land contained within a sewer service area be based on the 20-year population projection prepared by the Wisconsin Department of Administration. This 20-year population projection is then incorporated into an elaborate formula that takes into consideration expected future population, average lot size, average number of people per household, and various market and road factors. Once determined, the sewer service area should have sufficient acreage to satisfy the 20-year population growth for a municipality with a moderate amount of flexibility built in. The sewer service area boundary is typically revised every five years or so during a countywide update of the County sewage plan. In addition, municipalities may ask for an amendment to the sewer service area to address changing conditions or trends. Amendments must be reviewed and approved by the municipality, the BCPC, and the DNR.

Although this comprehensive plan envisions the development of approximately 3,400 acres of vacant developable land over the next 20 years, the Suamico sewer service area only provides approximately 1,750 acres of vacant developable land. The County sewage plan does state that as these approximately 1,750 acres of vacant developable land are developed, they can be replaced through sewer service area amendments. This process was specifically created to allow the sewer service areas to grow and expand in direct relationship to the growth and development occurring within them.

Based upon this information, it is apparent that the Village's development rates, ratio of sewered to unsewered development, and the direction of sewered growth and development are significantly different than those being used by the DNR and the BCPC. It is recommended, therefore, that the Village of Suamico provide this information to the DNR, GBMSD, and BCPC and request that they incorporate it into their individual planning efforts to the greatest extent possible.

To address this growth, additional major collection system components, such as interceptor sewers, lift stations, and forcemains, as well as continued maintenance of the existing sewerage system, are envisioned. Major anticipated changes include expansion of the Suamico collection system to the northeastern portion of the Village.

To ensure the most efficient and cost-effective sewerage system possible, replacement, rehabilitation, and new construction should take place in a planned and coordinated manner. For instance, whenever possible, sanitary system modifications within a specific area should be undertaken at the same time as water, stormwater, and/or road construction or reconstruction so that construction impacts are minimized and efficiency between the projects is maximized. Also, the development/redevelopment of lands adjacent to this specific area and the use of underutilized infrastructure should be encouraged over the extension of new infrastructure. When the extension of

infrastructure is warranted, it should be provided in such a manner that encourages compact and contiguous development patterns.

Based upon this information, it is recommended that the Village expand its long-range planning, maintenance, and funding efforts to ensure that its collection system remains adequately sized and located for anticipated growth and development.

It is also recommended that the Village of Suamico expand its collection and treatment systems in conformance with the 5-year service increments identified within this plan, promoting infill development and efficient and cost-effective growth patterns.

It is further recommended that the Village work with the DNR, GBMSD, and BCPC to ensure that this anticipated growth is accommodated by these agencies' sewerage system components and that it is in conformance with their sewer service area and facilities planning efforts.

Onsite Sewage Disposal Systems

Onsite sewage disposal systems are those that store, treat, or dispose of wastewater (or perform a combination of these functions) on the site at which the wastewater is generated. Onsite sewage disposal systems are used in those areas that are not served by offsite systems. Typical examples of onsite systems include holding tanks, conventional septic systems, or pressure systems used by individual homeowners and small businesses located in rural areas. Information provided in the Brown County Soil Survey indicates that while soils within the eastern half of the Village of Suamico have severe or very severe limitations for onsite sewage disposal systems, the soils within the western half of the Village are generally well suited for development. Slow permeability and a high groundwater table are the most common limiting factors within the eastern portion of the Village. In those areas, pressure systems or holding tanks are the only options available for onsite systems. Where soil and other limiting conditions are not a factor, conventional systems are typically used.

In 1969, Brown County created Chapter 11 (the Brown County Private Sewage System Ordinance) of the Brown County Code pursuant to requirements of the Wisconsin State Statutes and the Wisconsin Administrative Code, which pertain to regulation of the construction, installation, and maintenance of plumbing in connection with all buildings in the state. Chapter 11 of the Brown County Code regulates the location, construction, installation, alteration, design, and use of all private onsite wastewater treatment systems (POWTS) within the County so as to protect the health of residents, to secure safety from disease and pestilence, to further the appropriate use and conservation of land and water resources, and to preserve and promote the beauty of Brown County and its communities.

In 2001, the Wisconsin Department of Commerce adopted revisions to Wisconsin Administrative Code COM 83 (Private Onsite Wastewater Treatment System) to recognize new technologies, provide consistent application of the code, incorporate new standards, provide more options to owners, improve treatment, revise outdated rules, address legislative intent, and define agency roles. These changes have been reflected in Chapter 11 of the Brown County Code. The effect of these changes has been to increase

the options and opportunities for use of private onsite systems within the communities of Brown County.

The Brown County Zoning Department has been collecting detailed information on all POWTS within the County since 1977. Additional information pertaining to systems built prior to 1977 is being obtained as time allows. This information indicates that there have been about 1,332 gravity flow onsite waste systems (the most of any community within Brown County), about 289 pressure onsite waste systems (the third most of any community within Brown County), and about 135 holding tanks (the second most of any community within Brown County) installed within the Village. The Brown County Zoning Department has collected detailed holding tank pumping information since 1994. That information indicates that the total gallons pumped per year within the Village has increased from about 1,600,000 gallons in 1994 to about 2,800,000 gallons in 2003, an average increase of about 7 percent per year and more gallons than any other community within Brown County. An average of about 69 new onsite systems have been constructed each year from 1996 to 2003 (the most of any community within Brown County). The majority of these have been pressure systems. In addition, an average of about eight replacement systems have been constructed each year.

Consistent with the Village's long-range sewer and water planning efforts, consistent with the goals, objectives, policies, and assumptions set forth in this comprehensive plan, and in acknowledgement of the major investment already made and planned to be made in Suamico's sewerage system, it is recommended that new development to be served by onsite sewage disposal systems be prohibited within those portions of the Village identified within the 0- to 5-year service increments. It is further recommended that any new unsewered development located in the 5- to 10-year service increments be discouraged to the greatest extent possible and, if approved, be required to be developed in such a fashion that when public sanitary sewer service becomes available, such development can and must connect to the public sanitary sewer system in an efficient and cost-effective manner. It is also recommended that existing unsewered development within all of these service increments be connected to public sewer when it can be done cost-effectively and efficiently, such as when a majority of onsite systems within a certain area begin to fail and public sewer is already nearby.

Should significant amounts of development occur outside of the Suamico SSA, further amendments and expansions of that SSA may become more difficult to obtain. This is due to the fact that the size of the Suamico SSA is based on a series of assumptions, the most important in this case being that at least 75 percent of the new lots within the Village will occur on public sanitary sewer service. Should this goal not be maintained, the County sewage plan indicates that it will utilize the Village's past and present sewer development rates to size the Suamico SSA, likely resulting in a slower growing SSA.

Should significant development occur outside of these growth areas and without public sewer, it will become more costly and more difficult for the Village to expand its public water system. This is discussed in more detail at the end of this chapter.

It is recommended that the Village of Suamico support Brown County's private sewage disposal system ordinance that requires inspections of all existing onsite sanitary systems

at the time of sale of the associated property and the ordinance's mandatory 3-year maintenance program.

Water Supply

In conjunction with sanitary sewer service, drinking water is one of the more important and traditional elements of urban and suburban infrastructure. Where one is provided, the other is also often present. Water mains often share many of the same easements and are often extended concurrently with sanitary sewers. In addition, the fifth and seventh most commonly raised issues during the visioning session held for this plan pertained to future water and sewer installation.

Groundwater has long been the source of all drinking water and other water uses within the Village of Suamico. Until the early 1980s, Suamico relied solely upon individual private wells. At that time, a well was drilled for the Suamico Industrial Park. In 1993, that well was abandoned and replaced by a new well. In 1997, the water supply system was taken over by the Town of Suamico Sanitary District No. 1 and extended beyond the industrial park. By 2004, the system was comprised of two high capacity wells, an elevated storage tank, and a water main system encompassing about four square miles in the central portion of the Village, and it provides service to a population of about 200 people. The Suamico system primarily serves residential customers and is shown on Figure 6-4.

In addition, there is a private water supply system serving the Harbor Lights Lake subdivision in the central portion of the Village. It is envisioned that this system will eventually be replaced with the Village's public system.

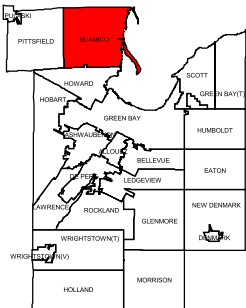
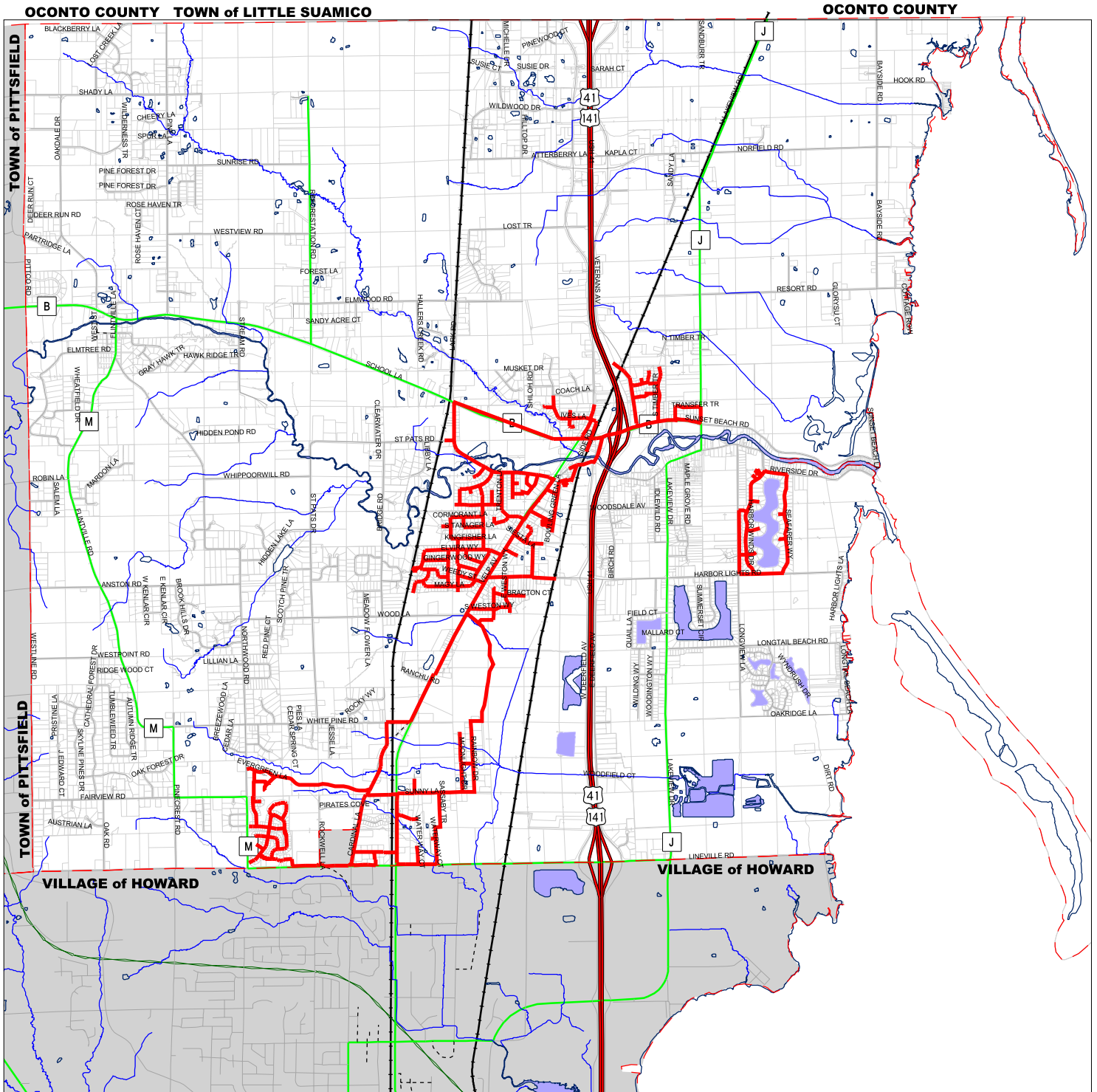
As stated by the Wisconsin Department of Natural Resources, all drinking water, no matter the source, may reasonably be expected to contain at least small amounts of some contaminants. Contaminants may include microbes, such as viruses and bacteria; inorganics, such as salts and metals; pesticides or herbicides; organic chemicals, such as petroleum byproducts; and radioactive substances. The presence of such contaminants does not necessarily indicate that the water poses a health risk.


The federal Safe Drinking Water Act of 1974 charged the Environmental Protection Agency (EPA) with promulgating drinking water standards to protect public health. These standards, known as "maximum contaminant levels" (MCLs), now cover approximately 52 substances. Primary MCL standards are designed to protect public health and include standards for organic and inorganic chemicals, microorganisms and bacteria, and turbidity. Secondary MCL standards are designed to protect public welfare and include color, odor, and taste. The Wisconsin DNR has promulgated state MCLs based on the federal MCLs whether its source is groundwater or surface water. These standards apply to any public water supply system. However, they technically do not apply to individual or non-public water supply systems but rather serve as guidance in determining if a well may be contaminated.

In 1984, Wisconsin State Statutes 160 and Administrative Codes NR 809 and 811 were created to minimize the concentration of polluting substances in groundwater through the use of numerical standards to protect the public health and welfare. The numerical



Figure 6-4
Water Mains
 Village of Suamico, Brown County, WI



 Water Mains
 Source: Kaempfer and Associates, Inc.

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
 October, 2004.

standards created under NR 809 and 811 consist of enforcement standards and preventive action limits.

A review of the 2003 Consumer Confidence Report for the Suamico Sanitary District No. 1 indicates that of the approximately 104 different contaminants that the sanitary district tested for, none exceeded the federal/state MCL. More detail about this can be obtained by reviewing the Consumer Confidence Report (CCR) maintained by the Wisconsin Department of Natural Resources and found on its website.

Although arsenic has also been identified as a groundwater contaminant concern in northeastern Wisconsin, violations of the arsenic MCL have not been identified in the sanitary district's public water supply system. In all regards, Suamico is meeting state and federal drinking water requirements.

To address the Village's anticipated growth, additional major distribution system components are envisioned, such as wells, elevated storage tanks, and water mains, as well as continued maintenance of the existing water system. Major anticipated changes include expansion of the distribution system to the northern portion of the Village.

To ensure the most efficient and cost-effective water system possible, replacement, rehabilitation, and new construction should take place in a planned and coordinated manner. For instance, whenever possible, water main modifications within a specific area should be undertaken at the same time as sewer, stormwater, and/or road construction or reconstruction so that construction impacts are minimized and efficiency between the projects is maximized. Also, the development/redevelopment of lands adjacent to this specific area and the use of underutilized infrastructure should be encouraged over the extension of new infrastructure. When the extension of infrastructure is warranted, it should be provided in such a manner that encourages compact and contiguous development patterns.

Based upon this information, it is recommended that the Village expand its long-range planning, maintenance, and funding efforts to ensure that its collection system remains adequately sized and located for anticipated growth and development. This should include periodic study of the feasibility of joining the Central Brown County Water Authority for the use of Lake Michigan (rather than groundwater) as the source of the Village's drinking water.

It is recommended that the Village continue its efforts with neighboring communities to arrange agreements of water for backup and emergency purposes.

It is recommended that the Village of Suamico update its Source Water Assessment and its Wellhead Protection Plan as necessary. Update and implementation of these plans should help ensure the long-term safety and viability of the Village's groundwater, which is the current source of its drinking water.

Solid Waste Disposal and Recycling

Solid waste collection and disposal is another example of traditional infrastructure provided by many urban communities to protect the health, welfare, and safety of its citizens.

Prior to the 1970s, solid waste from Brown County's communities and businesses was put in unregulated garbage dumps or burned in unregulated incinerators. In 1976, Brown County built the East Landfill, the first engineered landfill in Wisconsin. Shortly thereafter, Brown County built the West Landfill, the second engineered landfill in Wisconsin. These landfills were an environmentally- and economically-sound alternative to previous methods of solid waste disposal. Beginning in 2003, its solid waste, as well as the rest of Brown County's, is transported to the Brown County Solid Waste Transfer Station located at the West Landfill where it is, in turn, transported to the Outagamie County landfill.

The benefits of recycling are numerous and include saving natural resources, saving energy, reducing the need for landfill space and incineration, reducing pollution, reducing local solid waste management costs, and creating jobs and businesses. In addition, an increasing number of communities are realizing that the slogan "reduce, reuse, and recycle" is a significant factor in protecting the environment.

In 2004, the Village of Suamico contracted with a private provider for the collection of recycling. A recycling drop-off site is also located in the Suamico Industrial Park. It is recommended that the Village study the feasibility of a similar service for solid waste collection and disposal.

Larger items, yard waste, and household hazardous wastes can be disposed of at the Village's recycling drop-off site.

It is recommended that the Village conduct a study to determine the feasibility of a joint solid waste and/or recycling collection program with adjacent communities, such as the Village of Howard and the Town of Pittsfield. If determined to be feasible and cost-effective, the Village should participate in the program and should also encourage other adjacent communities to do so.

It is envisioned that the current method of recycling will continue to be adequate during the next 20 years; although, this service should be periodically reviewed to ensure that it continues to meet the Village's needs.

Stormwater Management

In 1987, the federal government passed an amendment to the Clean Water Act that included several regulations relating to stormwater management and nonpoint source pollution control. The programs created by this legislation are administered by the U.S. Environmental Protection Agency and are targeted to control nonpoint source pollution from municipal, industrial, and construction site runoff.

Due to revisions to the federal programs in 1999 and corresponding changes to Wisconsin Administrative Codes, these federal programs apply to most communities for most construction sites one acre or larger in size, including the central and south-central portions of the Village of Suamico. It is also anticipated that these requirements will apply as well to many ongoing Village activities, such as its road and utility reconstruction and grounds maintenance.

As stated in the Wisconsin Department of Natural Resources' model stormwater runoff ordinance, uncontrolled stormwater runoff from land development activity has a significant impact upon water resources and the health, safety, and general welfare of the community. Uncontrolled stormwater runoff can:

- Degrade physical stream habitat by increasing stream bank erosion, increasing streambed scour, diminishing groundwater recharge, and diminishing stream base flows.
- Diminish the capacity of lakes and streams to support fish, aquatic life, recreational activities, and water supply uses by increasing loadings of nutrients and other urban pollutants.
- Alter wetland communities by changing wetland hydrology and by increasing pollutant loads.
- Reduce the quality of groundwater by increasing pollutant loads.
- Threaten public health, safety, property, and general welfare by overtaxing storm sewers, drainageways, and other minor drainage facilities.
- Threaten public health, safety, property, and general welfare by increasing major flood peaks and volumes.
- Undermine floodplain management efforts by increasing the incidence and levels of flooding.
- Diminish the public enjoyment of natural resources.

As urban development increases, so do these risks. Research indicates that many of these concerns become evident when impervious surfaces (rooftops, roads, parking lots, etc.) within a watershed reach 10 percent. A typical medium density residential subdivision can contain about 35 to 45 percent impervious surfaces. Therefore, such adverse impacts can occur long before the majority of a watershed becomes developed.

The Village of Suamico's current stormwater system is comprised of a conveyance system consisting of swales, roadside ditches, storm sewers, culverts, and channels and a storage system consisting of wetlands, wetland remnants, and constructed stormwater detention facilities. This system generally transports stormwater runoff from developed lands to the Suamico River or directly to the bay of Green Bay.

In June 2001, Community Engineering Consultants prepared a Comprehensive Stormwater Management Plan Needs Assessment for Suamico. The study recommendations include:

- Identify all environmentally sensitive areas.
- Inventory existing drainage structures.
- Update the Official Map.
- Identify areas suitable for best management practices.
- Establish water quality performance standards.
- Adopt a stormwater management ordinance.
- Develop a stormwater management submittal and review process for development.
- Determine a funding method for stormwater management improvements.
- Investigate grant opportunities.
- Include design standards for low impact design/conservation subdivisions within the subdivision ordinance.
- Cooperate with neighboring communities regarding common stormwater management issues.

It is recommended that the Village of Suamico implement the recommendations of the Comprehensive Stormwater Plan Needs Assessment, including the preparation and adoption of a comprehensive stormwater management plan for the entire Village consistent with the Village's pertinent ordinances, the plans of neighboring communities, existing state and federal regulations, and other plans, such as the Lower Green Bay Remedial Action Plan.

It is anticipated that implementation of the stormwater management plan's recommendations and the creation of a stormwater management utility will fully address the stormwater management needs of the Village of Suamico during the timeframe of this comprehensive plan. However, the stormwater management plan and this comprehensive plan will likely need to be revised to ensure their continued compliance with state and federal stormwater regulations as those regulations change over time.

Parks and Recreation

The presence of outdoor recreation and open space adds to a community's quality of life. It enhances the attractiveness of and fosters a sense of civic pride in the community. Furthermore, the provision of an adequate supply of areas, facilities, and activities to accommodate the public's open space and recreational needs has been demonstrated to promote the general health, welfare, and safety of the community and its citizens.

Suamico completed its first comprehensive park and outdoor recreation plan in 1991 and updated that plan in 1997. By 1997, Suamico implemented most of the recommendations in that first plan, including expansion and development of Idlewild Community Park and acquisition and development of Calavera Springs Community Park.

Suamico's parks are shown in Figure 6-5, and they encompass a total of about 135 acres. A brief description of each site is included in this section. More information is presented

in the Comprehensive Outdoor Recreation Plan, Town of Suamico, Suamico, Wisconsin, dated April 1997 by Foth & Van Dyke.

- Idlewild Community Park is a 56-acre community park located at the northwest corner of CTH J and Harbor Lights Road in the central portion of the Village. It provides a lighted softball field, a baseball field, three combination little league baseball/girls softball fields, two soccer fields, a tennis court, an all-season recreation pavilion, a playground area, a concession stand, and a parking lot.
- Calavera Springs Community Park is a 69-acre community park located along CTH M in the southwestern portion of the Village. It provides three regulation-size soccer fields, three softball fields, a tennis court, two parking lots, an all-season recreation pavilion, and nature trails. Passive recreational facilities include 16 acres of woods, a spring which is the headwaters of a tributary of the Suamico River, and several acres of re-established prairie plantings.
- Firemen's Park is a 1/2-acre undeveloped park located on Riverside Drive in the central portion of the Village. It provides fishing and canoe access to the Suamico River.
- Wied Mill Park is a 9-acre undeveloped park located along Rock Bottom Court in the central portion of the Village. It provides access to the Suamico River.

In addition to the Village-owned sites previously noted, the following sites are also located within the Village of Suamico.

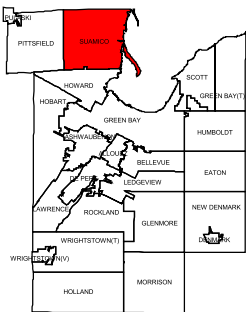
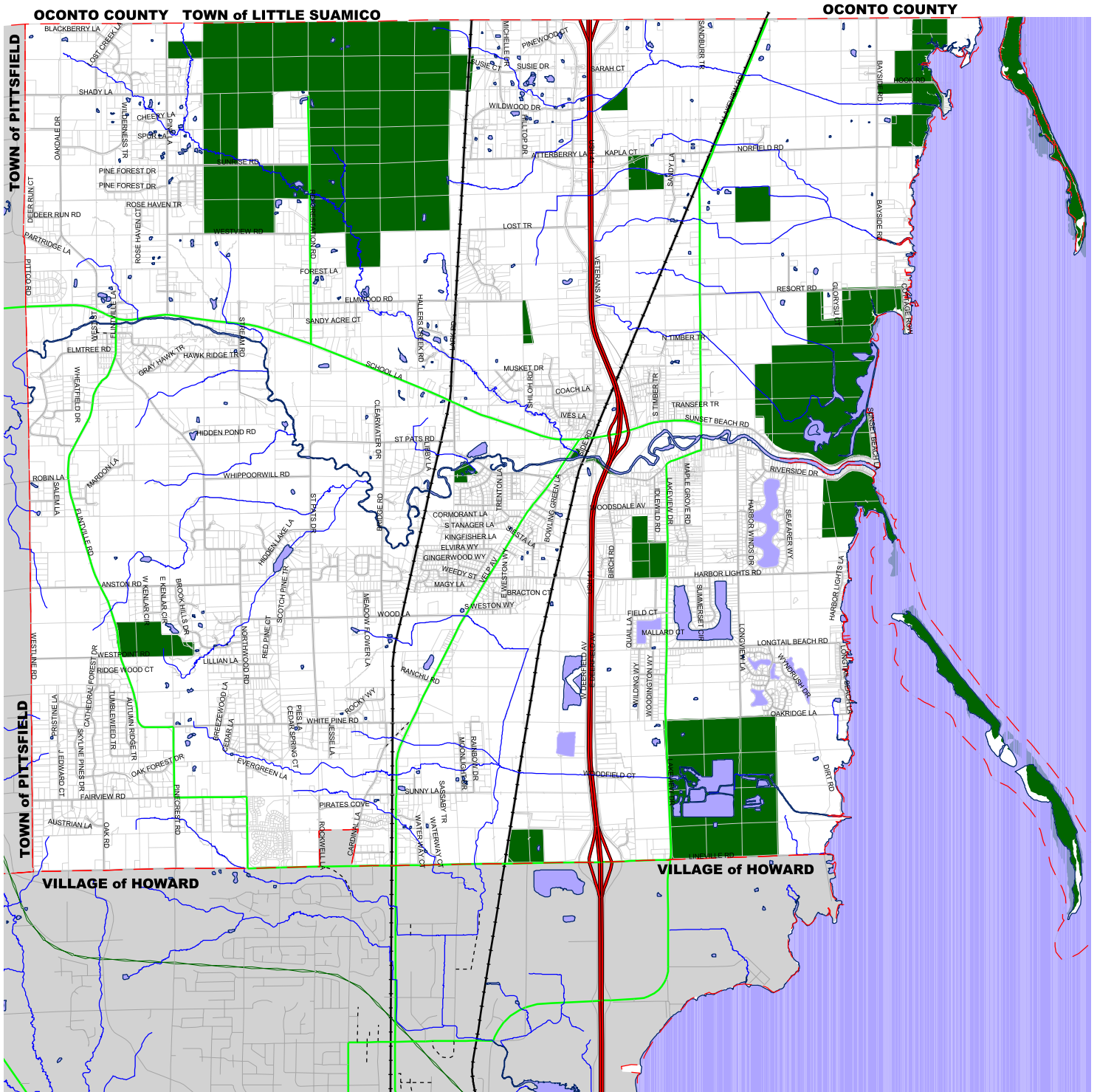
- Little Tail Management Unit is a 229-acre site owned by the State of Wisconsin. It is part of the Green Bay West Shore Wildlife Area and is located along Bay Side and Hook Roads in the northeastern portion of the Village. It is undeveloped and is intended to protect and preserve wildlife and wildlife habitat.
- Longtail Point is a 266-acre site owned by the State of Wisconsin. It is part of the Green Bay West Shore Wildlife Area and is located in the bay of Green Bay in the southeastern portion of the Village. It is undeveloped and is intended to protect and preserve wildlife and wildlife habitat.
- Sensiba Wildlife Area is a 606-acre site owned by the State of Wisconsin. It is part of the Green Bay West Shore Wildlife Area and is located along Resort and Beach Roads in the eastern portion of the Village. It is undeveloped and is intended to protect and preserve wildlife and wildlife habitat.
- Small Craft Boat Launch is a 2-acre site owned by the State of Wisconsin. It is part of the Green Bay West Shore Wildlife Area and is located along Harbor Lights Lane in the central portion of the Village. It provides a boat launch and a small parking lot.

Barkhausen Waterfowl Preserve is a 474-acre Brown County-owned Special Use Area located in the southeastern portion of the Village of Suamico. The site includes a group camping area, an interpretive center, indoor and outdoor study areas, a picnic area, restrooms, parking, and nine miles of hiking/ski trails.



Figure 6-5 Park and Recreation Areas

Village of Suamico, Brown County, WI



Park and Recreation Areas

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department. June 2004.

- Reforestation Camp is a 1,489-acre Brown County-owned Park Reserve located in the northern portion of the Village of Suamico. The site includes a softball diamond, a playground, 4 fishing ponds, picnic areas, a visitor's center, an education center, an observation tower, 2 shelters, restrooms, parking, a 1-mile interpretive trail, and 18 miles of hiking/ski trails. In addition, the Brown County Rifle Range (a 100-yard outdoor shooting range) and the NEW Zoo (a 38-acre outdoor zoo with 62 exhibits, 80 species, and over 200 specimens) are also located within the confines of the Reforestation Camp.
- Suamico Boat Landing is a 3-acre Brown County-owned Special Use Area located near the mouth of the Suamico River in the eastern portion of the Village of Suamico. The site includes a boat launch with four piers, restrooms, and parking.
- Bay Port High School is a 102-acre public school owned by the Howard-Suamico School District and located along Rockwell Lane and Lineville Road in the southern portion of the Village. The school provides approximately 62 acres of open space.
- Lineville Intermediate School is a 19-acre public school owned by the Howard-Suamico School District and located along Lineville Road in the northern portion of the Village of Howard between Bay Port High School and Forest Glen Elementary School. The school provides approximately 10 acres of open space, including a football field and track, two little league/softball diamonds, and two soccer fields. The school also has an indoor swimming pool.
- Forest Glen Elementary School is a 19-acre public school owned by the Howard-Suamico School District and located along Velp Avenue in the northern portion of the Village of Howard. The school provides approximately four acres of open space, including two playgrounds.
- Suamico Elementary School is a 26-acre public school owned by the Howard-Suamico School District and located along CTH B in the central portion of the Village. The school provides approximately 20 acres of open space, including a playground.

As a rapidly growing community, Suamico recognizes the need for additional active recreation areas and facilities since the Village is close to capacity in terms of meeting the needs of the population with its existing facilities. In order to continue to provide quality recreation opportunities for the Village's children, Suamico should consider a new community park with additional baseball fields, soccer fields, and playground equipment. A park in the south-central portion of the Village would provide a much needed park and neighborhood focal point for the existing homes to the north and the large number of proposed homes to the east. Additionally, a park in this area would have very good vehicular access and the potential for trail access should the E&LS rail line ever be abandoned and converted into a rails-to-trails corridor. A more in-depth study of specific park and recreation locations should be completed as part of an update to the Suamico Park and Outdoor Recreation Plan, as well as part of a comprehensive facilities plan.

In addition to its public park, recreation, and open space sites and facilities, the Village of Suamico is home to many local private, nonprofit, and volunteer organizations, sites, and facilities that provide outdoor recreation activities. Such organizations and sites include

the Golden Arrow Archery Club, the Nicolet Rifle Club, Wouters Front Tavern, Knight Riders Snowmobile Club, the Izaak Walton League, and Doctor Vickery Park.

In 2003, Suamico prepared a trail plan that identified possible trail locations, trail guidelines, and a summary of issues and action items. The plan generally establishes a recommended trail system throughout the Village consisting of off-road trails. In 2004, areas for trails were set aside in one subdivision and are envisioned within numerous other subdivisions currently under review.

To provide recreational services in an efficient and effective manner and to maintain eligibility for state and federal recreational grants, most communities identify planning principles and guidelines as an integral element of recreation and open space programs. That process is typically formalized in a park and open space plan. Suamico's park plan was last updated in 1997. To maintain eligibility for state and federal park, open space, and outdoor recreation grants, such plans must be updated and adopted by the community every five years. To adequately determine the park and recreation needs of the community and to meet such needs in as efficient and cost-effective manner as possible, such plans should also be updated whenever population or growth trends change. Such plans should be coordinated with the natural and cultural resource protection and preservation efforts of the community. It is recommended that the plan be updated every five years and the comprehensive plan revised accordingly.

It is recommended that the Village's trail plan be updated to include more specific recommendations on trail locations, connectivity, use, width, construction materials, ownership, and maintenance.

It is recommended that the Village participate in the Tree City USA program. This program is intended to help local communities preserve their more important woodlands and establish an urban forest. The Tree City USA designation is a voluntary program administered by the National Arbor Day Foundation and the USDA Forest Service. Currently, there are 2,700 tree cities across the country, with 139 in the State of Wisconsin. The following Brown County communities are also in the Tree City USA program: Village of Allouez, Village of Ashwaubenon, City of De Pere, Village of Denmark, City of Green Bay, Village of Hobart, Village of Howard, and Town of Lawrence. To receive the designation, a community must have a tree board, commission, or municipal department that has legal authority for the care of public trees and for developing and administering a community tree management program. The community must also have a tree ordinance, an annual budget for administering, managing, and implementing the community forestry program, and an Arbor Day observance and proclamation.

To capitalize upon the benefits provided by park, recreation, and open space sites, it is recommended that the Village continue its efforts to plan, acquire, develop, and maintain its park, recreation, and open space system. As residential neighborhoods continue to be developed within the Village, land for parks and open space sites should also continue to be set aside.

It is recommended that the Village maintain its close ties with and support of its many local private, nonprofit, and volunteer organizations. With such assistance, the Village

can accomplish more with its park and recreation system than it could otherwise. The Village should also continue and expand, where possible, its current practice of sharing facilities and joint planning with its school districts and neighboring communities for the same reasons.

Because of the importance of the Village's park system, the provision of adequate funding is vital. Therefore, establishment of a park impact fee to ensure an equitable system for the acquisition, development, maintenance, and replacement of its parks and outdoor recreation sites and facilities should be investigated.

Telecommunication

SBC/Ameritech provides landline phone service to all but the far western portion of the Village, while Northeast Communications Inc. provides similar service to the remainder of the Village. This includes Internet access by cable modem and DSL.

Current trends in the telecommunications industry point to a greater demand for high-speed Internet access and cellular communications in the future. In response, many local communities across the country, including some within Wisconsin, are considering a proactive approach to the provision of this service to ensure that this service is provided to its community in the quickest, most equitable, and most efficient manner possible. It is recommended that the Village consider a study of the provision of this service to ensure that it is meeting the Village's needs.

Before any cellular communications facilities are approved, the Village should ensure that all possible efforts are undertaken to collocate them and that adequate easements and other necessary rights-of-way are available. It is recommended that the Village ensure that adequate design standards for the associated infrastructure are followed. The Village should contact local cellular communication providers in order to address reception problems in the northwestern quarter of the Village.

It is otherwise anticipated that this service will continue to be provided by the private sector and will continue to meet the demands of the Village.

Power Generation

Electricity and natural gas are provided in the Village of Suamico by Wisconsin Public Service Corporation (WPS). WPS provides electricity and natural gas to all of Brown County, as well as to most of northeastern Wisconsin, including all or portions of 24 counties. WPS is in the process of converting its electric and gas meters to new automated meters, which will result in better accuracy, fewer estimated readings, and a quicker response to outages.

It is anticipated that this service will continue to be provided by the private sector and will continue to meet the demands of the Village.

Cemeteries

There are three cemeteries within the Village of Suamico.

While additional future demands for this service should continue to be addressed by the private sector, the Village should encourage such uses within its own community when properly designed and located.

Healthcare

The Village of Suamico primarily relies upon private healthcare providers located in the City of Green Bay and Village of Howard. Many services are also provided to the citizens of the Village, as well as the rest of Brown County, by the Brown County Health Department.

It is anticipated that these services will be adequate for the timeframe of this comprehensive plan.

While additional future demands for hospitals and medical clinics should continue to be addressed primarily by the private sector, the Village should encourage such uses within its own community when properly designed and located.

Elderly Care

Although one nursing home is located within the Village of Suamico, the Village primarily relies upon private elderly care providers located in the City of Green Bay. Many services are also provided to the citizens of the Village, as well as the rest of Brown County, by the Brown County Aging Resource Center. The American Red Cross Lakeland Chapter is considering expansion of its transportation program for the elderly to the Suamico area.

While additional future demands should continue to be addressed primarily by these agencies, some services may warrant provision by the Village. Most often considered in this regard is a senior center that would provide recreational, educational, and other similar opportunities to the Village's senior citizens. Senior centers are often located in conjunction with other compatible uses, such as a village hall, park site, and school, and often share space with other agencies for their services and programs, such as the local park department and the county health and human services department.

It is recommended that the Village study the feasibility of such a senior center. If feasible, the Village should also consider location of the senior center within one of the neighborhood centers proposed in Chapter 2 of this plan.

Childcare

Approximately five daycare centers are located within the Village of Suamico. Residents also rely upon private childcare/daycare providers located in neighboring communities, and there are a number of in-home licensed providers within the Village.

Additional future demands should continue to be addressed by the private sector, and the Village should encourage such uses within its own community when properly designed and located.

Emergency Services

Emergency services are vital to the welfare and safety of the community and are one of the few services a community provides that are equally important to both residents and businesses. The level of this service varies greatly from community to community based, in part, upon its size and population level. It is also common that the level of this service changes as the community grows.

Police service is provided to the Village of Suamico by the Brown County Sheriff's Department. The Sheriff's Department provides routine patrol service to the entire Village. This is the same service the Sheriff's Department provides to all municipalities within the County that do not have their own police department. The Village also has entered into an agreement through 2005 with the Sheriff's Department for additional police protection, including an additional full-time officer working a flexible schedule within the community (commonly referred to as the Village's Direct Enforcement Officer). The offices are located in Fire Station #1.

It is recommended that the Village of Suamico study this service to ensure that it continues to meet the needs of the Village. It is envisioned that at some point, as the Village continues to grow, additional protection and/or a higher level of service may be necessary.

The Suamico Volunteer Fire Department provides fire service to the Village. The department consists of about 40 people. It possesses two fire stations: one located in the central portion of the Village on Riverside Drive and one located in the southwestern portion of the Village at the intersection of Northwood Road and White Pine Road. The Suamico Volunteer Fire Department participates in mutual aid agreements with neighboring communities.

The level of fire service varies greatly from community to community. Further indications of this variability can be seen in the fire insurance ratings issued for local communities by the Insurance Services Office (ISO). Based upon its countrywide Public Protection Classification Program, Brown County communities range from a Class 2 for the City of Green Bay to a Class 9 for most rural towns.² The Village of Suamico's rating is 3. This classification system is used to help establish fire insurance premiums for residential and commercial properties.

Rescue service (ambulance and paramedic) is provided to the Village by contract with County Rescue Services.

It is recommended that the Village periodically study its police, fire, and rescue services to ensure that they continue to meet the needs of the community. This may eventually include the need for a joint fire/rescue station within the Village. It is also recommended that the Village continue its mutual aid agreements with its neighboring communities.

² This fire insurance rating classification system is based on a range from Class 1 (best) to Class 10 (worst) and is uniformly applied across the country based upon a number of factors, including the number of firefighters, the number of fire stations, and the distance from fire hydrants.

Libraries

The Village of Suamico relies upon the public Brown County Library system to meet its library needs. Of the nine libraries that make up the Brown County Library system, the closest is located within the Village of Howard. The Weyers-Hilliard Branch Library, located in the central portion of the Village of Howard, was completed and opened to the public in 2000. The Brown County Library system provides a local history and genealogy department, various adult programs, and numerous children's programs. All of these services are available to Village residents.

There may be a need within the timeframe of this comprehensive plan to develop a new branch of the Brown County Library in Suamico. As other new branch libraries have recently been funded, Suamico should consider working with Brown County, local business owners, and residents to fund library construction through donations. A new library in Suamico should be located in the village center area to further create a sense of identity for the Village and increase pedestrian and vehicular traffic in this area.

Schools

The majority of the Village of Suamico is located within the Howard-Suamico School District. A small portion in the northwest is located within the Pulaski School District.

The Howard-Suamico School District encompasses an area approximately 54 square miles in size and includes most of the Village, as well as all of the Village of Howard. In 2004, it consisted of seven schools (two within the Village of Suamico and two others immediately adjacent to the Village of Suamico), about 370 teachers, and an enrollment of about 4,800 students. The school district provides a comprehensive K-12 grade educational program with four elementary schools (K-4 schools), one intermediate school (5-6), one middle school (7-8), and one high school (9-12). Most students are bused to and from school. The school district consists of:

- ***Bay Port High School.*** This facility is located on Lineville Road in the southern portion of the Village. It encompasses about 102 acres and was constructed in 2000. It currently houses grades 9 through 12 and has an enrollment of about 1,490 students and about 100 teachers.
- ***Bay View Middle School.*** This facility is located on Cardinal Lane in the central portion of the Village of Howard. It encompasses about 43 acres, was constructed in 1963, and was most recently expanded in 1993. It currently houses grades 7 and 8 and has an enrollment of about 780 students and about 50 teachers.
- ***Lineville Intermediate School.*** This facility is located on Lineville Road in the far northern portion of the Village of Howard. It encompasses about 30 acres, was constructed in 1972, and was most recently expanded in 1993. It currently houses grades 5 and 6 and has an enrollment of about 740 students and about 50 teachers.
- ***Forest Glen Elementary School.*** This facility is located on Cardinal Lane in the far northern portion of the Village of Howard. It encompasses about 7 acres, was constructed in 1990, and was most recently expanded/upgraded in 1994. It currently

houses kindergarten through grade 4 and has an enrollment of about 620 students and about 50 teachers.

- ***Howard Elementary School.*** This facility is located on West Idlewild Court in the southwestern portion of the Village of Howard. It encompasses about 22 acres, was constructed in 1955, and was most recently expanded/upgraded in 1987. It currently houses kindergarten through grade 5 and has an enrollment of about 190 students and about 30 teachers.
- ***Meadowbrook Elementary School.*** This facility is located on Hillcrest Heights in the central portion of the Village of Howard. It encompasses about 10 acres, was constructed in 1972, and was most recently expanded/upgraded in 1998. It currently houses kindergarten through grade 4 and has an enrollment of about 420 students and about 40 teachers.
- ***Suamico Elementary School.*** This facility is located on School Lane in the central portion of the Village of Suamico. It encompasses about 26 acres and was constructed in 1954. It currently houses kindergarten through grade 4 and has an enrollment of about 500 students and about 40 teachers.

The Howard-Suamico School District is currently undergoing a study to determine how the school district can best provide for a student population that is rapidly increasing by 150-200 additional students per year. Although there are a number of options currently being discussed, many of the school buildings within the district are at or will reach capacity within the near future. Therefore, it is critically important for the Village of Suamico to proactively work with the school district and Village of Howard to cooperatively identify potential new school sites so that both communities can plan for the appropriate land uses, pedestrian and bicycle connections, and street network characteristics that will ensure future schools meet the vision set forth in the comprehensive plan.

The Howard-Suamico School District is in the process of purchasing an approximately 17-acre parcel for a new elementary school. The parcel is located between Idlewild Park and Birch Road fronting on Harbor Lights Road. This site is particularly well-suited to the development of a school with an adjacent park for shared usage between the Village and school district and higher density housing surrounding the school, which allows children to walk or bike to school if they choose. In order to better facilitate safe walking and biking to school, the Village and school district should cooperate in installing sidewalks along Harbor Lights and Birch Road as soon as possible.

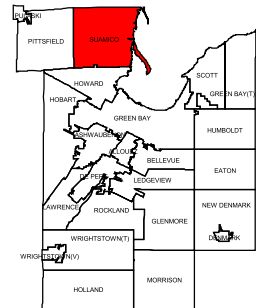
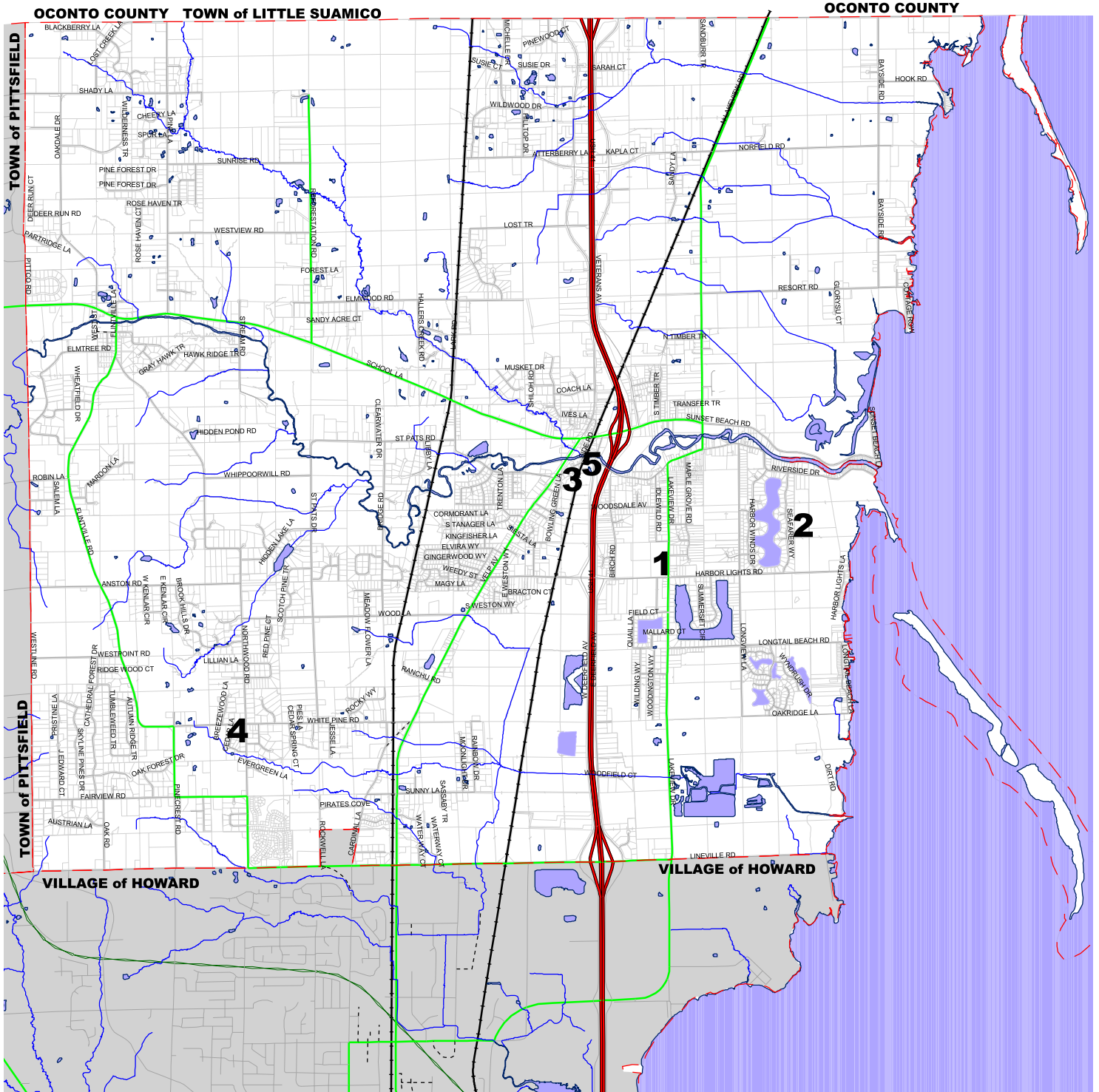
In addition to the Howard-Suamico School District, there are a few scattered parcels of land in the far western and northwestern part of the Village that are actually in the Pulaski School District. Students in this area attend schools located within the Village of Pulaski, and due to the scattered nature of the school district in this area, it is not likely that any new Pulaski schools will be built within the Village of Suamico.

The Village of Suamico should develop an annual or biannual meeting schedule with the Howard-Suamico School District and also stay in contact with the Pulaski School District to ensure future developments and future school building projects are coordinated in as cost-effective and cooperative means as possible.



Figure 6-6 Community Facilities

Village of Suamico, Brown County, WI



Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



- 1. - Village Hall / Police Station
- 2. - Wastewater Treatment Plant
- 3. - U.S. Post Office
- 4. - White Pine Fire Station
- 5. - Fire Station #1

This is a compilation of records and data located in various Brown County and City of Green Bay offices and is to be used for reference purposes only. The map is controlled by the field measurements between the corners of the Public Land Survey System and the parcels are mapped from available records which may not precisely fit field conditions. Brown County/ City of Green Bay are not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

Map prepared by Brown County Planning Department.
June 2004.

Post Office

A United States Postal Office building is located on Riverside Drive in the central portion of the Village. It is anticipated that this building will continue to meet the needs of the Village.

Government

The Suamico Village Hall is located on Lakeview Drive (CTH J) in the central portion of the Village adjacent to Idlewild Community Park. The structure was built in 2000. It contains the offices of the building inspectors, public works director, administrator, clerk, community enforcement officer, treasurer, Village Board meeting room, and municipal court. It is anticipated that this building will continue to meet the needs of the community for the foreseeable future.

The municipal court, established in 1996, consists of a municipal judge and a fulltime clerk of courts. The municipal court provides for local enforcement of Village laws and ordinances that would otherwise be handled by the County court system.

The Suamico WWTP is located on Riverside Drive in the eastern portion of the Village. After the Village begins sending its sewage to the Green Bay Metropolitan Sewerage District (GBMSD) in spring 2005, the Village's WWTP will be utilized for pretreatment and as a lift station for transfer of sewage to the GBMSD.

The Village of Suamico Public Works Department is located on Riverside Drive east of USH 41/141. The current site does not have adequate room for expansion as the Village continues to grow and the demand for services and facilities correspondingly increases. Suamico should investigate the options for eventually upgrading or replacing this facility. Due to the lack of space at the present site, a second facility or a complete relocation should be considered in the near future.

Policies and Programs

There are many approaches the Village of Suamico can take to achieve the utilities and community facilities goal and objectives listed in this plan's Issues and Opportunities chapter. They range from specific one-time actions to broad ongoing programs. A summary of those actions and programs as they pertain to the Utilities and Community Facilities chapter of this plan is provided in this section.

In addition, while not specifically addressed within this plan, it is generally understood that the Village should review its administrative practices to ensure their compatibility with the policies, programs, and actions set forth in this plan. Examples of this would include the employment of an adequate number of staff to carry out the programs recommended in this plan, the provision of continuing professional and technical education to Village staff, and the division of department and individual staff duties to ensure an efficient operation.

Important and commonly raised issues during the visioning session pertaining to this chapter include:

- Identify methods of reducing taxes.
- Ensure that the property tax ceiling is no higher than what it is today.
- Ensure that sewer and water service is not placed into areas where it is not needed or wanted.
- Ensure that developers pay for sewer and water services to their developments.

It is particularly important, therefore, that Village infrastructure and development policies address the impacts of premature extension of infrastructure and inefficient development patterns. When any service or infrastructure involving physical components is extended or expanded (most commonly considered in these situations are sewer, water, and stormwater systems but can also include streets, lights, electricity, or gas), it is typically sized and located in such a manner as to take full advantage of the ultimate area it is to serve and the lifespan of its components. It is incrementally installed to keep pace with the demands placed upon it, and development is only approved when it can be economically and efficiently served by such infrastructure. When done correctly, this means that the incremental components of the infrastructure are added only when they are needed. Also, at about the same time as the major components are fully utilized and need to be replaced or expanded, the infrastructure has also reached the end of its useful life and needs to be replaced or expanded, and development that is not in conformance with these guidelines is not approved. When this situation occurs, cost-effectiveness and efficiency will be maximized; component parts will be added only when needed; full use of the infrastructure will be obtained; and repair and replacement of the components will be kept to a minimum.

However, if infrastructure is extended or expanded in a manner that does not support these guidelines or development is approved that interferes with achieving these guidelines, the expansion of infrastructure has not been nearly as cost-effective or efficient as it could have been. Such inefficiencies commonly occur when infrastructure is extended to or expanded for premature development or inefficient development patterns or development not utilizing this infrastructure has been approved in areas for which the infrastructure was planned. This typically results in infrastructure that is extended long distances with no users, is extended long distances with an inadequate number of users, is extended to areas to which it is not desired, is sized or located so that more component parts eventually need to be constructed than otherwise would have been necessary, or the component parts eventually do not achieve full utilization.

When such situations occur, the extra costs associated with these inefficient actions are borne by the community rather than the premature or inefficient development. In addition, the community also typically has to pay for the extra capacity or extra components built into the infrastructure that are eventually needed for the development of the larger ultimate area. Therefore, it is recommended that the Village improve and expand upon its capital improvements programming and other long-range planning efforts to eliminate and minimize these inefficiencies.

It is recommended that, at a minimum, the Village enforce the recommendation from its previous comprehensive plan that all future development within the Village be approved so that 75 percent of the new lots can be provided public sanitary sewer and water service. It is also recommended that the Village undertake a study to determine the feasibility of increasing the percentage of future development to be provided public sewer and water. This study should consider the possibility of extending public sewer and water service to existing development whenever feasible. This would likely occur when a majority of private onsite systems and/or private wells within an area have reached the end of their useful life or when requested by the subject area.

It is further recommended that the Village implement a Capital Improvements Program so that the timing, construction, and funding of the Village's capital improvements, such as roads, sanitary sewers, water mains, and storm sewers, can be projected, prioritized and implemented as efficiently as possible.

A summary of this chapter's policies and programs is provided.

Sanitary Sewer Service

- Expand the Village's long-range planning, maintenance, and funding efforts to ensure that its collection system remains adequately sized for anticipated growth and development.
- Expand the Village's collection and treatment systems in conformance with the 5-year service increments identified within this plan and promote infill development and efficient and cost-effective growth patterns.
- Work with the DNR, GBMSD, and BCPC to ensure that this plan's anticipated growth can be accommodated by the agencies' sewerage system components and is in conformance with their sewer service area and facility planning efforts.

Onsite Sewage Disposal

- Prohibit unsewered development within the 0- to 5-year service increments identified in this plan.
- Discourage unsewered development within the 5- to 10-year service increments identified within this plan to the greatest extent practical. If development is approved within an area that could receive public sewer and/or water service in the future, such development should be designed and located so that it can eventually be connected to the public sewer and/or water systems as efficiently as possible.
- Undertake a study of the feasibility of connecting existing unsewered development to the public sewer and water systems.
- Support Brown County's private sewage disposal system ordinance that requires inspections of all existing onsite sanitary systems at the time of sale of the associated property and the ordinance's mandatory 3-year maintenance program.

Water Supply

- Expand its long-range planning, maintenance, and funding efforts to ensure that its water supply and transmission system remain adequately sized for anticipated growth and development and is expanded as efficiently as possible.
- Expand its water system in conformance with the 5-year service increments identified within this plan, promoting infill development and efficient and cost-effective growth patterns.
- Update its Vulnerability Assessment and Wellhead Protection Plan when appropriate.
- Periodically review the feasibility of joining the CBCWA.

Solid Waste Disposal

- Study the feasibility of a joint solid waste and/or recycling collection program with adjacent communities.
- Periodically study this service to ensure that it continues to meet the Village's needs.

Stormwater Management

- Implement the recommendations of the Comprehensive Storm Water Plan Needs Assessment, including the preparation of a stormwater management plan for the Village.

Parks and Recreation

- Consider the development of an active community park with baseball fields, soccer fields, and playground equipment in the south-central portion of the Village.
- Participate in the Tree City USA program.
- Continue support of the local nonprofit and volunteer groups.
- Continue and expand upon efforts to establish joint park/school sites, facilities, and programs.
- Study the feasibility of a park impact fee.
- Continue to implement the recommendations of the Village's park plan and update the plan when necessary.
- Update and implement the Village's trail plan.

Telecommunications

- Consider undertaking a study to determine the most equitable and cost-effective provision of telecommunications within the Village.
- Ensure that telecommunication facilities are collocated to the greatest extent possible.

- Work with existing cellular telecommunication companies to provide adequate reception for the northwestern quarter of the Village.
- Ensure that adequate easements and design standards for telecommunication facilities are utilized.

Elderly Care

- Study the feasibility of a senior center.

Emergency Services

- Periodically review police, fire, and rescue services to ensure that they continue to meet the needs of the Village.
- Continue mutual aid agreements with neighboring communities.

Library

- Suamico should consider coordinating with the Brown County Library System to develop a new branch library in the village center area through donations.

Schools

- Work with the Howard-Suamico School District to place sidewalks along Harbor Lights Road and Birch Road to create a safe walking and biking route to the new proposed elementary school.
- The Village should work closely with its school districts and its neighboring communities to address the future needs of the school districts in the most cost-effective and timely manner as possible.

Government

- Investigate the development of a new or relocated public works building to allow for future growth and services.

CHAPTER 7

Natural, Cultural, and Agricultural Resources

The natural features in Suamico, such as the bayshore, Suamico River, large stands of woodlands, varied terrain, and the estuaries of the West Shore wetlands, all combine to help create the rural character that the Village's residents wish to maintain. These natural features also continue to attract increasing numbers of new residents and, therefore, new development. In order for the Village to maintain these features that make Suamico desirable to both new and existing residents alike, it must strike a balance between development and the natural environment. This chapter will examine ways to build upon these resources to establish and promote a community identity, while at the same time preserving the land and the rural character that the residents enjoy.

Inventory and Analysis

Soils

Soil is one of the major building blocks of the environment. It is the interface between what lies above the ground and what lies underneath. The relationships between soil and agriculture are obvious. However, the relationships between soil and other land uses, while almost as important, are often less apparent. In Brown County, as elsewhere in North America, little attention is given to soils in regard to the location and type of future development. Among the reasons for this is the complacency by many that modern engineering technology can overcome any problems associated with soils. While this is true, the financial and environmental costs associated with overcoming soil limitations can often be prohibitive.

Glaciation is responsible for the general soil conditions found in the area. Unlike areas unaffected by glaciations where soils are formed by the weathering of local bedrock, Suamico's soils are composed of glacially eroded rock material that was carried by ice sheets or from surface material that was pushed by the advance of the glacier. When the glacial advance stopped, the ice sheets melted and deposited the materials it had carried over the area. These deposited materials are called glacial till or outwash and, together with other soil forming factors, including vegetation, have formed the soil that covers the Village today. According to the Soil Survey of Brown County, Wisconsin, there are three major soil associations present in the Village of Suamico. A soil association is "a landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils, at least one minor soil, and is named for the major soils." The major soil associations found in Suamico are Tedrow-Roscommon, Shawano-Tedrow-Roscommon, and Shawano-Boyer-Sisson.

Tedrow-Roscommon

The Tedrow-Roscommon association consists of deep, somewhat poorly drained and poorly drained nearly level soils that have sandy subsoil and are located on glacial lake and outwash plains. These soils typically have a very high water table during wet

periods, are poorly suited for crops, and generally have severe limitations for home sites due to the high water table. This soil series is primarily located in the eastern one-third of the Village adjacent to the bay of Green Bay.

Shawano-Tedrow-Roscommon

The Shawano-Tedrow-Roscommon soil association covers the north-central part of the Village. This association consists of deep, excessively drained to poorly drained, nearly level to steep soils that have a sandy subsoil and are located on glacial lake and outwash plains and ridges. Due to the soils' sandy nature, they are susceptible to wind erosion and are generally not very conducive to crops. However, they are among the best in the county for development purposes.

Shawano-Boyer-Sisson

The Shawano-Boyer-Sisson series are deep, excessively drained and well drained soils, are nearly level to steep soils that have a sandy and loamy subsoil and are located on glacial outwash plains and ridges and glacial lake plains. Use of these soils varies greatly in the County, ranging from cropland and woodland to residential and industrial development. The Shawano-Boyer-Sisson soil association is generally located in the southwestern one-third of the Village.

Productive Agricultural Lands

The Brown County Farmland Preservation Plan identifies Brown County's farmlands as irreplaceable resources that are necessary to the continued well-being of the County's economy. The plan further states that the protection of these farmlands and orderly rural and urban growth are deemed to be in the broad public interest.

Although agricultural uses still account for over 4,800 acres of land in Suamico, this acreage has continued to decrease. Between 1980 and 2004, agricultural land decreased by 60 percent in the Village of Suamico, resulting in a loss of 7,153 acres. Much of the land taken out of production has been converted to residential development or is no longer being actively farmed and is lying fallow.

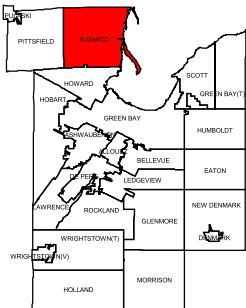
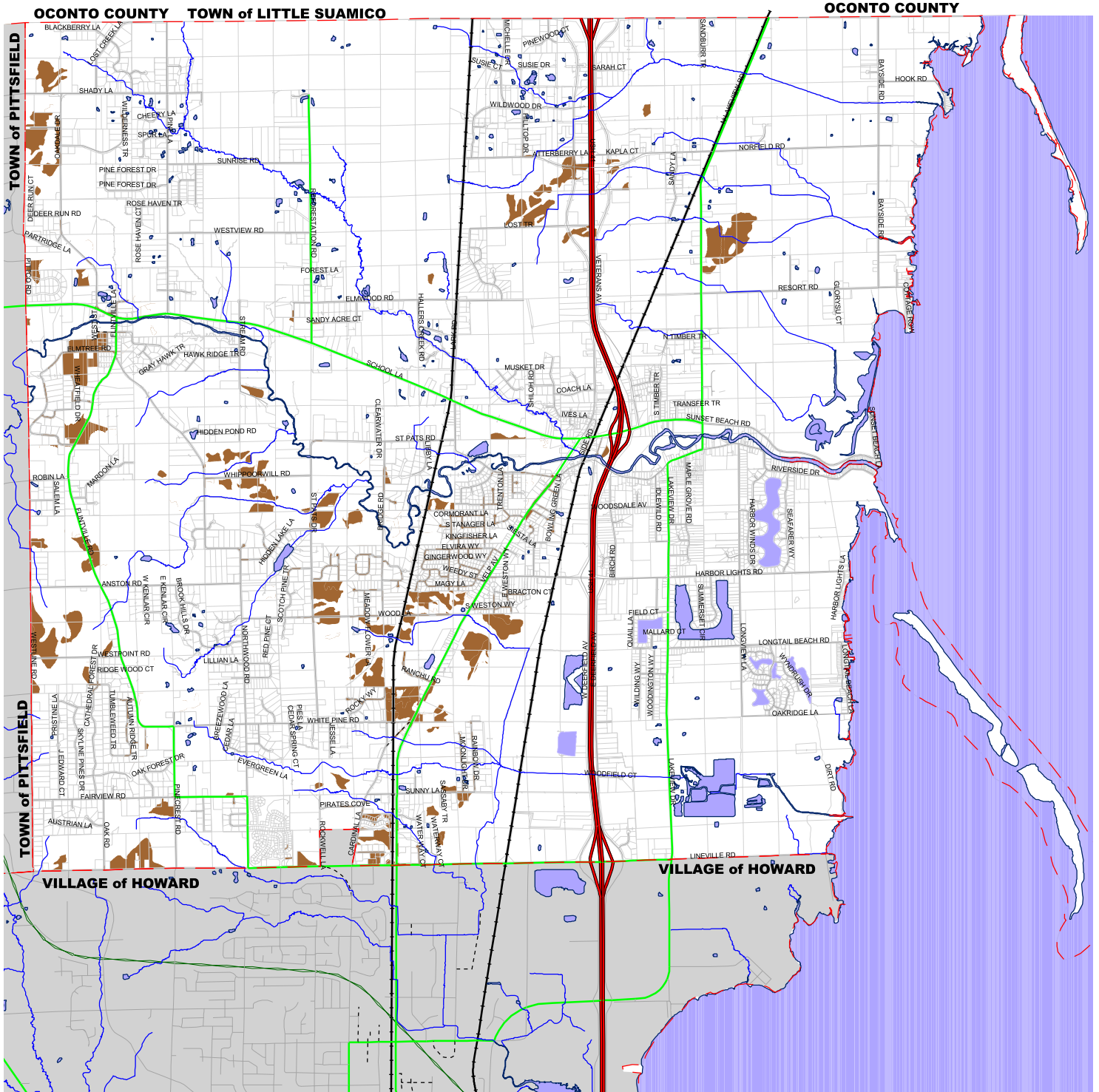
The Soil Survey of Brown County, Wisconsin, defines prime farmland as soils with capability classes of I and II. Class I soils have few limitations that restrict their use, while Class II soils have moderate limitations that reduce the choice of crops or that require moderate conservation practices. Based on the inventory of the soil survey, very little of Suamico is considered prime farmland. The few areas that are considered prime farmland, primarily southwest of the CTH B/USH 41/141 interchange, are already developed.

There are multiple factors that define productive agricultural lands. Soils are included if they are defined as being prime farmland without any limitations in the Soil Survey of Brown County, Wisconsin. If a soil is prime farmland but currently in a developed state, it is not included. Also included are those soils that are currently in a productive state, regardless of prime farmland classification. Suamico's remaining productive agricultural lands are mapped in Figure 7-1.



Figure 7-1 Productive Agricultural Lands

Village of Suamico, Brown County, WI



Productive Agricultural Lands

Source: United States Department of Agriculture
National Resources Conservation Service
National Soil Survey Center

Soil Survey Geographic (SSURGO) Database

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
March 2004.

Surface Water

Surface water is one of the most important natural resources available in a community. Surface waters provide recreational opportunities, as well as peace and solitude to anglers, boaters, hunters, water skiers, swimmers, and casual observers alike. Some surface waters provide an end source for drainage after heavy rains, provide habitat for countless plants, fish, and animals, and can be a source of drinking water for communities and a source of process water for industry and agriculture. Lands immediately adjacent to such waters have an abundance of cultural and archeological significance because they were often the location of Native American and early European settlements.

There are many miles of perennial streams in the Village of Suamico. These streams have many scenic and recreational values. Many of the Villages' ephemeral streams and wetlands, which are some of our most important surface water resources, do not show up on maps and are poorly protected by state and federal statutes. Yet, these ephemeral (intermittent) waterways provide sites for infiltration of surface water into groundwater reservoirs and provide habitat for many plants and animals. Small intermittent waterways and wetlands are where most nutrients and many contaminants enter the waters that are used for drinking and recreation.

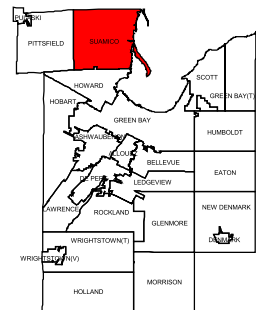
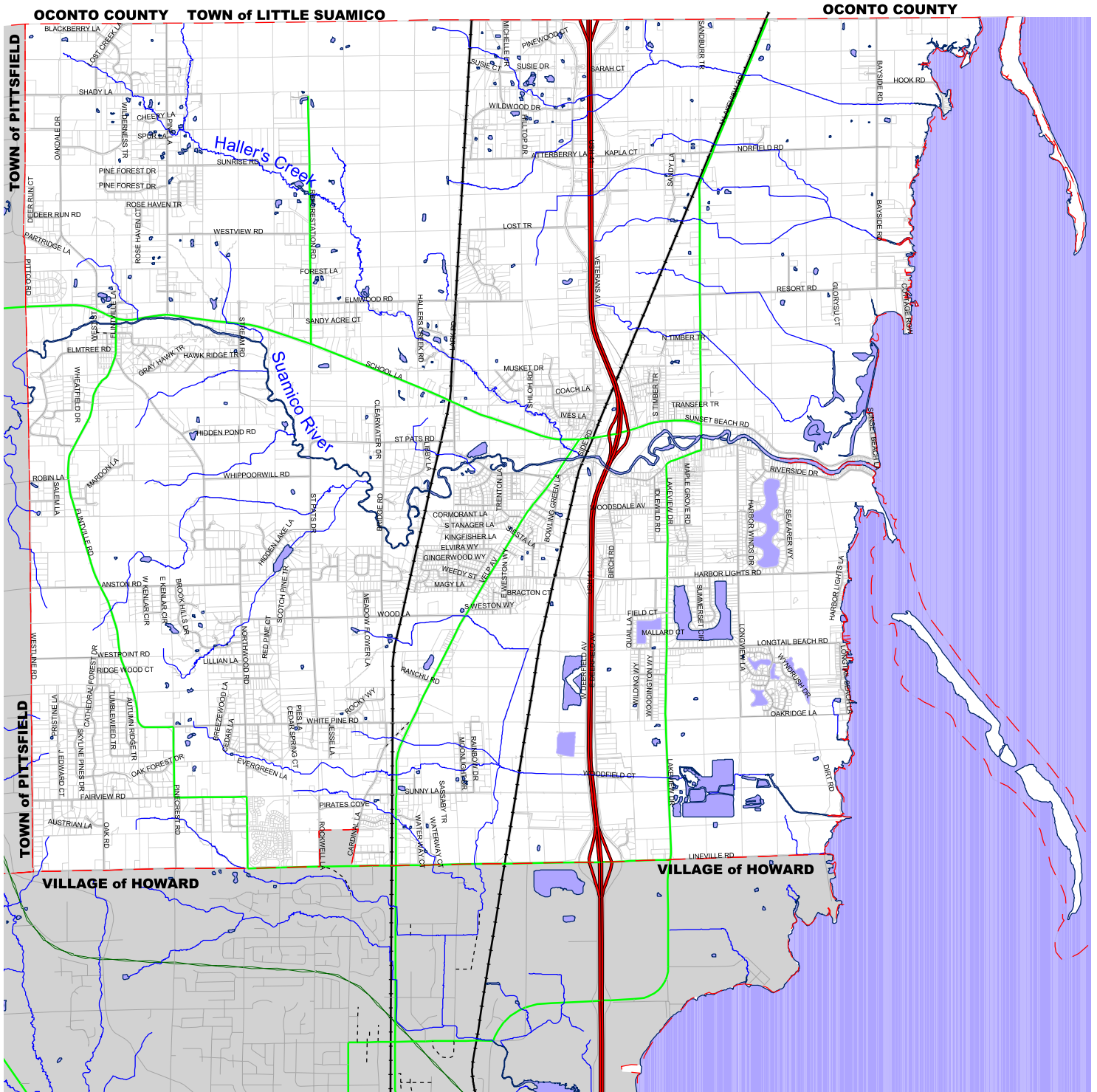
Sheetflow, which is simply water that flows across the land surface after a rainfall, can also be considered a surface water resource, and how it is managed is very important. As water flows across the surface of the land, it picks up nutrients and contaminants, and these dissolved substances are then carried into larger surface water bodies and into our groundwater. In many places in the Village of Suamico, groundwater is only a few feet below the surface of the land, and the soil (often Tedrow-Roscommon) is very sandy. As a result, anything applied to the land's surface almost immediately enters our groundwater.

Because of the importance of surface waters, numerous federal, state, and local laws and regulations have been created to protect them. They range from the commerce clause of the United States Constitution to county floodland zoning regulations. The most heavily regulated waters are those that are determined to be natural and "navigable." On the other hand, ephemeral waterways not considered navigable and ephemeral wetlands are poorly protected by state and federal statutes and need protection at a more local level.

As shown in Figure 7-2, the primary surface water features in the Village of Suamico are the bay of Green Bay, Suamico River, and Haller Creek. In addition to these three resources, the Village also has a number of small unnamed streams, ditches, and man-made lakes that are also considered surface water resources. The protection and preservation of the Village's surface waters should be one of its highest natural resources priorities. While this action is important for all of the Village's surface waters, particular focus should be provided to the Suamico River, Haller Creek, and bayshore areas in order to re-establish these waters as a primary benefit and attraction of the community.



Figure 7-2
Surface Water
 Village of Suamico, Brown County, WI



Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



— Surface Water

Source: Brown County Land Conservation Department

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Map prepared by Brown County Planning Department.
 January 2004.

Bay of Green Bay

Beyond serving as the starting point for early settlement and transportation to the interior of Wisconsin and thus being rich in historical and archeological significance, the bay of Green Bay provides the largest potential for water-based recreational activities within Suamico with about 6 miles of shoreline plus the shorelines of Long and Little Tail Points. The bay is a hard water alkaline basin, and its bottom materials consist of very loose flocculent sediment. Its depth is an average of about 26 feet outside the shipping channel. Much of the western shore of the bay, including the Suamico bayshore, is relatively undeveloped due to large wetland complexes and publicly-owned parcels that cover much of the shoreline.

The water quality and fishery of the bay of Green Bay are heavily influenced by what occurs inland in connected streams and wetlands. This is true even though many of these connections occur only once a year. Each spring, due to spring precipitation and snow-melt, almost all streams and wetlands within the Village are directly connected to the bay of Green Bay proper. This temporary hydrologic connection provides an opportunity for fish to migrate upstream to spawn, and this annual flooding benefits reproduction of other aquatic life forms. Each spring, there is a huge pulse of biotic activity as fish spawn and amphibians and invertebrates hatch and then slowly drift downstream to the bay of Green Bay proper.

Water quality and even the water temperature of the bay of Green Bay are heavily influenced by input from connected wetlands and waterways. Input into streams that discharge into the bay have an almost immediate effect on the bay of Green Bay proper. The impact upon the Village of Suamico's portion of the southern bay of Green Bay is magnified because bay water circulation is in a counter-clockwise direction to the south of Points Sable and Long Tail. As a result, what enters the south end of the bay has a tendency to re-circulate south of Points Sable and Long Tail.

Commercial fishing (primarily for perch, whitefish, and lake trout) had long been a popular activity within the bay until high pollutant loadings to the Fox River and the southern portion of the bay became a significant and widespread problem by the late 1940s and early 1950s. However, recent studies have indicated that improvements in water quality have occurred and are most likely due to reduced point source pollution loading.

Water quality impairments to the lower bay of Green Bay include PCB fish consumption advisories, excessive levels of bacteria, and low levels of dissolved oxygen. Factors causing this impairment are varied and complex and are discussed in detail in the Lower Green Bay Remedial Action Plan but are generally attributable to nonpoint sources of pollution and leftover industrial sources of pollution. For these reasons, the lower bay of Green Bay has been identified by the Wisconsin Department of Natural Resources as Impaired Water, which means that it does not meet federal and state water quality standards. As the most damaging new pollutant load to the bay of Green Bay is from nonpoint sources, the Village should complete development of its stormwater management plan and, based on the plan, develop a stormwater ordinance to ensure that stormwater runoff meets WDNR and EPA requirements. The Village may also wish to

consider the creation of a stormwater utility district in order to finance the necessary stormwater management facilities.

Suamico River

The Suamico River is a tributary to the bay. It is a navigable river that flows westward 16 miles from its headwaters in Shawano and Outagamie Counties and through the middle of the Village to the bay. The river transitions from a clear, bubbling stream in the western portion of the Village to a relatively sluggish, wide, and muddy stream near its mouth. The upper two-thirds has a rubble and gravel bottom containing many invertebrates and an abundance of crayfish. The easternmost portion of the river is classified as a Warm Water Sport Fishery with bottom materials comprised of sand and silt. The remainder is classified as a Full Fish and Other Aquatic Life water with bottom materials comprised of rubble and gravel. Agricultural and rural residential land uses are adjacent to the majority of the stream and continue to expose the river to nonpoint source pollution associated with agricultural, development, and impervious surface runoff.

Where possible, the Village should consider the establishment of buffers and the planting of native grasses and shrubs along the river to improve its wildlife habitat and stormwater management capabilities. Additionally, the Village should consider working with local conservation or school groups to restabilize the shoreline along the Suamico River by planting native grasses and plants in order to further reduce shoreline erosion.

Haller Creek

Haller Creek is a tributary to the Suamico River flowing in a southeasterly direction from the northwestern corner of the Village until its confluence with the Suamico River near Velp Avenue. Haller Creek is Suamico's only trout stream and, therefore, has important wildlife value warranting protection by the Village. The Village should consider identifying those areas of the creek that may be experiencing erosion or other habitat degradation and should consider working with local conservation or service groups to enhance the river's trout habitat.

Other small streams

There are many small intermittent and perennial streams within the Village. These streams provide seasonal spawning habitat for bay of Green Bay fish and provide important habitat for many other plants and animals. Many fish that reside in the bay of Green Bay as adults migrate upstream to spawn, and the young then drift slowly back to the bay. It's to their advantage to remain in these small waterways for as long as they can. These small streams provide excellent nursery habitat that allows the young fish to grow to a competitive size before they reach the bay of Green Bay proper. The importance of small streams is only now beginning to be understood by many, but longtime residents of the area realize that small streams and wetlands within the Village actually define the character of the Village of Suamico, as evidenced by the cattails on the Village's water tower.

The Village may wish to enact an open waterway ordinance to protect fish and wildlife habitat located in roadside ditches (such as the unique walleye and northern pike spawning habitat along Lineville Road) and in other streams and wetlands not currently protected by state or federal statutes.

Artificial Lakes

A number of artificial lakes have been created in the southeastern part of the Village, including Harbor Lights Lake, Lake Leone, Jessie Lake, and the Barkhausen Waterfowl Refuge ponds. Except for the Barkhausen ponds, the lakes have been created as a way to enhance residential development; although, they do provide limited fish and waterfowl habitat, as well. Because the lakes provide a conduit for contaminants to reach the Suamico's groundwater, the Village should monitor the lakes' quality to ensure pollutants are not entering the lakes or groundwater.

Watersheds

A watershed is an area of land where all the water on it and under it drains to the same place. Within this area of land, all living things are linked by the common waterway. The Suamico-Little Suamico Watershed drains the entire Village to the bay, except for a small portion of the southwestern part of the Village, which drains into Duck Creek. A few areas of the Village are also drained directly to the bay by small, unnamed streams and ditches.

Field observations by County staff and others over recent years indicate that many of the smaller streams within the Village have been significantly disturbed by past and current agricultural activities. Such disturbances include dredging, ditching, and realignment. All of these activities degrade or entirely remove the natural bed and bank of the stream, thus increasing erosion, removing vegetation and wildlife habitat, and damaging downstream water quality.

Floodplains

Floodplains are natural extensions of waterways. All surface waters possess them, but the size of the floodplain can vary greatly. They store floodwaters, reduce flood peaks and velocities, and reduce sedimentation. They also provide habitat and serve as filters for pollution.

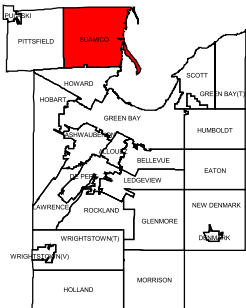
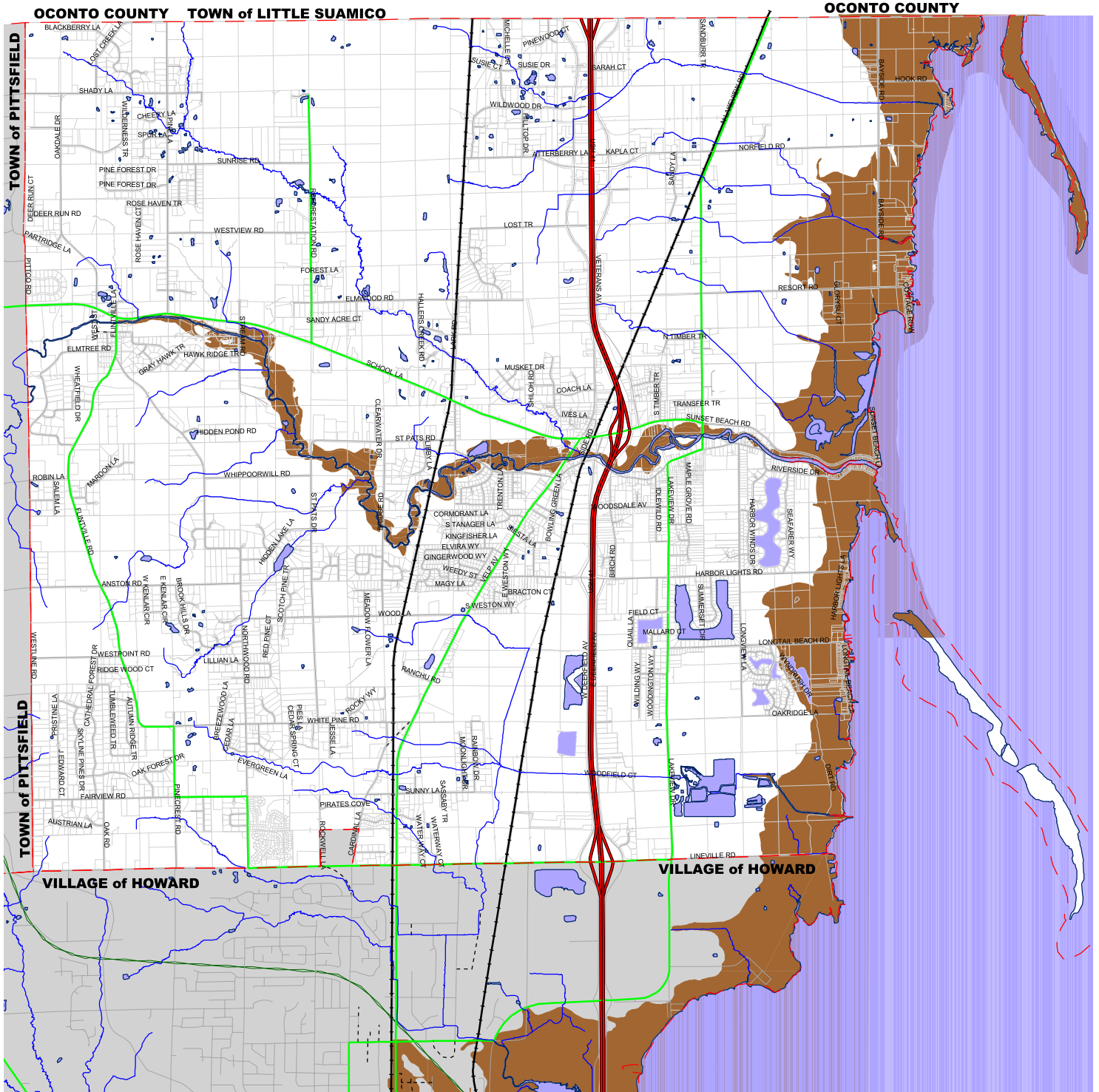
Like surface waters, the importance of floodplains is also recognized and is regulated by federal, state, county, and local governments. The State of Wisconsin mandates floodplain zoning for all communities under Wisconsin Administrative Code NR 117. These minimum standards must be implemented in order to meet eligibility requirements for federal flood insurance.

For regulatory, insurance, and planning purposes, the 100-year recurrence interval flood hazard area (also referred to as the regional flood) is most often used. This is the land that has a 1 percent chance of being flooded in any given year. Mapped floodplains within Suamico include the bayshore, Suamico River, Haller Creek, and an unnamed stream/wetland complex located just north of the Village's border with Howard. The Village's 100-year floodplains that have been mapped are shown in Figure 7-3.



Figure 7-3 Floodplains

Village of Suamico, Brown County, WI



 FEMA Floodplain

Area Inundated by 1% Annual Chance Flooding BFEs Determined

Source: U.S. Department of Homeland Security
Federal Emergency Management Agency
Digital Q3 Flood Data Flood Insurance Rate Map (FIRM)

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
January 2004.

Figure 7-4 presents a diagram of a floodplain and identifies its constituent parts, including both the floodway and flood fringe.

There are several threats to floodplains and the resource values that they represent:

- **Filling**, which might diminish the flood storage capacity of the floodplain. This could have the effect of raising the flood elevation or increasing flow velocities to the detriment of upstream or downstream properties.
- **Grading**, which can degrade the resource functions of floodplains, such as filtering pollutants or providing habitat.
- **Impediments**, which include encroachment of buildings or undersized culverts and bridge openings. These manmade and natural impediments affect the size and proper functioning of floodplains and pose potential hazards to adjacent residents and passersby.
- **Impervious surfaces**, which can increase the velocity of the flood flows, increase the number of pollutants, reduce the amount of natural wildlife habitat, and limit the amount of infiltration of stormwater into the ground.

Due to the importance of floodplains for environmental, regulatory, and insurance purposes, it is recommended that flood studies be undertaken for all rivers and streams where development is proposed. Such flood studies should map both the floodway and the flood fringe portions of the 100-year recurrence interval flood hazard area, should be based upon full development of the drainage basin, and should be reviewed and approved by both the Wisconsin Department of Natural Resources and the Federal Emergency Management Agency (FEMA). If detailed flood studies are not undertaken and/or do not take into consideration the effects of future development of the watershed, future flooding events may be more extensive and cause greater property damage.

Under current regulatory requirements, the floodways would be off limits to development. However, development could occur within the flood fringe areas with the receipt of appropriate permits and approvals, and agricultural activities could continue within the floodplain.

Shorelands and Stream Corridors

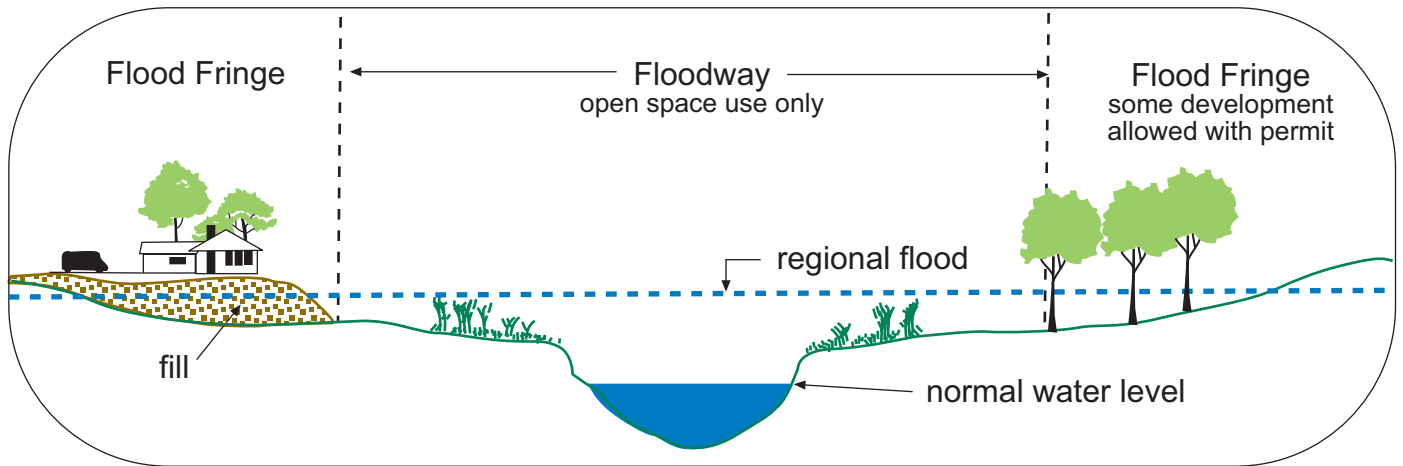
Shorelands are the interface between land and water. In its natural condition, shorelands are comprised of thick and diverse vegetation that protect lakes, rivers, and streams. If these areas are developed, this vegetation is lost, and fish, wildlife, and water quality are damaged.

There are a number of well-defined drainage courses with associated ravines in the western portion of the Village. Most of the streams in the eastern portion of the Village are less defined and do not have the differing topography as do the streams in the western portion of the Village.

Like floodlands, the importance of shorelands is recognized and is regulated by state and local governments. Shoreland zoning is primarily intended to control the intensity of

Figure 7-4

Floodlands and Floodplain Zoning



Definitions

Floodplain - That land which has been or may be covered by floodwater during the regional flood. The floodplain includes the floodway and flood fringe areas.

Floodway - The channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional flood discharge. The floodway is the most dangerous of the floodplain. It is associated with moving water.

Flood Fringe - The portion of the floodplain outside of the floodway, which is covered by floodwater during the regional flood. It is associated with standing water rather than flowing water.

Regional Flood - That area where large floods are known to have occurred in Wisconsin, or which may be expected to occur, at a frequency of one percent during any given year. Also referred to as the 100-year floodplain or 100-year recurrence interval flood hazard area.

Source: Wisconsin Department of Natural Resources

development near and to create a buffer around lakes, rivers, and streams. The buffer is intended to remain an undeveloped strip of land that protects the water from the physical, chemical, hydrological, and visual impacts of nearby development. Wisconsin mandates shoreland zoning for all unincorporated communities and those parts of incorporated cities and villages that were annexed after May 7, 1982. Since Suamico incorporated after April 30, 1994, it also must follow the state mandated minimums listed under Wisconsin Administrative Code NR 115. Figure 7-5 presents a diagram of the state mandated minimum shoreland zoning requirements.

The shoreland restrictions do not apply to those waters that are determined to be non-navigable waters. However, all lakes, rivers, and streams, no matter how small, should be assumed to be navigable until determined otherwise by the DNR.

As shorelands are closely related to floodplains, so are the threats to the resource values shorelands represent. In addition, research being conducted by the DNR and others indicates that current state-mandated shoreland zoning standards might not be adequate to properly protect water quality and shoreland ecosystems.

Under current regulatory requirements, the 75 feet closest to navigable waters are off limits to development, but development could occur within the remainder of the shoreland area with receipt of appropriate permits and approvals, and agricultural activities could continue within the shoreland area.

Based upon the importance of the Village's shorelands and their relationship to surface water and the Village's rural character, Suamico should encourage greater protection of the shoreland area. In this regard, the Village should take full advantage of federal, state, and county funding and other assistance in the establishment of vegetative stream buffers to further filter out sediments and other associated pollutants. Suamico is currently in the process of developing a shoreland-wetland ordinance that meets the requirements of NR 115.

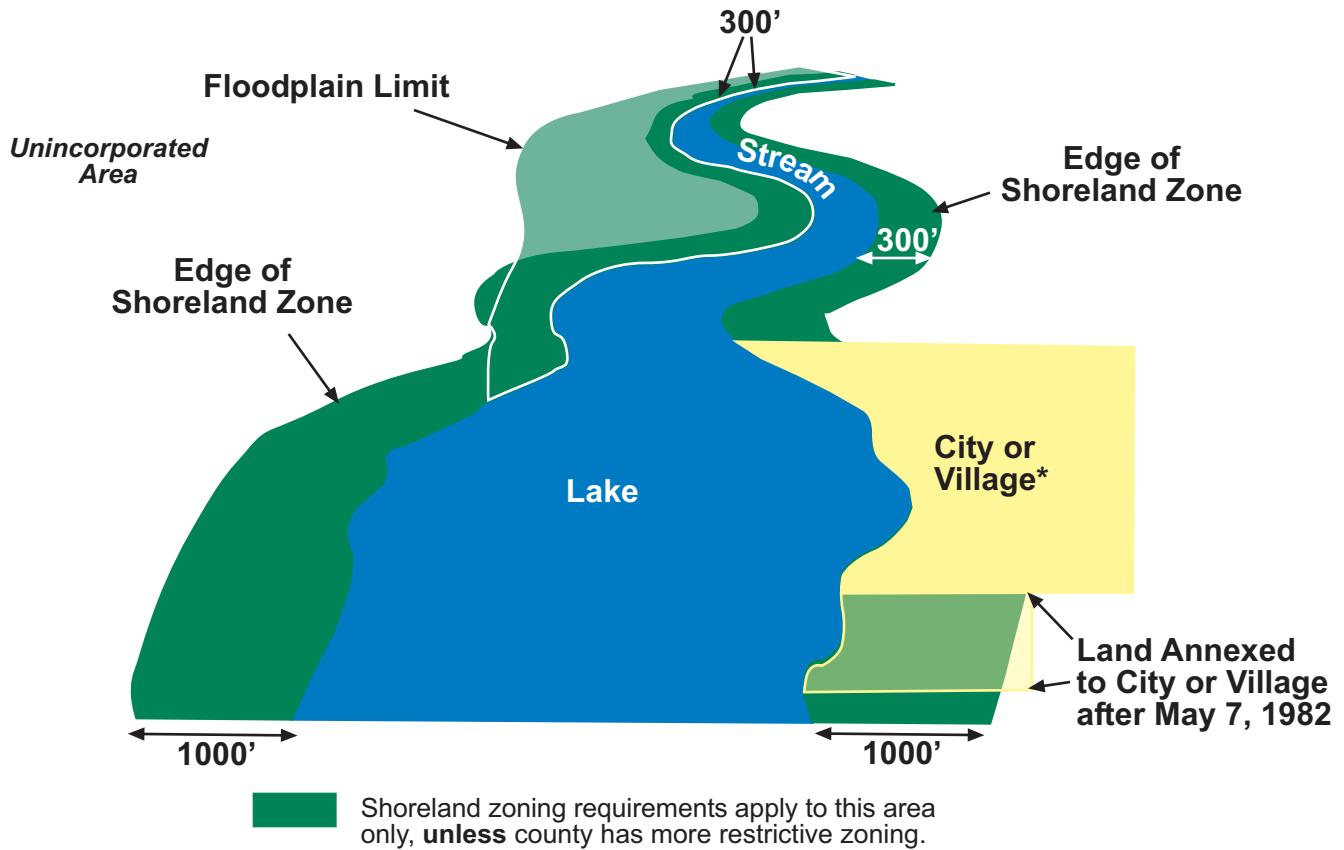
Wetlands

Wetlands are characterized by water at or near the ground level, by soils exhibiting physical or chemical characteristics of waterlogging, or by the presence of wetland-adapted vegetation. Wetlands are significant natural resources that have several important functions. They enhance water quality by absorbing excess nutrients within the roots, stems, and leaves of plants and by slowing the flow of water to let suspended pollutants settle out. Wetlands help regulate storm runoff, which minimizes floods and periods of low flow. They also provide essential habitat for many types of wildlife and offer recreational, educational, and aesthetic opportunities to the community.

There are two broad classifications of wetlands: perennial wetlands and ephemeral (intermittent) wetlands. Perennial wetlands are inundated with water for much of the year and develop classic wetland characteristics, such as soil mottling. Perennial wetlands usually support populations of water loving plants. Ephemeral wetlands, which are sometimes called intermittent wetlands due to soil type and topography, often do not develop classic wetland characteristics since they are flooded only part of the year. Both types of wetlands are equally important.

Figure 7-5

Shorelands and Shoreland Zoning



*Cities and villages are required to zone wetlands within the shoreland.

Definitions

Shoreland Zone - The shoreland zone is located within 1,000 feet of the ordinary high water mark (OHWM) of a "navigable" lake, pond, or flowage or within 300 feet of the OHWM of a "navigable" stream or river or to the landward side of the floodplain, whichever distance is greater.

Ordinary High Water Mark - The ordinary high water mark is the boundary between upland and lake or riverbed. It is the point on the bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation, or other easily recognized characteristics.

Navigable - Generally, a waterway is navigable if it has a bed and banks and can float a canoe at some time each year - even if only during spring floods. Even small intermittent streams that are seasonally dry may meet the test of navigability. Navigable lakes and streams are public waterways protected by law for all citizens.

Unincorporated Areas - Lands lying outside of incorporated cities or villages.

Source: Wisconsin Department of Natural Resources

The Village of Suamico contains a significant area of wetlands along the bay of Green Bay. These wetlands are recognized as being of national importance. They are part of a larger complex of wetlands located along the entire length of the western shore of the bay of Green Bay terminating near the City of Marinette. The “west shore wetlands,” as they are known, provide critical waterfowl and wildlife habitat, as well as fish spawning habitat for many game fish in the bay of Green Bay, including perch and northern pike. In order to preserve some of these vital spawning areas, the WDNR has purchased and maintains ownership over the Sensiba Wildlife Area (which includes Long Tail Point) and the Little Tail Management Unit in the far northeastern part of the Village.

The Wisconsin Wetlands Inventory map identifies wetlands scattered throughout the Village. As shown on Figure 7-6, the WDNR digital wetlands inventory identified approximately 5,190 acres of wetlands within the Village. In addition to the west shore wetlands, there is a large wetland complex located south of Harbor Lights Road between USH 41/141 and Velp Avenue. This complex is part of the Suamico Lacustrine Flats, which is also a critical northern pike spawning area. Due to the value of the wetlands for northern pike spawning in this area, they should be strongly considered for purchase by the WDNR, Village of Suamico, Brown County, or a combination of the agencies. Because of the inaccuracies inherent in the Wisconsin Wetlands Inventory, the Village may wish to accurately field-verify and map its known wetlands to ensure that they are not disturbed and to further streamline the development process. Suamico also contains a number of wetlands adjacent to its rivers and streams throughout the Village, as well as some isolated pothole wetlands in the more hilly terrain associated with the northwestern quarter of the Village.

The primary threat to wetlands is filling. Although an array of federal, state, and local regulations helps with protection, wetlands (especially smaller ones) are still lost to road construction and other development activities. The draining of wetlands can also occur through the placement of drain tile and rerouting of surface water. Some agricultural areas are actually former wetlands that would probably revert back to wetland character if left alone for a period of time.

Even if wetlands are not directly filled, drained, or developed, they still can be impacted by adjacent uses. Siltation from erosion or pollutants entering via stormwater runoff can destroy the wetland. Previously healthy and diverse wetlands can be reduced to degraded “muck holes” where only the hardiest plants like cattails can survive. Invasive plant species, such as purple loosestrife, can also negatively affect wetlands.

Under current regulatory requirements, all wetlands are off limits to development unless appropriate permits and approvals are obtained. In addition, under certain situations, agricultural activities may also be regulated within wetlands. In this regard, the Village should take full advantage of federal, state, and county funding and other assistance in the protection of existing wetlands and restoration of drained wetlands.

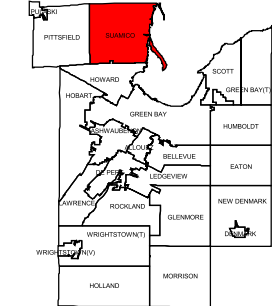
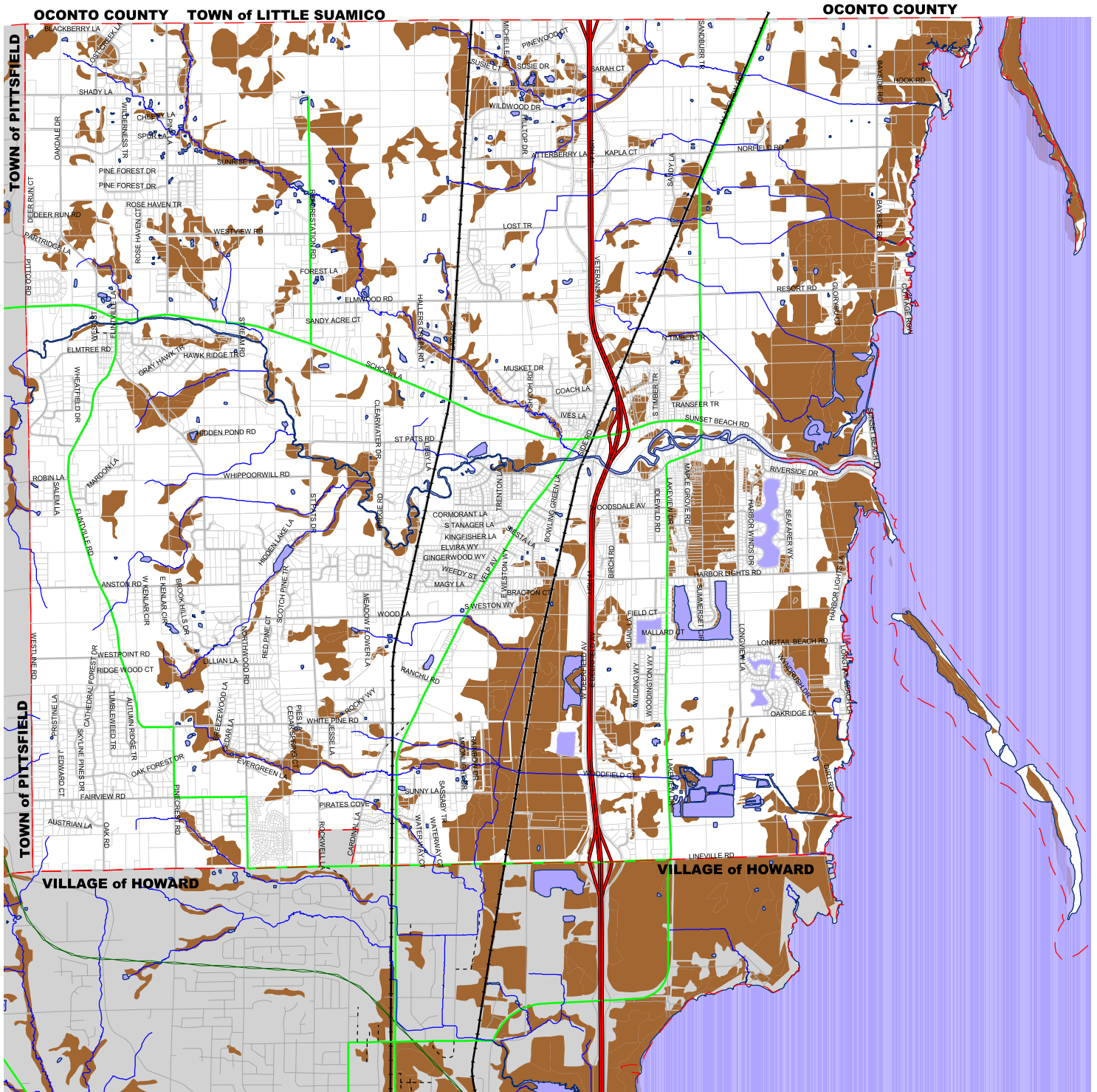
Environmentally Sensitive Areas

Environmentally sensitive areas (ESAs) are defined by the Brown County Planning Commission as portions of the landscape consisting of valuable natural resource features that should be protected from intensive development. They include all lakes, rivers,



Figure 7-6 Wetlands

Village of Suamico, Brown County, WI



Wetlands

Source: Wisconsin Department of Natural Resources

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
January 2004.

streams, wetlands, floodways, and other locally-designated significant and unique natural resource features. ESAs also include a setback or buffer from these features. In addition, they include areas of steep slopes (slopes 12 percent or greater) when located within or adjacent to any of the features previously noted (see Figure 7-7 for the locations of the Village's ESAs). Research and experience from throughout Wisconsin indicate that the potential exists for significant adverse water quality impacts if these areas are developed.

Identification and protection of ESAs are required by both state and county regulations under Wisconsin Administrative Code NR 121 and the Brown County Sewage Plan, prepared by the Brown County Planning Commission, as well as the Brown County Subdivision Ordinance. They are enforced during the review and approval of all land divisions and/or public sanitary sewer extensions. The intent of the ESAs is to protect water-related natural resource features from the adverse impacts often associated with development.

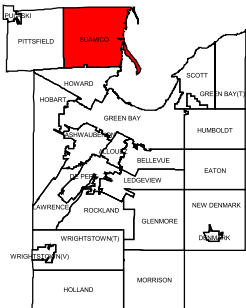
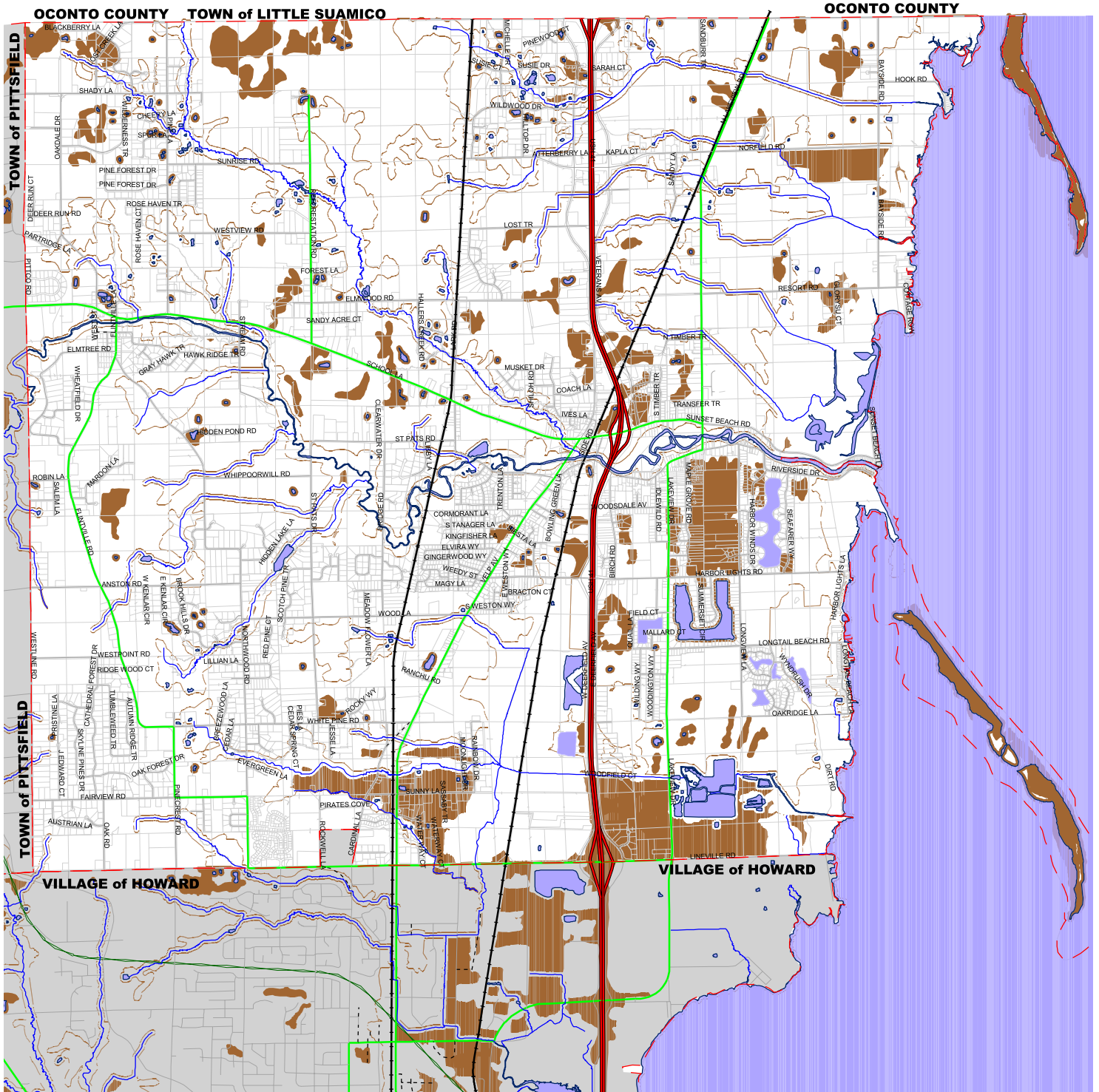
In general, development and associated filling, excavation, grading, and clearing are prohibited within ESAs. However, certain non-intensive uses, such as public utilities and public recreation, are often allowed within these areas. In conjunction with erosion control and stormwater management practices, protection of the ESAs can provide numerous benefits, including:

- Recharge of groundwater.
- Maintenance of surface water and groundwater quality.
- Attenuation of flood flows and stages.
- Maintenance of base flows of streams and watercourses.
- Reduction of soil erosion.
- Abatement of air pollution.
- Abatement of noise pollution.
- Favorable modification of micro-climates.
- Facilitation of the movement of wildlife and provision of game and non-game wildlife habitat.
- Facilitation of the dispersal of plant seeds.
- Protection of plant and animal diversity.
- Protection of rare, threatened, and endangered species.
- Threats to ESAs are similar to those of floodplains and shorelands. In addition, the quality and effectiveness of ESAs can be severely reduced should adjacent development change drainage patterns or remove native vegetation from the lands within or immediately adjacent to the ESAs. Such disturbances can also introduce invasive plant species to the ESAs, which can result in loss of native vegetation, diversity, and habitat.



Figure 7-7 Environmentally Sensitive Areas

Village of Suamico, Brown County, WI



Environmentally Sensitive Area

Source: 2000 Brown County Sewage Plan

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
January 2004.

It is recommended that the Village of Suamico work proactively with the Brown County Planning Commission to identify and educate the Village's residents on the importance of the ESAs.

Groundwater

As shown in Figure 7-8, groundwater begins as precipitation. This precipitation (rain or snow) falls upon the land. Some of the precipitation runs off into lakes, rivers, streams or wetlands. Some evaporates back into the atmosphere, and some is absorbed by plants. Groundwater is that precipitation that soaks into the ground past plant roots and down into the subsurface soil and rock. A layer of soil or rock that is capable of storing groundwater and yielding it to wells is called an aquifer. There can be a number of aquifers within an area, one above another. The top of the aquifer closest to the ground's surface is called the water table. It is the area below which all the openings between soil and rock particles are saturated with water. Like surface water, groundwater moves from high areas to low areas. It discharges at those places where the water table intersects the land's surface, such as in lakes, streams, and wetlands, providing a base flow for those water features. The distance such groundwater travels is generally not far.

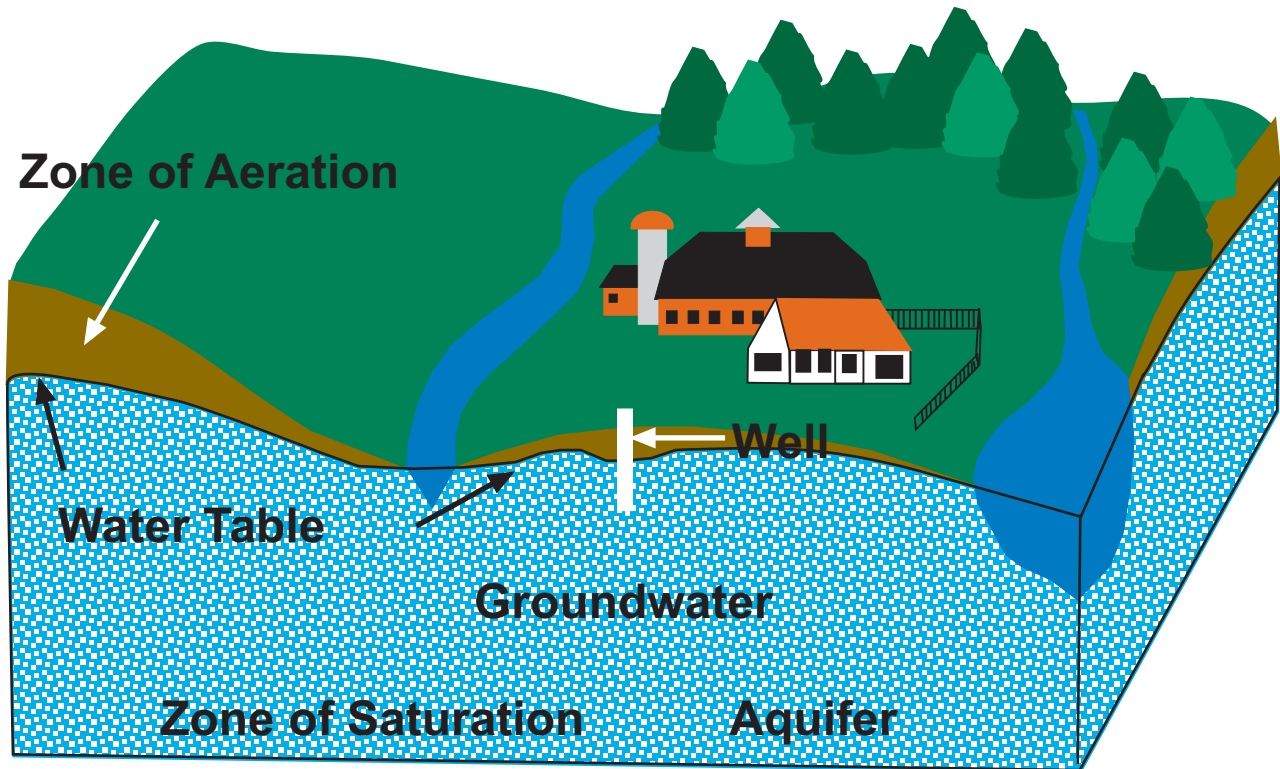
Groundwater is the source of the Village of Suamico's drinking water. Drinking water for the Village is drawn from the groundwater through private wells and from two municipal wells that serve residents in the southeastern quarter of Suamico.

As with all communities, it is very important that the groundwater, the Village of Suamico's only source of drinking water, is protected. The greatest threats to groundwater are contamination and overuse. As with any rural or suburbanizing community, the most common sources of contamination include feedlots, manure storage and spreading, manure pits, irrigation, fertilizers, and pesticides. Although Suamico does not currently have many problems with the high number of private wells in the Village, continued private well development may eventually have a negative impact on groundwater quantity and/or quality. The Village will also need to ensure that old wells are properly sealed to prevent contaminants from reaching the groundwater.

The Village will need to monitor not just the quality of groundwater available for its residents but also the quantity as Suamico and the Green Bay Metropolitan Area continue to grow. In order to ensure a safe supply of private drinking water, the Village should consider developing a well-testing program to identify contaminants that may be present, such as bacteria, nitrates, and pesticides, as well as other contaminants. The Village should provide new homeowners with information regarding proper maintenance and testing of private wells, such as the educational brochure from the WDNR entitled "You and Your Well."

Although maintaining groundwater quality will continue to be a concern, quantity may become less of an issue because many other suburban communities in Brown County will stop drawing groundwater after they begin receiving potable water from Lake Michigan. At some point in the future, Suamico may wish to reconsider joining the Central Brown County Water Authority in order to reduce the Village's reliance on groundwater as it expands its public water system for new development.

Figure 7-8
Groundwater



Definitions

Groundwater - The water below the water table contained in void spaces (pore spaces between rock and soil particles or bedrock fractures).

Water Table - The water surface in an unconfined aquifer; the level below which the pore spaces in the soil or rock are saturated with water; the upper surface of the zone of saturation.

Aquifer - A saturated geologic formation (rock or sediment) capable of storing, transmitting, and yielding reasonable amounts of groundwater to wells and springs.

Zone of Saturation - The zone in which the pore spaces between soil and rock particles are completely filled with water. The water table is the top of the zone of saturation.

Zone of Aeration - The zone between the land surface and the water table in which the pore spaces between soil and rock particles contain water, air, and/or other gases.

Source: Portage County Groundwater Citizens Advisory Committee

To help communities meet the requirements of the federal Safe Drinking Water Act and to protect their drinking water supply, the Wisconsin Department of Natural Resources recommends that all communities undertake Vulnerability Assessments and Wellhead Protection Plans. The DNR will assist with the preparation of these assessments and plans.

The Village should also support Brown County's "time of sale" program of inspecting private onsite wastewater treatment systems to guard against failing systems. Ensuring functioning septic systems will serve as a protection against groundwater contamination.

Woodlands

The vegetative state of the woodlands in Suamico varies considerably. The woodlands on the glacial moraine in the western part of the Village are characterized by mature stands of white pine, red maple, oaks, and other species in dry mesic classifications. This compares to the woodlands in the wetter eastern part of the Village, which consist largely of willows, cottonwoods, cedar, ash, aspen, and other wet and successional types of vegetation. The Brown County Reforestation Camp is almost entirely wooded with plantations of Norway pine, jack pine, and white pine planted since 1942. Natural woodlands in the camp vary from wet lowland communities dominated by black ash and trembling aspen to drier highland communities of aspen, paper birch, and red maple with scattered native white pine, red pine, and red oak.

The largest contiguous areas of woodlands in Suamico are located within the Reforestation Camp, Sensiba Wildlife Area, Barkhausen Waterfowl Preserve, and Suamico Lacustrine Flats. The wooded areas in the remainder of the Village have largely been fragmented by residential development. However, there are a few areas of woodlands up to 40 acres in size scattered around the Village.

Continued development is the primary threat to Suamico's remaining woodlands. Since these areas are prized as settings for residential subdivisions, they are often targeted for development. Intensive development, especially if improperly planned, can destroy the scenic and natural values of the woodland resource and can disrupt the blocks and corridors necessary to provide refuge and passage for wildlife. Loss of these woodlands may also degrade the perceived rural atmosphere of the Village.

Other threats to the woodlands of Suamico include improper management (such as the over-harvesting or under-harvesting of trees), haphazard utility and road construction and maintenance, and the introduction of exotic species and disease.

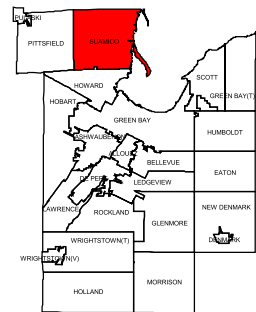
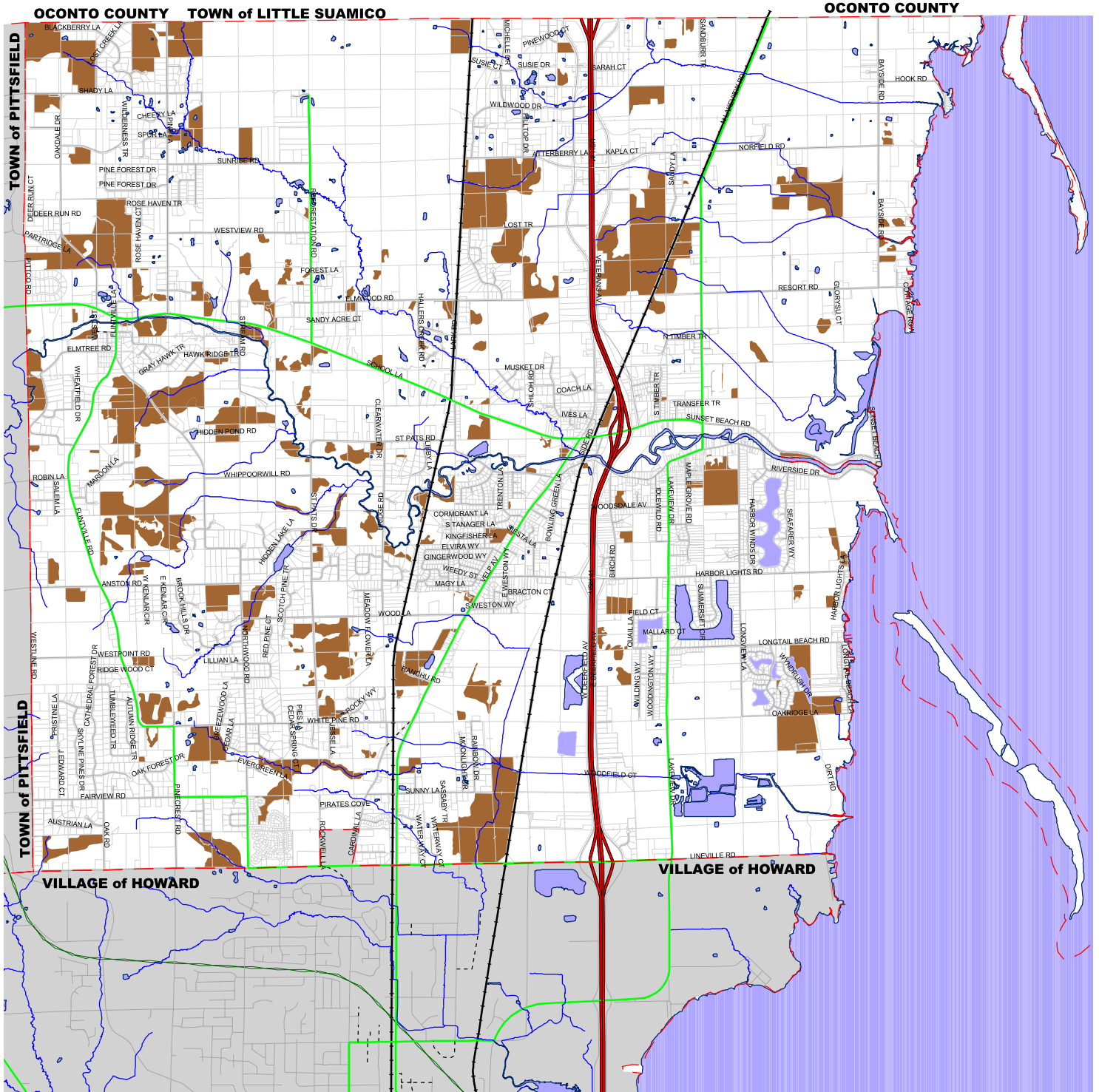
Where woodlands are not also classified as wetlands and are not located within the protected portions of floodplains and shorelands, they should be preserved as much as possible through such approaches as conservation by design and conservancy zoning.

Wildlife Habitat

Since much of the land in Suamico is actively being farmed or developed, the best wildlife habitat within the Village is contained in its woodlands, wetlands, and drainage corridors. Large tracts of woodlands or wetland-type vegetation offer areas for wildlife

Figure 7-9 Woodlands

Village of Suamico, Brown County, WI



Woodlands

Source: Brown County Land Use Inventory 2001.
Updated 2004.

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



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Map prepared by Brown County Planning Department.
January 2004.

movement. However, these areas are still affected by development around their edges by regional issues, such as water quality, and by potential invasion of exotic species. Wild game birds and mammals found in the Village include ducks, geese, woodcock, pheasant, Hungarian partridge, ruffed grouse, cottontail rabbit, fox and gray squirrel, muskrat, mink, raccoon, skunk, opossum, woodchuck, red fox, and whitetail deer.

The west shore wetlands provide excellent habitat for many types of mammals, birds, and fish. Additionally, the Brown County Reforestation Camp provides large areas of unfragmented habitat for both upland and lowland flora and fauna. Suamico also has narrow, linear habitat areas along the Village's numerous streams and drainageways.

Preservation of wildlife habitat is another reason why it is very important to protect surface waters, floodplains, shorelands, wetlands, and woodlands. It is assumed for purposes of this comprehensive plan that should these areas be adequately protected and preserved, so would wildlife habitat.

Threatened and Endangered Species

An endangered species is one whose continued existence is in jeopardy and may become extinct. A threatened species is one that is likely, within the foreseeable future, to become endangered. The Bureau of Endangered Resources within the Wisconsin Department of Natural Resources monitors endangered and threatened species and maintains the state's Natural Heritage Inventory (NHI). This program maintains data on the locations and status of rare species in Wisconsin. According to the NHI, there are some endangered or threatened species found or potentially found in Suamico. A map identifying locations for such species within Brown County indicates that there are a number of known occurrences of rare aquatic and terrestrial species and natural communities along the bayshore, as well as areas inland to USH 41/141. There are two other incidences of endangered aquatic species in the Flintville area.

Threatened or endangered species in Suamico include:

- Cherrystone Drop (threatened).
- Longear Sunfish (threatened).
- Pale Green Orchid (threatened).
- Redfin Shiner (threatened).
- Snow Trillium (threatened).
- Wood Turtle (threatened).
- Yellow Gentian (threatened).
- Common Tern (endangered).
- Forster's Tern (endangered).
- Purple False Oats (endangered).

The primary threats to these species are the loss of wetlands and other habitats due to development and other factors. Federal and state regulations discourage and sometimes prohibit development where such species are located. This is also another reason why it is very important to protect and preserve the Village's surface waters, floodplains, shorelands, wetlands, and woodlands.

Scenic Resources and Topography

The Village's topography ranges from almost flat adjacent to the bay (578 feet above sea level) to increasingly hilly and diverse traveling to the west (786 feet above sea level), resulting in a difference in elevation of only 208 feet over approximately 6 miles. Generally, the areas to the east of CTH J are the areas of the Village with the least amount of variability in topography. This oftentimes results in problems with draining stormwater away from development in these areas.

The western quarter of the Village is much higher and diverse in terms of its topography. It has a number of hills and ravines from the streams that drain this area. The hills provide picturesque views of the rolling terrain and, in some of the higher parts of the Village, provide views of the bay. Since this area has some issues with steeper slopes and terrain changes, stormwater in these areas may increase erosion due to the velocity with which the water drains and the generally sandy soils.

As with floodlands, shorelands, wetlands, and woodlands, scenic areas should also be considered for protection where appropriate under conservancy zoning and/or conservation by design subdivision techniques.

Mineral Resources

Nonmetallic mining is a widespread activity in Wisconsin, as well as in Brown County. In Wisconsin, there are an estimated 2,000 mines that provide aggregate for construction, sand, gravel, and crushed stone for road building, and limestone for agricultural lime applications. In Brown County, there are a number of active quarries that mine dolomite, sandstone, limestone, or crushed stone (sand or gravel). The pits and quarries in Suamico tend to be of a much smaller scale and operation than those in other portions of the County. The largest pits are located in the western quarter of the Village, and are typically used for gravel and sand.

It can be noted that the State of Wisconsin first passed a nonmetallic mining law in 1994. The law requires that all nonmetallic mining operations be registered. To be registered, the nonmetallic mineral deposit must be delineated by a professional geologist or registered engineer and certified to be economically viable. Second, if the land is zoned, the existing zoning at the time of registration must allow mining as a permitted use or as a conditional use. The state law further specifies that the registration lasts for ten years and can be renewed for an additional ten years. However, after 20 years, the full registration process must be undertaken once again. In addition, the law states that local zoning officials can deny the mining only if they can prove that the mineral deposit is not marketable or that the zoning at the time of the registration prohibited mining.

Wisconsin passed a second nonmetallic mining law in 2000: Wisconsin State Statute Section 295.13(1) and Wisconsin Administrative Code NR 135. The state statute and administrative code require that all counties in the state adopt an ordinance in 2001 (consistent with the model ordinance prepared by the Wisconsin Department of Natural Resources) to establish a reclamation program capable of ensuring compliance with uniform state reclamation standards. The administrative code also allows cities, villages, and towns to adopt such an ordinance and administer the program within their own jurisdiction at any time. However, the administrative code further states that the county ordinance will apply to every city, village, or town within the county until such time as the city, village, or town adopts and administers the ordinance itself.

Brown County adopted its Nonmetallic Mining Reclamation Ordinance in 2001. Most communities in Brown County, including the Village of Suamico, opted to have Brown County adopt and enforce the reclamation ordinance for their respective municipalities.

Wisconsin's nonmetallic mining reclamation program requires that nonmetallic mining operators prepare a reclamation plan to state standards. These standards deal with topsoil salvage and storage, surface and groundwater protection, reclamation during mining to minimize the amount of land exposed to wind and water erosion, re-vegetation, site grading, erosion control, and a final land use consistent with local zoning requirements.

Because of the presence of small-scale nonmetallic mining operations within the Village of Suamico and the potential for both significant positive economic impacts and significant negative environmental and land use impacts associated with mining, the Village ordinances should be subjected to further review and revision. Therefore, the Village's Planning Commission and Village Board should amend the Village's zoning ordinance to address nonmetallic mining operations and consider imposing conditions, such as requiring nonmetallic mining operations to be a certain number of feet away from ESAs and residential uses, identifying appropriate hours for blasting and hauling of aggregate, and utilizing the Brown County reclamation ordinance to ensure adequate cleanup and reuse of the site when mining is completed.

Historic Buildings

The Wisconsin Architecture and History Inventory (AHI) is an official inventory maintained by the Wisconsin Historical Society (WHS), which tracks historically significant structures, sites, or objects. These sites collectively display Wisconsin's unique culture and history and, therefore, should be noted and protected/preserved when feasible.

Suamico has one building that is listed on the state and national registers of historic places. The Henry House (also known as the Weed Mill Lumber Inn) located at 1749 Riverside Drive was certified on January 31, 1980. In addition to the state and national historic registers, the Wisconsin Historical Society maintains the Wisconsin Architecture and History Inventory (AHI) that identifies structures by community that are not listed on either the state or national register but have historic characteristics that indicate they may be eligible to be listed. Within Suamico, there are 31 structures that are listed on the AHI and are generally located in the village center area, as well as in the Flintville area.

In 1998, the Bay-Lake Regional Planning Commission received a grant from the National Park Service to conduct an intensive historical and architectural survey of selected unincorporated communities in Brown County. Bay-Lake RPC then contracted with Heritage Research, Ltd. to perform the survey and provide recommendations regarding eligibility for the National Historic Register. Heritage Research, Ltd. produced the Historical/Architectural Resources Survey of Selected Unincorporated Communities of Brown County. Within Suamico, 18 separate properties were surveyed (16 in the village center area and 2 in Flintville), and 3 were identified for further research and evaluation under National Register of Historic Places criteria.

The Suamico Fish Company building located at 1184 Riverside Drive was built circa 1905 and is a reminder of the importance fishing once played in Suamico's local economy. According to the report, "The fact that the company is still in business further bolsters its commercial role as one of the few remaining resources associated with the county's fishing trade." The report identifies this structure as the one out of three that is eligible for listing on the National Register of Historic Places.

The former Riverside Cheese Company located at 1776 Riverside Drive was built circa 1905. The report states, "Although the property's historic function as a cheese factory reflects one of the most significant industries in the economy/commercial development of Brown County and Wisconsin in general, the (building's) significant alterations seriously affect the structure's integrity of form as well as of function." As a result of the changes to the building, the building is not considered eligible for the National Register.

The third property identified for further research is located on Velp Avenue and currently consists of a farmstead and small barn. According to the report, "The site was originally used as a stagecoach stop and tavern known as The Rough and Ready, established in 1856." The report further states, "...it remains unclear whether or not the house or the granary were historically associated with the historic stagecoach stop, The Rough and Ready Tavern. This may impact historical significance. As a result of a lack of conclusive evidence, a decision regarding Register eligibility cannot be rendered at this point." The report recommends further study to determine eligibility.

As the Village redevelops the village center, it should take into account the number of potentially historic structures located there and work with the property owners to refurbish the buildings in a historically sensitive way. These redeveloped buildings can then be utilized to help draw residents and tourists to the village center as a destination. The Village should work with the State Historical Society to consider appropriate designation and preservation of potential historic sites as they are identified to maintain examples of the Village's culture and history.

Archeological Resources

The following information is provided by Janet M. Speth of the Neville Public Museum and was gathered from an archival literature search. According to the literature search, few large-scale archeological surveys have been conducted within the boundaries of the Village of Suamico. The surveys that have been made have generally been confined to narrow sewer easements or highway rights-of-way. However, the fact that there are 67

catalogued sites is, according to the museum, "...a testimony to the archeological richness of the area."

The lower reach of the Suamico River contains a cluster of archeological sites that were heavily collected in the early part of the twentieth century. Many of the artifacts from this area are in the collections of the Neville Public Museum. A second concentration of sites is located in the southwest quarter of the Village, and additional sites are scattered throughout Suamico.

According to the Neville Public Museum, areas of special archeological concern and interest in the Village of Suamico would be both banks of the lower stretch of the Suamico River, including any near-shore submerged areas, which may have been dry when lake levels were lower than today. A secondary area of concern is the area roughly paralleling Velp Avenue, which is a likely location for the earliest Native American sites in the Village.

There are five historic Euro-American cemeteries in the Village: an unnamed cemetery in Section 15, St. Benedict Cemetery in Section 22, Suamico Public Cemetery in Section 23, Ss. Edward and Isidore Cemetery in Section 18, and the two separate areas of the Unitarian Cemetery in Section 18.

The archeological sites are windows to the past. They provide information and insight as to the culture of the previous residents of Suamico. Current state law gives protection to all human burial sites. There are also programs and restrictions relating to other archeological sites. Developing these sites before they can be catalogued and studied is the major threat to this resource. Any residents finding evidence of archeological sites should contact representatives of the Neville Public Museum.

Suamico should capitalize on the value of these resources, perhaps by including these sites within public neighborhood parks and educating citizens about pre-European settlement life in the Suamico region. The Village should work with the Wisconsin Historical Society and the Neville Public Museum to identify these sites. Processes for dealing with these sites during construction of new development should then be established, particularly for burial sites, which, as previously mentioned, are currently protected under state law.

Parks, Recreation, and Open Space

Suamico has an abundance of recreational properties, which are owned and maintained by several different units of government. Figure 7-10 identifies these recreational sites. In addition, there are approximately 115 acres of privately-owned recreational land ranging from marinas to private wildlife preserves. The park and recreation facilities are analyzed in much more detail in the Utility and Community Facilities chapter.

Figure 7-10: Publicly-Owned Park and Recreation Lands in Suamico

Park or Recreation Land	Owner	Acres
Calavera Springs Park	Village	65.3
Idlewild Park	Village	35.9
Wied Mill Park	Village	9.4
Firemen’s Park	Village	0.5
Bay Port High School	Howard-Suamico School District	97.5
Suamico Elementary School	Howard-Suamico School District	27.3
Reforestation Camp/NEW Zoo	Brown County	1,526.7
Barkhausen Waterfowl Preserve	Brown County	474.8
Suamico Boat Landing	Brown County	2.9
Longtail Point	State of Wisconsin	820.8
Sensiba Wildlife Area	State of Wisconsin	500.4
Littletail Management Area	State of Wisconsin	193.1
Small Craft Boat Launch	State of Wisconsin	2.0

Community Design

Issues related to community identity and community design generally pertain to improving or establishing the Village’s identity and utilizing design elements, such as signage, landscaping, and architecture, to reinforce the Village’s desired rural character and natural beauty. Preserving the Village’s rural character and natural beauty were both concepts that Village residents prominently identified in the visioning session. This section of the plan identifies specific ways that the Village can help to establish its community identity.

At this time, the Village of Suamico does not generally capitalize upon its own distinctive identity. For instance, there is no uniform appearance to its signage and roadways, and there is no particular focus or emphasis placed upon the Suamico River or the Village’s many different natural areas. Therefore, there is a danger that Suamico’s identity will not be distinctive enough to set it apart from any other community. Recently, Suamico took steps to begin the formulation of its own identity by incorporating as a Village, thereby stemming any loss of land through annexation, and giving Suamico time to plan for its future.

Its cultural landmarks, especially public gathering places, also portray Suamico’s identity. Churches, libraries, dance halls, and similar institutions are what often spring to mind when one thinks of a community. Within Suamico, its village center and mix of residential, commercial, institutional, and recreational uses are often what come to mind.

To create a distinct and attractive identity, to foster community pride, and to promote the Village, it is proposed that:

- The Village’s entrance corridors and village center should be a focal point of Suamico’s efforts to achieve good design and a distinct identity.
- The Village should continue to implement the Town Center Plan and, in particular, the “Historic Hamlet” theme area. In terms of natural and cultural resources, this

would include establishment of design and building standards to encourage rehabilitation of the older, more architecturally interesting buildings and attractive landscaping.

- Planting street trees should be encouraged as a means of beautifying the built environment and providing neighborhood character. Trees and the natural/rural character they provide are some of the primary reasons people continue to move to Suamico. Suamico should require the planting of street trees for new subdivisions where trees do not already exist. In addition, the Village should seek to preserve selected existing trees either by working with developers to design around such trees or through a tree preservation ordinance. Suamico should also consider the establishment of a tree board to oversee the Village's forestry program.
- Even small areas of greenspace within residential developments are cultural resources that add value to neighborhoods. A local example of this is Wied Mill Park located adjacent to Rock Bottom Court. Even though the park is not developed, it helps to reinforce the natural feel of the area. New developments should contain small neighborhood parks or greenspace either through the use of conservation subdivisions or by setting aside small areas for neighborhood greenspace, parks, recreation, or stormwater management areas.
- Where public acquisition is appropriate or a larger setback/buffer adjacent to surface water is desired, establishment of natural corridors or parkways should be considered. By keeping intensive development out of the stream corridors, water quality is improved, habitat is maintained, and recreational opportunities are preserved. Parkway also maintain scenic values. It is specifically recommended that parkways be created along the Village's primary drainage corridors, such as the Suamico River. Parkway along the other tributaries of these surface waters should also be considered. The parkways should, at a minimum, include the floodway/shoreland buffer portion of the corridor and should ideally contain additional lands. These parkways would allow the corridors to remain mostly undeveloped as wildlife corridors, preserve natural beauty, provide stormwater management areas, provide trail possibilities, and link parts of the Village together. The parkways would also enhance public access and allow the Village to capitalize on the intrinsic value of its most notable natural features. Acquisition of parkways could occur at any time that an opportunity arises. Generally, it could occur at the time adjacent lands are developed and could be accomplished either through dedication or purchase. If public acquisition is not feasible, private ownership subject to conservation easements could be considered. Lands within the parkways should be used only for passive recreation, such as trails, consistent with the Village's adopted trail plan.
- Alternative development approaches, such as conservation subdivisions, should be encouraged near environmentally sensitive areas. New subdivisions can be designed to preserve natural drainage patterns, reduce fragmentation of wildlife habitat, and limit the amount of impervious surfaces, such as roads. By clustering development on a site, large blocks of environmentally sensitive areas can be left as preserved open space. To promote such development practices, greater flexibility and incentives should be inserted into Suamico's development codes, such as allowing

reduced lot sizes, smaller setbacks, and/or narrower streets, in exchange for preservation of natural resources.

- Natural, cultural, and agricultural resources education should be encouraged. Spreading knowledge of the importance of the Village's natural, cultural, and agricultural resources and ways to maintain them are essential implementation tools. For example, educating property owners along the Suamico River, bayshore, and the Village's numerous streams about nonpoint source pollution and providing tips on landscaping and buffering to prevent this pollution can help to achieve improved water quality. Periodic newsletters could be mailed to Suamico residents to provide information on topics, such as not dumping pollutants down storm sewers, tree trimming tips, and other issues relating to natural resource protection. Water resource educational materials are available from the WDNR and the UW-Extension. Another example is to erect signs that identify the names of creeks at road crossings. These signs are an excellent way to raise awareness of drainageways. Unnamed creeks could have names established, perhaps by honoring landowners along them or through school naming contests. This is also another way of raising awareness of the importance of these features.

Recommended Policies, Programs, and Actions

There are many avenues the Village of Suamico can take to achieve the natural, cultural, and agricultural resources goal and objectives listed in the plan's Issues and Opportunities chapter. They range from specific one-time actions to broad ongoing programs. Many of the policies, programs, and actions identified in this chapter have been specifically formulated to also address recommendations within the Land Use and Utilities and Community Facilities chapters of this plan. Not only is such an approach economical and efficient for the Village, but also such considerations are required under the Comprehensive Planning Law.

Agricultural Resources Recommendations

- Work with any remaining active farmers in the Village to ensure that encroaching development does not prevent them from continuing to farm.
- Support an update of the Brown County Farmland Preservation Plan after completion of this Village of Suamico Comprehensive Plan to ensure that the recommendations of the two plans are consistent with one another.
- Plan for the efficient, cost-effective extension of public sewer and water facilities by avoiding the extension of these services past large tracts of active agricultural land.

Natural Resources Recommendations

- Continue to implement the parkway and trail concepts along the Village's main rivers and streams consistent with the Village's adopted trail plan.
- Work with local conservation or school groups to stabilize the shoreline along the lower Suamico River and bayshore by planting native grasses and plants in order to reduce shoreline erosion.

- Encourage developers to incorporate access to the Suamico River and bayshore in both development and redevelopment projects.
- Flood studies should be undertaken for all drainageways within the Village. This can be accomplished on a case-by-case basis by developers as development occurs, but it may be more appropriate as part of a comprehensive stormwater management plan.
- Continue development of the Village's stormwater management plan and, when completed, create a stormwater management ordinance to implement the plan. Suamico may also wish to consider the creation of a stormwater utility to finance implementation.
- Ensure adequate shoreline protection and screening by consistently enforcing the Village's shoreland-wetlands ordinance when it is adopted.
- Work with the WDNR and the Wisconsin Coastal Management Program to identify critical wetland habitats in the Village and the means to protect them.
- Periodically review and revise as necessary the Village of Suamico Floodplain Zoning Ordinance to ensure its continued viability when it is adopted.
- Establish and utilize a conservancy zoning district to protect environmentally sensitive areas, important woodlands, wildlife habitat, scenic resources, etc.
- Support an update of the Brown County Sewage Plan to ensure that it is consistent with the recommendations of this comprehensive plan, particularly as it applies to the environmentally sensitive area designations.
- Provide information to private well owners regarding testing and maintenance of their wells through Village newsletter articles and educational materials from WDNR.
- Consider implementing a village-wide private well sampling program to test for potential contaminants.
- Continue to monitor the quality and quantity of the Village's groundwater resource as the Village continues to grow and perform a Vulnerability Assessment and a Wellhead Protection Plan to ensure a safe potable water supply.
- Support Brown County's "time of sale" program of inspecting private onsite sewage disposal systems to guard against failing systems in those areas not served by public sanitary sewers.
- Coordinate with local conservation, school, or other service groups to remove invasive plants, such as purple loosestrife, from the Village's wetlands and floodplains.
- Begin an educational program to make residents more aware of environmental areas, issues, and solutions in the Village.
- Contact the WDNR early in any development proposals along the lower Suamico River and West Shore Wetlands to properly address any threatened or endangered resources that may be present.

- Consider adoption of a nonmetallic mining ordinance to ensure adequate protection for existing and future residential developments.

Cultural Resources Recommendations

- Make developers aware during development of the potential for archeological sites near the lower Suamico River and bayshore, and contact the Neville Public Museum in the event that any artifacts are discovered. Where archeological sites are known, preserve them through their inclusion in the greenspace requirements of conservation subdivisions or other passive park areas.
- Consider adoption of a Historic Preservation Ordinance to ensure the preservation of the existing and any future structures listed on the State and/or National Registers of Historic Places.
- Continue to enforce the Village's design review standards for new commercial, multifamily, and industrial development to ensure it enhances the Village's desired rural character.
- Establish priorities for protection of historic and cultural buildings and strive for rehabilitation and maintenance rather than demolition when possible by working with private property owners to pursue federal and state historic preservation/rehabilitation tax credit programs.
- Begin to beautify the Village's main thoroughfares through the creation of a sign ordinance that encourages pedestrian-scale monument-style signage rather than large monopole pedestal signs.
- Continue to implement the recommendations contained in the Village's Town Center Plan to create an identity unique to Suamico.
- Focus the Village's design and beautification efforts first on its village center and entrance corridors and then by similar efforts on its neighborhoods and major natural resources. Specific actions should include:
 - Street tree requirements where appropriate.
 - Traffic calming along CTH HS, CTH J, and CTH B in the village center to create a more enjoyable environment for pedestrians and bicyclists.
 - Establishment of parkways, walkways, trails, etc. consistent with the Village's adopted trail plan.
 - Promotion of alternative development methods, including conservation subdivisions, traditional neighborhood developments, and mixed-use developments.

CHAPTER 8

Intergovernmental Cooperation

Cooperation between neighboring and overlapping units of government is one of the primary goals of the Wisconsin Comprehensive Planning Law, as well as the multi-jurisdictional planning effort, of which this plan is a component. In order for the Village to grow in an orderly and efficient manner, it is necessary for the Village to work with its neighbors, Brown County, the state, and other units of government. Working cooperatively is especially important since many issues, such as stormwater management and traffic, do not recognize municipal boundaries. What one municipality does may have significant impacts on its neighbors.

The intent of the Intergovernmental Cooperation chapter is to analyze the existing relationships between the Village and other units of government and to identify means of working cooperatively toward the goals and objectives identified in the Issues and Opportunities chapter of the plan.

Analysis of Governmental Relationships

School Districts

Howard-Suamico School District

A meeting was held with the Howard-Suamico School District Superintendent on April 22, 2004, to discuss the comprehensive plan and any school district issues that may be relevant to the plan. The district recently hired an architectural firm and the University of Wisconsin Applied Demographic Laboratory to help project future building needs. The report identifies the strong enrollment growth in the district of 150-200 additional students per year as the driving force behind the need for building new and/or expanding existing elementary schools in the very near future. The school district is looking to locate (where possible) the new elementary schools in areas with concentrations of existing residential development, thereby providing an opportunity for neighborhood students to bike or walk to school as an alternative to busing. With such a high rate of growth in the student population, coordination and communication between the Village and school district are critical. The school district superintendent and village administrator should meet at least once a year to continue discussions regarding potential cooperative programming and any other future issues that may impact the Village or school district. In the meantime, the Village of Suamico should continue to actively work with the school district in identifying potential school sites that are pedestrian-friendly, near residential development, and help to provide an identity for the surrounding neighborhood.

Historically, there has not been much interaction between the school district and Village of Suamico in terms of programming. However, there appears to be opportunities for cooperative efforts, particularly with regard to potential environmental efforts through school groups, such as the Future Farmers of America (FFA), or other environmental or

civic groups. These groups could work in conjunction with the Suamico Public Works Department in helping to develop small-scale stormwater management facilities, such as rain gardens, around the schools or assist in various Suamico River or bayshore shoreline enhancement activities, including erosion control and/or exotic species (such as purple loosestrife) abatement.

Pulaski School District

There are a few scattered parcels of land in the northwestern part of the Village that are within the Pulaski School District. As development in these areas is proposed, Suamico should notify the school district so that it may plan school bus routes and classroom allocation for future students in this area. As is evident from Figure 8-1, the scattered nature of the few parcels in Suamico that are within the Pulaski School District make busing in these areas particularly challenging. The Village of Suamico should encourage the Pulaski and Howard-Suamico School Districts to begin discussions regarding the possibility of amending the school district boundaries in a manner that generally conforms to municipal boundaries or, at the very least, is less scattered.

Adjacent / Overlapping Local Governmental Jurisdictions

Village of Howard

The Village of Howard bounds the Village of Suamico along Suamico's entire southern boundary. Staff from the Village of Howard met with staff from the Village of Suamico on May 4, 2004, to discuss opportunities for intergovernmental cooperation. Discussion primarily focused on the need for a detailed, unified vision for the Lineville Road area, including the provision of pedestrian amenities, the potential development of an entryway boulevard, land use compatibility, and access control measures. Both villages agreed to attend a meeting with the Brown County Highway Department to discuss the potential for these improvements coinciding with the programmed 2005 resurfacing of a portion of Lineville Road.

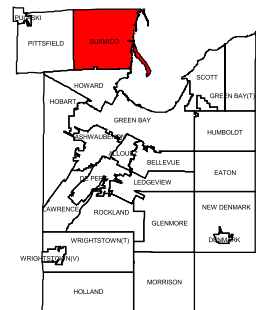
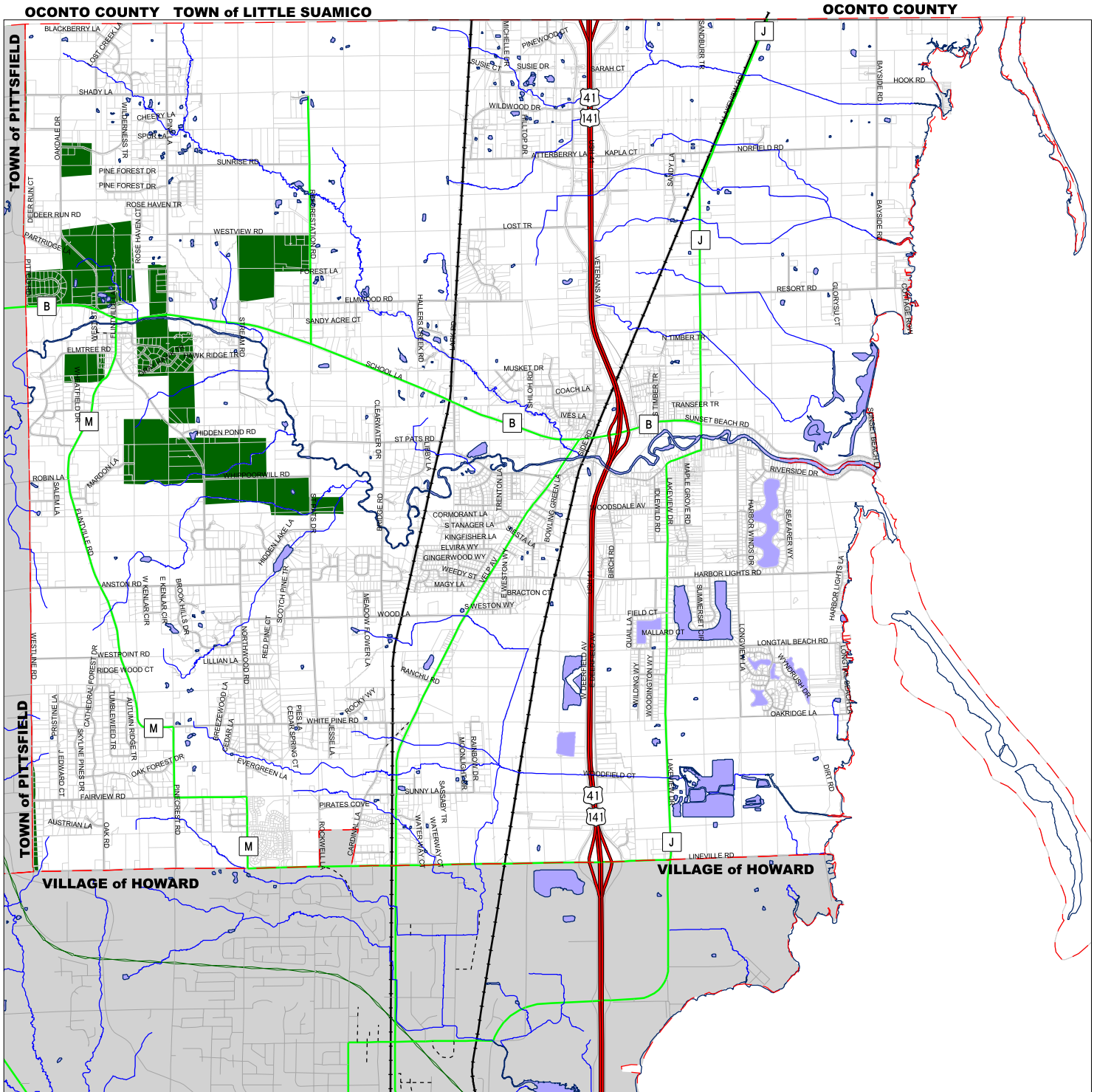
Pedestrian circulation along Lineville Road and home-to-school walk routes were also discussed rather extensively since three schools are located along Lineville Road. Suamico will be requiring the provision of sidewalks within one and one-half miles of every school in order to allow students to walk to school. This policy will now correspond with Howard's comprehensive sidewalk policy. Other discussion items included the potential for emergency water provision, regional stormwater management, and the possible sharing of labor and equipment. (See Figure 8-2)

Town of Little Suamico

The Town of Little Suamico (Oconto County) is adjacent to Suamico at its northern boundary. A meeting was held on April 26, 2004, with the town chairman and town planner representing Little Suamico to discuss future plans and opportunities for cooperation between the two communities. In the past, communication between the two communities was primarily informal between members of the respective sanitary districts with regard to the potential for Little Suamico connecting to the Green Bay Metropolitan Sewerage District (GBMSD) via a connection at CTH J with Suamico.



Figure 8-1
School Districts
 Village of Suamico, Brown County, WI



Pulaski School District
 Howard-Suamico School District

Scale: 1 inch = 1 mile

0.5 0 0.5 Miles



This is a compilation of records and data located in various Brown County and City of Green Bay offices and is to be used for reference purposes only. The map is controlled by the field measurements between the corners of the Public Land Survey System and the parcels are mapped from available records which may not precisely fit field conditions. Brown County/ City of Green Bay are not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

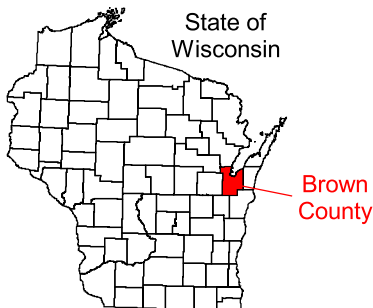
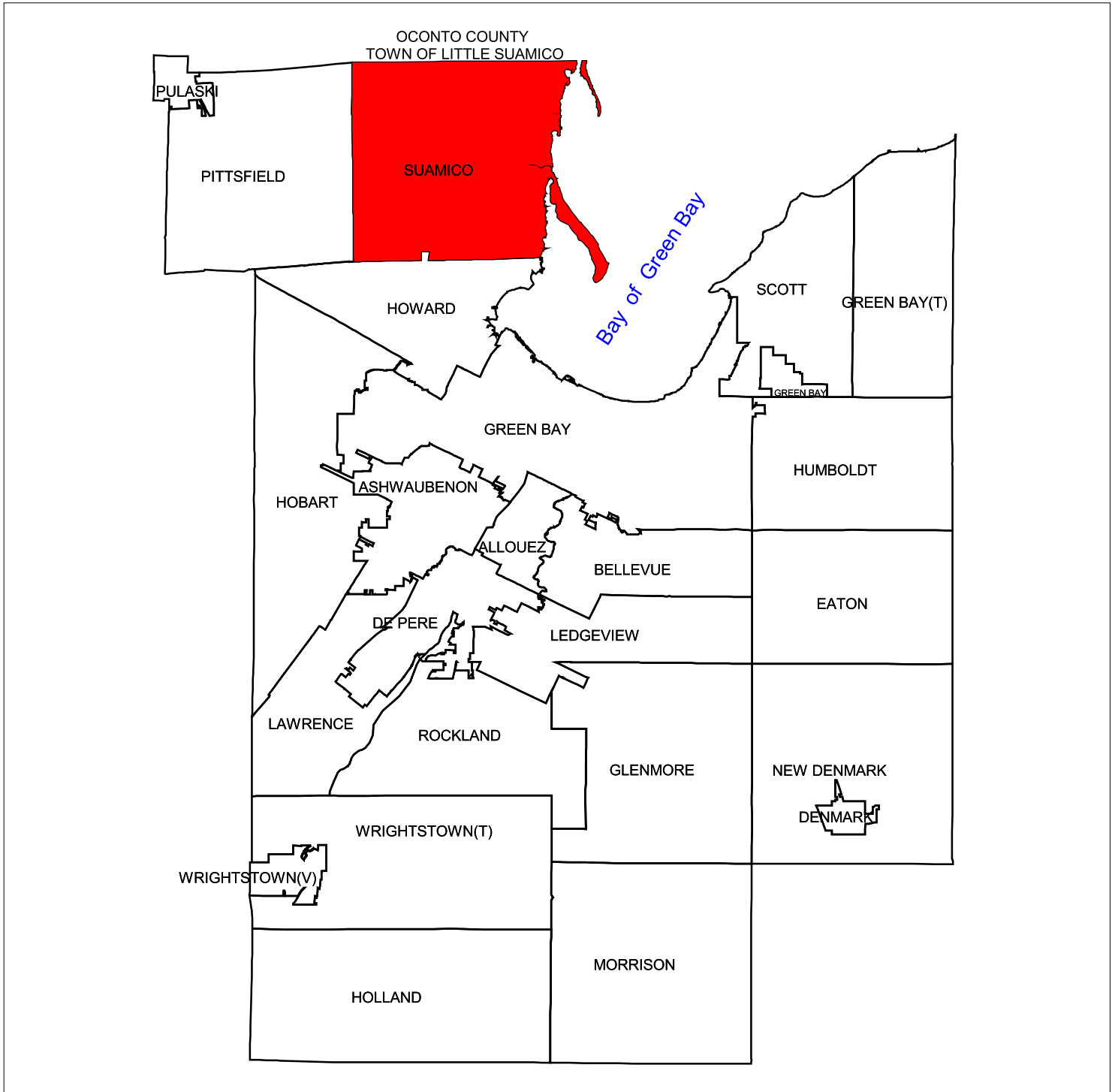
Map prepared by Brown County Planning Department.
 June 2004.



Figure 8-2

Regional Setting

Village of Suamico, Brown County, WI



This is a compilation of records and data located in various Brown County and City of Green Bay offices and is to be used for reference purposes only. The map is controlled by the field measurements between the corners of the Public Land Survey System and the parcels are mapped from available records which may not precisely fit field conditions. Brown County/ City of Green Bay are not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

Map prepared by Brown County Planning Department.
June, 2004.

Should this potential connection become more likely in the future, the Village and Town will need to meet with a number of other stakeholders, including GBMSD, the WDNR, Brown County, and the Bay-Lake Regional Planning Commission, to sort out the various requirements and responsibilities associated with such a connection. There may be opportunities in the future for additional cooperation between the communities in the areas of provision of public water and public services (police, fire, etc.), as well. Suamico and Little Suamico should set an annual meeting where the Town of Little Suamico Chair meets with the Village of Suamico Administrator and Village of Suamico President to maintain an open line of communication between the two communities and to continue discussions regarding potential areas for cooperation.

Town of Pittsfield

No comment was received from the Town of Pittsfield regarding intergovernmental cooperation. However, Suamico should seek to work with the Town to open lines of communication. This may include meeting on an annual basis with Pittsfield to discuss any potential intergovernmental issues or opportunities.

Brown County

The Brown County Planning Commission staff, as part of a multi-jurisdictional planning effort, facilitated the development of the Village of Suamico Comprehensive Plan. Therefore, Brown County is very supportive of the recommendations contained within the Village of Suamico Comprehensive Plan, particularly those that relate to the development of the village center, traffic calming measures, and the development of neighborhoods rather than stand-alone subdivisions. As this is a multi-jurisdictional planning effort, the Village's comprehensive plan will be adopted as a component of the Brown County Comprehensive Plan.

The Village of Suamico should encourage increased communication with the Brown County Park Department. With two very large County-owned facilities (Brown County Reforestation Camp/NEW Zoo and Barkhausen Waterfowl Preserve) within the Village's boundaries, the Brown County Park Department should provide an annual update to the Village Board regarding future improvements or potential land acquisitions so that Suamico can adequately plan for the provision of any utilities and/or services that may be required. Although these facilities are not taxable properties, they provide ample recreational opportunities for Suamico residents, are regional tourist destinations within the Village, and help to maintain the rural character of the community.

Oconto County

Suamico has maintained informal contacts with the Town of Little Suamico, which is in Oconto County, for a number of years. To date, the Village has not had an issue that involved Oconto County outside of the Town of Little Suamico. If an issue or opportunity arises for cooperation with Oconto County, Suamico should be open to working cooperatively with that county.

Regional / State Jurisdictions

Bay-Lake Regional Planning Commission

The Village of Suamico is within the Bay-Lake Regional Planning Commission (Bay-Lake RPC) jurisdiction, which covers an 8-county region and includes Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Oconto, and Sheboygan Counties. Bay-Lake RPC provides planning, ordinance writing, economic development, mapping, environmental studies, and grant writing to member communities within its region. Suamico has not utilized the services of Bay-Lake RPC since they wrote a Community Development Block Grant – Economic Development application in 1993. However, Bay-Lake has been active in the community as part of larger regional projects, including the Green Bay West Shore Study, which was funded by Wisconsin Coastal Management and inventoried and assessed the cumulative and secondary impacts of development on the Green Bay shoreline. A second recently completed project that covered Suamico is the Historical and Architectural Resources Survey of Selected Unincorporated Communities of Brown County. This document inventoried architecturally- or historically-significant structures in the Flintville and village center area of Suamico, as well as a number of other unincorporated communities in Brown County.

Suamico should consider further utilizing the resources of the Bay-Lake Regional Planning Commission, particularly with regard to implementing the economic development and natural resource recommendations.

Wisconsin Department of Natural Resources

Wisconsin Department of Natural Resources staff was asked to comment on the draft Utilities and Community Facilities chapter, as well as the draft Natural, Cultural, and Agricultural Resources chapter. The WDNR staff provided additional background and technical information for both of the chapters.

With the large areas of WDNR-owned property in Suamico, including the Little Tail Point Management Unit, Sensiba Wildlife Area, and Long Tail Point, communication between the Village and WDNR is critical for the proper management, use, and protection of these vital habitat areas. The Village and WDNR should meet on an annual basis to discuss issues of common concern and identify potential solutions to any issues that may exist.

WDNR staff can also provide the Village with a wealth of knowledge related to the Village's water and sewage systems. As the Village continues to grow, additional stress will be placed on these utilities, possibly creating a need for expansion of the existing facilities, particularly the public water system. WDNR staff should also be utilized to provide insight and technical expertise on how the Village could most efficiently use its existing community utilities without causing environmental damage to the Village's natural resources.

Wisconsin Department of Transportation

Since the only highway under WisDOT jurisdiction in the Village of Suamico is USH 41/141, which is already a limited-access freeway, WisDOT staff did not foresee any major issues or projects in the near future. However, Suamico should keep WisDOT informed of any large trip generating development proposals near the USH 41/141 interchanges and solicit their input regarding potential impacts on the freeway.

Wisconsin Department of Administration

The Wisconsin Department of Administration (WDOA) Comprehensive Planning Grant program helped the Village fund the development of its first comprehensive plan that meets the requirements of s.66.1001 Wis. Stats. The Village should continue to develop this relationship and rely on the Department of Administration for technical expertise for the implementation of this plan, as well as a potential funding and data source for future projects.

Also located with the Wisconsin Department of Administration is the Wisconsin Coastal Management Program (WCMP). WCMP provides funding and technical assistance to “coastal” counties and communities to raise awareness of the Great Lakes. Grant programs are available through WCMP to educate the public about issues, such as stormwater management, and to provide funding to improve Great Lakes access. The Village should contact WCMP regarding potential implementation projects, such as coastal wetland identification and inventory or park development.

Wisconsin Department of Commerce

The Village has not utilized the resources available from the Wisconsin Department of Commerce (Commerce) for a number of years. Commerce provides technical expertise and financial aid in the areas of housing, public facilities, and economic development. As Suamico develops the Norfield Road Business Park, Commerce may be able to aid in the expansion of existing businesses or attraction of new businesses through its Community Development Block Grant for Economic Development Program. The Implementation chapter contains a more detailed description of the programs that Commerce offers.

Intergovernmental Plans or Agreements

The Village is not currently party to any formal intergovernmental plans or agreements at this time. However, as growth continues within Suamico and the region, the Village should seek out opportunities to work with its neighbors. Cooperation between adjacent communities is particularly important when dealing with issues that transcend municipal boundaries, such as stormwater management, transportation, and groundwater.

Existing and Potential Intergovernmental Conflicts

Potential Annexations

The most likely intergovernmental conflict is the potential for residents of Pittsfield or Little Suamico petitioning the Village of Suamico for annexation, even though the Village is not actively seeking to enlarge its boundaries. This could become more of an issue if the current Village growth rate continues and public services (sewer, water, etc.) become available near the current Village boundaries. Annexation disputes often pit villages and towns against each other in an adversarial role, rather than cooperating with one another. For this reason, it is crucial that the Village begins discussing boundary issues and the potential for boundary agreements with the neighboring towns.

Economic Development Competition

Communities in Brown County are part of a larger, regional economy of northeastern Wisconsin. Therefore, economic development should be thought of as a regional exercise rather than a policy that stops at municipal boundaries. This is particularly evident in Suamico where the majority of residents live in Suamico but commute to jobs in other metropolitan Green Bay or Fox Valley communities. Currently, economic development at the local government level generally does not contain a regional perspective. Large developers oftentimes will pit one neighboring community against another to create negotiating leverage in terms of relaxing development design requirements and increasing incentives. Since communities do not want to lose out on potential property tax revenue to a neighboring jurisdiction, large developments oftentimes may not meet the expectations of residents, visitors, or other developers whose projects met the design guidelines in the past. In order to avoid these situations in the future, Suamico should work with all of its neighbors, including other metropolitan communities and Brown County, to begin developing a framework revenue sharing agreement for new development and to ensure economic development cooperation.

Processes to Resolve Conflicts

There are a number of processes that the Village and the surrounding communities could utilize to resolve or prevent conflicts in the future outside of the legal system, which should be the last resort. These methods include cooperative planning, informal negotiation, facilitated negotiation, mediation, and binding arbitration.

A boundary agreement with the Towns of Pittsfield and Little Suamico should be a goal for the Towns and the Village. Although the Village has no plans or current need to expand its boundaries, setting a boundary agreement ahead of growth pressures in the Towns or Village allows the communities to negotiate in a calm environment. However, for a boundary agreement to be reached and to be effective, all parties must negotiate in good faith so that a settlement agreeable to all sides can be attained.

Summary of Recommendations

To achieve the goal and objectives of this element of the plan, the Village should:

- Continue discussions with representatives of the Village of Howard and Brown County regarding the Lineville Road corridor area. Pertinent discussion items should include pedestrian accessibility, access management, compatibility of land uses, and design treatments.
- Begin discussions with the Village of Howard regarding potential cooperative efforts in solid waste collection, stormwater management, provision of emergency utilities, and shared use of labor and equipment.
- Begin comprehensive boundary agreement discussions with the Towns of Little Suamico and Pittsfield.
- Work with other metropolitan Green Bay communities to develop a framework for revenue sharing of property tax revenues from new development.
- Continue to work with the Brown County Park Department to plan for the County park facilities in the Village and the potential future additions to Barkhausen and the Reforestation Camp consistent with the Brown County outdoor recreation plan.
- Establish an ongoing meeting schedule with representatives of the surrounding communities to discuss land use, transportation, stormwater, and other planning issues that transcend municipal boundaries.
- Share meeting agendas and minutes with the surrounding communities and school districts to increase intergovernmental cooperation and awareness of planning issues.
- Maintain an open line of communication between the Village and the Howard-Suamico and Pulaski School Districts.
- Encourage the Howard-Suamico and Pulaski School Districts to begin discussions regarding the boundaries of their respective school districts.
- Continue to participate in intergovernmental agreements for fire, police, and emergency rescue services.
- Request incorporation of the Village of Suamico Comprehensive Plan into the Bay-Lake Regional Planning Commission Master Plan for the region.
- Utilize the resources of the Bay-Lake Regional Planning Commission, especially when dealing with issues that transcend local and county boundaries.
- Work with Advance (the economic development arm of the Green Bay Area Chamber of Commerce) and the Bay-Lake Regional Planning Commission to promote cooperative intergovernmental economic development activities and strategies to strengthen the region's economic vitality.
- Continue to work with the Wisconsin Department of Transportation, Village of Howard, and Town of Little Suamico to cooperatively plan for a safe, efficient, and visually appealing USH 41/141 corridor.

- Develop a relationship with the Wisconsin Department of Commerce to aid in the attraction, retention, and expansion of businesses in Suamico.
- Maintain contact between the Wisconsin Department of Administration and Village to implement applicable portions of the comprehensive plan.

CHAPTER 9

Implementation

The completion of a comprehensive plan should be celebrated as a significant milestone in providing guidance for the future development of the Village of Suamico. However, the key to the success of a comprehensive plan is its implementation. There are several land use regulatory tools, as well as administrative mechanisms and techniques, that can be utilized as implementation tools for the plan. While the Implementation chapter does not include all of the recommendations of the comprehensive plan, it does summarize the various implementation tools and related action steps toward its implementation.

Implement the Recommendations Contained in the Suamico Town (Village) Center Plan

Suamico should begin implementation of the Village Center Plan through improvements to the streetscape, particularly on CTH B, CTH HS, and Riverside Drive through the historic center of the community. Streetscape improvements have proven to be a worthy first step in the revitalization of a number of business districts in Brown County.

The Village should work with Brown County Highway to reconstruct the county roads in the village center in a manner consistent with a pedestrian-friendly area, including curb extensions and sidewalks, when the area is scheduled for reconstruction in 2009. The Village should also include street furniture, trees, and lighting consistent with the recommendations in the Village Center Plan.

Action Steps:

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Meet with Brown County Highway Department to ensure that reconstruction design of county highways are compatible with the recommendations for the village center area.	Public Works	Brown County Highway	2004
Prepare an application to the WisDOT Statewide Multi-Modal Improvement Program (SMIP) to help fund the streetscaping improvements and street design recommendations. Since the project is tentatively scheduled for 2009, the application should be prepared in 2006.	Administrator	Village Engineer, Public Works, Brown County Planning	2006

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Enable developers to meet the intent of the Village Center Plan by revising Suamico's zoning and subdivision ordinances to encourage the mix of local commercial, higher-density residential, recreational, and institutional uses consistent with the vision set forth in this plan and the Village Center Plan.	Planner	Zoning Administrator	2004-05
Identify potential infill or redevelopment sites in the village center that are underutilized due to potential or actual environmental contamination. Work with the property owners to obtain state or federal grants to clean up and redevelop the properties.	Planner	Assessor	2006

Zoning

Zoning is the most common regulatory device used by municipalities to implement plan recommendations. The major components of zoning include a written zoning ordinance and a zoning district map. The zoning ordinance includes specific language for the administration of the regulations. Included in the text are definitions, district use requirements, administrative procedures, sign and parking regulations, and other elements. The companion zoning district map defines the legal boundaries of each specified zoning district of the zoning ordinance.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Develop a "waterfront" zoning district to bring the existing nonconforming lots along the Suamico River and bay of Green Bay shoreline into conformance.	Planning Commission, Village Board	Board of Appeals, Zoning Administrator	2005

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
<p>When the Village considers future rezoning, conditional use, or variance requests, it is important that the various comprehensive plan goals, objectives, and recommendations are considered and used as a guide in the rezoning determination process. Whenever a decision is reached either approving or disapproving rezoning requests, the specific goals, objectives, policies, or other comprehensive plan concepts that the decisions are based upon should be noted as part of the record.</p>	<p>Planning Commission and Village Board</p>	<p>Planner, Zoning Administrator</p>	<p>2005</p>
<p>Clearly identify the requirements and permitted uses within each zoning district to ensure that the neighbors and developers have a clear sense of what is and is not permitted and/or expected within each district.</p>	<p>Planner, Zoning Administrator</p>	<p>Brown County Planning</p>	<p>2005-06</p>
<p>Revise the zoning ordinance language to remove Article IV (C)(4), which allows any use that is not a listed permitted use as a conditional use in all zoning districts.</p>	<p>Planner, Zoning Administrator</p>		<p>2005-06</p>
<p>The Village's zoning ordinance should be revised to promote concepts from the comprehensive plan, such as mixed land uses and zero setback commercial development.</p>	<p>Planner, Zoning Administrator</p>	<p>Brown County Planning</p>	<p>2005-06</p>
<p>Revise the residential components of the zoning ordinance to reflect the lot size recommendations contained in the comprehensive plan.</p>	<p>Planner, Zoning Administrator</p>	<p>Plan Commission</p>	<p>2005</p>

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Review the zoning ordinance to ensure that there are no procedural impediments to the development of conservation subdivisions.	Planner	Plan Commission	2005-06
Develop a housing maintenance code to ensure an adequately maintained housing stock.	Building Inspector		2007
Adopt the shoreland-wetland zoning ordinance that the Village is currently developing and consistently enforce it to help protect the numerous wetlands and streams that traverse the Village.	Zoning Administrator	Brown County Zoning	2006
Amend the zoning ordinance to include a district that allows traditional neighborhood developments based on the model ordinance developed by the state.	Planner	UW-Extension	2007
Revise the zoning ordinance to properly address the existing shoreline development, so that all structures are not considered to be non-conforming in terms of lot sizes.	Zoning Administrator	WDNR, Brown County Zoning	2006
Review and amend the zoning ordinance regarding very large "supercenter" retail to ensure the development will fit into the Village's rural character and any impacts, such as traffic, noise, and litter, are addressed.	Planner	Brown County Planning	2006

Subdivision Ordinance

Subdivision regulations govern the process by which lots are created out of larger tracts of land. These regulations seek to ensure that the subdivisions appropriately relate to the geography of the site and existing and future public facilities. New subdivisions must also be consistent with the community vision as outlined by the comprehensive plan.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Ensure that preliminary plats, when submitted to the Village, contain all of the required information identified in Suamico's subdivision ordinance.	Planner	Brown County Planning	2005
Revise the Village's subdivision ordinance to ensure that more than just environmentally sensitive areas and other "unbuildable" areas are preserved in conservation subdivisions.	Planning Commission and Village Board	Administrator, Brown County Planning	2005
The Village should review the comprehensive plan components and recommendations and use them as a guide in the review process when considering land divisions. Whenever a decision is reached either approving or disapproving land division requests, the specific goals, objectives, policies, or other comprehensive plan concepts that the decisions are based upon should be noted as part of the record.	Planning Commission and Village Board	Brown County Planning	2005
The subdivision ordinance should be revised to ensure that new development is consistent with the comprehensive plan. This is especially important in regards to encouraging neighborhood developments that are "walkable," "livable," and "varied," as stated in the plan. The subdivision ordinance should be revised to also contain design standards for open space, street widths and connectivity, sidewalks, trails, street trees, stormwater management, and other components of the comprehensive plan.	Planner	Brown County Planning	2005-06
Identify a desired minimum lot size for conservation subdivision lots so that residents and developers will know what the Village expects.	Planning Commission	Village Board	2006

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Amend the subdivision ordinance to include standards for traditional neighborhood developments.	Planner	Brown County Planning	2007

Official Map

An Official Map is a regulatory tool utilized by a community to project and record future municipal improvements. It is commonly used to identify existing streets and planned improvements, but an Official Map can also be utilized to identify planned school sites, recreation areas, and municipal facilities. Once an area is identified on an Official Map, no building permit for a use other than the proposed use on the Official Map may be issued for that site unless the map is amended.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
An Official Map should be developed to reflect the recommendations of the Village's comprehensive plan. Items that should be mapped include transportation improvements (future street extensions and connections), future park sites, utility rights-of-way, schools, and other facilities.	Planner	Village Engineer, Public Works	2006-07
Future amendments to the Official Map should be reviewed to determine if they are consistent with the recommendations of the comprehensive plan.	Planning Commission, Village Board	Planner	2007

Capital Improvements Program

Another important device for comprehensive plan implementation is the development of a Capital Improvements Program (CIP). The program is designed to annually schedule public works projects within a specified period of time, which usually encompasses a period of five to ten years. A CIP that is consistent with the comprehensive plan will provide a monitoring tool to ensure that public works projects are located and scheduled with thorough consideration of each of the plan's chapter recommendations.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Based on the comprehensive plan's recommendations, the Village should update and review the priorities and schedules for public works projects, such as road construction and maintenance, park development and acquisition, sewage system upgrades, and water supply improvements.	Administrator, Village Engineer	Public Works, Brown County Highway	2007
Utilize the comprehensive plan's 5-year service increments when scheduling public utility and infrastructure improvements.	Village Engineer, Public Works	Administrator, Planner	2006
Annual updates to the Capital Improvements Program should occur, and these updates should be in compliance with the recommendations of the comprehensive plan.	Administrator	Planner, Village Engineer, Public Works	2007

Building and Housing Codes

A building code is a set of regulations that describes standards for the construction of new buildings or the remodeling of existing buildings. A housing code defines standards for how a dwelling unit is to be used and maintained after it is built.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Review the comprehensive plan to identify opportunities to use the enforcement of the building code as a mechanism to implement the goals and objectives of the comprehensive plan.	Building Inspector	Planner	2006

Action Step	Responsible Party/Dept.	Other Partners/ Resources	Timeframe
The Village should develop a housing code and property maintenance code to address concerns regarding substandard buildings and dwellings and their impact on surrounding properties. These codes should address concerns regarding dangerous buildings, blighting influences, neighborhood nuisances, crowding, health issues, sanitation, yard maintenance, and building deterioration on surfaces, such as paint, siding, and broken windows.	Building Inspector		2006
Contact Green Bay-based Options for Independent Living to obtain information regarding visitability improvements to new homes and provide the information to builders and developers.	Building Inspector		2006

Outdoor Recreation Facilities

The Village contains a number of park and recreation facilities. With the availability of the Suamico River and bayshore for recreational opportunities, the Village should actively seek funding to take advantage of these unique natural resources. As the Village continues to develop, it should also develop neighborhood parks for nearby residents and children to walk to, congregate at, and visit with their neighbors.

Action Step	Responsible Party/Dept.	Other Partners/ Resources	Timeframe
Update the comprehensive outdoor recreation plan to provide an overall vision for recreational uses and provide eligibility to the Village for WDNR Stewardship funds for recreational activities and land purchases.	Planner	WDNR	2005

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Begin development of the Village's comprehensive trail network consistent with the Village's recently adopted trail plan. As subdivision plats are submitted, the trail plan should be reviewed to ensure trail connections are dedicated.	Planner	Planning Commission, Trail Committee	2005
Consider the development of an active community park in the south-central portion of the Village.	Administrator, Village Board	Park Commission, WDNR	Ongoing
Work with Brown County Park Department to expand the Reforestation Camp and Barkhausen Waterfowl Preserve consistent with the Brown County Open Space and Outdoor Recreation Plan.	Administrator, Planner	Brown County Parks, WDNR, Wisconsin Coastal Management	As property becomes available
Cooperate with the WDNR regarding potential purchases or protection of critical natural habitat areas.	Administrator, Planner	WDNR, Wisconsin Coastal Management	As property becomes available
Solicit the input of the Howard-Suamico School District in identifying potential combination park/school sites, as well as in recreational programming in the Village.	Planner	Howard-Suamico School District, Brown County Planning	2005
Utilize the Future Land Use Plan map to site future neighborhood parks throughout the community.	Planner	Howard-Suamico School District	2006
Begin discussions with surrounding communities regarding the potential for joint development of parks and recreational programming.	Administrator	Public Works, Planner	2007

Erosion and Stormwater Control Ordinances

Communities can adopt erosion and stormwater control ordinances to control the impact of development on runoff, groundwater recharge, and overall water quality. The

ordinance should include standards for compliance and guidelines to assist developers in choosing appropriate stormwater management techniques. In order to provide a basis for the formulation of the ordinance, a stormwater management plan is typically developed first. The ordinance should also identify how smaller management practices can be designed to be compatible with the overall plan. The erosion control ordinance primarily addresses the reduction of sediment runoff associated with construction.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Complete a stormwater management plan for the Village of Suamico and review the plan for consistency with the general goals and objectives of the comprehensive plan and the incorporation of stormwater management facilities within the identified greenway corridors.	Village Engineer	Public Works	2005-06
Designate and train staff and revise procedures to effectively implement a stormwater management strategy.	Village Board	Administrator	2006
Meet with school and conservation groups to discuss enhancing natural erosion control measures and removing invasive plant species along the Suamico River, bayshore, and the Village's numerous wetlands.	Public Works	WDNR, Howard-Suamico School District, Conservation Clubs	2006
Amend the erosion control and stormwater management ordinance, the subdivision ordinance, and the Capital Improvements Program to be consistent with the stormwater management plan.	Village Engineer	Planner, Administrator	2007

Historic Preservation Ordinance

Historical preservation ordinances are designed to help maintain the character of historically important buildings by preserving existing structures and facades, providing alternatives to demolition, and improving the compatibility of new adjacent buildings. A historical preservation ordinance can also be a catalyst for collecting and preserving the local history of the community.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Develop a historic preservation ordinance to protect those buildings that are or potentially could be listed on the state and national registry of historic places. Preservation of historic structures in the Village will help to create and define a sense of place and identity for the Village.	Village Board	Planning Commission, Planner, Wisconsin State Historical Society	2008
Establish priorities for historic and cultural buildings and encourage rehabilitation and maintenance rather than demolition of these structures.	Village Board		2008
Inform residents of grant funding and tax credits to assist property owners in the rehabilitation and maintenance of historic structures.	Planner		2008
Work with volunteers to capitalize on the value of these historic resources and information through integration into the community park system and through local history programs with the Howard-Suamico School District.	Planner	Howard-Suamico School District	2008

Intergovernmental Cooperation

Intergovernmental cooperation is a hallmark of the comprehensive planning law. The planning process developed the base contacts for communication among the many different governmental agencies and bodies that have an interest in the future of Suamico. It is necessary for the Village to continue to maintain those contacts and keep everyone informed of information pertinent to each stakeholder.

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Meet annually with Howard-Suamico School District superintendent and board president to discuss future school needs and possible cooperative ventures in terms of combination school/park sites and programming opportunities.	Village President, Administrator	Planner, Howard-Suamico School District	2005

Action Step	Responsible Party/Dept.	Other Partners/Resources	Timeframe
Coordinate with the Howard-Suamico School District to place sidewalks along Harbor Lights and Birch Roads for the new proposed elementary school.	Public Works, Administrator	Howard-Suamico School District	2005
Hold an annual meeting with the chief elected officials from each of the surrounding communities to discuss any potential concerns or opportunities.	Village President	Administrator	2005
Begin sending out Village Board meeting agendas and minutes to the surrounding communities to improve communication and provide opportunities for input.	Administrator		2005
Stay informed of current events at the county, region, and state levels that may impact the Village.	Administrator	Village Board, Brown County Planning, Bay-Lake RPC	Ongoing
Meet with the Village of Howard to discuss opportunities for cooperation in solid waste collection.	Administrator	Village Board	2005

Potential Funding Sources

Some of the recommendations in the plan may be implemented with the help of various sources of funds besides local property taxes. There are a number of grant programs administered by state and federal agencies, including the Wisconsin Department of Administration, Wisconsin Department of Commerce, Wisconsin Department of Natural Resources, and Wisconsin Department of Transportation. At the federal level, the Environmental Protection Agency, Department of Agriculture-Rural Development, and the (U.S.) Department of Commerce-Economic Development Agency all provide sources of funding.

Typically, the grant programs require a local match. However, the local match may typically include a combination of local tax dollars, in-kind services, and/or private donations. Each grant program has its own set of guidelines regarding eligible projects, as well as financing mechanisms, and should be reviewed before applying.

In addition to the following sampling of programs, the State of Wisconsin Department of Administration maintains the Wisconsin Catalog of Community Assistance (WCCA), which provides a comprehensive list of state aid programs. The WCCA can be found at http://www.doa.state.wi.us/dhir/wcca_catalog_all.asp.

Identified on the following pages are a number of programs that may be particularly applicable to the Village of Suamico. However, this is just a sample, and a comprehensive list can be found at the link to the Wisconsin Catalog of Community Assistance.

Wisconsin Department of Administration

The Wisconsin Department of Administration (WDOA) Division of Intergovernmental Relations contains the Wisconsin Coastal Management Program (WCMP), which provides funding opportunities for shoreland preservation and accessibility along Lake Michigan and Lake Superior. With Suamico's large areas of critical shoreland wetlands and underutilized shoreline for recreation, WCMP could be a valuable partner in implementing the comprehensive plan. In the most recent 2004-2005 Coastal Management grants round, grants were available for:

- Coastal land acquisition.
- Wetland protection and habitat restoration.
- Nonpoint source pollution control.
- Coastal resources and community planning.
- Great Lakes education.
- Public access and historic preservation.

The Wisconsin Department of Administration also offers the federal HOME Investment Partnership Program (HOME). HOME was created to help produce housing opportunities for households that earn not more than 80 percent of County median income (CMI). The Department of Administration-Division of Housing & Intergovernmental Relations (DHIR) annually receives approximately \$13 million of HOME funds.

The State of Wisconsin provides HOME funds through the Division of Housing & Intergovernmental Relations to local governments, housing authorities, and nonprofit organizations through several different subprograms. The state distributes these funds through a variety of decentralized approaches using formula and competitive application processes. Former grant recipients also accumulate funds through receipt of program income. Local sponsors have considerable flexibility in developing the affordable housing opportunities that are most needed in their respective communities. Applicable programs include:

- Homebuyer Rehabilitation (HBR) Program.
- Homeowner Rehabilitation & Accessibility (HRA) Program.

- Rental Housing Development (RHD) Program.
- Rental Rehabilitation Program (RRP).
- Wisconsin Fresh Start Program.

Detailed information regarding Wisconsin Coastal Management, HOME, or other programs offered through the Wisconsin Department of Administration can be found at www.doa.state.wi.us or the Bay-Lake Regional Planning Commission at www.baylakerpc.org.

Wisconsin Department of Commerce

The Wisconsin Department of Commerce (COMMERCE) has a broad range of financial assistance programs to help communities undertake economic development. COMMERCE maintains a network of area development managers to offer customized services to each region of Wisconsin (Brown County is located in Region 3).

COMMERCE-administered programs include:

- **Brownfields Initiative** - Provides grants to individuals, businesses, local development organizations, and municipalities for environmental remediation activities for brownfield sites where the owner is unknown, cannot be located, or cannot meet the cleanup costs.
- **Community-Based Economic Development Program (CBED)** - Designed to promote local business development in economically distressed areas. The program awards grants to community-based organizations for development and business assistance projects and to municipalities for economic development planning. The program helps the community or community-based organizations plan, build, and create business and technology-based incubators, and it can also capitalize an incubator tenant revolving loan program.
- **CDBG-Blight Elimination and Brownfield Redevelopment Program** - Can help small communities obtain money for environmental assessments and remediate brownfields.
- **CDBG-Emergency Grant Program** - Can help small communities repair or replace infrastructure that has suffered damages as a result of catastrophic events.
- **CDBG- Public Facilities (CDBG-PF)** - Helps eligible local governments upgrade community facilities, infrastructure, and utilities for the benefit of low-moderate income residents.
- **CDBG-Public Facilities for Economic Development (CDBG-PFED)** - Offers grants to communities to provide infrastructure for a particular economic development project.
- **CDBG-Economic Development (CDBG-ED)** - Provides grants to communities to loan to businesses for startup, retention, and expansion projects based on the number of jobs created or retained.

- **Community Development Zone Program** - A tax benefit initiative designed to encourage private investment and job creation in economically distressed areas. The program offers tax credits for creating new fulltime jobs, hiring disadvantaged workers, and undertaking environmental remediation. Tax credits can be taken only on income generated by business activity in the zone.
- **Wisconsin Main Street Program** - A comprehensive revitalization program designed to promote the historic and economic redevelopment of traditional business districts in Wisconsin. Communities are selected to participate on an annual basis and are judged on a submitted application. These communities receive technical support and training needed to restore their main streets to centers of community activity and commerce.

Additional information regarding the brownfields or CDBG programs can be found at <http://www.commerce.state.wi.us/MT/MT-COM-4200.html>. Information regarding the Wisconsin Main Street Program can be found at <http://commerce.state.wi.us/CD/CD-bdd-overview.html>. The Wisconsin Department of Commerce Area Development Manager (Region 3 in Brown County) or Bay-Lake Regional Planning Commission can also answer questions about these programs.

Wisconsin Department of Natural Resources

The Wisconsin Department of Natural Resources offers a number of grant programs that can be used to provide additional recreational opportunities to residents of the Village of Suamico. The Village should contact the Northeast Region Office of the WDNR to determine eligibility and availability if the Village decides to pursue any of the following grant programs:

Stewardship - Aid for the Acquisition and Development of Local Parks (ADLP)

The ADLP program funds are available to acquire land, rights in land, and develop public outdoor recreation areas for nature-based outdoor recreation purposes. Funds are allocated on a DNR regional basis so applicants compete only against other applicants located in their region.

Stewardship - Urban Rivers

Funds are available to acquire land, rights in land, or develop shoreline enhancements on or adjacent to rivers that flow through urban or urbanizing areas in order to preserve or restore urban rivers or riverfronts for the purposes of economic revitalization and nature-based outdoor recreation activities. Funds are allocated statewide so applicants compete against other applicants statewide in the project selection process.

Stewardship - Urban Greenspace

Funds are available to acquire lands to provide natural space within or near urban areas, protect scenic or ecological features, and provide land for nature-based outdoor recreation, including noncommercial gardening. Funds are allocated statewide so applicants compete against other applicants statewide in the project selection process.

Acquisition of Development Rights

Funds are available to acquire development rights (easements) in areas where restrictions on residential, industrial, or commercial development would enhance nature-based outdoor recreation.

Land and Water Conservation Fund (LAWCON)

LAWCON is a federal program administered through the WDNR. However, projects funded under LAWCON are not restricted to nature-based outdoor recreation projects as the Stewardship program funds are. Eligible projects include:

- Land acquisition.
- Development of recreational facilities.
- See eligibility list on WDNR website for ADLP program eligible projects.

Recreational Trails Act (RTA)

Recreational Trails Act (RTA) is a federal program administered through the WDNR. RTA funds may only be used on trails that have been identified in or which further a specific goal of a local, county, or state trail plan included or referenced in a statewide comprehensive outdoor recreation plan required by the federal LAWCON program. Eligible projects in order of priority are maintenance and restoration of existing trails, development and rehabilitation of trailside and trailhead facilities and trail linkages, construction of new trails (with certain restrictions on federal lands), and acquisition of easements or property for trails.

Additional information regarding community assistance programs can be found at the following WDNR Bureau of Community Financial Assistance (CFA) website: <http://www.dnr.state.wi.us/org/caer/cfa/bureau/programs.html>.

Wisconsin Department of Transportation

In addition to the Local Road Aids Program, which the Village already participates in, the Wisconsin Department of Transportation has additional programs to help fund transportation activities in the Village.

- **Local Roads Improvement Program (LRIP)** - Assists local governments in improving seriously deteriorating county highways, town roads, and city and village streets. As a reimbursement program, LRIP pays up to 50 percent of total eligible costs, with local governments providing the balance.
- **Surface Transportation Program-Rural (STP-R)** - Allocates federal funds to complete a variety of improvements to rural highways eligible for federal aid (primarily county highways classified higher than rural minor collectors).
- **Flood Damage Aids** - Assist local governments with improving or replacing roads and roadway structures that have sustained major damage from flooding. The

program helps defray the costs of repairing major flood damage to any public highway, street, alley, or bridge not located on the State Trunk Highway System.

- **Wisconsin Information System for Local Roads (WISLR)** - Ongoing effort that provides WisDOT and local governments convenient and secure access to comprehensive geographic information system data on Wisconsin's road network. Local units of government and counties are required to submit pavement ratings to WisDOT on a biennial basis.

Additional information regarding grant programs and other resources administered by the Wisconsin Department of Transportation can be found at the Programs for Local Governments web page: <http://www.dot.state.wi.us/localgov/index.htm>.

Comprehensive Plan Review and Update

Planning is not static. It is a continuous, ongoing process that is subject to change. It is also at the mercy of many forces over which a municipality has very little or no control (economic conditions, weather, birth rates, mortgage rates, etc.). Therefore, if the Village's comprehensive plan is to remain a useful document, the plan should be reviewed on an annual basis to ensure that it reflects the conditions present at the time and any changes and developments that may have occurred over the last year.

Action Steps:

1. The public will be notified and provided an opportunity to comment on proposed amendments to the comprehensive plan. The Village should consider neighborhood opinion while keeping in mind the goals of the Village as a whole in evaluating how a proposed amendment would meet the goals and objectives of the comprehensive plan. Options for soliciting public opinion could include direct mail survey forms, neighborhood meetings, and open house meetings.
2. Criteria should be adhered to when considering amendments to the comprehensive plan. Amendments should be approved only if they are determined to be in the public's best interest, and this determination should be based on a review of all applicable principles from the following:
 - How the proposal is more consistent with applicable policies of the comprehensive plan than the existing designation.
 - How the proposal is more consistent with each of the following objectives than the existing designation. Consistency is not required where the objective is clearly not applicable to the type of proposal involved.
 - Encourage the development of distinct neighborhoods served by commercial nodes and discourage urban sprawl and strip commercial development.
 - Provide uses that are functionally integrated with surrounding areas and neighborhoods in terms of local shopping, employment, recreational, or other opportunities.
 - Provide development that is compatible and integrated with surrounding uses in terms of scale, orientation, pedestrian enhancements, and landscaping.
 - Conserve or enhance significant natural and historical features that help maintain the Village's rural character.

- Provide adequate transportation, water, sewer, and other public services.
 - Provide significant economic development opportunities and broadening of the Village's economy.
 - Provide for the formation and enhancement of neighborhoods.
3. Amendments should demonstrate that a substantial change in circumstances has occurred since the original designation.
 4. Scope of Review. The review and evaluation of proposed comprehensive plan changes should consider both the likely and possible future use of the site and associated impacts.
 5. Cumulative Impacts. The review of individual comprehensive plan amendments should consider the cumulative transportation, land supply, and environmental impacts of other plan amendments proposed within the same annual cycle.
 6. The Village of Suamico Planning Commission should prepare a brief annual report. This report should summarize how the comprehensive plan was used to direct major spending, regulatory, and construction decisions, how development has or has not coincided with the recommendations of the plan, and how community circumstances have changed which have necessitated recommendations for appropriate comprehensive plan amendments by the Village Board.
 7. The Village should consult annually with other governmental agencies and neighboring communities to get their input regarding how their community activities relate to the recommendations of the comprehensive plan.
 8. The Village should complete a formal review and update of the entire comprehensive plan at least once every five years. Updated information should include at minimum new statistical information, existing land use, population projections, 5-year service increments, and a Future Land Use map. Based on this review, revisions should be made to sections of the plan determined to be out of date and sections that are not serving their intended purpose.
 9. At a minimum of once every ten years, the plan should be comprehensively rewritten using the formal process prescribed by the State Comprehensive Planning Law, including the maximum amount of public input, notification of neighboring/overlapping jurisdictions, 30-day review period, public hearing, and ordinance adoption.

APPENDIX A
**Public Participation Process for the Suamico Comprehensive
Plan**

Public Participation Process for the Suamico Comprehensive Plan

The Town of Suamico Comprehensive Plan will include several public participation components. These components are summarized below.

Citizens Advisory Committee

At the beginning of the plan development process, the town will appoint representatives to a citizens advisory committee. The advisory committee will advise staff during the plan development process, review plan recommendations, discuss the plan elements with public meeting participants, and recommend a final draft of the comprehensive plan to the town's planning commission and board. These meetings will be open to the public.

Town of Suamico Website

Residents will be encouraged to log onto the town's website to obtain information about each plan element and provide input to the process. The comprehensive plan component of the website will be established at the beginning of the process to allow people the chance to contribute immediately.

Flier

To officially start the planning process, a flier will be mailed to each Suamico household that summarizes the process and provides survey questions for people to answer to get them thinking about planning issues. The flier will also invite residents to a community visioning session that will occur at the beginning of the planning process.

Community Visioning Session

Once the project is underway, a community visioning session will be held during an evening to establish many of the goals and objectives that will serve as the foundation of the comprehensive plan. All Suamico residents will be invited to attend the sessions to offer and discuss their ideas of how the town should grow over the next several years.

Stakeholder Interviews

After the first draft of the plan's goals and objectives is completed, staff will conduct interviews with elected officials and other residents who make decisions for the community to determine how they feel about the goals and objectives and if additional issues should be addressed in the plan.

Public Open House Meetings

Once the survey, visioning session, stakeholder interviews, and other foundation-building exercises are completed and the plan is starting to take shape, at least one public open house meeting will be held to present various sections of the plan. Meeting participants will also have the opportunity to discuss the recommendations with planning staff and advisory committee members and to suggest modifications.

Public Hearing

Following the open house meetings and the approval of the draft document by the citizens advisory committee, a public hearing will be held to receive additional input from the public.

Planning Commission and Town Board Meetings

Following the public hearing, the draft plan will be presented to the town's planning commission and board. These meetings will be open to the public and will be intended to discuss and adopt the plan.

APPENDIX B

**Resolution #05001 - Village of Suamico Planning
Commission**

RESOLUTION #05001

VILLAGE OF SUAMICO PLANNING COMMISSION

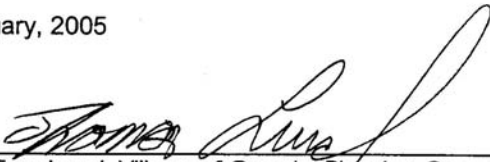
WHEREAS, the Village of Suamico Citizens Advisory Committee has developed the Village of Suamico Comprehensive Plan to guide and coordinate decisions and development within the Village in accordance with Wis. Stat. 66.1001; and

WHEREAS, the comprehensive plan was prepared by the Brown County Planning Commission in accordance with the contract with the Village of Suamico and State of Wisconsin; and

WHEREAS, several public meetings were held to obtain public input during the development of the comprehensive plan, and these meetings included a public visioning session on October 29, 2003, monthly citizens advisory committee meetings, an open house meeting on November 11, 2004, and a public hearing on December 6, 2004.

NOW, THEREFORE, BE IT RESOLVED, that the Village of Suamico Planning Commission recommends to the Village of Suamico Board of Trustees the adoption of the Village of Suamico Comprehensive Plan.

Approved this 12th day of January, 2005



Tom Lund, Village of Suamico Planning Commission Chair

APPENDIX C

**Ordinance 2005-03 – Ordinance to Adopt the Village of
Suamico Comprehensive Plan**

ORDINANCE 2005-03

ORDINANCE TO ADOPT THE VILLAGE OF SUAMICO COMPREHENSIVE PLAN

The Village Board of the Village of Suamico, Wisconsin, does ordain as follows:

Section 1. Pursuant to Section 62.23(2)(3) of the Wisconsin Statutes, the Village of Suamico is authorized to prepare and adopt a comprehensive plan as defined in Section 66.1001(1)(a) and 66.1001(2) of the Wisconsin Statutes.

Section 2. The Village Board of the Village of Suamico, Wisconsin, has adopted written procedures designed to foster public participation in every stage of the preparation of a comprehensive plan as required by Section 66.1001(4)(a) of the Wisconsin Statutes.


Section 3. The Village of Suamico Planning and Zoning Commission has adopted a resolution recommending to the Village Board the adoption of the document entitled "Village of Suamico Comprehensive Plan," which contains all of the elements specified in Section 66.1001(2) of the Wisconsin Statutes.

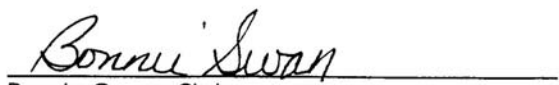
Section 4. The Village of Suamico has held at least one public hearing on this ordinance in compliance with the requirements of Section 66.1001(4)(d) of the Wisconsin Statutes.

Section 5. The Village Board of the Village of Suamico, Wisconsin, does by enactment of this ordinance formally adopt the document entitled "Village of Suamico Comprehensive Plan" pursuant to Section 66.1001(4)(c) of the Wisconsin Statutes.

Section 6. This ordinance shall take effect upon passage by a majority vote of the members-elect of the Village Board and upon publication required by law.

Adopted this 24 day of January, 2005


Tom Lund, President
Village of Suamico


Bonnie Swan, Clerk
Village of Suamico

Date of publication/Posting

1-26-05