TOWN OF BURLINGTON

Open Space & Recreation Plan Update

2005–2010

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1.0 PLAN SUMMARY

Since the latter half of the twentieth century, urban sprawl and development booms have altered the landscape of Massachusetts towns dramatically. As more land disappears, government and individuals are realizing that open space is a finite resource. These lands can add value for a variety of reasons, including conservation, recreation, and agricultural purposes; or simply because of their scenic qualities and contribution to the overall character of a town. Proper management of such space is imperative to achieving and maintaining sustainable communities.

This 2005 Open Space and Recreation Plan for the Town of Burlington has been prepared to provide goals and guidance towards planning land use management and acquisition over the next five years. Since Burlington is a developed suburb quickly approaching both residential and commercial build-out, a central theme throughout this report is ensuring protection of what unprotected, undeveloped parcels remain. Two parcels of critical concern are:

- The Landlocked Parcel and
- The Boston Property

The Town hopes to utilize both of these parcels for public recreation and/or conservation purposes, but must overcome legal and access issues to do so.

Other issues important to the Town, and discussed throughout this report, include:

- Providing additional athletic fields for high school sports, youth sports, and adult athletic programs.
- Involving the highly-present private sector in protecting open space and providing recreation opportunities
- Protecting Burlington's water resources
- Actively managing, maintaining, and striving to expand existing conservation and recreation areas
- Increasing public awareness and use of Conservation and Recreation facilities and activities

Burlington also hopes to create a town-wide Open Space and Recreation Network to improve, expand, and monitor the progress of these open space goals.

2.0 INTRODUCTION

2.1 STATEMENT OF PURPOSE

An Open Space and Recreation Plan update is long overdue for the Town of Burlington. Last revised in 1996, the Open Space Plan is necessary to qualify for state reimbursement programs for open space acquisition and protection; as well as recreation land acquisition and development. Faced with continuous growth, such programs will help us preserve open space while allowing development to occur in a sustainable manner. The completion of this report plays a role in other grant opportunities as well, such as the Commonwealth Capital score and Self Help Program grant.

Burlington's previous plan provided an excellent framework at the time, but in order to appropriately plan and achieve current goals, it was imperative that we update our strategy. Thus, the principal purpose of this Open Space Plan is to provide a framework from which to guide the planning and management of Open Space in Burlington over the next five years. Updating the plan also provides an excellent opportunity to gather feedback from residents, allowing the Town to understand and incorporate their open space ideals in future planning. We hope this update will inspire a cyclical pattern of continuous learning and review of Burlington's open space tactics.

Burlington has been successful at achieving several of its goals from the 1996 Open Space and Recreation Plan. For instance, the Recreation Department moved forward by commissioning Berkshire Design Group to conduct an inventory and analysis of eighteen of the Town's recreational facilities to gauge the need for updates and improvements. Below is a list of other Open Space and Recreation related projects completed since 1996:

- Major improvements and additions were made at most Town parks including: a new wading pool, a new skate park, conversion of a tennis court for use as a street hockey rink, construction of a sand volleyball court, new baseball backstops, construction of a new Little League baseball field; and new fencing. In addition a new sports lighting system was installed at one of the fields, a basketball court was renovated, and another field received a new irrigation system.

- Old bleachers in parks throughout Town were replaced with modern bleachers that meet mandated safety standards.

- Local schools saw improvements as well, with new playground equipment installed at the Fox Hill, Pine Glen and Memorial Elementary Schools; as well as at Overlook Park. Also, two multi-purpose athletic fields were rehabilitated at Marshall Simonds Middle School.

- A temporary outdoor ice-skating rink was erected at the Human Services Center over the last several winters.

- A wooden trestle bridge was constructed to provide Town officials entry, and limited public access, to the Vine Brook wetland area (see Section 4.5.3).

- Roughly fifty acres of conservation area were added through acquisitions and donations.

- Ongoing GIS mapping and analysis of Conservation lands was initiated in 2003. Projects included GPS mapping of trails and streams; and the creation of conservation area maps which were posted on the Conservation Department website.

- More outreach activities were held, including:
  - A photo exhibit sponsored by the Conservation Commission held during various years;
  - An annual tree giveaway and information booth run at Town elections; and
  - Bi-annual nature walks held at Conservations Areas throughout town.

- Signage was erected at Marion Road and Sawmill Brook Conservation Areas.

- Four new vernal pools were certified.

- The *Conservation Lands of Burlington* brochure was updated, distributed, and is now available and on display in several Town departments.

- The annual summer stream-cleaning program has continued and is a standard item in the Conservation Department's annual operating budget. (see Section 4.3.1)

- A major surveying project was conducted at the Sawmill Brook and Mill Pond Conservation Areas to provide information on the extent of the Town's property holdings; and to gather background data needed to address encroachment and dumping infractions by abutting property owners.

- The Conservation Department worked with Eagle Scout hopefuls on trail enhancement, clean-up, bird and bat house construction, and other projects throughout the year.

2.2 PLANNING PROCESS AND PUBLIC PARTICIPATION

A consultant with previous experience in the Burlington Conservation Department was hired to prepare this Open Space and Recreation Plan update in cooperation and consultation with multiple Town departments including the Department of Public Works, Planning Department, Recreation Department, Burlington High School Science Center, Burlington Health Department, Conservation Commission, Burlington ADA Coordinator, Burlington Human Resources Department, Building Department, Water Department, the Town Clerk's Office, and the Middlesex County Natural Resources Conservation Service.

Some public participation techniques included in the development of this update were:

Public Forums/Meetings – In conjunction with the development of the 2004 Burlington Community Development Plan, the Town held a Natural Resources and Open Space Forum on September 17th, 2003. The two main tasks of this forum were to 1) vote on priority goals and themes for open space and natural resource protection and 2) develop a list of areas within the Town that should be protected because of their importance to open space/natural resources protection or recreational purposes.

Multiple public meetings were also advertised in 2001 for development of a draft Open Space plan[1]; however there was a low response from Burlington residents. In reaction to this, an alternative public participation approach was used for this 2005 update: an Open Space and Recreation Survey distributed to all residents (see below).

Survey – In December 2004 the Burlington Conservation Department mailed a 14-question Open Space and Recreation survey to all Burlington households to garner public opinion. Of the 8,473 surveys sent, 770 were returned - a 9.1% response rate. The media was used concurrently to promote the survey, which was printed in a local newspaper, the Burlington Times Chronicle, and advertised several times a day on Burlington Cable Access Television (BCAT). It is anticipated that survey results will be published in the summer Recreation Department brochure and posted on the Town's website at www.burlington.org. Results will also be made available in the Town Library, Conservation Department and Recreation Department. (see Appendix 1 for a survey example; and Appendix 2 for survey results)

Public Events – Periodically the Town holds public events to spur residents' interest and appreciation of open space. The Burlington Conservation Department held a guided nature walk in October 2004 to officially unveil the Marion Road Conservation Area, Burlington's most recent addition to its open space. Such events will continue to be held in the future as part of a general outreach effort.

[1] The 2001 draft Open Space and Recreation Plan did not reach completion.

3.0 COMMUNITY SETTING

3.1 REGIONAL CONTEXT

A suburb of Boston, Burlington is located in northeastern Massachusetts midway between Boston and Lowell. As part of Middlesex County, the town is thirteen miles northwest of Boston and twelve miles south of Lowell. It is bordered by the towns of Bedford to the west, Billerica to the northwest, Wilmington to the northeast, Woburn to the southeast and south, and Lexington to the south. (see Map 1) Burlington is a member of the North Suburban Planning Council (NSPC), one of eight Metropolitan Area Planning Council (MAPC) subregions. The NSPC includes nine communities and is currently chaired by Burlington's Planning Director Tony Fields.

Burlington is commonly known as a shopping and entertainment destination, as well as an important regional employer. Additionally, because of its industrial draw and major surrounding roadways (see Section 3.42), it is a key commuter town. Yet, the Town also contains a large, primarily middle-to-upper income, residential community. These components of Burlington's character materialized from a period of intense growth and activity brought on by the construction of Route 128. Such development brought wealth to the community, but also greatly impacted its available open space. In the latter stages of the suburban development life cycle, Burlington is working to save what open space remains. It is also working to meet future demands of a changing demographic to improve the Town's habitability and sustainability.

Burlington is located at the top of three watersheds: Shawsheen River Basin (western Burlington); Ipswich River Basin (northeastern Burlington); and Mystic River Basin (southeastern Burlington) (see Map 4). Although sites along these waterways are prone to flooding, much of the land was built upon prior to regulations limiting such actions. Additionally, based on the existing zoning development laws and despite existing regulations, in many cases the re-development of such land will continue.

3.2 HISTORY OF THE COMMUNITY

Burlington went through numerous transformations before becoming an independent town. Like most of the United States, Native Americans first lived and prospered in the region. This dynamic changed in 1640 when European families resettled the area, which then became known as Charlestown Woods. In 1642 a large part of Charlestown Woods was established as the City of Woburn, the northwest corner of which became known as Shawshin. By 1730 Shawshin became a separate geographical entity known as the Woburn Second Parish, and in 1732 its own meetinghouse was built - The Burlington Meetinghouse. Sixty-nine years later, on Thursday, February 28, 1799, the Woburn Second Parish was officially incorporated as the Town of Burlington.

Over the next 100-years Burlington was a small agricultural community with only a few hundred residents. It contained gristmills, sawmills, a blacksmith shop and tavern stops where travelers were offered overnight accommodation, food and drink. Around 1840 the first genuine town industry, Reed's Ham Works, began.

Although the town also developed a limited industry in shoe crafts and market agriculture, farming was the dominant trade.

In the 1920s, summer cottages were built in the Winnmere and Havenville sections of town for city residents to vacation. However, in the Great Depression many of these cottages became their owner's permanent homes due to financial difficulties. To support this expansion, by 1949 the Town had formed a water district whose goal was to provide a fresh, clean water supply.

In the early 1950s Route 128 was built - the greatest infrastructure change to impact the Town to date. Prior to this, Burlington was inaccessible by major roads or rail services. Route 128 now brought traffic from all over the state, resulting in considerable residential and industrial growth. Farmlands gave way to housing subdivisions, office buildings, and the electronics industry. New schools had to be built to support the influx of relocating families. In the ten years between 1955 and 1965, Burlington was recorded as the fastest growing community in the state.[2] The Town's population hit its peak at around 24,000 residents in 1974, and today the population holds at roughly 23,000 residents.

Local historic sites remain as a testament to the Town's history. They include a historic trail featuring two National Register buildings, two restored tavern stops, one-room schoolhouses, the Walker house and the Old Burying Ground.

3.3 POPULATION CHARACTERISTICS

Burlington is a densely populated suburb consisting of predominantly middle to upper class residents employed in white-collar work. The ratio of jobs to working residents has risen since the recession year of 2002 from 2.3 to around 2.5, which is one of the highest among Metropolitan Area Planning Council (MAPC) communities. With more than two part-time or full-time jobs for every three working residents, Burlington represents an important job center for the region that "imports" workers from many other communities.

Adults over twenty-five compose the largest segment of Burlington's population. However, most of the recreational activities are geared towards children. As such, although recreational activities for children will continue to be essential, Burlington must shift some focus towards adult recreation and the aging population. This includes not only family recreation, but also activities for adults without children. Such considerations may also help accommodate the thousands of workers who commute to Burlington every day.

School-aged children, whose population has risen from 1990 to 2000, must continue to receive adequate and high-quality recreation and open space facilities to meet the demand – especially as there has been a

[2] Department of Housing and Community Development website, accessed at www.mass.gov/dhcd on 12/7/04.

large increase in youth sports participation over the past few years. Additionally, it is crucial that more facilities be available for the elderly population that offer easy navigation, handicapped accessibility, safety, and areas for rest/relaxation/sitting. Not only do we need to address housing needs for this population, but we also must provide a community that encourages activity as people age.

3.3.1 Population Trends

Burlington began as a small, agricultural community, but with the construction of Route 128 the Town's population burst, tripling within five years to 22,150 residents.[3] In 1975, Burlington had its highest number of residents at 24,374. Since then the number has slightly decreased to level off to approximately 23,000 individuals.

The median age of residents increased in the 1990s from 34 to 35.6 years, and the US Census Bureau now lists it at 38.3 years, somewhat higher than the metro-Boston median of 36 years.[4]

Figure 1
Burlington's Population Change
1990 – 2000

Age Group	1990	2000	% Change
Under 5	1,438	1,575	15.0%
5-9	1,389	1,491	9.5%
10-14	1,409	1,512	7.3%
15-19	1,558	1,226	7.3%
20-24	2,112	1,035	-21.3%
25-34	4,391	3,218	-26.7%
35-44	3,480	3,886	11.7%
45-54	2,989	3,205	7.2%
55-64	2,732	2,554	-6.5%
65-74	1,228	2,103	71.3%
75+	576	1,071	85.9%
Total	**23,302**	**22,876**	**-1.8%**

Source: U.S. Census Bureau

Future trends overall show an aging population in Burlington. According to the Massachusetts Institute for Social and Economic Research (MISER) population statistics, there was a 39% increase in residents 50 years and older from 1990 to 2000, and it is projected that these numbers will only continue to grow as the baby boomer generation ages.[5,6] By 2020, these numbers are expected to increase another twenty percent.

[3] Department of Housing and Community Development (DNCD) (2004) Burlington, accessed at www.mass.gov/dhcd/iprofile/048.pdf in December 2004.
[4] Metropolitan Area Planning Council (MAPC) (2004) Comprehensive Economic Development Strategy, submitted to the Economic Development Administration.
[5] Massachusetts Institute of Social & Economic Research (MISER), online database accessed at www.umass.edu/miser in November 2004.

Conversely, population numbers for younger residents between the ages of 15 and 34 have dramatically reduced over the past 10 years, declining by 47 percent overall. The number of 20-24 years olds alone has decreased by over 50 percent. It can be deduced from these figures that Burlington is becoming less desirable to young adults between the ages of 20 to 34. This may be due to a combination of factors including the cost of living, desire to live in a younger, urban environment; or a lack of recreation to support such a demographic. These figures also show a decrease in 55 to 64 year olds, which may be due to the desire to relocate for their retirement years for aesthetic and/or financial reasons.

This type of decline, however, is not exhibited in children under fourteen years; whose numbers have increased eight percent in Burlington from 1990 to 2000. This is evident through school enrollment numbers, which have increased 9.83 percent since 1993 at a rate of 1.6 percent per year. However, as with other younger segments, projections to the year 2020 calculate a 24 percent decrease in this number (see Figure 2).

Disability information is also vital when considering open space needs. As of the year 2000, 9.8% of Burlington's population between the ages of 21 and 64 years had disabilities. Of the burgeoning segment of residents 65 years and older, 973 or 38% were listed as disabled.

On the whole, the majority of Burlington's population is between the ages of 20 and 64 (56%). Conservation and recreation programs must provide for this young to middle-aged adult population. However, Burlington must be proactive in preparing for the growing numbers of elderly in town, which also involves allowing for the handicapped accessibility and usability of town open space and recreation.

Burlington has predominantly single-family detached homes, with 96 percent of the households owning one or more cars. The average household size is 2.76 people, and roughly 77% of all households are family households. Thirty-two percent of these have children under the age of 18. Only 23% of the town is non-family households, 65% of which are married couples.

[6] The latest MISER population projections for Massachusetts were released on Wednesday, December 10, 2003. They include a middle, high, and low projection series, of which the mid-level projections are typically used to forecast a town's future population changes. For this reason the mid-level projects were used as reference in this report.

Figure 2 Burlington Population Projection 2000 - 2020				
Age Group	**2000**	**2010 Projection**	**2020 Projection**	**% Change 2000 - 2020**
Under 5	1,575	1,206	961	-39.0%
5-9	1,491	1,205	960	-35.6%
10-14	1,512	1,636	1,253	-17.1%
15-19	1,226	1,317	1,063	-13.3%
20-24	1,035	1,198	1,298	25.4%
25-34	3,218	2,000	2,229	-30.7%
35-44	3,886	2,981	1,886	-52.0%
45-54	3,205	3,554	2,732	-14.8%
55-64	2,554	2,757	3,084	20.8%
65-74	2,103	1,963	2,154	2.4%
75 +	1,071	1,815	2,062	92.5%
Total	**22,876**	**21,632**	**19,662**	**-14.0%**

MISER has predicted an overall decrease in Burlington's population, based on current zoning and the trend toward smaller households and families. However, the Town has taken steps to meet the needs of its aging population – 997 units of multi family and senior housing have been approved over the past five years - and this will have some impact on the population.

3.3.2. Density

The population density per square mile of land in Burlington is 1,969.4, a number that since 1970 has fluctuated by only ± 1%. The housing density is 714.9 units per square mile, with roughly 46% of total land used for single or multi-family residential properties. Of the remaining land, 17.1% is commercial or industrial; and 36.7% is forestry, agricultural, wetland or open lands.

As Burlington is a major employment destination, 33,000 local company employees commute here every day.[7] All total, an average of 70,000 people are in Burlington on a typical day including residents, workers, and customers of local businesses.

The National Recreation and Park Association (NRPA) recommends each town have a minimum of 6.25 acres to 10.5 acres of *developed* open space per 1,000 people.[8,9] Burlington is currently under this minimum with 4.38 acres per 1,000 people. This number does not include the Boston Property and Landlocked Land parcels, which are not considered permanently protected lands and could become developed.

[7] 5,000 of these worker are Burlington residents

[8] Lancaster, R., (1990) Recreation, Park and Open Space Standards and Guidelines, published by the National Recreation and Park Association.

[9] According to NRPA's 1996 publication of Parks, Recreation, Open Space and Greenway Guidelines, the NRPA has shifted away from promoting a fixed standard of recommended parkland. They now advise that their minimum recommendations be taken into consideration when planning, but that each community implement what the citizens determine is best for themselves.

The MAPC identified the need for mixed-use buildings for the center of town to improve usability and create an atmosphere of a "pedestrian-friendly village reminiscent of a traditional downtown retail district".[10] They also recommended the Town Common's historical character and look remain intact and in good condition, including the Marion Tavern at Grandview Farm (see Section 4.6). Mixed-used developments were also suggested for other Town locations including the Quinn Perkins site (see Section 3.4 for more information on this site). However, Town center initiatives and other mixed-use developments are not anticipated to be large enough to significantly impact Burlington's density.

3.3.3 Residents' Income

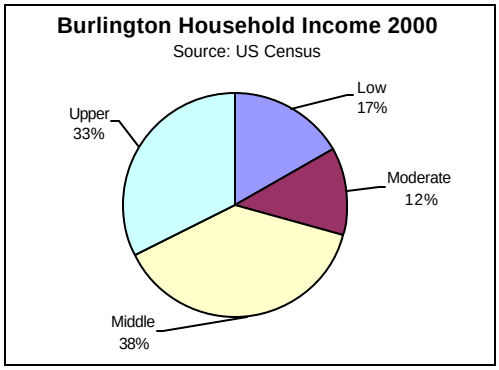
In 2000, Burlington's median family income was $82,072, with an income per capita of $30,732. Residents predominantly fall into the middle to upper class income categories, with 78% of families earning more than $50,000 per year (see Figure 3). However, an estimated 29% of Burlington households, or about 2,400, have incomes below 80% of the regional median family income (see Figure 4).[11] This is considered "moderate income" and is the level that qualifies for affordable housing. Of these households, almost 1,400 have incomes below 50% of the median, considered "low income." Middle-income households – those with incomes between 80% and 150% of the median – make up 38% of the Town's households, while upper-income households constitute about 33%.

Figure 3
Family Income Levels in Burlington

Families	Number	Percent
Less than $10,000	71	1.1
$10,000 to $14,999	47	0.7
$15,000 to $24,999	256	4.0
$25,000 to $34,999	387	6.0
$35,000 to $49,999	653	10.2
$50,000 to $74,999	1,344	20.9
$75,000 to $99,999	1,399	21.8
$100,000 to $149,999	1,471	22.9
$150,000 to $199,999	486	7.6
$200,000 or more	314	4.9
Total	**6,428**	**100.0**

Source: 2000 US Census

Figure 4



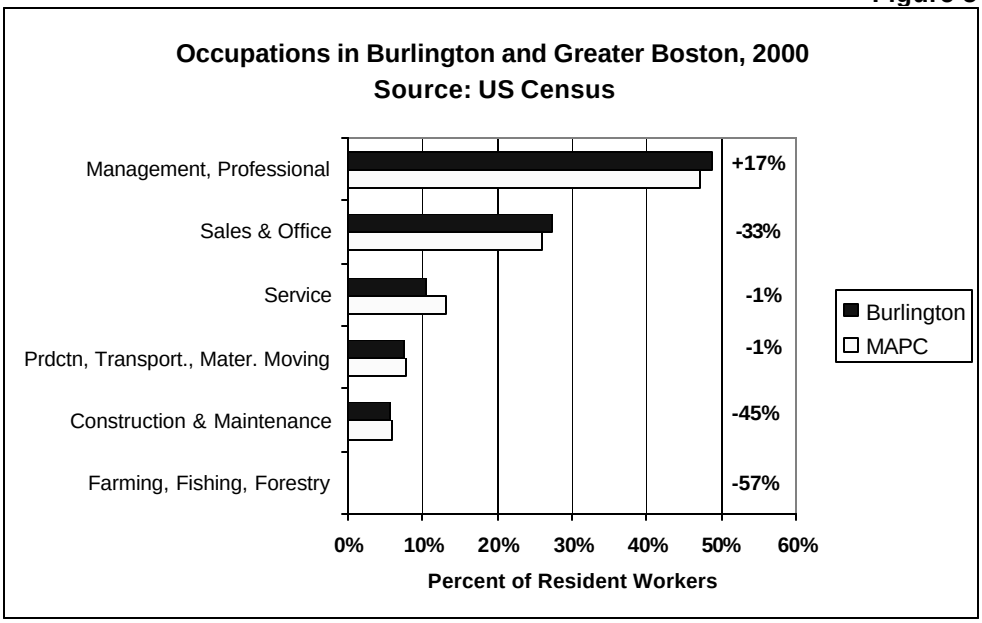
The occupational profile of Burlington residents closely mirrors that of the metropolitan region, with the 2000 census showing the greatest number of residents in managerial and professional occupations, followed by sales and office work. The proportion of Burlington workers in managerial and professional occupations is slightly higher than the region's at 49%, and in fact was the only category to grow in Burlington. As of the year 2000, all other categories declined in number and

[10] Massachusetts Area Planning Council (MAPC) (2004) Comprehensive Economic Development Strategy, submitted to the Economic Development Administration.

[11] This estimated breakdown does not adjust for family size. Cut-offs used in chart are based on the U.S. HUD regional median income for a family of four for the year 2000 applied to the Census income distribution for Burlington. Low income (50% of median) = $32,750; moderate income (80% of median) = $50,200; middle (81%-150%) = $98,250; upper income (over 150%) = over $98,251.

are below the regional proportion. This workforce profile is a prime illustration of the national trend away from occupations involved in producing goods and toward 'knowledge-based' jobs.

Figure 5



The growth of managerial and professional occupations accompanies rising educational levels. While Burlington's population over age 25 increased by 6% in the 1990s, the number having a college degree jumped by 31%. Burlington residents are slightly more likely to have a college degree (43% of residents, compared to 41% for the region), although the percentage with advanced degrees is lower (note that the metropolitan Boston work force is one of the most highly educated in the U.S.). The number of adults not having completed high school fell sharply in Burlington.

Burlington residents have been relatively successful in the employment market in recent decades, with annual unemployment having consistently stayed roughly a percentage point below the annual statewide rate since 1985. Additionally, the number of Burlington residents who lived in poverty fell by 40% to 434 in the 1990s, representing 1.9% of the Town's population. However, high demand and limited supply have cut vacancy rates and forced up the costs of both owning and renting a home throughout eastern Massachusetts. As a result, Burlington is experiencing these effects, making it difficult for many to afford to move to or remain in the town.

3.3.4. Major Industries, Employers and Employment Trends

Burlington is commonly known as a shopping and entertainment destination, with the Burlington Mall and surrounding stores drawing visitors from beyond the Town's borders. Yet its prime location at the junction of Routes 128 and 3, and its large office and industrial parks, also make Burlington one of the principal economic centers in the region.

As mentioned, approximately 33,000 workers daily commute to their jobs in Burlington. The Town has a diverse mix of occupations that generally pays 20% more than the regional average. The largest employment sectors are information technology, health care, retail, manufacturing and wholesale trade.[12] Below is a list of the top employers, most of which are clustered in the southern section of Burlington along Routes 128 and 3. More specifically, they are located within one-half mile of either side of Route 128, and one-half mile to the east of Route 3.

Figure 6
Major Employers in Burlington*

Company	Address	# of Employees
Lahey Clinic	41 and 31 Mall Road 63 South Avenue	3500
Sun Microsystems	Network Drive	2000
Siemens-Nixdorf	200 Wheeler Road 24 New England Executive Park	2000
Oracle	10 Vandegraff Drive	1000
Town of Burlington	Various locations	1000
Raytheon	7 Vandegraff Drive	600
Burlington Mall	Corner of Middlesex Turnpike & Burlington Mall Road	550
M/A-Com	43 South Avenue	450
EG & G Dynatrend	24 New England Executive Park	425
FAA	12 & 16 New England Executive Park	385
Lightbridge	30 Corporate Drive	300
Newsedge Corp	Blanchard Road	300

** Includes only companies with 300 or more employees*

None of these major employers contributes to the open space in Burlington. Mitre Corporation, a medium-sized local employer, is the lone company with such a relationship with the Town. Mitre has agreed to allow the Town of Burlington to use three of their baseball/softball fields, and in exchange these fields are maintained by the Burlington Recreation Department. However, development of a road is proposed in this area for construction in the next five years. If that occurs, one of the three fields may be lost.

The number of jobs in town rose to over 39,000 in 2000 before declining to 36,000 in the recession year of 2002.[13] There are also many vacant commercial buildings due to the post-September 11th economy. However, because of Burlington's accessibility and infrastructure, and the gradually improving economy, the Burlington Planning Department predicts the industrial presence to increase. Developers seem to agree, as nine (9) new office buildings are permitted for construction in town. This is a desirable scenario, as in most cases the zoning for such growth is already in place and the land being considered has already been disturbed. An added benefit of such redevelopment is the required clean-up of any hazardous materials on-site.

[12] Metropolitan Area Planning Council (MAPC), (2004) Burlington Community Development Plan, prepared for the Burlington Planning Board.
[13] Massachusetts Area Planning Council (MAPC) (2004), Comprehensive Economic Development Strategy, submitted to the Economic Development Administration.

3.4 GROWTH AND DEVELOPMENT PATTERNS (Required Map 1 – Zoning Map)

3.4.1 Patterns and Trends

Transportation corridors have been the defining factor for much of Burlington's recent development. Pre-1950s, Burlington was shielded from the growth seen in neighboring towns because railroad extensions bypassed the community. Any residential development that did occur clustered close to surface roads, with subdivisions eventually extending from these roads. However, construction of Routes 128 and 3 greatly magnified this pattern, as the town evolved from a small agricultural community to a thriving commercial suburb.

Burlington's accessibility to Boston, Lowell and surrounding suburbs continues to create development demands, both residential and commercial – a fact evident as Burlington now approaches build-out. Presently the residential stock in Burlington is predominantly single family and very expensive. However, as the baby boomer generation approaches retirement age, demand is rising for alternative housing types such as multi-family housing and smaller housing units, of which Burlington is in short supply. Additionally, more senior care facilities should be considered, as well as housing for first-time homeowners - but the land available to accommodate such future trends is limited.

Currently Burlington is not rezoning land for future commercial use, but rather re-using existing properties. In other words, future commercial development will take place at previously disturbed lands. With this in mind, the Burlington Planning Department predicts that retail, restaurants, biotechnology and medical tools, and high technology industries will experience the most growth in the future.

The remaining significant green spaces threatened by development in Burlington are the **City of Boston Land** and the **Landlocked Parcel**. (see Section 5.2.4.) These parcels have some legal roadblocks to their development, but not enough to alleviate concern. The use of the City of Boston land is controlled by the terms of a will that bequeathed the land to the City. Burlington remains concerned that some Boston officials seek to break the terms of the will in order to gain a more direct benefit for the City. The Landlocked Parcel was taken by eminent domain by the Town of Burlington for water supply protection and conservation purposes. Although it is town-owned, it is zoned general industrial and not protected from development.

Most of the remaining woodland in Burlington is concentrated in three large areas: the Mill Pond Conservation Area, and the aforementioned City of Boston Land and Landlocked Parcel.[14] There is also one remaining active farm left in the town, which is given some protection from development pressures by M.G.L. Chapter 61A. These valuable open spaces may be at risk as Burlington approaches build-out.

[14] From 1951 to 1981 alone, forested land in Burlington decreased by 59% from 4423 acres to 1807 acres.

From 1951 to 1981 alone, forested land in Burlington decreased by 59% from 4,423 acres to 1,807 acres. This number has continued to decrease and it is necessary to protect what remains.

3.4.2 Infrastructure

- Transportation Systems – In addition to Route 128 and Route 3, other major transportation routes are in close proximity to Burlington. Interstate 93, which connects Boston and New Hampshire, intersects Route 128 in the neighboring city of Woburn. Interstate 495 lies roughly 15 minutes north of Route 128 via Route 3. Route 3A is one of the main surface arterial roads that runs through the town in a north-south direction, and Route 62 passes through the northern section of Burlington running east-west. The combination of these routes makes Burlington easily accessible by major highways from almost all directions.

  Burlington's proximity and access to Boston allows it to function as a bedroom community. Like many outlying suburbs of Boston, most residents unfortunately rely on a car for transport to surrounding localities because the public rail system is lacking. However, a bus service through the Massachusetts Bay Transportation Authority (MBTA) connects the town to 78 other municipalities; and a link from the Lowell Regional Transit Authority (LRTA) provides additional access to and from Burlington to points north. Passenger commuter rail service can be accessed in the neighboring communities of Wilmington and Woburn; and the MBTA Red Line can be accessed from local bus routes to Alewife Station in Cambridge.

  Two options for air travel are also accessible from Burlington. Logan Airport is a 30-minute drive or can be accessed by the Logan Express in Woburn. M and L Transportation also offers scheduled service between Burlington and Logan Airport. Closer to home is L.G. Hanscom Field, a reliever airport located 9 miles away in Bedford, which offers limited commercial services.

  Within its borders Burlington has its own shuttle bus service, the B-Line, which runs six routes throughout Town with stops at recreation and conservation areas. Few residential neighborhoods in Burlington are supported by localized shops, so most residents opt to drive between the residential (northern) and commercial (southern and western) parts of town.

  Non-motorized transport is another option in town, although it has not reached its potential. Many main and secondary streets are lined with sidewalks, but the sidewalk network is inconsistent, particularly on roads built before the 1990s when sidewalks were not required. Officials are seeking to install the missing links to facilitate pedestrian movements throughout town.

The Burlington Bike Path Committee is also working to create a network - 17.8 miles of on and off-road bikeway throughout the Town of Burlington. It is anticipated that this project will ease the inflow of traffic by providing safe and accessible bikeways throughout Burlington with connections to key Town attractions. The committee also hopes to link Burlington to the surrounding towns of Bedford, Lexington and Billerica. This project has been divided into three-phases, and the Town is in the process of applying for a multi-million dollar grant to fund its implementation.[15]

✍ Water Supply Systems

The water system in Burlington includes three finished water storage tanks with six million gallons of capacity, roughly 130 miles of distribution pipings, one river diversion station with a piping capacity of eight million gallons per day (mgd), one raw water reservoir with a capacity of 513 million gallons, one surface water treatment facility, one groundwater treatment facility and seven gravel packed wells. These sources produced approximately 1.2 billion gallons in 2003, with a daily average of 3.3 mgd and a maximum day of 7.1 million gallons. While this daily average has remained constant over recent years, the major consumer has changed from commercial to residential.[16] To meet this water demand, in the summer 60% of the water comes from the reservoir and 40% is supplied through the Vine Brook wells. In the winter 80% comes from the wells and 20% from the reservoir.

The Town of Burlington has produced water for its residents since 1949. Yet the land area that supplies the primary recharge for the wells was not identified until after much of the commercial and industrial area was built - and unfortunately it was under these areas. Since then protection measures have been taken to regulate the operations adjacent to the aquifer.

✍ Sewer Service

Burlington's sewer system, a relatively old one, has a 9.2 million gallons per day (mgd) capacity with roughly 3.5 mgd discharged. The system runs from Burlington, through Woburn, Winchester, Medford, Somerville and onto Deer Island; and is managed by the Mass Water Resources Authority (MWRA). The Winchester portion of this line provides less capacity than needed, and during times of high rainfall this causes an overflow problem in the system. As a result, Woburn and Burlington must divert sewage from the system, which in Burlington's case is diversion of chlorinated sewage into Vine Brook. Due to this situation, the Department of Environmental Protection (DEP) has placed an Administrative Consent Order for the amount of sewage discharged from Burlington properties.

[15] Town of Burlington, Massachusetts (2003) Burlington Bikeway Transportation Enhancement Application, submitted to the Metropolitan Area Planning Council

[16] Town of Burlington (2004) Annual Water Quality Report: Water Testing Performed in 2003

This DEP moratorium affects town development by requiring that eleven (11) parts of infiltration inflow be removed for every additional one (1) gallon of sewage. For example in a four-bedroom house, a total of 440 gallons of sewage is permitted (110 gallons per bedroom). In order to comply with DEP requirements, the developer must set up an infrastructure to remove 11 times the 440 gallons (4,840 gallons) of infiltration inflow from the sewer system. Any development requiring less than 15,000 gallons of infiltration inflow removal is under the Town of Burlington's jurisdiction, but those requiring more must be approved by the DEP.

Since 1987 the Town has been appealing to the State Government to have the Winchester portion of the sewer system expanded to avoid backflow. As a result, in the spring of 2005 construction will begin on a new pipe system providing more capacity to the Winchester segment. This project is slated to finish by late 2006 (18-month construction duration).

3.4.3 Long-Term Development Patterns

The current local land use zoning law in Burlington is half acre zoning (20,000 square feet) residential single-family. Recent residential developments in town have been small, over the last ten years averaging two subdivisions a year of roughly two to three lots each.

The impact of future subdivisions and infrastructure expansions on existing open space will be minimal because both residential and commercial development is already nearing build-out. Additionally, any new subdivisions would have minimal impact on town infrastructure because the roads and sewers already extend to all parts of town. Thus, when maximum build-out is reached, there will not be a great deal of change from the current state. As such, future subdivisions will cause only minor increases in traffic; and the total population will increase by no more than 2,000 people.

Under current zoning, the Burlington Planning Department suggests a residential build-out number of 9,500 households. As of June 2004 there were roughly 8,718 residential households, so approximately 1,000 units remain. Major scheduled and proposed subdivisions include:

Figure 7
Scheduled and Proposed Subdivisions

Project	# of Units	Size	Comments
Kimball Woods	256 units	31 acres	Only two acres of which is developed
Arbor Point	425 units	70 acres	40 acres developed/30 acres open space
Kelly Farms Estates	10 units	8.5 acres	
Sunrise	79 units	4.5 acres	Assisted living complex
Dennis Drive Extension	4 units	3.5 acres	
Shamrock Drive	3 units	3.3 acres	

Based on these numbers, there will be roughly 200 units of currently unplanned development remaining barring zoning changes.

Burlington's commercial space is also close to build-out, which is estimated at 15 million square feet. Currently 13 million square feet of commercial and industrial space (retail, industrial, and office space) exists. Another one million is permitted but not built; and a further one million exists for potential use.

The Executive Office of Environmental Affairs (EOEA) build-out data, which differs from Burlington's projections because it is based on vacant land rather than partially developed land, projects lower build out numbers - 319 additional units for residential and one-half million square feet for commercial development.

There are two zoning bylaws of interest in Burlington that may positively influence long-term open space and recreation planning:

- **Section 8.4.0 of the Town Zoning Bylaw, "Open Space Residential Development"**
  The purpose of this bylaw section is to encourage the preservation of common land for conservation, agriculture, open space and recreational use and to provide increased opportunities for affordable housing. In addition, it is meant to help preserve historical and archeological resources; and protect existing and potential municipal water supply by promoting more sensible siting of buildings through reduced setback and increased buffer requirements. The bylaw can be used for any residential development that meets the minimum requirements, and works through a special permit review and issuance process. This provision was one of five amendments adopted in 1988 in response to the affordable housing crisis of that decade.

  Open space residential zoning is also commonly called "cluster" development, and the terms are frequently used interchangeably. The basic principle of such development is to group new homes onto part of the development parcel, so that the remainder can be preserved as unbuilt open space. This saves a significant amount of land, while still providing an attractive and comfortable living environment. Traditional zoning and subdivision requires homogenous spacing of buildings, and usually results in greater disturbance to the property as it is developed. Clustering buildings:

  - reduces the amount of vegetation to be cut,
  - allows for greater buffers to existing neighborhoods or natural features, and
  - has fewer roads and other utilities to maintain.

  Under Burlington's bylaw, 40% of the land area must be set aside as permanent open space.

The Town of Burlington has seen this principle used only twice – once in a development known as Vine Brook Farms (sometimes referred to as "Cranberry Estates"), which is a cluster of 25 single family dwellings on a 16 acre parcel; and also in a development called Beacon Woods, a 26-unit townhouse condominium project on 12 acres.

The reason for the limited use of this provision is that it requires a ten (10) acre minimum lot size, which today is neither practical nor effective because there simply are too few 10-acre parcels left in the town. The only individual parcels of this size are the Burlington Housing Authority parcel on Adams Street and the Town-owned Wildwood School. There are only three other opportunities where 10 acres can be amassed by consolidation of parcels – the Quinn Perkins gravel pit combined with some Town-owned land on Adams Street, the former Thorstensen gravel pit on Muller Road, and several lots in the Saw Mill area in multiple ownership.

The 1997 Housing Element of the Master Plan and the 2004 Community Development Plan both recommend that the minimum parcel size be reduced for open space developments. This recommendation recognizes that there are few undeveloped 10-acre parcels. The Planning Board has initiated discussion to reduce the minimum land area to 3-acre or 5-acre parcels. As the few remaining parcels come forward for possible development, this zoning tool would give the Planning Board the ability to consider options that are more beneficial to the Town and the environment.

- **Section 12.1.0, "Planned Development District" (PDD)**

  This zoning tool allows for mixed-use projects. Part of the bylaw's objective is to let development standards be tailored in a more site-specific manner, and to allow the town to evaluate impacts in a more comprehensive way. The process requires action by Town Meeting on a concept plan, followed by detailed Planning Board review. There are no pre-determined regulations regarding density or use, rather these are negotiated so that the performance standards can be tailored to the natural features of the property.

  Three recent applications using this bylaw resulted in permanent protection of notable open space:

  - The Wall Street PDD set aside 6.4 acres of endangered species habitat, abutting the existing Little Brook Conservation Area.
  - The Grandview Farm PDD set aside 1.0 acre of open space adjacent to the historic Grandview Farm, also known as Marion Tavern, located adjacent to the Town Common.
  - The Arborpoint PDD set aside 30 acres of open space, encompassing a mixture of existing wetland and upland areas.

In addition to open space goals, these projects also achieved local goals of affordable housing. Grandview Farm also achieved an historic preservation goal, and Arborpoint will provide an important segment of the bicycle path network, fostering the goal of a route connecting to the regional Minuteman Bicycle Trail in the neighboring town of Lexington. The PDD should continue to be used as a tool to achieve “smart growth” initiatives being promoted by the current state administration in addition to locally identified objectives.

4.0 ENVIRONMENTAL INVENTORY AND ANALYSIS

4.1 GEOLOGY, SOILS AND TOPOGRAPHY (Required Map 2 – Soils and Geologic Features Map)

Burlington's total land area is 11.88 square miles, or approximately 7,577 acres. The terrain is undulating, with the lowest elevation at about 100 feet above sea level (the southeast border of town between Cambridge and Winn Streets) and the highest elevation approximately 300 feet above sea level (Greenleaf Mountain).

Geologically, Burlington is located along the Bloody Bluff Fault which separates two very different landmasses called the Nashoba zone (to the west) and the Milford-Dedham zone (to the east). The fault passes up from Connecticut and out to the north shore. The landmass to the east of the fault was driven under the landmass to the west when they collided during the Paleozoic era. Both are believed to be derived from the African plate, which then became attached to the North American continent after colliding.

A large block of land was caught in this collision and crushed, forming the Burlington Mylonite Zone. Movement along the Bloody Bluff fault is from northwest to southeast. The Burlington Mylonite Zone passes through the eastern part of town, and may be up to 5 km wide in places. Roughly 1.5 km of that width is the direct result of the original action along the Bloody Bluff Fault.

Like most of the faults in New England, the Bloody Bluff Fault is no longer located at the edge of two tectonic plates. This greatly decreases the likelihood of a severe earthquake. However, according to a publication by the Massachusetts Emergency Management Agency, some old New England faults may be reactivated by stresses applied to moving plates. Although there is not enough data to tell which faults are active, the publication warns:

> *"The probability of a damaging earthquake occurring somewhere in New England are small by worldwide standards, but they are measurable. The chances that a potentially damaging earthquake (Magnitude 5 or greater [on the Richter Scale]) will occur somewhere in New England in a given year are about 1 in 20."*

Since Burlington's pattern of development is well established, the above-mentioned factors will not play a major role in the future protection of open space. Also, the topography of the land does not affect the wastewater, but at well numbers 9 and 6 there is an organically bound iron in the soil that is very expensive to remove. As such these wells have been shut down.

The attached Generalized Soils Map (see Map 2) shows the locations of Burlington's soil types grouped together by development limitations. In its Middlesex County Massachusetts Interim Soil Survey Report, the Soil Conservation Service rates each soil type according to its limitations for several kinds of development. For the purposes of open space planning, the limitations on dwellings and commercial

buildings seemed the most relevant, and these were used in defining the categories shown on the map. A *slight* limitation indicates that the soil is generally favorable for development; a *moderate* limitation indicates that the soil is unfavorable, but special planning and design can overcome the shortfalls; and a *severe* limitation indicates that there will be a major increase in construction costs, design, or maintenance to develop the area. Knowing that an area's soils severely limit development possibilities may make the area easier to protect, but it is not always a sufficient reason for protection. A table showing soil types by development limitations is shown in Appendix 3.

Most of the prime agricultural soils have already been built on, and the establishment of new farms is unlikely. Prime agricultural soils are rare – with simply a few isolated pockets along the southern borders of the town and one large swathe through the center of town. The only active farm in town is located here, however, houses have been constructed on much of the remaining land.

Additionally, the largest areas with severe development limitations are already either developed or protected - a trend that indicates that remaining unprotected land will be developed if the town continues to grow. As such, delaying the acquisition of land for open space and recreation purposes may erase the possibility of acquiring new land at all. Protected areas with severe limitations include the well fields south of Terrace Hall Avenue, the area north of Mill Pond, and the Little Brook Conservation area north of Mountain Road. Numerous areas with severe limitations have been built on or are in the process of being developed, indicating the shortage of developable lands with more favorable soils.

4.2 LANDSCAPE CHARACTER (Required Map 3 – Unique Features Map)

Burlington's landscape character varies, fluctuating from the highly commercial southern section of town, to the mainly single family residential in the northern part. One of the most important open-space features overall is the Town Common. This is a quiet landscaped park, regularly used for walking and playing games, as well as for more organized activities such as the summer movies and concerts sponsored by the Recreation Department. With the Town Hall, the Police and Fire Departments, and the Post Office located on the Common, and the library a short distance away, the Common is the symbolic center of the Town. In contrast, most of the northern part of the town is residential in character, with a few commercial pockets scattered throughout. These areas primarily consist of single-family homes, with a few multi-family housing developments providing an alternative residential setting.

The combination of residential neighborhoods and ready driving access to stores and transportation arteries has been one of Burlington's strongest drawing points. While many other towns in the area share the residential aspects of Burlington's character, few have its diversity of land use. The Town's recent planning endeavors have attempted to strike a balance between commercial/industrial land use and the community's residential character and quality of life, including the protection of open space.

4.3 WATER RESOURCES (Required Map 4 – Water Resources Map)

4.3.1 Watersheds

Burlington is located at the headwaters of three watersheds: Shawsheen River Basin (western Burlington); Ipswich River Basin (northeastern Burlington); and Mystic River Basin (southeastern Burlington) (see Map 4) - none of which have streams large enough to support active recreation. These three rivers are a shared resource with neighboring towns. For example the Ipswich River links with 21 communities in Northern Massachusetts, and supplies water to 14 of these.[17] However rapid growth of surrounding communities is having a high impact on this water system, including increased pollution and excessive water demands (at times causing the river to run dry in the summertime). The Ipswich River and several of its tributaries are listed as "impaired waters" by the Massachusetts Department of Environmental Protection (DEP), and it was also listed as the third most endangered river in America by American Rivers in 2003.[18] Watershed associations created to protect these watersheds are the Shawsheen River Watershed Association, Ipswich River Watershed Association and Mystic River Watershed Association.

Since 1990, the Town of Burlington Conservation Department has conducted an annual stream cleaning program during the summer months. Many town residents often overlook streams and wetlands until basements begin to flood. As such, these waterways are frequently seen as problem causers rather than environmental assets, particularly by residents living in flood plains or flood prone areas. Thus, since 1990 the Burlington Conservation Department has carried out a summer stream management program designed to address this issue. The program's two main goals are to:

1) Remove obstructions which may alter the streams' flow and exacerbate flooding and
2) Improve stream habitat by clearing the waterways of rubbish.

While these goals are important, the Conservation Department also strives to achieve them with minimal environmental impact. The aim is to strike a balance between reducing the flood risk and sustaining an ecologically fit stream.

4.3.2 Surface Water

Of the 88 acres of deep-water habitats in Burlington (excluding linear streams), the Mill Pond Reservoir accounts for slightly less than three-quarters. Ponds (including vernal pools), lakes and streams make up much of the remaining 28% of water bodies. While many small ponds in Burlington may be vernal pools, only eight have been certified as such in town. There is no state law protecting vernal pools unless they are both certified and located near or within a resource area protected by The Wetlands Protection Act. Since they are an important and

[17] Ipswich River Watershed Association website http://www.ipswichriver.org/river.html.
[18] American Rivers (2003) America's Most Endangered Rivers of 2003, accessed at http://pa.lwv.org/wren/library_PDF/MostEndangeredRivers2003.pdf in November 2004.

threatened habitat for a number of endangered species, the Town plans to boost efforts toward vernal pool identification and certification, and to increase their protection under the local wetland bylaw.

The largest body of water in town is the Mill Pond reservoir, which was constructed through the use of dams. The watershed for the reservoir is unusual because in addition to draining off adjacent land, water is pumped into the reservoir from the Shawsheen River located five miles away. The Mill Pond Reservoir is also one source of Burlington's drinking water. For additional information on the reservoirs contribution to the water supply see Section 3.4.2.

None of the non-reservoir water bodies in town are large enough to support active recreation such as boating or swimming. The reservoir only has unpaved walking trails for recreational activity, as the Town is wary for it to become a recreational area because it is a water supply. Water-related recreation in Burlington is limited to nature watching and hiking near water, with some fishing.

4.3.3 Aquifer Recharge Area

Burlington Water and Sewer Division maintains and operates ten (10) public water supply sources located within the Shawsheen River basin. The watershed area for the Shawsheen, which is diverted to the Mill Pond Reservoir, is located in the towns of Bedford, Billerica, Burlington, Concord, Lexington, and Lincoln.[19]

Figure 8
Description of the Water Sources (Zone II # 279)

Well/Source Name	Source ID#	Susceptibility
Groundwater Sources		
Terrace Hall Well #1	3048000-01G	High
Terrace Hall Well #2	3048000-02G	High
Middlesex Pike Well #3	3048000-05G	High
Middlesex Pike Well #4	3048000-07G	High
Middlesex Pike Well #5	3048000-08G	High
Lexington Well #10	3048000-11G	High
Lexington Well #11	3048000-12G	High
Surface Water Sources		
Shawsheen River	3048000-01S	High
Mill Pond Reservoir	3048000-02S	Moderate
Emergency Source		
Wyman #8 Tubular Wells		

Source: Mass DEP SWAP Report

[19] Massachusetts Department of Environmental Protection (2003) Source Water Assessment and Protection (SWAP) Report for Burlington Water and Sewer Division, released 6/30/03, accessed at http://www.mass.gov/dep/ on 11/23/04

"Approximately 80% of the Zone II and combined watersheds consist of residential areas, of which a portion is served by private septic systems, with the remainder being served by municipal sewering. If managed improperly, activities associated with residential areas can contribute to drinking water contamination from sources such as: septic systems, household hazardous materials, heating oil storage; and stormwater."[20]

In 1978, well numbers 3, 4, 5, and 7 were shut down because of contamination. In 1986 the Town received funding to build a temporary treatment plant to treat well numbers 3, 4, and 5. Well number 7 is still closed due to Trichloroethylene (TCE) contamination, and well numbers 6 and 9 are also closed because of the presence of high levels of iron and manganese, and removal of these natural compounds to achieve drinking water standards is not financially feasible. A permanent water treatment plant was approved in 1996, which treats wells 1-5 and new wells 10 and 11.

4.3.4 Flood Hazard Area

Significant portions of Burlington are located in 100-year flood hazard areas, denoted as "Zone A" on the Federal Emergency Management Agency's (FEMA) Q3 Flood Zones Map. Zone A relates to those parcels located in the 100-year flood plain that have a 1-in-100 chance in any given year of flooding.[21]

Specific areas in Town that fall into this category and have the most flooding potential include areas adjacent to Sawmill Brook from the Wilmington town line to Lucaya Circle; and most areas along the entirety of Longmeadow Brook, Sandy Brook and Vine Brook.

Related zoning Bylaws in Town include:

- The 100-year Floodplain District (Article 8.1.0 of the Zoning Bylaws), which is an overlay zoning district meant to prevent development in the floodplain and reduce flood damage. Either the Planning Board or the Building Inspector enforces the provisions of this bylaw.
- The Aquifer and Water Resources Districts (Article 8.3.0 of the Zoning Bylaws) are also overlay districts, but are somewhat more restrictive than the Flood Plain District. These land areas provide recharge to the Town's public water supply well. A number of activities are directly prohibited, while others may require a special permit from the Planning Board.

[20] Massachusetts Department of Environmental Protection (2003) Source Water Assessment and Protection (SWAP) Report for Burlington Water and Sewer Division, released 6/30/03, accessed at http://www.mass.gov/dep/ on 11/23/04.
[21] Federal Emergency Management Agency (FEMA) (2005) U.S. Flood Hazard Areas Flood Data Map for Burlington, Massachusetts, accessed at http://mapserver2.esri.com/cgi-bin/hazard.adol?z=&cgd=&c=burlington&st=Massachusetts&cd=g&s=0 in February 2005.

- ✍ The Wetlands District (Article 8.2.0 of the Zoning Bylaws) is also meant to prohibit or restrict certain land uses of wetland areas. It provides criteria for the Planning Board to consider separately from the jurisdiction the Conservation Commission has under Massachusetts General Law Chapter 131 Section 40 (Wetlands Protection Act). In order to build within this district, a special permit must be obtained from the Planning Board. However, zoned wetlands do not encompass all of the land areas that the Conservation Commission may determine to be wetlands.

4.3.5 Wetlands

Roughly one-tenth of Burlington is composed of wetlands and deep water-bodies (see Map 4). Of the 711 acres identified thus far, there are seven common types:

Burlington Wetland Types	Percentage
Deciduous wooded swamp	67%
Mixed types or complexes of wetland and water body	18%
Marshes	10%
Deciduous shrub wetlands	3%
Evergreen wooded swamps	1%
Wet meadows	1%

Atlantic white cedar swamps also occur in Burlington, but are very uncommon. From these figures, it can be suggested that the evergreen wooded swamps, wet meadows and Atlantic white cedar swamps are most rare locally, and should receive special consideration on protection issues.

Burlington's Wetland Bylaw (Article XIV, Section 1.0) aims to protect the wetlands, water resources, and adjoining land areas in the Town of Burlington by controlling activities deemed by the Conservation Commission as likely to have a significant or cumulative effect upon those resource areas. While the Wetland Bylaw mimics the Massachusetts Wetlands Protection Act in its protection of freshwater wetlands, rivers, streams, ponds, and lakes, as well as any land under those waters or bordering on them, from alteration; the Bylaw also gives the Commission jurisdiction to protect an additional resource area, Land Subject to Flooding or Inundation.

Land Subject to Flooding or Inundation is an area of low-lying land that floods or serves as a ponding area for water. It is defined by the maximum extent of standing water in the area following a 100-year storm event. In contrast to the state Wetlands Protection Act, which requires that a wetland be hydrologically connected to either a creek, river, stream, pond or lake, or if it is isolated, that it be large enough to confine at least a ¼ acre-feet of water to an average depth of six inches, Isolated Land Subject to Flooding or Inundation need only be 500 square feet in order to be jurisdictional.

The protection of Burlington's water resources is a prime concern of the community, prompting the creation of such bylaws designed to further protect water quality and prevent flooding, while also safeguarding certain aspects of Burlington's natural environment. Many open space acquisitions in the past have been related to water quality and wetlands protection, and these concerns should continue to be important factors.

The Wetlands Bylaw provides the Conservation Commission with two valuable enforcement tools that are not afforded to it by the Wetlands Protection Act: 1) the ability to hold performance bonds, and 2) the ability to impose fines.

Performance bonds are a proactive way for the Conservation Commission to encourage compliance with a permit. When issuing a permit for construction near a wetland, the Commission may require that an applicant submit a sum of money, to be held by the Commission, as a financial surety that conditions outlined in the permit will be adhered to. Upon the completion of the project, if no violations have occurred, the bond is returned to the applicant in full. If, however, the applicant did not comply with all of the standards in the permit, a portion, or all, of the bond will be forfeited.

Section 1.9 of the Bylaw gives the Commission the authority to fine anyone who violates any of the provisions of the Bylaw, or permit issued by the Commission. Fines may be issued up to $300 per day per violation.

In light of the recent relaxation of the implementing regulations of the state Wetlands Protection Act, the Conservation Commission is currently in the process of updating the Wetlands Protection Bylaw and promulgating regulations in order to maintain protection of public and private water supply, provide flood control, control erosion and sedimentation, prevent storm damage, and protect fisheries and wildlife habitat.

4.4 VEGETATION

Vegetation in Burlington is typical of many Massachusetts towns. A list of vegetation known to exist in Town is included in the Appendix 5. Although this list does not include species richness information, it provides a base for understanding the Town's vegetation. There are varying ecosystems which support the species mentioned in Appendix 5. In light of the fact that many vegetation types in Burlington are scarce due to abundant development, the large parcels of woodland, the few fields, and the rare wetland types are all ecosystems that should be seriously considered for protection through the future acquisition of open space.

4.4.1. Forests

Most of the forests in Burlington are second-growth forests with immature trees and a full undergrowth. Such habitats provide shelter and food for wildlife, and the vegetation variety provides valuable opportunities for nature study. There are a small amount of mature forests in town, which are excellent places for hiking trails because of the clear understory. Places with this kind of mature vegetation include Little Brook Conservation Area and some stands around the Reservoir.

The largest protected woodland area in Town is the conservation land surrounding Mill Pond, which totals over 140 acres. Next in size are the 36 and 27-acre conservation areas at Little Brook and Sawmill Brook, respectively. Land owned by the City of Boston, which is somewhat protected by the terms of the will which gifted it to the City, contains woodlands and open fields. The largest unprotected woodland in town is the 270-acre Landlocked Parcel located west of Route 3.

4.4.2. Fields

There are very few fields left in Burlington that are not used for active recreation. Most of the land which was once farmed has either become forested or been developed. The one remaining active farm in Town, located at 82 Lexington Street, is a 7.09 acre parcel involved in the Chapter 61A program with the state. The largest remaining field is on the City of Boston parcel in the south part of Burlington, again increasing the property's value to the Town. In addition to this field, which is primarily used by model airplane enthusiasts, there are also a few smaller fields that have overgrown naturally.

As field habitats continue to diminish, animals such as bluebirds that rely on these areas are finding it harder to locate essential habitat. Retaining both fields and forests in town will provide for greater biodiversity, particularly when they abut each other allowing animals to use the forest for cover while utilizing the fields as a food source. Fields can also provide scenic views and serve as a reminder of the agriculture that once was commonplace in Burlington. Also, utility line corridors are becoming the modern day equivalent of fields, and while these are neither scenic nor agricultural, they do provide useful habitat.

4.4.3. Wetlands

Burlington's wetlands are described in greater detail in Section 4.3.5. of this plan. Several kinds of wetlands are uncommon in Burlington and may deserve increased protection because of their rarity; including evergreen wooded swamps, wet meadows, and Atlantic white cedar swamps.

4.4.4. Endangered Species

Until 1993, the only endangered plant species in Burlington on file with the Natural Heritage and Endangered Species Program was from 1906 – the Lion's Foot (*Prenanthes serpentaria*), a

member of the sunflower family.[22] In 1993 another endangered vascular plant, the Variable Sedge (Carex polymorpha) was observed in Burlington. This population is one of only two known to exist in Massachusetts, thus for its protection specific information regarding the plant's location is confidential. Because of its rarity, it is also currently a candidate for the Federal endangered species list.

4.5 FISHERIES AND WILDLIFE

Although much of Burlington has been developed, there is still a variety of fish and wildlife species found in the town. See Appendix 6 for a preliminary list of Burlington wildlife. This list was created by combining information from various sources including the 1996 Open Space and Recreation Plan, professional reports of wildlife sightings, and sightings reported by residents and Town staff.

Three native wildlife species found on this inventory are also on the Massachusetts List of Threatened, Endangered and Special Concern Species.[23] They are:

Taxonomic Group	Scientific Name	Common Name	State Rank	Most Recent Observation
Fish	Notropis bifrenatus	Bridle Shiner	Special Concern	1994
Reptile	Clemmys guttata	Spotted Turtle	Special Concern	1988
Reptile	Terrapene carolina	Eastern Box Turtle	Special Concern	1998

4.5.2. Fish and Fishing

Fishing has been allowed at the Mill Pond Reservoir for many years, and the Recreation Department stocks the water body with trout each spring. Fishing permits are required and may be purchased by Burlington residents only. Each spring the town sponsors a Kids' Fishing Derby, and also provides fishing equipment for rent at a nominal fee. The Reservoir is man-made and thus originally had no biological community. In an attempt to develop a biological community and stabilize the lake, it was stocked with 2000-3000 largemouth bass, and as mentioned is stocked periodically with a variety of trout species including brown trout and rainbow trout. Other species found there include sunfish, bluegills, pickerel, eels and perch.

Butterfield Pond, located on the Burlington-Lexington border, also contains some of the species found in the Reservoir. Additional areas throughout town where fish may be found include Vine Brook, the ponds at the Arborpoint development on Wheeler Road, and a Butterfield Pond at Quinn Sand and Gravel off of the Middlesex Turnpike.

[22] Base solely on the 100 year old herbarium specimen, as a Lion's Foot sighting has not been reported since.
[23] Massachusetts Division of Fisheries and Wildlife (2002) Official State Rare Species List, Natural Heritage and Endangered Species Program, website accessed at www.mass.gov/dfwele/dfw/nhesp/nhrarelinks.htm in February 2005.

4.5.3. Wildlife and their Habitats

There is a wide variety of wildlife found in Burlington, although most of their habitat has been provided by accident and is neither protected nor managed for wildlife. As Burlington becomes increasingly developed, care must be given to protecting and managing diverse habitat to support the wildlife population.

Prime habitat areas located in Town include three large forested areas (the Mill Pond Conservation Area, the Boston Property, and the Landlocked Parcel). These consist of mostly secondary growth forest, although some mature stands are scattered throughout town. The Boston Property also contains the largest field in town. Although limited in amount, this combination of habitat types improves the species richness in Town.

To add to this, Burlington has numerous small streams and wetlands. The largest protected wetland area is the well-fields around Vine Brook in the southwestern portion of town. The only access to this area is a trestle bridge, open to Town workers with limited public access, providing particularly good habitat for those species that do not adapt well to human interaction.

Burlington is also home to many vernal pools, a unique wetland type that does not contain water throughout the year, and therefore contains no fish. Certain species, including the Wood Frog, Spotted Salamander and Fairy Shrimp, depend on vernal pools for reproduction and survival. It is a goal of the Town to work towards identifying and certifying more vernal pools in an effort to build knowledge and improve natural resources protection measures.

Roads and development have fragmented many of the habitats mentioned above. For example, although Mill Pond Conservation Area and the Sawmill Brook Conservation are within minutes of each other, Mill Street and the houses on either side of it separate the two properties. Most of the open space in Town is bounded by heavily traveled roads that effectively prevent movement between these lands. There are no protected wildlife corridors, although a few unprotected ones exist. The most extensive of these are the corridors owned or restricted by NStar for their utility lines. While these lines are not managed for wildlife, they still provide cover and food for numerous species as well as a somewhat natural connection between different habitat areas. The fact that vegetation in the corridors is kept immature through frequent cutting helps some species but makes no provisions for others. Acquiring and permanently protecting corridors for wildlife habitat purposes in strategic locations throughout town is an important goal. These corridors could double as hiking or biking paths, thereby increasing passive recreation opportunities in town.

Diminishing habitat for local wildlife has most likely led to an increase in human-wildlife interactions in previously uncommon areas (i.e. residential areas). Wild turkeys, coyotes, red foxes, and whitetail deer are more common in residential neighborhoods. These more adaptable animals are

learning to survive in suburban neighborhoods (i.e. using trash bins as a food source), a concern as these behaviors will be taught to future offspring. See Section 4.7 for more information.

Burlington's Wildlife Inventory can be found in Appendix 5.

4.6 SCENIC RESOURCES AND UNIQUE ENVIRONMENTS

As mentioned, the southern portion of town closest to Route 128 and Mall Road has been devoted primarily to commercial use. A unique environment located here that symbolizes Burlington in many non-resident minds is the Burlington Mall. This upscale shopping center is one of the largest in the area with 175 shops and a 775-seat food court. Located directly across the street from the mall is a ten-screen AMC movie theater, and a large two-story Barnes and Nobles bookstore. Within a quarter mile of the mall in most directions you can find strip malls, fast food and dine-in restaurants, and brand name retail chains – all of which draws numerous residents and visitors. Large companies also contribute to the character of the town including the Sun Microsystems headquarters and the Lahey Clinic Medical Center.

Another resource that contributes to the community's character is the Burlington Players, Inc. Located at Overlook Park, this theater facility offers four performances a year to adult audiences, and houses the Winmere Family Theater, and the Children's Theater Workshop. There are also many places in Burlington that are integral to the Town for their scenic values, including historical sites and conservation areas. The most significant conservation areas, which are described in more detail in Section 5.2.2, are Sawmill Brook, Little Brook, Mill Pond, and Vine Brook. Below are descriptions of additional areas that carry significance because of the impressions they create and perpetuate.[24] They help us maintain Burlington's character and allow residents to appreciate its finest aspects.

City of Boston Land

In the southern part of Burlington the City of Boston owns 150 acres of land, which includes the largest field in town. Views from the hills around this field are noteworthy. Ideally, any future use of the land would capitalize on, and perhaps even improve, these scenic qualities.

Landlocked Parcel

Located to the southwest of Route 3, this 270-acre parcel is the largest, unprotected natural area in town. It contains a number of wetlands, provides excellent wildlife habitat, and is crossed with hiking trails that connect to trails in Lexington and Bedford. Because open space in Burlington is quickly dwindling, and because of this parcel's highly visible location, the Landlocked Parcel's future is a contentious issue. Its use has the potential to greatly impact Burlington's habitability and the public's perception of the town.

[24] There are no areas of critical environmental concern (acec) within Burlington's borders.

Marion Tavern at Grandview Farm

Marion Tavern at Grandview Farm is one of Burlington's principal architectural landmarks, and has special significance as the Town's only surviving 19th century connected-farm complex. Conceived around 1840, the Marion building originally served as a stage tavern and halfway house to the coach route which passed through town. Its highly-visible location contributes greatly to the Burlington's character and is the historical cornerstone of the Town Common.

In 1999, the owners of Marion Tavern initiated a process to develop an apartment complex at the site. Town citizens began the "Save the Farm" movement to counteract this, and after a lengthy and complicated negotiation process, the Town settled a land swap with involved parties. As a result, the Town acquired the six acres of the Grandview property along with its associated buildings.

The Burlington Historical Museum

Formerly the Center School, this building was erected in 1855 and used as a grammar school until 1897. It then served as a public library until 1969. The building was recently restored and contains many artifacts of historical significance. Murals painted by local artists Donald Gorvette and Jeffrey Weaver, which depict local history, are particularly noteworthy.

Old Burying Ground

Benjamin Johnson gave this tract of land to the Second Parish in 1769 for use as a burying ground. At that time the land had already been used for this purpose for 40 years or more. It contains some of the oldest gravestones in the area, some dating back to 1736.

Meeting House of the Second Parish in Woburn

This building, now the Church of Christ Congregational, was erected in 1732 and is included on the National Register of Historic Places.

The West School

Built in 1794, this schoolhouse is one of a group of five that served the Town of Burlington until the Union School was built in 1898. It was originally located in what is now Simonds Park, and in 1839 was moved to its present location. In the 1990s it was completely restored through the efforts of the Burlington Historical Society.

Francis Wyman House

One of the three oldest houses in Massachusetts, the Francis Wyman House has been designated a National Landmark and is the oldest house standing in Burlington. It was built in 1666 to serve as a garrison house to which farmers in the vicinity could flee in case of Indian attacks. The house has been restored by the Francis Wyman Association; and is also listed on the National Register of Historic Places.

Archeological Sites

In addition to the buildings listed above, the Massachusetts Historical Commission (MHC) has identified one known area of prehistoric archaeological resources. In order to protect the area from possible vandalism or theft, its location is protected from disclosure.

It should be noted that a complete Town survey of potential archeological sites has not been carried out. The Massachusetts Historical Commission specifically states that their information is incomplete. If the Town becomes aware of additional historical sites or has a concern about a site-specific development proposal, the Massachusetts Historical Commission should be contacted.

A complete showing of areas which contribute to the community's character can be found on Map 3 - Unique Features Map.

4.7 ENVIRONMENTAL CHALLENGES

The environmental problems encountered in Burlington reflect its highly developed status. There are four chief environmental issues that could impact open space and recreation in Burlington: hazardous waste, chronic flooding, over-development, and non-point source pollution.

Hazardous Waste

Within Burlington there are 72 properties where releases of oil and/or hazardous materials have occurred and assessment and clean-up is ongoing. These properties are considered open DEP disposal sites. Of those 72 open sites, 11 have achieved temporary cleanup status and have no substantial hazards. Of the remaining open sites, 8 have development or redevelopment planned for 2005. A further 106 disposal sites are considered closed (i.e. a permanent solution has been achieved to control or mitigate contamination and there is no further significant risk to human health or the environment); or have been incorporated into open DEP site files and are being mitigated along with another release at the property or nearby source property. The number of open DEP sites is relatively static because as older spills are cleaned up, newer releases occur or are discovered.

Hazardous waste has already impacted the public water supply in Burlington. Wells 1, 3, 4, 5 and 7 have all been impacted. Currently water from all of Burlington's operational drinking water wells (wells 1, 2, 3, 4, 5, 10 and 11) is treated through air stripping towers which removes volatile organic compounds to a level of "none detected" prior to distribution throughout the town. While some older town wells (the former Meadowvale main station wells and well 7) were taken off-line due to mechanical failure of the well systems, wells 6 and 9 were taken off-line due to impact by natural contaminants. Salt, both natural and from former road use, was a common cause of contamination in the past.

Private residential underground storage tanks are abundant in Burlington and are not regulated by the federal, state or local government. As a result, these can easily be neglected until they begin to leak and

affect the soil and/or groundwater in the area. The potential impact of leaking residential underground storage tanks is significant given the fact that there are approximately thirty private wells in town.

While acquiring and managing open space cannot remove the threat of hazardous waste, this can be mitigated by protecting wetlands that help to filter and clean polluted water. Wetlands located around drinking water sources would be especially valuable. An educational program about the hazards associated with underground storage tanks may also be useful.

Chronic Flooding

Drainage in Burlington is complex because the town is at the top of three watersheds. Vine Brook in western Burlington is in the Shawsheen River Basin. The Ipswich River and Sawmill Brook in northeastern Burlington are in the Ipswich River Basin; and Little Brook in southeastern Burlington is in the Mystic River Basin (see Map 4). Flooding is a persistent problem, as 7.5% of the Town is in 100-year flood zones along the watershed-associated streams. Despite their floodplain locales, development was not deterred along streams in these areas, and many nearby residences' cellars and lawns periodically flood during heavy rain events or exceptionally wet seasons, causing concern and frustration. The Town works to lessen flooding by removing obstructions and debris buildup each summer as part of the Stream Cleaning program. However, this can only alleviate the flooding. To further address this issue, the Town hopes to acquire stream-abutting land and wetlands whenever possible to add to their open space network.

Over-development

Burlington is a town nearly at build-out, and the ramifications from such development must be taken into consideration. It is especially important to consider the *type* of development when speaking to over-development issues. Beyond residential areas, the Town contains many industries: a large mall, hospital, various strip malls, and many other retail stores, corporations, and restaurants. These industries bring with them environmental concerns such as trash and litter; noise and light pollution; stormwater run-off; and congestion and air quality issues related to high traffic volumes.

However, the over-development issue central to this report is the diminishing open space available in Burlington. This presents quality of life issues for the residents, as well as the local wildlife. Wild animals are being forced from their natural habitats because of habitat loss and fragmentation. For example the coyote, a shy animal that typically avoids contact with people, is being forced into residential neighborhoods. Local biodiversity is threatened by generalization as well, as many species cannot adapt to human environments. For example, the coyotes' presence has greatly risen over the past decade. These animals are highly adaptable, and can find the food, water, and shelter needed for survival in suburban environments. Thus their populations are seen to thrive while many others become extinct.[25] To offset such effects, the few remaining opportunities to protect natural areas in Burlington must be seized.

[25] Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA), (2001), Living with Wildlife: About Human Wildlife Conflict, website accessed at http://www.livingwithwildlife.org/aboutus/conflicts.html on February 10, 2004.

Nonpoint Source Pollution

Pollution from nonpoint sources such as runoff contaminated by pesticide use, construction and auto maintenance is difficult to trace or control and is therefore becoming an increasingly large problem. An inventory done by the Massachusetts Division of Water Pollution Control found that approximately 70% of rivers and coastal waters surveyed and 100% of lakes were affected by nonpoint source pollution. Since Burlington's streams enter rivers that provide drinking water to other towns, pollution from nonpoint sources could have an especially serious impact.

Nonpoint source pollution is controlled by methods called "Best Management Practices" (BMP). Examples would be installing detention/infiltration basins, reducing applications of pesticides and herbicides and properly disposing of used motor oil. Because these methods are often applied on a small-scale basis, they are difficult to enforce and are only effective upon large-scale adoption by the public. BMPs have been required for new developments in town over the past several years including the installation of stormwater filtration and treatment systems and installation of stormwater detention basins to allow fine particulate materials to settle out of stormwater and prevent the deposition of silt in water bodies in town.

By involving wetlands and floodplain areas, open space can help to mitigate the effects of non-point source pollution. This means that wetlands and land buffering streams would be especially useful acquisitions.

5.0 INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

(Required Map 5 – Inventory of Open Space)

Broadly defined, *open space* is public and privately owned undeveloped lands which are important resources for a variety of reasons, including conservation, recreation, agricultural or simply because of their scenic qualities and their contribution to the overall character of the town. Such space may contain active or passive recreation, forests, farmland, old fields, floodplains, wetlands, scenic vistas, or historical sites. These areas are invaluable and irreplaceable resources which bring environmental, social and economic benefits to the community. As such, it is critical to protect and sustainably manage what remains for current and future generations.

There are varying levels of protection, from permanent to temporary, for open space. Property is considered *legally protected open space* when it falls under Article 97 of the Articles of Amendment of the Massachusetts State Constitution. Lands protected by Article 97 typically are those owned by the Conservation Commission, Recreation Commission, Water Department or state and federal conservation agencies. More specifically it is those lands that have been designated for natural resource purposes, including conservation, forest, water and agriculture. As the highest level of open space protection available, the State has made it is difficult to convert Article 97 land for other use(s). To do so involves multiple time-consuming actions, including the requirement that the matter pass the Massachusetts legislature by a 2/3 vote.

Private lands can also be permanently protected if there is a deed restriction by a Conservation Restriction, Agricultural Preservation Restriction, Historic Restriction or Wetlands Restriction. Lands purchased for general municipal purposes, and in many cases school grounds, are not protected by Article 97.

Detailed below is information on Burlington's open space parcels, which includes private parcels of recreation or conservation interest; and public and non-profit parcels such as public recreation resources, public school areas, and public conservation resources. Several of these areas are already protected open space, while others are being considered for future acquisition or other protection measures.[26]

5.1 PRIVATE PARCELS

5.1.1 Recreational Interest

- ✍ The Burlington Swim and Tennis Club

  Located on Center Street a short distance from the Human Services Center, the Burlington Swim and Tennis Club is a non-profit corporation that operates a swimming

[26] Executive Office of Environmental Affairs, Division of Conservation Services (2001) Open Space Planner's Workbook, website accessed in November 2004 at http://www.mass.gov/envir/dcs/pdf/OpenSpacePlanners.pdf

pool, three tennis courts, and a function building. The Town may wish to consider the possibility of purchasing or leasing this facility if the opportunity arises.

✍ The Mitre Corporation Fields

Located at the intersection of Middlesex Turnpike and Bedford Street, Mitre owns three softball fields, which are used by the Town for Recreation Department softball programs, Little League baseball games, and corporate softball leagues. The Corporation's agreement with the Town stipulates that the field be maintained by the Recreation Department. Because of the great demand for athletic fields in Burlington, the Mitre fields provide the Town an opportunity to serve groups that could not otherwise be accommodated.

5.1.2 Conservation Interest

✍ Sawmill Road Parcels

There are six (6) privately owned parcels adjacent to Sawmill Road that are of conservation interest in terms of their relation to the Sawmill Conservation area. The largest is 2.1 acres, and their combined area is 9.475 acres.

5.2 PUBLIC AND NONPROFIT PARCELS

5.2.1. Public Recreation Resources

The lands designated as recreation lands in the accompanying chart are owned or managed by the Town of Burlington and maintained by the Recreation Commission (also see Appendix 6; and Map 5 – Inventory of Open Space). Each of the sites listed has active recreation facilities on it, which are briefly described below.

Name & Location	Size	Facilities	Current Use	Description
Recreation Resources				
Simonds Park (Bedford Street)	22 acres	1 lighted Little League field, 1 lighted Babe Ruth field, 2 lighted basketball courts, 1 wading pool, 1 program building, playground equipment, picnic area (tables + grills), accessible restrooms, 1 batting cage, refreshment stand, skate park, street hockey court	Little League baseball, Babe Ruth baseball, high school baseball, girls softball, tennis lessons, basketball leagues, day camps, family outings, picnicking, skateboarding, street hockey	A highly developed park in the center of Burlington, Simonds Park is the Town's largest and most-used recreation facility. It is used by people of all ages for a wide variety of structured and informal recreation activities.
Overlook Park (Edgemere Avenue)	20 acres	Playground equipment, park playhouse, maintenance garage, 1 basketball court, picnic area	Pick-up basketball, family outings, picnicking, adult community theater, children's theater programs, neighborhood program	This former U.S. Army Nike missile site is now used by the Town as a public park, headquarters for the Recreation Department's maintenance division, and as the home of the Burlington Players, a non-profit community theater organization.

Rahanis Park (Mill Street and Patriot Road)	15 acres	6 tennis courts, 2 softball fields, 1 basketball court, 2 multi-purpose fields, playground equipment, 1 sand volleyball court, picnic area with tables	Softball, youth soccer, tennis lessons, high school tennis, family outings, picnicking, summer playground program, pick-up basketball	Large-scale improvements over the past few years have made Rahanis Park an excellent facility which draws Town-wide use for a great number of programs and activities. The development of this park has helped to take some of the pressure off of Simonds Park, Burlington's only other park that attracts people from throughout the community. Recent improvements have included the construction of soccer fields, renovation of play areas, and landscaping improvements throughout the park.
Human Services Center Fields (Center Street)	10 acres	1 major baseball field, 1 softball field, 1 multi-purpose field, playground equipment	High school baseball, soccer, and lacrosse; youth soccer, Babe Ruth baseball, youth softball	These fields are located on Center Street behind the Human Services Center. Burlington High School uses the facilities for freshman baseball; the Burlington Baseball Association uses them frequently in the spring and summer; and lacrosse and girls field hockey are also played here.
TRW Park (Mall Road and Stony Brook Road)	7 acres	2 baseball fields, playground equipment, 1 multipurpose field, picnic area with tables	Little League baseball, adult softball, youth soccer, family outings, picnicking	Located on Mall Road, this park is used primarily for Little League baseball, youth soccer, and as a neighborhood playground. One ball field, the playground, and the parking lot have been refurbished. A second baseball field has been constructed.
Town Common (Cambridge Street and Center Street)	7 acres	Band Stand Picnic Tables	Summer movie series Large Town events including Truck Day, Pride Day, and Dare Day	The Town common is centrally located on Cambridge Street, and is surrounded by historic buildings and municipal facilities including the Town Hall, Fire Department, Police Department, and Post Office. Primary uses include Town events, and a picnic and relaxation area in nice weather.
Regan Park (County Road to Sumpter Avenue)	6 acres	1 Little League field, 1 basketball court, playground equipment, activity shelter, picnic area with tables	Little League baseball, pick-up basketball, family outings, picnicking, summer playground programs	This is primarily a neighborhood park, which attracts Town-wide use only for Little League baseball games. New playground equipment has been installed; basketball courts refurbished; and landscaping improvements have been made.
Veterans Parks (Wilmington Road)	5.5 acres	1 softball field, ½ basketball court, activity shelter, playground equipment, picnic area with tables	Baseball, softball, pick-up basketball, family outings, picnicking	This is primarily a neighborhood park, which has been greatly improved over the past few years. The ball field and play area have been refurbished; a half basketball court has been constructed; a parking area has been added; and the landscaping has been improved.

Mitre Corporation Fields (Bedford Street and Middlesex Turnpike)	5 acres	3 softball fields	Corporate softball, Recreation Department softball, Little League baseball	These softball fields are owned by the MITRE Corporation and, by agreement, managed by the Town. The three fields are extremely valuable in serving the needs of Recreation Department softball leagues, corporate softball groups, and Little League baseball.
Marvin Field (South Bedford Street)	4.5 acres	Lighted softball field	Adult softball leagues, high school softball, corporate softball	This is Burlington's premier softball field, used for Burlington High School varsity softball and the Recreation Department's adult softball leagues. The field has been greatly improved in the past three years with new fencing, a new backstop, a new irrigation system, construction of an off-street parking area, and installation of a new lighting system.
Wildmere Playground (Wildmere Avenue)	3 acres	Basketball court, playground equipment, picnic area with tables	Pick-up basketball, family outings, picnicking, play activities for young children, summer playground program.	Located in the Winnmere section of Burlington, Wildmere playground is a neighborhood play facility used almost exclusively by children in the immediate area.
Rotary Fields (South Bedford Street)	1.7 acres	Softball field	Adult softball leagues, high school softball, corporate softball	Purchased from the Federal Government and developed with the help of the Burlington Rotary Club, this field is used for high school softball, Recreation Department softball leagues, and corporate softball. Recent improvements include installation of outfield fencing, construction of a parking area, refurbishment of infield and outfield playing surfaces, and installation of an irrigation system.
Pathwood Tot Lot (Pathwood Avenue)	.5 acres	Playground equipment, ½ basketball court, picnic area with tables	Pick-up basketball, play activities for young children, picnicking	This is Burlington's smallest recreation facility, and is primarily used by young neighborhood children. The Tot Lot has recently been refurbished, with new playground equipment installed and a half basketball court constructed.

5.2.2. Public Conservation Resources

All conservation areas are open to the public, although some do not have access points to date.

Name	Size	Description
Conservation Resources		
Mill Pond Conservation Area	140 acres	Mill Pond Conservation area consists of land surrounding the town reservoir – and forms the largest conservation area in Burlington. Numerous marked and unmarked trails run throughout, which are used by joggers, walkers, and mountain bikers. This land was originally acquired to protect the reservoir watershed, which remains its primary purpose. However, because of its size and that it surrounds the only large open body of water in Burlington, it is the most well-known and used conservation area in town. It also has potential for wheelchair accessibility as the trail along the north side of the reservoir is fairly flat and wide.
Little Brook Conservation Area	36 acres	With 36 acres, this is the second largest conservation area in Burlington. Much of this area is steep with low-lying wetlands in its western portion. There is also beautiful upland area in the central and eastern section of the site. Many trails are open to the public here, but because it is less well known than the Mill Pond area, this site receives less use, and in turn less abuse.
Sawmill Brook Conservation Area	27 acres	Sawmill Brook Conservation Area is the third largest in Burlington, and is comprised of mostly dry woodland, wetlands and meadows. Environmental benefits for visitors include Sawmill Brook, which forms the southern border for most of the parcel, and birds and other wildlife. There are also several trails through the property, which classes from the adjacent Fox Hill Elementary School use to access the land for educational purposes. Also, the historic Clapp's Mill Site has 4 acres directly adjacent to this Area that contains the remnants of an historic mill and dam. A Tennessee Gas pipeline easement runs through this property, but it is clearly visible as a mowed area about 60-feet wide
Vine Brook Conservation Area	22 acres	The Vine Brook well field near the confluence of Vine Brook and Sandy Brook contains some of the most beautiful natural areas in Burlington. Because of abuse that occurred here in the past, this property was closed to the public. However, in mid-1990 the town needed to gain access to a well (well #10) located in this wetland area. In 1997, after consultation with the Burlington Conservation Commission, an environmentally friendly wooden trestle bridge was constructed to provide Town entry. Although the area is still not open to the general public because it is a water supply, some groups who obtain special permission, such as educational groups, can use the bridge to view and enjoy the land. (see Section 4.5.3).

Marion Road Conservation Area	15 acres	The Marion Road Conservation Area is the most recent addition to the Town's Open Space holdings. It has several acres of uplands, and an extensive wetland system that provides significant flood storage and water quality enhancement. There is excellent diversity of native vegetation throughout the parcel (including a dozen large shagbark hickory trees – a rare species in Burlington) that provide valuable wildlife habitat. Hawks, owls, pheasants, foxes, woodchucks, and deer have all been spotted here. It also contains a well-used trail system and was the site of Burlington's most recent town sponsored community nature walk.
Pine Glen Conservation Area	6 acres	A small parcel of land traversed by several brooks, the Pine Glen Conservation Area serves mainly to provide wildlife habitat and protect water quality. The Conservation Commission recently blazed a loop trail with stream crossings. This project was sponsored by the Department of Environmental Management Greenways Grant Program and allows for the adjacent Pine Glen School to use the land for educational purposes.
Sandy Brook Conservation Area	5 acres	This conservation area is primarily wooded swamp along Sandy Brook. Because of the thick underbrush and wet ground, the property is not easily used for recreation. Its main functions are to protect water quality and provide flood storage.
Chadwick Conservation Area	3.78 acres	This parcel contains a brook, wetlands and woodlands. Currently there are no marked trails in the Chadwick Conservation area.
Ipswich Conservation Area	3 acres	Consisting primarily of boggy wooded swamp, this parcel also includes a rock peak. The site gets its name from the small stream that is the head of the Ipswich River that passes through a corner of the site. A large conservation area in Wilmington abuts the property, a consideration in all future area management.
Muller Road Conservation Area	3 acres	This area is comprised of dry land donated to the town for conservation purposes. This parcel is primarily used by urban wildlife as it is under high-tension lines and in close proximity to the Middlesex Mall.
Rock Pond Brook Conservation Area	3 acres	Most of this parcel consists of steep uplands, although a brook traverses the back portion of it. Current access to this site is through an unmarked right of way which is difficult to spot and very steep in places. Since this property is located near Marshall Simonds Middle School, a goal is to explore creating easier access and encouraging use of the land by school classes.
Longmeadow Brook Conservation Area	2 acres	The primary purpose of this land is flood control and water quality protection. It includes a variety of vegetation growing along the steep valley around the brook. An abutting parcel of land, owned by the Town, could potentially provide better access to this site than the easement that is the current access point.
Fairfax Conservation Area	>1/8 acre	Although the Fairfax Conservation Area is small, the contribution it makes as a protected habitat corridor for wildlife is immeasurable. This area allows organisms to travel safely between habitats and reduces the number of roadkill events.

Forest Field Conservation Area	10.7	This parcel of mixed uplands and wetlands is located along the Boston Edison power lines between Mill and Locust Streets. The combination of field and forest plus wetlands makes this a good area to find a diversity of flora and fauna. While there are few paths in the area, the power line makes for easy walking; however, there is no legal access to this site. Obtaining an access point is the first priority for this conservation area.
Lubber Brook Conservation Area	5.4	In addition to Lubber Brook, a number of small brooks and wetlands are present in this area. Although this makes walking difficult, such environment provides important wildlife habitat, flood storage and water quality protection.
Litchfield Way Conservation Land	3.2	This 3.2 acre parcel was donated to the Town by Robert Murray on December 1, 2004. Benefits of the land include habitat for wildlife and flood storage protection.
Glen Cove Park Conservation Land	1.5	A 1 acre and ½ acre parcel were donated to the Town by Robert Murray as part of the Glen Cove Park subdivision project. These parcels, located just upstream from the Sawmill Brook Conservation Area, serve as wildlife habitat, and provide drainage and flood control in the Sawmill Brook watershed.

5.2.3. Public School Parcels

The Town of Burlington owns and operates six public schools that provide a variety of outdoor athletic facilities for school sports programs, informal play and Town recreation activities. All public school grounds and outdoor athletic facilities are maintained by the Recreation Department. The following list indicates the outdoor facilities available at each school.

1. Burlington High School
    a. Football stadium
    b. Practice fields
    c. Running track
    d. Softball field

2. Marshall Simonds Middle School
    a. Multipurpose athletic fields (2)

3. Fox Hill Elementary School
    a. Basketball court
    b. Playground equipment
    c. Softball field

4. Francis Wyman School
    a. Major baseball field
    b. Multi-purpose athletic fields (2)
    c. Playground equipment

5. Pine Glen Elementary School
    a. Soccer field
    b. Softball field
    c. Playground equipment

6. Memorial Elementary School
    a. Softball fields (2)
    b. Multi-purpose field
    c. Baseball field
    d. Basketball court
    e. Playground equipment

5.2.4. Other Public Lands

There are two other large parcels of land within the Town's borders that have the potential to benefit the community's conservation and recreation efforts:

- Landlocked Parcel

  The first is a Town owned 270-acre parcel of land bounded by Route 3, Route 128, and the towns of Bedford and Lexington. Currently there is no access to this land from within Burlington; therefore it is referred to as the "landlocked parcel". Potential uses for the property include recreational activities such as hiking, picnicking, camping, golf, swimming, tennis, basketball, volleyball, baseball, and softball. However, limiting the environmental impact of any potential activity on this parcel is of extreme importance to the Town.

- City of Boston Parcel

  A second piece of land that holds excellent possibilities is a 150 acre parcel of land the City of Boston owns in Burlington, sometimes referred to as the Cummings Estate. According to the will of Mary Cummings, this land must be used as a "public pleasure ground". The City of Boston parcel has excellent potential for park and recreation purposes, yet over the years has been used little by the City of Boston, and only sparingly by the Town of Burlington for a few formal and informal recreational activities. However, in January of 2004 the Town of Burlington and City of Boston reached an apparent agreement on a five-year license for use of the property by the Town for recreational purposes, but as of April 1, 2005 this license agreement has yet to be finalized by the City of Boston.

6.0 COMMUNITY VISION

6.1 Description of Process

Updating Burlington's Open Space and Recreation Plan has been a pressing Town goal since 2001. At the time, multiple public meetings were advertised for development of a draft plan, but Burlington residents showed little interest, and the open space plan was sidetracked due to other Departmental demands.

In 2003, in conjunction with the development of the 2004 Burlington Community Development Plan, a Natural Resources and Open Space Forum was held in the Fall, with results to be used in the development of an Open Space Plan update. Residents were invited to attend this forum through BCAT, the local newspaper, and through flyers distributed at various businesses and Town buildings throughout Burlington. The forum's first task was to vote on priority goals and themes for open space and natural resource protection. The second task was to develop a list of the areas within the Town that should be protected because of their importance for open space/natural resources protection or recreational purposes. Individuals suggested parcels or areas that they felt should be added to this list, and their reasons for protection (natural resource characteristics and recreation value) were recorded. To help in identifying the natural resource characteristics of these areas, a map entitled "Existing Natural Resources Identification – Map 2" was produced and displayed during the forum. This session would provide useful information when the formal Open Space Plan update began.

Ultimately, in 2004 a consultant (Sandra Grund) was hired to formally update the Open Space Plan. This portion of the process lasted from late 2004 to early 2005. During this time, the most successful tool for garnering public input was the Open Space and Recreation survey (see Section 2.2). In reaction to the poor attendance at past Open Space Plan public meetings, the survey was created as an alternative tool to increase public participation. The final survey was a combination of original questions, successful questions used in the past by other towns, and examples provided by the Executive Office of Environmental Affairs. After testing the survey for usability on sample individuals, the 14-question survey was mailed in December 2004 to every Burlington household. Concurrent to this mailing, local media was used to promote the survey, a copy of the survey was printed in a local newspaper (the Burlington Times Chronicle), and an announcement was run several times a day on BCAT.

Postage was not pre-paid for the survey responses, so residents were asked to mail the survey in or drop it off at return boxes located in the Town Recreation and Conservation Departments, where additional surveys were available. Of the 8473 surveys mailed, 770 (9.1%) were returned. As they arrived, the answers and comments were entered into a spreadsheet for tabulation and analysis.

Throughout the process of updating the Open Space Plan, cooperation and input was received from local and state departments and individuals including the Department of Public Works, Planning Department, Recreation Department, Burlington High School Science Center, Burlington Health Department,

Conservation Commission, Building Department, Water Department, Burlington Disability Access Committee, the Town Clerk's Office, Massachusetts Division of the Natural Resources and Conservation Service, National Recreation and Parks Association and Burlington residents.

6.2 Statement of Open Space and Recreation Goals

The overall open space vision for Burlington is to improve the Town's current open space system to enhance quality of life; and expand opportunities for active and passive recreation. Achieving this goal includes:

- Increasing the quantity, and improving the quality, of athletic fields and other recreation facilities.
- Protecting and utilizing the remaining large tracts of land in Town that are currently unprotected (i.e. the Boston Property and the Landlocked Parcel).
- Continuing to acquire and/or protect land for conservation, flood storage and water supply protection.
- Improving the transparency and communication between departments and to the community on open space and recreation issues.

We envision a sustainable Town that can meet the habitability needs of the community, including providing a safe, healthy environment and high-quality recreation programs and facilities. This should be realized while simultaneously encouraging smart growth planning for future residential and commercial development.

7.0 ANALYSIS OF NEEDS

7.1 Summary of Resource Protection Needs

As the Town of Burlington approaches build-out, only a small percentage of land still remains with potential open space use. As mentioned, two valuable properties of concern are the:

- **Landlocked Parcel** and
- **City of Boston Property.**

At minimum there should be some component in planning for these parcels to protect or partially protect these lands for conservation. Additionally, continuing to acquire and protect land along water resources remains a priority

However, Burlington's Open Space needs transcend acquiring land to include the protection of currently owned land. Burlington is a high traffic area, and unfortunately much of the industry and major roadways were built adjacent to the water supply before regulations limited such actions. The Town must implement pollution abatement measures to preserve the biodiversity and natural features of the land, and protect the water quality.

Natural areas in town have slowly diminished, and Burlington needs to utilize the remaining available spaces properly to increase its habitability before build-out occurs. Cluster zoning should receive more support in planning for Burlington's remaining development areas (see Section 3.4.3.). The current Open Space Residential bylaw 8.4.0 states that the minimum area of parcel required for cluster zoning be ten (10) acres. This is ineffective in a town such as Burlington where there are no privately held, residentially zoned parcels 10 acres or larger. The bylaw should be amended to reduce the acreage requirement to a size suited to Burlington's circumstances, and maximize the bylaw's potential.

7.2 Summary of Community's Needs

A primary need of the Burlington community is more outdoor athletic facilities for children. Because of dramatic increases in youth sport participation over the past few years, there are an insufficient number of athletic fields to accommodate the children who play baseball, softball, soccer, football and lacrosse. Of these, the foremost need is for additional baseball and softball fields. *Massachusetts Outdoors*, the 2000 Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP), which was used as a resource for understanding community demand in Burlington, confirmed the preference for baseball in this region. Additionally, the Burlington Baseball and Softball Association has voiced concern at public meetings that there are an inadequate number of baseball fields to support the 1,200 children playing little league baseball and softball.

As a secondary priority, there are also insufficient fields available for adult sports. Often this is overlooked because youth sports are a priority, but demand has risen as new companies move in, and Burlington's adult population grows. Beyond developing new fields, another solution is to extend the usability and longevity of current fields, which can be achieved by installing lighting for night use or installing a more durable artificial turf field.

As mentioned, in December 2004 an Open Space and Recreation survey was sent to all Burlington households; and on September 17th, 2003 the Town held a Natural Resources and Open Space Forum in conjunction with the development of the 2004 Burlington Community Development Plan (see Section 2.2). The feedback received from both of these measures provided insight into the concerns, interests and needs of the Burlington community. Below are some of the highlights:

- Open Space Preservation

  As the Town approaches build-out, residents are voicing their apprehension, with 66% of respondents feeling there is too much development in Burlington. They feel that space is being replaced with congestion and "McMansions".[27] There is a call from many residents to halt further development, with almost all (90.3%) believing that there is a need to preserve open space and natural areas in Burlington.

  When asked what actions should be taken to preserve open space, some are interested in what *they* can do, and would consider actions that restrict future development of their land (i.e. conservation restrictions, deed restrictions) or donate money to buy land. However, most seem to believe the responsibility lies with the Town – and would support many of the suggested Town actions. Preferred options were:

  1) zoning for open space conservation or
  2) mandatory dedication of open space by developers.

  In fact it is a combination of public and private action that leads to successful conservation. Relying on regulation and government wholly will not solve the issue – private action closes the circle.

  Which leads to another finding, many respondents are in favor of involving the private sector in open space planning and protection. This includes public-private partnerships; and mandatory dedication of open space by developers. Past research has found that many local businesses would also support such actions.

[27] According to *Webster's New Millennium™ Dictionary of English, Preview Edition (v 0.9.5) Copyright © 2003, 2004* a McMansion is an excessively large home built on relatively small acreage. Many times they are built when developers knock down smaller homes to build much larger ones that do not match the look of the neighborhood.

✍ Recreation/Conservation Facilities and Options

When asked which recreational facilities Burlington needs more of, residents top three choices were:

1) Preserved natural areas
2) Bike trails
3) An indoor swimming pool.

As the restaurants, retail stores and corporations have solidified their presence, it seems that the Burlington community desires places for outdoor retreat and healthy activity.

Most respondents (69.4%) are satisfied with the quality and quantity of facilities available for child and youth recreation, however less are satisfied with the adult recreation facilities in Town. One-fifth of respondents felt that our adult recreation was lacking.

Many recreational facilities are popular among residents, particularly the School facilities, Town Common and Simonds Park. Unfortunately, conservation lands are less popular, as a large number of residents (over 80%) stated they have never visited three of the larger conservation areas in town. It seems this is not from lack of want. When asked what limits their visits to conservation/park areas, over one-third said it is because they are unsure where the areas are located. This is surprising, as a large number of survey respondents (79%) have been Burlington residents for ten years or more.

Although conservation area descriptions and maps are provided on the Department web site, awareness must be raised so residents can benefit from these spaces. Yet, lack of interest also plays a role in infrequent usage, with almost one-fourth of respondents stating that they limit their visits because of lack of time or because their leisure time is spent doing other things.

✍ Water Resource Protection

Water resources are also of high concern to the community, a majority feeling that the most important reason for preserving open space is to meet our watershed protection needs. They regard this as more important than preserving open space for conservation, recreation, or aesthetic reasons. Residents attending the Natural Resource and Open Space forum (see Section 2.2) support this view, acknowledging that the Town's municipal water system is an advantage and that land needs to be acquired to protect the water supply and lessen flooding.

In preparing the ADA Access Self Evaluation portion of this report (see Appendix 7), the specific needs of disabled members of the community at conservation and recreation areas were considered. Areas of concern included lack of access to major fields at the most used park in Town, Simonds Park; and creating access to one of the Town conservation trails. Mill Pond Reservoir was suggested as a possible site for an accessible trail, as it is a popular location and the only large water body in town.

Additionally, at many of the parks (TRW, Veterans etc.) and all of the conservation areas, there are no drinking fountains, and it recommended that the parks and some conservation areas be equipped with at least one. Benches are also recommended for resting points at conservation areas.

7.3 Management Needs, Potential Change of Use

There is a need to expand the Recreation Department's maintenance capabilities by improving its maintenance management and increasing manpower. The Recreation Department currently maintains all of the Town's parks, playgrounds, athletic fields, school grounds, tennis courts, basketball courts, and all other outdoor recreation facilities. There are not sufficient resources to maintain all of these facilities adequately. Invariably, it is the school grounds that suffer most from lack of maintenance, but athletic fields and other recreation facilities are often impacted.

There are also several aspects in the land management of conservation areas that would benefit from improvement. In previous years, resources allowed for a seasonal land management intern position for trail maintenance. This is no longer the case due to dwindling budgets, but the Conservation Department hopes to re-fund such a position in the future. Additionally, there is a need to reactivate the volunteer Land Steward program to assist in monitoring and improving conservation lands. To support these increased land management activities, more equipment would also be beneficial, such as a department hand-held Global Positioning System (GPS) unit to help with mapping, trail construction and stream management.

The Conservation Department would also like to establish a funding source for land acquisition so the Town has the ability to purchase land when it becomes available. Currently there is a capital budget item established for this, but it has yet to receive funding.

8.0 GOALS AND OBJECTIVES

8.1 Goal A

Beautify Burlington's public outdoor recreation facilities and public school grounds.

Objectives

A-1 Develop a beautification plan for the Town's outdoor recreation facilities and school grounds.

A-2 Beautify all athletic fields.

A-3 Beautify all public school grounds.

A-4 Improve signage at all public recreation facilities.

A-5 Beautify all parks and playgrounds.

A-6 Beautify the Town Common.

8.2 Goal B

Utilize the Landlocked Parcel for public recreation and/or conservation purposes.

Objectives

B-1 Develop a plan of use for the site.

B-2 Get permission to use the land for recreation and/or conservation activities.

B-3 Make the land available to Burlington residents for passive recreational pursuits.

B-4 Gain access to the Landlocked Parcel.

8.3 Goal C

Provide additional athletic fields for high school sports, youth sports, and adult athletic programs.

Objectives

C-1 Provide additional youth baseball/softball fields.

C-2 Provide additional multi-purpose fields.

C-3 Develop at least one multi-field youth baseball complex.

C-4 Develop at least one artificial turf multi-purpose field.

C-5 Develop a new major baseball field.

8.4 Goal D

Reduce wear and tear on the Town's athletic fields.

Objectives

D-1 Develop and implement a utilization plan for all of the Town's athletic fields.

D-2 Apply field-use standards to all high impact athletic fields.

8.5 Goal E

Improve the maintenance of all Town outdoor recreation facilities.

Objectives

E-1 Improve maintenance of athletic fields.

E-2 Spend more man-hours on facility maintenance.

E-3 Improve tennis courts and basketball courts.

E-4 Improve driveways, walkways, and parking lots at the Town's parks and playgrounds.

8.6 Goal F

Utilize the City of Boston property for a variety of active and passive recreational activities.

Objectives

F-1 Gain permission to use the City of Boston Property for recreational purposes.

F-2 Develop athletic fields at the site.

F-3 Provide playground facilities.

F-4 Provide parking facilities.

F-5 Provide trails.

F-6 Provide other recreational facilities.

8.7 Goal G

Improve and expand athletic field lighting and tennis court lighting.

Objectives

G-1 Improve youth sports field lighting.

G-2 Expand adult softball field lighting.

G-3 Improve tennis court lighting.

8.8 Goal H

Develop new outdoor recreation facilities.

Objectives

H-1 Provide restrooms in larger parks.

H-2 Provide picnic shelters.

H-3 Provide water spray facilities.

H-4 Provide walking trails.

H-5 Provide street hockey facilities.

H-6 Provide new playgrounds.

H-7 Consider providing a public swimming facility.

8.9 Goal I

Create a town-wide Open Space and Recreation Network to improve, expand, and monitor Burlington's open space.

Objectives

I-1 Improve interdepartmental communications regarding Open Space to develop priorities and continuously monitor progress on open space and recreation acquisitions.

I-2 Explore funding potential and devise further options to link Burlington's open space via paths, corridors, and sidewalks.

I-3 Increase the number of sidewalks, bike paths, and walking paths, especially in areas between two parcels of open space which cannot be connected through protected lands

8.10 Goal J

Involve the private sector in protecting open space and providing recreation opportunities

Objectives

J-1 Encourage owners of existing business properties to construct facilities for employees.

J-2 Promote public-private partnerships to acquire and/or develop land for recreation use by residents and employees of Burlington businesses.

J-3 Encourage businesses and industries with open space on their properties to donate conservation restrictions.

J-4 Work with private businesses to acquire or develop land for conservation purposes and to develop facilities such as trails.

8.11 Goal K

Protect Burlington's water resources.

Objectives

K-1 Develop strategies for protecting and preserving Burlington's water resources through public education, land acquisition, and regulation.

K-2 Continue to improve the Stream Cleaning program.

K-3 To prevent sediment build-up in streams, work with the DPW on improving stormwater management techniques.

K-4 Certify more vernal pools in Burlington.

8.12 Goal L

Actively manage, maintain, and strive to expand conservation areas

Objectives

L-1 Revive the volunteer land steward program

L-2 Continue to pursue funding to survey and mark conservation areas

L-3 Establish and maintain funding search for land acquisition

L-4 Improve disabled access to conservation areas

L-5 Improve general access to conservation areas

L-6 Work to eliminate negative human impacts to conservation areas

8.13 Goal M

Increase public awareness and use of Conservation and Recreation facilities

Objectives

M-1 Increase and improve general public outreach efforts through events and communications

M-2 Increase and improve school-aged residents environmental education and participation

M-3 Promote year-round use of conservation areas

9.0 FIVE-YEAR ACTION PLAN (Required Map 6 – Action Plan Map)

GOAL A: BEAUTIFY BURLINGTON'S PUBLIC OUTDOOR RECREATION FACILITIES AND PUBLIC SCHOOL GROUNDS

Objective	Action	Year	Responsible Party
A-1	Work with community groups and school groups to develop a beautification plan for the Town's outdoor recreation facilities and school grounds.	2005	Recreation
A-2	Work with youth sports organizations, school teams, and adult sports leagues to clean up and beautify athletic fields.	2005	Recreation
A-3	Work with PTO's, school officials, and other school groups to schedule beautification days at all public schools.	2005	Recreation
A-4	Install new entrance signs at all parks and playgrounds.	2005	Recreation
A-4	Install new regulation signs at all outdoor recreation facilities.	2005	Recreation
A-5	Work with neighborhood groups and local businesses to clean up and beautify the Town's parks and playgrounds.	2005	Recreation
A-5	Develop an Adopt-a-Park program.	2006	Recreation
A-6	Work with the Burlington Beautification Committee to beautify the Town Common.	2006	Recreation

GOAL B: UTILIZE THE LANDLOCKED PARCEL FOR PUBLIC RECREATION AND/OR CONSERVATION PURPOSES.

Objective	Action	Year	Responsible Party
B-1	Ask the Board of Selectmen to form a committee to make recommendations for potential property uses.	2005	Recreation
B-1	Submit warrant articles to Town Meeting requesting funds for consulting services to study the land and determine what activity it is capable of supporting.	2006	Recreation
B-2	Make a formal request to the Selectmen to use the property for recreation and conservation activities.	2006	Recreation
B-3	Ask the Selectmen to open the land to Burlington residents for walking, cross country skiing, wildlife observation, and other passive recreation.	2006	Recreation
B-4	Seek funding for construction of a bridge, ramp, or other means of access to the site.	2007	Recreation

GOAL C: PROVIDE ADDITIONAL ATHLETIC FIELDS FOR HIGH SCHOOL SPORTS, YOUTH SPORTS, AND ADULT ATHLETIC PROGRAMS.

Objective	Action	Year	Responsible Party
C-1	Construct a new youth baseball/softball field on the Boston Property.	2005	Recreation
C-2	Construct a new multi-purpose field at the Boston Property.	2006	Recreation
C-3	Construct a four-field youth baseball complex at the Mitre Corporation athletic fields.	2007	Recreation
C-4	Develop a multi-purpose artificial turf athletic field at Burlington High School or at the Marshall Simonds Middle School.	2008	Recreation
C-5	Develop a major baseball field at the Boston Property.	2009	Recreation

GOAL D: REDUCE WEAR AND TEAR ON THE TOWN'S ATHLETIC FIELDS.

Objective	Action	Year	Responsible Party
D-1	Work with the public schools, youth sports organizations, and adult leagues to reduce the number of practices and games scheduled at athletic fields.	2005	Recreation
D-2	Set limits on the use of high impact athletic fields and work with user groups to keep field use within established limits.	2006	Recreation

GOAL E: IMPROVE THE MAINTENANCE OF ALL TOWN OUTDOOR RECREATION FACILITIES.

Objective	Action	Year	Responsible Party
E-1	Set up a firm schedule for fertilizing, aerating, and irrigating fields.	2005	Recreation
E-1	Purchase software to assist with the computerization of field maintenance scheduling.	2006	Recreation
E-1	Install irrigation systems at the Simonds Park baseball fields.	2008	Recreation
E-1	Install an irrigation system at the Human Services Center field.	2009	Recreation
E-2	Request funding for one additional recreation maintenance employee.	2007	Recreation
E-3	Repave the Rahanis Park tennis courts.	2007	Recreation

E-3	Rehabilitate the basketball courts at Overlook Park and Veterans Park.	2008	Recreation
E-3	Repave the Simonds Park tennis courts.	2009	Recreation
E-4	Repave the driveways, walkways, and parking lots at Simonds Park.	2006	Recreation
E-4	Repave the driveway at Overlook Park.	2009	Recreation
E-4	Repave the back parking lot at Rahanis Park.	2009	Recreation

GOAL F: UTILIZE THE CITY OF BOSTON PROPERTY FOR A VARIETY OF ACTIVE AND PASSIVE RECREATIONAL ACTIVITIES.

Objective	Action	Year	Responsible Party
F-1	Negotiate an agreement with the City of Boston to use the Boston Property for recreational purposes.	2005	Town Selectmen
F-2	Construct a youth baseball/softball field at the Boston Property.	2005	Recreation
F-3	Construct a playground at the Boston Property.	2005	Recreation
F-4	Construct a parking lot at the Boston Property.	2005	Recreation
F-5	Develop a walking trail at the Boston Property.	2006	Recreation
F-6	Seek funding for the development of multi-purpose fields, major baseball fields, and other recreation facilities at the Boston Property.	2007	Recreation

GOAL G: IMPROVE AND EXPAND ATHLETIC FIELD LIGHTING AND TENNIS COURT LIGHTING.

Objective	Action	Year	Responsible Party
G-1	Replace the lighting system at the Simonds Park Little League field.	2008	Recreation
G-1	Replace the lighting system at the Simonds Park Babe Ruth field.	2008	Recreation
G-1	Improve lighting at the Marshall Simonds School field complex.	2009	Recreation

G-2	Install a new sports lighting system at Rotary Field.	2009	Recreation
G-3	Replace the tennis court lighting system at Simonds Park.	2009	Recreation

GOAL H: DEVELOP NEW OUTDOOR RECREATION FACILITIES.

Objective	Action	Year	Responsible Party
H-1	Construct restrooms at Rahanis Park.	2006	Recreation
H-2	Install a picnic shelter at Simonds Park.	2006	Recreation
H-3	Construct a water spray playground at Rahanis Park.	2007	Recreation
H-4	Install a picnic shelter at Rahanis Park.	2007	Recreation
H-5	Construct a street hockey rink at Rahanis Park.	2009	Recreation
H-6	Install new playground equipment at the Human Services Center.	2009	Recreation
H-7	Conduct a feasibility study regarding the possibility of developing a public swimming facility in Burlington.	2009	Recreation

GOAL I: CREATE A TOWN-WIDE OPEN SPACE AND RECREATION NETWORK TO IMPROVE, EXPAND, AND MONITOR BURLINGTON'S OPEN SPACE.

Objective	Action	Year	Responsible Party
I-1	Ask the Town Administrator and Director of Recreation to create an Open Space and Recreation Network Committee comprising Conservation, Recreation, DPW, Planning, and Historical Commission members.	2006	Conservation
I-1	Commence meetings of Open Space and Recreation Network Committee	2006	Conservation
I-2	Research grants, and consult with the Department of Public Works (DPW) to utilize Chapter 90 money	Ongoing	Conservation
I-2	Work with Planning Board to encourage the construction of sidewalks when applicable as part of new commercial developments.	Ongoing	Conservation
I-3	Research bike trail and walking path organizations for strategy ideas (ex. Bay Circuit Trail Organization). Continue Conservation Commissions input on Bike Path Committees three-phase plan.	Ongoing	Conservation
I-3	Take inventory of access between existing open spaces	2005	Conservation
I-3	Solicit the Burlington DPW to be involved in providing input on new sidewalk locations.	Ongoing	Conservation

I-3	Explore creating a regional network of open space, i.e. creating corridors in Burlington to connect similar features in neighboring towns. Monitor land use changes and agendas in neighboring towns.	Ongoing	Conservation

GOAL J: INVOLVE THE PRIVATE SECTOR IN PROTECTING OPEN SPACE AND PROVIDING RECREATION OPPORTUITIES

Objective	Action	Year	Responsible Party
J-I	Continue to encourage corporations to invest in on-site employee recreation facilities. Post information on Town website.	Ongoing	Recreation
J-2	Create Gifts Catalog to encourage corporations to be involved in the development and improvement of outdoor recreation facilities.	2005	Recreation
J-3	Establish a systematic program and policy for accepting donations of land from the private sector.	2006	Conservation
J-3	Compose and distribute information packet to corporations encouraging them to donate conservation restrictions. Post information on Town website.	2007	Conservation
J-4	Compose and distribute information packet to corporations encouraging them to acquire or develop land for conservation purposes, and to develop on-site facilities such as trails. Post information on the Town website.	2007	Conservation

GOAL K – PROTECT BURLINGTON'S WATER RESOURCES

Objective	Action	Year	Responsible Party
K-1	Acquire land surrounding Town water resources when it becomes available.	Ongoing	Conservation
K-1	Enforce and improve runoff control provisions, including continued development of the Storm Water Runoff Bylaw already underway.	2005	Conservation
K-1	Create Conservation Commission Wetland Bylaw Committee to amend and improve existing Wetland Protection Bylaw.	2005	Conservation
K-1	Promote and educate residents regarding water efficiency by posting tools and suggestions for water efficient living on the Town website.	2006	Conservation
K-1	Disseminate information on the impacts of dumping in wetlands, waterways and catch basins	Ongoing	Conservation
K-1	Stencil dumping warnings on storm drains (ex – "*don't dump, drains to Ipswich River*").	Annually	Conservation
K-2	Continue to use the vactor for sediment removal in streams, rather than dredging.	Ongoing	Conservation
K-2	Recruit summer paid stream cleaning workers from the Burlington Science Center's student volunteers who have a genuine interest in the environment.	Summer 2005	Conservation

K-3	Inventory areas where sand is washing into streams, and consult with DPW regarding techniques to minimize problem.	2005	Conservation
K-4	Collaborate with the Burlington Science Center to train student volunteers in vernal pool certification.	2006	Conservation
K-4	Run vernal pool certification workshops through the Burlington Conservation Department.	Annually	Conservation

GOAL L: ACTIVELY MANAGE, MAINTAIN, AND STRIVE TO EXPAND CONSERVATION AREAS

Objective	Action	Year	Responsible Party
L-1	Recruit volunteers and resume the Land Steward Program.	2005	Conservation
L-2	Apply for grants as they become available.	Ongoing	Conservation
L-3	Apply for grants as they become available. Continue to propose that Burlington Town Government fund a dedicated Land Acquisition Account.	Ongoing	Conservation
L-4	Research alternative substances and potential location (environmental impact, safety and usability) for handicapped accessible conservation area trail.	2007	Conservation
L-4	Establish handicapped accessible trail at designated conservation area.	2009	Conservation
L-5	Install benches at scenic sites within conservation areas.	2008	Conservation
L-5	Install bike racks and increase marked parking areas.	2009	Conservation
L-5	Install signage to improve visibility of trail heads.	Ongoing	Conservation
L-6	Seek the Burlington Police Department's help in increasing enforcement.	2005	Conservation
L-6	Publicize dumping incidents and their impacts on the environment. Encourage neighborhood involvement.	Ongoing	Conservation
L-6	Install equipment to deter ATV use, such as signs indicating fines for violation, gates, concrete posts at trail heads etc.	2008	Conservation

GOAL M: INCREASE PUBLIC AWARENESS AND USE OF CONSERVATION AND RECREATION FACILITIES AND ACTIVITIES

Objective	Action	Year	Responsible Party
M-1	Sponsor semi-annual nature walks at Burlington conservation areas	2005	Conservation
M-1	Redesign, update and launch department website. Include interactive tools such as a feedback section, and advertise website in relevant department communications.	2005	Conservation
M-1	Create an annual town-wide environmental activity, possibly in conjunction with Earth Day	2006	Conservation

M-1	Create a semimonthly newspaper column highlighting local conservation activities and information.	2007	Conservation
M-1	Include insert annually in the summer Recreation Brochure presenting conservation area descriptions, map and information.	Annually	Conservation
M-2	Meet with the Burlington Science Center and teachers to offer support and encourage education on environmental topics.	Ongoing	Conservation
M-2	Encourage use of conservation areas, particularly those adjacent to schools, for curriculum related student visits.	Ongoing	Conservation
M-2	Collaborate with the Burlington Science Center to train student volunteers in vernal pool certification (also see K-3 action step).	2006	Conservation
M-2	Continue to participate in conservation related Eagle Scout projects as opportunities arise.	Ongoing	Conservation
M-3	Promote conservation areas as a year-round resource (i.e. snow shoeing and cross country skiing) in conjunction with education/outreach activities.	Ongoing	Conservation

10.0 PUBLIC COMMENTS

Attached Letters of Review:

- Burlington Town Administrator
- Burlington Planning Board
- Metropolitan Area Planning Council

TOWN OF BURLINGTON

Town Hall
29 Center Street
Burlington, MA 01803
Tel: (781) 270-1600
Fax: (781) 270-1608
E-Mail: info@burlmass.org

Town Administrator's Office
Robert A. Mercier, Town Administrator (781) 270-1635
Anthony J. Troiano, Assistant Town Administrator (781) 270-1634

June 6, 2005

Executive Office of Environmental Affairs
Division of Conservation Services
100 Cambridge Street, Suite 900
Boston, MA 02114

To Whom It May Concern:

I would like extend my strong recommendation and support for Burlington's 2005 Open Space and Recreation Plan update.

The Plan is detailed and comprehensive in scope, and its goals provide an excellent blueprint for Burlington's continued progress in the areas of conservation and recreation. We are hoping this document will provide effective lead in planning for open space and recreation projects and acquisitions over the next five years, as well as improve our standing for state reimbursement programs.

I would also like to acknowledge the outstanding effort involved in the Plan's completion, including the input of residents, local boards, municipal departments, and state agencies. Such collaboration aids in improving the quality of life in Burlington for current and future generations, and helps set the stage for future development to occur in a sustainable manner.

Sincerely,

Robert A. Mercier
Town Administrator

cc: Conservation Department

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TOWN OF BURLINGTON
29 CENTER STREET
BURLINGTON, MASSACHUSETTS 01803

TOWN HALL: (781) 270-1600 FAX: (781) 270-1608 E-MAIL: info@burlmass.org

June 3, 2005

Jennifer Jillson Soper
Executive Office of Environmental Affairs
Division of Conservation Services
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Ms. Soper,

At its meeting of June 2, 2005, the Burlington Planning Board unanimously endorsed the 2005 Open Space and Recreation Plan. We believe this Plan to be substantially improved over our 1996 Plan. We hope you will find this 2005 Open Space and Recreation Plan to be both complete in terms of your technical requirements and thorough in terms of addressing Burlington's future conservation and recreation needs.

Please call me at 781-270-1645 if you have any questions.

Sincerely,

Jayne L. Hyde

Jayne L. Hyde
Planning Board Chairman

cc: Robert Mercier, Town Administrator
John Keeley, Conservation Administrator
Sandra Grund, Conservation Intern
Donald Roberts, Recreation Director

Metropolitan Area Planning Council

60 Temple Place, Boston, Massachusetts 02111 617-451-2770 fax 617-482-7185 www.mapc.org

Serving 101 cities and towns in metropolitan Boston

May 3, 2005

Sandra Grund
Conservation Department
Town of Burlington
25 Center Street
Burlington, MA 01803

MAY 5 - 2005

Dear Ms. Grund:

The Metropolitan Area Planning Council has reviewed the draft open space and recreation plan update 2005-2010. The plan is very well-written, thorough and includes a very comprehensive Section 504 handicapped self-evaluation. I have a few minor comments to help strengthen the plan.

1) The North Suburban Planning Council - Within the discussion of the regional context, it should be noted that Burlington is a member of the North Suburban Planning Council, one of eight MAPC subregions. The North Suburban Planning Council is a group of nine communities that meet regularly to discuss issues of common interest and is an excellent forum for discussing regional open space issues and opportunities. More information on the North Suburban Planning Council can be found on the MAPC website at http://www.mapc.org/metro_area/nspc.html. The current chair of the NSPC is Tony Fields, the Burlington Planning Director.

2) Surrounding communities – The plan should include information on the open space planning activities of surrounding communities.

Thank you for the opportunity to review this plan.

Sincerely,

Marc D. Draisen, Executive Director

Cc: Jennifer Soper, Division of Conservation Services
Tony Fields, MAPC Representative, Town of Burlington

REFERENCES

American Rivers (2003) America's Most Endangered Rivers of 2003, website accessed at http://pa.lwv.org/wren/library_PDF/MostEndangeredRivers2003.pdf in November 2004.

Castle, Dixon, Grew, Griscom, and Zietz, (1976) Structural Dislocations in Eastern Massachusetts, Geological Survey Bulletin 1410, United States Government Printing Office: Washington.

Department of Housing and Community Development (DNCD) (2004) Burlington, website accessed at www.mass.gov/dhcd/iprofile/048.pdf in December 2004.

Environmental Surveys and Assessments (1990), An Inventory of Wetlands and Waterbodies in Burlington, Massachusetts.

Executive Office of Environmental Affairs, Division of Conservation Services (2000) Massachusetts Outdoors 2000! Statewide Comprehensive Outdoor Recreation Plan, website accessed at http://www.mass.gov/envir/dcs/pdf/SCORP_Chapter1.pdf in January 2005.

Executive Office of Environmental Affairs, Division of Conservation Services (2001) Open Space Planner's Workbook, website accessed at http://www.mass.gov/envir/dcs/pdf/OpenSpacePlanners.pdf in November 2004.

Fogelberg, J. (1976) A History of Burlington, Burlington Historical Commission.

Haines, A. and Vining, T.F., (1998), Flora of Maine, V.F. Thomas Co. P.O. Box 281, Bar Harbor Maine.

Hatch, Norman (ed.) (1991), The Bedrock Geology of Massachusetts, USGS Professional Paper 1366-E-J, Washington: US Government Printing Office.

IEP (1977), Task B – Land Use and Land Capability Study of the Conservation and Recreation Plan.

IEP (1977), Task C – Management of Wildlife Resources of the Conservation and Recreation Plan.

Ipswich River Watershed Association website http://www.ipswichriver.org/river.html

Lancaster, R., (1990) Recreation, Park and Open Space Standards and Guidelines, published by the National Recreation and Parks Association.

Massachusetts Department of Environmental Protection (2003) Source Water Assessment and Protection (SWAP) Report for Burlington Water and Sewer Division, released 6/30/03, accessed at www.mass.gov/dep/ on 11/23/04.

Massachusetts Division of Fisheries and Wildlife (2002) Official State Rare Species List, Natural Heritage and Endangered Species Program, website accessed at www.mass.gov/dfwele/dfm/nhesp/nhrarelinjks.htm in February 2005.

Massachusetts Emergency Management Agency, Earthquakes in New England.

Massachusetts Institute of Social & Economic Research (MISER), online database accessed at www.umass.edu/miser in November 2004.

Massachusetts Society for the Prevention of Cruelty to Animals (2001) Living with Wildlife: About Human Wildlife Conflict, website accessed at www.livingwithwildlife.org/aboutus/conflicts.html on February 10, 2005.

Metropolitan Area Planning Council (MAPC) (2004) Comprehensive Economic Development Strategy, submitted to the Economic Development Administration.

Metropolitan Area Planning Council (MAPC), (2004) Burlington Community Development Plan, prepared for the Burlington Planning Board.

Metropolitan Area Planning Council (MAPC), (2004) Comprehensive Economic Development Strategy, submitted to the Economic Development Administration.

National Recreation and Parks Association (NRPA) (1996) Parks, Recreation, Open Space and Greenway Guidelines.

Skohan, J. (2002), Roadside Geology.

Sorrie, B.A. and Somers P., (1999) The Vascular Plants of Massachusetts: A County Checklist, Massachusetts Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program.

Town of Burlington (2004) Annual Water Quality Report: Water Testing Performed in 2003.

United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) (1995) Middlesex County Massachusetts Interim Soil Survey Report, published by the Middlesex Conservation District, Fourth Edition.

Vanasse Hangen Brustlin, Inc. (2003) Burlington Bikeway Transportation Enhancement Application, submitted to the Metropolitan Area Planning Council by the Town of Burlington, Massachusetts.

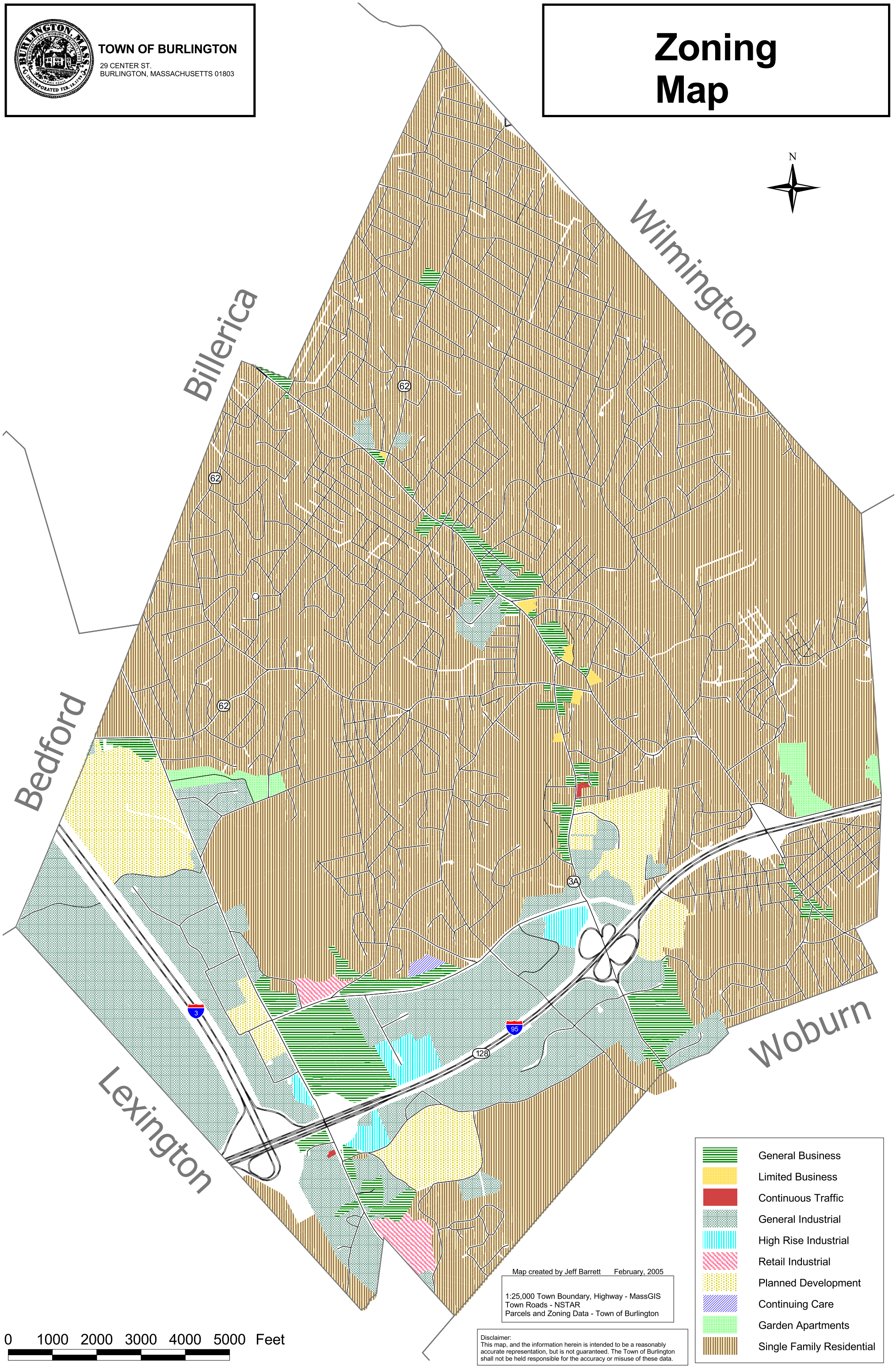
MAPS

MAP 1

ZONING MAP

TOWN OF BURLINGTON
29 CENTER ST.
BURLINGTON, MASSACHUSETTS 01803

Zoning Map



Map created by Jeff Barrett February, 2005

1:25,000 Town Boundary, Highway - MassGIS
Town Roads - NSTAR
Parcels and Zoning Data - Town of Burlington

MAP 2

SOILS AND GEOLOGIC FEATURES MAP

- Map Available in Hard Copy -

MAP 3

UNIQUE FEATURES MAP

TOWN OF BURLINGTON
29 CENTER ST.
BURLINGTON, MASSACHUSETTS 01803

Unique Features

Billerica
Wilmington
Bedford
Lexington
Woburn
N
Gibbers Brook Conservation Area
Ipswich Conservation Area
Sawmill Brook Conservation Area
62
Wilmington Rd.
Pine Glen Conservation Area
Jonathan Reed House
Francis Wyman Rd.
Cambridge St.
Francis Wyman House
Forest Field Conservation Area
Marion Rd. Conservation Area
Town Common
Burlington Historical Museum
Old Burial Ground
Sears St.
Burlington Public Library
West School
Bedford St.
Woburn Second Parish Meeting House
Fairfax Conservation Area
Marion Tavern/Grandview Farm Conservation Area
Brick Pond Brook Conservation Area
General John Walker House
Human Services Center
Center St.
Sandy Brook Conservation Area
Chadwick Conservation Area
Vine Brook Conservation Area
Burlington High School
3A
Hens and Chickens Tavern
Longmeadow Conservation Area
3
95
128
Northeastern University
Mullen Road Conservation Area

Map created by Jeff Barrett February, 2005

1:25,000 Town Boundary, Highway - MassGIS
Town Roads - NSTAR
Parcels and Zoning Data - Town of Burlington

- Cultural
- Historical
- Conservation Land
- Recent Conservation Land Expansions

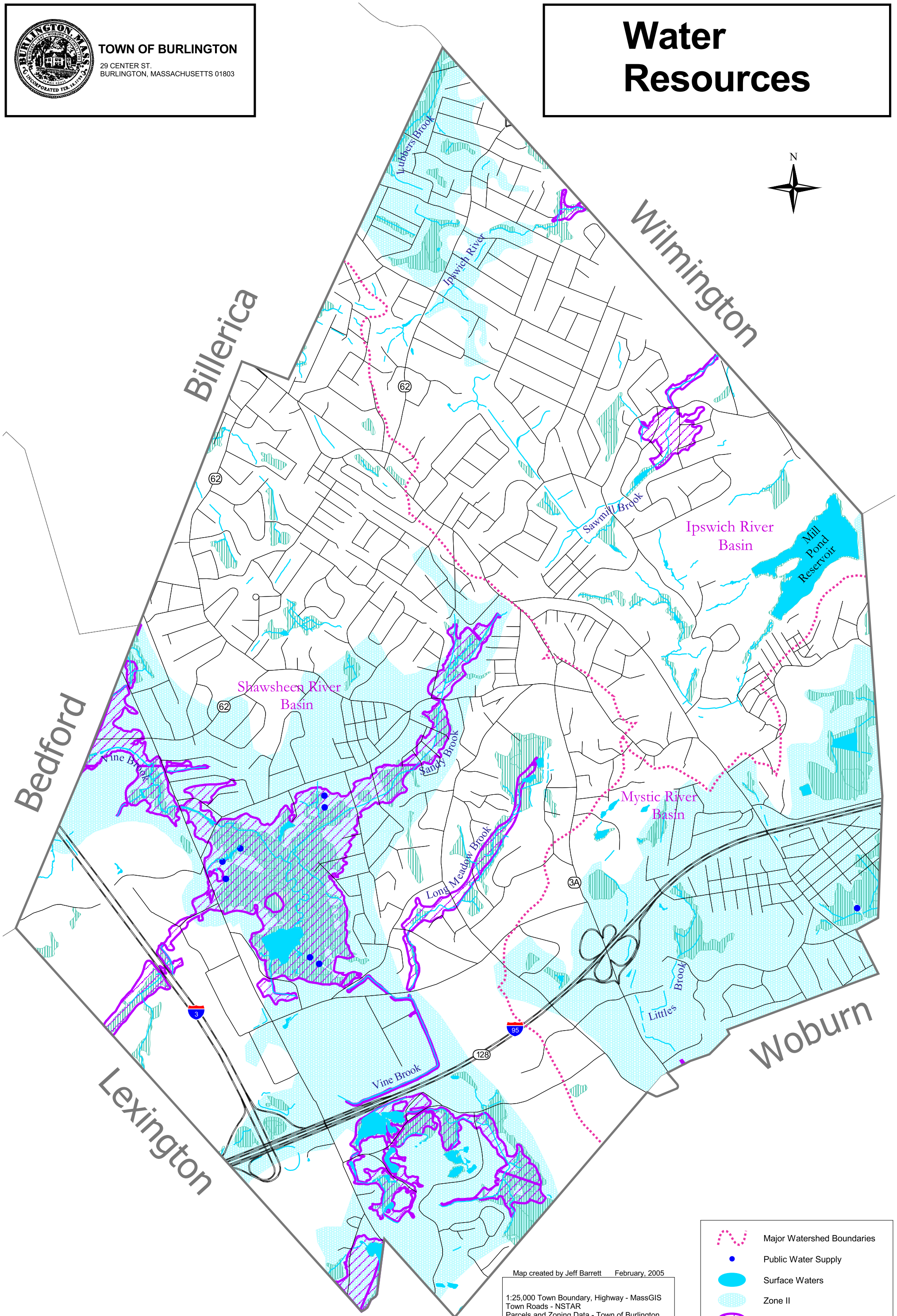
0 1000 2000 3000 4000 5000 Feet

MAP 4

WATER RESOURCES MAP

TOWN OF BURLINGTON
29 CENTER ST.
BURLINGTON, MASSACHUSETTS 01803

Water Resources



Map created by Jeff Barrett February, 2005

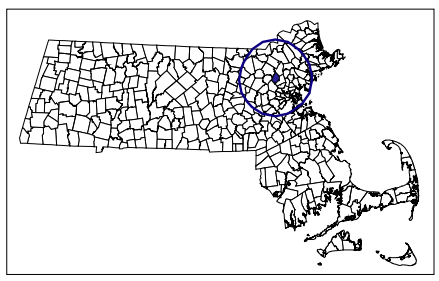
1:25,000 Town Boundary, Highway - MassGIS
Town Roads - NSTAR
Parcels and Zoning Data - Town of Burlington

MAP 5

INVENTORY OF OPEN SPACE

TOWN OF BURLINGTON
29 CENTER ST.
BURLINGTON, MASSACHUSETTS 01803

Open Space Inventory Map



N

Billerica

Wilmington

Bedford

Lexington

Woburn

62

3

95

128

Terrace Hall Ave

Sandy Brook Rd

Chap. 61A

Cambridge St.

Burlington Mall Rd.

South Bedford St.

Landlocked Parcel

Boston Property

Map created by Jeff Barrett February, 2005

Data Sources:
1:25,000 Town Boundary, Highway - MassGIS
Town Roads - NSTAR
Parcels and Zoning Data - Town of Burlington

Unprotected Lands
- Private Land w/conservation potential
- Private Land w/recreation potential
- Town Land w/con and/or rec potential
- Schools
- Other Municipal Land

Protected Lands
- Conservation Land
- Recreation Land
- Other Protected Open Space
- Open Space Owned by Other Town

0 1000 2000 3000 4000 5000 Feet

MAP 6

ACTION PLAN MAP

TOWN OF BURLINGTON
29 CENTER ST.
BURLINGTON, MASSACHUSETTS 01803

Action Plan Map

N

RAHANIS PARK

- Repave tennis courts
- Repave back parking lot
- Construct water spray playground
- Construct restrooms
- Construct street hockey rink
- Install picnic shelter

VETERAN'S PARK

- Rehabilitate basketball courts

SIMONDS PARK

- Install irrigation systems
- Repave tennis court
- Repave driveways, walkways, and parking lots
- Replace lighting system at fields
- Replace tennis court lighting system
- Install picnic shelter

HUMAN SERVICES CENTER FIELD

- Install irrigation system
- Install playground equipment

LANDLOCKED PARCEL

- Open land for passive recreation
- Obtain funding and permission for construction of access to the site

Billerica

Wilmington

Bedford

Lexington

Woburn

OVERLOOK PARK

- Rehabilitate basketball courts
- Repave driveway

BOSTON PROPERTY

- Construct youth baseball/softball field
- Construct multi-purpose field
- Construct playground
- Develop walking trail

MISCELLANEOUS PROJECTS

- Entrance signs at all outdoor recreation facilities
- Adopt-a-park program
- Public swimming facility feasibility study
- Handicapped accesible trail
- Bike racks, benches, and parking areas at conservation areas
- Trail head signage at conservation areas

Map created by Jeff Barrett February, 2005

1:25,000 Town Boundary, Highway - MassGIS
Town Roads - NSTAR
Parcels and Zoning Data - Town of Burlington

Unprotected Lands

Protected Lands

0 1000 2000 3000 4000 5000 Feet

APPENDICES

APPENDIX 1

OPEN SPACE AND RECREATION SURVEY

O P E N S P A C E S U R V E Y

OF BURLINGTON 2 0 0 4

The Town of Burlington is updating its **Open Space* and Recreation Plan**, and we need your input!

Last revised in 1996, this update is necessary to qualify for state reimbursement programs for open space acquisition and protection; as well as recreation land acquisition and development. Faced with significant growth now and in the future, such programs will help us preserve open space while allowing development to occur in a sustainable* manner.

Community input is *invaluable* for the Town to properly address residents' wants and needs, so please take a few minutes to complete and mail back the survey below. Your opinions will enable the Town to develop plans that will enrich our lives and those of future generations. Additional copies of this survey are available at the drop-off boxes mentioned below, and survey results will be available to the public in February 2005.

Please return this survey by JANUARY 10, 2005 to:

MAIL

Burlington Conservation Dept.
25 Center Street
Burlington, MA 01803

DROP-OFF BOXES

Conservation Dept.
25 Center Street

OR

Recreation Dept.
61 Center Street

Thank you for your time and feedback.
Together we can improve the quality of life in Burlington!

1. How long have you been a resident?

___ less than 2 years
___ 2 – 5 years
___ 6 – 10 years
___ 10 years +

2. What is your age group?

___ 18 to 25
___ 26 to 35
___ 36 to 45
___ 46 to 65
___ over 65

3. Are you satisfied with the places available in town for children and youth recreation?	yes	no	not sure
4. Are you satisfied with the places available in town for adult recreation?	yes	no	not sure
5. Are you satisfied with the general condition of these facilities?	yes	no	not sure
6. Is there a need to preserve open space* and natural areas in Burlington?	yes	no	not sure

~ CONTINUED ~

7. How often do you visit the following areas:

a. School facilities	5	4	3	2	1
b. Town Common	5	4	3	2	1
c. Mill Pond Reservoir	5	4	3	2	1
d. Simonds Park	5	4	3	2	1
e. Rahanis Park	5	4	3	2	1
f. Little Brook Conservation Area	5	4	3	2	1
g. Sawmill Brook Conservation Area	5	4	3	2	1
h. Marion Road Conservation Area	5	4	3	2	1
i. Other _____	5	4	3	2	1

Visits per year:

5 = 15+
4 = 10-15
3 = 5-10
2 = 1-5
1 = Never

8. How important is it to you to preserve:

a. Buildings of historical or architectural interest	5	4	3	2	1
b. Places of historical value	5	4	3	2	1
c. Open space to meet our conservation needs	5	4	3	2	1
d. Open space to meet our watershed protection needs	5	4	3	2	1
e. Open space to meet our active recreation* needs	5	4	3	2	1
f. Open space for aesthetic or passive recreation* needs	5	4	3	2	1

5 - Very important
4 - Important
3 - Neutral
2 - Less important
1 - Not important

9. Please check the top three (3) recreational facilities you feel Burlington needs more of:

___ Bike trails
___ Outdoor swimming pools
___ Indoor swimming pools
___ Hiking and cross-country skiing trails
___ Softball/baseball fields
___ Creative arts centers
___ Family picnic areas
___ In-line skating/skateboard facilities
___ Golf course/driving ranges
___ Other _____

___ Preserved natural areas
___ Children's playgrounds
___ Teen centers
___ Football/soccer fields
___ Basketball courts
___ Local neighborhood parks
___ Tennis courts
___ Street hockey areas
___ Volleyball courts

~ CONTINUED ~

10. Below are reasons why people don't go to conservation/park areas as often as they may like. Which, if any, are reasons that limit your visit?

___ Sites are too far from my home
___ Lack of transportation
___ Lack of time
___ I don't feel safe at these areas
___ Physical disabilities limit my visits
___ I'm unsure where the areas are located
___ I don't enjoy outdoor recreation
___ My leisure time is spent doing other things
___ My age limits my visits
___ Other _____

11. To preserve open space in town, what action would YOU take:

a. Contribute some land to the town/state/land trust	yes	no	not sure
b. Donate money to buy land	yes	no	not sure
c. Rewrite your deed to limit future development of your land	yes	no	not sure
d. Sell land to the town at a "bargain price"	yes	no	not sure
e. Put a conservation restriction on your land to protect it from future development	yes	no	not sure
f. Sell some land to the town for fair market value	yes	no	not sure
g. Vote for a town-supported land acquisition program	yes	no	not sure
h. Other _____	yes	no	not sure

12. To preserve open space, what TOWN actions do you favor?

___ Combination of public & private action
___ Conservation restrictions
___ Town purchase of land
___ Zoning for open space conservation
___ Mandatory dedication of open space by developers
___ Other _____

13. Do you feel there is too much development in Burlington? yes no not sure

14. Please feel free to expand on any answer or to comment on something we missed for use in the development of the Open Space Plan:

~ THANK YOU FOR YOUR TIME! ~

*FOR PURPOSES OF THIS SURVEY, PLEASE USE THE FOLLOWING DEFINITIONS:

Open Space

Public and privately owned undeveloped lands which are important for a variety of reasons, including conservation, recreation, agriculture or simply because of their scenic qualities and their contribution to the overall character of the town.

Active Recreation

"Active" means participation in a sport, be it individual or team related, usually implying some application of physical exertion or use of motor skills.

Passive Recreation

"Passive" means a non-sport related activity, such as picnicking, going for a walk, or visiting a playground. However, spectating at a sports event could also be included under this description, as it is non-participatory.

Sustainability

Meeting the needs of the present generation without compromising the ability of future generations to meet their needs. Involves addressing social, economic, and environmental factors of an issue.

Town of Burlington
Conservation Department
25 Center Street
Burlington, MA 01803

Town Resident
Burlington, MA 01803

APPENDIX 2

OPEN SPACE AND RECREATION SURVEY RESULTS

Town of Burlington
Open Space and Recreation Survey Results

		Years				
		> 2	2-5	6-10	10+	
#1	How long have you been a resident?	25	60	71	605	**761**
		3.3%	**7.9%**	**9.3%**	**79.5%**	100.0%

		18-25	26-35	36-45	46-65	65+	
#2	What is your age group?	7	48	173	305	228	**761**
		0.9%	**6.3%**	**22.7%**	**40.1%**	**30.0%**	

		Yes	No	Not Sure	
#3	Are you satisfied with the places available in town for children and youth recreation?	514	103	125	742
		69.3%	**13.9%**	**16.8%**	100.0%
#4	Are you satisfied with the places available in town for adult recreation?	429	175	143	747
		57.4%	**23.4%**	**19.1%**	100.0%
#5	Are you satisfied with the general condition of these facilities?	473	120	132	725
		65.2%	**16.6%**	**18.2%**	100.0%
#6	Is there a need to preserve open space and natural areas in Burlington	677	31	42	750
		90.3%	**4.1%**	**5.6%**	100.0%

#7	How often do you visit the following areas:	5	4	3	2	1	
	a. School Facilities	171	36	77	234	249	
	b. Town Common	149	100	196	249	72	
	c. Mill Pond Reservoir	49	27	81	192	328	
	d. Simonds Park	174	73	137	204	194	
	e. Rahanis Park	88	43	88	135	388	
	f. Little Brook Conservation Area	5	5	11	62	654	**90.0%**
	g. Sawmill Brook Conservation Area	13	9	21	76	629	**84.1%**
	h. Marion Road Conservation Area	6	7	14	63	657	**88.0%**

Visits per year:
5 = 15+
4 = 10-15
3 = 5-10
2 = 1-5
1 = Never

Town of Burlington
Open Space and Recreation Survey Results

		5	4	3	2	1	
# 8	**How important is it for you to preserve:**						
	a. Buildings of historical or architectural interest	317	232	110	50	47	756
	b. Places of historical value	331	239	109	44	37	760
	c. Open space to meet our conservation needs	467	183	67	24	14	755
	d. Open space to meet our watershed protection needs	547	148	45	6	11	757
	e. Open space to meet our active recreation needs	414	223	72	28	16	753
	f. Open space for aesthetic or passive recreation needs	417	224	86	24	18	769

# 9	**Please check the top three (3) recreational facilities you feel Burlington needs more of:**	
	Bike trails	322
	Outdoor swimming pools	138
	Indoor swimming pools	223
	Hiking and cross-country skiing trails	202
	Softball/baseball fields	77
	Creative arts centers	104
	Family picnic areas	154
	In-line skating/skateboard facilities	27
	Golf course/driving ranges	176
	Preserved natural areas	352
	Children's playgrounds	78
	Teen centers	176
	Football/soccer fields	37
	Basketball courts	28
	Local neighborhood parks	135
	Tennis courts	70
	Street hockey areas	20
	Volleyball courts	17
	Other	56

#10	**Below are reasons why people don't go to conservation/park areas as often as they may like. Which, if any, are reasons that limit your visit?**
	Sites are too far from my home	75
	Lack of transportation	21
	Lack of time	290
	I don't feel safe at these areas	64
	Physical disabilities limit my visits	50
	I'm unsure where the areas are located	408
	I don't enjoy outdoor recreation	12
	My leisure time is spent doing other things	199
	My age limits my visits	77
	Other	66

Town of Burlington
Open Space and Recreation Survey Results

		Yes	No	Not Sure
#11	**To preserve open space in town, what action would YOU take:**			
	a. Contribute some land to the town/state/land trust	82	347	125
	b. Donate money to buy land	163	359	134
	c. Rewrite your deed to limit future development of your l	127	384	131
	d. Sell land to the town at a "bargain price"	51	467	121
	e. Put a conservation restriction on your land to protect it from future development	225	296	130
	f. Sell some land to the town for fair market value	25	381	127
	g. Vote for a town-supported land acquisition program	450	153	137
	h. Other	34		

# 12	To preserve open space, what TOWN actions do you favor?	
	Combination of public and private action	372
	Conservation restrictions	381
	Town purchase of land	367
	Zoning for open space conservation	458
	Mandatory dedication of open space by developers	443
	Other	27

		Yes	No	Not Sure	
# 13	**Do you feel like there is too much development in Burlington**	494	131	123	748
		66.0%	**17.5%**	**16.4%**	

# 14	**Please feel free to expand on any answer or to comment on something we missed for use in the development of the Open Space Plan**	238 comments

APPENDIX 3

BURLINGTON SOILS TYPES BY DEVELOPMENT LIMITATIONS

Burlington Soil Types by Development Limitations

Variables Limitations	
Soil Type	**Comments**
Udorthents, sandy	
Udorthent, loamy	
Udorthents-urban land complex, 0-8% slopes	
Udorthents, wet substratum	

Slight Limitations	
Soil Type	**Comments**
Hinckley loamy sand, 3-8% slopes	Important farmland
Merrimac fine sandy loam, 0-3% slopes	Prime farmland
Windsor loamy sand, 0-3% slopes	Important farmland
Windsor loamy sand, 3-8% slopes	Important farmland
Canton fine sandy loam, 3-8% slopes	Prime farmland
Canton fine sandy loam, 3-8% slopes	Extremely stony
Merrimac-Urban land complex, 0-8% slopes	

Moderate Limitations	
Soil Type	**Comments**
Scituate fine sandy loam, 3-8% slopes	Prime farmland
Scituate fine sandy loam, 3-8% slopes	Extremely stony
Scituate fine sandy loam, 8-15% slopes	Important farmland
Hinckley loamy sand, 8-15% slopes	
Sudbury fine sandy loam, 2-8% slopes	Prime farmland
Woodbridge fine sandy loam, 3-8% slopes	Important farmland, very stony
Canton fine sandy loam, 8-15 % slopes	Important farmland
Canton fine sandy loam, 8-15 % slopes	Extremely stony
Canton fine sandy loam, 8-15 % slopes	Extremely bouldery
Paxton fine sandy loam, 3-8% slopes	Extremely stony
Paxton fine sandy loam, 8-15% slopes	Extremely stony
Deerfield loamy sand, 0-3% slopes	Important farmland
Deerfield loamy sand, 3-8% slopes	
Montauk fine sandy loam, 3-8% slopes	Prime farmland
Montauk fine sandy loam, 3-8% slopes	Extremely stony
Montauk fine sandy loam, 8-15% slopes	Important farmland
Montauk fine sandy loam, 8-15% slopes	Extremely stony
Canton-Charlton-Urban land complex, 0-8% slopes	
Charlton-Hollis-Urban land complex, 3-15% slopes	Rocky
Paxton-Urban land complex, 3-15% slopes	

Source: USDA NRCS Middlesex County Massachusetts Interim Soil Survey Report

Burlington Soil Types by Development Limitations

Severe Limitations	
Soil Type	**Comments**
Charlton-Hollis-Rock outcrop complex, 3-8% slopes	
Charlton-Hollis-Rock outcrop complex, 8-15% slopes	
Charlton-Hollis-Rock outcrop complex, 15-25% slopes	
Hollis-Rock outcrop-Charlton complex, 3-15% slopes	
Hollis-Rock outcrop-Charlton complex, 15-25% slopes	
Rock outcrop-Hollis complex	
Ridgebury fine sandy loam, 2-8% slopes	Extremely stony, Hydric
Whitman loams, 0-5% slopes	Extremely stony, Hydric
Whitman loams, 0-5% slopes	Extremely stony, Hydric
Whitman loams, 0-5% slopes	Extremely stony, Hydric
Hinkley loamy sand, 15-25% slopes	
Wareham loamy sand, 0-5% slopes	
Scarboro loamy sand, 0-3%	Hydric
Saco mucky silt loam	Hydric
Swansea muck	Hydric
Freetown muck	Hydric
Limerick silt loam, 0-3% slopes	Hydric
Freetown muck, ponded	Hydric
Wareham loamy sand, 0-5% slopes	Hydric
Montauk, fine sandy loam, 15-25% slopes	
Montauk, fine sandy loam, 15-25% slopes	Extremely stony
Woodbridge-Urban land complex, 3-15% slopes	

Urban Land	
Soil Type	**Comments**
Urban land	
Urban land, wet substratum	

Source: USDA NRCS Middlesex County Massachusetts Interim Soil Survey Report

APPENDIX 4

BURLINGTON VEGETATION INVENTORY

Common Name	Genus	Species
Balsam Fir	Abies	balsamea
Red Spruce	Picea	rubens
Austrian Pine	Pinus	nigra
Red Pine	Pinus	resinosa
Pitch Pine	Pinus	rigida
Eastern White Pine	Pinus	strobis
Scotch Pine	Pinus	sylvestris
Eastern Hemlock	Tsuga	canadensis
Atlantic White-cedar	Chamaccyparis	thyoides
Common Juniper	Juniperus	communis
Eastern Redcedar	Juniperus	virginiana
Northern White-cedar	Thuja	occidentalis
Eastern Cottonwood	Populus	deltoides
Bigtooth Aspen	Populus	grandidentata
Lombardy Poplar	Populus	nigra
Quaking Aspen	Populus	tremuloides
White Willow	Salix	alba
Weeping Willow	Salix	babylonica
Bebb Willow	Salix	bebbiana
Pussy Willow	Salix	discolor
Black Willow	Salix	nigra
Basket Willow	Salix	viminalis
Bitternut Hickory	Carya	cordiformis
Pignut Hickory	Carya	glabra
Shagbark Hickory	Carya	ovata
Hazel Alder	Alnus	serrulata
Yellow Birch	Betula	alleghaniensis
Sweet Birch	Betula	lenta
Paper Birch	Betula	papyrifera
European White Birch	Betula	pendula
Gray Birch	Betula	populifolia
American Hornbeam	Carpinus	caroliniana
Eastern Hophornbeam	Ostrya	virginiana
American Chestnut	Castanea	dentata
American Beech	Fagus	grandifolia
European Beech	Fagus	sylvatica
White Oak	Quercus	alba
Swamp White Oak	Quercus	bicolor
Scarlet Oak	Quercus	coccinea
Bear Oak	Quercus	ilicifolia
Chestnut Oak	Quercus	prinus
Northern Red Oak	Quercus	rubra
Black Oak	Quercus	velutina
Hackberry	Celtis	occidentalis
American Elm	Ulmus	americana
Slippery Elm	Ulmus	rubra
Osage-orange	Maclura	pomifera
White Mulberry	Morus	alba
Yellow-poplar	Liriodendron	tulipifera
Saucer Magnolia	Magnolia	soulangiana
Sassafras	Sassafras	albidum
Witch-hazel	Hamamelis	virginiana
London Planetree	Platanus	acerifolia

Common Name	Genus	Species
American Sycamore	Platanus	occidentalis
Downy Serviceberry	Amelanchier	arborea
Roundleaf Serviceberry	Amelanchier	sanguinea
Brainerd Hawthorn	Crataegus	brainerdii
Pear Hawthorn	Crataegus	calpodendron
Fireberry Hawthorn	Crataegus	chrysocarpa
Scarlet Hawthorn	Crataegus	coccinea
Cockspur Hawthorn	Crataegus	crus-galli
Broadleaf Hawthorn	Crataegus	dilatata
Fanleaf Hawthorn	Crataegus	flabellata
Biltmore Hawthorn	Crataegus	intricata
Downy Hawthorn	Crataegus	mollis
Washington Hawthorn	Crataegus	phaenopyrum
Frosted Hawthorn	Crataegus	pruinosa
Dotted Hawthorn	Crataegus	punctata
Fleshy Hawthorn	Crataegus	succulenta
Apple	Malus	sylvestris
American Plum	Prunus	americana
Sour Cherry	Prunus	cerasus
Garden Plum	Prunus	domestica
Canada Plum	Prunus	nigra
Pin Cherry	Prunus	pensylvanica
Peach	Prunus	persica
Black Cherry	Prunus	serotina
Common Chokecherry	Prunus	virginiana
Common Pear	Pyrus	communis
American Mountain-ash	Sorbus	americana
European Mountain-ash	Sorbus	aucuparia
Eastern Redbud	Cercis	Canadensis
Honey Locust	Gleditsia	triacanthos
Black Locust	Robinia	pseudoacacia
Shining Sumac	Rhus	copallina
Smooth Sumac	Rhus	glabra
Staghorn Sumac	Rhus	typhina
Poison-sumac	Toxicodendron	vernix
English Holly	Ilex	aquifolium
American Holly	Ilex	opaca
Boxelder	Acer	negundo
Norway Maple	Acer	platanoides
Red Maple	Acer	rubrum
Silver Maple	Acer	saccharinum
Sugar Maple	Acer	saccharinum
Horse Chestnut	Aesculus	hippocastanum
European Buckthorn	Rhamnus	cathartica
Glossy Buckthorn	Rhamnus	frangula
American Basswood	Tilia	americana
European Linden	Tilia	europaea
Russian Olive	Elaeagnus	angustifolia
Alternate-leaf Dogwood	Cornus	alternifolia
Flowering Dogwood	Cornus	florida
Red-osier Dogwood	Cornus	stolomfera
Black Tupelo	Nyssa	sylvatica
White Ash	Fraxinus	americana

Common Name	Genus	Species
Black Ash	Fraxinus	nigra
Green Ash	Fraxinus	pennsylvanica
Northern Catalpa	Catalpa	speciosa
Buttonbush	Cephalanthus	occidentalis
American Elder	Sambucus	canadensis
Arrowwood	Vibernum	dentatum
Nannyberry	Vibernum	lentago

Type	Common Name	Genus/Species
Moss	Peat Moss	Sphagnum spp.
Clubmoss	Ground pine	Lycopodium obscurum
Horsetail	Water Horsetail	Equietum fluviatile
Ferns	Sensitive Fern	Onoclea sensibilis
	Marsh Fern	Thelypteris thelypteroides
	Royal Fern	Osmunda regalis
	Crested Fern	Dryopteris cristata
	Cinnamon Fern	Osmunda cinnamomea
	Interrupted Fern	Osmunda claytonia
Grasses	Reed Canary Grass	Phalaris arundinacea
	Bluejoint	Calamagrostis canadensis
	Common Reed	Phragmites australis
	Manna/Rattlesnake Gr.	Glyceria canadensis
	Wood Reed	Cinna arundinacea
	Purple Lovegrass	Erafrostis spectabilis
	Rice Cutgrass	Leersia oryzoides
Sedges	Tussock Sedge	Carex stricta
	Wool Grass	Scirpus cyperinus
	Lurid Sedge	Cares lurida
	Bristle-bract Sedge	Carex tribuloides
	Green bulrush	Scirpus atrovirens
	Beaked spike-rush	Eleocharis rostellata
	Fringed Sedge	Carex crinita
	Fox Sedge	Carex vulpinoidea
Rushes	Soft Rush	Juncus effusus
	Canada Rush	Juncus canadensis
Forbs	Broad-leaved cattail	Typha latifolia
	Purple Loosestrife	Lythrum salicaria
	Tall Meadow Rue	Thalictrum pubescens
	Swamp Buttercup	Ranunculus septentrionalis
	Big-leaved Arrowhead	Saggitaria latifolia
	Northern Water Plantain	Alisma plantagoaquatica
	Jack-in-the-Pulpit	Arisaema triphyllum
	Lesser Burr-reed	Sparganuum americanum
	Jewelweed	Impatiens capensis
	Arrow-leaved Tearthumb	Polygonum sagittatum
	Halberd-leaved Tearthumb	Polygonum arifolium
	Boneset	Eupatorium perfoliatum
	Purple Joe-Pye Weed	Eupatoriadelphus purpurea
	Blue Vervain	Verbena hastata
	Skunk cabbage	Symplocarpus foetidus

Type	Common Name	Genus/Species
	False Hellebore	Veratrum viride
	Blue Flag	Iris versicolor
	Bedstraw	Gallium tinctorium
	Devil's Beggar-ticks	Bidens frondosa
	Swamp milkweed	Asclepias incarnata
	Partridgeberry	Mitchella repens
	Canada Mayflower	Maianthemum canadense
	May Apple	Podophyllum peltatum
	Goldthread	Coptis trifolia
	Marsh Marigold	Caltha palustris
	Goldenrods	Solidago spp.
	Asters	Aster spp.
	Willow-herb	Epilobium sp.
	Yellow Flag	Iris pseudacorus
	Violet	Viola sp.
	Water Purslane	Ludwiga palustris
	Water Horehound	Lycopus sp.
Deciduous Shrubs	Swamp rose	Rosa palustris
	Multiflora rose	Rosa multiflora
	Willows	Salix spp.
	Northern Arrowwood	Viburnum recognitum
	Sweet Pepperbush	Clethra alnifolia
	Highbush Blueberry	Vaccinium corymbosum
	Common Elderberry	Cambucus canadensis
	Speckled Alder	Alnus rugosa
	Steeplebush	Spirea tomentosa
	Broad-leaved Meadowsweet	Spirea latifolia
	Silky Dogwood	Cornus amomum
	Red Osier Dogwood	Cornus stolonifera
	Spicebush	Lindera benzoin
	Northern Wild Raisin	Viburnum cassinoides
	Common Winterberry	Ilex verticillata
	Maleberry	Lyonia liqustrina
	Swamp azalea	Rhododendron viscocum
	Sweet Gale	Myrica gale
Evergreen shrubs	Sheep Laurel	Kalmia angustifolia
Deciduous Trees	Witch Hazel	Hamamelis virginiana
	European Buckthorn	Rhamnus frangula
	Ironwood	Carpinus caroliniana
	Red maple	Acer rubrum
	American Elm	Ulmus americana

Type	Common Name	Genus/Species
	Swamp White Oak	Quercus bicolor
	White Oak	Quercus alba
	Green ash	Fraxinus pennsylvanica
	White Ash	Fraxinus americana
	Paper Birch	Betula papyrifera
	Yellow Birch	Betula alleghaniensis
	Gray Birch	Betuala populifolia
	Black Cherry	Prunus serotina
	Pin Oak	Quercus palustris
Evergreen trees	Atlantic White Cedar	Chamaecyparis thyoides
	Pitch Pine	Pinus rigida
	White Pine	Pinus strobus
Vines	Bittersweet Nightshade	Solanum dulcamara
	Poison Ivy	Toxicodendron radicans
	Ground nut	Apios americana
	Climbing Hempweed	Mikania scadens
	Common Greenbrier	Smilax rotundifolia
	Swamp Dewberry	Rubus hispidus
	Virginia Creeper	Parthenocissus quinquefolia
	Wild Grape	Vitis spp.
	Climbing Buckwheat	Polygonum scadens
Queen Anne's Lace		
Sticky Burr		
Lady Slipper		
Bayberry		

APPENDIX 5

BURLINGTON WILDLIFE INVENTORY

Common Name	Genus/Species
American Beaver	*Castor Canadensis*
Big Brown Bat	*Eptesicus fuscus*
Black Bear	*Ursus americanus* (rare visitor)
Bobcat	*Lynx rufus*
Common Raccoon	*Procyon lotor*
Coyote	*Canis latrans*
Deer Mouse	*Peromyscus maniculatus*
Eastern Chipmunk	*Tamias striatus*
Eastern Cottontail	*Sylvilagus floridanus*
Eastern Gray Squirrel	*Sciurus carolinensis*
Eastern Mole	*Scalopus aquaticus*
Eastern Pipistrel	*Pipistrellus subflavus*
Gray Fox	*Urocyon cinereoargenteus*
Hairytail Mole	*Parascalops breweri*
Hoary Bat	*Lasiurus cinereus*
House Mouse	*Mus musculus* (mostly in or near buildings)
Keen Myotis	*Myotis keeni*
Little Brown Bat	*Myotis lucifugus*
Longtail Shrew	*Sorex dispar* (edge of range)
Longtail Weasel	*Mustela frenata*
Masked Shrew	*Sorex cinereus*
Meadow Jumping Mouse	*Zapus hudsonius*
Meadow Vole	*Microtus pennsylvanicus*
Mink	*Mustela vison*
Moose	*Alces alces* (rare visitor)
Muskrat	*Ondatra zibethica*
New England Cottontail	*Sylvilagus transitionalis*
Northern Flying Squirrel	*Glaucomys sabrinus*
Northern shorttailed Shrew	*Blarina brevicauda*
Northern Water Shrew	*Sorex palustris*
Norway Rat	*Rattus norvegicus* (mostly in or near buildings)
Opossum	*Didelphis virginiana*
Pine Vole	*Pitymys pinetorum*
Porcupine	*Erethizon dorsatum*
Raccoon	*Procyon lotor*
Red Bat	*Lasiurus borealis*
Red Fox	*Vulpes fulva*
Red Squirrel	*Tamiasciurus hudsonicus*
River Otter	*Lutra canadensis*
Shorttail Weasel	*Mustela erminea*
Silver-haired Bat	*Lasionycteris noctivagans*
Small-footed Myotis	*Myotis subulatus*
Smoky Shrew	*Sorex fumeus*
Snowshoe Hare	*Lepus americanus* (edge of range)
Southern Bog Lemming	*Synaptomys cooperi*
Southern Flying Squirrel	*Glaucomys volans*
Southern Red-backed Vole	*Clethrionomys gapperi*
Starnose Mole	*Condylura cristata*
Striped Skunk	*Mephitis mephitis*
White-footed Mouse	*Peromyscus leucopus*
White-tailed Deer	*Odocoileus virginianus*
Woodchuck	*Marmota monax*
Woodland Jumping Mouse	*Napaeozapus insignis*

Common Name	Genus	Species
Acadian Flycatcher	Empidonax	virescens
Alder Flycatcher	Empidonax	alnorum
American Bittern	Botaurus	lentiginosus
American Coot	Fulica	americana
American Crow	Corvus	brachyrhynchos
American Goldfinch	Carduelis	tristis
American Kestrel	Falco	sparverius
American Redstart	Setophaga	ruticilla
American Robin	Turdus	migratorius
American Tree Sparrow	Spizella	arborea
American Wigeon	Anas	americana
American Woodcock	Philohela	minor
Baltimore Oriole	Icterus	galbula
Bank Swallow	Riparia	riparia
Barn Owl	Tyto	alba
Barn Swallow	Hirundo	rustica
Barred Owl	Strix	varia
Bay-breasted Warbler	Dendroica	castanea
Belted Kingfisher	Megaceryle	alcyon
Black Duck	Anas	rubripes
Black-and-White Warbler	Mniotilta	varia
Black-backed Three-toed Woodpecker	Picoides	arcticus
Black-billed Cuckoo	Coccyzus	erythropthalmus
Blackburnian Warbler	Dendroica	fusca
Black-capped Chickadee	Parus	atricapillus
Black-crowned Night Heron	Nycticorax	nycticorax
Blackpoll Warbler	Dendroica	striata
Black-throated Blue Warbler	Dendroica	caerulescens
Black-throated Green Warbler	Dendroica	virens
Blue Jay	Cyanocitta	cristata
Blue-gray Gnatcatcher	Polioptila	caerulea
Blue-winged Teal	Anas	discors
Blue-winged Warbler	Vermivora	pinus
Bobolink	Dolichonyx	oryzivorus
Broad-winged Hawk	Buteo	platypterus
Brown Creeper	Certhia	familiaris
Brown Thrasher	Toxostoma	rufum
Brown-headed Cowbird	Molothrus	ater
Bufflehead	Bucephala	albeola
Canada Goose	Branta	canadensis
Canada Warbler	Wilsonia	canadensis
Cape May Warbler	Dendoica	tigrina
Carolina Wren	Thryothorus	ludovicianus
Cattle Egret	Bubuleus	ibis
Cedar Waxwing	Bombycilla	cedrorum
Chestnut-sided Warbler	Dendroica	pensylvanica
Chimney Swift	Chaetura	pelagica
Chipping Sparrow	Spizella	passerina
Cliff Swallow	Petrochelidon	pyrrhonota
Common Bobwhite	Colinus	virginianus
Common Flicker	Colaptes	auratus

Common Name	Genus	Species
Common Gallinule	Gallinula	chloropus
Common Goldeneye	Bucephala	clangula
Common Grackle	Quiscalus	quiscula
Common Loon	Gavia	immer
Common Merganser	Mergus	merganser
Common Nighthawk	Chordeiles	minor
Common Pintail	Anas	acuta
Common Redpoll	Carduelis	flammea
Common Snipe	Capella	gallinago
Common Tern	Sterna	hirundo
Common Yellowthroat	Geothlypis	trichas
Connecticut Warbler	Oporornis	agilis
Cooper's Hawk	Accipiter	cooperii
Dark-eyed Junco	Junco	hyemalis
Double-crested Cormorant	Phalacrocorax	auritus
Downy Woodpecker	Picoides	pubescens
Eastern Bluebird	Sialia	sialis
Eastern Kingbird	Tyrannus	tyrannus
Eastern Meadowlark	Sturnella	magna
Eastern Pewee	Contopus	virens
Eastern Phoebe	Sayornis	phoebe
European Starling	Sturnus	vulgaris
Evening Grosbeak	Hesperiphona	vespertina
Field Sparrow	Spizella	pusilla
Fish Crow	Corvos	essifragus
Fox Sparrow	Passerella	iliaca
Gadwall	Anas	strepera
Glossy Ibis	Plegadis	falcinellus
Golden-crowned Kinglet	Regulus	satrapa
Golden-winged Warbler	Vermivora	chrysoptera
Grasshopper Sparrow	Ammodramus	savannarum
Gray Catbird	Dumetella	carolinensis
Gray-cheeked Thrush	Catharus	minimus
Great Blue Heron	Ardea	herodias
Great Egret	Casmerodius	albus
Great Horned Owl	Bubo	virginianus
Great-crested Flycatcher	Myiarchus	crinitus
Greater Black-backed Gull	Larus	marinus
Greater Yellowlegs	Tringa	melanoleuca
Green Heron	Butorides	virescens
Green-backed Heron	Butorides	striatus
Green-winged Teal	Anas	crecca
Hairy Woodpecker	Picoides	villosus
Hermit Thrush	Catharus	guttatus
Herring Gull	Larus	argentatus
Hooded Merganser	Lophodytes	cucullatus
Hooded Warbler	Wilsonia	citrina
Horned Grebe	Podiceps	auritus
Horned Lark	Eremophila	alpestris
House Finch	Carpodacus	mexicanus
House Sparrow	Passer	domesticus

Common Name	Genus	Species
House Wren	Troglodytes	aedon
Indigo Bunting	Passerina	cyanea
Kentucky Warbler	Oporornis	formosus
Killdeer	Charadrius	vociferous
King Rail	Rallus	elegans
Lapland Longspur	Calcarius	lapponicus
Least Bittern	Ixobrychus	exilis
Least Flycatcher	Empidonax	minimus
Least Sandpiper	Calidris	minutilla
Lesser Yellowlegs	Tringa	flavipes
Lincoln's Sparrow	Melospiza	lincolnii
Little Blue Heron	Florida	caerulea
Long-eared Owl	Asio	otus
Louisiana Heron	Hydranassa	tricolor
Louisiana Waterthrush	Seiurus	motacilla
Magnolia Warbler	Dendroica	magnolia
Mallard	Anas	platyrhynchos
Marsh Wren	Cistothorus	palustris
Merlin	Falco	columbarius
Mourning Dove	Zenaida	macroura
Mourning Warbler	Oporornis	philadelphia
Mute Swan	Cygnus	olor
Nashville Warbler	Vermivora	ruficapilla
Northern Cardinal	Cardinalis	cardinalis
Northern Goshawk	Accipiter	gentilis
Northern Harrier	Circus	cyaneus
Northern Mockingbird	Mimus	polyglottos
Northern Parula Warbler	Parula	americana
Northern Rough-winged Swallow	Stelgidopteryx	serripennis
Northern Shoveler	Anas	clypeata
Northern Shrike	Lanius	excubitor
Northern Waterthrush	Seiurus	noveboracensis
Olive-sided Flycatcher	Nuttallornis	borealis
Orange-crowned Warbler	Vermivora	celata
Orchard Oriole	Icterus	spurius
Ovenbird	Seiurus	aurocapillus
Palm Warbler	Dendroica	palmarum
Peregrine Falcon	Falco	peregrinus
Pied-billed Grebe	Podilymbus	podiceps
Pileated Woodpecker	Dryocopus	pileatus
Pine Grosbeak	Pinicola	enucleator
Pine Siskin	Carduelis	pinus
Pine Warbler	Dendroica	pinus
Prairie Warbler	Dendroica	discolor
Purple Finch	Carpodacus	purpureus
Purple Martin	Progne	subis
Red Crossbill	Loxia	curvirostra
Red-breasted Merganser	Mergus	serrator
Red-breasted Nuthatch	Sitta	canadensis
Red-eyed Vireo	Vireo	olivaceus
Red-necked Grebe	Podiceps	grisegena

Common Name	Genus	Species
Red-shouldered Hawk	Buteo	lineatus
Red-tailed Hawk	Buteo	jamaicensis
Red-winged Blackbird	Agelaius	phoeniceus
Ring-billed Gull	Larus	delawarensis
Ring-necked Duck	Aythya	collaris
Ring-necked Pheasant	Phasianus	umbellus
Rock Dove	Columba	livia
Rose-breasted Grosbeak	Pheucticus	ludovicianus
Rough-legged Hawk	Buteo	lagopus
Ruby-crowned Kinglet	Regulus	calendula
Ruby-throated Hummingbird	Archilochus	colubris
Ruddy Duck	Oxyura	jamaicensis
Ruffed Grouse	Bonasa	umbellus
Rufous-sided Towhee	Pipilo	reythrophthalmus
Rusty Blackbird	Euphagus	carolinus
Savannah Sparrow	Passerculus	sandwichensis
Saw-whet Owl	Aegolius	acadicus
Scarlet Tanager	Piranga	olivacea
Screech Owl	Otus	asio
Semipalmated Sandpiper	Calidris	pusilla
Sharp-shinned Hawk	Accipiter	striatus
Short-eared Owl	Asio	flammeus
Snow Bunting	Plectrophenax	nivalis
Snow Goose	Chen	caerulescens
Snowy Egret	Egretta	thula
Snowy Owl	Nyctea	scandiaca
Solitary Vireo	Vireo	solitarius
Song Sparrow	Melospiza	melodia
Sora Rail	Porzana	carolina
Spotted Sandpiper	Actitus	macularia
Swainson's Thrush	Catharus	ustulatus
Swamp Sparrow	Melospiza	georgiana
Tennessee Warbler	Vermivora	peregrina
Tree Swallow	Iridoprocne	bicolor
Tufted Titmouse	Parus	bicolor
Turkey Vulture	Cathartes	aura
Upland Sandpiper	Bartramia	longicauda
Veery	Catharus	fuscescens
Vesper Sparrow	Pooecetes	gramineus
Virginia Rail	Rallus	limicola
Warbling Vireo	Vireo	gilvus
Water Pipit	Anthus	spinoletta
Whip-poor-will	Caprimulgus	vociferus
Whistling Swan	Olor	columbianus
White-breasted Nuthatch	Sitta	carolinensis
White-crowned Sparrow	Zonotrichia	leucophrys
White-eyed Vireo	Vireo	griseus
White-throated Sparrow	Zonotrichia	albicollis
White-winged Crossbill	Loxia	leucoptera
Wild Turkey	Meleagris	gallopavo
Willow Flycatcher	Empidonax	traillii

Common Name	Genus	Species
Wilson's Warbler	Wilsonia	pusilla
Winter Wren	Troglodytes	troglodytes
Wood Duck	Aix	sponsa
Wood Thrush	Hylocichla	mustelina
Worm-eating Warbler	Helmitheros	vermivorus
Yellow Warbler	Dendroica	petechia
Yellow-bellied Flycatcher	Empidonax	flaviventris
Yellow-bellied Sapsucker	Sphyrapicus	varius
Yellow-billed Cuckoo	Coccyzus	americaus
Yellow-breasted Chat	Icteria	virens
Yellow-crowned Night Heron	Nyctanassa	violacea
Yellow-rumped Warbler	Dendroica	coronata
Yellow-throated Vireo	Vireo	flavifrons

Common Name	Genus/Species
American Brook Lamprey	*Lampetra appendix* (uncommon)
American Eel	*Anguilla rostrata*
Banded Killifish	*Fundulus diaphanus* (common surface dweller)
Banded Sunfish	*Enneacanthus obesus*
Blacknose Dace	*Rhinichthys atratulus*
Bridle Shiner	*Notropis bifrenatus*
Brook Trout	*Salvelinus fontinalis*
Brown Bullhead	*Ameiurus nebulosus*
Brown Trout	*Salmo trutta*
Burbot	*Lota lota* (deep water lakes only)
Chain Pickerel	*Esox niger*
Common Carp	*Cyprinus carpio*
Common Shiner	*Luxilus cornutus*
Creek Chub	*Semotilus atromaculatus*
Creek Chubsucker	*Erimyzon oblongus*
Eastern Silvery Minnow	*Hybognathus regius*
Fallfish	*Semotilus corporalis* (largest native minnow)
Fathead Minnow	*Pimephales promelas* (common bait minnow)
Golden Shiner	*Notemigonus crysoleucas*
Grass Pickerel	*Esox americanus*
Lake Chub	*Couesius plumbeus*
Lake Trout	*Salvelinus namaycush*
Longnose Dace	*Rhinichthys cataractae* (widest distribution of any minnow)
Longnose Sucker	*Catostomus catostomus* (most widespread sucker)
Ninespine Stickleback	*Pungitius pungitius*
Northern Pike	*Esox lucius*
Pumpkinseed	*Lepomis gibbosus*
Rainbow Trout	*Oncorrhynchus mykiss*
Redbreast Sunfish	*Lepomis auritus*
Sea Lamprey	*Petromyzon marinus*
Slimy Sculpin	*Cottus cognatus*
Spottail Shiner	*Notropis hudsonius*
Swamp Darter	*Etheostoma fusiforme*
Tadpole Madtom	*Noturus gyrinus*
Tessellated Darter	*Etheostoma olmsetdi*
Threespine Stickleback	*Gasterosteus aculeatus*
Trout-perch	*Percopsis omiscomaycus* (uncommon)
White Perch	*Morone americana*
White Sucker	*Catostomus commersoni*
Yellow Perch	*Perca flavescens*
Probable Introductions	
Smallmouth Bass	*Micropterus dolomieu*
Largemouth Bass	*Micropterus salmoides*
Bluegill	*Lepomis macrochirus*
Rock Bass	*Ambloplites rupestris*
Black Crappie	*Pomoxis nigromaculatus*
White Crappie	*Pomoxis annularis*

Common Name	Genus/Species
Reptiles	
Blanding's Turtle	*Emydoidea blandingii*
Common Garter Snake	*Thamnophis sirtalis*
Common Musk Turtle	*Sternotherus odoratus*
Eastern Box Turtle	*Terrapene carolina* (Endangered species)
Eastern Garter Snake	*Thamnophis sirtalis sirtalis*
Eastern Hognose Snake	*Heterodon platirhinos*
Eastern Milk Snake	*Lampropeltis triangulum*
Eastern Painted Turtle	*Chrysemys picta*
Eastern Ribbon Snake	*Thamnophis sauritis*
Northern Black Racer	*Coluber constrictor*
Northern Brown Snake	*Storeria dekayi*
Northern Copperhead	*Agkistrodon contortrix* (uncommon)
Northern Redbelly Snake	*Storeria occipitomaculata*
Northern Ringneck Snake	*Diadophis punctatus*
Northern Water Snake	*Nerodia sipedon*
Smooth Green Snake	*Opheodrys vernalis*
Snapping Turtle	*Chelydra serpentina*
Spotted Turtle	*Clemmys guttata*
Timber Rattlesnake	*Crotalus horridus* (rare)
Wood Turtle	*Clemmys insculpta*
Amphibians	
American Bullfrog	*Rana catesbeiana*
American Toad	*Bufo americanus*
Blue-spotted Salamander	*Ambystoma laterale*
Eastern Spadefoot Toad	*Scaphiopus holbrooki*
Four-toed Salamander	*Hemidactylium scutatum*
Fowler's Toad	*Bufo fowlerii*
Gray Treefrog	*Hyla versicolor*
Green Frog	*Rana clamitans*
Jefferson Salamander	*Ambystoma jeffersonianum*
Marbled Salamander	*Ambystoma opacum*
Mudpuppy	*Necturus maculosus* (unusual if found)
Northern Dusky Salamander	*Desmognathus fuscus*
Northern Leopard Frog	*Rana pipiens*
Northern Spring Peeper	*Psuedacris crucifer*
Northern Spring Salamander	*Gyrinophilus porphyriticus*
Northern Two-lined Salamander	*Eurycea bislineata*
Pickerel Frog	*Rana palustris*
Redback Salamander	*Plethodon cinereus*
Red-spotted Newt (Red Eft)	*Noto phthalmus viridescens*
Spotted Salamander	*Ambystoma maculatum*
Wood Frog	*Rana sylvatica*

APPENDIX 6

INVENTORY OF RECREATION AND CONSERVATION LANDS

Inventory of Lands of Conservation and Recreation Interest

Property	Owner	Manager	Current Use	Condition	Public Access	Access for People w/ Disabilities	Recreation Potential	Zoning	Protected Status	Funds Used for Acquisition	Deed Restriction
Private Parcels - Recreation Interest											
The Burlington Swim and Tennis Club	Private	Private	Recreation	Good	Yes	No	Yes	RO	None	N/A	N/A
The Mitre Corporation Fields	Mitre Corp.	Recreation Department	Recreation	Good	Yes	No	Yes	RO	None	N/A	N/A
Private Parcels - Conservation Interest											
Sawmill Road Parcels	Private	Private	Undeveloped	Good	No	N/A	No	RO	None	N/A	N/A
Public and Nonprofit Parcels - Conservation											
Chadwick Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Informal	No	Passive	RO	Permanent	Town	None
Fairfax Street Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Yes	No	Passive	RO	Permanent	Town	None
Forest Field Conservation Area	Town	Conservation Commission	Natural Resource Protection and Passive Recreation	Good	Informal	No	Passive	RO	Permanent	Donation	None
Ipswich Conservation Area	Town	Conservation Commission	Natural Resource Protection and Passive Recreation	Good	Yes	No	Passive	RO	Permanent	Town	None
Litchfield Way Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Informal	No	Passive	RO	Permanent	Donation	None
Little Brook Conservation Area	Town	Conservation Commission	Natural Resource Protection and Passive Recreation	Good	Yes	No	Passive	RO	Permanent	Town and Self-Help	None
Longmeadow Brook Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Informal	No	Passive	RO	Permanent	Town and Self-Help	None
Lubber Brook Conservation Area	Town	Conservation Commission	Natural Resource Protection and Passive Recreation	Good	Yes	No	Passive	RO	Permanent	Town (donation for $1.00)	None
Marion Road Conservation Area	Town	Conservation Commission	Natural Resource Protection and Passive Recreation	Good	Yes	No	Passive	RO	Permanent	State and Town (Rte. 3 Mitigation Grant)	Conservation restriction held by the state
Mill Pond Conservation Area	Town	Conservation Commission	Natural Resource Protection and Passive Recreation	Good	Yes	No	Passive	RO	Permanent	Town and Self-Help	None

Inventory of Lands of Conservation and Recreation Interest

Property	Owner	Manager	Current Use	Condition	Public Access	Access for People w/ Disabilities	Recreation Potential	Zoning	Protected Status	Funds Used for Acquisition	Deed Restriction
Muller Road Conservation Area	Town	Conservation Commission	Wildlife Corridor	Good	Yes	No	Passive	RO	Permanent	Donation	None
Pine Glen Conservation Area	Town	Conservation Commission	Natural Resource Protection and Nature Study	Good	Yes	No	Passive	RO	Permanent	Town and Self-Help	None
Rock Pond Brook Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Limited	No	Passive	RO	Permanent	Town and Self-Help	None
Sandy Brook Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Yes	No	Passive	RO	Permanent	Town and Self-Help	None
Sawmill Brook Conservation Area	Town	Conservation Commission	Natural Resource Protection, Passive Recreation, and Nature Study	Good	Yes	No	Passive	RO	Permanent	Town and Self-Help	None
Vine Brook Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Limited	No	Passive	RO	Permanent	Town and Self-Help	None
Wildmere Conservation Area	Town	Conservation Commission	Natural Resource Protection	Good	Yes	No	Passive	RO	Permanent	Town	None
Public and Nonprofit Parcels - Recreation											
Center School Field	Town	Recreation Department	Recreation	Good	Yes	No	High	RO	None	Town	No
Human Services Center	Town	Recreation Dept. and Selectmen	Recreation	Excellent	Yes	Yes	High	RO	None	Town	No
Marvin Field	Town	Recreation Department	Recreation	Good	Yes	No	High	RO	None	Owned by City of Boston	Yes
Overlook Park	Town	Recreation Department	Recreation	Fair	Yes	No	High	RO	None	Town	Yes
Pathwood Tot Lot	Town	Recreation Department	Recreation	Good	Yes	No	High	RO	None	Town	Yes
Rahanis Park	Town	Recreation Department	Recreation	Excellent	Yes	No	High	RO	None	Town and HUD	Yes
Regan Park	Town	Recreation Department	Recreation	Good	Yes	Partially	High	RO	None	Town and HUD	Yes
Rotary Field	Town	Recreation Department	Recreation	Good	Yes	No	High	RO	None	Town	Yes

Inventory of Lands of Conservation and Recreation Interest

Property	Owner	Manager	Current Use	Condition	Public Access	Access for People w/ Disabilities	Recreation Potential	Zoning	Protected Status	Funds Used for Acquisition	Deed Restriction
Simonds Park	Town	Recreation Department	Recreation	Excellent	Yes	Partially	High	RO	None	Town and Trust	Yes
TRW Park	Town	Recreation Department	Recreation	Good	Yes	Partially	High	RO	None	Town	No
Veterans Park	Town	Recreation Department	Recreation	Good	Yes	No	High	RO	None	Town and HUD	Yes
Wildmere Park	Town	Recreation Department	Recreation	Good	Yes	Partially	High	RO	None	Town	No
Public and Nonprofit Parcels - Public School Parcels											
Burlington High School	Town	School Committee	Education and Recreation	Fair	Yes	Partially	High	RO	None	Town	No
Fox Hill Elementary School	Town	School Committee	Education and Recreation	Good	Yes	Partially	High	RO	None	Town	No
Francis Wyman School	Town	School Committee	Education and Recreation	Good	Yes	Partially	High	RO	None	Town and State	No
Marshall Simonds Middle School	Town	School Committee	Education and Recreation	Excellent	Yes	Partially	High	RO	None	Town	No
Memorial Elementary School	Town	School Committee	Education and Recreation	Good	Yes	Partially	High	RO	None	Town	No
Pine Glen Elementary School	Town	School Committee	Education and Recreation	Fair	Yes	Partially	High	RO	None	Town	No
Other Public Lands											
Landlocked Parcel	Town	Selectmen	Natural Resource Protection, Open Space	Excellent	No	No	High	IG	None	Town	No
City of Boston Parcel	City of Boston	City of Boston	Natural Resource Protection, Passive and Active Recreation	Good	Limited	No	High	RO	Permanent	Trust	Yes
Wildwood School	Town	School Committee	Education and Recreation	Fair	Yes	No	High	RO	None	Town	No

APPENDIX 7

ADA SELF-EVALUATION FORM

ADA ACCESS SELF-EVALUATION

TRANSITION PLAN

OVERVIEW

The Town of Burlington is committed to providing all residents with appropriate access to its recreation and conservation facilities. The Town is aware of the needs of individuals with disabilities, and outfitting indoor recreation facilities for disability access has been a priority and a focus of the Town over the past few years. As a result, an excellent indoor system has been created. Additional recent focus has also been placed on playgrounds and handicapped parking. This includes considering disability access when selecting the equipment and surfacing of the playgrounds, and ensuring proper designation of handicapped parking where needed throughout the Town. However, from the standpoint of most existing outdoor open space and recreation facilities, disabled access is limited, and the Town plans to concentrate efforts on these areas in the years to come.

ADDRESSING ACCESSIBILITY

Through consultation with the Burlington's ADA Coordinator and the local Disability Access Commission, a transition plan to address access deficiencies at open space and recreation areas throughout town has been created. On Tuesday March 8, 2005 a meeting was held to gather input from three (3) Burlington community members who have disabilities or who are the primary caretakers of an individual with disabilities. Each is an appointed member of Burlington's Disability Access Commission and their contact information is provided below.

- Kenny Tigges – Chair of the Disability Access Commission
  autogrfma@verizon.net

- Maura Mazzocca - Disability Access Commission Member
  mmazzocca@rcn.com

- Bernice Ferguson - Disability Access Commission Member
  19 Bedford Street, Burlington, MA 01803

At this meeting major recreation and conservation facilities throughout town were discussed, including physical obstacles limiting access to these facilities and suggested improvements. Attached is a spreadsheet detailing

the physical obstacles mentioned, planned changes to address these obstacles, and scheduled dates to implement improvements.

In addition to these site specific concerns, a Town wide ambition is to equip most of the Recreation Areas throughout Town with bubblers. At many of the parks (TRW, Veterans etc.) and all of the conservation areas there are no water bubblers, and it recommended that the parks and some conservation be equipped with at least one. Benches are also recommended for resting points at Conservation Areas.

Progress of these initiatives will fall under the responsibility of:

Don Roberts
Director of Recreation
Town of Burlington
Center for Human Services
61 Center Street
Burlington, MA 01803

Tel: 781.270.1696
E-mail: droberts@burlmass.org

John Keeley
Conservation Administrator
Town of Burlington
Conservation Department
25 Center Street
Burlington, MA 01803

Tel: 781.270.1655
E-mail: jkeeley@burlmass.org

Kenny Tigges
Disability Access Commission Chair
Town of Burlington
4 Ellen Road
Burlington, MA 01803

Tel: 781.272.5187
E-mail: autogrfma@verizon.net

APPENDICES

Appendix 1 - Transition Plan Spreadsheet

Appendix 2 - Letter of Official Designation of ADA Coordinator

Appendix 3 - Grievance Procedures

Appendix 4 - Public Notification Requirement Examples

- Absentee Ballot Application
- Notice of Job Vacancy

Appendix 5 - Facility Inventories

Appendix 6 - Employment Practices Statement

APPENDICES

APPENDIX 1

TRANSITION PLAN SPREADSHEET

ADA Access Self-Evaluation Transition Plan

SITE	PHYSICAL OBSTACLES	PLANNED CHANGES	SCHEDULE
Simonds Park	Simonds Park is the largest and most used recreation area in town, however there is currently no disabled access to some of the major fields on the premises. Although the Town had recently made improvements including retrofitting the restrooms for accessibility, further access enhancements are necessary. The three main concerns are:		
	1. Little League Field - There is no accessible entry for people with disabilities to the major Little League field and bleachers from the parking lot. The current path's surface is rough making walking difficult, and wheelchair access unachievable.	Create a walkway from the parking lot to the Little League field and bleachers.	2006
	2. Babe Ruth Field - Access to the Babe Ruth field, located in the lower section of Simonds Park, is limited. Currently individuals must travel down a large hill with bumpy terrain - which is difficult for walkers and wheelchairs to traverse - or enter via an uneven pathway from the lower field parking lot.	Create a walkway from the lower parking lot to the Babe Ruth baseball field.	2006
	3. BBQ and picnic table area - This area is difficult to maneuver because of roots and overgrowth, and should be leveled off to allow for easier access.	Build a new picnic shelter to replace this area, incorporating handicapped accessibility improvements in the process as part of construction.	2006
Town Conservation Areas	Burlington's conservation areas do not have facilities or access for people with disabilities. There is particular interest in improving accessibility at the Mill Pond Reservoir site as this is one of the most popular areas, and the largest water body, in Burlington. Although parking lot access is satisfactory, there is no disabled access from the lot to the waterfront, and no trails with access for disabled individuals. Paving alternatives, such as compact peastone and woodchips, should be explored to make at least one conservation area trail accessible.	Research alternative substances and potential location (considering environmental impact, safety and usability) for a conservation area trail accessible to disabled individuals.	2007
Rahanis Park	There is currently a 40 inch-wide gate opening leading into the park from the parking lot, but there is no clear path of access (i.e. stone dust or paved pathway) leading to the ball fields from the parking lot.	The area in question is already level, so construction of a path to increase access is a feasible solution for the Town.	2007
Town Common	Parking for people with disabilities is needed in a more user friendly area, a shorter distance from the common. Also the main gazebo at this facility, used for wedding photos, youth award ceremonies, and other events and activities is not accessible to people with disabilities.	A ramp or lift for the gazebo is not considered feasible at this time. If needed, Town-owned concrete pads can be set up at the base of the gazebo for use. This has been done in the past to increase event space. However, it is a Town priority to create a more suitable handicapped parking space.	2007
Veterans Park	Because of the minimal number of parking spots, handicapped parking is not required by law at this site. However, the lot size is very small with only one point for both entry and exit, which does not allow for easy parking. Disabled visitors cannot exit their vehicle without difficulty, particularly those in wheelchairs.	Expand the parking lot, including handicapped parking, and improve drainage.	2008
Marvin Field	The surface of the parking lot, and the walkway from the parking lot to the bleachers, are both made of stone dust at Marvin Field. The terrain on the path is difficult to walk on and not very level. A paved path would increase this area's usability for people with disabilities.	Pave a pathway from the parking lot to the bleachers.	2008
Rotary Field	Rotary Field is located down a step hill reached by steps, and therefore is not accessible to people with disabilities.	This park is difficult to remedy due to drainage and grading issues, however the Town realizes this is an issue and plans to address its accessibility.	2009
Regan Park	There is a paved walkway from the Regan Park driveway to the playground and picnic area. However, the parking lot gets very muddy, particularly after a rain, making maneuvering a wheelchair difficult. The naturally high water table does not allow water to percolate through, causing it to pond. Such poor drainage occurs in most sections of the park including the driveway and fields. This park also does not have a water bubbler.	The parking lot is currently made of stone dust, and it is recommended that research into another substance be conducted to improve its texture and maneuverability. The current Town plan is to explore installation of additional drainage devices (i.e. catch basins etc.) to alleviate the problem.	2010

APPENDIX 2

LETTER OF OFFICIAL DESIGNATION OF ADA COORDINATOR

TOWN OF BURLINGTON

Town Hall
29 Center Street
Burlington, MA 01803
Tel: (781) 270-1600
Fax: (781) 270-1608
E-Mail: info@burlmass.org

Town Administrator's Office
Robert A. Mercier, Town Administrator (781) 270-1635
Anthony J. Troiano, Assistant Town Administrator (781) 270-1634

February 7, 2005

To Whom It May Concern:

Please be advised that Robert Hogan, the Director of Veteran's Services, has been designated as the ADA Coordinator for the Town of Burlington. If you have any further questions, do not hesitate to contact me.

Sincerely,

Robert A. Mercier
Town Administrator

APPENDIX 3

GRIEVANCE PROCEDURE

D R A F T

ADA COMPLIANCE

Grievance Procedure

The following Grievance Procedure is established to meet the requirements of the *Americans with Disabilities Act*. It may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in employment practices and policies or the provision of services, activities, programs, and benefits by the Town of Burlington.

Step 1: The complaint should be in writing and contain information about the alleged discrimination such as name, address, phone number of the complainant and location, date and description of the problem. Reasonable accommodations, such as personal interviews or a tape recording of the complaint, will be made available for persons with disabilities who are unable to submit a written complaint.

The complaint should be submitted by the grievant and/or his/her designee as soon as possible, but no later than 30 calendar days after the alleged violation to:

ADA Compliance Coordinator
Town of Burlington
29 Center Street
Burlington, MA

Step 2 : Within 15 days after receipt of the complaint, the ADA Compliance Coordinator will meet with the complainant to discuss the nature of the complaint and possible resolutions. Within 15 days after the meeting, the ADA Compliance Coordinator will explain the position of the Town of Burlington and offer options for substantive resolution of the complaint. The response will be in a format accessible to the complainant, such as audiotape, large print Braille, etc.

Step 3: If the response by the ADA Compliance Coordinator does not satisfactorily resolve the issue, the complainant and/or his/her designee may appeal the decision of the ADA Compliance Coordinator within 15 days after receipt of the response to the Town Administrator.

Within 15 days after receipt of the appeal, the Town Administrator will meet with the complainant to discuss the complaint and possible resolutions. The complainant must be notified of the meeting and may be present with counsel if he/she so chooses. Within 15 days, the Town Admininistrator will (1) resolve the dispute through reasonable accommodation; (2) dismiss the complaint as not relevant to the handicapped regulations; or (3) devise a plan for the needed structural or program changes to reach compliance. The complainant, ADA Compliance Coordinator and the Town Council must be notified of which action is taken either in writing or by other appropriate formal notification (such as audiotape).

All complaints received by the ADA Compliance Coordinator, or Town Administrator, as well as their responses shall be kept on file for a period of at least three (3) years.

Should an individual wish to file a complaint outside of the Town's complaint process, another option is to file a complaint with the:

Massachusetts Commission Against Discrimination (MCAD)
One Ashburton Place
Boston, MA 02108
(617) 727-3990

APPENDIX 4

PUBLIC NOTIFICATION REQUIREMENT EXAMPLES

- **Absentee Ballot Application**
- **Notice of Job Vacancy**

Commonwealth of Massachusetts

Absentee Ballot Application

William Francis Galvin
Secretary of the Commonwealth

This application is for use by:

1. A registered voter; ***OR***
2. A non-registered voter who is: (a) a Massachusetts citizen absent from the state; ***OR*** (b) an active member of the armed forces or merchant marines, their spouse or dependent; ***OR*** (c) a person confined in a correctional facility or a jail, **except if by reason of felony conviction**.

Instructions

- Fill out and sign this application only if you will be unable to vote at the polls on election day due to: (1) absence from your city or town during the hours the polls are open; (2) physical disability preventing you from going to the polling place; or (3) religious belief; OR if you qualify under #2 above.
- Remember to sign the application at number 5.
- Deliver or mail (remember to attach postage) this application to the city or town clerk or election commission in the city or town where you cast your vote. This application ***must*** be received by ***noon on the day before the election***. If the applicant has entered a health care facility anytime after twelve o'clock noon of the 5th day before the relevant primary or election, contact the city or town clerk about the proper procedure to be followed.
- The ballot will be mailed to you. You can then mail the ballot back to the city or town clerk or you (or a family member) may deliver the ballot in person to the city or town clerk.
- Instead of having the ballot mailed to you, you have the option of voting at your city or town hall at a time arranged with the clerk or election commission. However, you must still submit a timely application.

Warning: Illegal absentee voting, including making a false application, is punishable by a fine of up to $10,000 and up to five years in prison.

1 **This absentee ballot application is being made for:**
☐ a primary ☐ a preliminary election ☐ an election ☐ all elections this year

2 **If this application is for a *primary*, the ballot requested is for the:**
☐ Democratic ☐ Republican ☐ Libertarian ☐ Green-Rainbow

3 **Your legal voting residence:**

_____
street and number, apt. number *city or town* *ward/precinct (if known)*

Check if applicable: ☐ I am living outside the United States and the above address is my last residence in the U.S.

4 **Complete and check *only one* of the following:**
☐ Mail ballot to me at this address:

_____
street & number *p.o. box, if any* *city or town* *state or country* *zip code*

☐ I will call the town clerk or city clerk or election commission and vote there at a time arranged with the clerk or election commission.

☐ I have been admitted to the _____, a hospital or other health care facility after twelve o'clock noon of the 5th day before the primary/election and I request that my absentee ballot be delivered to me by an election official or: _____
name of a person designated by voter

5 **Sign your name here:** _____ _____
signature (signed under penalty of perjury) *date*

Print your name here:

6 **Only to be completed by any person assisting applicant.** If the applicant is unable to complete and sign this application because of blindness, physical disability, inability to read or the inability to read English, any person designated by the voter may do so. Complete and sign the following:

I assisted in completing this application since the applicant was unable to do so because of:
reason

_____ _____ _____
signature of assisting person (signed under penalty of perjury) *printed name of assisting person*

_____ _____ _____
street and number *city or town* *zip code*

Town of Burlington
Human Resources Office
29 Center Street
Burlington, MA 01803
Phone: 781-270-1774
Fax: 781-238-4696

FAX COVER SHEET

DATE: January 25, 2005

TO: Lorraine O'Donnell, Burlington Union Classified Advertising

FAX #: 781-453-6650

FROM: Anne Marie Tucciarone-Mahan, Human Resources Director

MESSAGE: Hi Lorraine. Kindly run the following ad in the next available multi-day run in the professional section. Please call me to confirm receipt and quote a price. Thank you.

NUMBER OF PAGES (including transmittal page):

Assistant Information Systems Manager

The Town of Burlington is seeking a qualified individual to fill the position of Assistant Information Systems Manager to support existing and new information technology programs. A Bachelor's Degree in computer science or a related field is required. The desired candidate shall have a minimum of two years work experience in network administration or any equivalent combination of education and experience. A full job description is available upon request. Starting salary at $41,525 plus benefits. Position available July 1st. Please send resume by June 4, 2004 to:

Human Resources Office
Town of Burlington
29 Center Street
Burlington, MA 01803
Fax: (781) 238-4696
E-mail: atucciarone-mahan@burlmass.org
EOE/AA

NOTICE OF JOB VACANCY – May 25, 2004
Assistant Information Systems Manager – IS Department

DEFINITION:

Under the general direction of the Information Systems Manager, support existing and new information technology programs.

ESSENTIAL FUNCTIONS:

Full job description available upon request in the Human Resources Office.

EDUCATION AND EXPERIENCE:

A Bachelor's Degree in computer science or a related field is required. The desired candidate shall have a minimum of two years work experience in network administration or any equivalent combination of education and experience.

KNOWLEDGE, ABILITY AND SKILL:

Ability to plan, organize and direct the preparation of reports to analyze problems and formulate recommendations. Ability to speak and write effectively. Ability to deal appropriately and effectively with co-workers, the general public, town officials and the business community. Strong conflict resolution and organizational skills are very important. A valid Massachusetts Drivers License is required.

This position is included within the *Professional & Administrative Compensation Plan.* Starting salary at Grade 11, Step I at $41,525 per year plus benefits. Position available effective July 1, 2004

Reply by June 4th to:

Human Resources Office
29 Center Street
Burlington, MA 01803
Fax: (781) 238-4696
EOE/AA

POST: Town Hall, Town Hall Annex, Human Services Center, Library, Recreation Maintenance, DPW, Police and Fire Departments.
Post until June 2, 2004. Applications shall be accepted until 4:00 p.m. Applications are available in the Town Administrator's Office.

APPENDIX 5

FACILITY INVENTORIES

- Facility Inventories Available in Hard Copy -

APPENDIX 6

EMPLOYMENT PRACTICES STATEMENT

TOWN OF BURLINGTON
29 CENTER STREET
BURLINGTON, MASSACHUSETTS 01803

TOWN HALL: (781) 270-1600 FAX: (781) 270-1608 E-MAIL: info@burlmass.org

March 7, 2005

TO: Whom It May Concern

FROM: Bob Hogan, Disability Access Coordinator

RE: Employment Practices

I am presently the Director of Veterans Services for the Town of Burlington and have been appointed by the Town Administrator Robert Mercier to the position of Disability Access Coordinator for the town. To the best of my knowledge the town adheres to all ADA requirements in its employment practices.

From the recruitment process throughout the hiring and training phase, all ADA requirements are met. All collective bargaining agreements also are in compliance for training, all testing, medical exams, all programs within the town for employees, as well as the wage and salaries of all employees are consistent with the ADA.

I again note that to the best of my knowledge the above to be true.

Signed,

Robert C. Hogan
Disability Access Coordinator