

TOWN OF  
**AVON**  
COMMUNITY DEVELOPMENT PLAN



JUNE, 2004

AVON PLANNING BOARD  
&  
OLD COLONY PLANNING COUNCIL  
70 SCHOOL STREET  
BROCKTON, MASSACHUSETTS  
02301

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The Plan also draws on the 2001 Avon Master Plan, the 1999 Open Space and Recreation Plan, and the appended 2002 Avon East-West Traffic Study prepared by the Council.

The Plan was supported by funds granted under the Commonwealth of Massachusetts' Executive Order 418 administered by the Community Development Plan Inter- Agency Working Group comprised of the Executive Office of Environmental Affairs, the Department of Housing and Community Development, the Department of Economic Development, and the Executive Office of Transportation and Construction.

The Council thanks the Avon Planning Board, the other town boards and departments, and the participating citizens for their interest and assistance during this project.

Cover: One of Avon's assets; the Robbins House Museum in Avon Center  
Photo by Susan McGrath



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## **Background / Vision Statement / Assets and liabilities**

### **Background**

The following Avon Community Development Plan was produced with funds granted under the Commonwealth of Massachusetts' Executive Order 418 administered by the Community Development Plan Inter-Agency Working Group comprised of the Executive Office of Environmental Affairs, the Department of Housing and Community Development, the Department of Economic Development, and the Executive Office of Transportation and Construction.

The purpose is to focus on resources, opportunities and needed actions in the key areas of Resource Protection and Open Space, Housing, Economic Development, and Transportation. It is not a Master Plan. Instead it builds on the 2001 Avon Master Plan including issues raised in public meetings, and on the comprehensive work done on topics such as community facilities, transportation, development of goals and objectives, and implementation techniques. It does so in order to produce an image-based, action-oriented document highlighting actions needed in these key areas.

The Plan particularly focuses on work needed to gain full Division of Conservation Services (DCS) approval of the Town's 1999 draft Open Space and Recreation Plan, and on economic development potential.

The Plan first examines the town's natural resources, considers factors affecting appropriate development, and shows the overall suitability of the town's remaining vacant land for various uses on Figure I-5, Resource Protection/ Open Space / Land Suitability.

In accord with the DCS review of the 1999 Open Space Plan, the CD Plan then closely reviews the degrees of protection afforded the town's open space and recreation resources, evaluates the accessibility of these resources under the Americans with Disabilities Act, discusses the significance of population patterns and resources shared with adjacent communities, notes needs and opportunities, and maps the findings and recommendations. These are shown on Figure I-7 "Resource Protection, Open Space, and Recreation Suitability and Recommended Actions". The chapter responds to the areas DCS listed as needing strengthening and it extends some of the proposals in that draft. It could be submitted as an amendment to the 1999 Draft, but might better serve as the basis of a new 2004 Open Space and Recreation Plan.

Next, the housing section updates the town's housing inventory and reviews trends since 2000, finding evidence of continuing shortages of moderate-cost sales and rental housing. It examines the evolving Avon housing market, builds on the Land Suitability Map in the Open Space and Resource Protection Element to suggest suitable sites for needed housing, and outlines potential actions to meet these needs. The findings and recommendations are shown on Figure II-1 "Housing Suitability / Recommended Actions."

After this the Plan looks closely at the potential of Abington's remaining land zoned, or potentially zoned, for commercial and industrial uses. It updates the inventory to reflect recent development, reviews post 2001 actions to guide and encourage such development, examines the potential of the remaining sites for various uses with present and prospective water supplies and waste water treatment facilities; and recommends needed actions. The results are shown on Figure III-1 "Economic Development Suitability / Recommended Actions".

The Plan then reviews the town's circulation system, including data on traffic volumes and accident rates, discusses the functioning of the overall system, notes needs, and briefly discusses alternatives. It draws on the Master Plan and on the comprehensive "2003 Avon East-West Traffic Study." The study itself is in an appendix. The recommendation are shown on Figure IV-1 "Recommended Transportation Improvements."

The final Community Development Plan, Chapter V, pulls these four sections together. It reflects reconciliation of any conflicts between potential uses of a given site. The final recommendations are listed in Chapter V and in the respective sections. For clarity, the Plan only shows patterns reflecting suitable uses while the maps of recommended actions in the respective chapters show the specific proposals. The Plan shows these more general suitable land uses against the background of existing land uses. Thus it is like the future land use plan in a conventional Master Plan, except that it leaves much of the undeveloped land in the Default Low Density category.

### **Vision Statement**

The following Town Vision Statement reflects discussions with the Planning Board, members of town staff and the citizens during preparation of the recent Master Plan and final review by the Planning Board. The process involved a series of workshops reviewing past studies and seeking concerns regarding housing, open space protection, sewage treatment and disposal, long term water supplies, industrial park circulation, land use conflicts and grow management. To structure responses, staff distributed a list of prospective goals and objectives in the areas listed above to be scored by degrees of agreement or disagreement.



## Vision of a Future Avon

No one vision statement was drafted during Master Plan preparation, but the implicit vision emerging from the process was one of:

A future Avon building on the best features of the present; a largely middle-income slowly-growing town of neighborhoods with well-preserved moderate-sized houses, some grander new ones, and an occasional multi-unit development near the Center. These neighborhoods house a varied population attracted by Avon's charm, reasonable housing costs and well-regarded school system.

The town is embraced by major open spaces at the Page Street woodlands and the expanded D.W Field Park, and leavened by open spaces between neighborhoods and along streams, particularly along Trout Brook.

With the increasing varied development along Rte. 24 potentially allowed by local sewerage, and a lively, enhanced commercial / civic center at Goeres Square, many residents find rewarding work within the town, and taxes remain low. Others commute elsewhere by car, bus or train. Traffic through the town is eased by improved east-west connections, and better connections to industrial / commercial destinations in Stoughton and Randolph.

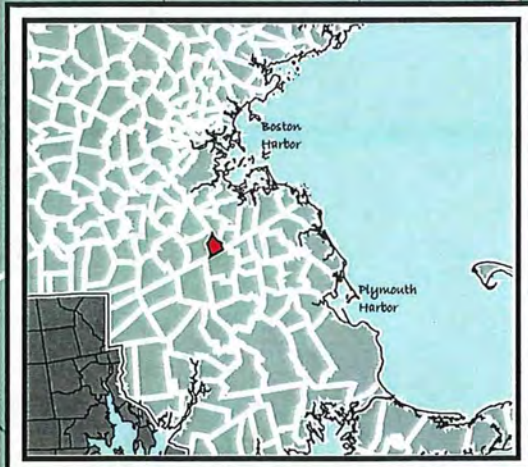
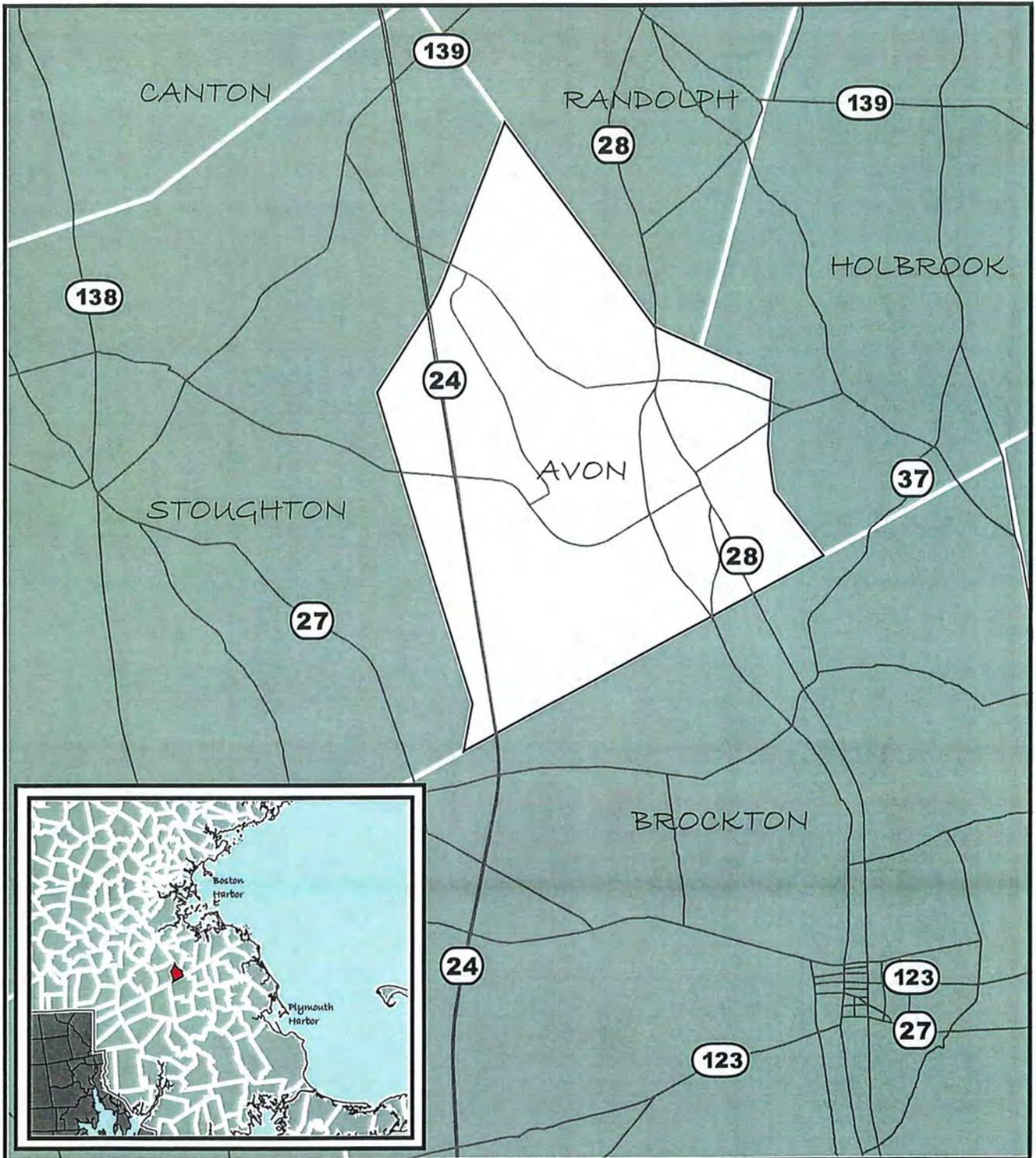
On summer evenings many residents walk or ride the bike paths over to the Center for an evening of music, games and relaxation at DeMarco Park, the Civic Center bandstand, or the Blanchard Tavern. Others enjoy the ballfields, neighborhood totlots, and the new wheels park, along with the many activities at D.W. Field Park; running, walking, riding, picnicking, escaping the heat swimming at Waldo Lake, and later skating there in the winter.

## Assets and Liabilities

Avon's assets continue to outweigh its liabilities as shown below.

Assets	Liabilities
Comfortable small town character	Limited Town service capacity
Tradition of strong, active local leadership and citizen participation	Static community, slowly losing population
Convenient location, near highways, commuter rail and service by two bus systems offering good access to Boston	Traffic on Rte. 28 and Page. St. and lack of bus service through the two Industrial and Merchants' Parks
	Lack of a local train station
Good, compact School System	Small student body limiting academic and activity offerings
Large non-residential tax base allowing high-quality services and a very low tax rate	No sewer System and some areas where soils have severe septic limitations
Moderate cost older housing stock	Little new housing
Adequate present water supply	Uncertain long-term water supply adequacy
Major scenic and recreational resources and potential of D. W. Field Park	Present lack of swimming opportunities
Compact town center with a good mix of civic uses and potential for commercial expansion	Limited land for growth
Unique local cultural opportunities such as Music at the Historic Blanchard Tavern and Robbins House Museum and the Baptist Church's Mozaic Room and the nearby Fuller Crafts Museum and Brockton Fire Museum	

# Locus Map Town of Avon



Major Highways  
Avon  
Surrounding Communities  
Rhode Island



Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD



# Aerial Photo



0.5 0 0.5 1 Miles



MassGIS/MHD 1/2 Meter  
Color Ortho flown April, 2001



June, 2004



Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD



## Chapter I

### Open Space and Resource Protection Element

This section reviews Avon's natural resources; identifies the overall suitability of the town's limited undeveloped land in varied parts of the town for different land uses and resource protection; and then makes more detailed recommendations in the areas of resource protection and the preservation / provision of open space and recreation lands. The resources and suitability patterns are shown on Figure I-5 "Resource Protection / Land Suitability." For clarity more specific proposals are on Figure I-7, "Open Space and Recreation Suitability / Recommended Actions.

In addition to doing basic Community Development Plan tasks, this section responds to the Division of Conservation Services' (DCS) June 30, 1999 letter setting requirements for final approval of the 1999 Open Space and Recreation Plan. Such approval is needed for the Town to receive open space and recreation grants. Accordingly this report extends and complement the town's October 1999 Open Space Plan. To do so it expands the Regional Context, Environmental Inventory, and Resource Protection Needs sections; maps the Protected and Unprotected Lands of Open Space and Recreation Interest, clarifies degrees of protection of various holdings, evaluates the handicapped accessibility of present conservation and recreation holdings, adds related recommendations, updates the Five – Year Action plan, and produces a new GIS-based Action Plan map in the form of the "Resource Protection, Open Space and Recreation Suitability / Recommended Actions" map. These actions are also shown on the final Community Development Plan.

#### A. Regional Context / Background

##### 1. Regional Setting

Avon is a small residential / commercial- industrial town of 4.57 square miles (2880 acres) and a Year 2000 population of 4,443. It is adjacent to the cities of Brockton and the towns of Stoughton, Holbrook, and Randolph. It is a suburb of both Brockton and Boston, and has commuter rail service to Boston via stations in Brockton, Stoughton and Randolph. It includes State Route 28 and the north-south limited Route 24 which in turn connects with the major circumferential limited-access Route 128 one community to the north, and with the outer circumferential Route 495, three communities to the south. Edward Harrison Boulevard is a major east-west road in Avon running from the Stoughton town line and Rte. 24 to Route 28, leaving further east-west movement to Holbrook and beyond via local East Spring Street.

Bus service is available from the Massachusetts Bay Transportation Authority (MBTA) and Brockton Area Transit (BAT) Authority. These run to the MBTA Ashmont Red Line

Station, and BAT connects Avon to Brockton and limited adjacent areas. There is also rail and truck freight service. Boston and Providence are less than one hour away. The town's strategic location, continuous economic growth, and commercial-industrial developments such as the Avon Industrial Park and the Avon Merchants Park have made it a major employment center. Similarly, the restoration of commuter rail service through Brockton and Randolph has made Avon more desirable as a Boston commuter community.

The town is almost entirely in the Taunton River Basin, being largely drained by Beaver Brook which flows to the Avon Reservoir and on to the Salisbury Plain River, and by other streams flowing to Trout Brook and on to the Salisbury Plain River en route to the Taunton River. A small area in the northeastern corner of the town drains to the Boston Harbor Basin via the three Swamp Brook, the Monatiquoit River and ultimately the Weymouth Fore River. Avon is at the top of each basin and, accordingly, the streams are small and flows are limited.

Shared resources include the City of Brockton's D.W Field Park, the Beaver Brook system, wooded wetlands along the Avon / Randolph border, and water recharge areas along the Trout Brook. The Park has 735 acres of ponds, lakes, dams, woods, a golf course and an encircling parkway. Much of the it, 238.26 acres, is in Avon, including the northernmost pond, the Brockton Reservoir. This supplies the city with about .8 Million Gallons / Day of drinking water. The City has recently acquired much adjacent land to protect the Reservoir and, in effect, to expand the Park, as is discussed later, and the Town is pursuing a remaining major parcel east of the Reservoir.

Beaver Brook emerges from tributaries in Stoughton and Avon, feeds the Avon Reservoir and then flows to the Taunton River via the Salisbury Brook and Salisbury Plain River as noted above. Its quality is very important. Actions to protect it are its inclusion in the Town's Water Supply Protection Zoning District (though Avon does not draw on the Reservoir), a DEP-funded joint Avon-Brockton storm drainage retrofitting project coordinated by the Old Colony Planning Council in a portion of the Avon Industrial Park, and enforcement of Wetland Protection Act requirements where the Brook runs through the Avon Merchants Park. The City has been studying related opportunities for further protective storm drainage improvements in the Industrial Park.

Wooded wetlands bracket the Avon / Randolph border with discontinuous holdings by each town (e.g. Avon's item B7 in the Inventory). Other areas abutting these holdings or the new DeMarco Park are proposed for acquisition in the 2001 Avon Master Plan.

The Zone II water recharge area for the town's Trout Brook wells extends south into Brockton. The aquifer is not taped by Brockton, but activities in the city could affect Avon's water supply. For that reason projects like the existing Champion City construction debris handling facility and the proposed solid waste transfer facility require close



examination and monitoring. Similarly, the Town supports the City's proposed water supply protection ordinance which would protect Brockton's portions of the Zone II recharge areas for local wells in Avon and West Bridgewater.

The town's topography is low-lying, with many small streams and related wetlands, and limited relief ranging from < 120' msl at Trout brook on the Brockton to 280' at the highest point in the Industrial Park to the North.

Related plans are the 2001 Avon Master Plan leading to this Community Development Plan; the 1999 Avon Open Space Plan, the 1990 Storm Drainage Improvements Study, the 1974 Avon Master Plan; the 1964 Report on the Storm Drainage System, the 1964 Avon Master Plan, related studies in Stoughton, Randolph, and Holbrook, and the Old Colony Planning Council's 1999 Regional Land Use and Policy Plan.

## 2. History of the Community

According to "A History of Avon Massachusetts 1720-1988" by William F. Hanna, in 1630, the Indian chief Chicataubut, sold the English the right to settle Dorchester, south of the top of Blue Hill. After the chief's death, his brother Kitchamakin extended the boundary still further southward, all the way to the Plymouth County line. This "New Grant," as it was called, gave the town of Dorchester title to over 40,000 acres, making it the largest town in New England. In 1726 Dorchester's South Precinct, holding the present Stoughton, Avon, Sharon, Canton and Foxborough, was set aside and incorporated under the name Stoughton.

The part of Stoughton that later became Avon was known as East Stoughton. The shoe industry was the major employer in the community. In 1869 there were eight boot and shoe factories and a hotel East Stoughton. Feeling isolated from the rest of Stoughton and ill served by it, residents seceded and established the new town of Avon. Residents named the town in honor of Shakespeare's home town and incorporated in 1888. They felt closer to Brockton never pursued a plan to be annexed by the City.

The number of shoe firms in Avon steadily diminished from the final quarter of the nineteenth century on but hundreds of townspeople continued to work in the shoe trade locally in one of Brockton's shoe factories. The shoe industry further declined after World War II. Then Route 24 was built providing easy access to the new Route 128 and during the 1950's and early 1960's Avon became a "bedroom community" oriented toward Boston. The town lost factory workers, household workers and laborers, while it gained professionals, skilled blue collar workers and employees engaged in the public service sector.

The population expanded greatly in the post war years reaching 5,295 in 1970 and then declined to 4,443 by 2000. Growth was slowed or reversed by a limited water supply and a lack of buildable land due to limited capacity for on-site sewage disposal, but build out analyses have found that significant growth is still possible, particularly with outside water sources and a possible wastewater disposal agreement with Brockton.

Just as residential building in the town was slackening, industrial and commercial construction was increasing. The 1956 Town Meeting created the Avon Industrial and Development Commission and the modern industrial/commercial history began with the 1966 creation of the Avon Industrial Park. This capitalized on its extensive undeveloped land, some of it challenging wetlands, and on its immediate proximity to the new Rte. 24. Under strong local leadership the town built Bodwell Street, the main access road through the Park and accepted it as a public way in 1967. This road facilitated subdivision and development of adjacent lands by private developers. The Park further succeeded by concentrating on distribution activities and industries with minimal water or sewer needs. In 1984 the Avon Industrial Park West was begun with some public support for the extended and looped water distribution system. It soon evolved into the very successful Avon Merchants Park “Big Box” retail center.

The town’s industrial/commercial tax base is a very high 55% of the total valuation. This has kept property taxes very low, making Avon an affordable place to live while giving it the capacity to support good public facilities and services including high quality schools.

### 3. Population Patterns

Avon has a stable or slowly-declining population with many skilled workers and professionals, but a median income slightly below the regional median. The population is slightly older than that in the region median and includes few minority group members and relatively few children.

Avon Population Trends / Projections 1960 – 2025

	1960	1970	1980	1990	2000	2010	2020	2025
Population	4,301	5,295	5,026	4,558	4,443	5,079	5,340	5,470
Change	N/A	+23.1%	-5.1%	-9.3%	-2.5%	+13.6%	+5.1%	+1.9%

Source: Data and projections from the OCPC Community Information and Data Book, 2002

The decline in population is thought to reflect the limited turnover of housing as older households remain in place due to the town’s low tax rate and congenial setting, along with the typical reduced household size among new families. Even with the expected reversal of recent population loss, the projections leave the town with little absolute growth despite continuing low-level housing development.

### Incomes

The town’s 1999 median household income of \$50,305 was just below the state-wide figure of \$50,502, and below the respective Brockton Primary Metropolitan Statistical Area (PMSA) and Old Colony region figures of \$52,058 and \$58,269 respectively. This is a change from 1989 when the town’s income of \$42,730 far exceeded the state and PMSA



figures of \$36,952, and \$37,403, and was slightly above the Region's \$42,183. This may reflect an aging population with a higher proportion living on lower retirement incomes.

Avon remains a solid middle class community. However 292 persons, or 6.6 percent of the population were living in poverty in 1999, as were 33 people or 4.4% of the population over the age of 65. The overall figure was well below the state level of 9.3% and just slightly higher than the OCPC's 5.05 %. However it represented an increase over the 188 persons and 4.1% of 1989. The Year 2000 block group data shows that no single part of the town accounts for the majority of the population living in poverty.

#### Population Below Poverty Level in Avon By Block Groups

	Total Persons	<u>Under 18</u>	<u>% Under 18</u>	<u>18-64</u>	<u>% 18-64</u>	<u>Over 65</u>	<u>% Over 65</u>
BG1	55	27	49.1%	19	34.5%	9	16.4%
BG2	56	31	55.4%	20	35.7%	5	8.9%
BG3	103	49	47.6%	47	45.6%	7	6.8%
BG4	23	17	73.9%	6	26.1%	0	0%
BG5	55	11	20.0%	32	58.2%	12	21.8%

(2000 U.S. Census)

#### Age Structure

The median age in Avon was 40.2 years as of 2000, a considerable increase over the 35.7 years of 1990. Even then the town had an older median age than the region (33.5) or the state (33.6). As noted above, this aging population could reflect the town's favorable industrial / commercial tax base and the resulting low taxes that discourage residents from leaving the town or selling to younger families. Like poor families, the elderly are distributed throughout the town, though there is a slight concentration in Block Group 5 reflecting the senior citizens housing there. Block groups with higher percentages of people under 18 usually have a smaller proportion over 65+, but all neighborhoods have significant numbers in all age groups.

#### Ethnicity/ Diversity

Since 1980, Avon's minority population has grown, slightly increasing the town's diversity. While the population decreased from 5,026 in 1980 to 4443 in 2000, the number of Blacks, American Indians, Asian/Pacific Islanders, Others and Hispanics of all races, rose as shown below. None-the-less the town remains overwhelmingly (93.6%) white with Afro-Americans the next largest group at 3.7%. Past data has show the Afro-Americans with a higher median household income than the Whites ( \$52,343 vs. \$46,644 in 1989), probably reflecting that needed to buy houses in the recent market.

These minority groups are found throughout the town and are so few as to suggest no locational preference for culturally-based recreation facilities.

### Avon's Population by Race/Ethnicity 1980-2000

Year	Total	White	Black	Native Am..	Asian /Pac Islander	Other	Hispanic Any Race
1980	5,026	4,957	41	1	18	9	20
1990	4,558	4,411	102	9	26	10	36
2000	4,443	4,152	166	12	41	34	64
2000%	100.00.	93.5	3.7	.3	.9	.8	1.4

.Source: State Data Center, MISER and U.S. Census 2000

#### Employment

The total number of Avon citizens employed in 1999 was 2,237. Educational, health and social services was the largest category, employing 430 people or 19.2% while 287 people, 12.8%, worked in the retail trade; 239 worked in manufacturing ,10.7%; 222 people, 9.9%, worked in Professional, scientific, management, administrative, and waste management services; 8.8% worked in construction; and 8.1% worked in real estate, finance, insurance or rental/leasing. Other large sectors of employment in Avon are transportation, warehousing and utilities,7.7%; and wholesale trade, 5.5%. Less common occupations are farming, fishing and forestry, 0%, information services, 3.4%; public administration, 4.1%; and arts, entertainment, recreation, accommodation and food services, 4.2%. Thus a majority of Avon's workers are in professional, managerial, sales and service, or executive job areas, while only 10.7% are in the formerly strong manufacturing sector. This is characteristic of a relatively affluent population.

The town offers various opportunities for employment. The Avon Industrial Park and Avon Merchants Park combined with the businesses along Route 28 provided 6,786 jobs according to 2000 U.S. Census. Most of these jobs are manufacturing, distribution, heavy commercial uses and trade. This concentration of businesses have made the town a major employment center. However, as is true in many communities, most residents (85.7%),commute to jobs elsewhere, while 95% of the local jobs are held by people commuting in from other communities.

#### **Significance**

The projected 23.15% growth from 4,443 in 2000 to 5,470 by 2025 implies considerable pressure on the town's remaining open spaces if it continues at the recent rate of 25,000 to 40,000 square feet consumed per household. Such low-density growth may leave some backland untouched and lessen the perceived need for local open space, but the large lots leave little wild land. The growing population will increase demand for recreation resources, while the increasingly low-density development will consume /natural areas and require greater open space holdings.

The differences between age groups is slight town wide. Thus the 2000 population under 18 years of age ranged only from 18.5%.in Block Group (BG) 5 in the asternmost portion



of the town, to 23.% to the adjacent block Groups 2 and 3 to the west. Since each area has diverse neighborhoods, the slight difference in the proportion of youth does not change the locational pattern of facility needs.

Similarly the proportion of the population over 65 years of age ranged only from 14.3% in the extensive northernmost BG 1, to 22.4% in BG 5. In all, the Block Groups contain enough diversity that BG data alone does indicate local patterns of needs or interests.

### **Implications for Needs**

#### **Town-wide Open Spaces**

The diversity within neighborhoods, and Avon's compactness combined with potential growth and change make it more important to provide some open spaces near most existing or growing neighborhoods, than to try to meet very localized needs determined by age or income levels or other social patterns. These factors also make it important to site one-of-a-kind facilities where they are generally accessible or to improve safe access to town-wide facilities like D.W.Field Park.

### **B. Factors in Overall Land Suitability for Uses other than Open Space / Recreation and Resource Protection**

#### **1. Land Use Considerations**

##### **(a.) Present Patterns**

The town's primary land use is residential and the greatest proportion of this is in detached single-family home development. Because most of the buildable land in town has been developed, most housing is built along existing roads as "subdivision approval not required" or "Form A" lots. The Form A lots make use of existing roads and hence have less impact on drainage or road maintenance costs than new subdivisions. However they wall off the interior landscape from a view from the road giving the appearance of full development. Subdivisions consume more land but can have less of a visual impact.

The second largest land uses are the varied industrial/ distribution / wholesale and retail uses in the Avon Industrial Park and the Avon Merchants' Park. These are well separated from most residences, being on either side of Rte. 24 at the western edge of the town. However some of the residential/ Industrial border is irregular. To minimize impacts on adjacent housing the Industrial District requires planted buffers as described below.

Very few new single-family homes and no multiple unit homes have been built in Avon in the past five years. While housing is the dominant land use, commercial and industrial development has constituted most new construction in recent years. Most new industrial development is in the area of the Avon Industrial Park, on Bodwell Street the Avon Merchants Park on Stockwell Drive, and along Route 28 towards Brockton.

## (b.) Zoning

These development patterns and potentials reflect the town's zoning bylaw. Three zoning provisions can affect open space preservation. The Cluster, Planned Unit Development and Planned Industrial Development provisions require local open space preservation and have the potential to also complement adjacent open public spaces. These will require imaginative designs and local permitting. The Water Supply Protection District protects resources outside of the publicly owned land.

The major zoning provisions affecting development in Avon follow.

### Residential R-A

This allows detached single-family and two-family housing on 25,000 sq. ft. lots and agriculture as-of-right, and attached single-family housing, conversion of single-family to two-family dwellings, apartment buildings, and Cluster or Planned Unit development by Special Permit. It also allows various institutional and recreational uses as-of-right or by Special Permit. It requires 150 feet of frontage.

The Cluster Development option allows lot size reduction as long as 10% of the total site (max. 50% wetlands or steep slopes) is set aside as open space. It requires tracts of at least 15 acres and has a density standard equivalent to 80% of the tract being available for 25,000 square foot lots with 15% of the site going for circulation, or about 1.4 units/acre, and it makes each lot subject to "all requirements for a one-family detached dwelling" in the RA District. It says nothing of reduced roadway requirements though some savings should be possible if lot frontage is reduced in the R-A District. There is limited incentive since the overall density standard is essentially lower than that assumed for conventional development, and the provisions have not been used. .

The Planned Unit Development provisions are like cluster development but allow mixed housing types and related recreational, commercial and institutional uses. They require tracts of at least 50 acres with at least 20% to be in open space. They permit a density of 20 units per net acre (after allowing for roads and the minimum 20% for open space), or an overall density of about 14 units per acre. While this approach allows much more compact development than is standard, no such projects are known to have been developed.

The provisions for Multi-Family Developments require a minimum of 40,000 square foot lots and allow densities ranging from 10,000 square feet/unit for the first ten units, up to 5,000 square feet/unit for the next six units and up to 3,000 square feet/unit thereafter. Thus a two-acre parcel could accommodate 14 units (7/acre) while a 4-acre parcel could accommodate 43 units for a density of almost 11/acre. Multi-Family Housing is allowed by Special Permit in the R-A District and in the R-B, Business and Commercial Districts.

### Residential R-B



The R-B District allows the same uses as the R-A District but requires 40,000 square foot lots and 200 feet of frontage for conventional lots. Densities could be significantly increased by about 50 % under the Cluster provisions since the latter are keyed to the requirements of the R-A 25,000 square foot lots described above.

#### Business B

The Business District allows a wide range of retail and service activities as-of-right or by Special Permit, and excludes most industrial uses and open storage uses. It requires 8,000 square foot lots but limits coverage only by applying yard and parking requirements. On a 20,000 square foot parcel with 100 feet of frontage this would allow about 54.5% coverage. It excludes one and two family detached housing but allows row housing and apartments by Special Permit. It also allows Planned Business Development by Special Permit (or as-of-right according to the summary table). These provisions allow integrated, multi-tenant, multi-building developments with common parking areas and driveways. Sites must have at least 5 acres and coverage may not exceed 50%. Development shall be in one continuous building or a group of buildings consistent with the intent of the section.

#### Commercial C

The Commercial C. District was added to the bylaw in 1992 and mapped over the previously Industrially-zoned Avon Merchants Park (the former Avon Industrial Park West). It combines the use regulations of the Business District with the dimensional regulations of the Industrial District. Thus it allows most retail uses as-of-right while excluding wholesale and manufacturing uses. At the same time it requires much larger minimum sized lots (40,000 square feet vs. 8,000 square feet) and larger front yards (40' vs. 15') and rear yards (40' vs. 30') than in the Business District, and adds a 25' side yard requirement where the Business District has none.

#### Industrial

The Industrial District permits a wide range of industrial and distribution activities as-of-right but requires special permits for outdoor displays, retail sales, vehicle sales, trucking terminals and Planned Industrial Developments. It excludes housing, hazardous or noxious industries, junk yards, open storage activities and some general retail activities. It combines the 40,000 square foot minimum lot size of the Residential B and Business Districts with much greater yard requirements than the Business District and a generous coverage ratio of 60%.

Planned Industrial Development projects are like industrial cluster developments. The regulations permit lot size reductions by 10% as long as 10% of the tract (maximum 50% wetlands and steep slopes) is set aside as common land for open space use. It is not clear if the intent is to allow increased density overall or just to allow reduced lot sizes for small buildings. The provisions require a minimum site of 15 acres and limit the number of establishments, not building areas, to that allowable under the normal requirements of the District.

To minimize impacts on adjacent residential areas the Industrial District requires a 30-foot wide, 7-foot high “sight-impervious” planted “greenbelt” of trees and shrubs along the edge of any Industrially-zoned parcel which abuts or extends into a residential district or abuts a lot which fronts only in a residential district. The bylaw also increases the normal yard requirements (40’ front and rear, and 25’ side) to 60’ where industrial lots abut or face a residential district.



Minimal Greenbelt between Residential and Industrial Districts along East High Street; Roughly 30’ Wide, but Not 7-foot High and “Sight Impervious.”

#### Flood Plain District

The Flood Plain District is an overlay district mapped over the 100-year flood plain on the Final Flood Insurance Rate Maps (FIRM) of the Federal Emergency Administration’s flood insurance program. It requires that any fill or construction be approved under the Wetlands Protection Act, and that occupied building space be protected in accord with the state building code. It prohibits activities that reduce flood storage or flow patterns and requires a special permit from the Board of Appeals for uses otherwise allowed in the underlying district.

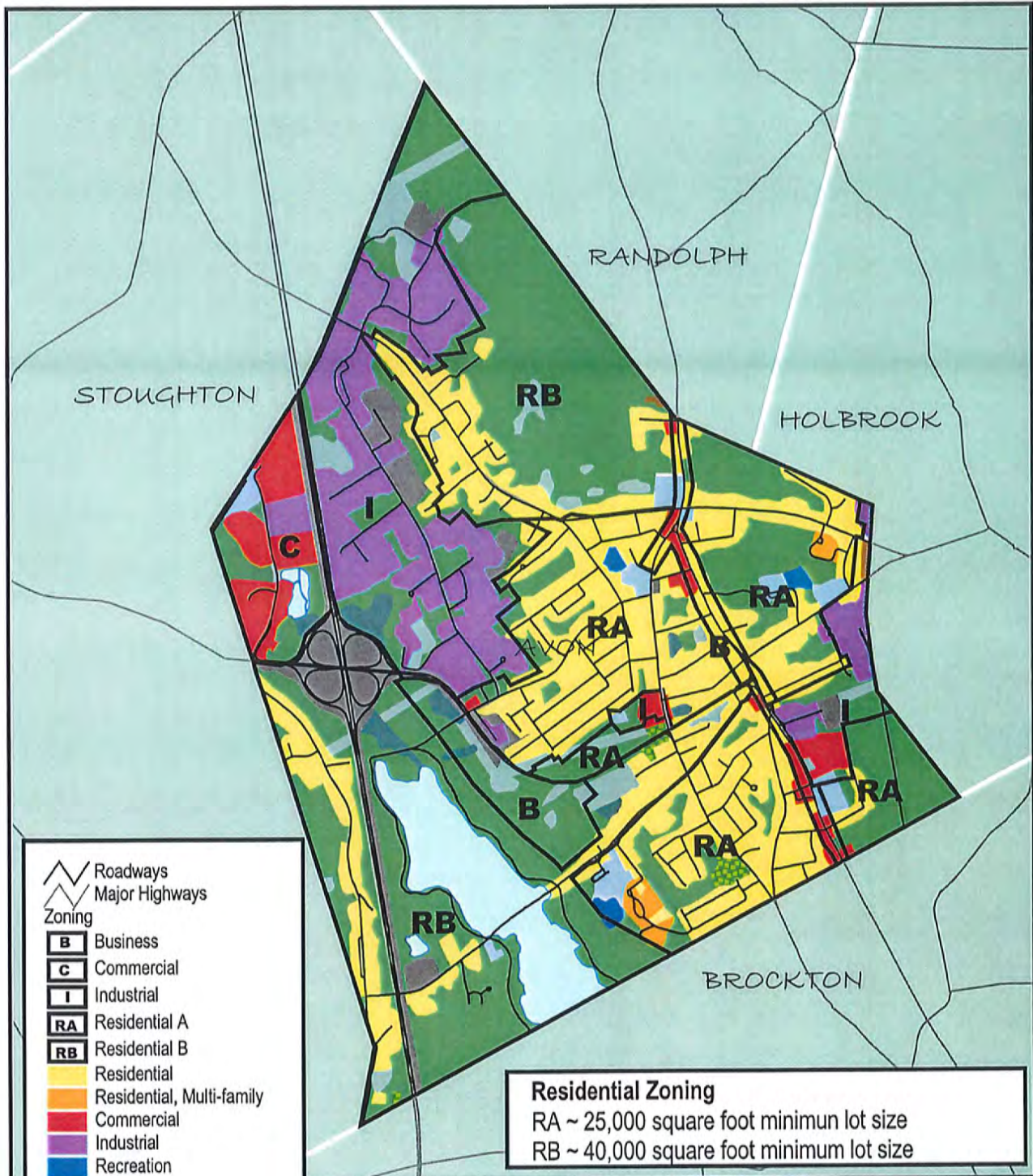
#### Water Supply Protection District

The Water Supply Protection Districts seeks to protect ground and surface water resources by prohibiting potentially contaminating land uses in the Zone II of water supply wells and in areas flowing to the major surface water supply, the Brockton Reservoir, by requiring a special permit for other-wise allowed uses and by restricting septic system loads in those areas. The last essentially requires a 40,000 square foot lot for the 440 gallons a day of waste expected from a four bedroom house - comparable to the state standards for protecting new sources. This lessens the usefulness of the town’s common 25,000 square



# Land Use & Zoning

Figure I-1



- Roadways  
 Major Highways  
**Zoning**  
 Business  
 Commercial  
 Industrial  
 Residential A  
 Residential B  
 Residential, Multi-family  
 Commercial  
 Industrial  
 Recreation  
 Urban Open  
 Agriculture  
 Forest  
 Abandoned & Mining  
 Transportation  
 Waste Disposal  
 Wellands  
 Surface Water  
 Surrounding Towns

**Residential Zoning**  
 RA ~ 25,000 square foot minimum lot size  
 RB ~ 40,000 square foot minimum lot size

0.6 0 0.6 Miles



Old Colony Planning Council  
 70 School Street  
 Brockton, MA 02301

GIS Data Sources:  
 MassGIS, MHD, OCPC Field Data

June, 2004





foot lots but leaves the Board of Health with some discretion in approving expansion of existing systems consistent with the purposes of the bylaw.

## 2. Infrastructure

### (a.) Transportation System

Avon is served by two numbered highways, Routes 24 and 28. Route 24, a Principal Arterial, is a six lane, limited access highway running along the western border of Avon south to Fall River and north to I-93/128 and on to Boston. It is heavily used by commuters to Boston and provides good access to the many Avon businesses near the Harrison Boulevard interchange. Route 28 is also a major north-south road. It provides access to a mix of residential areas, commercial uses and town facilities. The road extends from the Brockton city line in the south to the Randolph town line to the north.

Edward Harrison Boulevard is the major east-west road in Avon, running from the Route 24 interchange and the Stoughton town line to Rte. 28, with movement further east to Holbrook relying on local East Spring St. The highways and town streets are in generally good condition and there are sidewalks throughout the town.

The Town of Avon has bus service by the Massachusetts Bay Transportation Authority (MBTA) and Brockton Area Transit (BAT), providing service to the MBTA Ashmont Red Line Station. BAT also provides a DIAL-A-BAT service for the elderly and people with special needs. The Boston-Middleboro MBTA Commuter Rail line passes through Avon without stopping but residents have access to it at the Holbrook/ Randolph station to the north and the Montello station in Brockton to the south.

Implications: Avon's direct access to Routes 24 and 28 has made it a desirable place for businesses to locate. Both the highway and the nearby commuter rail make the town attractive to commuters.

### (b.) Water Supply System - Described below under Water Resources.

### (c.) Sewer Service

With the exception of the Wal-Mart store and a near by restaurant on Route 28 that are tied into the Brockton system, Avon relies on on-site sewage disposal. The lack of a public sewer system can restrict residential development or expansion particularly within the Water Supply Protection District, and restricts allowable non-residential growth.

Implications: The majority of vacant land has septic limitations or flood hazards. This has limited the development of this land. Any future sewer service would presumably be used to meet existing needs before being serving land that is presently undevelopable without sewers. Extensive sewerage would allow significant residential development in some present natural areas, so it is important to identify and protect such areas.

### 3. Environmental Inventory

#### (a.) Soils

Avon, like the rest of southeastern Massachusetts was blanketed by glacial ice sheets. As the ice retreated it revealed the region's characteristic north-south drumlins and created the present north-south drainage patterns found in Avon and the region.

Since essentially all of the town relies on on-site disposal soil conditions are important. The greatest concentrations of land with severe limitations for septic systems is in the northernmost portion of town bordered by Stoughton and Randolph to the North, and Page Street and East and West High Street to the South. The town's development patterns and potentials largely reflect the its soils and its zoning bylaw.

### 3. Environmental Inventory

#### (b.) Soils

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Since all of the town relies on on-site disposal, except for the Wal\*Mart store and the Avon Town House restaurant which are tied into the Brockton sewer system, soil conditions are important. The greatest concentrations of land with severe limitations for septic systems is in the northernmost portion of town bordered by Stoughton and Randolph to the north and Page Street and East and West High Street to the South. These soil patterns are suggested by the following interpreted soils map, and the town's development patterns and potentials largely reflect the town's soils and its zoning bylaw.

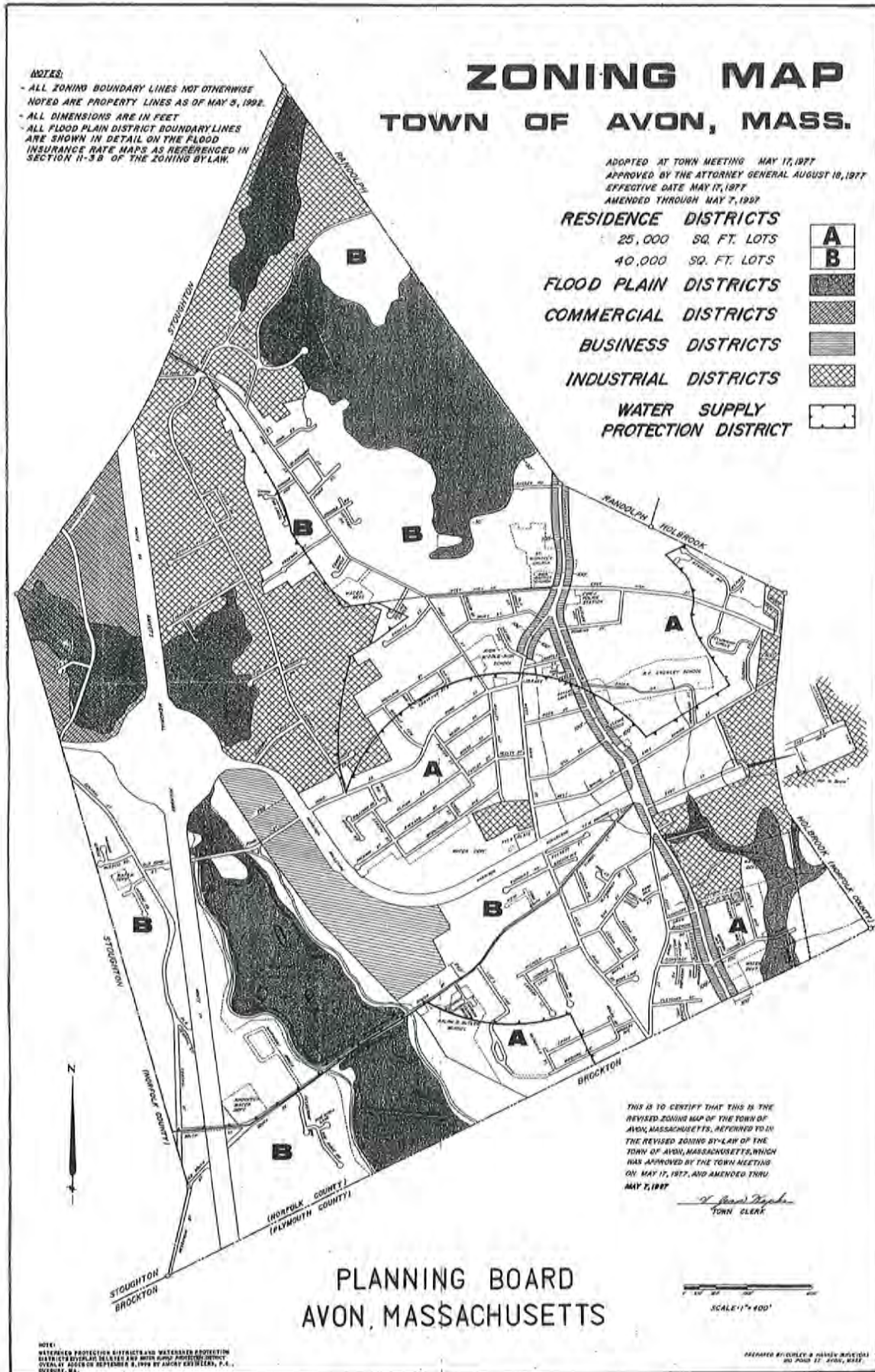
This influence should not be overstated. One local health agent reports that even when the most septicly limited soils (high water table and tight soils) are mapped, the area's typical large lots will have some usable soils. As a result, mapped limited areas often accommodate up to three quarters as many units as unrestricted soils. Except for actual wetlands, the limited soils are a better predictor of future maintenance problems than of developability. .

#### (b.) Topography / Landscape Character

Avon's topography is gently rolling dropping from northwest to southwest. There are very few hills and very little topographic relief or scenic outlooks, and other than Waldo Lake and the Brockton Reservoir, Avon has no significant ponds.

With its limited relief Avon's landscape depends largely on the balance of open areas (fields, marshes, wet meadows and ponds), woodlands and developed areas. As New





England evolves from farm land back to forest or to large-lot subdivisions, the open land which gives scenic vistas and reveals the underlying terrain is increasingly rare.

### (c.) Water Resources / Water Supply System

#### Streams and Storm Drainage

As noted above Avon drains to two basins. The northeast corner of the town drains via Three Swamp Brook through the Cochato-Monatiquoit River sub-basin to Boston Harbor and Massachusetts Bay while most of the town drains via the Trout Brook and its tributaries (including Beaver Brook flowing through the Brockton Reservoir and Waldo Lake) through the Salisbury Plain River sub-basin southeastward to the Taunton River and Narragansett Bay.

The most significant local sub-watersheds are the Beaver Brook Watershed draining approximately 2,000 acres to the Brockton Reservoir, and the Trout Brook watershed draining 1,100 acres in Avon to the Salisbury Plain River. The first is particularly important as it drains the Industrial Park and Merchants' Park to the Brockton Reservoir. See the review of Storm Drainage Needs below.

#### Wetlands

Avon's wetlands areas provide wildlife habitat, flood storage, pollution abatement and ground water recharge. The major estimates of these wetlands (from the Massachusetts Mapdown Project directed by UMass Forestry Professor Willam P. MacConnell reflect aerial photos taken in 1952, 1972, 1985 and 1991. The 1972 tabulation shows 66.8 acres of wetlands while the 1985 report showed a 25.1% drop to 50.03 acres. The 1991 total remained at 50.03 acres suggesting effective recent enforcement of the Wetlands Protection Act. Most of the town's wetlands are in the extensive wooded swamp east of Page St. and along the Randolph town line. Most of the wetlands are in mapped flood plain or in areas with severe septic limitations. Therefore they are protected through the Zoning and Health Board regulations, as well as by the Wetlands Protection Act. It is appropriate to acquire important wetlands, but higher priorities should go to key developable uplands, or to areas with good potential to recharge groundwater by holding storm water.

#### Flood Plains

Though flood flows are limited by the town's location at the head of two basins, the low-lying terrain has a significant amount of mapped flood plain as shown on Figure 6, the Resource Protection / Land Suitability Map. These areas run generally north-south beside Three Swamp Brook, Trout Brook, and Beaver Brook and spread out in low-lying areas. There are also local hazard areas. Thus the town is replacing a 36-inch culvert with a 42-inch culvert to ease flooding problem on East Street. However, such changes can increase problems downstream making it preferable to temporarily detain water, recharge as much as possible, and allow the rest to flow downstream after a storm.



## Water Supply System

The water supply system consists of six wells listed below along with their Safe Yields in million gallons / day (MGD). This is the amount that can be produced safely during 6-month drought.

Well	Safe Yield (MGD)
Memorial No. 1 off Route 28	.216
Memorial No. 2 off Route 28 (unused due to high iron and manganese)	n.a.
Porter Well at Avon Place, a shallow dug well.	.190
Theater Well No. 3 off Argyle Ave.	.072
Connelly Road Well No. 4	.072
Trout Brook Well Field	<u>.324</u>
Total	.874

All but the Porter Well are in a cluster near Trout Brook in the southeast corner of town. There has been concern about a plume of contamination moving towards Well 3, but it is presently reported to be unaffected. Well No. 2 is unused due to high iron and manganese levels, but it is so close to the Well # 1 that its use would lessen that well's yield.

The average daily water consumption has risen and then declined over the past five years with an average of .566 MGD and an overall upward trend as shown below. Some of the fluctuation reflects seasonal water bans. The Water Department uses a Water Consumption Form process to estimate the likely consumption by new firms, before granting service connections

### Average Daily Water Consumption (MGD)

1998	1999	2000	2001	2002	2003	1998-2003 Average
.534	.523	.568	.630	.605	.537	.566

Even the highest consumption is well within the Town's estimated Safe Yield of .874.

There are two standpipes for storage and pressure, a 1,000,000 one at Central St. and a 1.5 million gallon one at Page Street, for a total of 2.5 million gallons or almost 5 days' normal consumption.

The town continues to explore for new sources. It recently found a potential 75 gallons/minute (slightly over .1 MGD) well on land abutting D.W Field Park between two parcels recently acquired by Brockton. This was in bed rock well and had very high quality water with no detectable coliform bacteria or volatile organic compounds (VOCs). The acquisition of this land is recommended and the town is pursuing it. The Water Department is also using a Fractured Trace Analysis to identify other potential sites and



has identified two sites for further exploration. Because of the vulnerability of the present cluster of wells to contamination, the Water Department is particularly exploring possible sources in the northeast corner of the town which are in the Boston Harbor rather than Taunton River Basin.

The town has a Water Supply Protection zoning bylaw and related mapped Zone-II primary well recharge areas as described above. Though protected by the zoning, some land in these areas might well be acquired for selective multi-purpose use.

Implications: So far the Department has been able to supply the needs of Avon's significant commercial growth and its modest residential growth. Supplies should not constrain probable near-future growth unless the town is sewered and significantly more industrial / commercial development is allowed.

### Water Budget

The water budget compares developed and undeveloped water resources and water consumption trends. A town's own resources are its rainfall and resulting groundwater recharge, any water flowing through the town in surface streams or groundwater flows, and water flowing through cracks in the bedrock. In Avon the west branch of Beaver Brook drains the central eastern portion of Stoughton before traversing the Avon Merchants Park enroute to the Brockton Reservoir. It adds to the town's water resources but is not available to the town except in case of an emergency when Brockton could open gates on its distribution system.

### Sources

#### Total Rainfall

With the region's average of 45' of rainfall per year the town receives 1,221,858 gallons per acre or a total of 3409 million gallons per a year (MGY). About 75% of this or 2557 MGY falls in the Taunton Basin portion of the town and the other 852 MGY falls on the Boston Harbor Basin portion in the northeastern corner of the town. The estimated 2557 million gallons/year flows south through the Taunton River Basin very slowly through groundwater movement, and more quickly through streams, while the remaining 852 million gallons similarly moves northeast towards the Boston Harbor Basin.

A decreasing amount of this rainfall reaches the groundwater. While most soaks into the ground, an increasing amount flows from roof tops, paved areas and lawns to storm drains and streams, and exits the town via the Trout Brook or the Brockton Reservoir. Applying the effective imperviousness coefficients (from the table of Impervious Surface Defaults in the 10/17/01 EO 418 TA Open Space Planning Bulletin) to the town's 1996 land use data reduces Avon's effective pervious surface by 25.1% or 702.06 acres. This in turn reduces the hypothetical maximum groundwater recharge, 3409 MGY with no runoff, by 858 million gallons/year or 2.35 MGD, leaving about 2551 MGY, with an estimated 1913 MGY in the Taunton Basin portion of the town. (This maybe a high estimate since the

remaining undeveloped forests, wetland and other open land categories have more natural runoff to nearby streams than the 0 assumed in the table.)

At any rate, the lost recharge is increasing in proportion to added impervious surfaces. Such losses can be lessened through use of techniques such as porous paving, leaching catch basins, or discharge to detention/ retention basins with porous bottoms or to underground infiltration galleries.

#### Surface Supplies/ Consumption

As noted, the town receives up a significant amount of water flowing from Stoughton along the West branch of Beaver Brook to and through the Brockton Reservoir. The Reservoir also draws on the East branch of the Brook flowing through the Avon Industrial Park. At the same time the City withdraws about .8 MGD or 292 million gallons per year from the Reservoir with an estimated half or 146 million gallons (4 MGD) coming from Avon. The rest of the Brook's water flows down the Salisbury Brook. The water withdrawn is consumed, treated at Brockton's waste water treatment plant, and discharged to the downstream Taunton Basin via the Salisbury Plain River without direct effect on Avon.

#### Groundwater Supplies / Consumption

In contrast to the non-use of surface water, the town withdraws an average (1998-2003) of .566 MGD or 206.6 MGY from wells in the Taunton Basin portion of the town, or about 8.1% of the rainfall in that area. As shown above, this has recently ranged from .534 MGD in 1998 to .630 MGD in 2001. Most of the supply (83% in 2003) comes from wells near Trout Brook in the southernmost portion of the town. These benefit by being downstream of most of the stream system and related aquifer, and of most septic systems discharging to the ground.

Presently most of the water withdrawn per year is disposed of to the ground through septic systems or is returned to the ground due to leaks in the distribution system. Only one large store and a restaurant are connected the Brockton sewage system, and they are at the very southern end of the town. Very few of the town's industries export water by using it in their products. Some water is used outside for car washing and lawn and garden watering. Some of this is also returned to the ground, some goes into the stream system via the storm drains, and some evaporates.

#### Implications

Assuming that 75 % of the water withdrawn is returned to the ground and that 25% is lost, the resulting 51.6 MGY (.14 MGD) is only 2% of the total rainfall and 2.6% of the 1993 MGY estimated recharge in the Taunton Basin portion of the town which feeds the wells. Counting comparable losses to the Boston Harbor of Basin of 1.2% and 1.6% respectively, the total loss to the system is equivalent to 3.2% of the Taunton Basin rainfall and 4.2% of the probable Taunton Basin recharge. Given the location of the town's wells, this loss has

more effect on potential downstream users and stream flows than to Avon's water supply system.

However, on the immediate practical side, the .566 MGD withdrawn is 64.8% of the .874 MGD Safe Yield discussed above, some recharge areas may be threatened by contamination, and there are limited areas where it is practical to withdraw water. As noted above, the town is actively pursuing present alternative sources along with monitoring the potential threats to the present wells and identifying appropriate responses.

It is impressive that Avon's rainfall exceeds demand by so much. However the fact that an estimated quarter of it is already lost to runoff from impervious surfaces suggests the need to protect and increase recharge opportunities in order to maintain the water table and year-round stream flows. Such opportunities are discussed below.

### Water Quality Analysis

The town's overall water quality is indicated by the classification and degrees of impairment of its major surface waters, while drinking water quality is reflected in well water tests. Longer run development-related concerns reflect the relationship of major potentially contaminating land uses to water resources, and to developed or potential water supplies.

The Department of Environmental Protection classifies major water bodies in terms of their intended uses in order to derive appropriate standards.

The major freshwater categories are:

- A. Designated for public water supplies, and suitable for primary and secondary contact recreation – swimming and boating
- B. Suitable for primary and secondary contact recreation and potentially suitable for water supply with appropriate treatment
- C. Suitable habitat for fish and other wildlife and for secondary contact recreation – boating.

The streams in the town are not listed directly, but the receiving Salisbury Plain River past the Brockton wastewater treatment plant is classified B and the upstream segments are probably similar. For this classification, it should meet the following standards:

Dissolved Oxygen – Basically >6.0 mg/l in cold water fisheries and >5.0 mg/l in warm water fisheries.

Temperature - basically <68 degrees F. in cold water fisheries and <83 degrees F in warm water fisheries, with a rise after a discharge limited to 3 degrees F and 5 degrees F in cold and warm water fisheries respectively .

PH- In the range of 6.5 to 8.3: "standard units"



Fecal Coliform bacteria - a geometric mean of 200 organisms /100 ml. in any set of samples and with <10% of the samples exceeding 400 organisms/ 100 ml..

Solids – No floating, suspended or settleable solids impairing the assigned use, aesthetically objectionable, impairing bottom dwellers, or degrading bottom chemistry

Color and Turbidity – None that is aesthetically objectionable or impairs the water’s assigned uses.

Taste and Odor— None that are aesthetically objectionable, impair the water’s assigned uses, or spoil the flavors of edible wildlife.

While the upstream portions of the Salisbury Brook, Trout Brook and tributaries might be expected to be held to a higher standard, they are not listed in the “1990/ Surface Water Quality Standards”.

Another inventory, reflecting current conditions rather than desired conditions, is the Section 303d list. This was formerly a separate document but is now part of the DEP’s Integrated List of Waters. This lists waters which are impaired for their assigned use by their remaining need for defining and enforcing Total Maximum Daily Loads (TMDLs) for major pollutants, and by the need to lessen polluting factors like low flows.

Category 5 includes waters whose degree of impairment requires definition of its TMDL (s) and conformity to those standards, It is equivalent to the former 303d list.

Other impaired waters are listed under Categories 4a and 4c:.

4a - Impaired water for which required TMDL(s) have been approved.

4c – An unused category since it related to assumed future conditions

4c - Impaired waters which are affected by “pollutant stressors” like low flows or exotic species infestation, rather than by traditional water-borne pollutants like Nitrates and therefore require measures beyond TMDL adoption and implementation.

The most serious of these could be Trout Brook since it runs behind the Trout Brook wells. However pathogens are not among the regulatory contaminants reported in the town’s 2002 Drinking Water Quality report, and the Water Department deals with potentially harmful organisms by treating the water with sodium hypochlorite.

The overall drinking water quality test results combining all sources were favorable as shown below. The Department notes that these conditions have been constant for some time. As discussed earlier, a plume has been detected approaching Well # 3 near the Trout Brook wellfields. However this is being intercepted and air-stripped, and the threat reportedly is under control.

## Water Budget Summary

### Sources

Estimated Annual Rainfall	Taunton Basin (TB)	Boston Harbor Basin ( BHB)
	45" 2557 MGY	45" 852 MGY
Input from West Branch of Beaver Brook - Assumed to equal to flow out of town via Brockton Reservoir Diversion and Salisbury Brook	n.a.	n.a.
Flow from East Branch of Beaver Brook – unknown, but the estimated .4 MGD diverted to Brockton would have exited town via the Reservoir, ponds and Salisbury Brook anyway	n.a.	n.a.
Estimated recharge from rain	1913 MGY	638 MGY
Estimated recharge from disposal systems @ 75% with 20% discharging to the BHB	123.9 MGY/ .34 MGD	31MGY / .08 MGD

### Withdrawals

1998-2003 Average withdrawals 206.6 MGY/ .556 MGD

### Losses to System

Loss given some recharge from use/leakage from outdoor use <51.6 MGY / .14 MGD

Loss to system of estimated recharge in Boston Harbor Basin 31 MGY / .08 MGD

Loss of flow to BHB as % of TB rainfall / recharge 1.2% / 1.6%

Loss of non-recharged water as a % of estimated TB rainfall / recharge 2% / 2.6%

### Deficit

Total losses as % of TB rainfall / recharge 3.2%/ 4.2%

### Relation to Safe Yield

566 MGD Withdrawal as % of .864 MGD Safe Yield 64.8%

### Listed Waters in Avon

Water	Category	Impairment - or cause of impairment in [ ].
Waldo Lake (in D. W. Field Park)	4c	[Exotic Species]
Brockton Reservoir (In D.W. Field Park)	4c	[Exotic Species]
Upper and Lower Porter Pond (in Brockton portion of D.W. Field Park)	4c	[Exotic Species]
Trout Brook (next to well field)	5	Siltation Organic Enrichment Pathogens

#### Storm Runoff

One major potential water quality concern is the large proportion of the Brockton Reservoir which is in the Industrial Park and the Merchants Park. The extensive paving in these subdivisions increases water flow but also increases the transport of oil, and gas drippings, animal waste and other items in urban storm runoff. Runoff from the Merchants Park is partially protected by its transport through an informal detention pond. In addition the water draining from the industrial park is partially protected by the enhanced detention ponds improved during the 1992-1993 joint Avon / Brockton Water Supply Protection Project, and is protected from harmful new development by the 1992 Water Supply Protection Zoning District. The zoning limits new uses which might be contaminating and sets protective standards for such new development. In contrast the Avon/Brockton project lessened impacts of past development. This measurably improved the quality of water running from the developed part of the Park to the Beaver Brook, but affected less than a third of the Park's area.

### Avon Drinking Water Results

Regulated Contaminant	Highest Detected	Highest Level allowed (MCL)	Violation Y/N	Source	Possible
Inorganic Chemicals					
Nitrate (PPM)	3.63	10.0	N		Fertilizer, Septic Systems
Nitrite (PPM)	<.05	1.0	N		" " " "



Synthetic Organic Chemicals

Last sampled in 1995 with results meeting all applicable DEP and EPA standards. No longer tested since DEP sees no risk of contamination

Unregulated Organic Compounds

Bromodichloromethane (PPM)	0.7	NR (not	N	By-products of chlorination
Chlorodibromomethane (PPM)	1.3	NR regulated)	N	
Bromoform (PPM)	0.7	NR	N	

Radionuclide)

Gross Alpha Activity (pCi/L)	1.1	15	N	Natural results of oil / gas production and mining
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Lead and Copper	90 <sup>th</sup> Percentile	Action Level	# sites above Action Level	
Lead (PPB)	5.0	15.0	1	Plumbing Corrosion, Erosion
Copper (PPM)	0.73	1.3	0	Plumbing Corrosion Erosion, Wood Preservatives

It would be good to complement Avon's zoning which protects both Avon's and Brockton's resources with the proposed Brockton ordinance intended to protect the portion of Avon's Trout Brook wells Zone II which is in Brockton. Similarly it is important to maximize protective provisions in any nearby development like the proposed solid waste transfer station.

A remaining improvement proposed during the protection project was retrofitting a large 16.1-acre informal impoundment where the East Branch of Beaver Brook, draining about 75% of the Park, crosses under Rte. 24. Modifying the culvert to retain storm water longer would allow pollutants held on silt to settle and would allow some nutrients to be taken up by the pond's vegetation.

The probable increase in impervious surfaces from continuing development in the Industrial Park and Merchants Park implicitly threaten water quality even though both are in the Water Supply Protection District. To increase protection from runoff, the City of Brockton recently studied further opportunities to retain and upgrade storm runoff with a variety of Best Management Practices such as retention ponds, use of sorbent pillows in catch basins, and directing water through pollution and silt trapping devices such as the Vor-Tec, Stormtreat and Downstream Defender systems.

Conclusions / Implications

The town's water quality is good. There is little surface water data, but the reported impairments of the Brockton Reservoir and Waldo Lake by exotic species are relatively

benign in health terms, and the water produced is within the treatment capacity of the downstream Brockton water treatment plant.

A major issue is the potential impact of any sewerage. Sewerage in areas with stressed septic systems or quite close the wells could protect groundwater and that flowing to the Reservoir, and allow higher densities in strategic locations or more intensive use of the industrial commercial parks. But it would do so at the cost lost groundwater recharge. The effects on ground water would depend on the discharge points, with the greatest loss coming with a downstream plant like that in Brockton, and with much less loss with one or more local plants discharging within the town. Discussions with the Health Agent suggest no pressing need to install sewers for public health reasons. Yet it would be appropriate to finish exploring these issues through the on-going Comprehensive Waste Water Management Plan.

Recommendations include:

- Expand or upgrade Best Management Practices facilities in the Industrial Park and Merchants' Park, particularly the opportunities presented by the impoundment above the Rte. 24 Culvert
- Develop methods to ensure that any significant spill of fuel or other fluids is intercepted before reaching the Reservoir.
- Continue to closely monitor the plume near Well 3.
- Maximize protective provisions in any nearby development like the proposed waste transfer station.
- Work to complement Avon's zoning which protects both Avon's and Brockton's resources with the proposed Brockton ordinance protecting Brockton's portion of Avon's Trout Brook Wells' Zone II.
- Study and exploit the protective opportunities offered by potential low-lying enhanced multi-purpose impoundments along the major branches of Trout Brook and elsewhere, e.g. the low, stormwater holding lots off of Bodwell Street and Central Street discussed below.
- Draw on the Comprehensive Wastewater Management Plan to refine the recommendations the areas of water quality, water supply, and land use flexibility discussed above.

### Ponds

The town has very few natural ponds, though there is one east of Rte. 24 and north of South St.

The main ponds are the Beaver Brook impoundments forming the Brockton Reservoir and Waldo Lake, though the latter is split between Avon and Brockton. They are discussed under Water Quality above, and under Open Space resources below.

#### Groundwater /Aquifer Recharge Areas.

The Water Supply Protection District seeks to protect community water supplies through preservation and maintenance of the groundwater. This is increasingly important as development adds impermeable surface, increases runoff, and lessens recharge. With such losses, it is important to recharge the ground water wherever possible. This need will greatly increase if a significant part of the town is sewerred. The need to recharge is presumably greatest in areas drawn on by the Trout Brook wells, while some increased runoff in the western part of the town may be recaptured if it flows toward the Brockton Reservoir or the downstream ponds.

The recommended approaches include increased use of leaching catch basins or galleries, selective use of porous paving, use of detention ponds and retention ponds engineered for maximum recharge, and preservation / enhancement of natural temporary impoundments to maximize percolation while retaining a local natural area. Some areas which are septicly limited due to a year-round or seasonal high water table but have very permeable soils allowing recharge. On the other hand some areas have "restrictive layers" limiting permeability. In such cases it might be necessary to alter the bottom of an impoundment or to ensure that leaching basins or galleries penetrate the tight layers.

#### Review of Storm Drainage Needs

Since the town is at or near the head of the Trout Brook and Beaver Brook watershed, storm flows are moderate. None-the-less the town needs to manage its drainage system to both avoid losses and injures and to preserve the resource.

The areas potentially at risk are along the mapped flood plain shown on the Resource Protection / Land Suitability map. As noted above, these areas run generally north-south beside Three Swamp Brook, Trout Brook, and Beaver Brook and spread out in low-lying areas. There are also local hazard areas which may need increased culvert capacity or channel capacity if upstream runoff cannot be recharged or stored adequately, as discussed below.

The town is drained by many short segments of storm sewers discharging to lowlands or to the stream system, with relatively few areas where culverts have been enlarged to pass more water down stream. As the Old Colony Planning Council's 1990 "Report on 1964-1989 Storm Drainage System Improvements" notes:

"The system generally drains to nearby streams or low-lying areas, rather than to a continuous piped, or heavily-ditched drainage system. This has the advantage of using some of the water storage and absorption [recharge] capacity of the existing natural streams and wetlands, thereby allowing groundwater recharge and helping to protect downstream areas from flooding by slowing storm flows. Such an approach is quite appropriate, particularly in a community like Avon which is at the head of a drainage



basin, and is consistent with the storm water management approach recommended in earlier studies, such as the 1974 Avon Plan. However it requires that the intervening streams and wetlands, and the final receiving bodies, have sufficient carrying or storage capacity to both prevent local flooding and protect downstream areas.”

The 1990 study notes that the earlier report relied on removing storm water, rather than accommodating it. It gave highest priority to enlarging culverts, piping streams, and lowering the groundwater and the surface water of some wetlands. For the sake of economy and flexibility it did not recommend complete piped systems. Yet it may have anticipated such a system since it stressed making major downstream improvements first. These could accommodate later upstream work and prevent local improvements from causing flooding immediately downstream. However this approach can aggravate situations further downstream by increasing flood flows there.

Local needs noted in past reports led to 65 recommendations in the 1964 report to extend existing storm drains, dredge or clean natural waterways, add new lines parallel to or in place of smaller line, and pipe existing segments of existing streams. Thus the town is replacing a 36-inch culvert with a 42- inch culvert to ease flooding on East Street. However, such changes can increase problems downstream making it preferable to temporarily detain water, recharge as much of it as possible, and allow the rest to flow downstream after a storm.

Very few of past recommendations have been done. The report notes only a few stream segments which have been altered by deepening, widening or straightening, or piping in order to increase capacity, to make up for storage lost to nearby filling, to lower the water table near septic systems, or to protect nearby development. Instead most of the recent work consists of adding catch basins, manholes, pipes and outlets draining the Industrial Park, and the Merchants Park, generally to Beaver Brook, with other work done to serve scattered problem areas and new development. Many of the recommended new culverts have not been installed or were done more modestly, .e.g. installing a second 12” pipe at Nichols Ave. rather than the recommended new 30” line. This modest response may be good in preserving opportunities for a more balanced system.

The previously proposed changes are apt to worsen downstream conditions while reducing immediate risks. More recently the concern with flood control is increasingly joined by a concern for increasing ground water recharge, particularly if the community is likely to be sewerred and lose the present recharge from leachate. Accordingly, the present study suggests identifying and capitalizing on remaining opportunities to increase storage and enhance recharge, particularly where these actions can also preserve a local open space or bit of wildlife habitat. Some opportunities deserving closer examination are listed below under section H (2.6) It is important to coordinate such efforts at detention with downstream interests to ensure that increased detention in Avon does not allow flows to peak at a time which aggravates, rather than lessens flooding further downstream.

#### (d.) Vegetation

Avon’s undeveloped land is primarily woodland, much of it wooded swamp, but all forms of undeveloped land are being lost. Between 1971 and 1991 the MacConnell maps

showed the following losses of farm land, forest, open lands and wetlands:

#### **Town of Avon, Changes in Vegetation, in Acres**

	1971	1985	1991	% change 1971-1991
Forest (inc. swamp)	1,572	1,368	1,117	-40.7%
Wetlands	66	50	50	-32.0%
Open Land (inc. meadows)	279	253	101	-76.2%
Agriculture (cultivated)	9	6	5	-60.0%

The woodland is generally new growth hardwoods replacing former agriculture, with some pockets of softwoods on sandy soils, and an extensive area of wooded swamp east of Page St. crossing the Randolph town line. There are no significant open wetlands e.g. marshes, bogs or wet meadows. There may be some undocumented vernal pools requiring further inventory work. Nor is there any significant farm land since the last noted agricultural operation was an indoor mushroom farm.

#### Rare, Threatened and Endangered Species

According to the database of the Massachusetts Natural Heritage and Endangered Species Program there have been no sightings of endangered plant species in town.

#### (e.) Fisheries and Wildlife

The town's wildlife consists of the birds, small mammals and occasional reptiles typical of temperate hardwood forests. Hence one could expect to find skunks, rabbits, field mice, chipmunks, o'possums, groundhogs, squirrels...and occasional deer and coyotes, along with snakes, turtles and possibly salamanders.

#### Corridors

No migration corridors have been identified in this small community. However the extensive contiguous wetlands north of North Main Street and east of Page Street may allow some movement along Three Swamp Brook and along Mary Lee Brook in Randolph; and movement of smaller creatures may be possible along limited portions of Beaver Brook and Trout Brook.

#### Rare, Threatened and Endangered Species

The Natural Heritage and Endangered Species Program notes the occasional local occurrence of *Clemmys Guttata* (the Spotted Turtle) which is of Special Concern due to a declining population, very limited distribution, or specialized habitat requirements.

#### (f) Environmental Problems

#### Hazardous Waste Site

The industrial site at 100 Ladge Drive near the Trout Brook Well Field is contaminated with petroleum products. It is under the jurisdiction of the Department of Environmental

Protection and is being cleaned up. Yet the levels of contamination were increasing while the plume crept toward the Well Field, so the Water Department temporarily shut down the nearest well to the plume as a precaution. Extensive water quality tests here have been negative to date and the plume is being intercepted and treated.

### Septic Systems

The town has many older septic systems on small lots with a potential for failure. Studies in the 1970s recommended ultimate town-wide sewerage with discharge to the Brockton Advanced Waste Water Treatment Plant, but no project has been implemented. The Board of Health monitors potential problem areas and helps home owners to replace or upgrade the systems for the maximum feasible compliance with the current Title V Sanitary Code and the Water Supply Protection District.

### Landfills

The Town's former landfill off of Bodwell St. Extension has long been closed and capped. It is remote from any water supply wells.

### (h.) Scenic Resources and Unique Environments

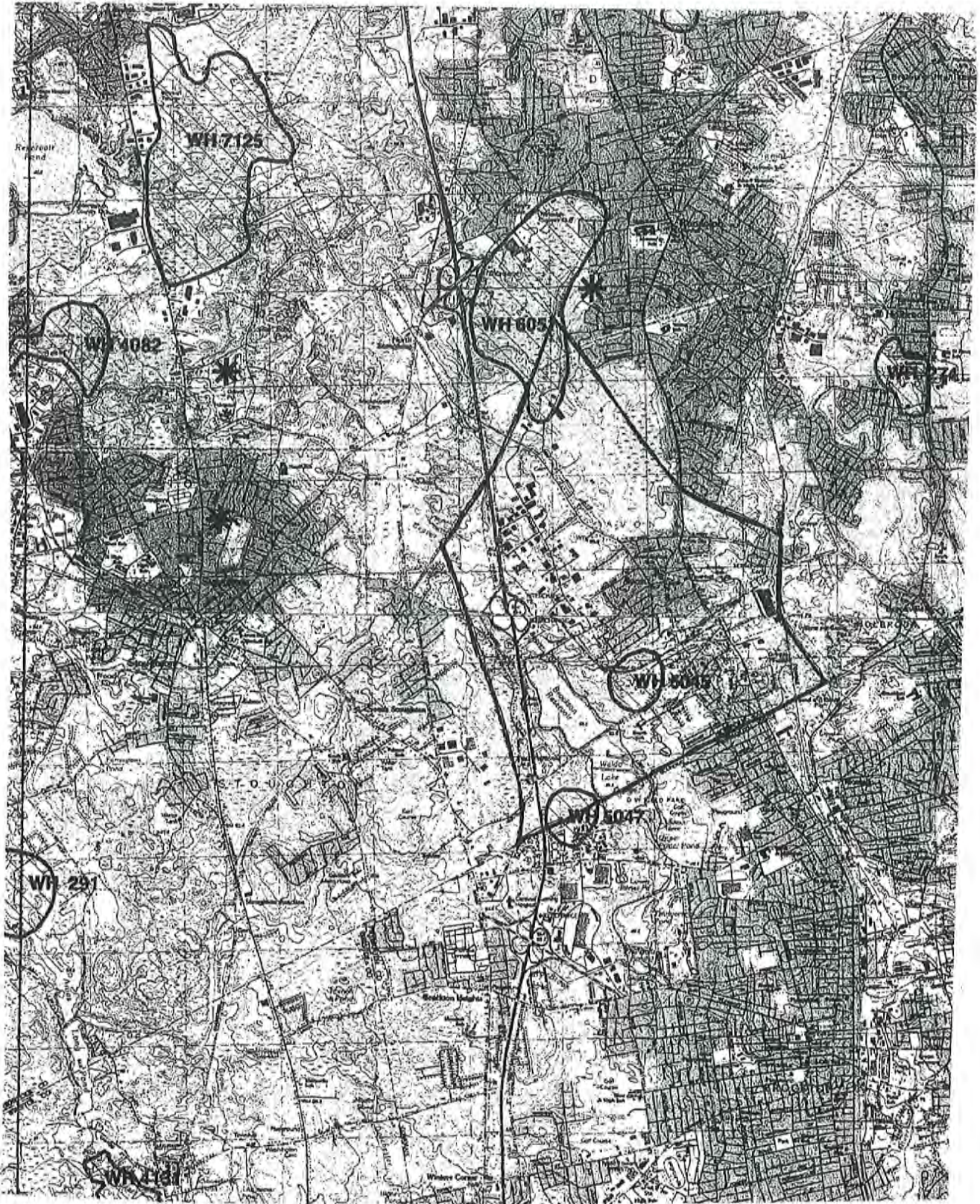
#### Cultural, Archeological and Historic Areas

The town's major sites of cultural, archeological or historic interest include:

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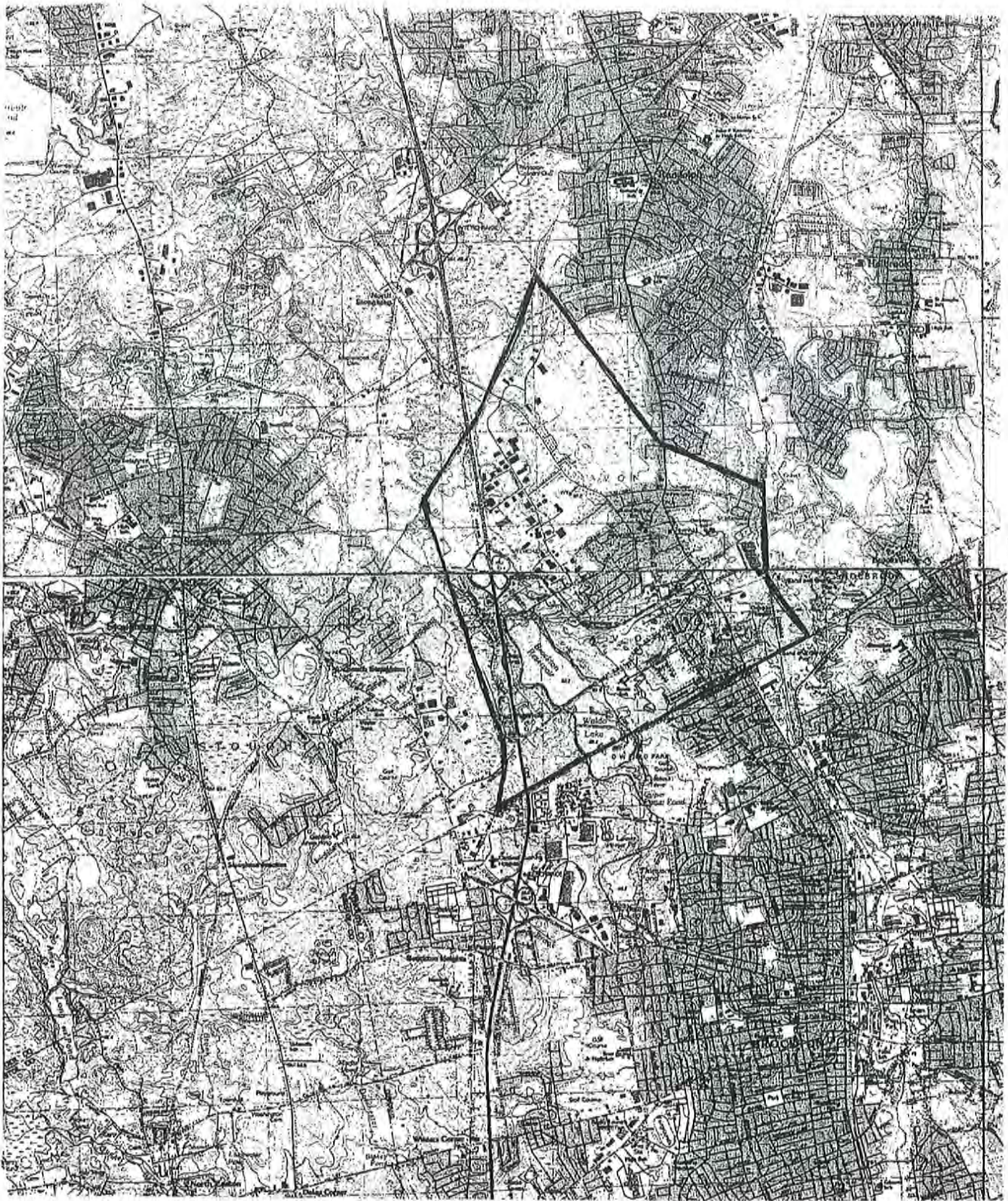


ESTIMATED HABITATS OF RARE WILDLIFE AND CERTIFIED VERNAL POOLS

For use with the MA Wetlands Protection Act regulations (310 CMR 10).

Produced by Natural Heritage & Endangered Species Program, MA Division of Fisheries & Wildlife





**PRIORITY SITES OF RARE SPECIES HABITATS AND EXEMPLARY NATURAL COMMUNITIES**  
Note: NOT equivalent to SIGNIFICANT HABITATS as designated under MA Endangered Species Act  
NOT for use with MA Wetlands Protection Act regulations.  
Produced by Natural Heritage & Endangered Species Program, MA Division of Fisheries & Wildlife



- The Henry Lawton Blanchard Museum / 1820 Samuel Robbins House at 188 Main Street. It was built by prosperous Sea Captain Samuel Robbins. The Blanchard Trust acquired it in 1966, restored and furnished it, and opened it as the Blanchard House Museum in 1970.
- Blanchard's Tavern, 98 Main St., founded by William Blanchard on 1784, donated to the Town in 1938 for use as town hall, then acquired by the Blanchard Trust in 1966, restored and re-opened as an 18<sup>th</sup> Century tavern in 1979. It is open Fridays and/or Saturdays with traditional period entertainment.



Blanchard's Tavern – Colonial Tavern, Former Town Hall , and Now Restored Tavern with Period Music on Weekends.

- The Historic Town Cemeteries on East Main Street, and Page Street.
- The Avon Cemetery Association Cemetery on Memorial Drive
- St. Michael's Cemetery on East Spring St.

These simple cemeteries hold the remains of many important Avon figures including Goeres, Ganleys, Littlefields, Wheelers, Blanchards, Dohertys, and Gearys They are discussed under Cemeteries in the Inventory of Land of Conservation Interest

- D.W. Field Park This 737-acre park connects Avon and Brockton through a parkway winding around the Brockton Reservoir and other ponds. It was endowed by 19<sup>th</sup>



- D.W. Field Park This 737-acre park connects Avon and Brockton through a parkway winding around the Brockton Reservoir and other ponds. It was endowed by 19th Century manufacturer D.W. Field and designed in a style influenced by Frederick Law Olmsted. The limited land area around the reservoir and ponds in the northern part of the park in Avon is being expanded through recent acquisitions by Brockton to protect water supplies and the park.

### Scenic Resources

As New England evolves from farmland back to forest or to large-lot subdivisions, open land, which gives scenic vistas and reveals the underlying terrain, is increasingly rare. In any case, past State (Department of Environmental Management) Inventories of Scenic Resources listed nothing in Avon or other non-coastal portions of Southeastern Massachusetts since they concentrated on large-scale multi-community vistas, generally with considerable relief and good visibility from highways. Avon's scenic areas are generally water-related and publicly protected. These include:

- Views of the Brockton Reservoir/Waldo Lake from South Street and Pond Street
- Views of D.W. Field Park from the East and West Parkways.
- Views of the restored Blanchard House and Tavern

## **C. Land Use Determinants**

### 1. Overall Factors

The varied factors reviewed above combine with other considerations to suggest the suitability of a site or of a type of a site for various uses. Few sites are suitable for only one use, so the ultimate reconciliation of competing need and recommendations in the final Community Development Plan will reflect many factors. These go beyond the influences reviewed above and include:

- Regional and local accessibility
- Soil Suitability for construction and sewage disposal
- Immediate accessibility and frontage
- Population growth and migration
- Market demand for possible uses
- Availability of Financing
- Neighboring communities' land use policies and regulations
- Existing land use patterns and expectations
- Absolute regulatory controls
- Discretionary Land use controls - Special Permits, Use Variances
- Local taxation policies
- Public land use policies / zoning



D.W. Field Park's Waldo Lake as Seen from the South Street Dam at Dusk

## 2. Area Needed for Expected Proposed Uses

It is difficult to estimate the land requirements of particular uses since the town is mature and has most basic facilities. Since housing is the default use, the task is to allow enough land for public facilities and commerce which largely reflect residential growth. However, trade and industry relate to markets and suppliers well beyond the community. Uses in Avon are part of a web of uses in the Greater Brockton and Greater Boston areas, and cannot be predicted or allocated on a single-community basis. Thus major retail uses draw on trading areas far beyond the town itself. To help to meet the need for non-residential tax base as well as for local retail services and employment, the Plan allows for a moderate increase in industrial and commercial use. The need is to guide the location of such uses, particularly to existing centers and concentrations of activity.

## 3. Suitable Locations - Major Considerations in Sitting Various Uses

The characteristics making land suitable for various uses follow.

### (a.) **Low Density Single-Family Detached and Duplex Houses**

Level, buildable land

Public water and sewer service

Potential for one-site water supply and or sewage disposal

General accessibility

Minimum traffic

Convenience to schools, stores and services

Presence of amenities; parks, playgrounds, ponds

**(b) Multi-Unit, Mid-Density Low-Rise Apartments and Town Houses**

Above characteristics plus sufficient centrality, accessibility to amenities, or attractive settings to balance higher densities

Such housing can be appropriate at center of a community, sheltered in a rural setting near a main roads, or near a major access point such as by a commuter rail station. Zoning often allows multi-unit housing only on major roads though nearby locations could be nearly as accessible and much more livable.

**(c.) Industry**

Level sites with good highway and/or rail access

Water and sewer service, and preferably gas service

Sufficient distance from housing to avoid negative impacts

Accessibility to a sufficient local or regional labor pool

Proximity to any available public transit

Proximity to related or complementary industries, services, or suppliers

Observations: While the big firms may need regional accessibility to draw workers from long distances, small and medium-sized firms with general skill requirements can function well in traditional locations drawing largely on local labor within the town or nearby communities. Thus Avon can well serve firms with both needs.

**(d.) Retail**

Centrality to much or all of the community for locally-oriented businesses

Centrality to the region for larger stores serving a wider market

Proximity to related or complementary retail and service activities

At a local intersection or other point with easy pedestrian and auto accessibility for neighborhood-serving stores

Observation: Larger stores can often thrive in isolation along major roads but such locations do not strengthen any local center or concentration of stores.

**(e.) Offices**

Visible buildable sites

Public water and sewerage

Accessibility to clients, employees, and related services

Proximity to public transit or shared parking

Observation: Office activities can function well in town centers where they support, and are supported by, related office, retail, civic, and service activities within a walkable distance.

**(f.) Public Facilities, Administrative/Services**

Centrality to the whole town

Public water and sewer



Adequate access, parking and proximity to any transit service

Observation: Such activities function well in town centers where they Support / are supported by related office, retail, civic, and service uses.

**(e.) Schools**

Reasonably level, buildable sites

Room for playgrounds and other supporting facilities

For elementary schools, centrality to the neighborhoods served

Central to population concentrations and at the junction of streets and pedestrian ways allowing a maximum number to walk to school

**4. Mixed Uses Issues; Conflicting Uses vs. Complementary Uses**

A common concern of planning, zoning and urban renewal is avoiding conflicts between mixed land uses. Adjacent housing and industry are assumed to risk conflict from heavy traffic, noise, odor, and visual dominance, and scattered commercial uses are assumed to undermine neighborhoods. Similarly commercial strip zoning is opposed because it leaves the residences at risk while creating no strong commercial center – even though it creates generally accessible commercial sites which work for the individual firms.

As important as avoiding conflicting uses, is encouraging complementary, mutually-supportive uses. This is most clear in a town center where stores, offices, and civic facilities benefit from each others' presence. People come to the Post Office, but then shop, and stop for refreshment or lunch before going home. Such multi-purpose trips may seem to compete for parking spaces. However, lots big enough to accommodate the combined parking needs will also lessen total traffic by allowing multi-purpose trips to such a "park-once" center. The challenges are to keep diverse uses in the Center and to attract others; and, where uses need highway locations, to group complementary activities, rather than stringing them along in a mixed residential / commercial strip.

**D. Resource Protection / Land Suitability Map**

The following map of Resource Protection / Land Suitability shows Avon's natural resources, including those needing further protection, and identifies the suitable uses for the remaining developable land. Since the multiple data layers make some patterns difficult to read, the suitable uses are better read from the subsequent map of Open Space and Natural Resource Protection Suitability and the other individual suitability / recommendations maps which also show action recommendations from the Final Community Development Plan.

**E. Open Space and Recreation Plan Summary**

The Town's Open Space and Recreation Plan reviews the influences on the Avon's

growth, outlines a vision for future town character, describes present and potential lands of open space and conservation interest and needs; establishes goals and objectives and offers a five year action program. The program recommends acquisition or protection of major resources and means of connecting such existing and proposed holdings.

The overall recommendation is to take a range of actions to maintain open space in Avon, to protect major scenic landscapes, valuable wildlife habitat, and water resources; to provide varied open spaces in or near every neighborhood; and to meet the recreation needs of a diverse population.

One key recommendation is to continue working to protect and expand D.W. Field Park, to expand potential uses such as bike riding trails in the recently acquired woods east of the Park, and water sport opportunities downstream of the Brockton Reservoir such as in Waldo Lake, and to develop a role for Avon in Park management.

The major recommendations are:

1. Creation of a multi-purpose flood control/open space system taking advantage of the flood control, groundwater recharge, wildlife habitat and neighborhood open space value of some parcels.
2. Protection of the Trout Brook Watershed by continued strict enforcement of Title Five regulations and the Water Supply Protection Zoning district, purchase of land or easements to prevent development in vacant flood plain areas, and cooperation with the town of Holbrook and the City of Brockton to enact comparable protection over portions of the Trout Brook wells recharge area in the two communities.
3. Creation of a Bikeway/Trail System to connect residential areas to open space, recreational and employment areas, and to integrate related facility such as the playground at the Crowley School and the adjacent conservation land to the north.
4. Maximizing opportunities for accommodating persons with disabilities at conservation and recreation facilities.
5. Examining and developing opportunities to increase access to Waldo Lake or the ponds to the south for water-based recreation including swimming, boating, fishing etc.
6. Examine other uses of town owned land off of Page Street once proposed for a golf course.
7. Optimize use of the Lutheran Home property beyond the developed DeMarco Park while maintaining an open space and recreation focus.
8. Identify and study the prospects of low-lying undeveloped areas along streams for a combination of temporary flood storage/groundwater recharge and local open space / habitat protection areas.

#### Acquisitions:

1. Acquire any remaining unprotected land to protect the Brockton Reservoir, Avon's portion of D.W. Field Park, and any prospective well site.
2. Acquire land available land along Trout Brook as available flood control purposes and to create a greenbelt along the waterway.
3. Expand and integrate low-lying wooded holdings east of Page Street along the Randolph line to give some permanent open space to the end of the town farthest from D.W. Field Park.

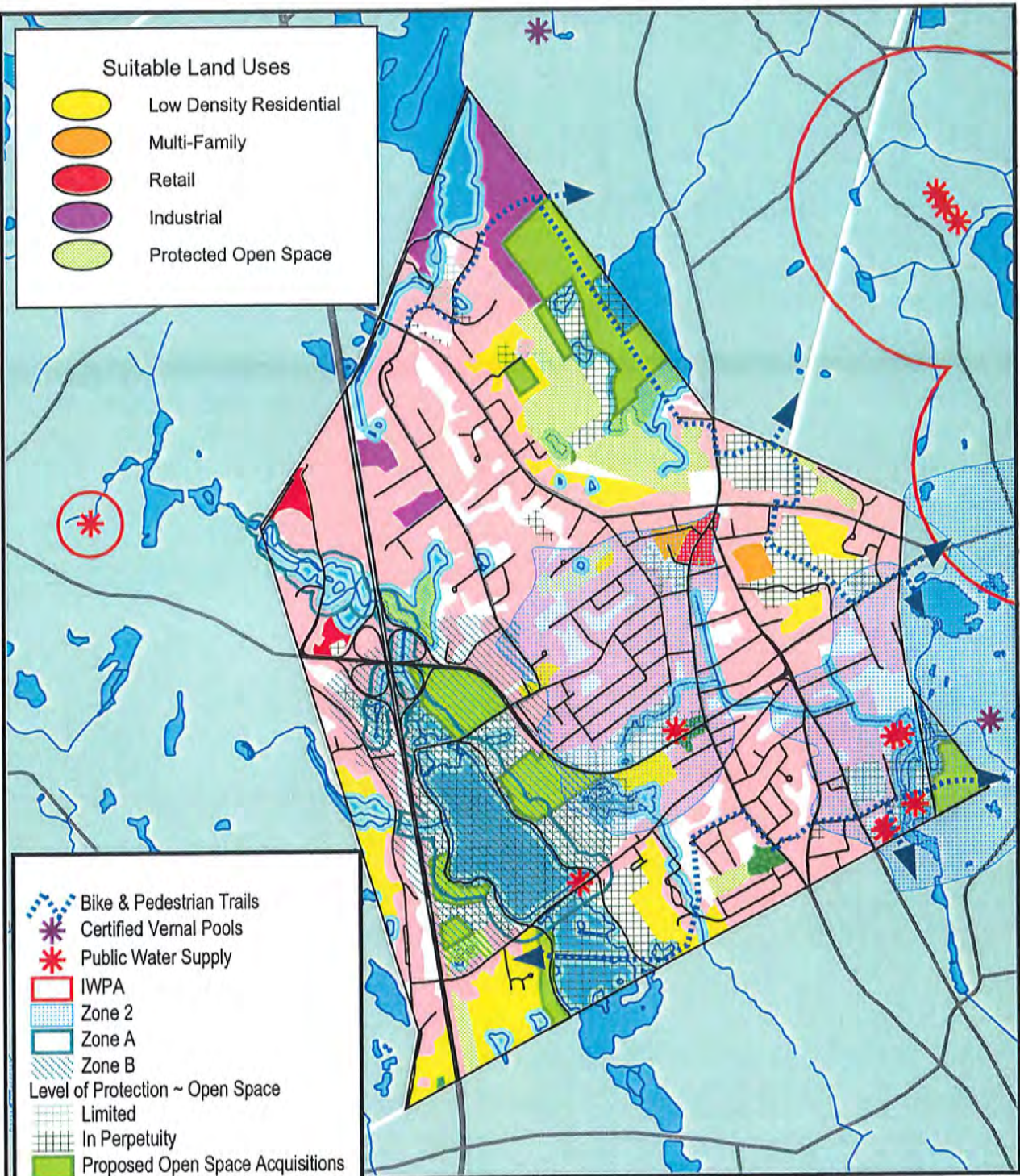
#### Recreation Facility Improvements and Additions:

1. Replace all playground equipment with safe, up-to-date facilities for all ages. Incorporate adult activities (e.g. exercise circuits) and sitting areas near any totlots
2. Resurface and re-equip basketball courts at the high school and the Crowley school.
3. Resurface the ball fields at the Butler school.
4. Clear eleven acres of land at the Butler school and construct two soccer fields.
5. Build walking paths with benches and bike paths through the Lutheran home property.
6. Equip the old unused tennis courts at the Butler school for seasonal ice skating
7. Build new fencing, scoreboards and concession stands at town ball fields.
8. Build a picnic pavilion at the Lutheran home site equipped for seasonal ice skating .
9. Install security lights at the Butler and Crowley school fields.



# Resource Protection / Land Suitability

Figure I -5



**Suitable Land Uses**

- Low Density Residential
- Multi-Family
- Retail
- Industrial
- Protected Open Space

- Bike & Pedestrian Trails
- Certified Vernal Pools
- Public Water Supply
- IWPA
- Zone 2
- Zone A
- Zone B
- Level of Protection ~ Open Space**
- Limited
- In Perpetuity
- Proposed Open Space Acquisitions
- Agriculture
- Hydrography 25K
- 100 ft buffer
- Ponds & Wetlands
- Major Highways
- Developed Land
- Avon
- Surrounding Towns

0.5 0 0.5 1 Miles



Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD, OCPC Field Data

June, 2004





## **F. Degrees of Protection**

There are several degrees of Resource Protection.

Ownership by a public agency for open space, recreation, and natural resource protection is the most protective if the purpose of the agency is such protection, and if the sites are dedicated to such use in the deed. The deed can be important because a town meeting vote to acquire land for open space purposes does not always prevent a change in use or later sale. In addition, such a deed triggers further protection under Article 97 of the Massachusetts Constitution which requires a 2/3rds vote of each house of the General Court to change the use of public land acquired for such purposes. Article 97 should apply to any land held for open space recreation and resource protection by an agency with such purposes, but dedication in the deed strengthens this protection.

In all, protection under Article 97 also applies to lands held for open space purposes by state agencies such as the new Department of Conservation and Recreation (including the former Department of Environmental Management and the Metropolitan District Commission) and the Division of Fisheries and Wildlife; and by local bodies such as Conservation Commissions, Water Departments, and Recreation Commissions. While the Article refers only to the power of the General Court to provide for acquiring land for such purposes, the Attorney General interprets it as also applying to acquisitions by individual communities since they are creatures of the state.

In contrast, land held by the Selectmen for general municipal purposes or by the School Department for educational purposes (including playgrounds) is not so protected. Hence backland or playground land on a school site may be converted to other uses unless specifically committed to open space or recreation uses, e.g. by a conservation restriction.

In addition, land acquired with aid from the State Division of Conservation Services is protected indirectly by a requirement that such land converted to other uses (most commonly schools) has to be replaced with land of similar size and value. This is often difficult in land-short communities.

Land taxed at its current use value under Chapter 61, (forest), 61a (agriculture), and 61b (recreation), rather than at a speculative development value, is under reduced development pressure and therefore may remain open much longer than otherwise likely. However, it is not actually protected.

This relief lessens the tax pressure to sell, but does not prevent a very profitable sale for a more intensive higher-value use. An owner may always take the land out the respective chapter by paying a portion of the taxes saved and then convert it to another use later, so long as it is not also offered for sale for such a different use at the time that it is taken out of the program. If the land is offered for sale for a different use, the Conservation Commission, Planning Board and Board of Selectmen must be notified. Then the town (or an agency acting for it e.g., a non-profit land trust or the Department Conservation and Recreation ) has at best 120 days in which to meet the private purchase offer.



Land held for open space or recreation use by private bodies, e.g. private golf courses or sportsmens clubs, is not protected unless covered by a conservation restriction.

### **G. Inventory by Degree of Protection**

Avon's Open Space and Recreation resources consist of present public and semi-public holdings and facilities, and, more broadly, of other natural and scenic assets which give the town some of its character and may require protection. Some resources can be protected by partial or full acquisition. Others, such as a scenic landscape or an historic development pattern, may be difficult to protect without changed perspectives on approaches to land use. The discussion below uses these terms:

Full Protection - Protected by the owners' purposes or method of acquisition under Article 97 and / or dedicated to open space use in the deed

Good Protection – Protected by the owner's compatible purposes as with school playgrounds, but potentially converted to school building use.

Fair Protection – Publicly held, but for undefined municipal purposes and potentially available for other uses

Avon contains approximately 566 acres of fully or partially protected open space. Of these 540.1 are publicly-owned and 25.6 are privately-owned. Of the public holdings, 238.3 acres are at D.W. Field Park and 291.8 acres are in town parks, conservation and recreation holdings, cemeteries, and water supply protection lands. Of the public land, 11.1 acres are owned or managed by town bodies other than the Conservation, Park/ Recreation, or Water Commissions and may not be permanently protected. The land around the park acquired or proposed for acquisition is shown on Fig.I-6.

#### **1. OPEN SPACE PROTECTED BY OWNERSHIP AND / OR PURPOSE**

(a.) City of Brockton

(a.1) D.W. FIELD PARK / CITY OF BROCKTON RESERVOIR

LOCATION: Land is west of Harrison Blvd., bordered by Harrison Blvd., Old Pond Street, South Street, Central Street and Route 24.

MAP, BLOCK, AND LOT NUMBERS: A5/3/5; B2/5/3; B3/ 3/2, B3/3/2; B4/ 6/2; B4/7/2; B5/1/1; C2/ 1/1

ACRES: 238.26

MANAGEMENT: City of Brockton Water and Park Departments

HANDICAPED ACCESSIBILITY: Partial: Parkway is accessible as is base of tower, shore of Waldo Lake is steep and rocky, walk along dam requires steps

Recommendation: plan for accessibility along new trails in expanded holdings, improve access to shore for fishing, any future swimming and small boat access

DEGREE OF PROTECTION: Full protection of Park land; Good Protection of Water land

ZONING: Business

D.W. Field Park is located in the northwest corner of Brockton and southwest corner of Avon. The site includes the Brockton Reservoir, and Waldo Lake in Avon. Recreational opportunities include walking, jogging, bicycling, boating, fishing, golf, hiking, ice skating, picnicking and cross country skiing. A sizable, several year program to acquire abutting private lands in order to protect the Park and Reservoir has led to major acquisitions as described below

In Avon much of the defined Park land east of the Park along Harrison Blvd. is a very thin strip long-bordered by privately owned land zoned for business and housing industrial land. Thus much of the apparent park woodland was illusory. As- of-right commercial development there would have greatly reduced the apparent Park, and run-off and septic system leachate potentially threatened the down-slope reservoir which supplies the City with about 800,000 gallons / day.

In addition the Park was comparably threatened by development on other Avon land to the west. Four house lots were approved and cleared in a development called "South Park Custom Homes" on South Street and another subdivision was approved. This lead to a joint city/town proposal to acquire up to 137.4 acres of vacant land to create a wooded buffer around the park benefiting both communities by protecting drinking water source and preserving open space.



A Couple Enjoying D.W. Field Park at the End of the Day

The state's Division of Conservation Services encouraged the effort and approved funding for a first phase, but local matching funding lagged. Since then the

Brockton Water Commission has acquired the 68.82 acres listed below and shown as three major non-contiguous holdings labeled E-1, E-2 and E-3 on the map of Protected Lands. This leaves about 48.4 acres between or adjacent to the major acquisitions to be acquired, while approximately 20.2 acres are now unavailable in being approved subdivisions. See Fig. 7 adapted from the original Self Help application. Unfortunately much of the unavailable land runs along the West Parkway as is discussed later.

Other relatively inaccessible land to the west of the Park owned by the Veterans of Foreign Wars (h-1) is unlikely to be developed but would be appropriate to acquire for coordinated management as discussed later under Other Lands of Conservation and Recreation Interest. Similarly, other long-term City holdings north and west of the Park (discussed below as e.4 and e.5 about the Park, and appear to be part of it. They and would appropriately be managed as part of it with protective Water Commission oversight.

(b.) Town of Avon Lands, Managed by Conservation Commission

(b.1) LOCATION: Off Robbins Street, north of the Crowley School

ACRES: 16.7

MAP, BLOCK, AND LOT NUMBERS: D6/06/ 25

MANAGEMENT: Conservation Commission

HANDICAPPED ACCESS: Bathrooms etc. are at adjacent Crowley School

Parking is available at edge of woods but terrain is irregular.

Recommendation: Create smoothly graded paths as part of the proposed bike / pedestrian paths.

DEGREE OF PROTECTION: Good, depending on deed

ZONING: Residential A, 25,000 sq. ft. lots

This site is an irregular grass and tree covered area. Access is from an unmarked strip of woods between two houses on Robbins Street. It is unimproved wooded upland just north of the Crowley School and lacking any trails or facilities. It could be used for recreation purposes tied into recreational development and potential trails at the Crowley School.

(b.2) LOCATION: 450 East Main St.

AREA: 27,550 sq. ft.

MAP, BLOCK AND LOT NUMBERS: D3/ 10/ 09

MANAGEMENT: Conservation Commission

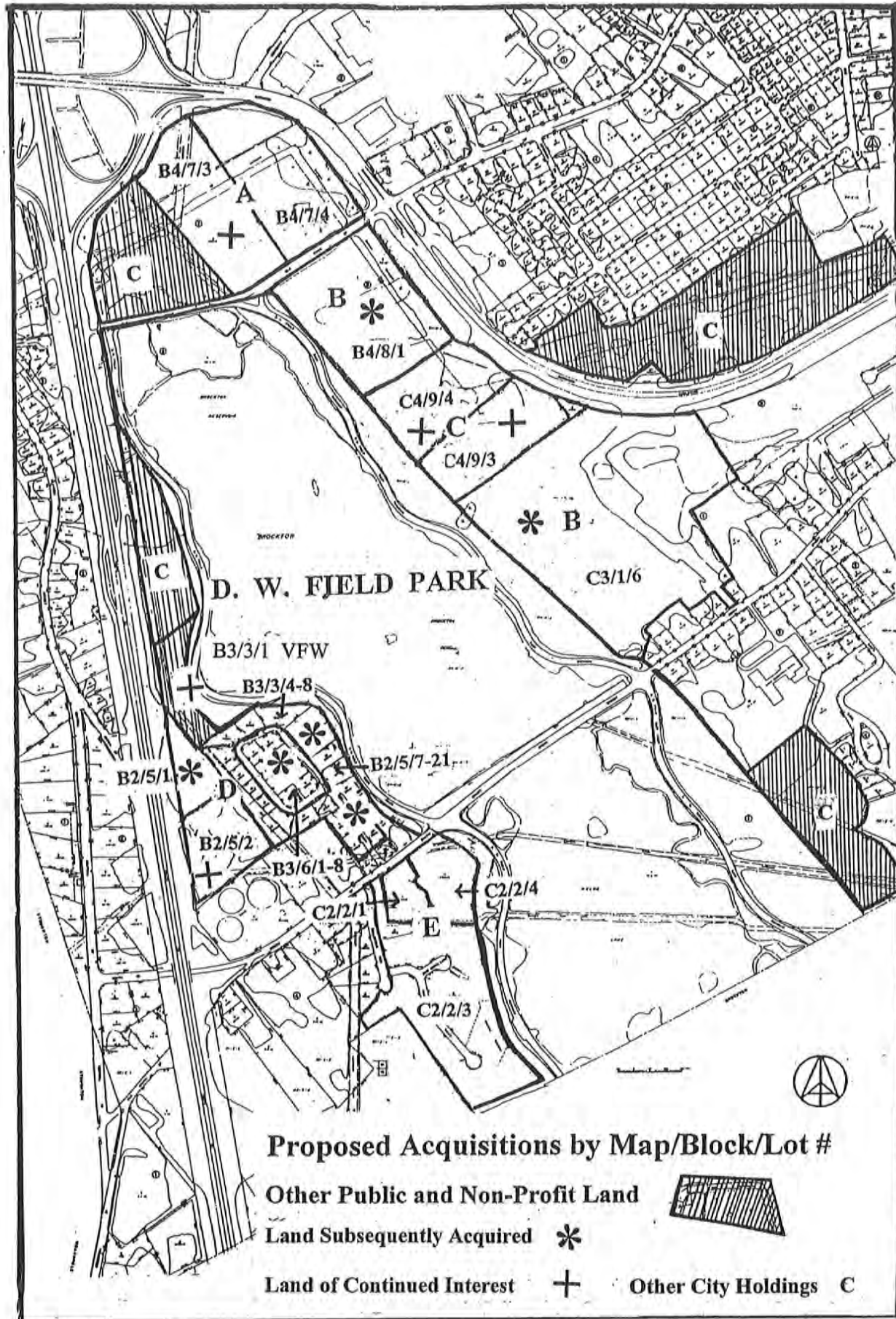
HANDICAPPED ACCESS: None except at edge of steep site

Recommendation: Grade future paths for maximum access to different levels

DEGREE OF PROTECTION: Good, depending on deed

ZONING: Business District





This small, thickly-vegetated, steeply sloping site is covered by trees, shrubs and some grass. Access to the highest part of the site is from East Main St. while Connolly Rd. could give access to the lower portions. Though too steep and densely wooded for a major playground, it could be developed with small activity areas at different levels with much vegetation retained on the steepest slopes and in the lowest, wettest areas. It is now unimproved open space with no trails or other facilities.

- (b.3) LOCATION: Central Street  
ACRES: 11.5  
MAP, BLOCK AND LOT NUMBERS: B4/1/ 1  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: None except to edge of site from road.  
Recommendation: Design any future paths for wheelchair access.  
DEGREE OF PROTECTION: Good, depending on deed  
ZONING: Residential B, 40,000 sq. ft. lots

This grass and tree covered area has access via a right-of-way to Central Street. It is unimproved open space acting as a buffer between houses and a Rte. 24 on-ramp. It has the potential to include a significant storm water detention basin protecting and recharging this area upstream of the Brockton reservoir.

- (b.4) LOCATION: Wales Ave.(Conservation for drainage purposes)  
ACRES/SQUARE FEET (2 parcels) 2.85.  
MAP, BLOCK AND LOT NUMBERS: B8/ 04/ 03  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: Nope except from edge of road, Demand is unlikely as this is a low-lying drainage area  
DEGREE OF PROTECTION: Good, depending on deed  
ZONING: Industrial

This is a grass and tree covered drainage basin at the corner of Wales Ave. and Bodwell Street in the Industrial park. Access is from Wales Ave. It may have been part of the closed town sanitary landfill.

- (b.5) LOCATION: North of Wales Ave., East of Page St.  
AREA: .64 acres.  
MAP, BLOCK AND LOT NUMBERS: B8/ 03/6  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: Minimal from edge of this undeveloped wooded strip.  
DEGREE OF PROTECTION: Good, depending on deed  
ZONING: Industrial

This long, narrow, grass and tree covered area in the Industrial Park forms an informal buffer between an industrial building and houses along Page Street

and has access is from Wales Ave.

- (b.6) LOCATION: South of Wales Ave., east of Page St.  
AREA: .3 acres.  
MAP, BLOCK AND LOT NUMBERS: B7/4/2  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: Minimal from edge. It is an undeveloped wooded strip.  
DEGREE OF PROTECTION: Good, depending on deed  
ZONING: Industrial

This is a second long, narrow grass and tree covered strip of land forming a buffer between an industrial building and houses along Page St. with access from Wales Ave.

- (b.7) LOCATION: Rear, Page St. and Randolph Town Line (Conservation for groundwater recharge)  
ACRES: 9.0 acres  
MAP, BLOCK AND LOT NUMBERS: C8/ 02/ 05  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: None; a low-lying, totally landlocked parcel  
DEGREE OF PROTECTION: Good, depending on deed  
ZONING: Residential B, 40,000 sq. ft. lots

This landlocked site is a long, rectangular un-improved parcel of wooded swamp on the Randolph town line. It is listed as held for groundwater recharge and it abuts the eastern end of a larger, comparable holding in Randolph. That in turn abuts N2, the Edwards property discussed under Unprotected Lands. There are no trails on the site, but they are proposed later on the adjacent unprotected land.

- (b.8) LOCATION: Rear of Page St., West of B7, (Conservation for groundwater recharge)  
ACRES: 33.4  
MAP, BLOCK AND LOT NUMBERS: C7/3/ 27  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: None; a large, low-lying, totally landlocked parcel  
DEGREE OF PROTECTION: Good, depending on deed  
ZONING: Residential B, 40,000 sq. ft. lots

This is a large irregular parcel of wooded swamp with some upland in the portion nearest Page St. It is separate from B7 by F3, the Schepis land discussed under Unprotected Lands

- (b.9) LOCATION: Past the northern end of Stockwell Drive between the town line and Route 24



AREA: 139 Sq. Ft.  
MAP, BLOCK AND LOT NUMBERS: A7/01/ 02  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: Next to roadway around CostCo store  
DEGREE OF PROTECTION: Good, depending on deed  
ZONING: Industrial

This is a tiny rock, grass and tree-covered lot near the Costco store in the Avon Merchants Park with access from Stockwell Drive. It is possibly big enough for a commemorative picnic table.

- (b.10) LOCATION: "Avon Park" land off King Street, east of Page Street and west of Conservation holding b.8.  
AREA: 2.75 acres  
MAP, BLOCK, AND LOT NUMBERS: C7 / 2 / 4,5,6.  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: None, beyond passable portion of King Street.  
Recommendation: Grade any future paths for wheelchair access  
DEGREE OF PROTECTION: Good, depending upon deed  
ZONING: Residential B, 40,000 sq. ft. lots.

These are three 40,000 sq ft. lots in a failed / tax-foreclosed subdivision

- (b.11) LOCATION: Further "Avon Park" land off King Street, east of Page Street and diagonally across from Housing Authority holding ( j.2) below.  
AREA: 4.6 acres  
MAP, BLOCK, AND LOT NUMBERS: B7 /4 /9,10,11; B8/ 4 / 7,8  
MANAGEMENT: Conservation Commission  
HANDICAPPED ACCESS: Poor; at edge of passable portion of King St.  
Recommendation: Grade any future paths (e.g., to Bodwell Street, allowing noon-time walks) for wheelchair access.  
DEGREE OF PROTECTION: Good, depending upon deed  
ZONING: Residential B, 40,000 sq. ft. lots.

This slightly higher ground is mapped as upland on the edge of the swamp. Only part of it is mapped as severely limited for septic systems, and it has frontage on King Street, so this land may be partly developable .

c. Town of Avon Park Land

- (c.1) John J. DeMarco Park  
LOCATION: North Main Street, north of East High St., abutting vacant land in Randolph  
ACRES: 22.8 Fig. 8 Page St woodlands  
MAP, BLOCK AND LOT NUMBERS: D6/ 7/ 1  
MANAGEMENT: Park and Recreation Commission.

HANDICAPPED ACCESS: Fully accessible paths to bandstand and fountain;  
Rear land is undeveloped with informal paths.

Recommendation: Design recommended bike / pedestrian system for full wheelchair accessibility.

DEGREE OF PROTECTION: Full, given its purpose .

ZONING: Residential A, 25,000 sq. ft. lots

Uses of this recently acquired "Lutheran Home" site were explored by a Lutheran Property Study Group appointed by the Board of Selectmen. A resulting survey suggested many recreational use with the greatest demand for a bike path, presumably to be integrated with paths to and from other destinations. For example, a path from the site's East High Street frontage to that on North Maim Street could allow a rider going from East High Street to North Main Street to avoid their busy intersection of the two roads and enjoy the scenery within the site. Similarly a path into the Holbrook woodland to the east could connect with Route 28 further north via local streets in Holbrook and Randolph.



John J. DeMarco Park Dedication April 25, 2004

After further study the front part of the site has since been developed as the multi-purpose John J. DeMarco Park honoring the late long-term selectman, civic leader and regional planning advocate. The park includes a brick remembrance walkway, a lawn for picnics and concerts, walking paths, a pavilion and a fountain. Further uses of the whole site are still possible.

## 2. PARTIALLY PROTECTED LANDS HELD FOR OTHER PURPOSES BY PUBLIC OR NON-PROFIT BODIES

(d.) Town of Avon Lands Held by the Water Department

(d.1) LOCATION: Brentwood Ave.





John J. DeMarco Park Dedication , April 25, 2004. DeMarco Family Uncovers the Monument

ACRES: 28.3)

MAP, BLOCK AND LOT NUMBERS: C4/ 8/ 22&23; D4/3/1; D4/2/1

MANAGEMENT: Avon Water Dept., Highway Dept.

DEGREE OF PROTECTION: Good, given long-term need.

ZONING: Residential A, 25,000 sq. ft. lots

The eastern end of this strip houses Avon's oldest well, the dug (not drilled) Porter Well along with the town's Highway Department. The easternmost portion across W. Main St. houses a sand pile and an apparent salt shed. It backs onto a low open marshy portion of Trout Brook (just upstream from Harrison Blvd.) with potential for multi-purposed flood storage / recharge/ habitat use. An Eastern Edison utility line runs through the site and is kept clear of trees and brush. Access is from residential Brentwood Ave., Harrison Blvd. and W. Main St. Uses are limited by the need to protect the well and to keep the area accessible for power line maintenance. It is best left to function as a protected green space with examination of its potential for flood storage and recharge..

(d.2) LOCATION: Harrison Blvd.

AREA: .31 acres

MAP, BLOCK AND LOT NUMBERS C4/9/2

MANAGEMENT: Avon Water Dept., Highway Dept.

DEGREE OF PROTECTION: Good, given long-term need

ZONING: Business



This is a grass and tree covered lot west of the curve of Harrison Blvd. and abutting recently acquired Brockton Water holding C1 above, and parcels C4,9,4 and C4,9,3 proposed for acquisition by the Avon Water Dept. Due to its relative inaccessibility it is best left as protected open space and managed as part of the adjacent water lands. .

- (d.3) LOCATION: Connolly Road  
AREA: 11.38 acres  
MAP, BLOCK AND LOT NUMBERS E3/4/1 & 10; E3/5/1&2.  
MANAGEMENT: Avon Water Dept., Highway Dept.  
DEGREE OF PROTECTION: Good, given long-term needs  
ZONING: Res. A, 25,000 sq. ft. lots / Business along Rte 28 frontage  
DEGREE OF PROTECTION: Good, depending on long-term needs  
This site includes town water supply protection land and Department facilities south of Connolly Road. It is at the edge of a commercial area with little population.

- (d.4) LOCATION: Argyle Ave.  
AREA : 1.5 acres  
MAP, BLOCK AND LOT NUMBERS E4/ 3/ 3,4&5.  
MANAGEMENT: Avon Water Dept., Highway Dept.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential A, 25,000 sq. ft. lots

This site is the location of many water department facilities. It is located in a commercial area with a small population density. Due to it's location and importance as a water supply area it is best left as protected green space.

- (d.5) LOCATION: Meadow Road  
AREA: 17.37 acres  
MAP, BLOCK AND LOT NUMBERS E4/1/ 4,5,7,13,14,15  
MANAGEMENT: Avon Water Dept., Highway Dept.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential A, 25,000 sq. ft. lots

This extensive well protection area contains a well / pumping station and borders a recent Walmart Store.

- (d.6) LOCATION: East of RR tracks, west of Holbrook Line, north of Brockton line  
AREA: 8.8 acres .  
MAP, BLOCK AND LOT NUMBERS E4/1/1,2,3 4,5; E4 /5/3  
MANAGEMENT: Brockton Water Dept.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Res. A, 25,000 sq. ft. lots; plus Industrial on northern most tip; E4/4/3

This recently acquired land further protects Avon's wells and is complemented by recently acquired land in the adjacent part of Holbrook. This acquisition was particularly necessary given the lack of water supply protection zoning in Holbrook's industrially-zoned portion of Avon's Zone II recharge area. The Old Colony Planning Council discussed appropriate zoning changes with the Holbrook Public Works Department and Planning Board in the late 1980s but little happened, making acquisition the most protective option.

- (d.7) LOCATION: Atone Rd./ Sanborn Hill Road Standpipe  
ACRES: 2.0  
MAP, BLOCK AND LOT NUMBERS B4/2/1  
MANAGEMENT: Avon Water Dept., Highway Dept.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots

Access is via a curved, crushed stone road off of Central St. The area outside of the fenced-in standpipe has a very attractive open, needle-carpeted pinewoods sloping towards the Stoughton line. It has been proposed for a playground /tot lot since the nearest play area is at the Butler School, about two miles away, but might be too much out of sight for this use without opening up the view from the street. It might better be left of informal recreation.

- (d.8) LOCATION: Page Street Standpipe  
ACRES: 5.40  
MAP, BLOCK AND LOT NUMBERS C6/2/38  
MANAGEMENT: Avon Water Dept..  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots

Like the Antone Rd. standpipe site above, this land has limited visibility, being up a driveway and back about 350', yet the size of the wooded site suggests use for a playground and tot lot. The immediate neighborhood is residential and the nearest play area is at the Avon High School a half mile away.

(e.) BROCKTON WATER PROTECTION LAND

- (e.1) LOCATION: Between Harrison Blvd. and Park, just south of Pond St.  
AREA: 12.3 acres  
MAP, BLOCK AND LOT NUMBERS B4/ 8/1;

MANAGEMENT: Brockton Water Commission.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots

Recently acquired extensive woodland sloping from Harrison Blvd. to the edge of the present park and offering a potential for Park expansion and activities such as hiking and trail bike riding.

- (e.2) LOCATION: Between Harrison Blvd. and Park, north of South St.  
AREA: 40 acres;  
MAP, BLOCK AND LOT NUMBERS C3/1/ 6,  
MANAGEMENT: Brockton Water Commission.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots

Recently acquired extensive woodland, some open land and a small pond between the curve of Harrison Blvd. and the edge of the present park and offering a potential for Park expansion and activities such as hiking, trail bike riding, and habitat preservation.

- (e.3) LOCATION: Between Rte. 24 and Park, north of South St.  
AREA: 15.52 acres; 13.30 acres previously subdivided as Martineau Circle and 3.22 acres between the Circle and Rte. 24  
MAP, BLOCK AND LOT NUMBERS B2/ 5 7-20; B2./ 6/ 01-08; and B3/ 3/4-8; and B2/ 5 / 1  
MANAGEMENT: Brockton Water Commission.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots

Recently acquired irregular woodland running from Rte. 24 to the edge of the Park and almost to South St., offering trails and a wooded backdrop to the Park. It abuts woodland and a pond north of the Brockton water tanks.

- (e.4) LOCATION: North of Park between Pond Street, Rte. 24 and private Striar holdings (M-1) discussed below  
AREA: 11 acres;  
MAP, BLOCK AND LOT NUMBERS B4 / 7/ 2  
MANAGEMENT: Brockton Water Commission.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots

Long-term water supply protection holdings dating back to when Avon was East Stoughton. These City-owned wetlands, open water and segment of Beaver Brook look like part the Park, but are managed separately from it.

- (e.5) LOCATION: Between Park and Rte. 24



AREA: 7.3 acres;  
MAP, BLOCK AND LOT NUMBERS B3 / 3/ 2  
MANAGEMENT: Brockton Water Commission.  
DEGREE OF PROTECTION: Good, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots

This unused strip of level woodland held for water supply protection looks like part of the Park, but is managed separately.



D.W Field Park at Sunset – Looking at Partially Protected / Partially Unprotected Land on the East Side from the West Side

These long-term holdings and extensive acquisitions around D.W. Field park have accomplished much, but some key gaps remain as can be seen on the following map. The hope is that these holdings and their management can be integrated with the Park while protecting water quality. The major gaps are m-1 at the northern end of the Park (B4/7/3 and 4); m-2 between two major holdings along Harrison Blvd. (C4/9/3 and 4) of interest to the Avon Water Dept), and one parcel m-3 (B2/5/2) up against Rte. 24. In addition the visual character of the Park would benefit from partial acquisition or committed vegetated screening of m-4 along the approved, but un-built Fieldstone subdivision next to the park drive south of the present South Park development. In addition overall protection and park management would benefit from acquisition of the VFW property (m-5 / H-1) (B3/3/1) and integration of the adjacent City-owned holdings e-4 north of the Park and e-5 between the Park and Rte. 24.

(f.) Other –Town Pound

(f.1) Town Animal Pound  
LOCATION: Wales Ave.



AREA: 7.1 acres  
MAP, BLOCK AND LOT NUMBERS B8 / 1 / 6.  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Fair, depending on the Town's needs.  
ZONING: Residential B, 40,000 sq. ft. lots.

This facility is located at the former town dump. It has potential environmental issues need to be examined before possible reuses of this site can be explored.



A Natural Spot in D.W. Field Park

(g.) Public and Private Cemeteries

Owned by Town of Avon

- (g.1) LOCATION: Page Street, north of King Street, Curtis Cemetery  
AREA: .12 acres  
MAP, BLOCK AND LOT NUMBERS B7 4/ 6  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential B, 40,000 sq. ft. lots.





Historic Curtis Cemetery on Page Street

- (g.2) LOCATION: 180 East Main Street, Town of Avon Cemetery  
AREA: .26 acres  
MANAGEMENT: Town of Avon  
MAP, BLOCK AND LOT NUMBERS D5/ 6/ 19  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential A, 25,000 sq. ft. lots.

These are two small, historically evocative, stone wall-bound spots adding to the town's character and interest.

Privately Owned

- (g.3) LOCATION: 80 Memorial Drive, Avon Cemetery Association  
AREA: 8.1 acres  
MAP, BLOCK AND LOT NUMBERS: E4 / 2/ 1  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential A, 25,000 sq. ft. lots.

This large, attractive facility is a neighborhood asset even though the surroundings are only partly residential. One question is the ownership of and prospects for the 3 acres (E4/2/2) which wrap around the north side, east side and half of the south side of the cemetery.

- (g.4) LOCATION: East Spring Street, St. Michael's Cemetery  
AREA: 10.8 acres  
MAP, BLOCK AND LOT NUMBERS: E5 /1/ 1  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential A, 25,000 sq. ft. lots.



This major facility extends the open space character of the adjacent Crowley School and backs on to the Fellowship Circle public housing for the elderly to the north. It is suggested below for inclusion with the Robbins St. woodland to the north and the Demarco Park /Lutheran Home property in a bike path system linking open spaces and other destinations

(h.) Non-profit Holdings

- (h.1) LOCATION ,VFW Land Between the Park and Rte. 24 , just south of e.5 above.  
AREA: 3 acres  
MAP, BLOCK AND LOT NUMBERS B3 /3/ 1;  
MANAGEMENT: Veterans of Foreign Wars  
DEGREE OF PROTECTION: Fair, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots. Also within Avon's Water Supply Protection Overlay Zoning District limiting hazardous uses.

(i.) Avon Housing Authority

- (i.1) Senior Citizen Housing: 5.10 acres. This abuts St. Michael's Cemetery which abuts the Crowley School land, which in turn abuts the Robbins Street conservation land. No significant undeveloped land
- (i.2) LOCATION: Former Avon Park subdivision land east of Page St. and abutting Conservation holding b.10, above  
AREA: 2.75 acres  
MAP, BLOCK AND LOT NUMBERS C7 /2/ 1,2,3  
MANAGEMENT: Avon Housing Authority  
DEGREE OF PROTECTION: Good, given unlikely housing use  
ZONING: Residential B, 40,000 sq. ft. lots

These three low-lying 40,000 sq. ft. lots adjacent to Conservation holding (b.10) above are owned by the Avon Housing Authority for potential low cost housing, rather than by the Town. Such development seems unlikely, given the site's isolation and probably wooded swamp character.

3. PARTIALLY PROTECTED PUBLIC RECREATION AND ATHLETIC FACILITIES

- (j.) Avon School Department and Parks and Recreation Commission. Total holdings including land and buildings: Schools 53.0 acres; Commission .6Sacreq. Ft.
- (j.1). LOCATION: AVON HIGH SCHOOL 285 West Main Street  
AREA: 8.6 acres  
MAP, BLOCK, AND LOT NUMBERS: C5, 10, 06

FACILITIES: Gymnasium, basketball court, playground, tot lot, seasonal ice skating rink, one ball field at Noonan Field.

MANAGEMENT: Park and Recreation Commission. Noonan Field is fully scheduled with the Babe Ruth teams and with certain South Shore men's league teams. It is also used by high school teams and for pick up soccer games.

**HANDICAPPED ACCESS**

- Parking includes handicapped parking spaces
- Signage - sign that identifies the facility
- Bathrooms are accessible
- All facilities are on ground level

**Recommendation:**

- Build a level paved path to facilities from parking area.

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

(j.2) LOCATION: RALPH D. BUTLER ELEMENTARY SCHOOL, Patrick Clark Drive

AREA: 28.3 acres

MAP, BLOCK, AND LOT NUMBERS: C3, 02, 15

FACILITIES: Gymnasium, playground, tot lot, tennis courts (unused), three ball fields, soccer field.

MANAGEMENT: Park and Recreation Commission. The "High School Field" here is reserved exclusively for high school teams. Two fields are used for Little League. All the fields need to be reconstructed.

**HANDICAPPED ACCESS::**

- Parking includes handicapped parking spaces
- Signage - a sign that identifies the facility
- Restrooms in building are accessible
- All facilities are on ground level

**Recommendations**

- Build a level paved path to facilities from parking area.

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

(j.3) LOCATION: ROBERT F. CROWLEY SCHOOL, Fagan Drive

AREA: 16.1 acres

MAP, BLOCK, AND LOT NUMBERS: D5, 06, 07

FACILITIES: Playground, tot lot, two ball fields, a small soccer field.

The fields are used by Little League and high school softball teams.

The site abuts conservation land to the north and St. Michael's Cemetery to the south.

MANAGEMENT: Park and Recreation Commission

**HANDICAPPED ACCESS:**

Parking includes handicapped parking spaces

Signage - a sign that identifies the facility



Crowley School Ball Fields with Woods behind St. Michaels Cemetery to Rear

- Restrooms in building are accessible
- All facilities are on ground level

Recommendation:

- Build a paved path from parking area to facilities .

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

(j.4) LOCATION: Bartlett Street Tennis Courts, across from High School

AREA: .6 acres

MAP, BLOCK, AND LOT NUMBERS: D6 / 4 / 19.

FACILITIES: Two tennis courts

MANAGEMENT: Park and Recreation Commission

HANDICAPPED ACCESS:

- Parking lacks handicapped parking spaces
- Restrooms – none on site
- All facilities are on ground level

Recommendation:

- Needs a handicapped parking space .

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

#### 4. PRIVATE RECREATION FACILITIES

(k.1) LOCATION: AVON FISH AND GAME, INC. 113 Granite Street

AREA: 3.9 acres



MAP, BLOCK, AND LOT NUMBERS: C5 / 1 / 49

FACILITIES: Clubhouse with inside gun range, outside archery range, picnic area. Club is at the end of a dead end street near the Avon Industrial Park. The site is reduced from a past 8.9 acres by sale of land to the abutting Condyne Corp.

DEGREE OF PROTECTION: Fair, depending on the club's long-term plans

ZONING: Residential A, 25,000 sq. ft. lots.

## 5. MISCELLANEOUS TOWN PROPERTIES

(1.1) School Department: 53.0 acres (see recreation inventory)

(1.2) Town Offices: 1.86 acres The small Trout Brook tributary ponding area and covered foot bridge behind and between the Town Offices and the Library suggest possible approaches to handling downstream potential multi-purpose flood storage / recharge / habitat protection areas.

(1.3) Police and Fire Department: 1.70 acres

(1.4) Town Library: 1.10 acres

(1.5) LOCATION: Corner of Memorial Drive and Ladge Drive

AREA: 31, 257 square feet

MAP, BLOCK, AND LOT NUMBERS: D4 / 17 / 11

MANAGEMENT: Town of Avon

DEGREE OF PROTECTION: Fair, depending on Town needs

ZONING: Residential A, 25,000 sq. ft. lots.

This is a key parcel accommodating the Edison power line and Trout Brook; potentially the upper end of a flood storage / recharge impoundment at the Ladge Drive culvert.

There are also several small or land-locked, town-owned parcel generally acquired through tax foreclosure. Some many have potential for neighborhood open spaces while others might better be sold to abutters to enlarge lots.

(1.6) LOCATION: Private Lane west of Page St.

AREA: 1 acre

MAP, BLOCK, AND LOT NUMBERS: C6 / 2 / 5,6

MANAGEMENT: Town of Avon

DEGREE OF PROTECTION: Fair, depending on Town needs

ZONING: Residential B, 40,000 sq. ft. lots.

These wooded lots abut two private ways one of which abuts back land next to vacant lots along Granite St. and the Avon Fish and Game Assn. property described above. They help to give a wooded backdrop to adjacent neighborhoods.



Covered Bridge over Trout Brook Tributary behind Town Offices - a Popular Hang Out Despite Recent Vehicular Damage.

- (1.7) LOCATION: Two lots, one of 15,750 Sq. Ft. surrounded by lots fronting on E. Main Street, Connolly Road. and Overlook Drive; the other, of 5400 sq. ft., on Fletcher St.  
AREA: .39 acres  
MAP, BLOCK, AND LOT NUMBERS: D3 / 12 / 5,19  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Fair, depending on Town needs  
ZONING: Residential A, 25,000 sq. ft. lots.

These back onto 4.18 privately-owned acres (E3/1/2) running from East Main Street to Memorial Drive, which could offer a route for a portion of the proposed Field Park to Trout Brook bike / pedestrian path. A new house on intervening Kempton Ave. and commercial growth along Memorial Drive may preclude this. Study the possibilities of acquiring the private land and integrating these with it; potentially donating the 5400 sq. ft. lot for an affordable house given sewerage; or leaving the lots as informal natural areas or expanded private yard space.

- (1.8) LOCATION: Corner of Connolly Road and Overlook Drive.  
AREA: .12 acres (Too small to map)  
MAP, BLOCK, AND LOT NUMBERS: D3 / 12 / 12  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Fair, depending  
ZONING: Residential A, 25,000 sq. ft. lots

This is very small for public use and is landscaped as an extension of the adjacent private house lot.

- (1.9) LOCATION: Two lots south of King St.  
AREA: .12 acres  
MAP, BLOCK, AND LOT NUMBERS: B7 / 6 / 6,7  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Fair, depending on Town needs  
ZONING: Residential B, 40,000 sq. ft. lots.

These are bracketed by houses on this relatively high portion of King Street. They are not needed to make good use of the non-adjacent extensive public land to the east, and might well be left as informal open space or parts of adjacent house lots.

6. LAND UNDER MASSACHUSETTS GENERAL LAWS CHAPTERS 61, 61a AND 61b.

According to the Board of Assessors, Avon has no land under Chapter 61, Classified Forest, Chapter 61 A, Agriculture or Chapter 61b Recreation.

H. OPPORTUNITIES PRESENTED BY UNPROTECTED LANDS OF CONSERVATION AND RECREATION INTEREST

These consist of the remaining unprotected Business or Residentially-zoned land around Avon's portion of the park. They have value in themselves and need protection to protect the Park and in some cases its reservoir

1. Proposed D.W. Field Park Acquisitions

- (m.1) LOCATION: Two adjacent parcels at the Northeast corner of D.W. Field Park owned by Subon Company:  
AREA: 25.05 acres.  
MAP, BLOCK, AND LOT NUMBERS: B4/ 7/ 3, 11.69 acres;  
and B4, 007, 04, 13.36 acres.  
DEGREE OF PROTECTION: None beyond present environmental protection provisions  
ZONING: Business

This is the gateway to the park and part of its watershed. The seemingly buildable lots were proposed for an outlet store which was withdrawn after close environmental scrutiny. Though they are in the Water Supply Protection overlay District, there is the potential for water quality problems from road/parking lot runoff and other hazards depending on business type, Hence these lots are among the most vulnerable and are recommended for acquisition by either the City or the Town.



- (m.2) LOCATION: Between Harrison Blvd. and the Park  
AREA: 16.9 acres  
MAP, BLOCK, AND LOT NUMBERS: C4 / 9 / 3,4  
DEGREE OF PROTECTION: None beyond present environmental protection provisions  
ZONING: Business

This land would be highly developable except for present limited curb cut rights. It is a key gap in preserving / expanding the east side of the Park and includes a potential town well site. Town acquisition through with State Aquifer Land Acquisition funds has been explored and would be appropriate if compatible with well development and informal, non-contaminating recreation use.

- (m.3) LOCATION: Between Rte.24 and City's recent Martineau Circle acquisitions. k  
AREA: 5.9 acres  
MAP, BLOCK, AND LOT NUMBERS: B2 / 5 / 1  
DEGREE OF PROTECTION: None beyond present environmental protection provisions  
ZONING: Residential B, 40,000 sq. ft. lots

This woodland and pond between Rte.24, the Brockton water tanks and the City's recently acquired former Martineau Circle subdivision would make a logical addition to the Park with hiking access partly provided by two mowed pipeline easements at its southern and eastern edges.

- (m.4) LOCATION: From South Street to the Brockton line, west to of the West Parkway.  
AREA: 16.8 acres  
MAP, BLOCK, AND LOT NUMBERS: C2 / 2 / 1; C 2/ 2 /3  
DEGREE OF PROTECTION: None beyond present environmental protection provisions  
ZONING: Residential B, 40,000 sq. ft. lots

This sloping woodland runs along about 1100' of the West Parkway and has frontage on South St. It wraps around the partly- built South Park Homes subdivision at the corner of South Street and the Parkway, and includes the large un-built 14.3 acre Fieldstone subdivision and a 2.5 acre parcel on South Street just west of South Park. The nearest South Park lots are 70 to 190 feet from the Parkway and have nominal buffer area, but the cleared land and new houses are quite apparent from the Parkway. To protect the rest of the Parkway the possibility of re-orienting the Fieldstone project toward planned new development to the west should be explored. In any case the Park would be further protected / enhanced by acquiring land west of the Parkway to the maximum feasible depth and / or acquiring a protective easement along the edge of any new development abutting the Parkway.

(m.5) LOCATION: VFW land between Rte. 24 and the Park, discussed above as holding h.1.

AREA: 3 acres

MAP, BLOCK, AND LOT NUMBERS: B3, 003, 01.

DEGREE OF PROTECTION: Fair, depending on long-term needs and enforcement of environmental regulations

ZONING: Residential B, 40,000 sq. ft. lots. Also within Avon's Water Supply Protection Overlay Zoning District limiting hazardous uses.

Though protected by non-profit ownership and inaccessibility, the land locked three-acre site should be acquired for coordinated management as part the Park

## 2. Other sites

(n.-1) LOCATION: Apparent T.L. Edwards property along Wales Avenue next to the Randolph town line..

AREA: 56.3 acres

MAP, BLOCK, AND LOT NUMBERS: B9 / 2 / 1) (23.2.acres) C9 / 2 / 1 (33.1acres)

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential B, 40,000 sq. ft. lots

Two wooded upland parcels with few mapped limitations for septic systems and abutting woodland across the Randolph line. The westernmost part of parcel B9 / 2/1 is used to store used asphalt and other materials (creating sizable hills) along with old curbing, catch-basin covers etc. These abut the Schepis parcel described below.

With buffering, resolution of any zoning or water quality issues, acceptable access and compatible uses north of Wales Avenue, the vacant land here could be used for the housing allowed by present zoning or for expanded industrial uses. Since the last portion of Wales Ave. was abandoned, the only access may be from the very end of the paved Wales Ave. or through a new subdivision road. The latter could connect with Stoughton Street in Randolph for housing or serve industries by looping back to an existing or new road in Avon. The remaining land could be used for open space and habitat. Acquisition as municipal land would keep the choice in Avon's hands. The unspoiled areas are recommended for acquisition in conjunction with the Schepis land and town land to the south and for use as open space, habitat, and trails.

(n.2) LOCATION: Apparent Schepis property east of Page St. between Town holdings b.7 and b.8 in the page Street woodlands discussed above.

AREA: 52 acres

MAP, BLOCK, AND LOT NUMBERS: C8 / 2 / 4

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential B, 40,000 sq. ft. lots

This is a landlocked parcel abutting the two Edwards properties described above and separating two major town-owned parcels. These parcels were once considered for the site of a municipal golf course. They are largely wet but some peripheral upland might be usable with sewerage or innovative /alternative systems.

(n.3) LOCATION: Private land between Town holdings b-8 and B-10.

AREA: 200,000 square feet

MAP, BLOCK, AND LOT NUMBERS: C7 / 2 / 17,18 ; C8/ 2/3

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential B, 40,000 sq. ft. lots

These four 40,000 square foot lots are between Conservation holding b-8 and the smaller Conservation and Housing Authority parcels discussed above

The combination of holdings b.7, b.8, b-10 and i-2 and sites n-1, n-2 and n-3 along with some intervening private parcels could create a major wildlife preserve and low impact recreation area – particularly if done in conjunction with Randolph’s contiguous Lokitis Conservation Area. Boardwalks and access easements would probably be needed to cross the deepest swamp and to allow trails running from Langley Road to Wales Street to cross intervening private land.

(n.4) LOCATION: One corner on the inner curve of Harrison Blvd. protruding into the Avon Water Dept. land.

AREA: 19,981 square feet

MAP, BLOCK, AND LOT NUMBERS: C4 / 8 / 24

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential A, 25,000 sq. ft. lots

This apparently private parcel points into Water Department holding d.1 above and would best be acquired and managed as part of that property.

(n.5) LOCATION: Between the Lutheran Home/ DeMarco Park property on the Randolph Town line.

AREA: 3.3 acres

MAP, BLOCK, AND LOT NUMBERS: D6/ 7 / 32

DEGREE OF PROTECTION: None beyond present environmental protection provisions



ZONING: Residential B, 40,000 sq. ft. lots

This long, tapered wooded strip runs between the Lutheran Home property, houses in Randolph, and rough woodland in Holbrook. It could complement the Lutheran Home acquisition by going to the town line; and would allow integrated open space uses such as bike / pedestrian trails along the Holbrook / Randolph line and possibly on to the Holbrook/Randolph commuter rail station to the north.

(n.6) LOCATION: Scattered parcels along the stream system with potential for streamside access or multi-purpose use

AREA: Minimal; 31.8 acres in the list below, including 16'1 City owned acres on Beaver Brook, plus a potential 5-10 acres to be identified in open lowlands.

MAP, BLOCK, AND LOT NUMBERS: Potentially including D5 /2/ 18,21; D4 /2/11; D4 / 7 / 11; D4 /13/14,15; D4/17/11,12 ; D4/17/ 11,12; D4/11/17; B6/1/7 and B5/1/1

DEGREE OF PROTECTION: None beyond present environmental protection provisions and City ownership of the Beaver Brook land above Rte.24

ZONING: Mostly Residential A and B, less than an acre of Town-owned Business land, and 1.73 acres of Industrially-zoned streamside land

Though the town's streams are protected by the Sanitary Code, the Wetlands Protection Act and the Rivers Bill, some segments would benefit from selective acquisition in fee or acquisition of easements. These could allow creation of streamside paths or the proposed multi-purpose flood control / ground water recharge/ habitat / open space areas discussed above. Possible opportunities include the following Trout Brook and Beaver Brook segments:

1. The low-lying stream segment between Gill and Rock Street, (D5 / 2 / 18,21), 6.37 acres
2. The low, marshy area just above Harrison Blvd. (D4/ 2/11), 2.2 acres
3. The area between the Blvd. and School St. – which retains provisions for flashboards at School St. (D4 / 11/ 7), 1.8 acres
4. The area just above Glendower Street (D4 / 13 / 4,15), 2.9 acres
5. The land upstream of the Ladge Road culvert (D4 /17/11,12), 2.45 acres
6. The informal Beaver Brook impoundment just above Rte. 24. (B5/1/1), 16.1 acres
7. A segment of Beaver Brook just below Strafello Drive (B6 / 1/7) an estimated 2+/- acre remaining open portion following recent development
8. Another 5-10 acres here storm water is discharged to lowlands.

(n.-7) LOCATION: Private land between sites i-2 and b-11 described above.

AREA: 5.5 acres

MAP, BLOCK, AND LOT NUMBERS: C7/1/1-6

DEGREE OF PROTECTION: None beyond environmental protection provisions

ZONING: Res. B, 40,000 sq. ft.



Potential Flood Storage / Recharge / Habitat Area #2

These possibilities need to be studied in detail. Potential concerns include ownership, ability to hold useful storm flows without harming nearby development and septic systems, potential safe access for any open space, existing and potential groundwater recharge capacity, habitat value, and Wetlands Protection Act regulatory issues related to the above.

#### **H. Overall Community Goals**

The approach to using or augmenting protected and unprotected land depends on the Town's overall goals and resulting sense of needs and opportunities. The following community goals grow out of the goals in the 1964 and 1974 Master Plans and out of Visioning Sessions for the 1999 Master Plan, and continuing contact with the Planning Board and Conservation Commission.

Avon's Open Space Goals are:

1. To provide open space in or close to every neighborhood.
2. To preserve Avon's natural and historical visual character
3. To ensure the excellent quality of Avon's water supply.
4. To preserve and provide conservation land, particularly that with multi-purpose potentials for recreation, flood control, ground water recharge and wildlife habitat preservation and neighborhood enhancement

3. To ensure the excellent quality of Avon's water supply.
4. To preserve and provide conservation land, particularly that with multi-purpose potentials for recreation, flood control, ground water recharge and wildlife habitat preservation and neighborhood enhancement
5. To cooperate with adjacent communities to maximize benefits from potentially shared holdings.
6. To accommodate persons with disabilities at local conservation and recreation areas.
7. To coordinate and plan with other Town Boards and civic groups for the wise use of Avon's natural resources.

Avon's Related Recreation Goals are:

1. To provide recreational opportunities for diverse population groups, not just youth.
2. To meet the long-term space needs of locally significant sports.
3. To increase access to scarce water-based recreational resources, particularly swimming and boating opportunities.
4. To ensure the provision of recreation facilities while recognizing that recreation needs should be met on neighborhood, town wide and regional levels.
5. To ensure cooperation between the Park and Recreation Commission, the School Department, and private groups to avoid duplicating efforts.
6. Whenever possible, to design recreational facilities for multiple use.

## I. ANALYSIS OF NEEDS

The purpose of this section is to identify the overall open space and recreation needs of Avon. Such needs reflect both unavailable basic facilities and un-realized opportunities. Different towns will have different needs reflecting their resources, expectations and opportunities. This section is based on information provided by the Avon Park and Recreation, and Conservation Commissions and staff analysis. It is divided into a conservation needs analysis and a recreation needs analysis.

### 1. Conservation/ Resource Protection Needs

Avon's Conservation Needs include:



- Greenbelt System/ Stream/ Wetlands Protection Avon has scattered holdings, but no complete greenbelt corridors. It needs to develop a system of greenbelts along its streams and wetlands areas while opportunities remain. To do so it should identify critical pieces of the potential system and implement methods to protect them, e.g. purchase, land dedication, conservation easements, local open space provisions, etc.
- Bikeway / Trail System The town lacks a town-wide multi-purpose trail system allowing non-motorized off-road travel. Avon should seek to use existing and proposed easements, sidewalks and small land purchases to connect residential, open space and recreation areas and other destinations e.g. D.W. Field Park, Demarco Park, the High School/Library/Town Hall/Tennis Court Area; Senior Housing, Goeres Square, and the Butler and Crowley Schools.
- Maximum Opportunities for Persons With Disabilities Since the inventory reveals some inaccessible resources, Avon needs to identify and implement ways to provide full access at conservation and recreation areas.
- Water Resource Protection Water quality in the Trout Brook, the Porter Well and Brockton's Reservoir are protected by the Sanitary Code for septic systems and by the Town's Water Supply Protection Zoning District. Since ownership is the best protection, easements and purchase should be considered to prevent development in the flood plain or sensitive recharge areas.
- Augmented Natural Flood Control The town's streams, wetlands and other natural portions of the drainage system provide much flood storage but as mentioned in 1964 and 1974 master plans, and in the 1998 Avon Town Report, the drainage system is inadequate and is in need of rehabilitation. It is also important to protect the quantity of groundwater by enhancing groundwater recharge, particularly if sewers are installed since they will divert potentially recharged water to the downstream treatment plant. Any future drainage improvements should be designed to take advantage of the flood control, recharge, wildlife habitat and open space value of any existing or potential detention areas as noted in the 1988 Updated Drainage Systems Report.
- Protection/Expansion of D.W. Field Park and the Avon Reservoir Some of the adjacent woodland along Harrison Blvd. is still privately-owned and zoned for business, and some land on the west side tied to the Park by trails is privately-owned and has several approved subdivisions. Much of this privately-owned land drains to the Avon Reservoir. Accordingly there is a need to finish acquiring this bordering land and to incorporate it into the Park, thereby protecting the Park and the Reservoir and expanding permanent recreation opportunities. Since Brockton owns the Park, the best approach is a joint effort to acquire the remaining land and to oversee management of the enlarged park.

## 2. Recreation Needs

The Park and Recreation Commission establishes long-range goals and objectives and develops recreation programs and activities in cooperation with other town bodies and local recreational organizations.

### (a.) Determining Recreation Needs

There is no easy way to measure need for recreation facilities. The state has quantitative guidelines in the Massachusetts Statewide Conservation Outdoor Recreation Program or SCORP, however such standards do not recognize that recreation demand reflects a range of population characteristics, local interests, and local recreation opportunities and so on. Also, the standards focus on competitive sports and playgrounds, and are less helpful in supporting activities such as hiking, fishing, swimming, bike riding, etc.

Some other ways of determining needs are through recreation needs surveys or requests from the public for a particular program or activity.

Classification of Public Recreational Facilities:

**Community Park:** These serve the entire community with a large, contiguous open space.

**Neighborhood Park:** These resemble community parks but serve a smaller area.

**Playfields:** These serve to accommodate outdoor sports competition, especially for teenagers and adults. They can be all-purpose or designed specifically for baseball, football or soccer according to league requirements. SCORP guidelines call for 3 acres per 1,000 residents, with a 10-acre minimum, and adequate parking.

**Playgrounds:** Playgrounds provide game space for a particular neighborhood and larger ones should include a tot lot. The SCORP requires one acre per 250 elementary school children in dense neighborhoods, and a service radius of one-half mile.

**Play Lot or Tot Lot:** A play lot should have swings, slides, sandbox and other equipment for serve one - to five-year olds. They can also help to lessen social isolation of suburban parents. The SCORP requires one-half acre for each 1,000 persons in densely populated neighborhoods, and a service area radius of one-quarter mile.

Avon presently has 3 small areas with enough play equipment to be listed as tot lots even though the total calculated area, as shown on the following table, is only a quarter acre.

**Tennis Courts:** SCORP standards require one per 2,000 persons.

Further standards exist for swimming and other activities. Little analysis has gone into increasingly important facilities for skate boards, roller blades, and mountain bikes. These may be too few facilities to meet growing demands regardless of any formal standards.

The following evaluates Avon according to present SCORP standards.

### TOTAL RECREATION NEEDS BY SCORP STANDARDS

Facility Type	Supply	2000 Population	Total Calculated Need	Present/ Net Need (Acres)
Playfields	50 Acres	4,443	13.3 acres @ 3 acres per 1000 pop.	0
Playgrounds	3 Acres	407*	1.6 Acres @ one/ 250 pop. 5-11 Yrs.	0
Tot Lots	.25 Acres	4,443	2.22 Acres @ .5 acre/ 1000 pop.	1.97
Tennis Courts	2 courts (in use)	4,443	3 @ 1 per 2000 pop.	1 Ct.

Town-wide, Avon's facilities meet the 2000 requirements for everything except for tot lots and tennis courts. The town would meet the tennis court requirement if the unused courts at the Butler School are included. Two possible locations for tot lots are at the Sanborn Hill and Page Street standpipes. These would serve underserved neighborhoods.

#### (b.) Special Local Opportunities

Needs and opportunities can be quite mixed. An underlying need/obligation is to take advantage of unique local opportunities and to protect unique or characteristic resources. Not every community can or must have every resource or facility, but pursuing local special opportunities will increase the variety of resources open within the region. Examples of such resources from many communities are:

- A quarry offering rock climbing in Quincy
- A publicly-owned steep hill accommodating a ski tow in Wrentham
- Old sand pit and quarry badlands with dirt bike potential in Hingham
- Access to the Wompagnoag Canoe passage in Pembroke, Hanson and Halifax
- Potential open cranberry bog Bay Circuit Trail links in Hanson/Halifax
- Multi-purpose recreational opportunities in the area's highest "man made drumlin", East Bridgewater's former BFI landfill
- The diverse opportunities of the former Lutheran home property
- The water sport opportunities at D.W Field Park below the Reservoir.



### 3. Summary of Recreational Needs

- Installation of up-to-date equipment at all town playgrounds
- Updated basketball courts at the High School and the Crowley School. Redoing the ball fields at the Butler School, clearing land to add two soccer fields.
- Security lights at Butler and Crowley school fields.
- Further paths and benches at the Lutheran home property/ Demarco Park.
- New seasonal ice skating rinks, possibly at the unused Butler School tennis courts and at the proposed DeMarco Park picnic pavilion
- New fencing, scoreboards, and concession stands at all ballfields
- Opportunities for swimming and small boating, possibly at D.W Field Park's Waldo Lake to replace that lost with the filling of the Park's Ellis Brett Pond, and including a bathhouse that could be seasonally used as a changing/warm-up clubhouse for winter ice-skating.



A Potential Swimming Area on D.W. Field Park's Waldo Lake

- A Wheels Park for skateboards and roller blades, possibly on underused parking space near other youth facilities at the Buckley Center

- Extensive bike paths, mountain bike trails, and foot paths connecting local destinations and giving access to natural areas, e.g., in the expanded D. W. Field Park, or in the Page Street woodlands with possible connections to Wales Ave., King St. and Langley Rd.; and between the Lutheran Home property, the Robbins Street land, the Crowley School, St. Michael's Cemetery and other points to the north and south.
- A better distribution of local tot lots with complementary adult sitting and exercise facilities; at a minimum adding one in the southeastern corner of town (possibly at the attractive sloping lot at East Main Street and Connolly Road.), one to serve upper Page Street , and one for the isolated Center St. neighborhood.
- The potential major wildlife preserve/low impact recreation area incorporating the present Page St. properties (B-7, B-8, B-10 and E-10) and portions of the unprotected areas n.1, n.2, and n.3 and some intervening private land.
- Some usable open space near every neighborhood

#### 4. Management Needs

- To coordinate / integrate Town and City management of water protection lands and open space and recreation land in and abutting D.W. Field Park
- To coordinate water resource protection / acquisition activities with Brockton and Holbrook
- To coordinate / cooperate management / use adjacent open space holdings with Randolph, Brockton and Holbrook

#### **J. Action Oriented Goals and Objectives**

These goals and objectives are based on those outlined in past studies and in the 1999 Master Plan.

**GOAL 1.** To protect watershed areas from the direct and indirect impacts of development, to protect and enhance water resources including ponds, streams, wetlands, well sites and groundwater recharge areas, and to protect people and property from flood hazards.

#### **OBJECTIVES:**

- (a.) To continue to protect water resources through enforcement of the wetlands protection act, flood-plain regulations, and the town's water supply protection zoning by-law.
- (b.) To ensure that developers/contractors use best management practices to prevent soil erosion or non-point sources of contamination when working in areas adjacent to streams, ponds, and wetlands.

- (c.) To establish a non-point source pollution control program to educate people about non-point source pollution and implement measures to minimize non-point source pollution.
- (d.) To identify and acquire land in aquifer recharge areas and zones of contribution to public water supply wells.
- (e.) To protect water quality and groundwater recharge along with natural habitat and local open spaces by using regulation and acquisition to protect or enhance natural areas which have flood control, recharge, open space and habitat value.

**GOAL 2.** To provide sufficient land, facilities, and programs to accommodate a range of recreational activities meeting the diverse interests and abilities of Avon residents.

**OBJECTIVES:**

- (a.) To continue and enhance the role of the Park and Recreation Commission as the lead town body coordinating /planning town recreational programs and facilities.
- (b.) To work with other town boards, the schools, community recreation organizations, and other interested parties on an on-going basis to reassess various needs for recreation programs and facilities and to recommend priorities for both capital and operational budgets.
- (c.) On an on-going basis to conduct a needs analysis/community survey to assess the recreation needs of Avon residents, especially for persons with disabilities.
- (d.) To continue outreach programs such as newspaper articles and notices and cable television announcements to keep residents informed of Park and Recreation and other organizations' recreational offerings.
- (e.) To provide adequate facilities for recreation programs and maintain facilities in good repair and to ensure that recreation equipment meets safety standards and is protected from vandalism and inappropriate uses.
- (f.) To add two new soccer fields, probably on available land at the Butler School.
- (g.) To ensure that all facilities are fully accessible to, and adapted for use by persons with disabilities.

**GOAL 3** To work with the City of Brockton to preserve D.W. Field Park, particularly the section along Harrison Blvd.

**OBJECTIVES:**

- (a.) To cooperate in acquiring and mapping private holdings next to the park using private, government and non-profit resources.



- (b.) To develop bicycle and pedestrian trails for the diverse users.
- (c.) To expand the range of compatible activities possible at D.W. Field Park, e.g. hiking and trail bike riding through woods away from the intensely used shoreline.
- (d.) To establish a joint Avon / Brockton park commission to oversee park operation and set needed policies.
- (e.) To create a new watersports space and programs at Waldo Lake.

**K. Major Recommendations - Keyed to the following Natural Resources / Open Space Suitability Map:**

**OS-1. Use/Expansion/Protection of Present Resources**

- (a.) Create a multi-purpose flood control/open space system taking advantage of the flood control; groundwater recharge, wildlife habitat and neighborhood open space value of some streamside lands. Possible sites include:
  - The low-lying areas along Trout Brook between Gill St. and Rock St.; just north of the 6' culvert under Harrison Blvd., just upstream of School St. (where the control structure still has slots for control boards); at the partially town-owned Brook Segment upstream of the Ladge Drive culvert; perhaps where the Brook crosses Connolly Road.
  - Areas where drains discharge to low-lying land rather than directly to streams, e.g. Central St., North of South Street; Bruce Road off of Page St.; and the outlet south of Strafello Road. (See the Council's 1990 "Report on 1964-1989 Storm Drainage System Improvements.")
  - The City-owned informal Beaver Brook impoundment upstream of Rte. 24.

Not every site will have all of these potentials, but the recharge/flood control benefits may make this approach valuable even when the open space/recreation benefits are slight. The approach will require detailed, site-specific studies to avoid backwater impacts on existing development and to get the most appropriate combination of features (e.g. wild habitat versus a usable grass-sloped ponding area) or the high recharge value of a dredged coarse bottom versus a maximum of diverse pollution-abating vegetation).

- (b.) Protect the Trout Brook Watershed by continued enforcement of Title Five, of the Water Supply Protection Zoning bylaw, of the Rivers Act, and of the Wetlands Protection Act, and by purchasing land or easements to prevent development in vacant flood plain areas or significant recharge areas.

- (c.) Create a Bikeway/Trail System connecting residential areas to open spaces, recreational areas and employment centers. Possibilities to explore/implement include:
- A trail from the town entrance on East Spring St., along the edge of St. Michael's Cemetery, through the Crowley school grounds and the Robbins St. conservation land to the rear, (or through Fellowship Circle if compatible), then up Robbins St. and East High St. and through the Lutheran Home Property.
  - From the above end it could go across Rte. 139 through Langley Road., through a trail in the Page St. Woodlands, and out Wales Ave. It could even go on through open land along the Randolph/Holbrook town line exiting to Rte. 139 ,or going on to the Randolph/Holbrook Commuter rail station via local streets.
  - To the south and east such a trail system could go along the railroad right-of-way to the Edison power line, then past the Child World building along the power line into Brockton past the Brookfield School, and on to Ames Nowell State Park. This would accomplish a major park of the recently proposed Brockton Bicycle Interchange.
  - For easier, safer and more direct access to the Industrial Park from Avon neighborhoods along Page St. and from Randolph and Holbrook, acquiring rights-of-way and creating direct connections from Freeman St., Granite St. and/or Highland St. to Bodwell St. in the Park, and along Wales Ave from Randolph to Bodwell St. Extension.
  - If feasible, creating a bike / pedestrian path across the Waldo Lake Dike and on through the Butler School to South Street and W. Main St via Leo's Lane and Nichols Ave., and then along existing roads (W. Main Street, Bow's Ave.) then via an easement between house lots to Connolly Road and on to the proposed Trout Brook Path (below).
  - A pedestrian way and/or bike path along Trout Brook from Ladge Drive west of the NRT trucking terminal, behind the Wal Mart and on through the water lands to Connolly Rd., and then to the Brockton-owned pond and open space just above Howard St., and possibly on to the Montello Commuter rail station. Much of the route is quite wet and might need boardwalks or other alterations and/or routing along streets.
  - Reopening the closed portion of Wales Ave. for pedestrian/bike use connecting with any new paths in the Edwards or Schepis properties (B-1 and B-2) and the rest of the Page St. Woodlands, with adjacent neighborhoods, and with the Lokitis Conservation land in Randolph.
- (d.) Accommodate people with disabilities at all feasible conservation and recreation sites and facilities.

- (f.) Work with the Lutheran Home Study Group to explore varied open space and recreation uses for remaining portion of the Lutheran Home property and, potentially, the adjacent Nelson land on the Holbrook line.
- (g.) Develop mountain bike trails, low impact camping or other uses of the town-owned land off of Page Street (The Page Street Woodlands) once proposed for a golf course and acquisitions proposed below.
- (h.) Combine holdings B-7, B-8, B-10 and I-2 and along with some of the unprotected areas 2-1 and 2-2 (minus the recycled highway material storage area), and any other available land to create a major wildlife refuge and low-impact recreation area, potentially integrated with Randolph's adjacent Lokitis conservation area.

#### OS-2. Acquisitions

- (a.) Acquire land to protect the Brockton Reservoir and Avon's portion of D. W. Field Park as discussed.
- (b.) Selectively acquire land along Trout Brook where suitable for flood storage/recharge / habitat and open space purposes, and for streamside trails and greenbelt conjunction with the Scepis land and town land to the south and use for open space, habitat, and trails.
- (c.) Acquire all or selected portions of the Schepis (N-2) (C8 / 2 /4), and Edwards properties (N-1) (B9 /2/1 and C9 / 2/ 1) and N-3 (C7/2/17,18 and C8 /2/3) described under Unprotected Lands above, and a portion of the N-7 land between B-11 and I-2 (C7/2/4,5,6) and C8/2/1,2,3). If access and use compatibility can be resolved, consider mixed open space preservation and selective development on some of the Edwards uplands
- (d.) Acquire any available land in the Zone II groundwater recharge area around the trout Brook wells and along the main stems of Trout Brook
- (e.) Acquire the 3.3-acre Nelson woodland between the Lutheran Home property and the vacant land across the Holbrook line, and explore the proposed trail with Holbrook.

#### OS-3. Recreation Facility Improvements and Additions

- (a.) Replace all equipment at town playgrounds with safe, up-to-date equipment
- (b.) Resurface and re-equip basketball courts at the high school and the Crowley school.
- (c.) Resurface the ball fields at the Butler School
- (d.) Develop a multi-season bath house/skating clubhouse along with swimming floats and possibly a small boat rental operation at Waldo Lake



- (b.) Resurface and re-equip basketball courts at the high school and the Crowley school.
- (c.) Resurface the ball fields at the Butler School
- (d.) Develop a multi-season bath house/skating clubhouse along with swimming floats and possibly a small boat rental operation at Waldo Lake
- (e.) Clear available land at the Butler School and build two soccer fields
- (f.) Add paths with benches and bike trail segments on the Lutheran home property
- (g.) Convert the unused Butler School tennis courts to a seasonal ice skating rink
- (h.) Build new fencing, scoreboards and concession stands at town ball fields
- (i.) Build a picnic pavilion / winter ice skating rink at the Lutheran Home property
- (j.) Install security lights at the Butler and Crowley school Fields
- (k.) Improve existing tot lots and add new ones, possibly on the town parcel at West Main /St. and Connelly Rd.; near King Street or Freeman Street, or the Water Tower land along upper Pond St., and on Central St., perhaps at the Antone Rd. water tower.
- (l.) Develop a centrally located Wheels Park for skateboards and roller blades, perhaps on under-used parking space behind the Buckley Center
- (m.) Study and implement the feasible portions of the recreational and commuting bike paths described in 1(c.) above.
- (n.) Examine and implement mountain bike trails, low impact camping or other uses of the present or expanded town-owned land off of Page Street once proposed for a golf course; explore joint opportunities with managers of Randolph's Lokitis land.

#### **L. Open Space and Recreation Suitability / Recommended Actions Map**

The map below (following the Five Year Action Program) shows the land found to be suitable for Resource Protection, Open Space and Recreation uses. The numbered items are those listed in the recommendations (item K above). They show the major recommendations remaining after reconciling any conflicts between the individual maps of Land Suitable for Open Space, Housing, and Economic Development. These findings are included in the Final Community Development Plan, and are shown on the final Community Development Plan map by patterns, and are shown here separately for clarity.

## **M. Five Year Action Plan**

### Multiple Years

#### Acquisitions

- A1 Acquire the remaining land needed to protect the Brockton Reservoir and Avon's portion of D.W. Field Park, in cooperation with Brockton.
- A2 Acquire land along Trout Brook and the Zone II of the Trout Brook wells as available for flood control and water supply protection purposes creation of a greenway belt along the waterway.

### Fiscal Year 2005

#### Management/Site Improvements

- M1 Help to organize a joint management entity for D.W. Field Park to meet diverse local and regional needs and participate on it.
- M2 Resurface the ball fields at the Butler School
- M3 Begin making improvements needed for maximum handicapped accessibility.

#### Planning Process

- P1 Work with the Lutheran Home Study Group to develop a plan for entire site
- P2 Explore opportunities to increase access to Waldo Lake for water-based recreation including swimming, boating, and fishing.
- P3 Review opportunities for multi-purpose open space, habitat protection, flood control and groundwater recharge facilities in low-lying flood plain areas and existing informal impoundments, identify the tradeoffs involved and explore their implementation.
- P4. Conduct a needs analysis to determine appropriate ways to ensure access to conservation and recreation facilities for persons with disabilities.

#### Acquisitions

- A3 Acquire the Nelson woodlands behind the Lutheran Home Property.

## Fiscal Year 2006

### Management/Site Improvements

- M4 Replace all equipment at town playgrounds with safe, up-to-date equipment.
- M5 Resurface and re-equip basketball courts at the High School and the Crowley school.
- M6 Build walking paths with benches at the Lutheran home property.
- M7 Adapt the unused tennis courts at the Butler School to be used as a seasonal ice skating rink.
- M8 Clear eleven acres of land at the Butler school and build two soccer fields.
- M9 Begin to develop the Waldo Lake water sport area with a small beach, with a partially enclosed area for lessons, a float, and possibly a simple bathhouse for toilets, showers, changing and equipment storage.

### Planning Process

- P5 Determine appropriate ways to ensure access to conservation and recreation facilities for persons with disabilities.
- P6 Begin designing a town-wide multi-purpose trail system using existing and proposed easements, sidewalks and small land purchases to connect residential, open space and recreational areas.
- P7 Conduct a Greenbelt System/Stream/Wetlands Protection Study to identify critical pieces of the greenbelt system and methods to protect them.
- P8. Locate and design a wheels park, possibly on under-used parking space behind Buckley Center

### Acquisitions

- A4 Acquire all or selected portion of private lands in and abutting the Page Street Woodland as listed on OS-2 above.



## Fiscal Year 2007

### Management/Site Improvements

- M10 Begin modification of multi-purpose lowlands / impoundments as identified in P3
- M11. Begin building a town-wide multi-purpose trail system studied in P5.
- M12 Install security lights at Butler and Crowley School Fields
- M13 Locate and design a wheels park, possibly on under-used parking space behind Buckley Center

### Planning Process

- P9. Build on P5 to study use of Page Street woodlands (once considered for a golf course) and contiguous private land described under above for uses such as bike rails and low impact camping and coordinate efforts with managers of Randolph's Lokitis land.
- P10. Conduct annual review of Open Space and Recreation Plan goals, objectives, and action plan. Establish priorities for the year. Begin Plan update.
- P11. Chose locations and design for new and upgraded tot lots

### Acquisitions.

- A5 Acquire properties and easements need for planned trail system

## Fiscal Year 2008

- M14. Build new fencing, scoreboards and concession stands at town ball fields.
- M15. Construct a new picnic pavilion at the Lutheran home property. Equip it so it can be used as a temporary ice skating rink in winter.
- M16 Continue work on trail system
- M17 Continue work on multi-purpose flood plain impoundments s

### Planning Process

- P12. Conduct annual review of Open Space and Recreation Plan goals, objectives, and action plan. Establish priorities for the year. Amend plan if needed.

Acquisitions

A6 Acquire land needed for multi-purpose impoundments studied in P3

Fiscal Year 2009

Management/Site Improvements

M18 Continue work on trail system

M19 Continue work on multi-purpose flood plain impoundments

M20 Build new tot lots and upgrade existing facilities

M21 Begin work on trail or campsites on Page Street Woodland studied under P7

Planning Process

P13 Review Open Space and Recreation Plan goals, objectives and action plan, begin 5-year plan update.

Acquisitions

A7 Continue acquisitions for projects noted above.

FIVE-YEAR ACTION PLAN SUMMARY

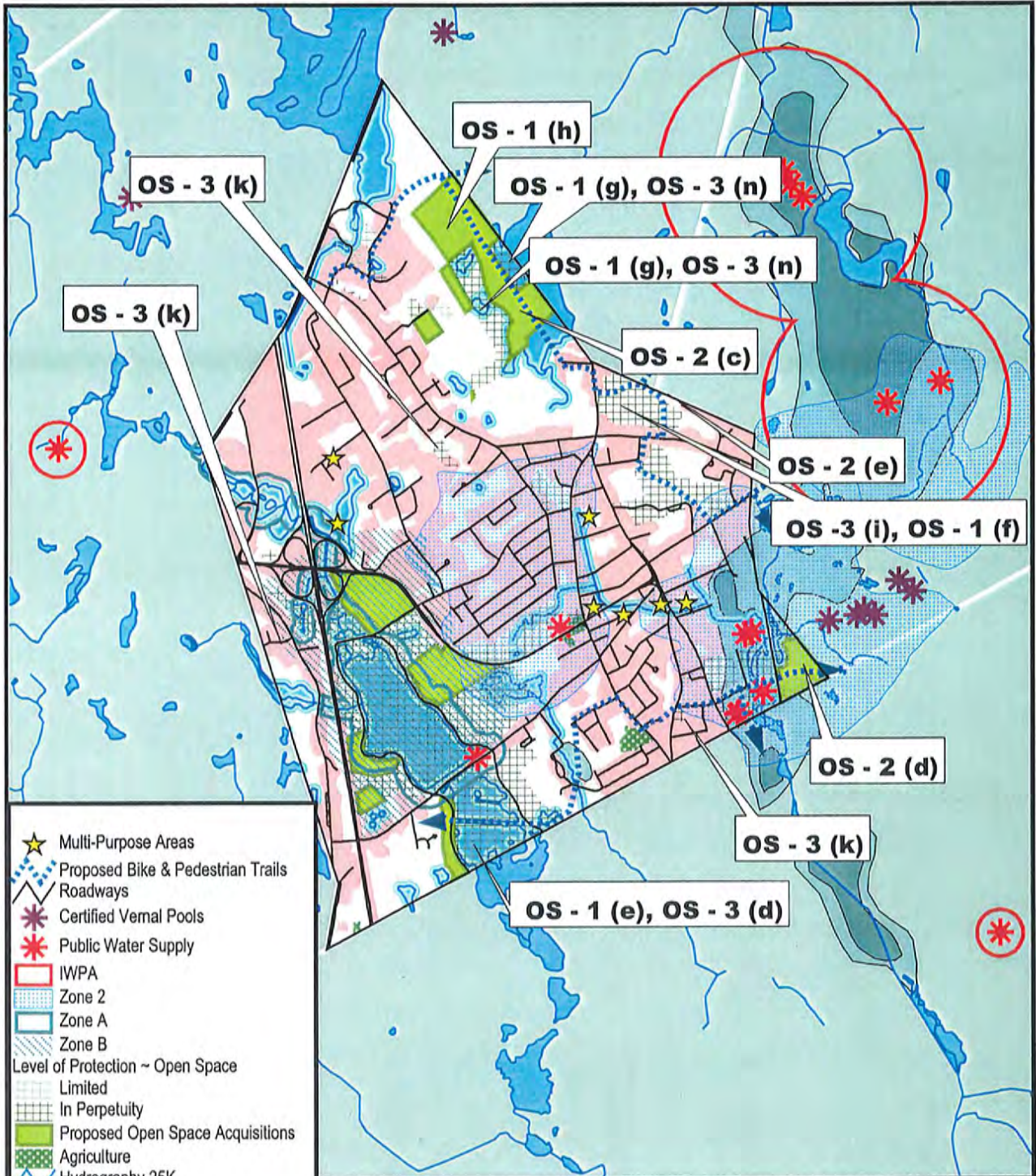
<u>ACTIVITY</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
<u>Acquisitions</u>					
A1, A2	-----	-----	-----	-----	-----
A3	-----				
A4, A5		-----			
A5			-----		
A6				-----	
A7					-----
<u>Management/Site Improvements</u>					
M1, 2, 3	-----				
M4, 5, 6, 7, 8, 9		-----			
M10, 11, 12, 13			-----		
M14, 15, 16, 17				-----	
M18, 19, 20, 21					-----
<u>Planning Process</u>					
P1, 2, 3, 4	-----				
P5, 6, 7, 8		-----			
P9, 10, 11			-----		
P12				-----	
P13					-----





# Resource Protection/Open Space/ Recreation Suitability/ Recommended Actions

Figure I - 7



- Multi-Purpose Areas
- Proposed Bike & Pedestrian Trails
- Roadways
- Certified Vernal Pools
- Public Water Supply
- IWPA
- Zone 2
- Zone A
- Zone B
- Level of Protection ~ Open Space**
- Limited
- In Perpetuity
- Proposed Open Space Acquisitions
- Agriculture
- Hydrography 25K
- 100 ft buffer
- Ponds & Wetlands
- Aquifers**
- 100 - 300
- 100-300
- >300
- Developed Land
- Avon
- Surrounding Towns

0.5 0 0.5 1 Miles



Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD, OCPC Field Data

June, 2004





## Chapter II

### Housing Element

#### A. Housing Goals and Objectives

Avon's housing goals and objectives reflect and build on the applicable general and specific goals and objectives in the Master Plan. These are to:

1. Guide future town development in order to meet the needs of diverse population groups, protect attractive neighborhoods, preserve natural resources and open spaces, and continue to provide high-quality public services.
2. Balance reasonable industrial and commercial growth with preservation and enhancement of the town's amenities and residential character.

Objective: Modify and enforce land use and development regulations minimizing conflicts between neighborhoods and nearby industrial and commercial areas.

Objective: Revise zoning bylaws to keep future industrial/commercial growth separate from residential neighborhoods.

8. Protect and maintain the present housing stock while expanding opportunities for diverse housing types.

Objective: Identify areas appropriate for moderate density housing and adoption of appropriate regulatory changes.

Objective: Use of any public sewer system to allow selective higher densities in areas of high accessibility and amenities.

Objective: Refine and fill the housing supply gaps explored below

Objective: Explore conditions and develop a housing rehabilitation loan program if needed

Thus the summary housing goals would be:

1. To meet the needs of diverse population groups in terms of income and household type
2. To protect and enhance the town's present and future neighborhoods, and,
3. To maintain and preserve the existing moderate-cost housing stock.

Related objectives would be:

- Identification of areas suitable for moderate density / affordable housing and adoption of any needed regulatory changes
- Identification of opportunities to use any future sewerage to accommodate appropriate higher density development.
- Establishment of guidelines and responsible parties for responding to any prospective Ch.40b projects
- Creation of a rehabilitation loan program or other resources needed to maintain the present stock
- Modification of regulations intended to protect neighborhoods from adjacent industry such as the industrial / residential Greenbelt provision
- Inventorying the Town's actual housing supply by cost, size and condition, and setting standards reflecting this supply and resulting needs
- Preparing a Certified Housing Plan or Strategy under Ch.418 and accomplishing the resulting goals and objectives.

## **B. Inventory**

The town's primary land use is residential and the greatest proportion of this is in detached single-family houses. According to the 2000 Census, there were 1,230 single-family detached houses; 39 units in attached houses, 294 units in two to four-unit buildings, and 102 units in buildings with 5 or more units, and none in mobile homes or trailers, for a total of 1,705 year-round housing units, occupied or vacant.

Avon's housing is generally of moderate cost. According to the Warren Group, publisher of Banker & Tradesmen, the year 2000 the median sales price was \$174,900. This was well above the median value owners ascribed to their property in the 2000 Census, \$160,100, but below the statewide median sales prices of \$198,000. The median value is for all houses, while the prices are for those sold. In any case, many new units on the market are considerably larger and more expensive than the town's general stock.

Most of the housing is owner-occupied with 1305 owner-occupied units and 400 renter-occupied units (23.5%) in 2000. This was a slight increase over the 349 rental units (20.95%) of 1990.

During the 1980s and 1990s the town gained housing, but lost population due to a declining household size. From 1980 to 2000 the town gained 77 units (from 1628 to 1740) while dropping from 5026 persons @ \$3.1/du to 4,443 persons @2.6/du. Though household sizes are dropping generally, the declining population suggests that older residents are remaining in their homes after their families have grown, rather than moving



Traditional Older Neighborhood

into smaller units. Thus households with a householder aged >65 occupied 12.3% of all units in Avon compared to 8.2% in the region. This may suggest a need for alternative housing opportunities for such empty nesters who want to remain living in Avon.

The overall vacancy rate dropped between 1990 and 2000 from 4.5% to 2.0%, and the 2000 rental vacancy rate was only 1.2%. Changes in the inventory by structure type and vacancy rates from 1990 to 2000 are shown below.

**Avon's Housing Stock  
1990-2000 Changes in number of Units and Vacancy Rates**

Housing Type	1990		2000	
	Number	%	Number	%
Single-family detached	1,238	74.3	1270	73.0
Single-family attached	22	1.3	39	2.2
Two-family	n.a.		112	6.4
2-4 units	287	17.2		
3,4 units			182	10.5
5+	90	5.4	102	5.7
Mobile homes, other	29	1.7	0	.
Vacant			35	2.0
Total	1666	100.00	1740	
Total Vacancy	75 (in above) 4.5%			2.0

Source: US Census 1990,2000





Compact 1950s Ranch Houses



New Housing off Page Street

**Tenure Patterns / Rental Housing**

The table below shows the number of housing units in Avon and the Old Colony Region, and the type of occupancy and tenure for these units during 2000. As can be seen, the town had a total of 1740 housing units in 2000, an increase of 4.4% percent over the 1,666 units recorded in 1990. Of the 1,705 occupied units, 1305 (76.5%) were owner-occupied; 400 (23.5%) were renter-occupied; and 35 units were vacant.

The supply of rental housing grew slightly in the 1990s, going from 349 renter occupied units (20.1% of all units) in 1990 to 400 occupied units (23.5%) in 2000. The proportion of rental housing in Avon is higher than in all but 6 other communities in the OCPC region. Those with higher proportions are also older employment centers with a long history of rental housing. This suggests that there is a reasonably good mix of housing opportunities in the community since it balances opportunities for rental housing and for homeownership. However, the very low rental vacancy rate of 1.2% suggests a need for more rental housing.

### Multi-Unit Development

Attached and multi-unit buildings are allowed by Special Permit in all but the Industrial District, but Avon has only one major multiple-unit development; the 70 unit Housing for the Elderly Complex off of East Street. Seven duplexes are located on Bows Lane and four are on Collins Circle. This is far less than the 100 acres of 4.3du/acre garden

#### Avon and OCPC Area Communities Housing Tenure and Occupancy - 2000

Municipality	Owner Occupied	Percent Owner Occupied	Renter Occupied	Percent Renter Occupied	Vacant	Total
ABINGTON	3,778	71.8	1,485	28.2	85	5,348
AVON	1,305	76.5	400	23.5	35	1,740
BRIDGEWATER	5,611	74.6	1,915	25.4	126	7,652
BROCKTON	18,375	54.6	15,300	45.4	1,162	34,837
EAST BRIDGEWATER	3,562	82.0	782	18.0	83	4,427
EASTON	6,113	81.6	1,376	18.4	142	7,631
HALIFAX	2,519	91.3	239	8.7	83	2,841
HANSON	2,779	89.0	344	11.0	55	3,178
KINGSTON	3,473	81.8	775	18.2	277	4,525
PEMBROKE	5,121	89.1	629	10.9	147	5,897
PLYMOUTH	14,292	77.6	4,131	22.4	2,827	21,250
PLYMPTON	819	95.9	35	4.1	18	872
STOUGHTON	7,642	74.5	2,612	25.5	234	10,488
WEST BRIDGEWATER	2,092	85.6	352	14.4	66	2,510

Source: U. S. Census

apartments proposed in the 1966 Master Plan or the scattered 3-12 du/acre housing proposed in the 1974 Plan. The rest of the multiple unit developments are spread around the town. The smaller multiple-unit buildings are understood to be generally owner-occupied.

The Residential R-A, R-B and Business B districts require a minimum of 40,000 square feet for multi-family housing. Allowed densities range from 10,000 sq. ft./unit for the first ten units, 5,000 sq. ft./unit for the next six units, and 3,000 sq. ft./unit thereafter.



Thus a two-acre parcel could accommodate 14 units @ 7/acre while a 4-acre parcel could hold 43 units at almost 11/acre.

### **Assisted Housing**

The Avon Housing Authority administers 70 units of State-Aided Housing for the Elderly (Ch. 667) including six units for the handicapped. This housing comprises 4.0% of the total 2000 housing stock, well under the 10% required for exemption from



Fellowship Circle Housing for the Elderly

the Comprehensive Permitting provisions of Chapter 40B. The Authority also administers 100 units of U.S. Dept. of Housing and Urban Development Section 8 Rental Assistance vouchers. The Section 8 certificates enable families to obtain housing through a three-way lease agreement between the landlord, the tenant and the Housing Authority. According to the Executive Director of the Authority, the certificates are mobile and may be used outside of Avon. Only twenty-five of the Section 8 certificate recipients have rented locally. The remainder are housed in neighboring communities, particularly Randolph. The town's limited moderate-cost rental stock and the relatively low applicable Brockton area HUD Fair Market Rents (FMRs) may divert many certificate holders to nearby communities, particularly where the higher Boston FMRs are combined with relatively low rents.

### **Influences**

#### **Commuter Rail Restoration**

Avon is already quite accessible via Routes 28 and 24 and bus service to Brockton and Boston by BAT and MBTA busses and connecting rapid transit. However, the restored MBTA Old Colony Commuter service running along the southeastern edge of the town greatly increases auto-free access to Boston/Cambridge and other communities along the



line. Though there is no stop in Avon, Brockton's Montello Station is only two miles south of Avon center, the Randolph/Holbrook station is only 1.75 miles north on Route 139, and the Stoughton Center station on the Stoughton line is about 3 miles to the west. By increasing auto-free access to metropolitan Boston the rail service makes Avon an even more desirable place to live for many people.

### **Tax Rates**

In 2000 Avon had the lowest residential property tax rate of the fifteen communities in the OCPC region. This was \$12.43 per thousand compared to the highest rate of \$20.30 per thousand recorded in Whitman. The 2001 residential rate of \$12.79 was only slightly higher and by 2004 it had reached \$13.06. Even with this increase, Avon homeowners had the lowest average single family tax bill of 32 South Shore Communities in 2004, (\$2,432 vs. \$3623 in Abington, \$3372 in Whitman and \$2,936 state-wide.) Tax rates are discussed further in Chapter III, Economic Development.

Low property taxes clearly make monthly housing costs more manageable for lower income families and families on fixed incomes. The question of whether the low property taxes push up asking prices to the buyer's acceptable monthly total burden has not been studied. If so, prices for a given house in Avon would be slightly higher than in nearby comparable communities.

### **C. Review of Build Out Analyses to Suggest Possible Future Supply and Potential Population Increases from Development**

The November 1993 Old Colony Planning Council Undeveloped Land Inventory and Buildout Analysis found 825 acres of vacant privately-owned land and a potential build-out of 546 new single-family houses and 1,180 multi-family units (assuming such development on Commercial land), the potential for 2,133, 000 square feet of commercial space (without such residential use of Commercial land) and 1,337,000 square feet of industrial space. The potential house lots, combined with 44 existing lots could house up to 1625 new residents. Excluding the 1165 theoretically possible, but unlikely multi-family units in the Avon Merchants Park, the remaining 115 potential multi-family units could house another 290 persons, for a total potential 1915 added persons at 2.7 / housing unit and a total population 6348. Most of the town's vacant, residentially developable land was north of Page Street and East and West High Streets where 40,000 sq. ft. lots are required.

A more recent Buildout analysis sponsored by the Executive Office of Environmental Affairs in 2000 found 1065 buildable acres and 765 potential residential lots allowing for 2217 new residents, and 6,449,936 sq. ft. of commercial / industrial space.

Due to site conditions and market limitations, permits for single-family houses averaged 4.2 /year in recent years but have been down to 2/year since 2000 according to the Building Inspector. Currently there are about 40 approved or proposed subdivision lots.

### Alternative Buildout Analyses

	OCPC 1993	EOEA 2000
Vacant Developable Acres	825	1065
House Lots	546	765
Multi-Family Units	115	---
Added Population	1915	2204
Commercial / Industrial Space	3,470,000 Sq. Ft.	6,449,936 Sq. Ft.

They could add 104 persons at the year 2000's 2.6 persons per unit. A previously noted 53 house lots in lapsed subdivisions have been bought by the Brockton Water Commission to protect the Avon Reservoir.

The more conservative OCPC analysis suggests the addition of about 660 housing units and 1900 residents beyond the 1990 population of 4558, for an eventual total of 6458. Avon's actual future population will depend on both household size trends and the number/mix of units built.

#### **D. Housing Needs**

##### 1. Overall

Housing needs refer to the ability of present and potential residents to find adequate-sized standard units at a reasonable proportion of income. Housing costs in Avon are generally lower than the average cost in the OCPC region as shown in the following table. Avon's median sales housing prices generally exceeded the OCPC average during 1988, 1989, and 1991, but have been lower recently as shown below. However, Avon's 1995 prices were higher than in 3 of 4 adjacent communities. Avon's 1995 median of \$129,000 median exceeded those in Brockton, (\$76,500), Holbrook, (\$110,000) and Randolph, (\$128,000). Only Stoughton had a higher median sales price (\$132,500). By 2000 the median sales price for housing in Avon climbed to \$174,900, but this was low in comparison with the median sales price for housing in the OCPC region, which was \$192,864. The trend is understood to be continuing.

#### **Median Sales Prices of Housing Town of Avon and Old Colony Planning Council Region**

	1990	1995	2000
Avon	128,950	129,000	174,900
OCPC	136,689	139,093	192864

Source: Banker and Tradesmen.

These figures reflect all houses sold, new and old, and hence vary with the mix of houses on the market at a given time. According to Avon Building Inspector, buildable lots alone average \$100,000 in price. Hence new houses are more expensive than most of the town's older housing stock and range from \$150,000 to \$500,000. New homes tend to raise the calculated median price of housing when introduced to the market. However, because so few new homes are built in Avon in any given year, new house prices have less effect on the median sales price than in other OCPC communities.

One test of affordability is the cost to the median income family of purchasing a home in the market. Mortgage lenders assume that 28% of gross monthly income is a manageable maximum housing cost. This so-called "front end" figure assumes that a maximum of 8% more is committed to all other debt (car loans, credit cards, etc.) for a total of 36% of gross monthly income.

Avon had an estimated Median Family Income of \$59,772 in the year 2000 according to the National Low Income Housing Coalition (NLIHC), an increase over the \$49,565 recorded in the 1990 US census. Using the lenders' 28% standard, an Avon family with a 2000 median gross income of \$59,772 was slightly below the estimated income (\$62,964) required to afford that year's median home price of \$174,900. These figures could suggest that local house prices were almost in line with incomes, but without knowing the distribution of all costs and incomes it cannot be assumed that most families with incomes below the median will find comparably lower-cost housing. Overall, they could not afford the median priced house then; and the subsequent rapidly rising housing prices and slowly rising incomes have increased the gap.

A related need indicator is the proportion of home owners paying more than the target 30% of income for housing. As of the 2000 Census, 237 or 30.4 % of Avon's home owners were paying over 30% of income for mortgages and related costs, and 134 owners or 17.2% were paying over 35%. These data may indicate a need to create new low cost sales or rental housing for lower income families.

To help moderate-income buyers, many banks and the Massachusetts Housing Finance Agency (MHFA) offer First Time Buyer programs with favorable terms and the state has a Soft Second Mortgage Program run by local Housing Partnership Committees in cooperation with banks. These can significantly lower monthly costs and ease mortgage qualification. However, Avon has no Housing Partnership Committee or Soft Second Program at present.

## 2. Rental Housing Supply/Cost

As of the 2000 Census, the median gross rent in Avon was \$708 /month. A subsequent survey of area real estate agents found very little rental housing available in the community. Rents for apartments were from \$650.00 to \$750.00 per month without utilities for 2 and 3 bedroom apartments and up to \$900/month for duplexes, which are comparable to rents found in the city of Brockton. The applicable Brockton area Fair





Two Traditional Houses with Different Degrees of Expansion

Market Rents allowed under Section 8 were then \$750 for 2-bedroom units and \$932 for 3-BR units including utilities, compared with state-wide figures of \$854 and \$1,070 respectively. The more reasonably priced Brockton rental market has encouraged some families from the Boston area to relocate to the area, thereby tightening the local supply..

The more recent 2002 OCPC Avon Rent Reasonableness Study found that the average rent for apartments with heat and hot water in Avon and surrounding moderate-cost communities had risen to \$906/month for one bed-room, \$1,180//month for two-bedrooms and \$1,399/month for three bedrooms. The price range was from \$650 to \$1000 for 1- BR; \$901 to \$1,600 for 2-BR, and \$910 to \$1,800 for 3-BR. The survey found only three advertised vacancies in Avon, and noted a 1.7% vacancy rate in the Brockton Rental market, exceeding above Avon's 2000 rate of 1.2% , but still quite low.

To relate rental housing cost to income, National Low Income Housing Coalition (NLIHC) data show that while the 2003 estimated median income in the Brockton Metropolitan Statistical Area (including Avon) was \$70,300, the median renter income was only \$32,5674. At that income, the affordable rent for a two-bedroom unit was \$814, and only 61% of the renter households could afford the 2003 HUD Fair Market Rent (FMR) for a two-bedroom unit of \$1,046. The other 39% were paying a higher proportion of income for rent or had found units below the FMR.

Another indication of remaining needs is the Avon Housing Authority's waiting list of 225 households seeking elderly units and of 100 households seeking Section 8 certificates and vouchers. While demand can be exaggerated by people who apply to more than one authority, this waiting list indicates considerable unmet need for low-cost housing.

The increasing low vacancy rates, rising rents and rising sales prices documented in the Master Plan show that Avon's housing supplies are increasingly tight and unable to meet

the needs of many current residents at reasonable costs, or to accommodate typical population growth or in-migration from other communities.

### **E. Anticipated Gaps**

The continuing increase in local sales housings cost and rental housing prices suggest a continuing gap in affordability and limited development of new housing. In terms of supply, to reverse the population decline and grow by even the 7.2 % experienced by the region from 1990 to 2000, the town would have add 123 units (assuming the present 2.6 person average households ) from 2000 to 2010. This rate is 66.2% beyond the 74 units added from 1990 to 2000. It is even further beyond the recent slow growth adding only 8 houses from 2000 to 2004 or about 20 per decade. Thus, given the 7.2% goal, the town will have a gap of 103 units by 2010. This reflects the town's limited available, buildable land. However some presently proposed incomplete subdivisions are expected to add another 40 units, according to the Building Inspector, leaving a gap in supply of about 60 units.

The gap in affordability is much greater since most new housing would be in market rate units. Using the 10% standard for exemption from State Comprehensive Permits, the town would need 174 low-cost, nominally subsidized housing units. It now has 70 units, all housing for the Elderly at the Housing Authority's Friendship Circle development. This leaves a present gap for Ch.40b purposes of 104 units and, assuming the added 123 units, a possible year 2010 gap of 116 units.

In contrast, the 2000 Census finding that 237 or 30.4 % of Avon's home owners were paying over 30% of income for mortgages and related costs suggests a present affordability gap of 237 units and a 2010 gap 274 units. However, given the middle-income nature of the town, many of these homeowners are probably buying relatively expensive houses, but are not of low income. Therefore, a working assumption is that only half of those paying 30% are making below 80% of the regional median income and would be considered to be low income. This reduces the estimated present gap to 119 units and the 2010 gap to 133 units.

Since households headed by persons over 65 years of age occupy only 12.3 % of the town's housing, about 87% of such new assisted housing be for non-elderly families and individuals. However, given the forthcoming increase in the elderly population as the earliest Baby Boomers age, a better target would be 25% (26 units) for the elderly / handicapped, and 75% (78 units ) for non-elderly individuals and families.

Applying the NLIHC finding that 39% of the area population cannot afford the FMR rents for a two-bedroom unit without spending more 30% of income for housing to the Year 2000 400 rental units there is present low-cost rental housing gap of 156 units.

Assuming that rental housing in Avon rises from 23.5% to 25%, a quarter of the needed 123 new units discussed above, or 31, should be rental. Based on the NLIHC finding that 39% of rental households cannot afford the FMR without paying more than 30% of



income for rent, at least 12 of the new units should be kept affordable. Together the present and prospective needs suggest a low cost rental housing gap of about 168 units.

In summary, the above analysis produces an estimated present affordable home ownership gap of 119 units and 2010 gap of 133 units; along with a present estimated affordable rental housing gap of 156 units and a 2010 gap of 168 units. These give a total present gap of 275 units and a year 2010 gap of 301 units. These numbers might change considerably, mostly downward, with further more detailed data on local housing costs and incomes.

#### **F. Potential Means of Providing a Range of Affordable Housing**

Though housing in Avon is more affordable than in most of the region's communities, much of it remains out of reach of many residents or potential residents. Available rental housing is fairly scarce because of the relatively rental small housing stock in town and the lack of new construction. Hence it is important to encourage/facilitate the creation/preservation of moderate cost housing and to increase access to existing units. Approaches to be considered include:

(a.) Expanding access to existing units by increasing the number of rental assistance certificates. However the respective state and federal programs are quite limited, as is the local supply of eligible units.

(b.) Directly creating of low-cost family and elderly housing by the Avon Housing Authority.

(c.) Creation of moderate cost sales and rental family and elderly housing in cooperation with non-profit agencies such as the South Shore Housing Development Corporation.

(d.) Creation of moderate cost sales and rental family and elderly housing by private developers using favorable financing from the Massachusetts Housing Partnership, the New England Fund or other agencies and working and working with the town through the state's Local Initiatives Program. The last involves town cooperation in the form of land donations or approval of local Comprehensive Permits to lower development costs. The resulting units generally count towards the 10% assisted stock standard under chapter 774.

(e.) Establishment of a Local Housing Partnership Committee to quality the town for various forms of assistance in feasibility studies and initial project costs.

(f.) Lowering costs by donating surplus buildable land to projects sponsored by a Housing Partnership Committee or to groups which directly create low-cost sales housing such as Habitat for Humanity.

(g.) Using the Massachusetts Housing Partnership's Soft Second Mortgage Program and



other programs to lower monthly costs for first time homebuyers.

(h.) Exploring regulatory measures to lower development costs or to require a mixture of housing prices through tools such as inclusionary zoning.

(i) Lowering home maintenance costs by creating a local low-cost housing rehabilitation loan program



Duplex Housing, Efficient and Attractive but Rarely Seen

## **G. Map of Housing Suitability and Recommended Actions**

The identified areas reflect the town's 2001 Master Plan Recommendations. They focus on undeveloped land including the few town holdings, or on re-developable land, assuming abandonment of any non-residential uses in suitable areas.

### **Housing Suitability Map**

The Land Suitability Map and the more specific Housing Suitability Map show sites appropriate for continued medium size and large lot development under the R-A and R-B zoning districts along with sites suitable for affordable housing at moderate densities. The numbered sites refer to actions recommended on the Final Community Development Plan Map after reconciling any conflicts between housing, economic development, and open space proposals. The sites on the suitability maps reflect present patterns and potentials due to location, present and prospective infrastructure, and amenities.



Affordable housing need not always be built at significantly higher densities than as-of-right market rate housing , but it is one way to reduce prices by reducing land costs.

### **Recommended Actions**

- H-1 Establishment of a Local Housing Partnership Committee to qualify the town for the Soft Second Mortgage Program or various forms of assistance in feasibility studies and initial project costs and to take initiate / support local housing activities
- H-2 Revise the Cluster and Planned Unit Development (PUD) bylaws to increase their use, thereby allowing appropriate growth while preserving informal open space and improving access to existing public holdings.
- H-3 Consider the challenges / opportunities presented by private treatment plants and other alternative sewage treatment/disposal methods. These may lessen the effect of soil limitations which now slow or scatter development. If they can keep nitrates to an appropriate level on smaller lots, they may allow denser development in areas of high amenity/accessibility while lowering densities elsewhere, or they may allow excess development town-wide. To avoid further sprawl, loss of open spaces, and increased service costs, the town will need purposeful, innovative local planning.
- H-4 Examine whether King Street could be improved to open the nearby town-owned lots (B7 / 6/ 6,7) east of page St. for a range of affordable development
- H-5 Lower land costs by donating scattered, buildable town-owned parcels like (Map / Block and / Parcel numbers) C6/2/5,6 (west of Page St. and south of Granite St.), D3/12/19 (off of E. Main St.) and B7 / 6/ 6,7 ( the uppermost ones on King St. noted above) to projects sponsored by the Housing Partnership Committee or to groups which directly create low cost sales housing such as Habitat for Humanity.
- H-6 Expanding access to existing units by seeking more rental assistance vouchers
- H-7. Draw any potential sites to the attention of the Avon Housing Authority or non-profit agencies such as the South Shore Housing Development Corporation for low / moderate cost sales or rental housing
- H-8 Encourage creation of affordable sales and rental family and elderly housing by private developers using favorable financing through the Massachusetts Housing Partnership or the New England Fund and working with the town through the state's Local Initiatives Program. The last involves town cooperation in the form of land donations or approval of local Comprehensive Permits to lower development costs.

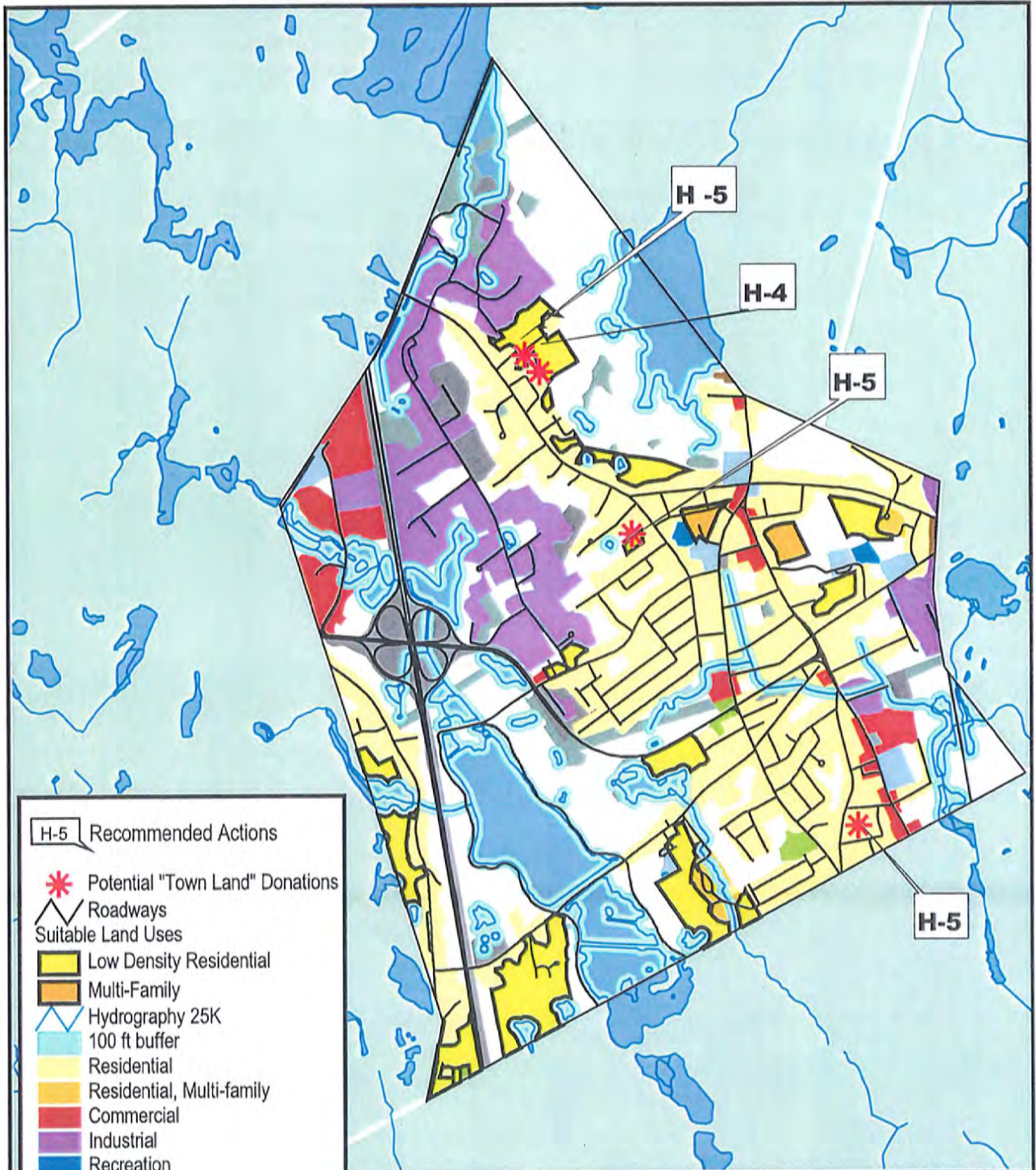
- H-9 Adopt and use the Massachusetts Housing Partnership's Soft Second Mortgage Program and other programs to lower monthly costs for first time homebuyers
- H-10 Explore and enact regulatory measures to encourage or require a mixture of housing prices through tools such as incentive zoning and inclusionary zoning
- H-11 Explore housing conditions and rehabilitation needs and, if appropriate, develop a housing rehabilitation loan program and apply for support under the state's Community Development Fund.





# Housing Suitability / Recommended Actions


Figure II-2



- H-5 Recommended Actions**
- Potential "Town Land" Donations
  - Roadways
  - Suitable Land Uses**
  - Low Density Residential
  - Multi-Family
  - Hydrography 25K 100 ft buffer
  - Residential
  - Residential, Multi-family
  - Commercial
  - Industrial
  - Recreation
  - Urban Open
  - Agriculture
  - Abandoned & Mining
  - Transportation
  - Waste Disposal
  - Ponds & Wetlands
  - Avon
  - Surrounding Towns

0.5 0 0.5 Miles



 Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD, OCPC Field Data

June, 2004





## Chapter III

### Economic Development Element

#### A. Economic Profile of Avon

Avon is a small town with a large industrial park and a large retail “Merchants Park.” These result in a very favorable tax base and an historically low tax rate. Both parks have thrived based on their good regional accessibility, being next to Rte. 24 at the Harrison Blvd./ Central St. Interchange. They are limited by the town’s lack of sewerage and its limited water supplies, but so far there have been sufficient low-water using, distribution and retail-oriented firms to fill both parks. While the town gets significant tax revenues, few residents work in either park.

Avon’s most relevant resources are good highway access and well-located industrial land. The town’s location next to Brockton, and on Route 24 makes it easy for customers and workers to reach both parks, and for residents to commute. As is typical of many communities, most residents work outside of the community while most local jobs are held by non-residents as discussed below.

The town’s land in commercial use grew from 53 acres in 1971 to 61 acres in 1985, to 117.52 acres in 1999. Land in industrial use grew from 79 acres in 1971 to 252 acres in 1985, and to a total of 446.36 acres in 1999. These reflect interpreted aerial photography from Mass. GIS.

As described in the Master Plan, Avon’s total of 184.2 vacant acres of developable land (105.7 business, 78.5 industrial) is located primarily off Route 24. Of this, about 98 acres is business-zoned land between Harrison Blvd. and D.W. Field Park which contains Brockton’s Avon Reservoir. The City has acquired all but 16.99 acres of this for water supply protection and the Town is exploring acquisition of the remaining piece for water supply purposes, as discussed under Open Space. Protection of these 98 acres will leave 7.7 acres of Business-zoned land and 78.5 acres of Industrial-zoned land.

#### 1. Specific Areas

##### Avon Industrial Park

The Avon Industrial Park is largely built out under present regulations and available infrastructure. There are only 19.9 acres of vacant Industrially-zoned land left. Of these, a 3.2-acre parcel and a 1.68-acre parcel appear to be owned in common with abutting parcels. The northern half of the remaining vacant 11.97- acre parcel west of Bodwell Street and along the edge of Route 24 includes several small ponds and wetlands and has septic limitations, leaving about 6 usable acres. However, much land on the present developed sites is used only for present or potentially expanded sewage disposal fields. With sewerage, some of this land could be used for infill expansion, particularly since few firms are built out to the present 60% lot coverage limitation.



Industrial Park Storm Water Mitigation; Enhanced Detention Pond at Murphy Drive with Modified Outlet Structure in Foreground



Wine Distribution Firm in the Avon Industrial Park Extension



Opportunity for a New Firm - Modern Space Available in Avon Industrial Park



AREA: 7.1 acres  
MAP, BLOCK AND LOT NUMBERS B8 / 1 / 6.  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Fair, depending on the Town's needs.  
ZONING: Residential B, 40,000 sq. ft. lots.

This facility is located at the former town dump. It has potential environmental issues need to be examined before possible reuses of this site can be explored.



A Natural Spot in D.W. Field Park

(g.) Public and Private Cemeteries

Owned by Town of Avon

- (g.1) LOCATION: Page Street, north of King Street, Curtis Cemetery  
AREA: .12 acres  
MAP, BLOCK AND LOT NUMBERS B7 4/ 6  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential B, 40,000 sq. ft. lots.





Historic Curtis Cemetery on Page Street

- (g.2) LOCATION: 180 East Main Street, Town of Avon Cemetery  
AREA: .26 acres  
MANAGEMENT: Town of Avon  
MAP, BLOCK AND LOT NUMBERS D5/ 6/ 19  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential A, 25,000 sq. ft. lots.

These are two small, historically evocative, stone wall-bound spots adding to the town's character and interest.

Privately Owned

- (g.3) LOCATION: 80 Memorial Drive, Avon Cemetery Association  
AREA: 8.1 acres  
MAP, BLOCK AND LOT NUMBERS: E4 / 2/ 1  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential A, 25,000 sq. ft. lots.

This large, attractive facility is a neighborhood asset even though the surroundings are only partly residential. One question is the ownership of and prospects for the 3 acres (E4/2/2) which wrap around the north side, east side and half of the south side of the cemetery.

- (g.4) LOCATION: East Spring Street, St. Michael's Cemetery  
AREA: 10.8 acres  
MAP, BLOCK AND LOT NUMBERS: E5 /1/ 1  
DEGREE OF PROTECTION: Good, reflecting long-term use  
ZONING: Residential A, 25,000 sq. ft. lots.

This major facility extends the open space character of the adjacent Crowley School and backs on to the Fellowship Circle public housing for the elderly to the north. It is suggested below for inclusion with the Robbins St. woodland to the north and the Demarco Park /Lutheran Home property in a bike path system linking open spaces and other destinations

(h.) Non-profit Holdings

- (h.1) LOCATION ,VFW Land Between the Park and Rte. 24 , just south of e.5 above.  
AREA: 3 acres  
MAP, BLOCK AND LOT NUMBERS B3 /3/ 1;  
MANAGEMENT: Veterans of Foreign Wars  
DEGREE OF PROTECTION: Fair, depending on long-term needs  
ZONING: Residential B, 40,000 sq. ft. lots. Also within Avon's Water Supply Protection Overlay Zoning District limiting hazardous uses.

(i.) Avon Housing Authority

- (i.1) Senior Citizen Housing: 5.10 acres. This abuts St. Michael's Cemetery which abuts the Crowley School land, which in turn abuts the Robbins Street conservation land. No significant undeveloped land
- (i.2) LOCATION: Former Avon Park subdivision land east of Page St. and abutting Conservation holding b.10, above  
AREA: 2.75 acres  
MAP, BLOCK AND LOT NUMBERS C7 /2/ 1,2,3  
MANAGEMENT: Avon Housing Authority  
DEGREE OF PROTECTION: Good, given unlikely housing use  
ZONING: Residential B, 40,000 sq. ft. lots

These three low-lying 40,000 sq. ft. lots adjacent to Conservation holding (b.10) above are owned by the Avon Housing Authority for potential low cost housing, rather than by the Town. Such development seems unlikely, given the site's isolation and probably wooded swamp character.

3. PARTIALLY PROTECTED PUBLIC RECREATION AND ATHLETIC FACILITIES

- (j.) Avon School Department and Parks and Recreation Commission. Total holdings including land and buildings: Schools 53.0 acres; Commission .6Sacreq. Ft.
- (j.1). LOCATION: AVON HIGH SCHOOL 285 West Main Street  
AREA: 8.6 acres  
MAP, BLOCK, AND LOT NUMBERS: C5, 10, 06

FACILITIES: Gymnasium, basketball court, playground, tot lot, seasonal ice skating rink, one ball field at Noonan Field.

MANAGEMENT: Park and Recreation Commission. Noonan Field is fully scheduled with the Babe Ruth teams and with certain South Shore men's league teams. It is also used by high school teams and for pick up soccer games.

**HANDICAPPED ACCESS**

- Parking includes handicapped parking spaces
- Signage - sign that identifies the facility
- Bathrooms are accessible
- All facilities are on ground level

**Recommendation:**

- Build a level paved path to facilities from parking area.

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

(j.2) LOCATION: RALPH D. BUTLER ELEMENTARY SCHOOL, Patrick Clark Drive

AREA: 28.3 acres

MAP, BLOCK, AND LOT NUMBERS: C3, 02, 15

FACILITIES: Gymnasium, playground, tot lot, tennis courts (unused), three ball fields, soccer field.

MANAGEMENT: Park and Recreation Commission. The "High School Field" here is reserved exclusively for high school teams. Two fields are used for Little League. All the fields need to be reconstructed.

**HANDICAPPED ACCESS::**

- Parking includes handicapped parking spaces
- Signage - a sign that identifies the facility
- Restrooms in building are accessible
- All facilities are on ground level

**Recommendations**

- Build a level paved path to facilities from parking area.

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

(j.3) LOCATION: ROBERT F. CROWLEY SCHOOL, Fagan Drive

AREA: 16.1 acres

MAP, BLOCK, AND LOT NUMBERS: D5, 06, 07

FACILITIES: Playground, tot lot, two ball fields, a small soccer field.

The fields are used by Little League and high school softball teams.

The site abuts conservation land to the north and St. Michael's Cemetery to the south.

MANAGEMENT: Park and Recreation Commission

**HANDICAPPED ACCESS:**

Parking includes handicapped parking spaces

Signage - a sign that identifies the facility





Crowley School Ball Fields with Woods behind St. Michaels Cemetery to Rear

- Restrooms in building are accessible
- All facilities are on ground level

Recommendation:

- Build a paved path from parking area to facilities .

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

(j.4) LOCATION: Bartlett Street Tennis Courts, across from High School

AREA: .6 acres

MAP, BLOCK, AND LOT NUMBERS: D6 / 4 / 19.

FACILITIES: Two tennis courts

MANAGEMENT: Park and Recreation Commission

HANDICAPPED ACCESS:

- Parking lacks handicapped parking spaces
- Restrooms – none on site
- All facilities are on ground level

Recommendation:

- Needs a handicapped parking space .

DEGREE OF PROTECTION: Good, reflecting long-term use

ZONING: Residential A, 25,000 sq. ft. lots.

#### 4. PRIVATE RECREATION FACILITIES

(k.1) LOCATION: AVON FISH AND GAME, INC. 113 Granite Street

AREA: 3.9 acres

MAP, BLOCK, AND LOT NUMBERS: C5 / 1 / 49

FACILITIES: Clubhouse with inside gun range, outside archery range, picnic area. Club is at the end of a dead end street near the Avon Industrial Park. The site is reduced from a past 8.9 acres by sale of land to the abutting Condyne Corp.

DEGREE OF PROTECTION: Fair, depending on the club's long-term plans

ZONING: Residential A, 25,000 sq. ft. lots.

## 5. MISCELLANEOUS TOWN PROPERTIES

(1.1) School Department: 53.0 acres (see recreation inventory)

(1.2) Town Offices: 1.86 acres The small Trout Brook tributary ponding area and covered foot bridge behind and between the Town Offices and the Library suggest possible approaches to handling downstream potential multi-purpose flood storage / recharge / habitat protection areas.

(1.3) Police and Fire Department: 1.70 acres

(1.4) Town Library: 1.10 acres

(1.5) LOCATION: Corner of Memorial Drive and Ladge Drive

AREA: 31, 257 square feet

MAP, BLOCK, AND LOT NUMBERS: D4 / 17 / 11

MANAGEMENT: Town of Avon

DEGREE OF PROTECTION: Fair, depending on Town needs

ZONING: Residential A, 25,000 sq. ft. lots.

This is a key parcel accommodating the Edison power line and Trout Brook; potentially the upper end of a flood storage / recharge impoundment at the Ladge Drive culvert.

There are also several small or land-locked , town-owned parcel generally acquired through tax foreclosure. Some many have potential for neighborhood open spaces while others might better be sold to abutters to enlarge lots.

(1.6) LOCATION: Private Lane west of Page St.

AREA: 1 acre

MAP, BLOCK, AND LOT NUMBERS: C6 / 2 / 5,6

MANAGEMENT: Town of Avon

DEGREE OF PROTECTION: Fair, depending on Town needs

ZONING: Residential B, 40,000 sq. ft. lots.

These wooded lots abut two private ways one of which abuts back land next to vacant lots along Granite St. and the Avon Fish and Game Assn. property described above. They help to give a wooded backdrop to adjacent neighborhoods.





Covered Bridge over Trout Brook Tributary behind Town Offices - a Popular Hang Out Despite Recent Vehicular Damage.

- (1.7) LOCATION: Two lots, one of 15,750 Sq. Ft. surrounded by lots fronting on E. Main Street, Connolly Road. and Overlook Drive; the other, of 5400 sq. ft., on Fletcher St.  
AREA: .39 acres  
MAP, BLOCK, AND LOT NUMBERS: D3 / 12 / 5,19  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Fair, depending on Town needs  
ZONING: Residential A, 25,000 sq. ft. lots.

These back onto 4.18 privately-owned acres (E3/1/2) running from East Main Street to Memorial Drive, which could offer a route for a portion of the proposed Field Park to Trout Brook bike / pedestrian path. A new house on intervening Kempton Ave. and commercial growth along Memorial Drive may preclude this. Study the possibilities of acquiring the private land and integrating these with it; potentially donating the 5400 sq. ft. lot for an affordable house given sewerage; or leaving the lots as informal natural areas or expanded private yard space.

- (1.8) LOCATION: Corner of Connolly Road and Overlook Drive.  
AREA: .12 acres (Too small to map)  
MAP, BLOCK, AND LOT NUMBERS: D3 / 12 / 12  
MANAGEMENT: Town of Avon  
DEGREE OF PROTECTION: Fair, depending  
ZONING: Residential A, 25,000 sq. ft. lots

This is very small for public use and is landscaped as an extension of the adjacent private house lot.



- (1.9) LOCATION: Two lots south of King St.  
 AREA: .12 acres  
 MAP, BLOCK, AND LOT NUMBERS: B7 / 6 / 6,7  
 MANAGEMENT: Town of Avon  
 DEGREE OF PROTECTION: Fair, depending on Town needs  
 ZONING: Residential B, 40,000 sq. ft. lots.

These are bracketed by houses on this relatively high portion of King Street. They are not needed to make good use of the non-adjacent extensive public land to the east, and might well be left as informal open space or parts of adjacent house lots.

6. LAND UNDER MASSACHUSETTS GENERAL LAWS CHAPTERS 61, 61a AND 61b.

According to the Board of Assessors, Avon has no land under Chapter 61, Classified Forest, Chapter 61 A, Agriculture or Chapter 61b Recreation.

H. OPPORTUNITIES PRESENTED BY UNPROTECTED LANDS OF CONSERVATION AND RECREATION INTEREST

These consist of the remaining unprotected Business or Residentially-zoned land around Avon's portion of the park. They have value in themselves and need protection to protect the Park and in some cases its reservoir

1. Proposed D.W. Field Park Acquisitions

- (m.1) LOCATION: Two adjacent parcels at the Northeast corner of D.W. Field Park owned by Subon Company:  
 AREA: 25.05 acres.  
 MAP, BLOCK, AND LOT NUMBERS: B4/ 7/ 3, 11.69 acres;  
 and B4, 007, 04, 13.36 acres.  
 DEGREE OF PROTECTION: None beyond present environmental protection provisions  
 ZONING: Business

This is the gateway to the park and part of its watershed. The seemingly buildable lots were proposed for an outlet store which was withdrawn after close environmental scrutiny. Though they are in the Water Supply Protection overlay District, there is the potential for water quality problems from road/parking lot runoff and other hazards depending on business type, Hence these lots are among the most vulnerable and are recommended for acquisition by either the City or the Town.

- (m.2) LOCATION: Between Harrison Blvd. and the Park  
AREA: 16.9 acres  
MAP, BLOCK, AND LOT NUMBERS: C4 / 9 / 3,4  
DEGREE OF PROTECTION: None beyond present environmental protection provisions  
ZONING: Business

This land would be highly developable except for present limited curb cut rights. It is a key gap in preserving / expanding the east side of the Park and includes a potential town well site. Town acquisition through with State Aquifer Land Acquisition funds has been explored and would be appropriate if compatible with well development and informal, non-contaminating recreation use.

- (m.3) LOCATION: Between Rte.24 and City's recent Martineau Circle acquisitions. k  
AREA: 5.9 acres  
MAP, BLOCK, AND LOT NUMBERS: B2 / 5 / 1  
DEGREE OF PROTECTION: None beyond present environmental protection provisions  
ZONING: Residential B, 40,000 sq. ft. lots

This woodland and pond between Rte.24, the Brockton water tanks and the City's recently acquired former Martineau Circle subdivision would make a logical addition to the Park with hiking access partly provided by two mowed pipeline easements at its southern and eastern edges.

- (m.4) LOCATION: From South Street to the Brockton line, west to of the West Parkway.  
AREA: 16.8 acres  
MAP, BLOCK, AND LOT NUMBERS: C2 / 2 / 1; C 2/ 2 /3  
DEGREE OF PROTECTION: None beyond present environmental protection provisions  
ZONING: Residential B, 40,000 sq. ft. lots

This sloping woodland runs along about 1100' of the West Parkway and has frontage on South St. It wraps around the partly- built South Park Homes subdivision at the corner of South Street and the Parkway, and includes the large un-built 14.3 acre Fieldstone subdivision and a 2.5 acre parcel on South Street just west of South Park. The nearest South Park lots are 70 to 190 feet from the Parkway and have nominal buffer area, but the cleared land and new houses are quite apparent from the Parkway. To protect the rest of the Parkway the possibility of re-orienting the Fieldstone project toward planned new development to the west should be explored. In any case the Park would be further protected / enhanced by acquiring land west of the Parkway to the maximum feasible depth and / or acquiring a protective easement along the edge of any new development abutting the Parkway.

(m.5) LOCATION: VFW land between Rte. 24 and the Park, discussed above as holding h.1.

AREA: 3 acres

MAP, BLOCK, AND LOT NUMBERS: B3, 003, 01.

DEGREE OF PROTECTION: Fair, depending on long-term needs and enforcement of environmental regulations

ZONING: Residential B, 40,000 sq. ft. lots. Also within Avon's Water Supply Protection Overlay Zoning District limiting hazardous uses.

Though protected by non-profit ownership and inaccessibility, the land locked three-acre site should be acquired for coordinated management as part the Park

## 2. Other sites

(n.-1) LOCATION: Apparent T.L. Edwards property along Wales Avenue next to the Randolph town line..

AREA: 56.3 acres

MAP, BLOCK, AND LOT NUMBERS: B9 / 2 / 1) (23.2.acres) C9 / 2 / 1 (33.1acres)

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential B, 40,000 sq. ft. lots

Two wooded upland parcels with few mapped limitations for septic systems and abutting woodland across the Randolph line. The westernmost part of parcel B9 / 2/1 is used to store used asphalt and other materials (creating sizable hills) along with old curbing, catch-basin covers etc. These abut the Schepis parcel described below.

With buffering, resolution of any zoning or water quality issues, acceptable access and compatible uses north of Wales Avenue, the vacant land here could be used for the housing allowed by present zoning or for expanded industrial uses. Since the last portion of Wales Ave. was abandoned, the only access may be from the very end of the paved Wales Ave. or through a new subdivision road. The latter could connect with Stoughton Street in Randolph for housing or serve industries by looping back to an existing or new road in Avon. The remaining land could be used for open space and habitat. Acquisition as municipal land would keep the choice in Avon's hands. The unspoiled areas are recommended for acquisition in conjunction with the Schepis land and town land to the south and for use as open space, habitat, and trails.

(n.2) LOCATION: Apparent Schepis property east of Page St. between Town holdings b.7 and b.8 in the page Street woodlands discussed above.

AREA: 52 acres

MAP, BLOCK, AND LOT NUMBERS: C8 / 2 / 4



DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential B, 40,000 sq. ft. lots

This is a landlocked parcel abutting the two Edwards properties described above and separating two major town-owned parcels. These parcels were once considered for the site of a municipal golf course. They are largely wet but some peripheral upland might be usable with sewerage or innovative /alternative systems.

(n.3) LOCATION: Private land between Town holdings b-8 and B-10.

AREA: 200,000 square feet

MAP, BLOCK, AND LOT NUMBERS: C7 / 2 / 17,18 ; C8/ 2/3

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential B, 40,000 sq. ft. lots

These four 40,000 square foot lots are between Conservation holding b-8 and the smaller Conservation and Housing Authority parcels discussed above

The combination of holdings b.7, b.8, b-10 and i-2 and sites n-1, n-2 and n-3 along with some intervening private parcels could create a major wildlife preserve and low impact recreation area – particularly if done in conjunction with Randolph's contiguous Lokitis Conservation Area. Boardwalks and access easements would probably be needed to cross the deepest swamp and to allow trails running from Langley Road to Wales Street to cross intervening private land.

(n.4) LOCATION: One corner on the inner curve of Harrison Blvd. protruding into the Avon Water Dept. land.

AREA: 19,981 square feet

MAP, BLOCK, AND LOT NUMBERS: C4 / 8 / 24

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential A, 25,000 sq. ft. lots

This apparently private parcel points into Water Department holding d.1 above and would best be acquired and managed as part of that property.

(n.5) LOCATION: Between the Lutheran Home/ DeMarco Park property on the Randolph Town line.

AREA: 3.3 acres

MAP, BLOCK, AND LOT NUMBERS: D6/ 7 / 32

DEGREE OF PROTECTION: None beyond present environmental protection provisions

ZONING: Residential B, 40,000 sq. ft. lots

This long, tapered wooded strip runs between the Lutheran Home property, houses in Randolph, and rough woodland in Holbrook. It could complement the Lutheran Home acquisition by going to the town line; and would allow integrated open space uses such as bike / pedestrian trails along the Holbrook / Randolph line and possibly on to the Holbrook/Randolph commuter rail station to the north.

(n.6) LOCATION: Scattered parcels along the stream system with potential for streamside access or multi-purpose use

AREA: Minimal; 31.8 acres in the list below, including 16'1 City owned acres on Beaver Brook, plus a potential 5-10 acres to be identified in open lowlands.

MAP, BLOCK, AND LOT NUMBERS: Potentially including D5 /2/ 18,21; D4 /2/11; D4 / 7 / 11; D4 /13/14,15; D4/17/11,12 ; D4/17/ 11,12; D4/11/17; B6/1/7 and B5/1/1

DEGREE OF PROTECTION: None beyond present environmental protection provisions and City ownership of the Beaver Brook land above Rte.24

ZONING: Mostly Residential A and B, less than an acre of Town-owned Business land, and 1.73 acres of Industrially-zoned streamside land

Though the town's streams are protected by the Sanitary Code, the Wetlands Protection Act and the Rivers Bill, some segments would benefit from selective acquisition in fee or acquisition of easements. These could allow creation of streamside paths or the proposed multi-purpose flood control / ground water recharge/ habitat / open space areas discussed above. Possible opportunities include the following Trout Brook and Beaver Brook segments:

1. The low-lying stream segment between Gill and Rock Street, (D5 / 2 / 18,21), 6.37 acres
2. The low, marshy area just above Harrison Blvd. (D4/ 2/11), 2.2 acres
3. The area between the Blvd. and School St. – which retains provisions for flashboards at School St. (D4 / 11/ 7), 1.8 acres
4. The area just above Glendower Street (D4 / 13 / 4,15), 2.9 acres
5. The land upstream of the Ladge Road culvert (D4 /17/11,12), 2.45 acres
6. The informal Beaver Brook impoundment just above Rte. 24. (B5/1/1), 16.1 acres
7. A segment of Beaver Brook just below Strafello Drive (B6 / 1/7) an estimated 2+/- acre remaining open portion following recent development
8. Another 5-10 acres here storm water is discharged to lowlands.

(n.-7) LOCATION: Private land between sites i-2 and b-11 described above.

AREA: 5.5 acres

MAP, BLOCK, AND LOT NUMBERS: C7/1/1-6

DEGREE OF PROTECTION: None beyond environmental protection provisions

ZONING: Res. B, 40,000 sq. ft.



Potential Flood Storage / Recharge / Habitat Area #2

These possibilities need to be studied in detail. Potential concerns include ownership, ability to hold useful storm flows without harming nearby development and septic systems, potential safe access for any open space, existing and potential groundwater recharge capacity, habitat value, and Wetlands Protection Act regulatory issues related to the above.

#### **H. Overall Community Goals**

The approach to using or augmenting protected and unprotected land depends on the Town's overall goals and resulting sense of needs and opportunities. The following community goals grow out of the goals in the 1964 and 1974 Master Plans and out of Visioning Sessions for the 1999 Master Plan, and continuing contact with the Planning Board and Conservation Commission.

Avon's Open Space Goals are:

1. To provide open space in or close to every neighborhood.
2. To preserve Avon's natural and historical visual character
3. To ensure the excellent quality of Avon's water supply.
4. To preserve and provide conservation land, particularly that with multi-purpose potentials for recreation, flood control, ground water recharge and wildlife habitat preservation and neighborhood enhancement



3. To ensure the excellent quality of Avon's water supply.
4. To preserve and provide conservation land, particularly that with multi-purpose potentials for recreation, flood control, ground water recharge and wildlife habitat preservation and neighborhood enhancement
5. To cooperate with adjacent communities to maximize benefits from potentially shared holdings.
6. To accommodate persons with disabilities at local conservation and recreation areas.
7. To coordinate and plan with other Town Boards and civic groups for the wise use of Avon's natural resources.

Avon's Related Recreation Goals are:

1. To provide recreational opportunities for diverse population groups, not just youth.
2. To meet the long-term space needs of locally significant sports.
3. To increase access to scarce water-based recreational resources, particularly swimming and boating opportunities.
4. To ensure the provision of recreation facilities while recognizing that recreation needs should be met on neighborhood, town wide and regional levels.
5. To ensure cooperation between the Park and Recreation Commission, the School Department, and private groups to avoid duplicating efforts.
6. Whenever possible, to design recreational facilities for multiple use.

## I. ANALYSIS OF NEEDS

The purpose of this section is to identify the overall open space and recreation needs of Avon. Such needs reflect both unavailable basic facilities and un-realized opportunities. Different towns will have different needs reflecting their resources, expectations and opportunities. This section is based on information provided by the Avon Park and Recreation, and Conservation Commissions and staff analysis. It is divided into a conservation needs analysis and a recreation needs analysis.

### 1. Conservation/ Resource Protection Needs

Avon's Conservation Needs include:

- Greenbelt System/ Stream/ Wetlands Protection Avon has scattered holdings, but no complete greenbelt corridors. It needs to develop a system of greenbelts along its streams and wetlands areas while opportunities remain. To do so it should identify critical pieces of the potential system and implement methods to protect them, e.g. purchase, land dedication, conservation easements, local open space provisions, etc.
- Bikeway / Trail System The town lacks a town-wide multi-purpose trail system allowing non-motorized off-road travel. Avon should seek to use existing and proposed easements, sidewalks and small land purchases to connect residential, open space and recreation areas and other destinations e.g. D.W. Field Park, Demarco Park, the High School/Library/Town Hall/Tennis Court Area; Senior Housing, Goeres Square, and the Butler and Crowley Schools.
- Maximum Opportunities for Persons With Disabilities Since the inventory reveals some inaccessible resources, Avon needs to identify and implement ways to provide full access at conservation and recreation areas.
- Water Resource Protection Water quality in the Trout Brook, the Porter Well and Brockton's Reservoir are protected by the Sanitary Code for septic systems and by the Town's Water Supply Protection Zoning District. Since ownership is the best protection, easements and purchase should be considered to prevent development in the flood plain or sensitive recharge areas.
- Augmented Natural Flood Control The town's streams, wetlands and other natural portions of the drainage system provide much flood storage but as mentioned in 1964 and 1974 master plans, and in the 1998 Avon Town Report, the drainage system is inadequate and is in need of rehabilitation. It is also important to protect the quantity of groundwater by enhancing groundwater recharge, particularly if sewers are installed since they will divert potentially recharged water to the downstream treatment plant. Any future drainage improvements should be designed to take advantage of the flood control, recharge, wildlife habitat and open space value of any existing or potential detention areas as noted in the 1988 Updated Drainage Systems Report.
- Protection/Expansion of D.W. Field Park and the Avon Reservoir Some of the adjacent woodland along Harrison Blvd. is still privately-owned and zoned for business, and some land on the west side tied to the Park by trails is privately-owned and has several approved subdivisions. Much of this privately-owned land drains to the Avon Reservoir. Accordingly there is a need to finish acquiring this bordering land and to incorporate it into the Park, thereby protecting the Park and the Reservoir and expanding permanent recreation opportunities. Since Brockton owns the Park, the best approach is a joint effort to acquire the remaining land and to oversee management of the enlarged park.

## 2. Recreation Needs

The Park and Recreation Commission establishes long-range goals and objectives and develops recreation programs and activities in cooperation with other town bodies and local recreational organizations.

### (a.) Determining Recreation Needs

There is no easy way to measure need for recreation facilities. The state has quantitative guidelines in the Massachusetts Statewide Conservation Outdoor Recreation Program or SCORP, however such standards do not recognize that recreation demand reflects a range of population characteristics, local interests, and local recreation opportunities and so on. Also, the standards focus on competitive sports and playgrounds, and are less helpful in supporting activities such as hiking, fishing, swimming, bike riding, etc.

Some other ways of determining needs are through recreation needs surveys or requests from the public for a particular program or activity.

Classification of Public Recreational Facilities:

**Community Park:** These serve the entire community with a large, contiguous open space.

**Neighborhood Park:** These resemble community parks but serve a smaller area.

**Playfields:** These serve to accommodate outdoor sports competition, especially for teenagers and adults. They can be all-purpose or designed specifically for baseball, football or soccer according to league requirements. SCORP guidelines call for 3 acres per 1,000 residents, with a 10-acre minimum, and adequate parking.

**Playgrounds:** Playgrounds provide game space for a particular neighborhood and larger ones should include a tot lot. The SCORP requires one acre per 250 elementary school children in dense neighborhoods, and a service radius of one-half mile.

**Play Lot or Tot Lot:** A play lot should have swings, slides, sandbox and other equipment for serve one - to five-year olds. They can also help to lessen social isolation of suburban parents. The SCORP requires one-half acre for each 1,000 persons in densely populated neighborhoods, and a service area radius of one-quarter mile.

Avon presently has 3 small areas with enough play equipment to be listed as tot lots even though the total calculated area, as shown on the following table, is only a quarter acre.

**Tennis Courts:** SCORP standards require one per 2,000 persons.



Further standards exist for swimming and other activities. Little analysis has gone into increasingly important facilities for skate boards, roller blades, and mountain bikes. These may be too few facilities to meet growing demands regardless of any formal standards.

The following evaluates Avon according to present SCORP standards.

### TOTAL RECREATION NEEDS BY SCORP STANDARDS

Facility Type	Supply	2000 Population	Total Calculated Need	Present/ Net Need (Acres)
Playfields	50 Acres	4,443	13.3 acres @ 3 acres per 1000 pop.	0
Playgrounds	3 Acres	407*	1.6 Acres @ one/ 250 pop. 5-11 Yrs.	0
Tot Lots	.25 Acres	4,443	2.22 Acres @ .5 acre/ 1000 pop.	1.97
Tennis Courts	2 courts (in use)	4,443	3 @ 1 per 2000 pop.	1 Ct.

Town-wide, Avon's facilities meet the 2000 requirements for everything except for tot lots and tennis courts. The town would meet the tennis court requirement if the unused courts at the Butler School are included. Two possible locations for tot lots are at the Sanborn Hill and Page Street standpipes. These would serve underserved neighborhoods.

#### (b.) Special Local Opportunities

Needs and opportunities can be quite mixed. An underlying need/obligation is to take advantage of unique local opportunities and to protect unique or characteristic resources. Not every community can or must have every resource or facility, but pursuing local special opportunities will increase the variety of resources open within the region. Examples of such resources from many communities are:

- A quarry offering rock climbing in Quincy
- A publicly-owned steep hill accommodating a ski tow in Wrentham
- Old sand pit and quarry badlands with dirt bike potential in Hingham
- Access to the Wompagnoag Canoe passage in Pembroke, Hanson and Halifax
- Potential open cranberry bog Bay Circuit Trail links in Hanson/Halifax
- Multi-purpose recreational opportunities in the area's highest "man made drumlin", East Bridgewater's former BFI landfill
- The diverse opportunities of the former Lutheran home property
- The water sport opportunities at D.W Field Park below the Reservoir.

### 3. Summary of Recreational Needs

- Installation of up-to-date equipment at all town playgrounds
- Updated basketball courts at the High School and the Crowley School. Redoing the ball fields at the Butler School, clearing land to add two soccer fields.
- Security lights at Butler and Crowley school fields.
- Further paths and benches at the Lutheran home property/ Demarco Park.
- New seasonal ice skating rinks, possibly at the unused Butler School tennis courts and at the proposed DeMarco Park picnic pavilion
- New fencing, scoreboards, and concession stands at all ballfields
- Opportunities for swimming and small boating, possibly at D.W Field Park's Waldo Lake to replace that lost with the filling of the Park's Ellis Brett Pond, and including a bathhouse that could be seasonally used as a changing/warm-up clubhouse for winter ice-skating.



A Potential Swimming Area on D.W. Field Park's Waldo Lake

- A Wheels Park for skateboards and roller blades, possibly on underused parking space near other youth facilities at the Buckley Center

- Extensive bike paths, mountain bike trails, and foot paths connecting local destinations and giving access to natural areas, e.g., in the expanded D. W. Field Park, or in the Page Street woodlands with possible connections to Wales Ave., King St. and Langley Rd.; and between the Lutheran Home property, the Robbins Street land, the Crowley School, St. Michael's Cemetery and other points to the north and south.
- A better distribution of local tot lots with complementary adult sitting and exercise facilities; at a minimum adding one in the southeastern corner of town (possibly at the attractive sloping lot at East Main Street and Connolly Road.), one to serve upper Page Street , and one for the isolated Center St. neighborhood.
- The potential major wildlife preserve/low impact recreation area incorporating the present Page St. properties (B-7, B-8, B-10 and E-10) and portions of the unprotected areas n.1, n.2, and n.3 and some intervening private land.
- Some usable open space near every neighborhood

#### 4. Management Needs

- To coordinate / integrate Town and City management of water protection lands and open space and recreation land in and abutting D.W. Field Park
- To coordinate water resource protection / acquisition activities with Brockton and Holbrook
- To coordinate / cooperate management / use adjacent open space holdings with Randolph, Brockton and Holbrook

#### **J. Action Oriented Goals and Objectives**

These goals and objectives are based on those outlined in past studies and in the 1999 Master Plan.

**GOAL 1.** To protect watershed areas from the direct and indirect impacts of development, to protect and enhance water resources including ponds, streams, wetlands, well sites and groundwater recharge areas, and to protect people and property from flood hazards.

#### **OBJECTIVES:**

- (a.) To continue to protect water resources through enforcement of the wetlands protection act, flood-plain regulations, and the town's water supply protection zoning by-law.
- (b.) To ensure that developers/contractors use best management practices to prevent soil erosion or non-point sources of contamination when working in areas adjacent to streams, ponds, and wetlands.



- (c.) To establish a non-point source pollution control program to educate people about non-point source pollution and implement measures to minimize non-point source pollution.
- (d.) To identify and acquire land in aquifer recharge areas and zones of contribution to public water supply wells.
- (e.) To protect water quality and groundwater recharge along with natural habitat and local open spaces by using regulation and acquisition to protect or enhance natural areas which have flood control, recharge, open space and habitat value.

**GOAL 2.** To provide sufficient land, facilities, and programs to accommodate a range of recreational activities meeting the diverse interests and abilities of Avon residents.

**OBJECTIVES:**

- (a.) To continue and enhance the role of the Park and Recreation Commission as the lead town body coordinating /planning town recreational programs and facilities.
- (b.) To work with other town boards, the schools, community recreation organizations, and other interested parties on an on-going basis to reassess various needs for recreation programs and facilities and to recommend priorities for both capital and operational budgets.
- (c.) On an on-going basis to conduct a needs analysis/community survey to assess the recreation needs of Avon residents, especially for persons with disabilities.
- (d.) To continue outreach programs such as newspaper articles and notices and cable television announcements to keep residents informed of Park and Recreation and other organizations' recreational offerings.
- (e.) To provide adequate facilities for recreation programs and maintain facilities in good repair and to ensure that recreation equipment meets safety standards and is protected from vandalism and inappropriate uses.
- (f.) To add two new soccer fields, probably on available land at the Butler School.
- (g.) To ensure that all facilities are fully accessible to, and adapted for use by persons with disabilities.

**GOAL 3** To work with the City of Brockton to preserve D.W. Field Park, particularly the section along Harrison Blvd.

**OBJECTIVES:**

- (a.) To cooperate in acquiring and mapping private holdings next to the park using private, government and non-profit resources.

- (b.) To develop bicycle and pedestrian trails for the diverse users.
- (c.) To expand the range of compatible activities possible at D.W. Field Park, e.g. hiking and trail bike riding through woods away from the intensely used shoreline.
- (d.) To establish a joint Avon / Brockton park commission to oversee park operation and set needed policies.
- (e.) To create a new watersports space and programs at Waldo Lake.

**K. Major Recommendations - Keyed to the following Natural Resources / Open Space Suitability Map:**

**OS-1. Use/Expansion/Protection of Present Resources**

- (a.) Create a multi-purpose flood control/open space system taking advantage of the flood control; groundwater recharge, wildlife habitat and neighborhood open space value of some streamside lands. Possible sites include:
  - The low-lying areas along Trout Brook between Gill St. and Rock St.; just north of the 6' culvert under Harrison Blvd., just upstream of School St. (where the control structure still has slots for control boards); at the partially town-owned Brook Segment upstream of the Ladge Drive culvert; perhaps where the Brook crosses Connolly Road.
  - Areas where drains discharge to low-lying land rather than directly to streams, e.g. Central St., North of South Street; Bruce Road off of Page St.; and the outlet south of Strafello Road. (See the Council's 1990 "Report on 1964-1989 Storm Drainage System Improvements.")
  - The City-owned informal Beaver Brook impoundment upstream of Rte. 24.

Not every site will have all of these potentials, but the recharge/flood control benefits may make this approach valuable even when the open space/recreation benefits are slight. The approach will require detailed, site-specific studies to avoid backwater impacts on existing development and to get the most appropriate combination of features (e.g. wild habitat versus a usable grass-sloped ponding area) or the high recharge value of a dredged coarse bottom versus a maximum of diverse pollution-abating vegetation).

- (b.) Protect the Trout Brook Watershed by continued enforcement of Title Five, of the Water Supply Protection Zoning bylaw, of the Rivers Act, and of the Wetlands Protection Act, and by purchasing land or easements to prevent development in vacant flood plain areas or significant recharge areas.

- (c.) Create a Bikeway/Trail System connecting residential areas to open spaces, recreational areas and employment centers. Possibilities to explore/implement include:
- A trail from the town entrance on East Spring St., along the edge of St. Michael's Cemetery, through the Crowley school grounds and the Robbins St. conservation land to the rear, (or through Fellowship Circle if compatible), then up Robbins St. and East High St. and through the Lutheran Home Property.
  - From the above end it could go across Rte. 139 through Langley Road., through a trail in the Page St. Woodlands, and out Wales Ave. It could even go on through open land along the Randolph/Holbrook town line exiting to Rte. 139 ,or going on to the Randolph/Holbrook Commuter rail station via local streets.
  - To the south and east such a trail system could go along the railroad right-of-way to the Edison power line, then past the Child World building along the power line into Brockton past the Brookfield School, and on to Ames Nowell State Park. This would accomplish a major park of the recently proposed Brockton Bicycle Interchange.
  - For easier, safer and more direct access to the Industrial Park from Avon neighborhoods along Page St. and from Randolph and Holbrook, acquiring rights-of-way and creating direct connections from Freeman St., Granite St. and/or Highland St. to Bodwell St. in the Park, and along Wales Ave from Randolph to Bodwell St. Extension.
  - If feasible, creating a bike / pedestrian path across the Waldo Lake Dike and on through the Butler School to South Street and W. Main St via Leo's Lane and Nichols Ave., and then along existing roads (W. Main Street, Bow's Ave.) then via an easement between house lots to Connolly Road and on to the proposed Trout Brook Path (below).
  - A pedestrian way and/or bike path along Trout Brook from Ladge Drive west of the NRT trucking terminal, behind the Wal Mart and on through the water lands to Connolly Rd., and then to the Brockton-owned pond and open space just above Howard St., and possibly on to the Montello Commuter rail station. Much of the route is quite wet and might need boardwalks or other alterations and/or routing along streets.
  - Reopening the closed portion of Wales Ave. for pedestrian/bike use connecting with any new paths in the Edwards or Schepis properties (B-1 and B-2) and the rest of the Page St. Woodlands, with adjacent neighborhoods, and with the Lokitis Conservation land in Randolph.
- (d.) Accommodate people with disabilities at all feasible conservation and recreation sites and facilities.



- (f.) Work with the Lutheran Home Study Group to explore varied open space and recreation uses for remaining portion of the Lutheran Home property and, potentially, the adjacent Nelson land on the Holbrook line.
- (g.) Develop mountain bike trails, low impact camping or other uses of the town-owned land off of Page Street (The Page Street Woodlands) once proposed for a golf course and acquisitions proposed below.
- (h.) Combine holdings B-7, B-8, B-10 and I-2 and along with some of the unprotected areas 2-1 and 2-2 (minus the recycled highway material storage area), and any other available land to create a major wildlife refuge and low-impact recreation area, potentially integrated with Randolph's adjacent Lokitis conservation area.

#### OS-2. Acquisitions

- (a.) Acquire land to protect the Brockton Reservoir and Avon's portion of D. W. Field Park as discussed.
- (b.) Selectively acquire land along Trout Brook where suitable for flood storage/recharge / habitat and open space purposes, and for streamside trails and greenbelt conjunction with the Scepis land and town land to the south and use for open space, habitat, and trails.
- (c.) Acquire all or selected portions of the Schepis (N-2) (C8 / 2 /4), and Edwards properties (N-1) (B9 /2/1 and C9 / 2/ 1) and N-3 (C7/2/17,18 and C8 /2/3) described under Unprotected Lands above, and a portion of the N-7 land between B-11 and I-2 (C7/2/4,5,6) and C8/2/1,2,3). If access and use compatibility can be resolved, consider mixed open space preservation and selective development on some of the Edwards uplands
- (d.) Acquire any available land in the Zone II groundwater recharge area around the trout Brook wells and along the main stems of Trout Brook
- (e.) Acquire the 3.3-acre Nelson woodland between the Lutheran Home property and the vacant land across the Holbrook line, and explore the proposed trail with Holbrook.

#### OS-3. Recreation Facility Improvements and Additions

- (a.) Replace all equipment at town playgrounds with safe, up-to-date equipment
- (b.) Resurface and re-equip basketball courts at the high school and the Crowley school.
- (c.) Resurface the ball fields at the Butler School
- (d.) Develop a multi-season bath house/skating clubhouse along with swimming floats and possibly a small boat rental operation at Waldo Lake

- (b.) Resurface and re-equip basketball courts at the high school and the Crowley school.
- (c.) Resurface the ball fields at the Butler School
- (d.) Develop a multi-season bath house/skating clubhouse along with swimming floats and possibly a small boat rental operation at Waldo Lake
- (e.) Clear available land at the Butler School and build two soccer fields
- (f.) Add paths with benches and bike trail segments on the Lutheran home property
- (g.) Convert the unused Butler School tennis courts to a seasonal ice skating rink
- (h.) Build new fencing, scoreboards and concession stands at town ball fields
- (i.) Build a picnic pavilion / winter ice skating rink at the Lutheran Home property
- (j.) Install security lights at the Butler and Crowley school Fields
- (k.) Improve existing tot lots and add new ones, possibly on the town parcel at West Main /St. and Connelly Rd.; near King Street or Freeman Street, or the Water Tower land along upper Pond St., and on Central St., perhaps at the Antone Rd. water tower.
- (l.) Develop a centrally located Wheels Park for skateboards and roller blades, perhaps on under-used parking space behind the Buckley Center
- (m.) Study and implement the feasible portions of the recreational and commuting bike paths described in 1(c.) above.
- (n.) Examine and implement mountain bike trails, low impact camping or other uses of the present or expanded town-owned land off of Page Street once proposed for a golf course; explore joint opportunities with managers of Randolph's Lokitis land.

#### **L. Open Space and Recreation Suitability / Recommended Actions Map**

The map below (following the Five Year Action Program) shows the land found to be suitable for Resource Protection, Open Space and Recreation uses. The numbered items are those listed in the recommendations (item K above). They show the major recommendations remaining after reconciling any conflicts between the individual maps of Land Suitable for Open Space, Housing, and Economic Development. These findings are included in the Final Community Development Plan, and are shown on the final Community Development Plan map by patterns, and are shown here separately for clarity.

## **M. Five Year Action Plan**

### Multiple Years

#### Acquisitions

- A1 Acquire the remaining land needed to protect the Brockton Reservoir and Avon's portion of D.W. Field Park, in cooperation with Brockton.
- A2 Acquire land along Trout Brook and the Zone II of the Trout Brook wells as available for flood control and water supply protection purposes creation of a greenway belt along the waterway.

### Fiscal Year 2005

#### Management/Site Improvements

- M1 Help to organize a joint management entity for D.W. Field Park to meet diverse local and regional needs and participate on it.
- M2 Resurface the ball fields at the Butler School
- M3 Begin making improvements needed for maximum handicapped accessibility.

#### Planning Process

- P1 Work with the Lutheran Home Study Group to develop a plan for entire site
- P2 Explore opportunities to increase access to Waldo Lake for water-based recreation including swimming, boating, and fishing.
- P3 Review opportunities for multi-purpose open space, habitat protection, flood control and groundwater recharge facilities in low-lying flood plain areas and existing informal impoundments, identify the tradeoffs involved and explore their implementation.
- P4. Conduct a needs analysis to determine appropriate ways to ensure access to conservation and recreation facilities for persons with disabilities.

#### Acquisitions

- A3 Acquire the Nelson woodlands behind the Lutheran Home Property.



## Fiscal Year 2006

### Management/Site Improvements

- M4 Replace all equipment at town playgrounds with safe, up-to-date equipment.
- M5 Resurface and re-equip basketball courts at the High School and the Crowley school.
- M6 Build walking paths with benches at the Lutheran home property.
- M7 Adapt the unused tennis courts at the Butler School to be used as a seasonal ice skating rink.
- M8 Clear eleven acres of land at the Butler school and build two soccer fields.
- M9 Begin to develop the Waldo Lake water sport area with a small beach, with a partially enclosed area for lessons, a float, and possibly a simple bathhouse for toilets, showers, changing and equipment storage.

### Planning Process

- P5 Determine appropriate ways to ensure access to conservation and recreation facilities for persons with disabilities.
- P6 Begin designing a town-wide multi-purpose trail system using existing and proposed easements, sidewalks and small land purchases to connect residential, open space and recreational areas.
- P7 Conduct a Greenbelt System/Stream/Wetlands Protection Study to identify critical pieces of the greenbelt system and methods to protect them.
- P8. Locate and design a wheels park, possibly on under-used parking space behind Buckley Center

### Acquisitions

- A4 Acquire all or selected portion of private lands in and abutting the Page Street Woodland as listed on OS-2 above.

## Fiscal Year 2007

### Management/Site Improvements

- M10 Begin modification of multi-purpose lowlands / impoundments as identified in P3
- M11. Begin building a town-wide multi-purpose trail system studied in P5.
- M12 Install security lights at Butler and Crowley School Fields
- M13 Locate and design a wheels park, possibly on under-used parking space behind Buckley Center

### Planning Process

- P9. Build on P5 to study use of Page Street woodlands (once considered for a golf course) and contiguous private land described under above for uses such as bike rails and low impact camping and coordinate efforts with managers of Randolph's Lokitis land.
- P10. Conduct annual review of Open Space and Recreation Plan goals, objectives, and action plan. Establish priorities for the year. Begin Plan update.
- P11. Chose locations and design for new and upgraded tot lots

### Acquisitions.

- A5 Acquire properties and easements need for planned trail system

## Fiscal Year 2008

- M14. Build new fencing, scoreboards and concession stands at town ball fields.
- M15. Construct a new picnic pavilion at the Lutheran home property. Equip it so it can be used as a temporary ice skating rink in winter.
- M16 Continue work on trail system
- M17 Continue work on multi-purpose flood plain impoundments s

### Planning Process

- P12. Conduct annual review of Open Space and Recreation Plan goals, objectives, and action plan. Establish priorities for the year. Amend plan if needed.

Acquisitions

A6 Acquire land needed for multi-purpose impoundments studied in P3

Fiscal Year 2009

Management/Site Improvements

M18 Continue work on trail system

M19 Continue work on multi-purpose flood plain impoundments

M20 Build new tot lots and upgrade existing facilities

M21 Begin work on trail or campsites on Page Street Woodland studied under P7

Planning Process

P13 Review Open Space and Recreation Plan goals, objectives and action plan, begin 5-year plan update.

Acquisitions

A7 Continue acquisitions for projects noted above.



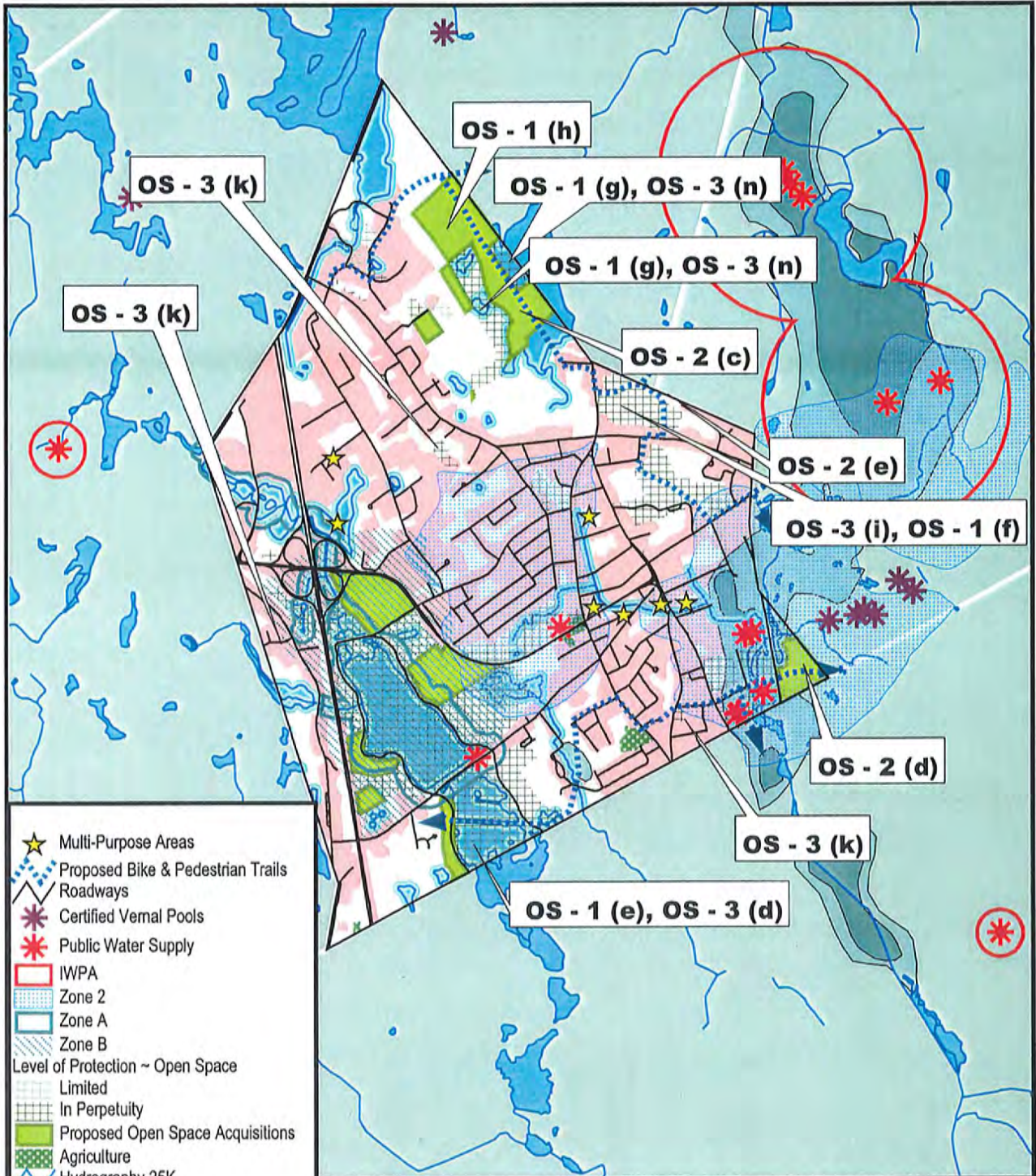
FIVE-YEAR ACTION PLAN SUMMARY

<u>ACTIVITY</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
<u>Acquisitions</u>					
A1, A2	-----	-----	-----	-----	-----
A3	-----				
A4, A5		-----			
A5			-----		
A6				-----	
A7					-----
<u>Management/Site Improvements</u>					
M1, 2, 3	-----				
M4, 5, 6, 7, 8, 9		-----			
M10, 11, 12, 13			-----		
M14, 15, 16, 17				-----	
M18, 19, 20, 21					-----
<u>Planning Process</u>					
P1, 2, 3, 4	-----				
P5, 6, 7, 8		-----			
P9, 10, 11			-----		
P12				-----	
P13					-----



# Resource Protection/Open Space/ Recreation Suitability/ Recommended Actions

Figure I - 7



- ★ Multi-Purpose Areas
- Proposed Bike & Pedestrian Trails
- Roadways
- ✳ Certified Vernal Pools
- ✳ Public Water Supply
- IWPA
- Zone 2
- Zone A
- Zone B
- Level of Protection ~ Open Space
- Limited
- In Perpetuity
- Proposed Open Space Acquisitions
- Agriculture
- Hydrography 25K
- 100 ft buffer
- Ponds & Wetlands
- Aquifers
- 100 - 300
- 100-300
- >300
- Developed Land
- Avon
- Surrounding Towns

0.5 0 0.5 1 Miles



Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD, OCPC Field Data

June, 2004





## Chapter II

### Housing Element

#### A. Housing Goals and Objectives

Avon's housing goals and objectives reflect and build on the applicable general and specific goals and objectives in the Master Plan. These are to:

1. Guide future town development in order to meet the needs of diverse population groups, protect attractive neighborhoods, preserve natural resources and open spaces, and continue to provide high-quality public services.
2. Balance reasonable industrial and commercial growth with preservation and enhancement of the town's amenities and residential character.

Objective: Modify and enforce land use and development regulations minimizing conflicts between neighborhoods and nearby industrial and commercial areas.

Objective: Revise zoning bylaws to keep future industrial/commercial growth separate from residential neighborhoods.

8. Protect and maintain the present housing stock while expanding opportunities for diverse housing types.

Objective: Identify areas appropriate for moderate density housing and adoption of appropriate regulatory changes.

Objective: Use of any public sewer system to allow selective higher densities in areas of high accessibility and amenities.

Objective: Refine and fill the housing supply gaps explored below

Objective: Explore conditions and develop a housing rehabilitation loan program if needed

Thus the summary housing goals would be:

1. To meet the needs of diverse population groups in terms of income and household type
2. To protect and enhance the town's present and future neighborhoods, and,
3. To maintain and preserve the existing moderate-cost housing stock.

Related objectives would be:

- Identification of areas suitable for moderate density / affordable housing and adoption of any needed regulatory changes
- Identification of opportunities to use any future sewerage to accommodate appropriate higher density development.
- Establishment of guidelines and responsible parties for responding to any prospective Ch.40b projects
- Creation of a rehabilitation loan program or other resources needed to maintain the present stock
- Modification of regulations intended to protect neighborhoods from adjacent industry such as the industrial / residential Greenbelt provision
- Inventorying the Town's actual housing supply by cost, size and condition, and setting standards reflecting this supply and resulting needs
- Preparing a Certified Housing Plan or Strategy under Ch.418 and accomplishing the resulting goals and objectives.

## **B. Inventory**

The town's primary land use is residential and the greatest proportion of this is in detached single-family houses. According to the 2000 Census, there were 1,230 single-family detached houses; 39 units in attached houses, 294 units in two to four-unit buildings, and 102 units in buildings with 5 or more units, and none in mobile homes or trailers, for a total of 1,705 year-round housing units, occupied or vacant.

Avon's housing is generally of moderate cost. According to the Warren Group, publisher of Banker & Tradesmen, the year 2000 the median sales price was \$174,900. This was well above the median value owners ascribed to their property in the 2000 Census, \$160,100, but below the statewide median sales prices of \$198,000. The median value is for all houses, while the prices are for those sold. In any case, many new units on the market are considerably larger and more expensive than the town's general stock.

Most of the housing is owner-occupied with 1305 owner-occupied units and 400 renter-occupied units (23.5%) in 2000. This was a slight increase over the 349 rental units (20.95%) of 1990.

During the 1980s and 1990s the town gained housing, but lost population due to a declining household size. From 1980 to 2000 the town gained 77 units (from 1628 to 1740) while dropping from 5026 persons @ \$3.1/du to 4,443 persons @2.6/du. Though household sizes are dropping generally, the declining population suggests that older residents are remaining in their homes after their families have grown, rather than moving





Traditional Older Neighborhood

into smaller units. Thus households with a householder aged >65 occupied 12.3% of all units in Avon compared to 8.2% in the region. This may suggest a need for alternative housing opportunities for such empty nesters who want to remain living in Avon.

The overall vacancy rate dropped between 1990 and 2000 from 4.5% to 2.0%, and the 2000 rental vacancy rate was only 1.2%. Changes in the inventory by structure type and vacancy rates from 1990 to 2000 are shown below.

**Avon's Housing Stock  
1990-2000 Changes in number of Units and Vacancy Rates**

Housing Type	1990		2000	
	Number	%	Number	%
Single-family detached	1,238	74.3	1270	73.0
Single-family attached	22	1.3	39	2.2
Two-family	n.a.		112	6.4
2-4 units	287	17.2		
3,4 units			182	10.5
5+	90	5.4	102	5.7
Mobile homes, other	29	1.7	0	.
Vacant			35	2.0
Total	1666	100.00	1740	
Total Vacancy	75 (in above) 4.5%			2.0

Source: US Census 1990,2000





Compact 1950s Ranch Houses



New Housing off Page Street

**Tenure Patterns / Rental Housing**

The table below shows the number of housing units in Avon and the Old Colony Region, and the type of occupancy and tenure for these units during 2000. As can be seen, the town had a total of 1740 housing units in 2000, an increase of 4.4% percent over the 1,666 units recorded in 1990. Of the 1,705 occupied units, 1305 (76.5%) were owner-occupied; 400 (23.5%) were renter-occupied; and 35 units were vacant.

The supply of rental housing grew slightly in the 1990s, going from 349 renter occupied units (20.1% of all units) in 1990 to 400 occupied units (23.5%) in 2000. The proportion of rental housing in Avon is higher than in all but 6 other communities in the OCPC region. Those with higher proportions are also older employment centers with a long history of rental housing. This suggests that there is a reasonably good mix of housing opportunities in the community since it balances opportunities for rental housing and for homeownership. However, the very low rental vacancy rate of 1.2% suggests a need for more rental housing.

### Multi-Unit Development

Attached and multi-unit buildings are allowed by Special Permit in all but the Industrial District, but Avon has only one major multiple-unit development; the 70 unit Housing for the Elderly Complex off of East Street. Seven duplexes are located on Bows Lane and four are on Collins Circle. This is far less than the 100 acres of 4.3du/acre garden

#### Avon and OCPC Area Communities Housing Tenure and Occupancy - 2000

Municipality	Owner Occupied	Percent Owner Occupied	Renter Occupied	Percent Renter Occupied	Vacant	Total
ABINGTON	3,778	71.8	1,485	28.2	85	5,348
AVON	1,305	76.5	400	23.5	35	1,740
BRIDGEWATER	5,611	74.6	1,915	25.4	126	7,652
BROCKTON	18,375	54.6	15,300	45.4	1,162	34,837
EAST BRIDGEWATER	3,562	82.0	782	18.0	83	4,427
EASTON	6,113	81.6	1,376	18.4	142	7,631
HALIFAX	2,519	91.3	239	8.7	83	2,841
HANSON	2,779	89.0	344	11.0	55	3,178
KINGSTON	3,473	81.8	775	18.2	277	4,525
PEMBROKE	5,121	89.1	629	10.9	147	5,897
PLYMOUTH	14,292	77.6	4,131	22.4	2,827	21,250
PLYMPTON	819	95.9	35	4.1	18	872
STOUGHTON	7,642	74.5	2,612	25.5	234	10,488
WEST BRIDGEWATER	2,092	85.6	352	14.4	66	2,510

Source: U. S. Census

apartments proposed in the 1966 Master Plan or the scattered 3-12 du/acre housing proposed in the 1974 Plan. The rest of the multiple unit developments are spread around the town. The smaller multiple-unit buildings are understood to be generally owner-occupied.

The Residential R-A, R-B and Business B districts require a minimum of 40,000 square feet for multi-family housing. Allowed densities range from 10,000 sq. ft./unit for the first ten units, 5,000 sq. ft./unit for the next six units, and 3,000 sq. ft./unit thereafter.



Thus a two-acre parcel could accommodate 14 units @ 7/acre while a 4-acre parcel could hold 43 units at almost 11/acre.

### **Assisted Housing**

The Avon Housing Authority administers 70 units of State-Aided Housing for the Elderly (Ch. 667) including six units for the handicapped. This housing comprises 4.0% of the total 2000 housing stock, well under the 10% required for exemption from



Fellowship Circle Housing for the Elderly

the Comprehensive Permitting provisions of Chapter 40B. The Authority also administers 100 units of U.S. Dept. of Housing and Urban Development Section 8 Rental Assistance vouchers. The Section 8 certificates enable families to obtain housing through a three-way lease agreement between the landlord, the tenant and the Housing Authority. According to the Executive Director of the Authority, the certificates are mobile and may be used outside of Avon. Only twenty-five of the Section 8 certificate recipients have rented locally. The remainder are housed in neighboring communities, particularly Randolph. The town's limited moderate-cost rental stock and the relatively low applicable Brockton area HUD Fair Market Rents (FMRs) may divert many certificate holders to nearby communities, particularly where the higher Boston FMRs are combined with relatively low rents.

### **Influences**

#### **Commuter Rail Restoration**

Avon is already quite accessible via Routes 28 and 24 and bus service to Brockton and Boston by BAT and MBTA busses and connecting rapid transit. However, the restored MBTA Old Colony Commuter service running along the southeastern edge of the town greatly increases auto-free access to Boston/Cambridge and other communities along the

line. Though there is no stop in Avon, Brockton's Montello Station is only two miles south of Avon center, the Randolph/Holbrook station is only 1.75 miles north on Route 139, and the Stoughton Center station on the Stoughton line is about 3 miles to the west. By increasing auto-free access to metropolitan Boston the rail service makes Avon an even more desirable place to live for many people.

### **Tax Rates**

In 2000 Avon had the lowest residential property tax rate of the fifteen communities in the OCPC region. This was \$12.43 per thousand compared to the highest rate of \$20.30 per thousand recorded in Whitman. The 2001 residential rate of \$12.79 was only slightly higher and by 2004 it had reached \$13.06. Even with this increase, Avon homeowners had the lowest average single family tax bill of 32 South Shore Communities in 2004, (\$2,432 vs. \$3623 in Abington, \$3372 in Whitman and \$2,936 state-wide.) Tax rates are discussed further in Chapter III, Economic Development.

Low property taxes clearly make monthly housing costs more manageable for lower income families and families on fixed incomes. The question of whether the low property taxes push up asking prices to the buyer's acceptable monthly total burden has not been studied. If so, prices for a given house in Avon would be slightly higher than in nearby comparable communities.

### **C. Review of Build Out Analyses to Suggest Possible Future Supply and Potential Population Increases from Development**

The November 1993 Old Colony Planning Council Undeveloped Land Inventory and Buildout Analysis found 825 acres of vacant privately-owned land and a potential build-out of 546 new single-family houses and 1,180 multi-family units (assuming such development on Commercial land), the potential for 2,133, 000 square feet of commercial space (without such residential use of Commercial land) and 1,337,000 square feet of industrial space. The potential house lots, combined with 44 existing lots could house up to 1625 new residents. Excluding the 1165 theoretically possible, but unlikely multi-family units in the Avon Merchants Park, the remaining 115 potential multi-family units could house another 290 persons, for a total potential 1915 added persons at 2.7 / housing unit and a total population 6348. Most of the town's vacant, residentially developable land was north of Page Street and East and West High Streets where 40,000 sq. ft. lots are required.

A more recent Buildout analysis sponsored by the Executive Office of Environmental Affairs in 2000 found 1065 buildable acres and 765 potential residential lots allowing for 2217 new residents, and 6,449,936 sq. ft. of commercial / industrial space.

Due to site conditions and market limitations, permits for single-family houses averaged 4.2 /year in recent years but have been down to 2/year since 2000 according to the Building Inspector. Currently there are about 40 approved or proposed subdivision lots.

### Alternative Buildout Analyses

	OCPC 1993	EOEA 2000
Vacant Developable Acres	825	1065
House Lots	546	765
Multi-Family Units	115	---
Added Population	1915	2204
Commercial / Industrial Space	3,470,000 Sq. Ft.	6,449,936 Sq. Ft.

They could add 104 persons at the year 2000's 2.6 persons per unit. A previously noted 53 house lots in lapsed subdivisions have been bought by the Brockton Water Commission to protect the Avon Reservoir.

The more conservative OCPC analysis suggests the addition of about 660 housing units and 1900 residents beyond the 1990 population of 4558, for an eventual total of 6458. Avon's actual future population will depend on both household size trends and the number/mix of units built.

#### **D. Housing Needs**

##### 1. Overall

Housing needs refer to the ability of present and potential residents to find adequate-sized standard units at a reasonable proportion of income. Housing costs in Avon are generally lower than the average cost in the OCPC region as shown in the following table. Avon's median sales housing prices generally exceeded the OCPC average during 1988, 1989, and 1991, but have been lower recently as shown below. However, Avon's 1995 prices were higher than in 3 of 4 adjacent communities. Avon's 1995 median of \$129,000 median exceeded those in Brockton, (\$76,500), Holbrook, (\$110,000) and Randolph, (\$128,000). Only Stoughton had a higher median sales price (\$132,500). By 2000 the median sales price for housing in Avon climbed to \$174,900, but this was low in comparison with the median sales price for housing in the OCPC region, which was \$192,864. The trend is understood to be continuing.

#### **Median Sales Prices of Housing Town of Avon and Old Colony Planning Council Region**

	1990	1995	2000
Avon	128,950	129,000	174,900
OCPC	136,689	139,093	192864

Source: Banker and Tradesmen.



These figures reflect all houses sold, new and old, and hence vary with the mix of houses on the market at a given time. According to Avon Building Inspector, buildable lots alone average \$100,000 in price. Hence new houses are more expensive than most of the town's older housing stock and range from \$150,000 to \$500,000. New homes tend to raise the calculated median price of housing when introduced to the market. However, because so few new homes are built in Avon in any given year, new house prices have less effect on the median sales price than in other OCPC communities.

One test of affordability is the cost to the median income family of purchasing a home in the market. Mortgage lenders assume that 28% of gross monthly income is a manageable maximum housing cost. This so-called "front end" figure assumes that a maximum of 8% more is committed to all other debt (car loans, credit cards, etc.) for a total of 36% of gross monthly income.

Avon had an estimated Median Family Income of \$59,772 in the year 2000 according to the National Low Income Housing Coalition (NLIHC), an increase over the \$49,565 recorded in the 1990 US census. Using the lenders' 28% standard, an Avon family with a 2000 median gross income of \$59,772 was slightly below the estimated income (\$62,964) required to afford that year's median home price of \$174,900. These figures could suggest that local house prices were almost in line with incomes, but without knowing the distribution of all costs and incomes it cannot be assumed that most families with incomes below the median will find comparably lower-cost housing. Overall, they could not afford the median priced house then; and the subsequent rapidly rising housing prices and slowly rising incomes have increased the gap.

A related need indicator is the proportion of home owners paying more than the target 30% of income for housing. As of the 2000 Census, 237 or 30.4 % of Avon's home owners were paying over 30% of income for mortgages and related costs, and 134 owners or 17.2% were paying over 35%. These data may indicate a need to create new low cost sales or rental housing for lower income families.

To help moderate-income buyers, many banks and the Massachusetts Housing Finance Agency (MHFA) offer First Time Buyer programs with favorable terms and the state has a Soft Second Mortgage Program run by local Housing Partnership Committees in cooperation with banks. These can significantly lower monthly costs and ease mortgage qualification. However, Avon has no Housing Partnership Committee or Soft Second Program at present.

## 2. Rental Housing Supply/Cost

As of the 2000 Census, the median gross rent in Avon was \$708 /month. A subsequent survey of area real estate agents found very little rental housing available in the community. Rents for apartments were from \$650.00 to \$750.00 per month without utilities for 2 and 3 bedroom apartments and up to \$900/month for duplexes, which are comparable to rents found in the city of Brockton. The applicable Brockton area Fair



Two Traditional Houses with Different Degrees of Expansion

Market Rents allowed under Section 8 were then \$750 for 2-bedroom units and \$932 for 3-BR units including utilities, compared with state-wide figures of \$854 and \$1,070 respectively. The more reasonably priced Brockton rental market has encouraged some families from the Boston area to relocate to the area, thereby tightening the local supply..

The more recent 2002 OCPC Avon Rent Reasonableness Study found that the average rent for apartments with heat and hot water in Avon and surrounding moderate-cost communities had risen to \$906/month for one bed-room, \$1,180//month for two-bedrooms and \$1,399/month for three bedrooms. The price range was from \$650 to \$1000 for 1- BR; \$901 to \$1,600 for 2-BR, and \$910 to \$1,800 for 3-BR. The survey found only three advertised vacancies in Avon, and noted a 1.7% vacancy rate in the Brockton Rental market, exceeding above Avon's 2000 rate of 1.2% , but still quite low.

To relate rental housing cost to income, National Low Income Housing Coalition (NLIHC) data show that while the 2003 estimated median income in the Brockton Metropolitan Statistical Area (including Avon) was \$70,300, the median renter income was only \$32,5674. At that income, the affordable rent for a two-bedroom unit was \$814, and only 61% of the renter households could afford the 2003 HUD Fair Market Rent (FMR) for a two-bedroom unit of \$1,046. The other 39% were paying a higher proportion of income for rent or had found units below the FMR.

Another indication of remaining needs is the Avon Housing Authority's waiting list of 225 households seeking elderly units and of 100 households seeking Section 8 certificates and vouchers. While demand can be exaggerated by people who apply to more than one authority, this waiting list indicates considerable unmet need for low-cost housing.

The increasing low vacancy rates, rising rents and rising sales prices documented in the Master Plan show that Avon's housing supplies are increasingly tight and unable to meet



the needs of many current residents at reasonable costs, or to accommodate typical population growth or in-migration from other communities.

### **E. Anticipated Gaps**

The continuing increase in local sales housings cost and rental housing prices suggest a continuing gap in affordability and limited development of new housing. In terms of supply, to reverse the population decline and grow by even the 7.2 % experienced by the region from 1990 to 2000, the town would have add 123 units (assuming the present 2.6 person average households ) from 2000 to 2010. This rate is 66.2% beyond the 74 units added from 1990 to 2000. It is even further beyond the recent slow growth adding only 8 houses from 2000 to 2004 or about 20 per decade. Thus, given the 7.2% goal, the town will have a gap of 103 units by 2010. This reflects the town's limited available, buildable land. However some presently proposed incomplete subdivisions are expected to add another 40 units, according to the Building Inspector, leaving a gap in supply of about 60 units.

The gap in affordability is much greater since most new housing would be in market rate units. Using the 10% standard for exemption from State Comprehensive Permits, the town would need 174 low-cost, nominally subsidized housing units. It now has 70 units, all housing for the Elderly at the Housing Authority's Friendship Circle development. This leaves a present gap for Ch.40b purposes of 104 units and, assuming the added 123 units, a possible year 2010 gap of 116 units.

In contrast, the 2000 Census finding that 237 or 30.4 % of Avon's home owners were paying over 30% of income for mortgages and related costs suggests a present affordability gap of 237 units and a 2010 gap 274 units. However, given the middle-income nature of the town, many of these homeowners are probably buying relatively expensive houses, but are not of low income. Therefore, a working assumption is that only half of those paying 30% are making below 80% of the regional median income and would be considered to be low income. This reduces the estimated present gap to 119 units and the 2010 gap to 133 units.

Since households headed by persons over 65 years of age occupy only 12.3 % of the town's housing, about 87% of such new assisted housing be for non-elderly families and individuals. However, given the forthcoming increase in the elderly population as the earliest Baby Boomers age, a better target would be 25% (26 units) for the elderly / handicapped, and 75% (78 units ) for non-elderly individuals and families.

Applying the NLIHC finding that 39% of the area population cannot afford the FMR rents for a two-bedroom unit without spending more 30% of income for housing to the Year 2000 400 rental units there is present low-cost rental housing gap of 156 units.

Assuming that rental housing in Avon rises from 23.5% to 25%, a quarter of the needed 123 new units discussed above, or 31, should be rental. Based on the NLIHC finding that 39% of rental households cannot afford the FMR without paying more than 30% of



income for rent, at least 12 of the new units should be kept affordable. Together the present and prospective needs suggest a low cost rental housing gap of about 168 units.

In summary, the above analysis produces an estimated present affordable home ownership gap of 119 units and 2010 gap of 133 units; along with a present estimated affordable rental housing gap of 156 units and a 2010 gap of 168 units. These give a total present gap of 275 units and a year 2010 gap of 301 units. These numbers might change considerably, mostly downward, with further more detailed data on local housing costs and incomes.

#### **F. Potential Means of Providing a Range of Affordable Housing**

Though housing in Avon is more affordable than in most of the region's communities, much of it remains out of reach of many residents or potential residents. Available rental housing is fairly scarce because of the relatively rental small housing stock in town and the lack of new construction. Hence it is important to encourage/facilitate the creation/preservation of moderate cost housing and to increase access to existing units. Approaches to be considered include:

(a.) Expanding access to existing units by increasing the number of rental assistance certificates. However the respective state and federal programs are quite limited, as is the local supply of eligible units.

(b.) Directly creating of low-cost family and elderly housing by the Avon Housing Authority.

(c.) Creation of moderate cost sales and rental family and elderly housing in cooperation with non-profit agencies such as the South Shore Housing Development Corporation.

(d.) Creation of moderate cost sales and rental family and elderly housing by private developers using favorable financing from the Massachusetts Housing Partnership, the New England Fund or other agencies and working and working with the town through the state's Local Initiatives Program. The last involves town cooperation in the form of land donations or approval of local Comprehensive Permits to lower development costs. The resulting units generally count towards the 10% assisted stock standard under chapter 774.

(e.) Establishment of a Local Housing Partnership Committee to quality the town for various forms of assistance in feasibility studies and initial project costs.

(f.) Lowering costs by donating surplus buildable land to projects sponsored by a Housing Partnership Committee or to groups which directly create low-cost sales housing such as Habitat for Humanity.

(g.) Using the Massachusetts Housing Partnership's Soft Second Mortgage Program and

other programs to lower monthly costs for first time homebuyers.

(h.) Exploring regulatory measures to lower development costs or to require a mixture of housing prices through tools such as inclusionary zoning.

(i) Lowering home maintenance costs by creating a local low-cost housing rehabilitation loan program



Duplex Housing, Efficient and Attractive but Rarely Seen

### **G. Map of Housing Suitability and Recommended Actions**

The identified areas reflect the town's 2001 Master Plan Recommendations. They focus on undeveloped land including the few town holdings, or on re-developable land, assuming abandonment of any non-residential uses in suitable areas.

#### **Housing Suitability Map**

The Land Suitability Map and the more specific Housing Suitability Map show sites appropriate for continued medium size and large lot development under the R-A and R-B zoning districts along with sites suitable for affordable housing at moderate densities. The numbered sites refer to actions recommended on the Final Community Development Plan Map after reconciling any conflicts between housing, economic development, and open space proposals. The sites on the suitability maps reflect present patterns and potentials due to location, present and prospective infrastructure, and amenities.



Affordable housing need not always be built at significantly higher densities than as-of-right market rate housing , but it is one way to reduce prices by reducing land costs.

### **Recommended Actions**

- H-1 Establishment of a Local Housing Partnership Committee to qualify the town for the Soft Second Mortgage Program or various forms of assistance in feasibility studies and initial project costs and to take initiate / support local housing activities
- H-2 Revise the Cluster and Planned Unit Development (PUD) bylaws to increase their use, thereby allowing appropriate growth while preserving informal open space and improving access to existing public holdings.
- H-3 Consider the challenges / opportunities presented by private treatment plants and other alternative sewage treatment/disposal methods. These may lessen the effect of soil limitations which now slow or scatter development. If they can keep nitrates to an appropriate level on smaller lots, they may allow denser development in areas of high amenity/accessibility while lowering densities elsewhere, or they may allow excess development town-wide. To avoid further sprawl, loss of open spaces, and increased service costs, the town will need purposeful, innovative local planning.
- H-4 Examine whether King Street could be improved to open the nearby town-owned lots (B7 / 6/ 6,7) east of page St. for a range of affordable development
- H-5 Lower land costs by donating scattered, buildable town-owned parcels like (Map / Block and / Parcel numbers) C6/2/5,6 (west of Page St. and south of Granite St.), D3/12/19 (off of E. Main St.) and B7 / 6/ 6,7 ( the uppermost ones on King St. noted above) to projects sponsored by the Housing Partnership Committee or to groups which directly create low cost sales housing such as Habitat for Humanity.
- H-6 Expanding access to existing units by seeking more rental assistance vouchers
- H-7. Draw any potential sites to the attention of the Avon Housing Authority or non-profit agencies such as the South Shore Housing Development Corporation for low / moderate cost sales or rental housing
- H-8 Encourage creation of affordable sales and rental family and elderly housing by private developers using favorable financing through the Massachusetts Housing Partnership or the New England Fund and working with the town through the state's Local Initiatives Program. The last involves town cooperation in the form of land donations or approval of local Comprehensive Permits to lower development costs.

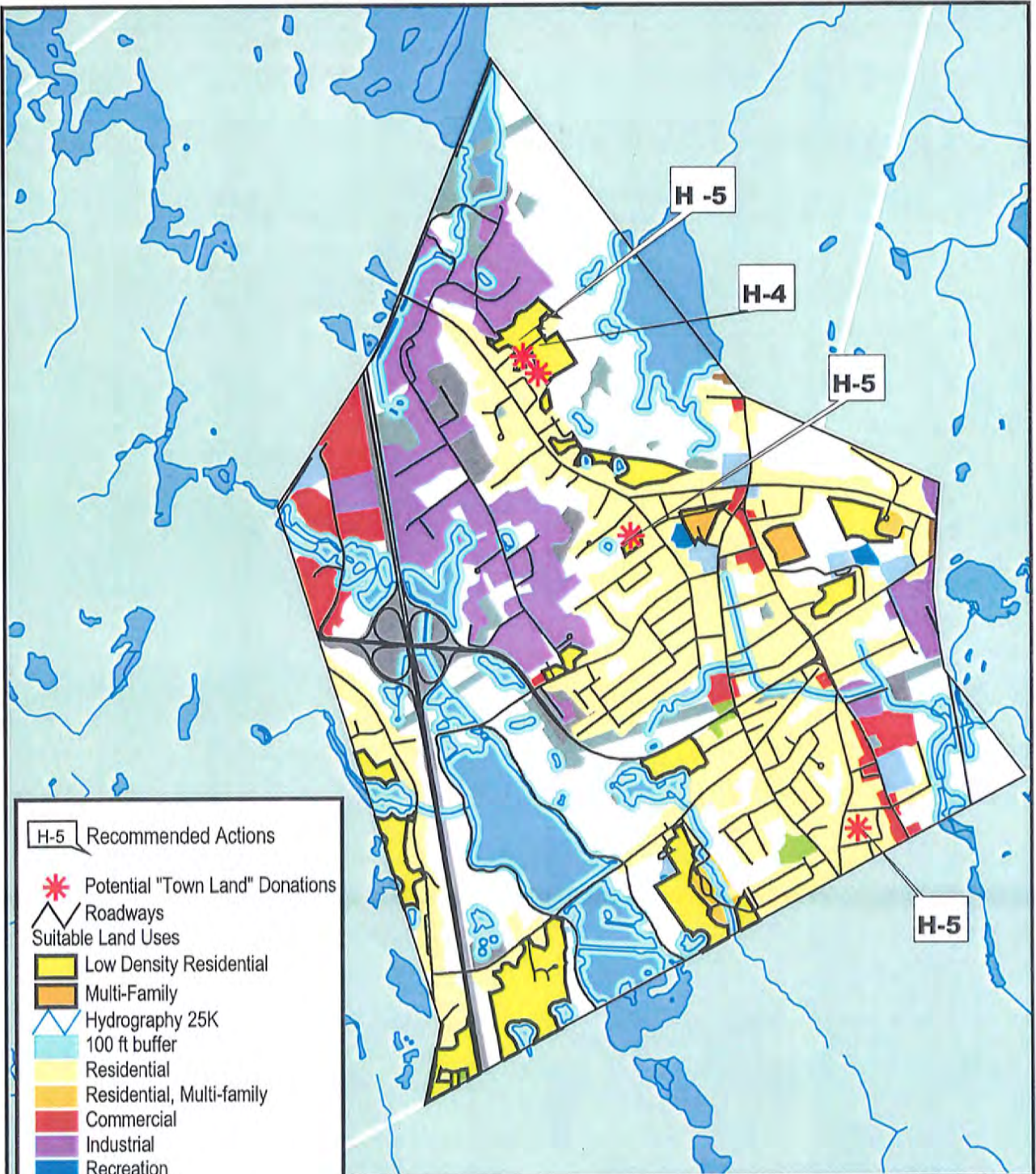


- H-9 Adopt and use the Massachusetts Housing Partnership's Soft Second Mortgage Program and other programs to lower monthly costs for first time homebuyers
- H-10 Explore and enact regulatory measures to encourage or require a mixture of housing prices through tools such as incentive zoning and inclusionary zoning
- H-11 Explore housing conditions and rehabilitation needs and, if appropriate, develop a housing rehabilitation loan program and apply for support under the state's Community Development Fund.



# Housing Suitability / Recommended Actions

Figure II-2



- H-5 Recommended Actions**
- Potential "Town Land" Donations
  - Roadways
  - Suitable Land Uses**
  - Low Density Residential
  - Multi-Family
  - Hydrography 25K
  - 100 ft buffer
  - Residential
  - Residential, Multi-family
  - Commercial
  - Industrial
  - Recreation
  - Urban Open
  - Agriculture
  - Abandoned & Mining
  - Transportation
  - Waste Disposal
  - Ponds & Wetlands
  - Avon
  - Surrounding Towns

0.5 0 0.5 Miles



Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD, OCPC Field Data

June, 2004





## Chapter III

### Economic Development Element

#### A. Economic Profile of Avon

Avon is a small town with a large industrial park and a large retail "Merchants Park." These result in a very favorable tax base and an historically low tax rate. Both parks have thrived based on their good regional accessibility, being next to Rte. 24 at the Harrison Blvd./ Central St. Interchange. They are limited by the town's lack of sewerage and its limited water supplies, but so far there have been sufficient low-water using, distribution and retail-oriented firms to fill both parks. While the town gets significant tax revenues, few residents work in either park.

Avon's most relevant resources are good highway access and well-located industrial land. The town's location next to Brockton, and on Route 24 makes it easy for customers and workers to reach both parks, and for residents to commute. As is typical of many communities, most residents work outside of the community while most local jobs are held by non-residents as discussed below.

The town's land in commercial use grew from 53 acres in 1971 to 61 acres in 1985, to 117.52 acres in 1999. Land in industrial use grew from 79 acres in 1971 to 252 acres in 1985, and to a total of 446.36 acres in 1999. These reflect interpreted aerial photography from Mass. GIS.

As described in the Master Plan, Avon's total of 184.2 vacant acres of developable land (105.7 business, 78.5 industrial) is located primarily off Route 24. Of this, about 98 acres is business-zoned land between Harrison Blvd. and D.W. Field Park which contains Brockton's Avon Reservoir. The City has acquired all but 16.99 acres of this for water supply protection and the Town is exploring acquisition of the remaining piece for water supply purposes, as discussed under Open Space. Protection of these 98 acres will leave 7.7 acres of Business-zoned land and 78.5 acres of Industrial-zoned land.

#### 1. Specific Areas

##### Avon Industrial Park

The Avon Industrial Park is largely built out under present regulations and available infrastructure. There are only 19.9 acres of vacant Industrially-zoned land left. Of these, a 3.2-acre parcel and a 1.68-acre parcel appear to be owned in common with abutting parcels. The northern half of the remaining vacant 11.97-acre parcel west of Bodwell Street and along the edge of Route 24 includes several small ponds and wetlands and has septic limitations, leaving about 6 usable acres. However, much land on the present developed sites is used only for present or potentially expanded sewage disposal fields. With sewerage, some of this land could be used for infill expansion, particularly since few firms are built out to the present 60% lot coverage limitation.





Industrial Park Storm Water Mitigation; Enhanced Detention Pond at Murphy Drive with Modified Outlet Structure in Foreground



Wine Distribution Firm in the Avon Industrial Park Extension



Opportunity for a New Firm - Modern Space Available in Avon Industrial Park



Bodwell Street, the main road in the industrial park, is scheduled to be repaved in the Spring of 2004. Concerns expressed in meetings with businesspersons in the park include the desire for town sewer and high-speed internet service.

Most of the businesses in the park are warehousing, light manufacturing, including machine shops, and trucking. Existing businesses can expand as long as they do not significantly increase water consumption or demands on their on-site disposal systems. Thus a number of low-water using businesses have expanded their buildings for distribution and light manufacturing purposes.



Major Distribution Facility – P&O Logistics Cold Storage Building (Formerly Condyne Freezers) off Murphy Drive in Industrial Park

#### Avon Merchants Park

The Avon Merchants Park has been very successful and is also largely built out. There are 9.94 acres of vacant Business-zoned land left. Most of this is on high rocky ground on the Stoughton line west of Stockwell Drive. One smaller .97 acre parcel on Grant Road is filled land next to a reserved wetland area. About 16 acres of wetlands and a ponding area along the Beaver Brook floodplain are preserved from development under a state Wetlands Order of Conditions. As in the Industrial Park, some businesses have land held for sewage disposal which could be used for denser development given municipal sewerage, or even a local privately owned system.

The 9.94 acres is being acquired by the Scandinavian furniture and house wares chain IKEA, to be combined with land in Stoughton to create a 25-acre site for a new 350,000 square store on the Stoughton portion of the site.



One major problem at the Merchants Park is that Stockwell Drive, the main street in the park, has no outlet to the north. There has long been a proposal to extend it through the proposed Stoughton Industrial Park to the north and then onto Turnpike Street. This would allow traffic to come and go by the most direct routes, lessening congestion at the Stockwell Drive / Central St. intersection in Stoughton and increasing overall safety and convenience, though at the cost of increased traffic on Turnpike St. There is now a revised proposal to mitigate the impacts of a proposed IKEA store north of the present Costco store, by giving it direct access to the nearest segment of Turnpike St. Final approval has been granted by Stoughton and the store is expected to open in mid-2005.



New Industrial Park Storm Water Control System - Detention Pond with Tapered Weir North of Murphy Drive



Extensive Shopping Opportunities at the Avon Merchants Park

(85.71%) commuted to Boston, Brockton or elsewhere while 95% of the local jobs were held by people from elsewhere. Nonetheless local employment growth gives people the opportunity to work locally if the job requirements and local skills match. As of 2000 the average annual earnings for people working in Avon was \$39,433.

### **Labor Force Quality**

Labor Force quality relates to the workers' general skills and knowledge, and the degree to which they are adaptable, trainable, and desired by prospective employers. According to the 2000 U.S. Census, 21.2% of Avon residents had earned a Bachelor's degree or higher, less than the statewide average of 33.2%. However, nearly 90.6% of Avon's adult population had completed high school or higher, exceeding the statewide average of 84.8%.

### **5. Market Sectors**

Employment in wholesale and retail trade is increasing at the fastest rate in Avon. Over a ten-year period, 1990-2000, such employment grew from 2,490 to 3,587, strengthening its position as the foundation of Avon's economic base. The second fastest growing employment sector was services which went from 331 workers in 1990 to 883 in 2000. Other sectors that grew from 1990 to 2000 were Utilities, from 431 to 796, Construction from 160 to 327, Government from 189 to 204, FIRE (Finance, Insurance and Real Estate) from 36 to 41, and Agriculture, Forestry and Fishing, 0 to 7. In contrast, the largest sector, manufacturing, declined from 1,338 in 1990 to 1,003 in 2000. The main reason for the growth in Avon's economy has been the continued prosperity of the Avon Industrial Park and Avon Merchants Park.

### **6. Support System**

Local assistance from business organizations, and government or quasi-governmental bodies can greatly help in selling the positive aspects of a community to locating and expanding business owners. A proactive industrial development commission showcases local advantages.

Avon has an Industrial Development Commission and Industrial Development Finance Authority. The Commission provides information to businesses considering locating or expanding in Avon. The Authority refers businesses seeking financing to the S.E.E.D. Corporation, MassDevelopment (formerly the Massachusetts Development Finance Agency) and other institutions. The former park business association did much to organize the past shuttle van services and a new industrial park association is being formed.

### **B. Economic Development Goals and Objectives**

Industrial and commercial development can affect the community in several ways. The



- At least 10% of the land (<50% wetland or 5% slope) be dedicated as protected open space
- The dedicated land be used only for open space, playfields, golf, or conservation, and have suitable access to a street.
- The site has public water and a Board of Health–approved sewage disposal system.

### **3. Tax Base**

Approximately 58% of all Avon’s tax revenues are from industrial and commercial properties and 6% are from related personal property taxes, with housing contributing only 36% of all tax revenues. This large non-residential tax base has long held the Town’s residential tax burden well below most communities. Lately, major public improvements, particularly school and water projects, have required increases in the rate and the resulting residential rate of \$13.06/ \$100 exceeds than the surrounding communities except for Holbrook (\$15.19). Avon’s commercial / industrial rate has risen too, reaching \$24.55 / \$1000 and exceeding all surrounding communities except for Holbrook (\$26.27). None-the-less Avon residents had the lowest average single family tax bill of 32 South Shore Communities in 2004, (\$2,432 vs. \$3623 in Abington, \$3372 in Whitman and \$2,936 state-wide.) This reflects the combination of the rates and the assessed property values. A forthcoming revaluation is expected to increase the valuations and lower the tax rate, though the increased public expenditure may increase the average bills.

The importance of the non-residential tax base is shown by the fact that in the late 1990s 765 acres in commercial and industrial use consumed 28.5% of the town’s land area but produced 62.5% of its tax revenues. This makes it important to ensuring that the town has the infrastructure to make the most of its economic development potential.

### **4. Labor Force**

Avon’s local labor force includes all town residents, 16 years or older who are either working or seeking work. According to the Commonwealth’s Division of Employment and Training (DET), Avon’s 2003 labor force totaled 2,764 people, of which 5.4% were unemployed. This unemployment rate was slightly higher than the statewide rate of 5.3%. The total labor force available to the town’s firms is all those within commuting distance by any mode. As of 2000 the town drew on 105 communities in Massachusetts, Rhode Island, New Hampshire and even Maine. For those not driving, access by transit is difficult. A local taxi company ran state-assisted service from nearby Brockton Area Transit (BAT) and MBTA bus stops in the late 1980s and BAT recently ran buse service through the Industrial Park. Neither ran to the Merchants Park and there is no service now.

#### **Commuting**

As of 2000, only 344, or 14.29% of Avon’s employed residents worked at one of the 6858 jobs in the town and they held only five percent of those local jobs. Most residents

Uses allowed as-of-right include exempt religious, educational and agricultural uses; parking of commercial vehicles over 5 tons; recreational facilities owned or operated by a government agency; private, non-profit membership clubs or lodges; farm stands, businesses, financial, professional or governmental offices; laboratories or research facilities, radio or television studios; gas stations, auto repair shops, car washes, commercial greenhouses, laundries and dry cleaning plants; printing shops, bottling of beverages, plumbing, electrical or carpentry shops, place for manufacturing or assembly of goods; and wholesale business and storage in a roofed structure.

This district is mapped on both sides of Bodwell Street and Bodwell Street Extension (Avon Industrial Park), on West Main Street between Avon Place and Brentwood Ave. and along the easternmost part of town along the Holbrook town line, on both sides of Brook Terrace, east of Littlefield Street, south of East Street, east of Memorial Drive, just south of Meadow Road and north of Meadow Road and Avon Water Department property.

Commercial District 40,000 square foot lots

This District is mapped only west of Rte. 24 and north of Central Street, the site of the Avon Merchants' Park. To reflect the distinct character of that site and its intended uses, the District combines the dimensional standard of the Industrial District and the Use regulations of the Business District.

#### Special Provisions

##### Planned Business Development

Allowed by Special Permit in the Commercial District (and also as-of-right in the Business District according to the Table of Use Regulations)

The Planning Board as Special Permit Granting Authority may allow a greater ground coverage of up to 50% and parking requirements reduced by <10% on commonly owned tracts of >five acres so long as:

- Uses are in one continuous building or a grouping of buildings when safe and consistent with the purpose of the section
- There is one common parking area with common entrances and exits
- The site has public water and a Board of Health-approved sewage disposal system

##### Planned Industrial Development

Allowed by Special Permit in the Industrial District

The Planning Board as Special Permit Granting Authority may reduction of lot sizes by < 10%, on commonly owned tracts of >15 acres so long as:

- The total number of businesses is no more than that normally allowed
- Only industrial or service uses are allowed and they are totally within the building

## **Development along Route 28**

This area, near the Town's Trout Brook wells, consists of Memorial Drive, and East and West Main Street. It accommodates a major discount store and trucking firm, a large restaurant, and scattered other smaller businesses. There are 4.75 acres on two parcels of vacant Business-zoned land on Memorial Drive, 5.06 acres on six parcels of vacant Business-zoned land on East Main Street and 1.20 acres on three parcels of vacant Business land on West Main Street. Most of these are small parcels except for a 40,508 s.f. site on Memorial Drive, and sites of one-acre and a 2.80 acres on East Main Street.

Avon has relatively little available vacant land or empty buildings in the two parks or elsewhere. Most empty buildings are designed for industrial or warehousing use with little vacant commercial space. The following buildings which were recently vacant or had space available exemplify Avon's supply of industrial/commercial space:

- 291 Pond Street, former Grossman Cap Company, 10,560 SF office/22,800 SF warehouse for lease
- 21 Parker Drive, former Standard Register Company, office/manufacturing plant
- 101 Wales Ave, former Museum Enterprise Partners –Boston Distribution Center 100,000 SF, 10,000 SF office space, 7.5 acre site, for sale/lease

Source: field survey, May, 2004

## **2. Zoning Districts Regulating Economic Development**

The Business District – 8,000 square foot lots

Uses allowed as-of-right include exempt religious, educational and agricultural uses; non-profit community centers, offices, hospitals, infirmaries, nursing homes, non-profit membership clubs or lodges; commercial entertainment and recreational facilities; farm stands, business, financial and professional offices, medical facilities, laboratories or research facilities, retail stores, eating places; manufacturing, assembly, or packaging of consumer goods if at least 50% of the merchandise is sold at retail on the premises and that no more than 25% of the floor area is devoted to such uses; service businesses, laundries, funeral establishments, veterinary clinics, retail stores; planned business development, attended gas stations, sale or rental of motor vehicles, automobile repair shops, car washes, commercial greenhouses, and gravestone sales.

This district is mapped on both sides of Rte. 28 and on West Main St. from Victory Ave. to Goeres Square, except for the east side of Memorial Drive on the east side, just south of Meadow Road and just south of East Street, which is zoned Industrial.

The Industrial District – 40,000 square foot lots





Expanded Weiss Sheet Metal Firm in the Industrial Park

following reflects the varied benefits of achieving a high level of the town's goals and objectives

### **1. Tax Base Enhancement**

The tax base is quite substantial compared to many communities, but an increase would help to support the town's needed infrastructure improvement program while allowing continued relatively low taxes and good services. Therefore it is important to find opportunities for further local commercial / industrial development. The challenge is to produce a maximum of revenue for a given cost in land and service demands.

Accordingly, the highest tax-base related priorities should go to:

- Activities which use sites and buildings intensely and have significant related personal property assessments in equipment or inventory. Examples would be manufacturing, multi-story office buildings, or retail uses, rather than warehouse or distribution uses.
- Activities with minimal demands on public services or infrastructure, particularly on water supply and disposal, and which route little traffic through residential areas.
- Uses developed on infill sites in presently developed areas

### **2. Job Creation / Retention**

This is done to offer employment to the unemployed, to get a balance between jobs and population, and to lessen the need to commute, as well as to preserve the related non-residential tax base. While a balance of local jobs and population can minimize travel time and cost, they are not the only answer since so few residents work within the town.

Local employment opportunities are most important for low and moderate-income people with limited mobility, but increasing the attractive local opportunities should benefit all.

Countering unemployment with local jobs is not as pressing as in some communities, given a moderate unemployment rate, jobs in other communities and high mobility. Avon's recent (2003) unemployment rate of 5.4% was just above the state average of 5.4%, but any unemployment is a burden on the community and the families affected.

With rising fuel costs and shortages, and the impacts of driving, having good, satisfying jobs close at hand could beneficially allow / encourage more people to work locally at fulfilling jobs. The combined need to employ the local unemployed and to offer local employment to a diverse labor force calls for growth in both entry level jobs with a diversity of skill requirements, and more intensive high-skilled manufacturing or administrative / service office oriented employment.

In all, appropriate job creation/ retention and general development priorities would be to gain or retain varied manufacturing, service, and retail opportunities offering both entry level employment with on-the-job training and promotional opportunities, and more demanding high skill jobs.

A related concern is the benefits of growth and change to low and moderate income persons. The challenge is maintaining Avon's relative prosperity and healthy economic growth, finding jobs fitting the range of skills within the town, and creating or retaining job opportunities for persons of low and moderate income / capabilities. Methods to increase such opportunities can take many forms depending on the needs. Possible responses include:

- Basic education, skills training and on-the-job training coordinated by the regional Workforce Investment Board for people with limited education or marketable skills.
- Project labor agreements and other preferential hiring systems when major public projects otherwise might not hire enough local workers.
- Favorable financing for new or expanding firms through MassDevelopment or the Southeastern Economic Development Corp. (S.E.E.D.).
- Direct action to create incubator buildings, possibly through a local Economic Development Industrial Corporation (EDIC).
- Easing access to employment concentrations through expanded bus service, special services, or transportation vouchers.
- Provision of adequate infrastructure.

In any case, such programs and opportunities exist throughout the region. The need may be to make them more accessible / applicable to local needs.

### **3. Seeking Growth with Minimal Demands on Local Services, Infrastructure or Resources**

**Water Supplies** have been a challenge for Avon. The supply comes from five wells located in the southeastern part of town adjacent to the City of Brockton, and the shallow dug "Porter Well." near Harrison Blvd. The town has two storage facilities; a 1,500,000 gallon standpipe off Page Street, and 1,024,000 gallon standpipe on Central Street. In 1999 the town pumped 190,969,756 gallons for an average daily consumption of 523,205 gallons. In 2001, it pumped 229,889,380 gallons for an average daily consumption of 629.8 million gallons per day (MGD), the highest for the period from 1998 to 2003. As noted in the Natural Resources chapter one well is closed due to high iron and manganese levels, and one has been was threatened by a contaminant plume. Thus it is important to continue the Water Commission's Water Consumption Form process and to solicit firms with minimal needs.

**Sewer capacity** is minimal. A public system facilitates business and industrial development due to the potential for increased density, the savings of not having to construct an on-site system, and the ability to dispose of significant amounts of wastewater. Avon has no municipal sewer system. The City of Brockton provides limited service to the Wal Mart store and a local restaurant which are near the Trout Brook wells. The lack of sewerage limits potential businesses to those for whom on-site disposal is sufficient. If sewer service was generally available a greater variety of commercial/industrial development would be possible.

Therefore it is important to monitor present disposal systems, to encourage use of innovative / alternative package plants with much higher effluent quality, and to examine prospects for full or partial sewerage. This should build on the findings of the Town's Comprehensive Waste Water Management Study.

### **C. Economic Development Challenges and Opportunities**

#### **1. Challenges include:**

- Very little vacant appropriately-zoned and located land  
While the 1993 Buildout analysis found 106 vacant Business or Commercial acres and 78 Industrial acres, much of this has since been developed in the parks or is along Rte.28, or next to neighborhoods with potential mixed-use conflicts
- Limited water supplies as discussed above
- Essentially no public sewerage and major areas with tight soils, as discussed above.
- A small town center with a minimal retail concentration



- Competition to the Merchants Park from other retail complexes. The Park is sensitive to local and regional competition. Existing regional shopping centers in Kingston and Hanover, and, most critically, Brockton and Taunton, are adding stores and upgrading, notably in the nearby Westgate Mall.

## **2. Economic Development Opportunities / Favorable Factors**

- **Healthy overall conditions**  
Economic indicators such as employment and business starts, past growth, and the draw of the forthcoming IKEA store suggest continued retail and service growth
- Access to extensive labor supplies in nearby Brockton and adjacent communities, especially given improved transit access to the two parks
- The recently completed Goeres Square traffic improvements, potentially helping to attract a few more stores and service uses to the Center, making it Avon's business center outside of the two Parks, as suggested in the 1997 Commercial Area Revitalization Plan
- The attraction of the musical events at the Blanchard Tavern, the Robbins House Museum, and the Baptist Church's Mozaic Room Coffeehouse drawing new people to Avon Center
- Potential intensification of uses in the two parks through greater lot coverage or use of upper story space, exploiting the parks' great regional accessibility.
- Prospective expanded water supplies from the present deep rock well explorations and potential long-term purchases from the forthcoming regional desalinization system.
- **Opportunities for Synergistic Industrial Clustering**

Similar or complementary businesses often locate close to each other, reflecting shared resources; complementary relationships between firms; an accumulating labor force or other factors. However, the benefits of such proximity may be overstated since firms sometimes locate together because their needs are similar, not that they are interdependent. Still there may be opportunities to identify and recruit firms in an emerging cluster such as bio-technology.

This suggests synergism-related priorities of:

- Identifying concentrations of similar or complementary firms.
- Concentrating any private or public recruiting on firms with identified potentially productive linkages to present firms.

#### **D. Recommended Action Plan / Implementation Measures**

While the taxes and employment generated by new economic growth are desirable, Avon must continue to manage its development, so the character of the community is not adversely affected. Avon is a desirable place to live. It should act to enhance the local quality of life as well as serve its commercial/industrial base. Avon should support its town center business owners so that it becomes a pedestrian friendly and vibrant commercial area.

1. Expand opportunities for diverse firms to locate and grow in Avon. This is done through infrastructure improvement, selective marketing, zoning for such growth and improving access. In particular Avon should continue to seek broad-based commercial and industrial development exemplified by the number of long-established metal trades firms located in the industrial park
2. Ensure that the town has the infrastructure to make the most of its economic development potential by:
  - Continuing to search for local water supplies
  - Examining possible use of future desalinated water
  - Encouraging firms with minimal water-consumption and waste water discharge requirements.
  - Encouraging firms which can use on-site non-potable water for process purposes and which can re-use it or safely discharge it into the ground.
  - Seeking sewage solutions building on the Comprehensive Waste Water Comprehensive Waster Water Management Plan
  - Exploring selective sewerage of the Industrial Park and the Merchants' Park with discharge to the ground at the upstream end of either park.
3. Review / confirm /extend Master Plan Zoning Proposals Given Changing Conditions
  - Examine the effectiveness of the present Greenbelt requirements in the Industrial District e.g., near Freeman St. and along East Spring St. on the Holbrook border, and revise the text and/or enforcement practices accordingly.
  - Expand Industrial Zoning along the east side of upper Wales Ave. thereby adding up to 56 acres

- Examine the effectiveness of the Planned Business Development and Planned Industrial Development provisions, particularly the allowed parking reductions, and consider making the provisions more useful by reducing the area requirements
  - Increase Business zoning in the East Main Street, West Main Street, Bartlett Street triangle, and drastically reduce it along the rest of Rte 28.
4. Make Transportation and circulation improvements to ease access
- Restore / extend bus or van service to and through the Industrial Park and the Merchants Park either from Brockton or through connections with the BAT and MBTA bus stops in Avon Center.
  - Support the proposed roadway connections between the Merchants Park, Turnpike Street and ultimately the proposed Stoughton Industrial Park in order to improve circulation in both of the parks.
  - Continue making traffic and pedestrian improvements around Goeres Square.
  - Improve signage to identify businesses at the entrances to the Industrial Park and the Merchants Park.
  - Work with Stoughton to get a smoother connection between upper Page Street and Rte.139 to the north by improving the nearly-discontinuous route past BJ's in the Stoughton Technology Park.
5. Strengthen and coordinate industrial development and promotion efforts
- Encourage cooperation between the Industrial Development Commission, any Industrial Park / Merchants Park associations, and all other bodies on town-wide economic development issues
  - Concentrate any private or public recruiting on firms with potentially-productive linkages to present industries
  - Explore the tax breaks and other advantages of becoming part of an individual or multi-community state-sponsored Economic Development Target Area



## **E. Economic Development Land Suitability / Recommended Actions Map**

The map below shows the land found to be suitable for economic development. The map shows the major recommendations remaining after reconciling any conflicts between the individual maps of Land Suitable for Open Space, Housing, and Economic Development. These findings are included in the Final Community Development Plan text and are shown on the final Community Development Plan map in colors and patterns since there is not room to show the numbers for all recommendations there. The recommendations with specific locations are shown here separately for clarity.

### **Economic Development Recommendations**

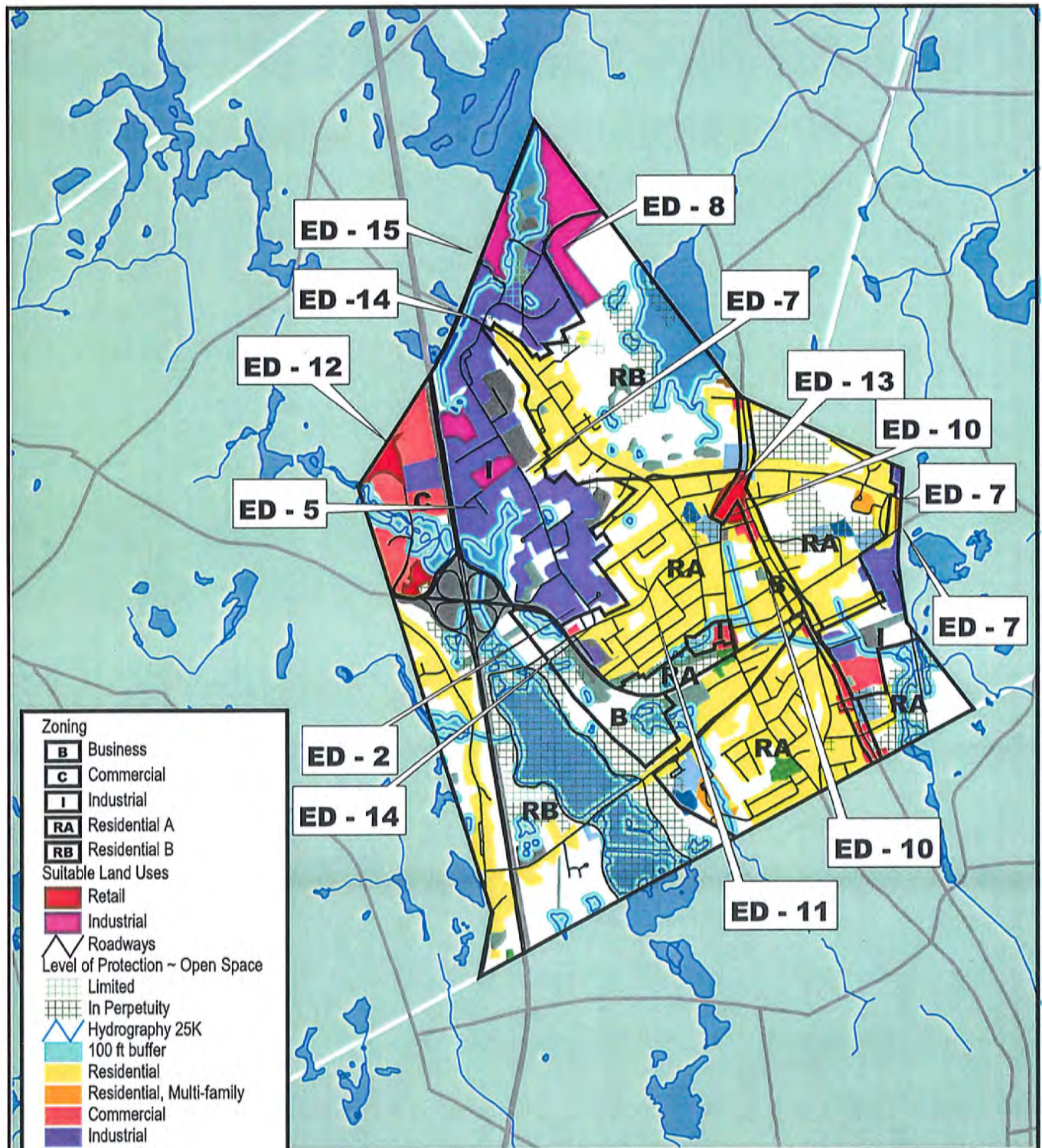
- ED-1 Expand opportunities for diverse firms to locate and grow in Avon through infrastructure improvement, selective marketing, zoning for such growth and improving access.
- ED-2 Ensure that the town has the infrastructure to make the most of its economic development potential by continuing to search for local water supplies, examining possible use of future desalinated water, encouraging firms with minimal water-consumption and waste water discharge requirements.
- ED-3 Encourage firms which can use on-site non-potable water for process purposes and which can re-use it or safely discharge it into the ground.
- ED-4 Seek sewage solutions building on the Comprehensive Waste Water Comprehensive Waster Water Management Plan, or
- ED-5 Explore selective sewerage of the Industrial Park and the Merchants' Park with discharge to the ground at the upstream end of either park.
- ED-6. Review / confirm /extend Master Plan Zoning Proposals Given Changing Conditions
- ED-7 Examine the effectiveness of the present Greenbelt requirements in the Industrial District e.g. near Freeman St. and along East Spring St. on the Holbrook border, and revise the text and/or enforcement practices accordingly.
- ED-8 Expand Industrial Zoning along the east side of upper Wales Ave., thereby adding up to 56 acres
- ED-9 Examine the effectiveness of the Planned Business and Industrial Development provisions, particularly the allowed parking reductions, and consider making the provisions more useful by reducing the area requirements
- ED-10 Increase Business zoning in the East Main Street, West Main Street, Bartlett Street triangle, and drastically reduce it along the rest of Rte. 28.

- ED-11 Make Transportation and circulation improvements to ease access, particularly restore / extend bus or van service to and through the Industrial Park and the Merchants Park either from Brockton or connecting with the BAT and MBTA bus stops in Avon Center.
- ED-12 Support the proposed connections between the Merchants' Park and Turnpike Street, and ultimately the proposed Stoughton Industrial Park in order to improve circulation in both of the parks.
- ED-13 Continue making traffic and pedestrian improvements around Goeres Square.
- ED-14 Improve signage to identify businesses at the entrance(s) to Avon Industrial Park and Avon Merchants Park.
- ED-15 Work with Stoughton to get a smoother connection between upper Page Street and Rte. 139 to the north by improving the nearly-discontinuous route past BJ's in the Stoughton Technology Park
- ED-16 Strengthen industrial development and promotional efforts between the Industrial Development Commission, any Industrial Park / Merchants Park associations, and with all other bodies affecting town-wide economic development issues
- ED-17 Concentrate any private or public recruiting efforts on firms with identified potentially-productive linkages to present industries
- ED-18 Explore the tax breaks and other advantages of becoming part of an individual or multi-community state-sponsored Economic Development Target Area



# Economic Development Suitability / Recommendations

Figure III-1



**Zoning**

- B** Business
- C** Commercial
- I** Industrial
- RA** Residential A
- RB** Residential B

**Suitable Land Uses**

- Retail
- Industrial
- Roadways

**Level of Protection ~ Open Space**

- Limited
- In Perpetuity

**Hydrography 25K**

- 100 ft buffer

**Residential**

- Residential, Multi-family
- Commercial
- Industrial
- Recreation
- Urban Open
- Agriculture
- Abandoned & Mining
- Transportation
- Waste Disposal
- Ponds & Wetlands
- Major Highways
- Surrounding Towns

0.5 0 0.5 1 Miles



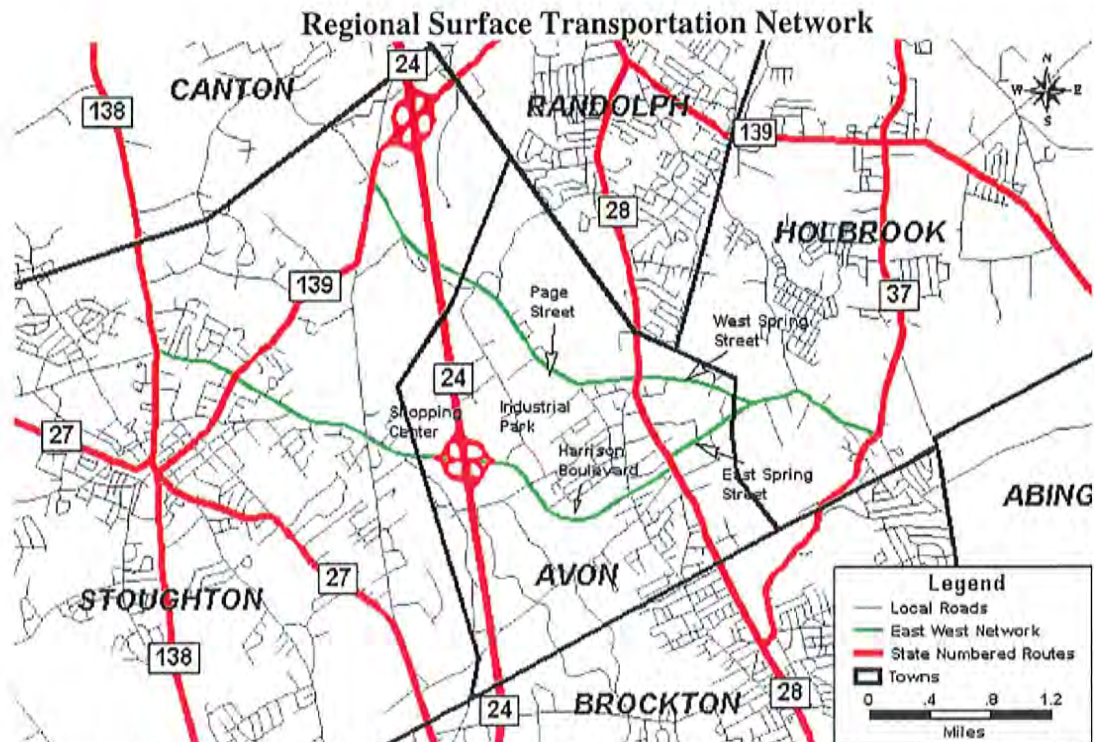
Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD, OCPC Field Data

June, 2004







This map shows the transportation network that serves Avon and the surrounding area. The east-west roadways through Avon provide connections to major regional highways  
 Source: OCPC Avon East-West Traffic Study.2003

(b.) Route 28

The north-south Route 28 runs along Memorial Drive, East Main St., Main St. and North Main St. and provides access to a mix of houses, business, and town facilities while running from communities south of Brockton through Randolph and on to Boston. It has major intersections with Harrison Blvd., East Spring St., West Main St., Main St., and East High St. It has four lanes from the Brockton city line to East/West High St. where it narrows to two lanes up to the Randolph Town line. The section north of East Spring St. has been reduced to one lane except for the last block north of Bartlett Street. This is intended to be consistent with the section north of East and West High Streets, to slow traffic, and to allow easier pedestrian crossing where appropriate.

(c.) Edward S. Harrison Boulevard

Edward S. Harrison Boulevard is the major east-west road in Avon and is essentially an access to Route 24. It runs from the Stoughton town line through the Rte. 24 interchange serving the Avon Merchants' Park, and the Avon Industrial Park and carries much traffic. There is no direct access to properties along Harrison Blvd. east of Rte. 24 due to Massachusetts Highway Department (MHD) curb-cut limitations. The road ends at Rte. 28 with traffic continuing west on the local East Spring St. Thus, those driving between Rte. 24 and Holbrook must drive along the Blvd., turn left, cut across East Main St. and then turn right onto the offset East Spring Street.

## Chapter IV

### Circulation and Transportation

As we enter the 21st century, the continuing dispersal of development and changing commuting patterns requires responsive planning to accommodate or counter these trends. The following reviews circulation issues in Avon and makes recommendations drawing on the 2001 Master Plan, and incorporates the recommendations of the 2003 Avon East - West Traffic Study which dealt with one of the Town's main circulation issues. It describes existing systems, conditions, and patterns, and trends, both locally and regionally and recommends needed actions.

#### A. Description/Analysis of the Present System and Findings of Recent Studies

##### 1. Existing Road System

The road network in southeastern Massachusetts reflects long established land uses and means of transportation. The growth of Boston from a small settlement into a large metropolitan area influenced all of eastern Massachusetts and Avon's major roads. Route 24, Route 28, Central St. and Page St. run essentially north and south while Harrison Blvd. which ends at Rte 28. is the only high capacity east - west road.

For purposes of administration, funding, and planning all roads are classified based on volume and function. In the hierarchy, freeways, expressways, and major arterials constitute the major highway system while collectors and local roads make up the local street system. The functional classification of roads within Avon is as follows:

Rural Principle Arterials: Route 24

Other Urban Principle arterials: East Main St., Main St., Memorial Dr., and North Main St.

Rural Major Collectors and Urban Minor Arterials: Bodwell St., East and West High Sts., E. Spring St., Harrison Blvd., New Pond St., Page St., and W. Main St.

Rural Minor Collectors and Urban Collector Streets: Central St., and South St,

Local Roads and Streets: All other streets and roads used for access to residential Areas.

##### (a.) Route 24

Route 24 is a six lane limited access highway along the western border of Avon, and runs north to I-93/128 and south to New Bedford. It is much like an interstate highway and heavily used by commuters heading to and from Boston. It gives access to the many businesses near the Harrison Blvd. Interchange.





Traffic Turning Left from the Merchants Park onto Harrison Blvd.

Continuing the road eastward into Holbrook was originally considered but has never been done, as discussed below. Such an extension is acknowledged in the 2003 Avon East-West Traffic Study as “the best solution from a traffic planning perspective, as it would eliminate altogether the need for east-bound or west-bound vehicles to turn onto (or off from) Rte. 28.” However, any extension would require taking houses along Rte. 28, backyards of houses along East Spring Street, and all or a major portion of a large modern warehouse along the railroad tracks, along with dealing with irregular terrain and a railroad crossing. Hence the Study (in the Appendix) saw the project as “a costly alternative and therefore unlikely at the current time.” Instead, it examined speeds, accidents, present geometrics and signal warrants. It concluded that:

The Old Colony Planning Council recommends the following actions be taken to improve the traffic flow on Avon’s east-west transportation network:

- Upgrading the intersection of West Main Street and Harrison Boulevard with geometric improvements and signalization providing protected left turns
- Widen Harrison Boulevard between Pond Street and Route 28 from two lanes to four
- Make geometric improvements and update signalization for the Route 28 intersections with Harrison Boulevard and East/West Spring Street, coordinating the operation of the two intersections

As noted in the Economic Development Chapter, Stockwell Drive in the Merchants Park, has no outlet to the north and all traffic must come and go via Harrison Blvd. / Central St. This generates high volumes of left turns as cars head back towards Rte. 24. Past studies like the 1987 Stoughton Strategic Planning Study have proposed extending Stockwell





Well-Maintained Houses on Rte. 28 in Path of Any Prospective Alignment, Limiting Opportunities to Extend Harrison Blvd. to the East.

Drive through the proposed Stoughton Industrial Park to the north, reaching both Turnpike Street and Page St. via that park's access roads. This would allow traffic to come and go by the most direct routes, lessening congestion at the Stockwell Drive / Harrison Blvd./ Central St. intersection on the Avon/Stoughton line, and increasing overall safety and convenience, though at the cost of increased traffic on Turnpike and Page Streets in Stoughton.

These suggestions were part of a larger concept of easing north – south movement by creating essentially a service road system through the industrial / commercial areas on either side of Rte. 24 between Harrison Blvd./ Central St. and Rte. 139, east of Rte. 24. This included improved connections from Bodwell St. and Page St., north of Bodwell St., to Rte. 139 through the presently discontinuous roadways in the Stoughton Technology Park, and allowing through truck movement where now restricted.

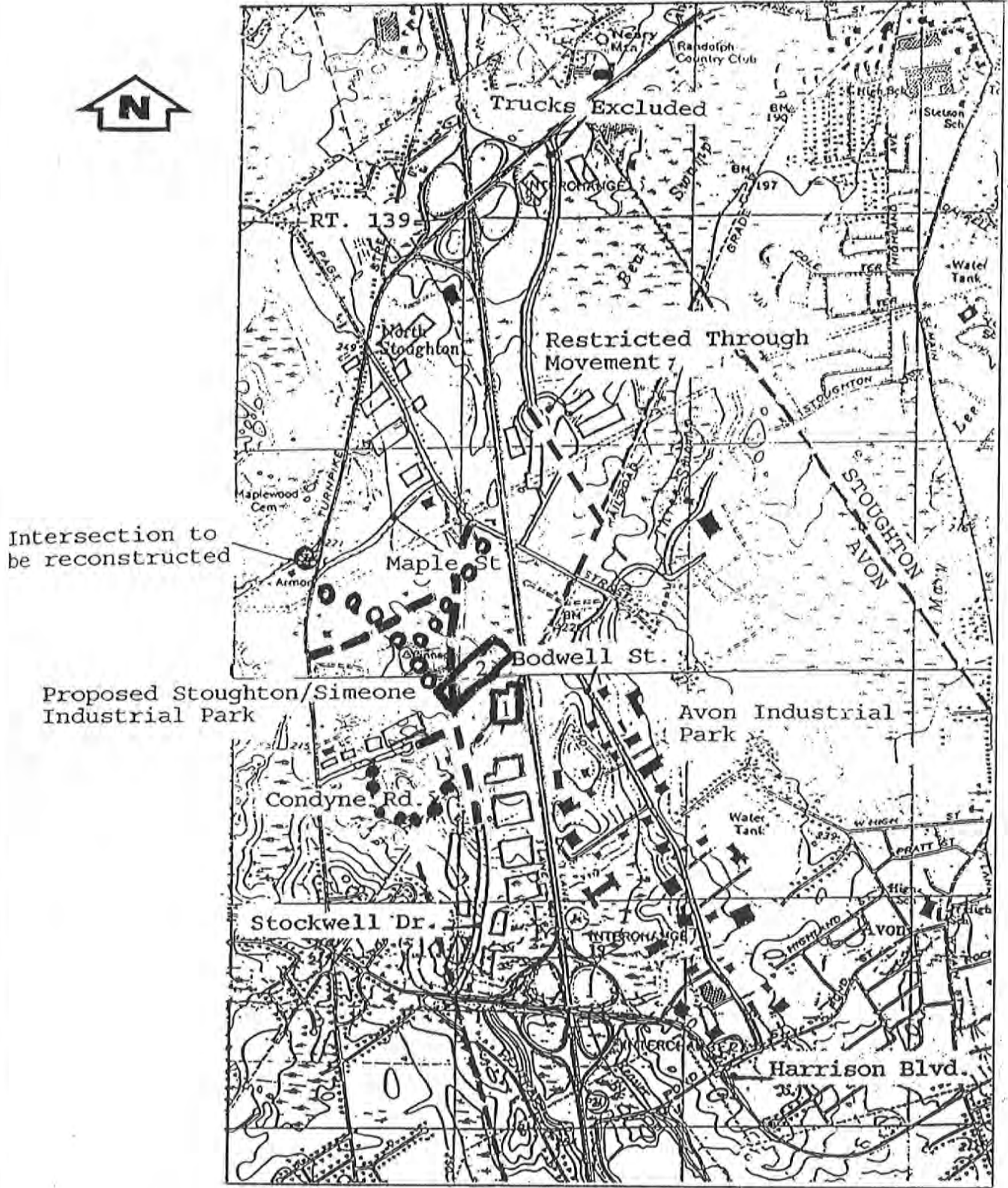
There is now a revised proposal to mitigate the impacts of a proposed IKEA store north of the present Costco store, by giving it access to the nearest segment of Turnpike St. via a new road arcing around wetlands and connecting with Condyne Road. To accommodate potential long-run development to the North, the proponents suggest other new roads running to Turnpike St. just south of Rte. 139, and to Page St. just west of Rte. 24. See the following updated map from the Master Plan. Final approval has been granted by Stoughton and the IKEA store is expected to open in mid-2005.

(d.) East High St../High St. / Page St.

The East High St., West High St., and Page St. corridor provides a north-west/south-east diagonal route serving the north end of the industrial park and connecting with Holbrook to the east and Stoughton to the west. This corridor, particularly Page St., has a high volume of trucks because of the access to the northern end of the Avon Industrial Park, a

Proposed Route 24 Service Road System Avon / Stoughton

Fig. IV-1

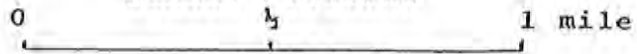


Intersection to be reconstructed

Proposed Stoughton/Simeone Industrial Park

Avon Industrial Park

SCALE: 1:25000



- CostCo 1
- IKEA 2
- Previously Proposed New Roads [thick dashed line]
- Proposed IKEA Turnpike St. Connector [dotted line]
- Potential Future Development Access [circles]

Adapted from 2001 Avon Master Plan.



proposed industrial park in Stoughton to the west, and the southern portion of the Stoughton Technology Park. The section of Page Street south of Bodwell Street is locally signed against truck traffic, but according to the Police Department this is not enforceable because the street is considered to be a County road connecting to Routes 28 and 139. Hence truck traffic is discouraged, but not prevented. The Page St. portion in Stoughton then continues to Route 139 which intersects Route 24.

Regarding Page Street and Bodwell Street, the East-West Study recommended:

- Upgrading (the) intersection of Page Street with Bodwell Street and Bodwell Street Extension (industrial park entrances) from two-way stop control to traffic signals as demand increases
- Resurfacing and/or reconstruction of Page Street and West High Street from town border to Route 28.

## **2. Other Modes**

### **(a.) Bus Service**

Avon is served by the Massachusetts Bay Transportation Authority (MBTA), the Brockton Area Transit Authority (BAT), and van service by the local Council on Aging. The MBTA service runs from Avon Square through Randolph to the Ashmont Red Line station in Dorchester. The BAT service runs from the BAT terminal in Brockton thorough Avon on Route 28 and again, on to Ashmont. The route includes scheduled stops at Avon Sq., Randolph Sq., and Milton Hospital where passengers can be dropped off or picked up. Thus it serves some intervening employment areas.

BAT also provides Council on Aging-sponsored service for the elderly and disabled with a Dial-A-Bat Bus operating by appointment.

In the winter of 1987-1988, OCPC and the town developed a state-supported Industrial Park shuttle service with the help of the Mass. Department of Employment and Training. It ran from the BAT and MBTA stops in Avon Square thereby allowing non-driving workers from Brockton and elsewhere to commute to the Industrial Park. The shuttle ran for only a few months before and after Christmas due to limited funding and was moderately successful considering the timing.

BAT subsequently ran service to the Industrial Park directly from Downtown Brockton but was unable to sustain it. With the increasing size of the combined Industrial Park and Merchants Park, and the possibility of connecting them with the restored Old Colony Railroad, renewed service might be feasible and beneficial and should be reconsidered.

### **(b.) Commuter Rail Service**

Restored Old Colony Rail service (except for the promising but complex Greenbush line) began in 1987 and trains now carry people to and from Boston and intermediate points as far south as Middleboro / Lakeville and Kingston / Plymouth. As noted earlier, Avon residents have access to the Holbrook/Randolph station 1.75 miles to the north, to Brockton's Montello station two miles to the south, and to the Stoughton Center Station on the separate Stoughton line three miles to the east.

(c.) Rapid Transit

Access to the more frequent, less expensive service on the MBTA's Red Line to Boston and Cambridge is available at the Braintree, Ashmont, or Quincy Center stations. The MBTA and BAT bus routes that travel on Route 28 run to the Ashmont station.

(d.) Bicycle and Pedestrian Transportation

Walking and bicycling are available to most able-bodied people and require little new infrastructure, since they generally use existing roads. The Claire Saltonstall bikeway, which is part of the Boston to Cape Cod Bikeway, runs approximately 65 miles from Boston to the Cape Cod Canal with a 70-mile extension to Provincetown, and a 20-mile extension to Woods Hole. It enters Avon from Randolph on North Main St. and exits into Holbrook on East High St. Potential bicycle and pedestrian trail systems are described below under Needs / Opportunities.

**B. Problems, Needs / Opportunities**

**1. Trends and Planning Issues**

(a.) Traffic Volumes

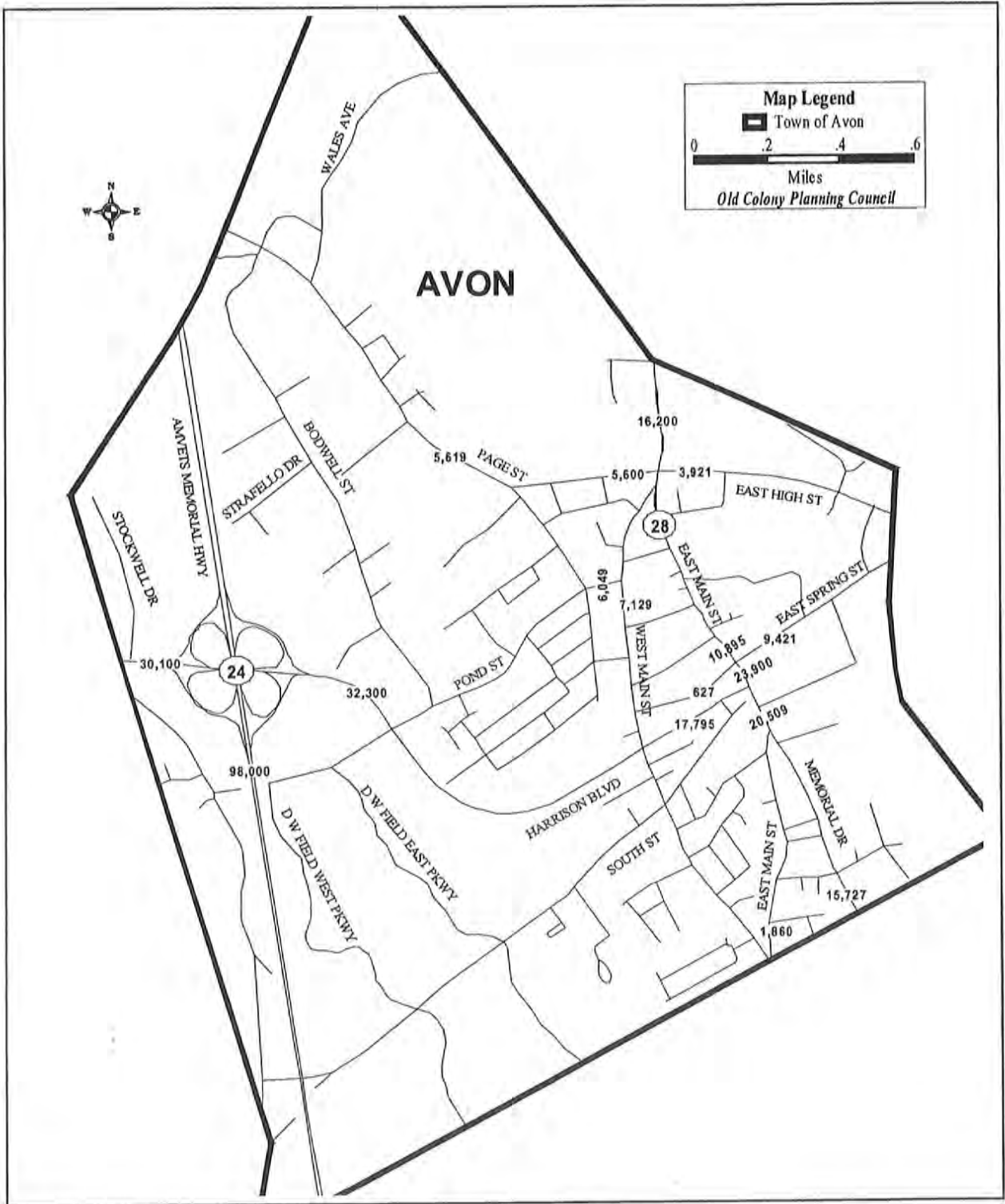
Traffic volume is measured by average daily traffic (ADT) and peak hour volumes. The first is the total vehicles on a roadway, in both directions, on an average day. Peak hour traffic figures are the total vehicles on a roadway during the busiest hours, generally from 7:00 – 9:00 A.M. and 4:00 – 6:00 P.M.

Traffic counts, available from MHD, OCPC, and private consultants, are used to determine the volumes in a designated area in both directions, along with vehicle classifications, and speed distributions. These are important when trying to analyze current movement patterns and to plan for future demand. Route 24 for instance, had an ADT of 93,300 in 1996, compared to 59,750 in 1978 a 51% growth increase, while Route 28, at the Randolph town line, went from an ADT of 13,400 in 1980 to 21,000 by 1993, a 57% increase. Recent volumes and growth rates are shown on the map and table below.

Much of this is truck traffic with the major streets carrying from 4.13% to 15.77% heavy vehicle traffic as discussed in the appended East-West Traffic Study.

# Average Daily Traffic

# Fig. IV-2





**Table IV-1**  
**Avon Traffic Growth Rates**

<i>ROUTE</i>	<i>STREET</i>	<i>LOCATION</i>	<i>HISTORIC YEAR</i>	<i>AADT</i>	<i>LATEST YEAR</i>	<i>AADT</i>	<i>TOTAL % GROWTH</i>	<i>ANNUAL % GROWTH</i>
24	AMVETS MEM HWY	NEW POND ST EB ON-RAMP (NB)	1984	1,553	1997	3,651	135.1%	6.8%
24	AMVETS MEM HWY	NEW POND ST EB ON-RAMP (SB)	1984	1,789	1997	4,884	173.0%	8.0%
24	AMVETS MEM HWY	NEW POND ST OFF-RAMP, EXIT 19A (NB)	1984	5,054	1997	4,802	-5.0%	-0.4%
24	AMVETS MEM HWY	NEW POND ST OFF-RAMP, EXIT 19A (SB)	1984	1,521	1997	5,963	292.0%	11.1%
24	AMVETS MEM HWY	NEW POND ST OFF-RAMP, EXIT 19B (NB)	1984	2,714	1997	4,136	52.4%	3.3%
24	AMVETS MEM HWY	NEW POND ST OFF-RAMP, EXIT 19B (SB)	1984	1,862	1997	5,584	199.9%	8.8%
24	AMVETS MEM HWY	NEW POND ST WB ON-RAMP (NB)	1984	5,460	1997	6,401	17.2%	1.2%
24	AMVETS MEM HWY	NEW POND ST WB ON-RAMP (SB)	1984	2,669	1997	4,816	80.4%	4.6%
24	AMVETS MEM HWY	S OF NEW POND ST	1990	90,196	1997	98,000	8.7%	1.2%
<i>Route 24</i>			<i>1985</i>	<i>12,535</i>	<i>1997</i>	<i>15,360</i>	<i>22.5%</i>	<i>1.7%</i>
28	E MAIN ST	N OF E SPRING ST	1987	10,453	1999	10,895	4.2%	0.3%
28	E MAIN ST	N OF HARRISON BLVD	1990	16,576	1999	17,972	8.4%	0.9%
28	E MAIN ST	S OF E SPRING ST	1984	20,800	1999	23,900	14.9%	0.9%
28	E MAIN ST	S OF HARRISON BLVD	1990	20,960	1999	20,509	-2.2%	-0.2%
28	N MAIN ST	AT RANDOLPH T/L	1991	15,100	1999	16,200	7.3%	0.9%
28	N MAIN ST	N OF E HIGH ST	1992	14,409	1997	13,458	-6.6%	-1.4%
<i>Route 28</i>			<i>1989</i>	<i>16,383</i>	<i>1999</i>	<i>17,156</i>	<i>4.7%</i>	<i>0.5%</i>
	E HIGH ST	E OF MAIN ST (RT 28)	1992	3,899	1997	3,921	0.6%	0.1%
	E MAIN ST	AT BROCKTON C/L	1990	2,132	1999	1,860	-12.8%	-1.5%
	E SPRING ST	E OF E MAIN ST (RT 28)	1987	7,118	1999	9,421	32.4%	2.4%
	HARRISON BLVD	W OF E MAIN ST (RT 28)	1991	14,875	1999	17,795	19.6%	2.3%
	NEW POND ST	E OF AMVETS MEM HWY (RT 24)	1990	32,664	1998	32,300	-1.1%	-0.1%
	NEW POND ST	W OF AMVETS MEM HWY (RT 24)	1990	23,947	1998	30,100	25.7%	2.9%
	PAGE ST	W OF W HIGH ST	1992	4,296	1998	5,619	30.8%	4.6%
	W HIGH ST	W OF N MAIN ST (RT 28)	1992	3,410	1997	4,848	42.2%	7.3%
	W HIGH ST	E OF PAGE ST	1995	5,200	1998	5,600	7.7%	2.5%
	W MAIN ST	S OF POND ST	1988	6,904	1998	7,129	3.3%	0.3%
	W SPRING ST	W OF E MAIN ST (RT 28)	1987	584	1999	627	7.4%	0.6%
<i>Local</i>			<i>1990</i>	<i>9,548.1</i>	<i>1998</i>	<i>10,838</i>	<i>13.5%</i>	<i>1.6%</i>
<i>Town Wide</i>			<i>1988</i>	<i>12,159</i>	<i>1998</i>	<i>13,861</i>	<i>14.0%</i>	<i>1.3%</i>

\* All volumes have been adjusted using MHD Seasonal Adjustment Factors.

\* Volumes prior to 1987 were adjusted using 1987 MHD Seasonal Adjustment Factors

(b.) Accidents

The following chart and map show number and location of accidents from 1994 to 1999 drawn from records of the State Police and Avon Police. In all there were 1,689 accidents from 1994 to 1999 for an average of 282 / year. The worst year was 1995 with a total of 301. From 1995 on there was a gradual decline in the total number of accidents from 190 in 1995 to 160 in 1999, but an increase in the number of personal injuries from 11 in 1995 to 129 in 1998 and a comparable 126 in 1999.

The road with the most accidents over time is Harrison Blvd., and the intersection with the most annual accidents town-wide, 17, is that of Harrison Blvd. and West Main St. The 100 accidents here over 6 years included 45 with personal injuries.

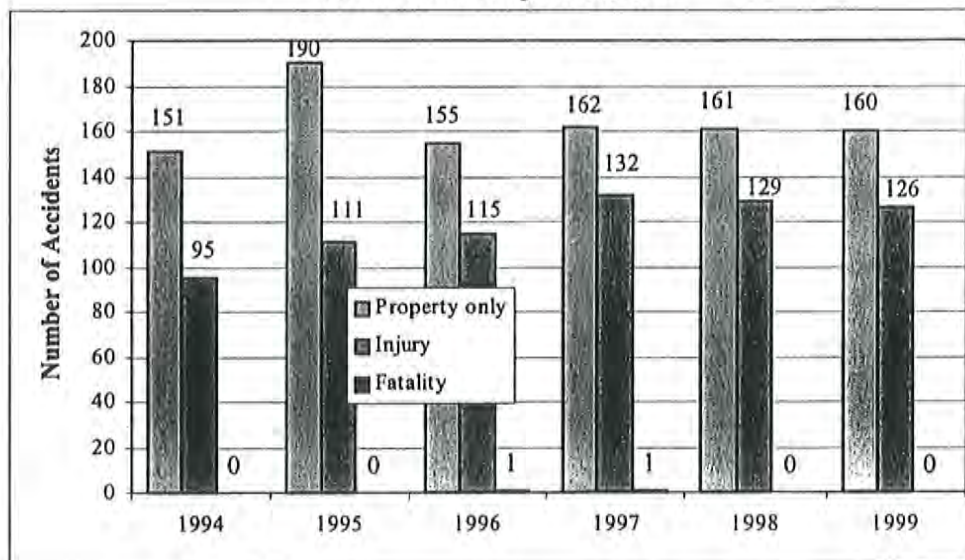
Other Harrison Blvd. intersections having high accident rates are those with Rte. 28 with 11/year, including five with injuries, and Pond Street with 10/ yr., half with injuries. Those at Pond Street presumably reflect the large volume of trucks traversing the short stretch of that street between Harrison Blvd. and Bodwell St. in the Industrial Park, though the intersection of Pond St. and Bodwell St. itself had only 3 accidents / year.

Route 28 had the 11 accidents/year at its intersection with Harrison Blvd. noted above; 13 at its the intersection with East Spring, (with injuries nearly 3 times/year); and 6 at East High St., just above Goeres Square.

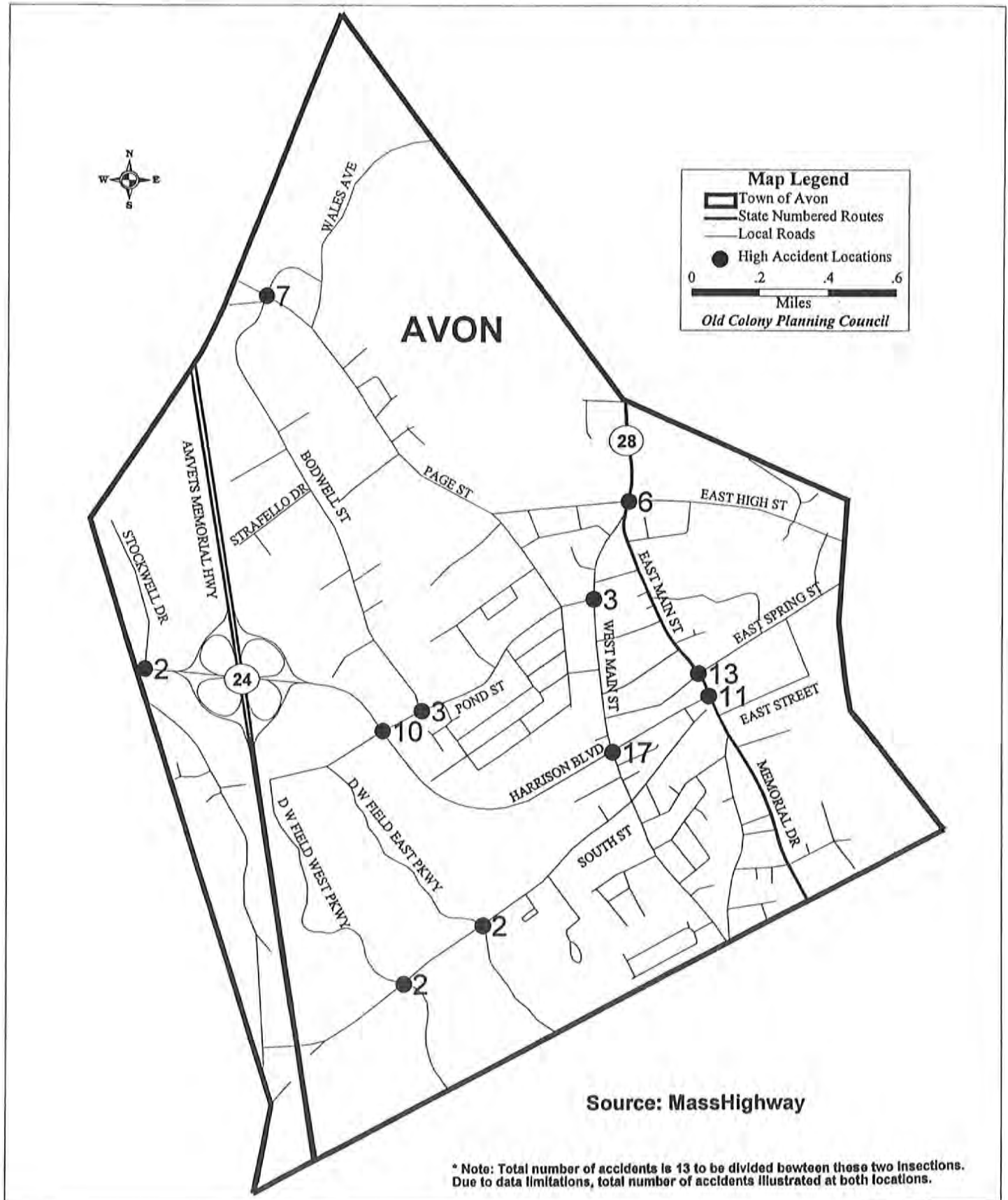
The concentration of accidents at Harrison Blvd. and Rte. 28, and at Rte. 28 and East Spring St. presumably reflects the awkward offset of Harrison Blvd. and East Spring St.

The moderate number of accidents at the Stockwell Drive / Harrison Blvd. intersection despite high volumes there and many turning movements probably reflects the benefits

**Total Number of Accidents**



# Average Annual Accidents 1994-1999 Fig. IV-3





of the extensive signalization there, and the slight relocation of the north-bound Rte. 24 off ramp there, increasing sight lines and stopping distance. Nonetheless, the high speeds and volumes there appear inherently dangerous.

A less frequent accident area is the intersection of Bodwell St. and Page St. with 7 accidents / yr. However that may reflect the low volume there. (A better test than the absolute number of accidents is the crash rate per million vehicles entering the intersection as discussed in the appended East-West Traffic Study). The combination of limited visibility and considerable truck traffic entering and leaving the two sections of the Industrial Park suggest the improvements discussed below.

## **2. Opportunities for Bicycle and Pedestrian Trails**

Brockton's D. W. Field Park, located in both Brockton and Avon, is a wonderful area for bicycling and walking, and is part of a proposed Brockton Bicycle Interchange. This would be an adjunct to the Bay Circuit Trail linking Borderland State Park in Easton, D. W. Field Park, and Ames Nowell State Park in Abington on the Brockton line. Riding through this series of parks would be an enjoyable alternative to driving through them and the route would overlap with some of the Boston to Cape Cod Bicycle Route.

Bicycles can also be a means of moderate distance (5 to 15 +/- mile) fair weather commuting, and of getting from home to the BAT terminal and rail stations, and from stations and bus stops to the industrial parks in Avon and Stoughton. These would require suitable bike storage facilities, racks on busses and other improvements.

Several potential recreational and commuting bicycle and pedestrian trails for further study are discussed and mapped in the Open Space chapter. They are:

- A trail from the town entrance on East Spring St., along the edge of St. Michael's Cemetery, through the Crowley school grounds and the Robbins St. conservation land to the rear, (or through the Fellowship Circle elderly housing development if compatible), then up Robbins St. and East High St. and through the Lutheran Home Property to Rte. 28.
- From the above an extension could go across Rte. 139 through Langley Road, through a trail in the Page St. Woodlands, and out Wales Ave. It could even go on through open land along the Randolph/Holbrook town line exiting to Rte. 139, or going on to the Randolph/Holbrook Commuter rail station via local streets.
- To the south and east such a trail system could go along the railroad right-of-way to the Edison power line, then past the Child World building along the power line into Brockton past the Brookfield School, and on to Ames Nowell State Park.
- For easier, safer, and more direct access to the Industrial Park from Avon neighborhoods along Page St. and from Randolph and Holbrook, a route along acquired rights-of-way with new direct connections from Freeman St., Granite St.

and/or Highland St. to Bodwell St. in the Park, and along Wales Ave. from Randolph to Bodwell St. Extension.

- A bike / pedestrian path across the Waldo Lake Dike and on through the Butler School to South Street and W. Main St. via Leo's Lane and Nichols Ave., then along existing roads (W. Main Street, Bow's Ave.), then via an easement between house lots to Connolly Road, and on to the proposed Trout Brook Path (below).
- A pedestrian way and/or bike path along Trout Brook from Ladge Drive west of the NRT trucking terminal, behind the WalMart and on through the water lands to Connolly Rd., and then to the Brockton-owned pond and open space just above Howard St., and possibly on to the Montello Commuter rail station. Much of the route is quite wet and might need boardwalks or other alterations and/or routing along streets.
- Reopening the closed portion of Wales Ave. for pedestrian/bike use connecting with any new paths in the Edwards or Schepis properties (sites B-1 and B-2 in the Open Space chapter) and the rest of the Page St. Woodlands, with adjacent neighborhoods, and with the Lokitis Conservation land in Randolph.

### **C. Transportation Goals and Objectives**

1. Meeting and reconciling the local and intercommunity needs of residential, commercial, and industrial traffic

Objective: Creation of a service-road system on either side of Rte. 24 between the Rte. 24/Harrison Blvd. and Rte. 24 / Rte. 139 interchanges via the intervening industrial parks

Objective: Reconsideration of reducing traffic through neighborhoods and increased competitiveness by developing the proposed Rte. 24/Page St. interchange

Objective: Potentially improved access to Randolph via the abandoned Wales St. if local impacts are acceptable, thereby providing access to much undeveloped land zoned Industrial and Residential

2. Improving East-West movement between Rte. 24 and Rte. 37 in Holbrook.

Objective: Maximum feasible geometric and signalization improvements to movement through the offset intersections of Harrison Blvd. / Rte.28 and Rte. 28 / East Spring St.

Objective: Consideration / implementation of a direct connection between Harrison Blvd. and Bodwell St. consistent with neighborhood protection

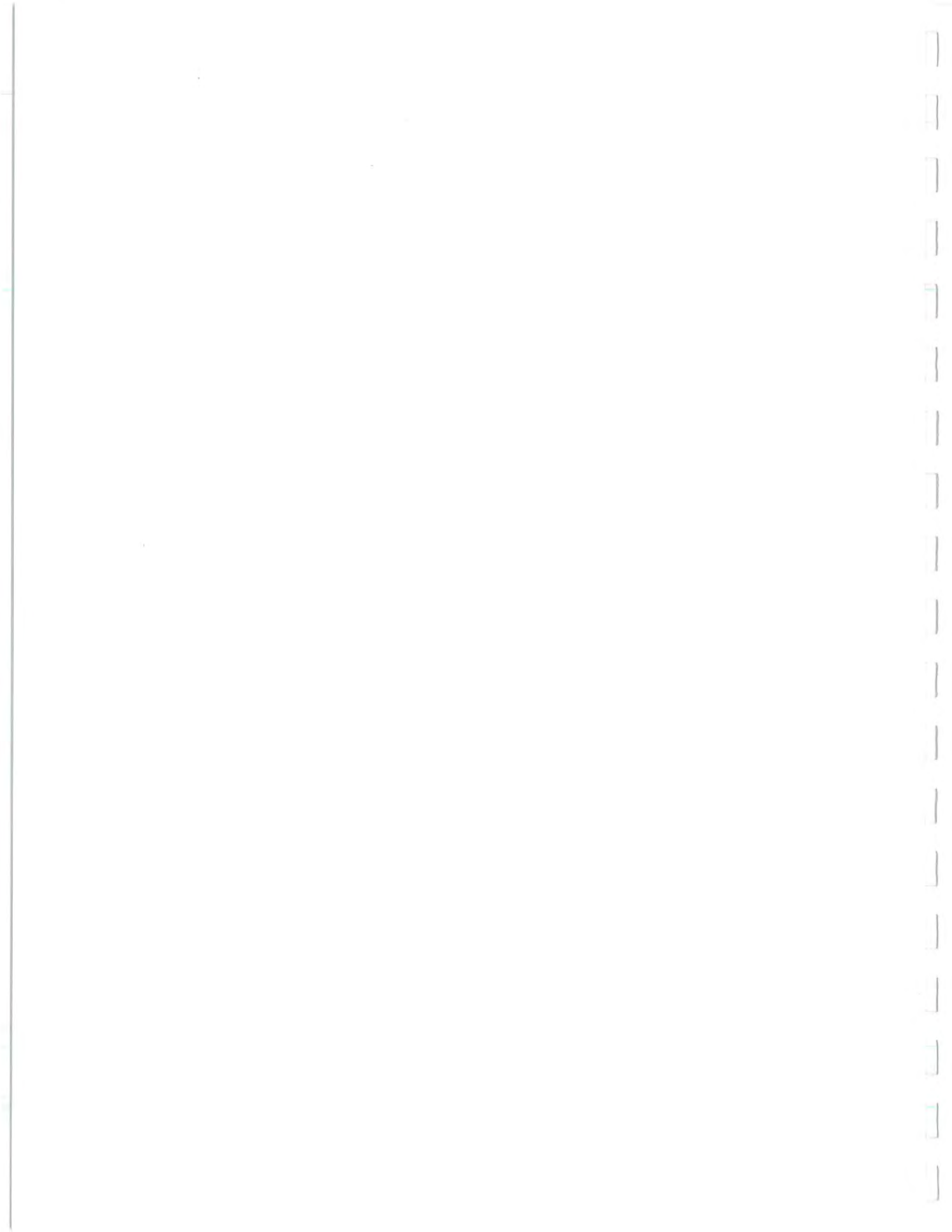
The town's traffic and circulation issues, data, and analyses, particularly those related to the limited East-West movement options, are reviewed in great detail in the appended Avon East-West Traffic Study. This includes data and analysis on traffic volume and trends, accident patterns and trends, crash rates, travel speed studies, and identification and evaluation of many alternatives.

### **Transportation and Circulation Recommendations**

- TC-1 Create a service-road system west of Rte. 24 from Harrison Blvd. to Rte. 139 by getting access from the Merchants Park to the proposed Stoughton Industrial Park, Turnpike St. and/or Page St.
- TC-2 Create a service-road system east of Rte. 24 from Harrison Blvd. to Rte. 139 by resolving the discontinuous roadway segment from Bodwell St. into the Stoughton Technology Center, or by creating a new route from Bodwell St. along the old rail ROW to the unobstructed park drive.
- TC-3 Reconsider the formerly-proposed Page St. / Rte. 24 interchange to reduce traffic through neighborhoods and increase overall accessibility
- TC-4 Improve access to Randolph and potential use of the intervening land via the abandoned Wales St. if local impacts are acceptable
- TC-5 Improve East-West movement between Rte. 24 and Rte. 37 in Holbrook. by geometric and signalization improvements to the offset intersections of Harrison Blvd. / Rte.28 and Rte. 28/ East Spring St.
- TC-6 Consider a direct connection between Harrison Blvd. and Bodwell St. consistent with neighborhood protection
- TC-7. Increase residents' options for short trips by improving any existing pedestrian and bicycle facilities, establishing integrated pedestrian / bicycle routes through and between neighborhoods, open spaces, public facilities, and employment concentrations, and providing sidewalks along all streets, as discussed in the Open Space Element
- TC-8 Re-established transit access to and through the Industrial Park and the Merchants Park connecting both to the BAT and MBTA bus stops, and potentially to commuter rail
- TC-9 Implement the Pavement Management System supporting timely, cost-effective maintenance of the local roads
- TC-10 Improve high-hazard intersections, e.g. add a traffic light at Pond St., replace the flashing light at Page St. with a timed light, and make geometric changes easing truck access to the Industrial Park and movement between Harrison Blvd. and E. Spring St.

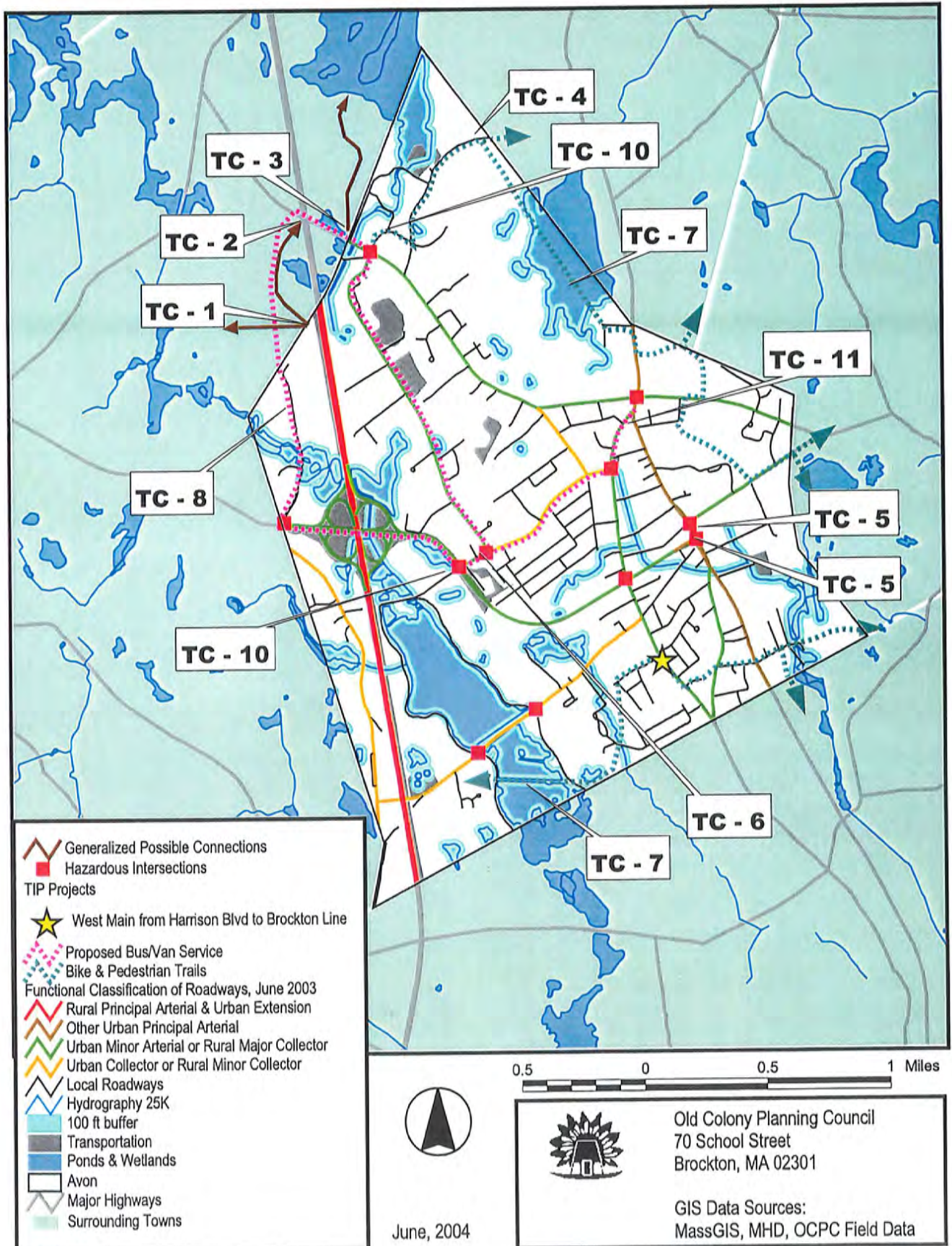


TC-11 Study of the results of the Goeres Square improvements and implement any remaining potentially productive proposals.



# Transportation Improvements

Figure IV - 4







## Chapter V

### Final Community Development Plan

The following Community Development Plan map combines the land use suitability analysis and recommendations from the Resource Protection / Land Suitability Map, the Open Space / Recreation Suitability Map, the Housing Suitability Map, the Economic Development Suitability Map, and the map of Recommended Transportation Improvements with the most recent GIS land use data.

The intent is to reconcile any initially conflicting findings and recommendations; to pull together the resulting recommendations for Avon's use; and then to show the results in the context of actual present-day land uses. The result combines a traditional master plan's future land use map with a guide to the actions needed to implement the 2001 Master Plan and other studies, and to respond to the related needs and opportunities identified in this study.

The recommended actions are drawn from the respective elements, which in turn draw on the Master Plan, the 1999 Open Space Plan, and the 2003 Avon East-West Traffic Study.. Those referring to specific or generalized sites and remaining after reconciling any conflicts between the individual maps of land suitable for Open Space, Housing, and Economic Development, and Transportation Improvements are shown here by the respective colors and patterns. For the sake of clarity, major recommendations are shown on the respective Suitability maps with boxes and numbers.

#### A. Recommended Resource Protection / Open Space Actions

##### OS-1 Use/Expansion/Protection of Present Resources

- (a.) Create a multi-purpose flood control/open space system taking advantage of the flood control; groundwater recharge, wildlife habitat and neighborhood open space value of some streamside lands. Possible sites include:
  - The low-lying areas along Trout Brook between Gill St. and Rock St.; just north of the 6' culvert under Harrison Blvd., just upstream of School St. (where the control structure still has slots for control boards); at the partially town-owned Brook Segment upstream of the Ladge Drive culvert; perhaps where the Brook crosses Connolly Road.
  - Areas where drains discharge to low-lying land rather than directly to streams, e.g. Central St., North of South Street; Bruce Road off of Page St.; and the outlet south of Strafello Road. (See the Council's 1990 "Report on 1964-1989 Storm Drainage System Improvements.")
  - The City-owned informal Beaver Brook impoundment upstream of Rte. 24.

Not every site will have all of these potentials, but the recharge/flood control benefits may make this approach valuable even when the open space/recreation benefits are slight. The approach will require detailed, site-specific studies to avoid backwater impacts on existing development and to get the most appropriate combination of features (e.g. wild habitat versus a usable grass-sloped ponding area) or the high recharge value of a dredged coarse bottom versus a maximum of diverse pollution-abating vegetation).

- (b.) Protect the Trout Brook Watershed by continued enforcement of Title Five, of the Water Supply Protection Zoning bylaw, of the Rivers Act, and of the Wetlands Protection Act, and by purchasing land or easements to prevent development in vacant flood plain areas or significant recharge areas.
- (c.) Create a Bikeway/Trail System connecting residential areas to open spaces, recreational areas and employment centers. Possibilities to explore/implement include:
  - A trail from the town entrance on East Spring St., along the edge of St. Michael's Cemetery, through the Crowley school grounds and the Robbins St. conservation land to the rear, (or through Fellowship Circle if compatible), then up Robbins St. and East High St. and through the Lutheran Home Property.
  - From the above end it could go across Rte. 139 through Langley Road., through a trail in the Page St. Woodlands, and out Wales Ave. It could even go on through open land along the Randolph/Holbrook town line exiting to Rte. 139 ,or going on to the Randolph/Holbrook Commuter rail station via local streets.
  - To the south and east such a trail system could go along the railroad right-of-way to the Edison power line, then past the Child World building along the power line into Brockton past the Brookfield School, and on to Ames Nowell State Park. This would accomplish a major park of the recently proposed Brockton Bicycle Interchange.
  - For easier, safer and more direct access to the Industrial Park from Avon neighborhoods along Page St. and from Randolph and Holbrook, acquiring rights-of-way and creating direct connections from Freeman St., Granite St. and/or Highland St. to Bodwell St. in the Park, and along Wales Ave from Randolph to Bodwell St. Extension.
  - If feasible, creating a bike / pedestrian path across the Waldo Lake Dike and on through the Butler School to South Street and W. Main St via Leo's Lane and Nichols Ave., and then along existing roads (W. Main Street, Bow's Ave.) then via an easement between house lots to Connolly Road and on to the proposed Trout Brook Path (below).



- A pedestrian way and/or bike path along Trout Brook from Ladge Drive west of the NRT trucking terminal, behind the Wal Mart and on through the water lands to Connolly Rd., and then to the Brockton-owned pond and open space just above Howard St., and possibly on to the Montello Commuter rail station. Much of the route is quite wet and might need boardwalks or other alterations and/or routing along streets.
  - Reopening the closed portion of Wales Ave. for pedestrian/bike use connecting with any new paths in the Edwards or Schepis properties (B-1 and B-2) and the rest of the Page St. Woodlands, with adjacent neighborhoods, and with the Lokitis Conservation land in Randolph.
- (d.) Accommodate people with disabilities at all feasible conservation and recreation sites and facilities.
- (e.) Develop facilities and programs increasing access to Waldo Lake for water-based recreation including swimming, boating, fishing, and ice-skating. This could include a multi season bath house/skating clubhouse, swimming floats and possible small boat rentals.
- (f.) Work with the Lutheran Home Study Group to explore varied open space and recreation uses for remaining portion of the Lutheran Home property and, potentially, the adjacent Nelson land on the Holbrook line.
- (g.) Develop mountain bike trails, low impact camping or other uses of the town-owned land off of Page Street (The Page Street Woodlands) once proposed for a golf course and acquisitions proposed below.
- (h.) Combine holdings B-7, B-8, B-10 and I-2 and along with some of the unprotected areas N-1 and N-2 (minus the recycled highway material storage area), and any other available land to create a major wildlife refuge and low-impact recreation area, potentially integrated with Randolph's adjacent Lokitis conservation area.

#### OS-2 Acquisitions

- (a.) Acquire land to protect the Brockton Reservoir and Avon's portion of D. W. Field Park as discussed.
- (b.) Selectively acquire land along Trout Brook where suitable for flood storage/recharge / habitat and open space purposes, and for streamside trails and greenbelt conjunction with the Scepis land and town land to the south and use for open space, habitat, and trails.
- (c.) Acquire all or selected portions of the Schepis (N-2) (C8 / 2 /4), and Edwards properties (N-1) (B9 /2/1 and C9 / 2/ 1) and N-3 (C7/2/17,18 and C8 /2/3) described under Unprotected Lands above, and a portion of the N-7 land between N-2 and areas B-10 and I-2 (C7/2/4,5,6) and C8/2/1,2,3). If access and use compatibility

can be resolved, consider mixed open space preservation and selective development on some of the Edwards uplands

- (d.) Acquire any available land in the Zone II groundwater recharge area around the trout Brook wells and along the main stems of Trout Brook
- (e.) Acquire the 3.3-acre Nelson woodland between the Lutheran Home property and the vacant land across the Holbrook line, and explore the proposed trail with Holbrook.

### OS-3 Recreation Facility Improvements and Additions

- (a.) Replace all equipment at town playgrounds with safe, up-to-date equipment
- (b.) Resurface and re-equip basketball courts at the high school and the Crowley school.
- (c.) Resurface the ball fields at the Butler School
- (d.) Develop a multi-season bathhouse / skating clubhouse along with swimming floats and possibly a small boat rental operation at Waldo Lake
- (e.) Clear available land at the Butler School and build two soccer fields
- (f.) Add paths with benches and bike trail segments on the Lutheran home property
- (g.) Convert the unused Butler School tennis courts to a seasonal ice skating rink
- (h.) Build new fencing, scoreboards and concession stands at town ball fields
- (i.) Build a picnic pavilion / winter ice skating rink at the Lutheran Home property
- (j.) Install security lights at the Butler and Crowley school Fields
- (k.) Improve existing tot lots and add new ones, possibly on the town parcel at West Main St. and Connelly Rd.; near King Street or Freeman Street, and on Central St., perhaps at the Antone Rd. water tower.
- (l.) Develop a centrally located Wheels Park for skateboards and roller blades, perhaps on under-used parking space behind the Buckley Center
- (m.) Study and implement the feasible portions of the recreational and commuting Bike paths described in 1(c.) above.
- (n.) Examine and implement mountain bike trails, low impact camping or other uses of the present or expanded town-owned land off of Page Street once proposed for a golf course; explore joint opportunities with managers of Randolph's Lokitis land.

- (n.) Examine and implement mountain bike trails, low impact camping or other uses of the present or expanded town-owned land off of Page Street once proposed for a golf course; explore joint opportunities with managers of Randolph's Lokitis land.

## **B. Recommended Housing Actions**

- H-1 Establish a Local Housing Partnership Committee to qualify the town for the Soft Second Mortgage Program or various forms of assistance in feasibility studies and initial project costs and to initiate / support local housing activities
- H-2 Revise the Cluster and Planned Unit Development (PUD) bylaws to allow appropriate growth while preserving informal open space and improving access to existing public holdings.
- H-3 Consider the challenges / opportunities presented by private treatment plants and other alternative sewage treatment/disposal methods. These may allow denser development in areas of high amenity/accessibility while lowering densities elsewhere, or they may allow excess development town-wide. To avoid further sprawl, loss of open spaces, and increased service costs, pursue related purposeful, innovative local planning.
- H-4 Examine whether King Street could be improved to open the nearby town-owned lots (B7 / 6/ 6,7) east of page St. for a range of balanced development
- H-5 Donate buildable town-owned parcels like (Map / Block and / Parcel numbers) C6/2/5,6 (west of Page St. and south of Granite St.), D3/12/19 (off of E. Main St.) and B7 / 6/ 6,7 ( the uppermost ones on King St.) to projects sponsored by the Housing Partnership Committee or to groups which directly create low cost sales housing such as Habitat for Humanity.
- H-6 Expanding access to existing units by seeking more rental assistance vouchers
- H-7. Draw any potential sites to the attention of the Avon Housing Authority or non-profit agencies such as the South Shore Housing Development Corporation for low / moderate cost sales or rental housing
- H-8 Encourage creation of sales and rental family and elderly housing by developers using favorable financing through the Massachusetts Housing Partnership or the New England Fund and working with the town through the state's Local Initiatives Program. This involves town cooperation in the form of land donations or approval of local Comprehensive Permits to lower development costs.
- H-9 Adopt and use the Massachusetts Housing Partnership's Soft Second Mortgage Program and other programs to lower monthly costs for first time homebuyers



- H-10 Explore and enact regulatory measures to encourage or require a mixture of housing prices through tools such as incentive zoning and inclusionary zoning
- H-11 Explore housing conditions and rehabilitation needs, and, if appropriate, develop a housing rehabilitation loan program and apply for support under the state's Community Development Fund.

### **C. Recommended Economic Development Actions**

- ED-1 Expand opportunities for diverse firms to locate and grow in Avon through infrastructure improvement, selective marketing, supportive zoning and improved access.
- ED-2 Ensure adequate infrastructure to exploit Avon's economic development potential by searching for local water supplies, examining use of future desalinated water, and encouraging firms with minimal water-consumption and waste-water discharge requirements.
- ED-3 Encourage firms which can use on-site non-potable water for process purposes and which can re-use it or safely discharge it into the ground.
- ED-4 Seek sewage solutions building on the Comprehensive Waste Water Comprehensive Waster Water Management Plan
- ED-5 Explore selective sewerage of the Industrial Park and the Merchants' Park with discharge to the ground at the upstream end of either park.
- ED-6. Review / confirm /extend Master Plan Zoning Proposals to reflect Changing Conditions
- ED-7 Evaluate the Greenbelt requirements in the Industrial District e.g. near Freeman St. and along East Spring St. on the Holbrook border, and revise the text and/or enforcement practices accordingly.
- ED-8 Expand Industrial Zoning along the east side of upper Wales Ave., thereby adding up to 56 acres
- ED-9 Evaluate the Planned Business and Industrial Development provisions, particularly the allowed parking reductions, and consider making the provisions more useful by reducing the area requirements
- ED-10 Increase Business zoning in the East Main Street, West Main Street, Bartlett Street triangle, and drastically reduce it along the rest of Rte. 28.
- ED-11 Make Transportation and circulation improvements to ease access, particularly

restore / extend bus or van service to and through the Industrial Park and the Merchants Park either from Brockton or from the BAT and MBTA bus stops in Avon Center.

- ED-12 Support the proposed connections between the Merchants' Park and Turnpike Street, and the proposed Stoughton Industrial Park in order to improve circulation and increase the accessibility of both parks
- ED-13 Continue any needed traffic and pedestrian improvements around Goeres Square.
- ED-14 Improve directory signage at the entrance(s) to Avon Industrial Park and Avon Merchants Park.
- ED-15 Work with Stoughton to get a better connection between upper Page Street and Rte. 139 by improving the nearly-discontinuous route through the Stoughton Technology Park
- ED-16 Strengthen industrial development and promotional efforts between the Industrial Development Commission, any Industrial Park / Merchants Park associations, and with all other bodies affecting town-wide economic development issues
- ED-17 Concentrate any private or public recruiting efforts on firms with potentially-productive linkages to present industries
- ED-18 Explore/exploit the tax breaks and other advantages of being in an individual or multi-community state-sponsored Economic Development Target Area

#### **D. Recommended Transportation and Circulation Improvements**

- TC-1 Create a service-road system west of Rte. 24 from Harrison Blvd. to Rte. 139 by getting access from the Merchants Park to the proposed Stoughton Industrial Park, Turnpike St. and/or Page St.
- TC-2 Create a service-road system east of Rte. 24 from Harrison Blvd. to Rte. 139 by resolving the discontinuous roadway segment from Bodwell St. into the Stoughton Technology Center, or by creating a new route from Bodwell St. along the old rail ROW to the unobstructed park drive.
- TC-3 Reconsider the formerly-proposed Page St. / Rte. 24 interchange to reduce traffic through neighborhoods and increase overall accessibility
- TC-4 Improve access to Randolph and the intervening land via the abandoned Wales St. if local impacts are acceptable
- TC-5 Improve East-West movement between Rte. 24 and Rte. 37 in Holbrook.

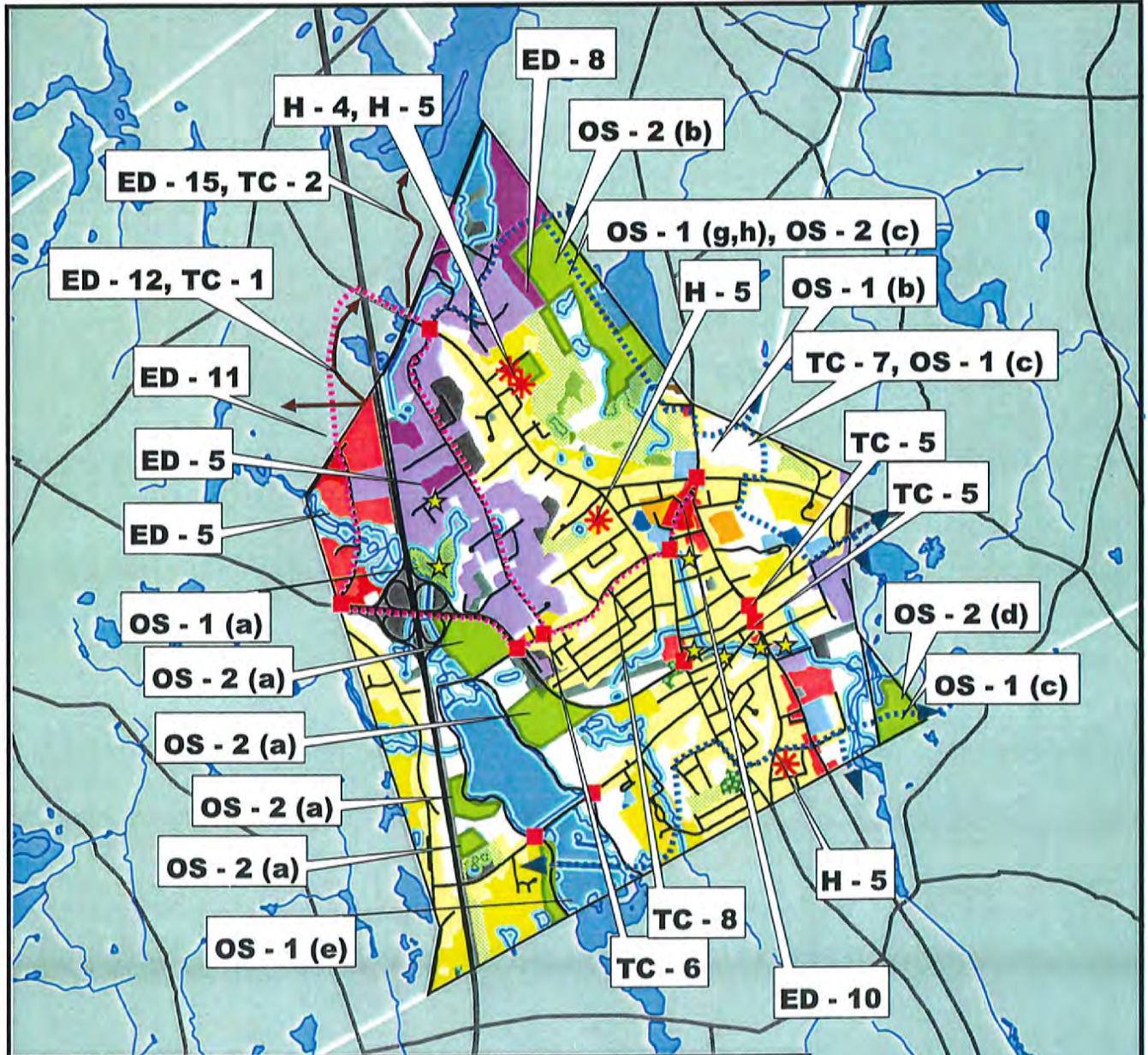
by geometric and signalization improvements to the offset intersections of Harrison Blvd. / Rte.28 and Rte. 28/ East Spring St.

- TC-6 Consider a direct connection between Harrison Blvd. and Bodwell St. consistent with neighborhood protection
- TC-7. Increase residents' options for short trips by improving pedestrian and bicycle facilities, particularly the trails discussed in the Open Space Element
- TC-9 Establish integrated pedestrian / bicycle routes through and between neighborhoods, open spaces, public facilities, and employment concentrations and provide sidewalks along all streets.
- TC-10 Provide transit access to the Industrial Park and the Merchants Park connecting both to the BAT and MBTA bus stops, and potentially to commuter rail
- TC-11 Implement the Pavement Management System supporting timely, cost-effective maintenance of the local roads
- TC-12 Improve high-hazard intersections, e.g. add a traffic light at Pond St., replace the flashing light at Page St. with a timed light, and make geometric changes easing truck access to the Industrial Park and movement between Harrison Blvd. and E. Spring St.
- TC-13 Study of the results of the Goeres Square improvements and implement any remaining potentially-productive proposals.
- TC-6 Consider a direct connection between Harrison Blvd. and Bodwell St. consistent with neighborhood protection
- TC-7. Increase residents' options for short trips by improving pedestrian and bicycle facilities, particularly the trails discussed above and in the Open Space Element
- TC-9 Establish integrated pedestrian / bicycle routes through and between neighborhoods, open spaces, public facilities, and employment concentrations and provide sidewalks along all streets
- TC-10 Re-established transit access to and through the Industrial Park and the Merchants Park connecting both to the BAT and MBTA bus stops, and potentially to commuter rail
- TC-11 Implement the Pavement Management System
- TC-12 Improve high-hazard intersections, e.g. add or upgrade signals at Pond St. and Page St., and make geometric changes easing truck access to the Industrial Park and movement between Harrison Blvd. and E. Spring St.



# Community Development Plan

Figure V - 1



**Proposed Uses**

- Multi-Purpose Areas
- Potential "Town Land" Donations
- Proposed Bike & Pedestrian Trails
- Generalized Possible Connections
- Proposed Bus/Van Service
- Proposed Open Space Acquisitions

**Suitable Land Uses**

- Low Density Residential
- Multi-Family
- Retail
- Industrial
- Protected Open Space

0.5 0 0.5 Miles

**Existing Features**

- Hazardous Intersections
- Roadways
- Hydrography 25K
- 100 ft buffer
- Residential
- Residential, Multi-family
- Commercial
- Industrial
- Recreation
- Urban Open
- Agriculture
- Forest
- Abandoned & Mining
- Transportation
- Waste Disposal
- Ponds & Wetlands
- Major Highways
- Surrounding Towns

Old Colony Planning Council  
70 School Street  
Brockton, MA 02301

GIS Data Sources:  
MassGIS, MHD, OCPC Field Data

June, 2004

2011.01.15