A MASTER PLAN
FOR THE RESTORATION AND IMPROVEMENT OF

PROSPECT HILL PARK

WALTHAM, MASSACHUSETTS

PROSPECT HILL PARK - 1898

COURTESY OF WALTHAM HISTORICAL SOCIETY

CITY OF WALTHAM
MAYOR WILLIAM F. STANLEY

PLANNING DEPARTMENT AND
PARK AND RECREATION DEPARTMENT

WALKER-KLUESING DESIGN GROUP
MASTER PLANNING - LANDSCAPE ARCHITECTURE
BOSTON, MASSACHUSETTS

FORESTRY MANAGEMENT SERVICES
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MIDDLETOWN, CONNECTICUT

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EXECUTIVE SUMMARY

This beautiful 250 acre park with dramatic topography and picturesque forests has been slowly deteriorating. As the largest and oldest public open space in Waltham [which means forest home], it has been a source of pride and a focal point of the community since its creation. The park has suffered from indifference since World War II when interests in other issues prevailed and passive recreation took a back seat. The condition of the park has languished in recent years due to insufficient funding, the loss of skiing and unauthorized, inappropriate uses.

The park remains well used during temperate months. Since the closing of the ski area, it is now not as heavily used during the winter months. According to a 1993/94 survey Prospect Hill Park is still the second most visited recreation area in the City after Waltham Common. The park remains a refuge from urban strife, and as the second highest point in the Boston metropolitan area, this rugged and picturesque eminence offers perhaps the best views of the Boston basin available.

PURPOSE OF STUDY

The purpose of this study is to develop a master plan and implementation plan for the entire park that can be used as a guide for both long and short term planning and improvements. General goals are to reinforce an overall image that is compatible with existing natural and historic assets of the park, improve accessibility, and increase passive recreation opportunities while maintaining the active recreation components in their current locations, but not expand them.

METHODOLOGY

The study began with a review of available historic materials that are primarily found in the City Engineering Department, the Waltham Historical Society, the Frederick Law Olmsted National Historic Site in Brookline, and the City Annual Reports from 1891 through 1968 at the Waltham Public Library. Written records after that time have been difficult to obtain. The records of the Waltham Parks and Recreation Department were destroyed by fire in 1983. Olmsted office records in the Library of Congress in Washington DC were not examined. The study continued with on site investigations. Meetings were held with the Waltham Planning Department, Parks and Recreation Department, Engineering Department, Conservation Commission, Prospect Hill Park Advocacy Group, Ad-Hoc Committee/Prospect Hill and residents of the neighborhood. In addition, three well attended public meetings were held.

The Massachusetts Historic Commission has no record of any archaeological investigations that may have taken place in the park. It is suggested that an archaeologist review the site to make a preliminary determination of any potential archaeological sensitivity. Significant findings were apparently made on Blue Hill in Milton which has many similarities to Prospect Hill.

The park has been designated as a Priority Habitat of rare plant and animal species, and exemplary natural communities by the Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program. The Program reviewed the site and noted that Linear-leaved Milkweed, a "Threatened" species pursuant to the Massachusetts Endangered Species Act, currently exists in the park area. They also have historic records of Long-leaved Bluet, a "Threatened" species, and Sandplain Flax, a "Special Concern" species, in the area. It is recommended that the park property be surveyed for these species, particularly in areas where construction activity is anticipated.

GENERAL RECOMMENDATIONS

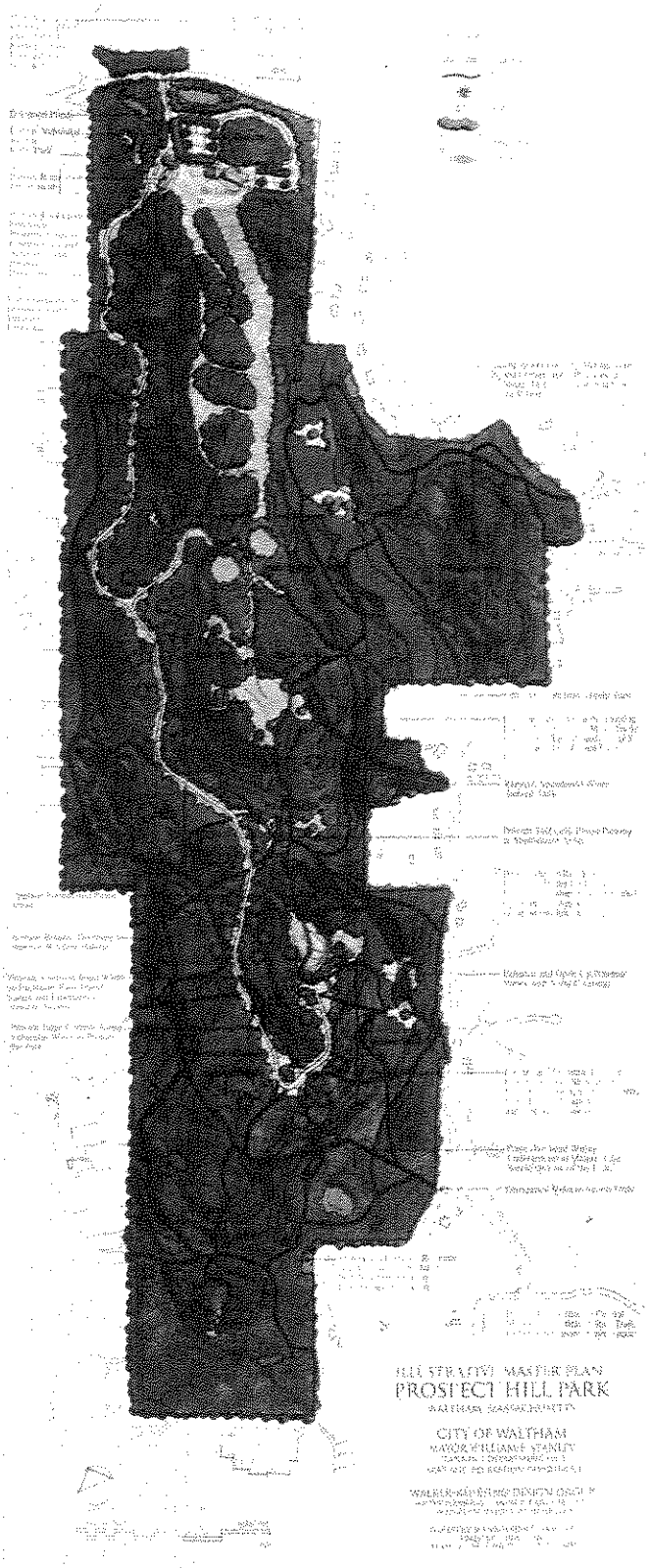
The following summary of recommendations for this master plan illustrates the measures necessary to renew Prospect Hill Park as a safe natural environment where Waltham's residents and guests can enjoy passive and active recreation on a year round basis. It addresses the major issues of safety, security, accessibility and sustainability.

The basic concept is to restore the passive recreation areas, provide accessible pedestrian circulation to the summit of Big and Little Prospect allowing access for all to the panoramic views, and restore the image of the park. The pedestrian system, planting and amenities such as shelters, picnic areas, benches and signs, provide the opportunity to accentuate the natural character of the park.

ACCESSIBILITY

Vehicular Circulation

- Control vehicular access to protect the park and limit illicit activities.
- Implement a boundary survey. Provide gates and fencing at property lines to control uses and activities, and prevent intrusions.
- Improve public safety and provide an inviting entrance image at the Totten Pond Road entrance to the park.
- Utilize the Prospect Hill Road gate for emergency vehicle access only.
- Limit the extent of vehicular access by reducing the amount of paved roads, while providing access to major destination areas.
- Provide a uniform paved road width throughout the park to facilitate two travel lanes and insure emergency vehicle access.
- Provide edge control along vehicular ways where necessary to protect fragile areas of the park.
- Provide sufficient paved parking at appropriate areas.



Pedestrian Circulation

Improve and enhance the existing trail system.

Expand the system to eliminate dead ends and facilitate utilization of the entire park.

Make trails suitable for year round use including walking, jogging, hiking, cross country skiing, snow shoeing, orienteering, nature study and bird watching.

Create and/or improve trails to accommodate different user groups.

Clearly mark trails with distances, degree of difficulty and accessibility.

Expand regional open space and recreational systems that cross municipal boundaries including connection to the Central Massachusetts Branch Rail Trail.

Handicap Accessibility

Provide handicap access to all major destinations in the park.

Provide handicap accessible trails to all major destinations.

Provide handicap accessible restroom[s] at appropriate locations within the park.

RECREATION FACILITIES

Restoration

Restore and maintain historic features such as the stone stairs, stone causeways, stone culverts, stone fireplaces and pavilions, including the Caretaker's cottage.

Update and improve the park's physical features with new improvements blending in unobtrusively.

Picnic areas

Retain and improve formalized picnic areas near vehicular access points.

Active Recreation

Limit active recreation components in the park to those that exist or have previously existed in the park like skiing and the children's playground.

Skiing

Allow five years to reinstate the former ski area to its former use level as a self supporting vendor operation.

Balance ski operation requirements with overall park needs and maintain the operation of the Summer Camp by Park and Recreation Department.

If a suitable vendor agreement is not obtained within the five year time frame [by 2002], utilize the land in an appropriate and effective manner.

Children's Facilities

Remove the animal farm and utilize the land more effectively.

Relocate the playground and Summer Camp pool to a safer location.

Update swing sets in picnic areas, providing safe and appropriate surfacing with adequate safety zones.

Buildings

Remove the radar station and fire tower, if possible, and restore the scenic quality of these two summits. Should the radar station site become available, retain the City's option to maintain the existing building for an appropriate park use.

Limit the addition of new buildings such that the total square foot coverage of buildings in the park does not exceed current levels. Public rest rooms are not to be included in the square foot coverage count.

SITE FURNISHINGS AND AMENITIES

Furnishings

- Provide a coordinated system of furnishings [picnic tables, benches, trash receptacles and fireplaces] that is thematically consistent, identifiable and compatible with the overall park image.
- Maintain the stone fireplaces in formalized picnic areas.

Signs

- Provide park identification signs at primary entrances welcoming prospective park users.
- Provide an orientation map and information kiosk for park users at major access points.
- Post rules and regulations pertaining to use of the park.
- Develop a sign system for the park, including trails.
- Provide interpretive exhibits and/or native wildlife displays at key points in the park.
- Remove reflective markers from trees.

PUBLIC CONVENIENCES

Rest Rooms

- Provide public rest room facilities at the north entrance to the park, at the pavilion area near Little Prospect and in the valley between Big and Little Prospect so families can enjoy the park more comfortably.

Drinking Fountains

- Provide water for drinking and cleaning near picnic and playground areas.

Telephones

- Provide public telephones near picnic and playground areas.

SAFETY AND SECURITY

Public Safety

- Eliminate public safety hazards by repairing the stone steps and causeways, preventing access to the fire tower and removing trash from dump sites, the abandoned water storage tank, and hazardous trees and limbs.
- Implement a traffic study at the Totten Pond Road entrance and make the necessary improvements.
- Implement a hydrology study of the north end of the park and make the necessary improvements to alleviate periodic flooding.

Security

- Provide emergency call boxes at appropriate locations within the park.

INFRASTRUCTURE

- Place overhead wiring underground to maintain the scenic quality of the park.
- Restore stone headwalls at culverts.

VEGETATION AND WILDLIFE

- Protect and enhance resource areas including wetlands, wildlife habitats, geologic features and scenic areas.
- Increase botanic diversity to improve wildlife habitat value.
- Enhance and open up potential views with vista clearing.
- Use vegetation to screen visually intrusive elements like the adjacent office park buildings and parking, and the water storage tanks.

RECREATION PROGRAMS

- Increase recreation and education programming for the park with year round programs. Include guided tours to increase awareness of Waltham's natural resources.
- Develop a flyer or handout which provides a park map, lists environments, recreational and educational opportunities, and a calendar of events to improve community and regional park visibility and use.
- Provide an Interpretive Center provided there is sufficient public support and financing.

MAINTENANCE AND MANAGEMENT

- Establish a maintenance plan and schedule for the long term protection for the park.
- Implement forestry management and conservation practices to insure the long term health of the forest.
- Re-examine park rules and regulations to formalize appropriate controls for the park.
- Appoint one City official to be responsible for directing improvements and coordinating the various activities of City Departments, utility companies, Friends Groups, etc. that occur in the park.
- At the conclusion of this capital improvement program, re-evaluate the condition of the park and make appropriate improvements.

FRIENDS GROUPS

- Develop a formalized agreement defining the role of friends groups in relation to the primary responsibility and control of Park and Recreation Department.
- Expand the role of the Prospect Hill Advocacy Group to include the establishment of a Park Partners program with adjacent corporations and jointly involve them in park care and use, and fund-raising for non-capital park improvements that are normally outside grant opportunities or the city budget. Add a development officer to deal specifically with fund raising from private sources for the park.
- Utilize Friends Groups funding to employ a Park Ranger with conservation management, forestry management and public relations skills under the jurisdiction of the Park and Recreation Department. Insure appropriate relationships and communications with the City Police Department for enforcement. Utilize the Caretaker's Cottage as a headquarters for the Park Ranger.
- Utilize Friends Groups volunteers or funding to employ an outside vendor to service rest rooms.

ACQUISITION

- Acquire additional land for park purposes as opportunities present themselves.
- Incorporate the adjacent Water Department parcel at the end of Dale Street, containing an abandoned water storage tank, into the park.

A BRIEF HISTORY OF THE PARK'S DEVELOPMENT

HISTORIC BACKGROUND

In 1882, a few short years after Boston began construction of its Emerald Necklace, the Massachusetts Park Act became law which stated that a Park Commission is the only body authorized to acquire lands for park or playground purposes, for which appropriations have been made. In 1891 the City of Waltham adopted the Park Act favoring the establishment of a system of public parks and playgrounds for its citizens. The next year a five member Board of Park Commissioners was formed and they began preliminary work, first focusing their attention on Prospect Hill because of the rapid encroachment of houses on the southeasterly side of the hill. A long history of acquisition began the following year. Also in 1892, the Metropolitan Parks Bill passed and a Board of Metropolitan Park Commissioners was formed with the charge of developing a comprehensive plan for laying out, acquiring and maintaining a system of public open spaces for the Boston metropolitan area. Charles Eliot was engaged as the landscape architect and Members of the Board visited Prospect Hill.

In Waltham Mayor Erskine Warren's inaugural address in January of 1893, he stated that "plans are now being perfected and surveys being made for what will be known in the future as Prospect Hill Park. Thousands will hail with joy this important movement, and generations yet unborn will rise to bless the forethought of those who gave them the freedom of these grounds."

In the same month Charles Eliot filed a report with the Metropolitan Park Commission on "the opportunities ... for the creation of ... public open spaces as may best promote the health and happiness of the inhabitants of the metropolitan district". In the report he recommended that Prospect Hill and Bear Hill become a large public open space as part of a larger metropolitan open space system. He noted that Waltham was a "rapidly increasing community" and was fortunate to have this "great and rugged hill". In the report he also stated:

"One who stands upon it looks eastward down the Charles River valley to where the golden dome of the State House glistens against the distant blue horizon of the sea. The slopes of the hill, still preserved from ugly scars, present several particularly attractive spots, and the neighboring but lesser Bear Hill has a distinct beauty of its own. The whole tract lies within the bounds of Waltham, so that there is nothing to prevent the opening of a reservation on this hill through local action. The hill, however, is so well placed, both with reference to the view up and down the Charles valley and with respect to its position in the metropolitan district, that it would merit the attention of whatever metropolitan parks board may be established."

Top of Prospect Hill Courtesy of Waltham Historical Society

On 15 February 1895 Charles Eliot wrote a letter to the Waltham Park Commissioners which noted that the Commission had secured the summit of Prospect Hill for the enjoyment of the public. He also recommended enlarging the boundaries of the park. In the letter he stated:

"Park Commissioners ought everywhere to regard themselves and be regarded as, primarily, trustees of scenery; because the refreshment which townspeople find in scenery is the most recreative mode of enjoyment which a park commission can possibly supply. Sewers, water-pipes, well-paved streets, playgrounds for youth, concert grounds, public gardens, open-air nurseries, - all these and the like are good and more or less necessary, and yet the city which, while gaining these things has permitted its scenic opportunities to be destroyed, may rightly be said to have gained the world, but lost its soul."

After the formation of the Board of Park Commissioners in 1892, a Playground Committee was established in 1906 recognizing the distinct value and needs of active recreation. In 1915 a separate Waltham Board of Recreation was established, the first such board in the Commonwealth. In 1967 the Park Board and the Recreation Board combined into the current Park and Recreation Board.

Before the two boards united, the Park Board made two important findings relevant to Prospect Hill Park. In 1947, the park became the center of controversy and remained in the control of the city. The Park Commission stated its intention to maintain the natural and rustic environment, which was the intent and purpose for which the park was established. They also stated that the park did not lend itself to the development of playgrounds and such. In 1956 the Commission rejected a commercial request for permission to install a short wave receiver/transmitter radio antenna in the park because of the potential electrical hazard to park users and because it would cause other such requests. The Commission was concerned that the top of the park would become covered by such equipment. They stated, "In the interest of protecting the park users and preserving the natural beauty of the area it is the Commission's opinion that the action followed should set a precedence and be followed in the case of future requests."

EVOLUTION OF THE PARK'S DEVELOPMENT

Development of the park is presented here as the evolution of specific aspects of the many and various components of the park. A chronologic evolution of the overall park can be found in the Chronology section of the Appendix of this report.

Acquisition

Acquisition of property for the park began in 1893 as an assemblage of private property and generally proceeded from south to north. The majority of acquisition was completed in the first 34 years, by 1927 when the park reached 219 acres in size. Land for the ski area was added in 1948 and another small parcel was added in 1957. Loss of park land and/or control of park land began in 1945 with the lease of the radar site, followed by construction of Totten Pond Road circa 1960 [and disposition of a portion of the left over isolated land to the MDC where the ice rink was constructed], construction of the water tanks in 1974 and lease of the ski area in 1986. Various easements were negotiated with Polaroid in 1963, 1964 and 1975. A minor revision of the park property line occurred in 1979 with the adjacent office park. Today the park contains approximately 250 acres.

Access and Circulation

Access to the park, road development and road maintenance were annual concerns of the Park Commission. Park roads were initially developed on the old woods roads of the former land owners, first in gravel, later in macadam and most recently in bituminous concrete. Development and improvements to roadways began as property was acquired in 1893. They were intended to be pleasure walks or drives as opposed to public highways. All but two of the dangerous curves in the road were removed in 1915. Rail fences were erected on these dangerous curves in 1935 in an Emergency Relief Administration project. In 1965 it was noted that there were 7 miles of park roads.

In 1895 the south entrance to the park entrance was marked by two large field stone posts. This was followed with the erection of complimentary stone piers at the new Winter Street north entrance in 1935. A suitable and dignified entrance to the park from Main Street was recommended by the Park Commissioners annually for many years, virtually from the inception of the park. By 1911, a 50 foot wide way for the easterly approach from Main Street to the park gate had been laid out but had not been built, nor was it under the control of the Commission. The Commissioners were concerned about the narrowness and potential dangers, and the lack of pride in the entrance. A suitable entrance drive was never accomplished.

The Greenwood Lane extension was built with a turnabout terminating in the park in 1915 to facilitate access to the Worcester Pines acquisition. A culvert was installed the following year at a brook crossing near this entrance from Greenwood Lane. The turnaround disappeared at some later date and the culvert no longer appears to exist.

In 1915 a new drive was proposed to skirt the eastern edge of the park from Bacon Street through to upper Main Street. This was not implemented. Totten Pond Road was laid out through a portion of the north end of the park in 1960, isolating the former north entrance.

With increased use of automobiles, the care of roads was becoming a burden by 1911. The gravel roads, also impacted by rain and frost, needed constant maintenance including regrading, resurfacing and oiling. A portable stone crusher was suggested to assist with road repairs. A gravel pit was opened midway in the park to supply road material in 1915. Two years later a second gravel pit was opened on Summit Road. The latter pit was covered with the construction of the water storage tanks in 1974. During the Depression, the Emergency Relief Administration assisted with providing parking at the two summits, new roads and the repair of existing roads.

By 1939 it was noted that the type of road construction was insufficient for the traffic even though the main road was already of macadam construction by that time. In 1955 the Public Works Department resurfaced parking areas at the two peaks as well as the main road which suffered from increased heavy traffic related to the radar station. Rent for the lease of the radar station site was increased in 1962 to cover the additional cost of road repair.

North Entrance Courtesy of Waltham Historical Society

Paths and Steps

After a great deal of work establishing a pedestrian path system, broad natural stone steps were added on steep paths in the park by the park keeper during the general period of World War I. The first set was installed in 1913 and supplemented in six additional locations in 1916. Stone steps were repaired and added to between Big and Little Prospect in 1918 along with two miles of new paths: one from the fire tower to the Worcester Pines and another from Hermit Rock to Little Prospect. During the Depression 4,400 feet of new paths and stone steps were added to the park.

Stone Steps Courtesy of Waltham Historical Society

Furnishings

Furnishing the park began with the placement of substantial seats and hitching posts on the summit of Little Prospect in 1894. Additional seats were placed in the same area the following year with hopes to include rustic seats in the forest at some future date. New stone seats and resting places were built in 1905. Many seats were repaired in 1920 and 1933. Six "settees" were added near the road to the Worcester Pines in 1928. Eight benches were added in 1934. Seventeen picnic tables and two swing sets were added during the Depression. Neatly painted trash barrels were provided at the pavilion and the Worcester Grove in 1917 and more were added near the road to Worcester Pines in 1928.

Campsites

At the instigation of the Waltham Chamber of Commerce, a tourist camp was established at Little Prospect in 1921. By 1932, three camps were in service, each with a brick fireplace. The following year six stone and cement fireplaces were constructed. Six additional stone fireplaces were built in 1934 when a total of 9 camp sites were in service. In 1949 six new fireplaces were erected and major repairs were completed on the old ones. In 1955 two camps [15 and 16] are added. The number of camp site continued to increase with 19 in 1957, 20 in 1961 and 23 in 1965.

Structures

The first new building in the park was a pavilion erected in 1895 on the slope of Little Prospect. It was repaired in 1903 and repainted in 1920 and 1925. A wood tool shed built nearby was enlarged in 1914 and repainted in 1925. At some point this building became the Caretakers Cottage. In 1933 it was enlarged again and had roofing and other repairs. After it was leveled by fire in 1949, it was rebuilt in stone. Another tool house was planned to be built into the slope for the Worcester Grove in 1916. There is no evidence that this was built. Four shelters were built in 1933 as part of a Civil Works Administration project. Four additional shelters as well as two stone and concrete shelters with a fire place for the Boy Scouts were built in 1934 with Emergency Relief Administration assistance. The roofs and floors of existing shelters were repaired in 1949.

Picnic Area, 1932 Courtesy of Waltham Historical Society

In 1895 a suggestion was made to construct a broad stone tower or rampart observatory on Great Prospect. While no action was taken at the time the desire for a stone observation tower came up again in 1903 when an observation pole was erected on Great Prospect. It was also used to raise the national flag on holidays. A new flag pole was recommended for Little Prospect in 1917, but there is no record that it was installed. The desire to reach greater heights may have been met when a 60 foot high state fire tower was erected on Big Prospect in 1917. Installation of the radar station in 1952 conflicted with the tower and a new fire tower was later constructed adjacent to the summit of Little Prospect in 1963.

Picnic Pavilion 1925 Annual Report

The US Government leased a portion of the site for "observation and Radar experimental purposes" in 1951. The Commission made every effort to keep the site available to the public with reasonable restrictions. The following year a 1-1/2 story building was constructed on the site for research purposes.

Public Conveniences

As early as 1895 the Park Commissioners expressed interest in adding sanitary facilities and a well in the park. A sanitary facility was erected in 1897 near the pavilion because of increasing use of the park. The tourist camp established in 1921 proved to be a popular resort. A temporary discontinuance of its use was recommended in 1922 until improved and proper sanitary arrangements could be made. Ten toilets were constructed in the park in 1933 and 1934.

A well was dug near Pine Ledge Spring in 1900. It was noted that this well furnished good water throughout the year of 1905 while the two springs failed during dry weather. The spring near camp no. 1 was cleaned and enclosed in 1932. A 1934 drawing indicates a pump and a spring in the park.

Fencing

About 1,000 feet of substantial wire fence was erected on the southerly line of the park in 1898 with the intention of defining the boundary of the entire park. The boundary fence was extended around the Warren acquisition in 1905, completing the enclosure of park land. The 20 year old fence above the road through the "Bond land" was replaced in 1911. The next year the Board recommended an increased appropriation for marking of boundaries. There is no notation as to whether this work was completed.

Stone Walls

In both 1902 and 1913 the Commissioners recommend the preservation of the old [1635] "Squadron Lines", stone boundary walls within and adjoining the park. One crossed the park a little north of Little Prospect. Many of the old boundary walls were torn down in various areas in a ten year effort to stop the destruction caused by moths.

Signs

Once public access to the park became available in 1894 the Park Commission posted rules and regulations for the proper and reasonable use of the park. In 1896 signs prohibiting shooting were posted. By 1916 there were 30 parks signs and notices which were repaired or painted. In 1920, 35 signs were relettered.

Vegetation

Management and maintenance of the vegetation has been a priority since the inception of the park. The majority of efforts related to clearing underbrush, removing fallen and dead trees and cutting out such trees as checked the growth of others. Brush and dead wood were cleared to protect against the damage of fire. In 1922 trees on the south side of Big Prospect damaged by the previous year's ice storm were trimmed. Great efforts were made to clear the damage of the 1938 hurricane which felled 2,500 trees with Pines suffering the most. The Worcester Pines were virtually a complete loss with less than a dozen Pines left standing. Camp 1 and vicinity were also nearly cleaned out. Two hurricanes in 1954 also caused substantial damage leaving roads impassable and forcing the closing of the park.

The Ledges

In 1895 a man was employed from April to November to guard against fire and perform other necessary work such as repairing roads and cutting dead wood. In 1915 the Commission assisted in combating the unemployment problem by employing 25 people per day for February and March to cut dead trees and underbrush. During February and March of 1931, 300 men recommended by the Emergency Employment Committee were employed clearing underbrush and repairing and improving roads. Clearing of 100 acres of underbrush, and trimming dead and overhanging wood were part of a 1933 Civil Works Administration project. A considerable amount of forestry work is done with the assistance of the WPA in 1935 And 1936. Little of this type of work is noted after that period except for some brush clearing in 1953.

Manipulation of the forest type first occurred in 1903 when small Pines were planted to provide a diversity of foliage in the predominant Oak forest. The advisability of reforestation was recognized in 1912, particularly in areas damaged by forest fire. Small Pines, Oaks and Chestnuts were added on the former Warren property near the shelter. More small Pines were planted in 1913, taken from the natural supply at Worcester Pines. Reforestation continued in 1915 with Pines and Hemlocks.

After an estimated 4,500 trees were cut into firewood to relieve the shortage of fuel in the city in 1918, consideration was given to planting 5,000 hardwood trees for the future. Maples and Pines were planted throughout the park in 1919. 100 Pines were planted along several old paths which were reopened in 1926. The following year 20,000 Pine and Spruce seedlings were ordered with the long term goal of adding 100,000 evergreen trees to the park. With 80% of the seedlings surviving, fewer, but larger [2-3' height] plants were ordered [200 Pinus mugho and 300 Pinus excelsa] for the next year with the expectation that evergreens would have a tendency to keep down the growth of brush. In 1929 another 1,400 trees [12" height] were planted [400 Pinus Mugho, 700 Picea excelsa princess and 300 other Spruces]. A Civil Works Administration project in 1933 included transplanting Pine trees.

Vista clearing was first performed in 1896. It was repeated in 1916 at Little Prospect. With the 1951 vista clearing at Little Prospect, the Commission noted that there must be careful consideration not to remove too many trees.

Wildlife

Indigenous wildlife that were noted in the park early on include quail, partridge and rabbits. In 1901 the Massachusetts Fish and Game Commission donated a few English pheasants to the city which were placed in the park. More were added in 1902 and were still evident as late as 1914 although there was a concern in 1911 that the attempt had not been successful because of the severe cutting of underbrush to assist in stopping the spread of destructive moths. Brown Tail moths were discovered in 1904, followed by Gypsy Moths in 1907 and forest tent caterpillars in 1914. Among the efforts to rid the park of moths, a 100 foot width was cleared along the boundary of the park to check the infestation in 1907.

Fire

When work began on the park in 1893, every care was taken to guard against a repetition of brush fires which had proved so destructive in the past. The following year there was a fire on the south and east sides of Big Prospect. In 1902 concern was expressed about the potential of fire even though the building or setting of fires in the park was prohibited. In 1905 the first large fire in the park broke out on the westerly slope of Big Prospect. This was followed by fires in 1911 and 1914. The Caretakers Cottage was also leveled by fire in 1949.

To combat this threat the Commission took several measures. Their initial goal was to use roads as fire stops wherever possible. In 1947 it was noted that the practice of closing the park during extremely dry seasons would be continued to eliminate the threat of fire hazard. The park was closed in 1954 after the destruction and fire hazard of the August hurricane. The following year the park was furnished with a booster tank to help check the spread of fire. In 1965 the park was again closed for 8 weeks due to a drought and fire hazard. Issues related to fire were not recorded after 1968 in the Annual Reports.

Vandalism

Expression of and concern about vandalism in the park was first noted by the Park Commissioners in 1902 when they noted cutting or marking seats or buildings. This concern was not expressed again until 1957 when vandalism throughout the park caused consideration of closing the park at dark. Over the next ten years various acts of vandalism were noted, notably at the Caretakers Cottage, Warming Hut and ski tow. In 1963 the park was closed at sunset until June 1 because of vandalism, after which vandalism decreased. In 1968 the park was open from 7:30 AM to 8:30 PM from April 19 to September 15. Acts of vandalism were not recorded after 1968 in the Annual Reports.

Attendance

As early as 1898 it was noted that the park was being used by people from surrounding towns and cities. The Park Commission maintained an interest in how many people were using the park and either kept records or made estimates of use from 1920 to 1968. In 1919 they received inquiries regarding camping in the park and some were granted. The following year 20 permits were granted for camping and corn roasts. This increased to 55 permits in 1923. The next year 20 permits were granted to people outside the city for camping. This also increased. In 1932 an estimated 1,000 persons were in the park to view the partial eclipse on 31 August. By 1933 numerous visitors were recorded in the park including 5,130 campers in the 3 camps. As the number of campsites increased, so did attendance, from 11,460 in 1934 to 24,900 in 1936 to 30,679 in 1941. Attendance declined during World War II and then remained relatively steady around 10,000 people per year during the 1950's and 1960's when automobiles became more commonly available. Attendance records are not available after that time.

Winter Use

The first notation of winter use of the park occurred in 1931 when it was stated that coasting, snow shoeing and winter sports were enjoyed. Over the next 17 years winter sports became increasingly popular and a desire was expressed to expand winter use of the park. In 1948 additional land was acquired for a ski slope. Construction began late in the year with a largely volunteer effort. It continued the following year with the erection of a "warm up hut" at the foot of the slope and 25 lights to permit night skiing.

By 1951 it became apparent that natural snow cover could not be depended on for a complete ski season. A proposal of experimenting with artificial snow was rejected by the Commission as not having proved satisfactory in other places. Eight of the next ten years had little snow and consequent meager use of the ski facilities. In 1968 the Jaycees began construction of a Ski Chalet and snow making and T-Bar facilities were installed. With the acquisition of snow making facilities, skiing became possible daily during most of the winter. Skiers were supervised by a volunteer ski patrol.

The City operated the ski slope for 37 years, then turned operations over to private operators because maintenance of the facility had become too costly. Ski Sports, Inc. operated the slope for two seasons starting in 1986. Ski Adventure, Inc. took over in 1988 and closed in the middle of the 1989 season which was the last year the park had skiing. After 41 years of operation, the ski facilities closed.

Master Planning

The Park Commissioners often thought about potential future development for the park. In 1956 future considerations included: erecting chain link fence in hazardous areas to protect children; increasing the number of camp sites; providing swings and slides at various camp sites; providing a ball field at the bottom of the ski hill; and [in cooperation with the Recreation Department] providing a playground near the main gate for use of the Prospect Terrace apartments and neighborhood.

In 1966 The Allen Organization of Vermont prepared a master plan for the park that envisioned utilizing the entire park, adding recreation facilities including an 18 hole par 3 golf course, a swimming center, outdoor theater, game courts, children's zoo, day camp, boy scout camp, ski area and parking for 800 cars. The plan illustrated both little understanding of the terrain or concern for the costs that would be incurred with the proposed development.

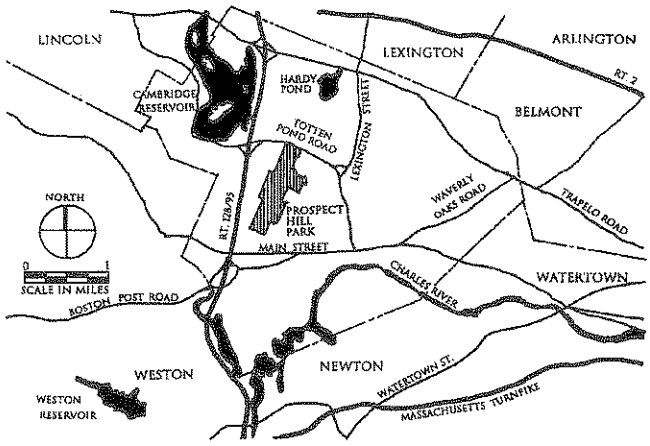
CURRENT LANDSCAPE CHARACTER

EXISTING PHYSICAL FEATURES
AND LANDSCAPE CHARACTERISTICS

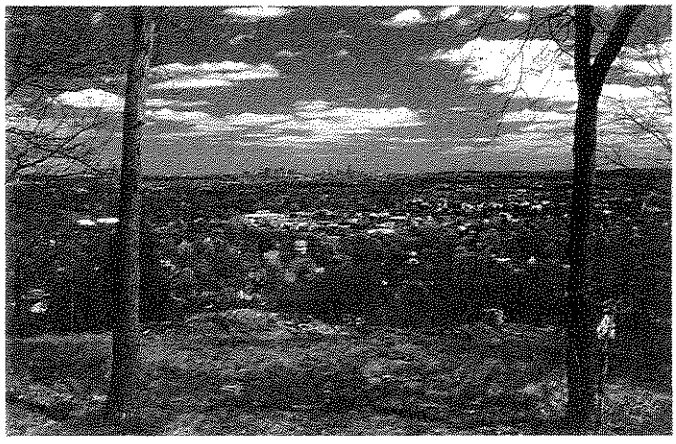
This is a large and beautiful park with picturesque natural character, dramatic topography, rock outcrops, cliffs and forests. It is the second highest point in the Boston metropolitan area with perhaps the best views of the Boston basin available. As the largest and oldest public open space in the city, it has been a source of pride and a focal point of the community since its creation. Based on a 1993/94 Survey, Prospect Hill Park is the second most visited recreation area in the City after Waltham Common.

The park has suffered since World War II when interests in other issues prevailed and passive recreation took a back seat. The condition of the park has languished in recent years due to discontinued uses, the introduction of inappropriate uses, lack of adequate funding, insufficient maintenance and illegal dumping. The park remains well used during temperate months but is now little used during the winter months since the closing of the ski area. The park remains a refuge from urban strife.

Prospect Hill Park is a long narrow rectangularly shaped parcel approximately 250 acres in size. It is about a mile and a quarter long [6,850 feet] in a North/South direction from its southern border to Totten Pond Road and ranges in width from 950 feet at its narrowest point to 2,700 feet at its widest point.



Context Plan

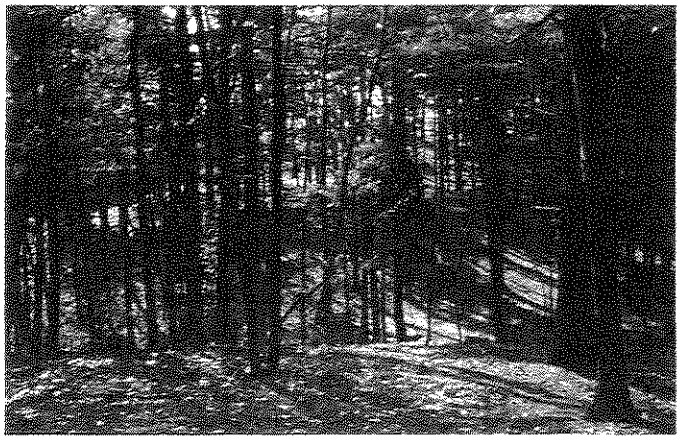


Boston Basin from Boston Rock

TOPOGRAPHY

The dramatic topography has glacial origins. The park is composed around a north-south ridge line consisting of two high summits, Big and Little Prospect, with a valley in between and a series of lower summits. The ridge line creates an acoustic barrier, reducing the noise impact from traffic on route 128. East facing slopes tend to be much quieter than other slopes.

Big Prospect is the highest of the Waltham hills and the highest elevation in the Boston metropolitan area next to the Great Blue Hill. The topographic relief of the park ranges from a high point *[the lightest color]* of 485 feet above sea level at the top of Big Prospect to a low point *[the darkest color]* of 118 feet above sea level at the easternmost point of the park at Greenwood Lane for a total vertical grade change of 367 feet. The peak of Little Prospect is elevation 435 feet, 50 feet lower than Big Prospect.



Dramatic Topography

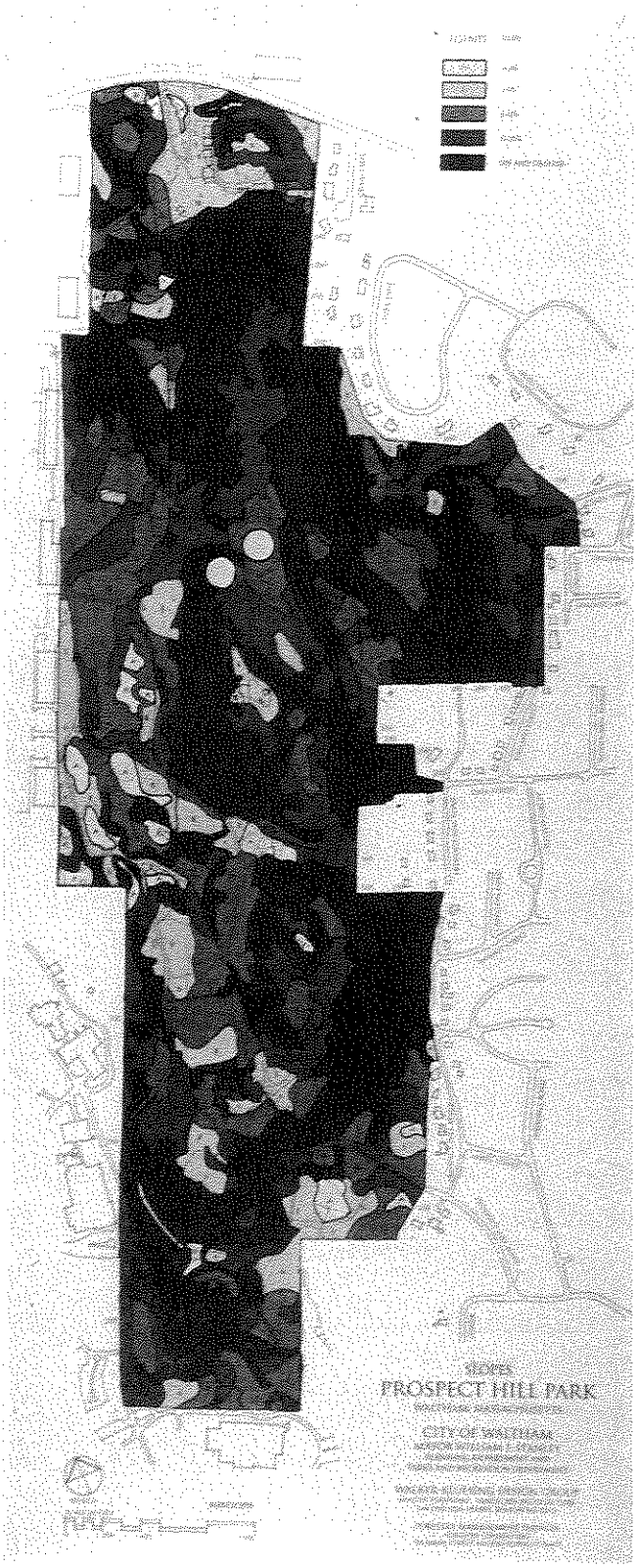
Approximately 50% of the park consists of slopes in excess of a 20% gradient *[the darkest color]*, a 20 foot slope in 100 feet. It is generally extremely costly to make any type of improvement on slopes this steep. About 20% of the site consists of slopes between 12 and 20% which are generally very costly to make improvements upon. Another 20% of the park consists of slopes between 6 and 12% which are difficult, but improvements can generally be made upon them. Between 5 and 10% of the land consists of slopes between 2 and 6% which are the most ideal for most types of uses and generally the easiest to make improvements to. Less than 5% of the park consists of slopes between 0 and 2% *[the lightest color]* which are generally too flat for proper surface drainage and consequently tend to be wet.

The eastern slopes are very steep and difficult to traverse. The incredible rock outcrop cliffs create a separation, isolating the eastern portion of the park formerly known as the Worcester Pines. Cross access between this area and the major portion of the park is difficult.

CLIMATOLOGY

The north-south ridge line creates microclimatic conditions in terms of solar impacts. North facing slopes tend to be coldest in the winter. The former ski facilities are located properly on the north facing slope of the ridge line. South facing slopes tend to be warmest year round except in the southern part of the site where evergreen trees predominate and block out the winter sun.

Fern Covered Rock Cliffs Overlooking Worcester Pines



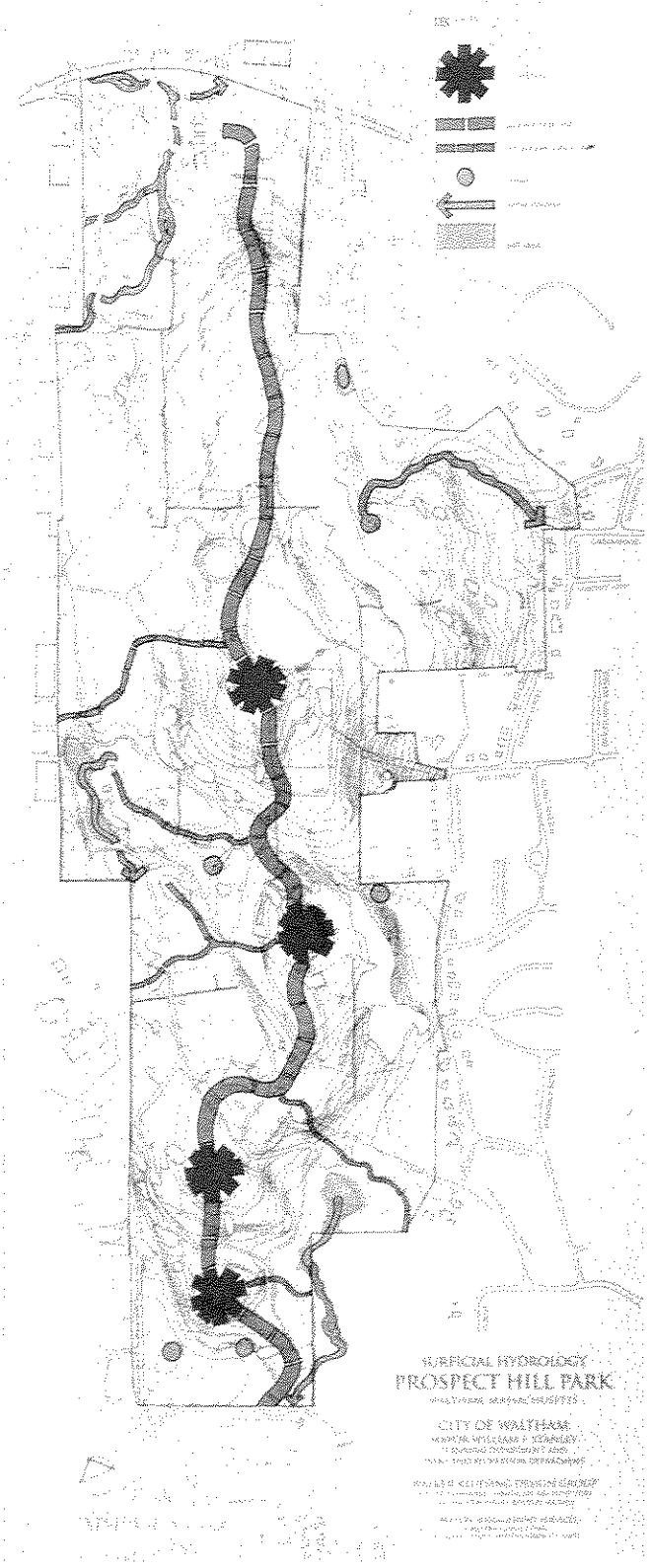
Winds keep the summits of Big and Little Prospect cool year round. East facing slopes have little wind impact. Prevailing westerly winds cause unsecured trash and other debris to be blown into the park from the adjacent office buildings.

SURFICIAL HYDROLOGY

The north-south ridge line *[wide dashed blue line]* forms the major watershed divide in the park. It is punctuated with four peaks *[red asterisks]* starting with Big Prospect at the north, Little Prospect immediately south of Big Prospect, and two lower peaks south of that.

Four year round or intermittent waterways *[thin solid blue line with directional arrow]* exist: one at the southeast corner of the park originating in an area of wetlands; one at the central western edge originating near the valley between Big and Little Prospect; one at the northwestern edge originating in the adjacent office park area; and one on the east side in the former area of the Worcester Pines.

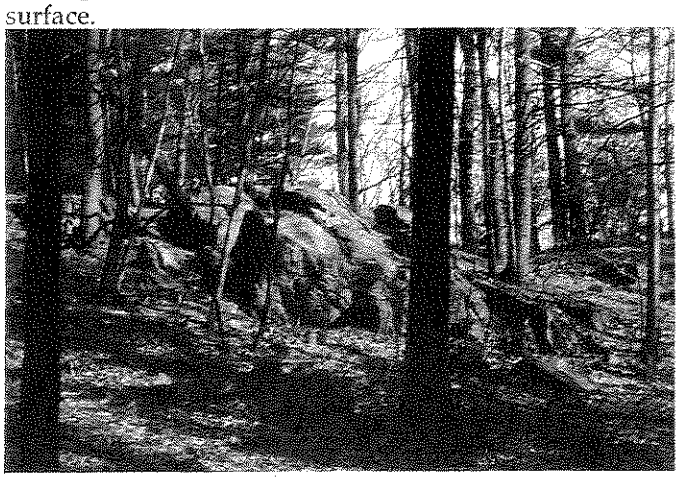
Historic evidence suggests that there are or were at least five natural springs *[blue circles]* in the park. One is found at the base of the eastern rock outcrop facing the former Worcester Pines. One is found west of the valley between Big and Little Prospect. Two are located on the southern slope in or near the current Polaroid easement. Another was noted but not found on the eastern slope below Little Prospect.



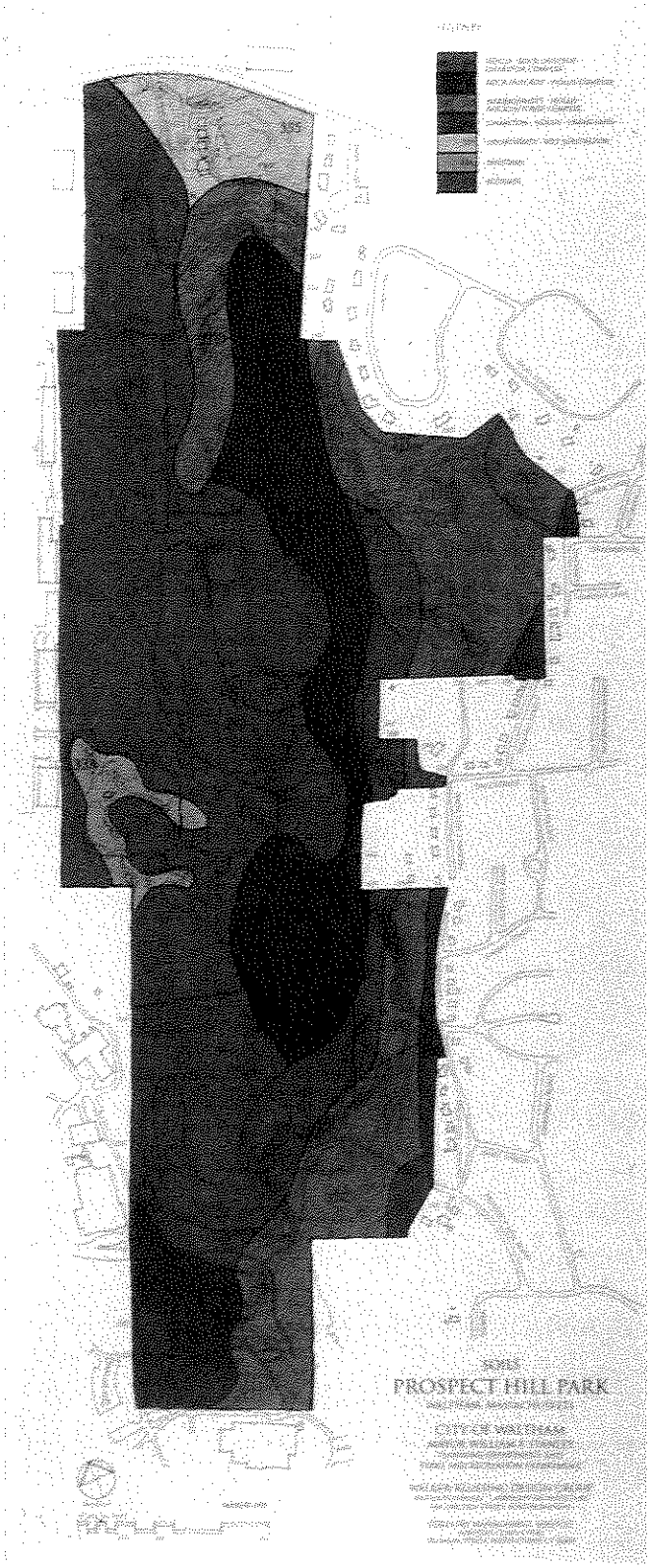
SOILS

There are two general soil types in the park. The majority *[brown tones]* are rocky and steep with shallow depths to bedrock. The rest *[blue tones]* are wet with slow permeability. Soil types that are rocky and steep with shallow depths to bedrock include Hollis - Rock Outcrop - Charlton Complex, Rock Outcrop - Hollis Complex, Narragansett - Hollis - Rock outcrop complex, and Charlton - Hollis - Urban Land Complex. The vast majority of soils are Hollis - Rock Outcrop - Charlton Complex and Rock Outcrop - Hollis Complex. A closely related soil type, Narragansett - Hollis - Rock Outcrop Complex is found along the lower eastern side slopes of the park and in the central valley at the northern end. Charlton - Hollis - Urban Land Complex is found along the lower eastern side slopes of the park.

Hollis - Rock Outcrop - Charlton Complex consists of undulating and rolling shallow soils, areas of exposed bedrock and very deep soils on hills and ridges where relief is highly affected by underlying bedrock. The components of this complex occur in such intricate patterns that it is not practical to separate them. The complex is approximately 30% Hollis soils, 30% rock outcrop, 25% Charlton and 15% other soils. Major limitations are related to rockiness, slope and depth to bedrock in the Hollis soils. This soil type has a slow to very slow infiltration rate and high runoff potential. There is moderate potential for frost action and a slight to moderate erosion hazard and equipment limitation. It also offers high potential productivity with restricted root depth and moderate seedling mortality. Rock Outcrop - Hollis Complex soils are similar to the preceding description with bedrock typically within 14" of the surface.



Rock Outcrop



Narragansett - Hollis - Rock outcrop complex soils consist of gently sloping to strongly sloping, very deep and shallow soils on uplands where the relief is affected by the surface of underlying bedrock. The components of this complex occur in such intricate patterns that it is not practical to separate them. The complex is approximately 45% Narragansett soils, 20% Hollis soils, 10% rock outcrop and 25% other soils. Major limitations are related to rockiness, slope, depth to bedrock, potential frost action. Cut banks of shallow excavations tend to cave in. There is a slight to moderate erosion hazard and equipment limitation. There is a moderately high potential productivity with restricted root depth.

Charlton - Hollis - Urban Land Complex soils consist of gently sloping to steep, deep, well drained Charlton soils, excessively drained Hollis soils and areas of urban land. Although urban development has altered the soils and landscape in these areas, soils can be identified at widely separated points and the general nature of the area can be determined. Broad delineations are made on the map. This soil type consists of about 75% Hollis and similar soils and at least 25% Urban Land and other disturbed soils. Urban Land consists of streets, parking lots, buildings and other structures. Major limitations are related to rockiness, slope and depth to bedrock in the Hollis soils. It also offers moderately high potential productivity and slight seedling mortality. Potential erosion hazards and equipment limitations are slight to moderate.

There are three areas of wet soil types with slow permeability. A large area of Udorthents, wet substratum is found at the northern end of the park. While it has been reported that there used to be a pond in this area that was filled in, this has not been verified. A small area of Scituate soils is found at the southern end of the park. A small area of Whitman soils is found in the west central area of the park. While it has also been reported that the soils on the ski slope and at the base of the ski slope came from the city incinerator, this has not been verified.

Udorthents, wet substratum soils are gently sloping areas that were previously flood plains and/or swamps that have been filled. The fill consists of various types of soil material, rubbish and refuse. Depths of fill range from 2-20' or more.

The Scituate soils are nearly level to sloping, deep [5+ feet] moderately well drained soils in low areas and along drainage ways to uplands. They formed in compact sandy glacial till. Scituate soils have friable, fine sandy loam or sandy loam surface soil and subsoil with moderately rapid permeability, over a firm loamy sand or loamy fine sand substratum [hardpan] at 18-34" which has slow permeability. They have a perched seasonal high water table from November to May. When the soils are saturated they have a high runoff potential. Scituate soils have a very stony surface except where stones have been removed and they have stones below the surface. Major limitations are related to wetness, slow permeability, potential frost action and stoniness. These soils offer a moderately high potential in terms of plant productivity.

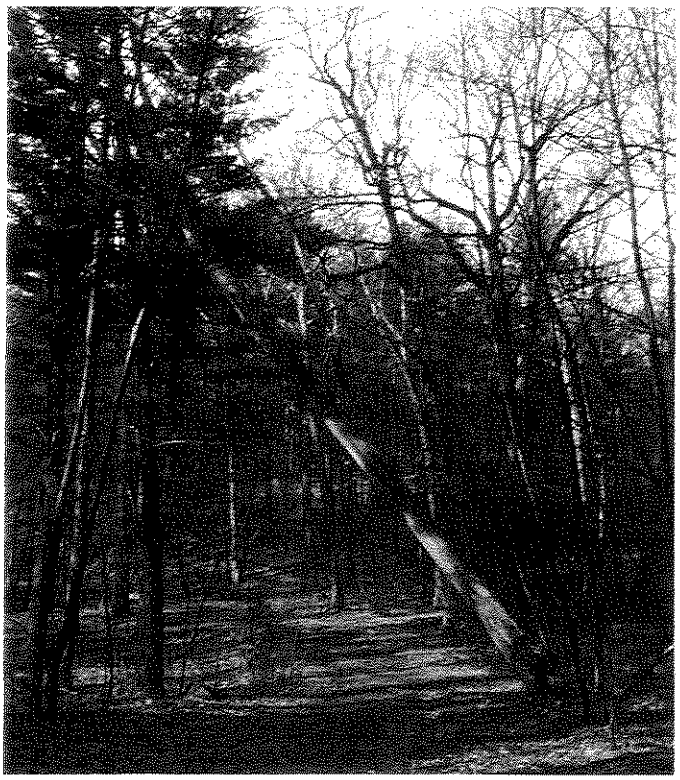
Whitman soils are nearly level, deep [5+ feet] very poorly drained soils in depressions and drainage ways of uplands. They formed in compact glacial till. Whitman soils have friable and loam or fine sandy loam surface soil and subsoil with moderate to moderately rapid permeability, over a firm sandy loam, fine sandy loam or loam substratum [hardpan] at 10-30" which has slow or very slow permeability. They have a perched high water table at or near the surface most of the year [September to June]. When the soils are saturated they have a high runoff potential. Whitman soils have a very stony or extremely stony surface except where stones have been removed and have stones below the surface. Major limitations are related to wetness, ponding, slow permeability, potential frost action and stoniness. These soils offer high potential productivity with excessive water in or on the soil leading to high seedling mortality. The potential for erosion is moderate. Limitations on equipment on these soils are severe.

In general the soil types and slopes indicate that extreme difficulty and very high costs will be encountered in any attempts to make improvements on the land. Rock outcrops and steep slopes make shaping the earth difficult. The thin soil layer above bedrock needs stabilization to prevent erosion which is evident on some paths and trails as well as on the former ski slopes. Very little of the land area is suitable for typical active recreation improvements like playing fields. Because of the acidic nature of these soils, with a pH range generally between 4.5 and 6.0, there is a high risk of corrosion on concrete.

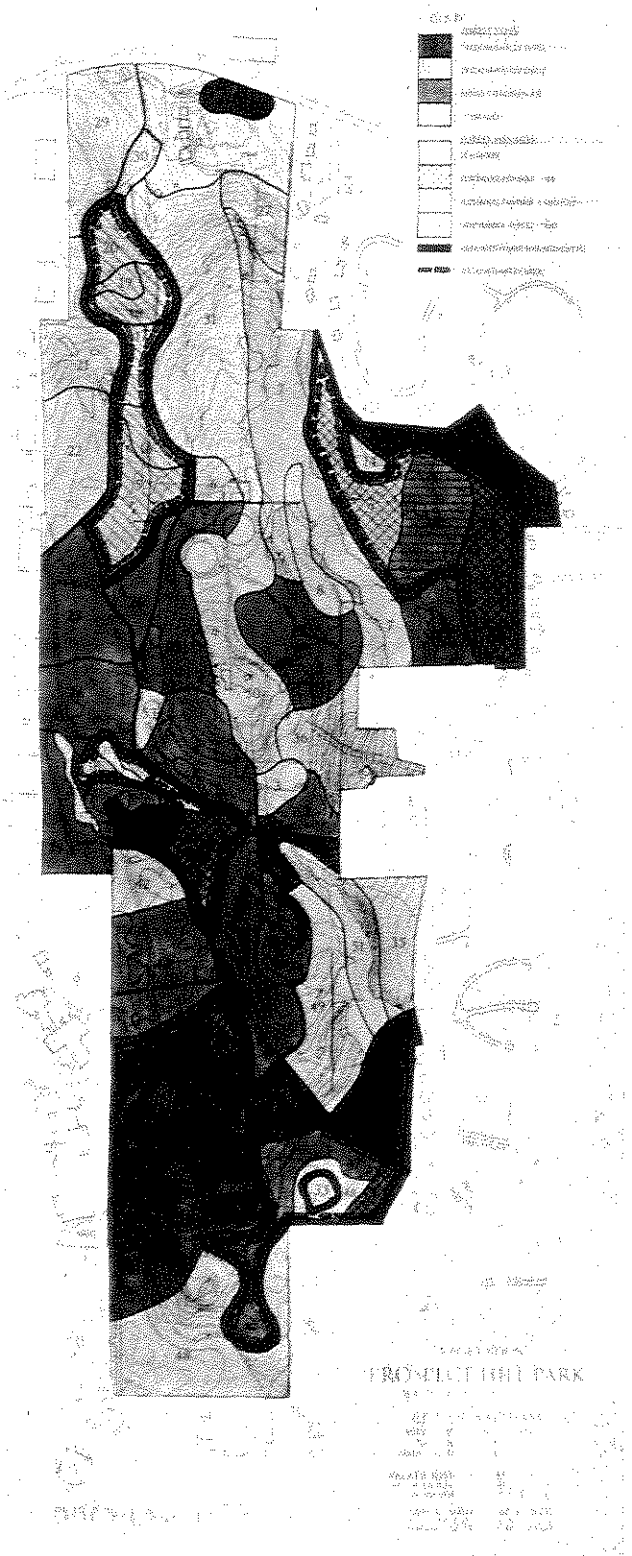
VEGETATION

An inventory and assessment of vegetative cover types was made early in 1997 to provide general information about the characteristics, composition and condition of the forest resources in the park. Specific data for each distinct stand of vegetative types can be found in the appendix of this report.

The primary vegetative cover type is forest which is maturing. It is generally at an even age and is composed of relatively few types of vegetation, primarily Oaks and White Pine. The average size of the Oaks ranges from 12 to 20 inches diameter at breast height and White Pines range from 12 to 18 inches. The largest trees are found in the southeast corner and along the eastern edge of the park with up to 40 inch Red Oaks and 35 inch White Pines. The south central part of the park, approximately 10%, has primarily evergreen tree growth *[dark green]*. The west central part of the site, approximately 35%, is mixed evergreen and deciduous *[middle green]*. The remainder of the site, about one half is primarily deciduous *[light green]*. Dead and fallen trees and branches, as well as stumps that have been cut high are a safety hazard.



Public Safety Hazard Tree



The current health and vigor of the forest varies based upon location. About half of the forest would be considered in good to excellent health, with an emphasis on good, in areas where the is adequate moisture and soil depths. The rest of the forest would be considered in poor to fair health, with an emphasis on poor, in areas that are steep with shallow soil depths. Some of the Spruce planted in the late 1920's reforestation efforts survive on the eastern slope between Big and Little Prospect. Their size, 10" diameter at breast height maximum, does not reflect their age because of the difficult growing conditions in that area. About a third of the forest offers a high potential for management *[solid brown line]* related to silvicultural benefits, wildlife habitat, environmental education and outdoor recreation.

Understory vegetation in the park has diminished significantly. More than half of the park has sparse to no understory vegetation today and only about 10% of the park would be considered to have dense undergrowth. This occurred historically from purposeful removal, initially to reduce the potential fire hazard and later in attempts to stop the spread of destructive moths. Today the density of the tree canopy does not allow sufficient light onto the forest floor to support understory growth. There are also very few open or lawn areas. The most significant are at the north end of the park and the former ski slopes.

The park contains areas of significant wetlands in the city. They tend to be upland wetlands, marshes and wet meadows that are wet most of the season. The Waltham Conservation Commission maintains jurisdiction over these areas including a 100 foot buffer zone on each side of them and a 200 foot wide buffer zone on each side of the stream adjacent to Totten Pond Road. These areas contain most of the understory in the park. The 1992 study of the wetlands in the central western part of park noted land under water, bordering land subject to flooding and bordering vegetated wetlands [bordering on stream]. No rare, threatened or endangered vegetative species were noted in the study.

Prospect Hill Park has been designated as a Priority Habitat of rare plant and animal species, and exemplary natural communities by the Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program. It is not however listed as a Significant Habitat. Therefore, a permit for any activity is not required from the Massachusetts Division of Fisheries and Wildlife at this time. The Program reviewed the site and noted that Linear-leaved Milkweed , a "Threatened" species pursuant to the Massachusetts Endangered Species Act, currently exists in the area of the park. They also have historic records of Long-leaved Bluet, a "Threatened" species, and Sandplain Flax, a "Special Concern" species, in the area of the park. All areas where construction activity is anticipated should be resurveyed prior to construction.

The following plants have been noted in the park:

Evergreen Trees
Red Pine, Pitch Pine, Scotch Pine, White Pine, Eastern Redcedar, Norway Spruce, Red Spruce.

Deciduous Trees
Wild Apple, White Ash, Quaking Aspen, American Basswood, American Beech, Black Birch, Gray Birch, Paper Birch, Catalpa, Black Cherry, American Chestnut, Eastern Cottonwood, Crabapple, American Elm, Black Gum, Pignut Hickory, Shagbark Hickory, Black Locust, Red Maple, Sugar Maple, Black Oak, Northern Red Oak, Scarlet Oak, Scrub Oak, White Oak, Sassafras, Tupelo, Willow.

Understory Growth in an area of an Earlier Forest Fire

Shrubs
Ailanthus, Alder, Speckled Alder, Arrowwood, Swamp Azalea, Barberry, Bearberry, Blackberry, Lowbush Blueberry, Highbush Blueberry, Clethra, Silky Dogwood, Elderberry, Winged Euonymous, Forsythia, Sheep Laurel, Maleberry, Meadowsweet, Hog Peanut, Hophornbeam, Huckleberry, Pussywillow, Wild Raisin, Raspberry, Multiflora Rose, Spicebush, Spirea, Smooth Sumac, Staghorn Sumac, Summersweet, Sweet Pepperbush, Mapleleaf Viburnum, Wintergreen, Woodbine.

Vines, Ground Cover and Grasses
American Bittersweet, Dewberry, Bull Brier, Wild Grape, Common Greenbrier, Honeysuckle, Poison Ivy, Japanese Knotweed, Deer Tongue Grass, Little Bluestem.

Herbaceous Perennials
Boneset, Common Ragweed, Cowwheat, Daisey, Fleabane, Downy Goldenrod, Hairy Soloman's Seal, Heart Shaped Aster, Panicled Tick Trefoil, Pink Lady's Slipper, Pipsissewa, Striped Wintergreen, Stiff Aster, Upland Boneset, White Wood Aster, Wild Sasparilla.

Ferns
Sensitive Fern, Royal Fern, Cinnamon Fern.

Mosses
Sphagnum Moss, Haircup Moss.

Aquatic Plants
Hydrophilic Grasses.

The potential fire hazard is limited primarily because of the lack of underbrush. In very dry seasons the Pines offer the greatest fire potential partially because of the flammable resins in the trees. There are signs of old fires as well as some newer ones. Evidence of fire is found near the top of Little Prospect, on its lower eastern slopes, on the southeast slope of Big Prospect, on the slopes east of the former ski slope and centrally located near the west edge. It has been reported that the Fire Department used to burn brush at the summits.

WILDLIFE
Evidence of any significant amount of wildlife is lacking in the park. The lack of understory as wildlife habitat may be an influencing factor. Early attempts to stock the park with English pheasants were not successful. It is assumed that this was due to severe cutting of the underbrush to assist in stopping the spread of moth pests. Rabbits, partridges and pheasants were observed in the park prior to this cutting. Rabbits, gray squirrels, chipmunks, raccoons, skunks, red fox, opossum, muskrat, birds [chickadees, crows, morning doves, red tailed hawks, mallards, redwing blackbirds, robins, scarlet tanangers, vireos, warblers, wood ducks and woodpeckers] and salamanders have reputedly been seen in the park recently.

In 1992 a study was made of the wetlands in central western part of the park. Wetlands wildlife, nesting sites, shelters and feeding zones were found. There is some belief that vernal pools may exist in or adjacent to the park, although they have not been documented or certified. Vernal pools are small water bodies which appear in the spring and dry up the rest of the year They support a great deal of plant and other wildlife and are important breeding areas for salamanders, toads and frogs.

SURROUNDING LAND USE
The park is zoned as conservation/recreation which allows following the land uses: farms, public outdoor recreational facilities, churches and educational uses. Adjacent land uses include an office park to the west and south, residential development to the east and the Metropolitan District Commission Veterans Memorial Rink to the north. An isolated portion of the park adjacent to the MDC rink, created by the construction of Totten Pond Road, holds the remnants of the former north entrance to the park. It is currently unused and wooded, screening adjacent neighbors from the road. The steep and varied topography will make it difficult to convert it to other uses.

Waltham is a close suburb of Boston with little vacant land remaining. It has a large young adult population [18-34]. High technology industries bring over 60,000 employees to the city each day, many of them to the adjacent office park.

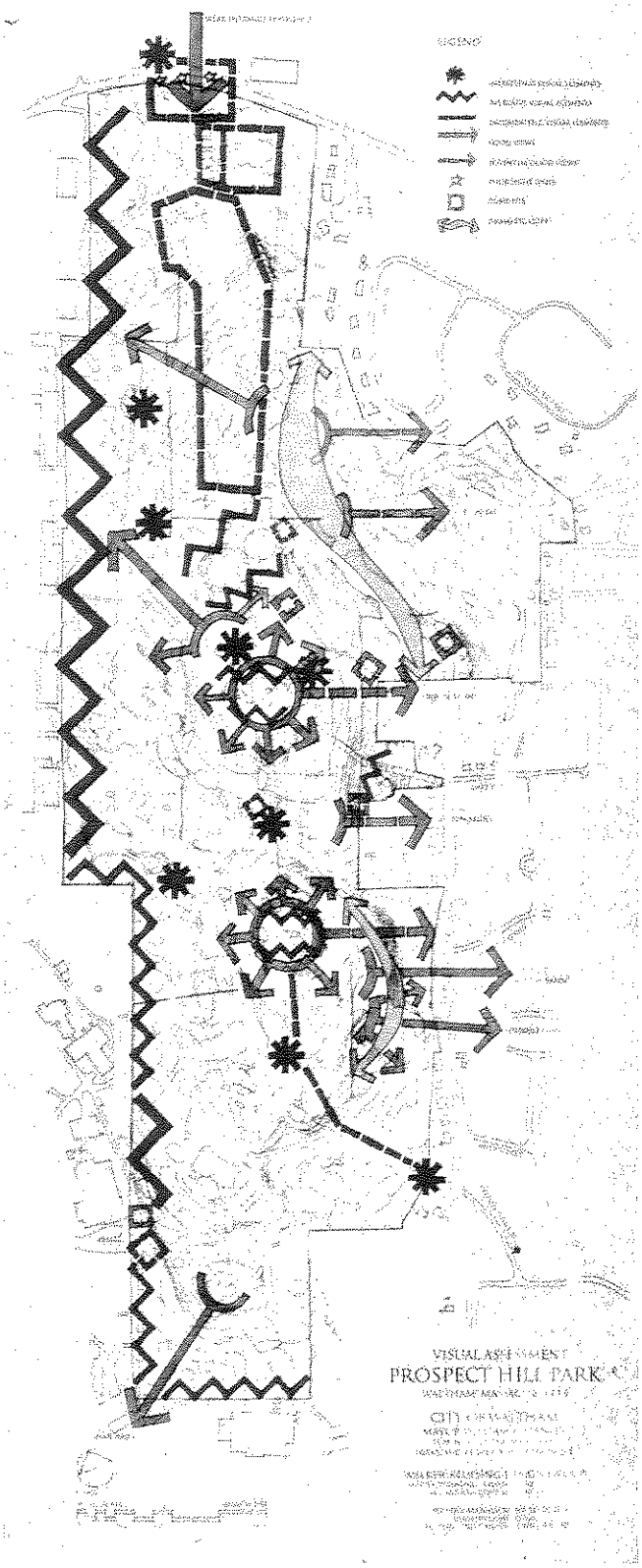
VISUAL ASSESSMENT

As the second highest point in the Boston metropolitan area, the peak of this rugged and picturesque eminence offers perhaps the best views *[blue arrows]* of the Boston basin available. It offers exceptional view of Boston Basin to the east [in numerous existing and potential locations], as well as views to the north, northwest [Cambridge Reservoir] and southeast. Most potential views are screened by vegetation.

The physical presence of the strong topography of the hill *[yellow]* offers a point of reference for the city as it is seen from many parts of the city and its environs. On the other hand, the park itself seems relatively concealed in that it does not provide any significant visible presence from adjacent public ways. The entrance area along Totten Pond Road is the only significant stretch where the park fronts on a public way. Plans to extend Prospect Hill Road along much of the eastern edge were not realized and much of that edge has subsequently become residential development.

The park suffers from the intrusive visual impact *[red]* of the adjacent office park. Some internal park buildings and other facilities [radar facilities and water tanks] are visually incompatible with the natural character of park. On the other hand, many of the older park structures and facilities made of stone and wood have a rustic character supportive of the character of the park *[dark blue]*.

Visual Intrusion of Adjacent Office Park



VANDALISM

While the park seems relatively safe, there are concerns about vandalism and illicit activities, particularly illegal dumping. The latter has been a problem for some time. In the winter of 1993, 181 separate dumping sites were counted in the park. Today evidence of this activity is most noticeable on the east side of the park both above and below the Glen, on the east side of water tanks in several locations, east of former campsite 7 and at the top of the ski area. Dumping tends to occur in concealed locations, not visible to the general park user. The City has made efforts to secure all entrances to the park to curtail this activity.

Graffiti has not become a significant problem in the park as yet. The isolated abandoned water storage tank on the east slope above Dale Street has been the most significant target. Some incidents can also be found on pavements, rocks and picnic shelters. Some evidence of destructive vandalism can be found on various picnic tables, fire places and wood posts at shelters. There are also some concentrated areas of broken glass, typically resulting from illegal drinking in the park. There has also been some unauthorized clearing on the park's eastern edge, north of the Prospect Hill Road entrance.

Vehicular Damage

Wheeled vehicles are creating damage in the park. Mountain bikes [with pedals] are starting to make an appearance in the park. While they tend to be less destructive than other forms of transportation, erosion is evident on trails, paths and the face of the ski slope. The city has made efforts to restrict use of the park by dirt bikes [with motors], motorcycles, ATV's and snow mobiles. All of these vehicles have the potential to destroy the trail system. Automobile and truck tire tracks are evident on fragile soils in numerous other locations. It is important to note that while the Motor Cyclists of America held a hill climbing contest on the road leading to Prospect Hill in 1906, the road was gravel at the time and required constant maintenance.

CIRCULATION

Entrances and Controls

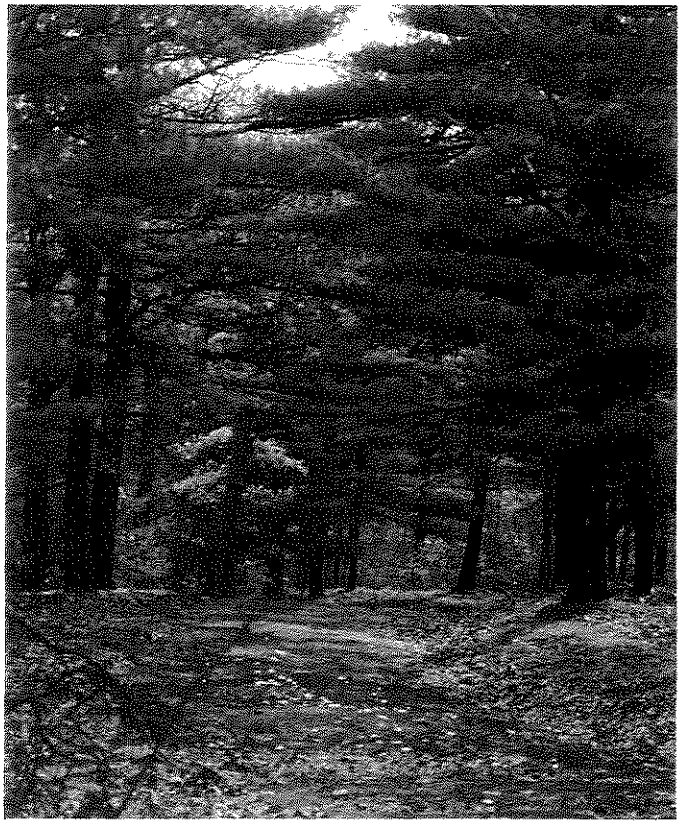
Vehicular access and egress to and from the park is controlled by a gate at the north end of the park. The gate is only open to the public in warmer weather [approximately from April to October, although sometimes later with warm weather]. The gate is locked at 8:00 PM by volunteers or at 4:30 PM by staff. There is no police support in opening or closing the gate. The gate at Prospect Hill Road, at the southeast corner of the park, has been closed for approximately 10 years because of neighbor concerns related to safety. The road through the park had been used as a through street, providing a short cut to some users. Users of this entrance now park on the street outside the gate. Large square stone gate posts remain that were constructed at these two original entrances to the park. At former north entrance to park they are located on the north side of Totten Pond Road opposite the current main entrance to the park. One of the stone gate posts at the Prospect Hill Road entrance needs repair work.

There are two other vehicular gates in or adjacent to the park. One exists well inside the park on road east of Big Prospect. It essentially prevents public access to former dumping sites and to private property with a transmission tower. Another gate exists on the western edge of the park controlling vehicular access to and from the adjacent office buildings. There are a number of pedestrian entrances to the park, most without controls or signs.

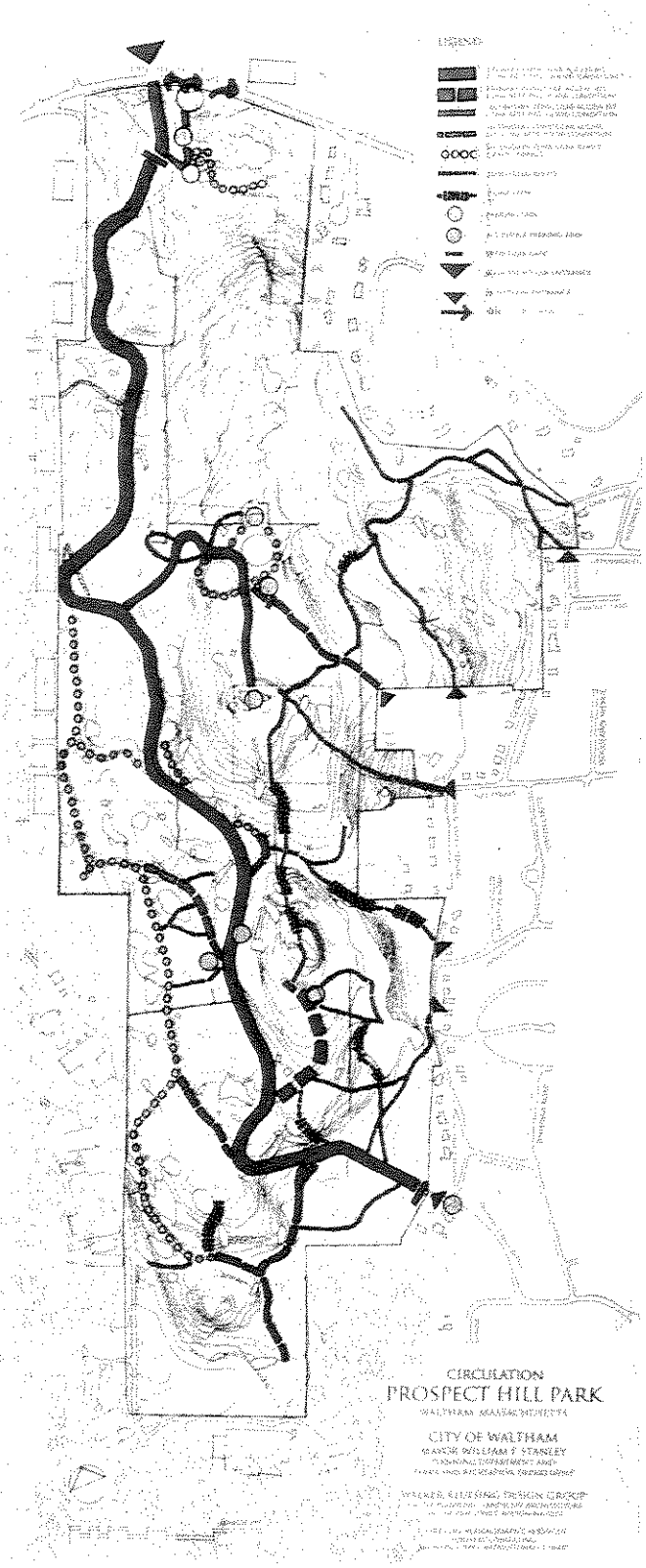
Other than the Prospect Hill Road entrance, vehicular access to the eastern edge of the park is difficult. Most of the roads in this area are private and offer no encouragement or recognition of public parking or access to the park. There is also no visible acknowledgment of the park in terms of signs or other markers.

Vehicular Circulation

There are three entrances/exits from Totten Pond Road at the north end of the park. The busy and relatively high speed nature of this road, as well as poor sight distances, make it hazardous entering and exiting the park. The primary or westernmost entrance is a single lane, but not marked one way. It is what is left of the historic entrance from the north. The drive takes one to the gate controlling access to the upper park. It also arrives at the base of the ski slope where the Park and Recreation Department offices are located. The central and easternmost access points arrive immediately into a large parking area, often utilized by MDC rink users across Totten Pond Road.



Park Road



Beyond the gate, a two lane 20 foot wide bituminous concrete paved road in good condition leads into the upper park. After a short distance the road changes into a narrow two lane [16 feet] and stretches of a single lane [12 feet] while allowing two way traffic. The single lane roads vary in condition and material. Most are paved with bituminous concrete. Road surfaces in the center and southern end of the park are in fair to poor condition. On the more secondary routes the bituminous surface has worn away leaving the gravel base exposed.

No vehicular access remains to the site of the former Worcester Pines. Users must park on Greenwood Lane and enter via a foot path that is not particularly obvious. No traces remain of the former public access and turnaround in this area.

Parking

At the north entrance, the parking area is paved with bituminous concrete. There are reputedly 86 spaces in the larger area near the road, but the painted stall lines are no longer evident. Near the buildings, there are 24 lined spaces including one handicapped space. There are also reputedly 11 parallel parking spaces along the north entrance road adjacent to the playground. Near Little Prospect there is a small unlined paved area with space for 7 vehicles. For the most part parking for picnic and other functions is informal and not controlled. The few existing paved spaces are related to designated handicap picnic areas.

The MDC rink on the opposite side of Totten Pond Road has space for 32 vehicles on the south side and some additional parking on the north side. Overflow parking for the rink occurs in the park lot with pedestrians crossing Totten Pond Road.

Trails and Paths

There is a perception that many residents are unaware of the existing walking trails in the park. It is not a coherent or cohesive pedestrian system. It needs organization and direction. Some paths are difficult to find or recognize. A few paths have paint markings on the ground or natural features like trees and rock outcrops. Most paths lead north-south with the topography. Some of the paths and trails are paved with bituminous concrete. Some are gravel, dirt or pine needles. All of the walking trails need rehabilitation, upgrading and maintenance.

There are also a number of stone steps on paths. They were constructed primarily during WWI and the Depression. All except one set of steps are dry laid. Most of the steps need repair with some missing treads. A portion of the serpentine stone stair north of Little Prospect has become overgrown with trees and other vegetation. Some steps appear to have had a stone gutter adjacent to them. The two stone causeways east of Big Prospect also need repair.

Accessibility

There is one designated handicap parking space near the Parks and Recreation Department offices with an accessible ramp to the building. There are also 4 paved designated handicap parking spaces at picnic areas. Little else in the park meets the Americans with Disabilities Act accessibility standards in terms of surface materials or gradients.

Stone Steps

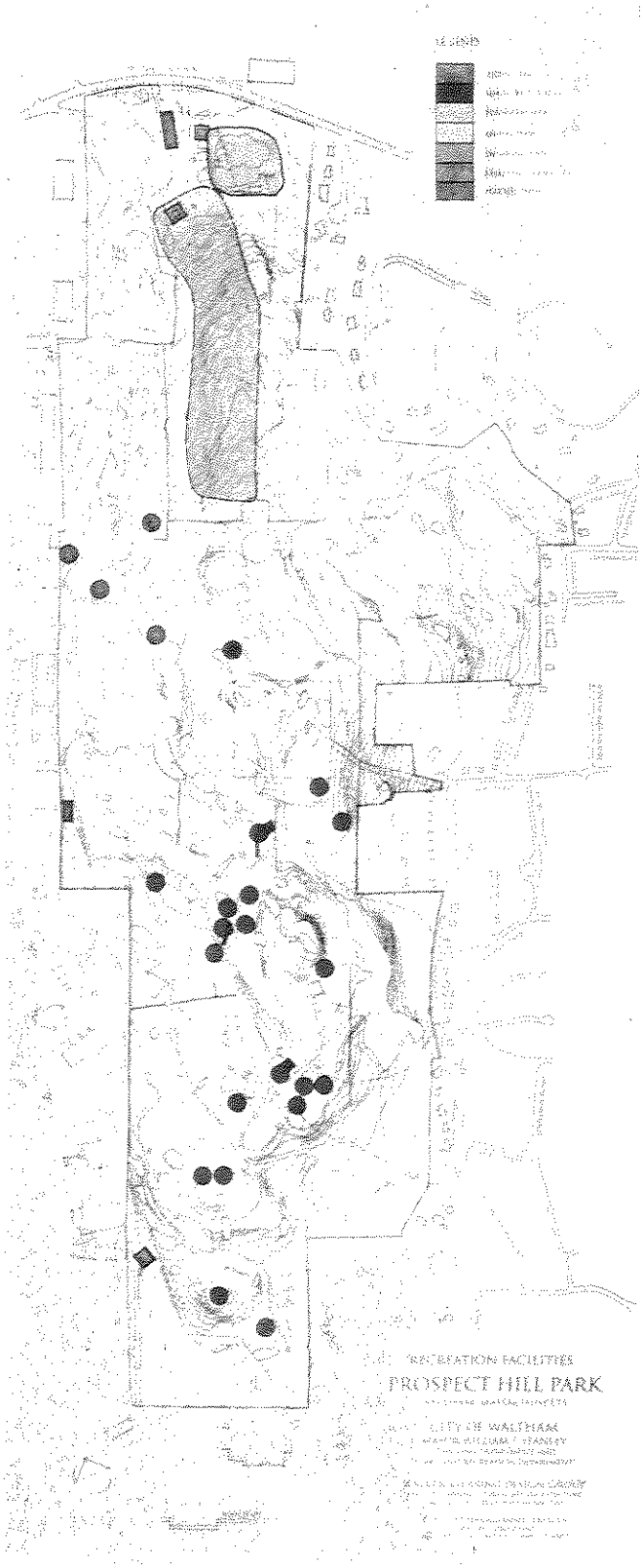
RECREATION

In addition to the walking trails, the picnic areas or former camp sites are a popular attraction. There were 23 camp sites *[orange circles]* in 1968 which reputedly increased to 30 to 40 picnic or camp sites. Now there are 12 designated or permitted areas. They are no longer offered as an overnight facility, primarily because of the lack of sanitary facilities. The "Summer House" site south of Little Prospect is the most popular. A 40 person limit has been imposed on this site because of the parking impact and the need to maintain emergency vehicle access. A picnic area of the west side near and apparently furnished by an adjacent office building is located in the park. A concern has been expressed that some of the picnic areas feel too close to the road.

The park houses a recently built playground at the north end of the park. Some concerns have been expressed about safety in terms of its location related to roads and parking, and about its location in a wetland buffer zone. Two older swing sets are located in picnic areas, both near former camp no. 6. All of the swing seats are different.

There is a small swimming pool near the Park and Recreation Department offices that is utilized for the Kids Day Camp program that has operated each summer since 1964. An aging animal farm *[light tan]* is located behind the Park and Recreation Department offices. There is a small partial basketball court at the base of the ski slope and a volleyball/basketball court located in the Polaroid easement. A play equipment area, enclosed by a 6 foot high chain link fence, protrudes into the west side of the park. The play area serves the Executive Office Park Day Care Services.

Playground with Former Ski Slope in the Background



Former ski slopes *[light blue area]* and equipment remain in the park. The slopes closed in 1989, reputedly because maintenance of the facility became cost prohibitive. The former ski area has a total grade change of approximately 208 feet, from a high point of elevation 350 to elevation 142 near the base lodge. Maximum ski run length is approximately 1,500 feet. The secondary ski trails are starting to fill in with vegetation and erosion is becoming evident on the main trail.

FURNISHINGS

There are three types of picnic tables found in the park. A few of the oldest type, wood tables with metal frames fixed into the ground, remain. There are also 8 moveable wood tables with metal frames, mostly in poor condition and 25 [13 at the north end of the park] newer moveable black vinyl coated tables with metal frames. A few of the latter are bent and/or have been used as grills.

The fireplaces, constructed of stone, a combination of stone and brick, and all brick, were built during the Depression with a few added in 1949. The brick fireplaces tend to be slightly smaller. The fireplaces are in various states of repair with many in poor shape. The 15 fireplaces remaining have been recently supplemented with 7 newer metal grills.

Two types of trash receptacles are used in the park. At the north end, there are 16 black vinyl coated wire mesh baskets [with green plastic inserts] similar in style to the newer picnic tables. Translucent white and blue plastic 55 gallon drums are used as trash receptacles adjacent to the picnic areas.

Picnic Area

Other than at picnic tables, formalized seating is difficult to find in the park. A few benches can be found in the area of the playground. All of the original rustic seats are gone. Some metal supports of the former benches have been left embedded in the ledge at various overlooks.

Most of the fencing in and around the park is chain link. Remnants of perimeter fencing can be found near Rock Hill Avenue and along the site of the former Worcester Pines. At Little Prospect a 12 foot high chain link fence with barbed wire surrounds the fire tower and a lower chain link fence is located adjacent to the cliff. Chain link fence also encloses the radar station and water tanks. The Polaroid easement at the south end of the park is fenced with chain link that has green vinyl fabric and rusted posts and rails. Trees have fallen on some sections of this fence. Public access to the easement is controlled by four gates in the fence. Two are open for free passage and two are locked closed. Concrete blocks also prevent access.

Galvanized steel guard rails can be found at the base of the ski slope near the ski lodge. A wood guard rail in fair condition is located adjacent to the north entrance road and a telephone pole barricade near the Prospect Hill Road entrance is in poor condition.

SIGNS

There is no formal sign system for the park. No information appears available on how to find anything or know that various facilities exist. Painted wood signs stating the park name and some prohibitive rules and regulations pertaining to use of the park are found at the north and southeast entrances. They are white with black lettering.

There are a few vehicular regulatory signs in the park as well as barrier free parking signs at 4 picnic areas. Reflective markers have been nailed to trees adjacent to vehicular roads. Trees are growing over and enveloping the markers. Because the park is no longer open during evening hours, these markers no longer serve any purpose. There are some metal signs nailed to trees indicating the numbers of some campsites. Most are missing and the campsite numbers do not correspond to the historic numbers. Some of the trails are marked, typically with spots of various colored paint applied to path surfaces or adjacent trees or rocks. There are numerous signs, many outdated, at the animal farm.

BUILDINGS/STRUCTURES

The largest picnic shelter, located south of Little Prospect and originally known as the Party Pavilion, is also the oldest structure in the park. It is now known as the Summer House. Built in 1895, it is a wood structure. The steep pitched metal roof is showing signs of rust. The ridge comb is missing. The wood eaves are showing signs of deterioration and should be replaced. Two of the cast iron bases of the wood support posts are damaged. Recent bituminous paving overlays have trapped water at the bases of the support posts, accelerating deterioration. The entire pavilion needs paint.

There are also two of the former eight smaller picnic shelters remaining in the park, one just north of Big Prospect and one south of Little Prospect . Built during the Depression, they have rustic cedar log support posts typical of the era. The bases of the posts exhibit deterioration. Many of the diagonal supports are missing and the shallow pitched roofs need significant work. The shelters rest on concrete pads constructed with a grey edging and a pink infill.

A small green painted wood structure is located near the picnic shelter south of Little Prospect. Concrete pads of former small picnic shelters can be found at or near former campsites 1, 3 and 7. Two stone lean-to shelters with concrete roofs represent a Boy Scout Camp built in 1934. There is a fire place between the shelters and free standing stone fireplace nearby.

The Caretaker's Office is a former wood tool shed [circa 1910] that was rebuilt in 1949 in stone with a fireplace. It currently has boarded up windows although the door has been left ajar allowing free access. The structure appears to be in reasonably good shape, needing roof and window work. There is a stone utility structure behind the building.

Remnants of former ski lift facilities can be found on the north slope including derelict ski lift [T bar] machinery, maintenance building, ticket office, cables, pipes, lights, poles, overhead wires and trail grooming equipment. Started in 1948, with night lighting added in 1949 and expanded facilities added in 1968, it was abandoned in 1989.

The Radar Station at the top of Big Prospect was constructed in 1952 and consists of a radar disk and a 1-1/2 story building. The station is enclosed by a chain link fence. The Massachusetts Department of Environmental Management owns the 1963 Fire Tower at Little Prospect. It replaced the 1917 fire tower on Big Prospect after the radar station was constructed. It is now an unmanned facility currently housing City antennas and is no longer used for its original purpose. It is a safety hazard in its current condition. The gate in the surrounding chain link fence at the tower base is open inviting public access. There are missing and broken treads on the tower stair.

The former ski lodge, built in 1968, is located at the base of the former ski slope at the north end of the park. It is now a recreation and hall used to run programs. The ski lodge outdoor deck needs minor repair and paint. Other buildings in the area include the Parks and Recreation Department offices, an above ground pool facility with adjacent changing rooms used in Park and Recreation Department Summer Program, a garage and various utilitarian buildings. The animal farm, which started in 1969, is also nearby. It is a tired facility with aging animals, a collection of small buildings, a larger barn, a former trailer, fenced in areas for animals, signs and a wishing well. It exists as a volunteer effort. The animals are not being replaced.

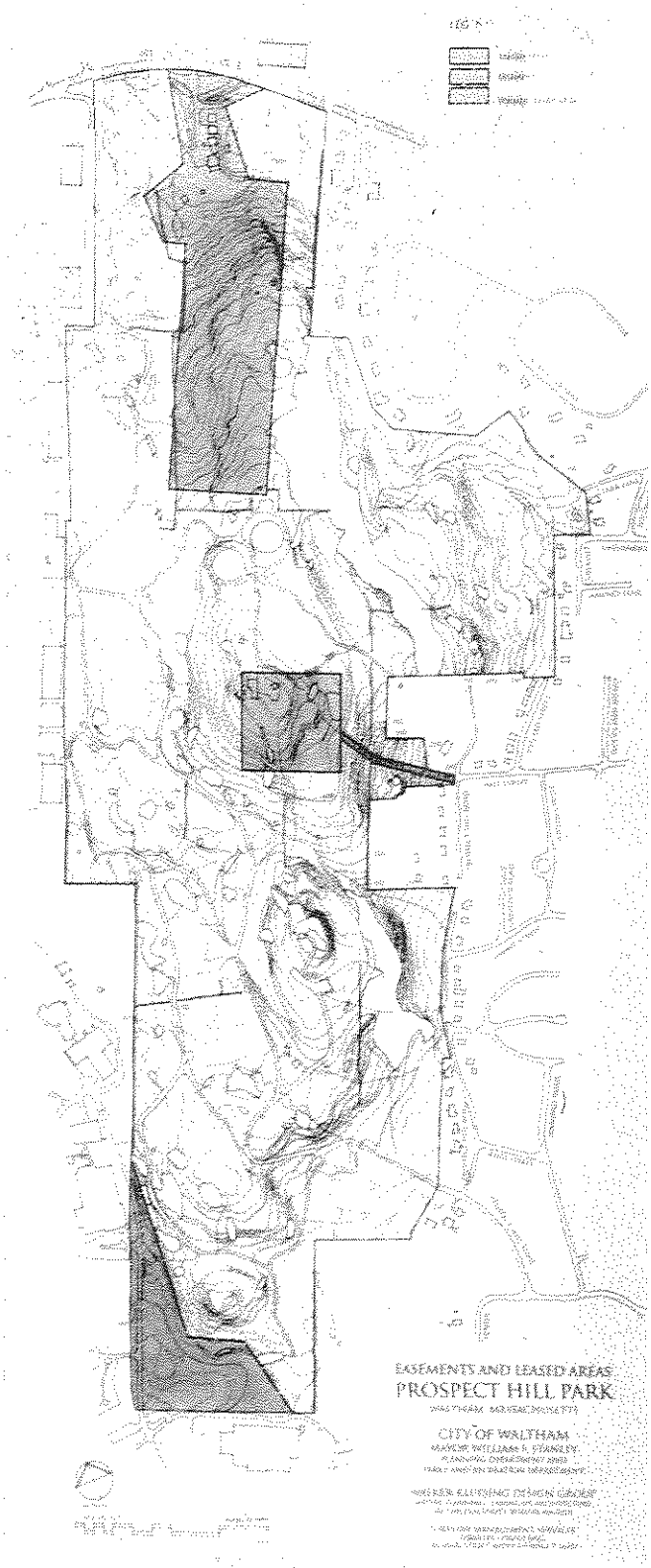
The two prestressed concrete water storage reservoir tanks located north of Big Prospect were constructed in 1974. The fire hydrants that were added with the construction of the tanks aid in fire protection for the park. An older metal water storage tank on the east slope is empty, accessible and a safety hazard. A missing manhole cover is also dangerous. The tank has been vandalized with graffiti.

EASEMENTS

In 1964 Polaroid obtained an easement *[light green]* through 8.8 acres at the south end of the park for vehicular access and utility service [above ground gas lines]. The easement is fenced with some open and some locked gates. The fence line apparently crosses onto both sides of the easement. Fallen trees have damaged the fence.

LEASED AREAS

In 1951 the federal government leased 5.7 acres to house a US Air Force Radar station *[yellow]*. A 30 foot wide utility easement *[light green]* connects this area to Dale Street. While private vendors operated the former ski operations [1986 through 1989], 24.5 acres of the park were leased to them *[light tan]*. This area is no longer leased, but there is an active interest in finding a new vendor to operate the ski area.

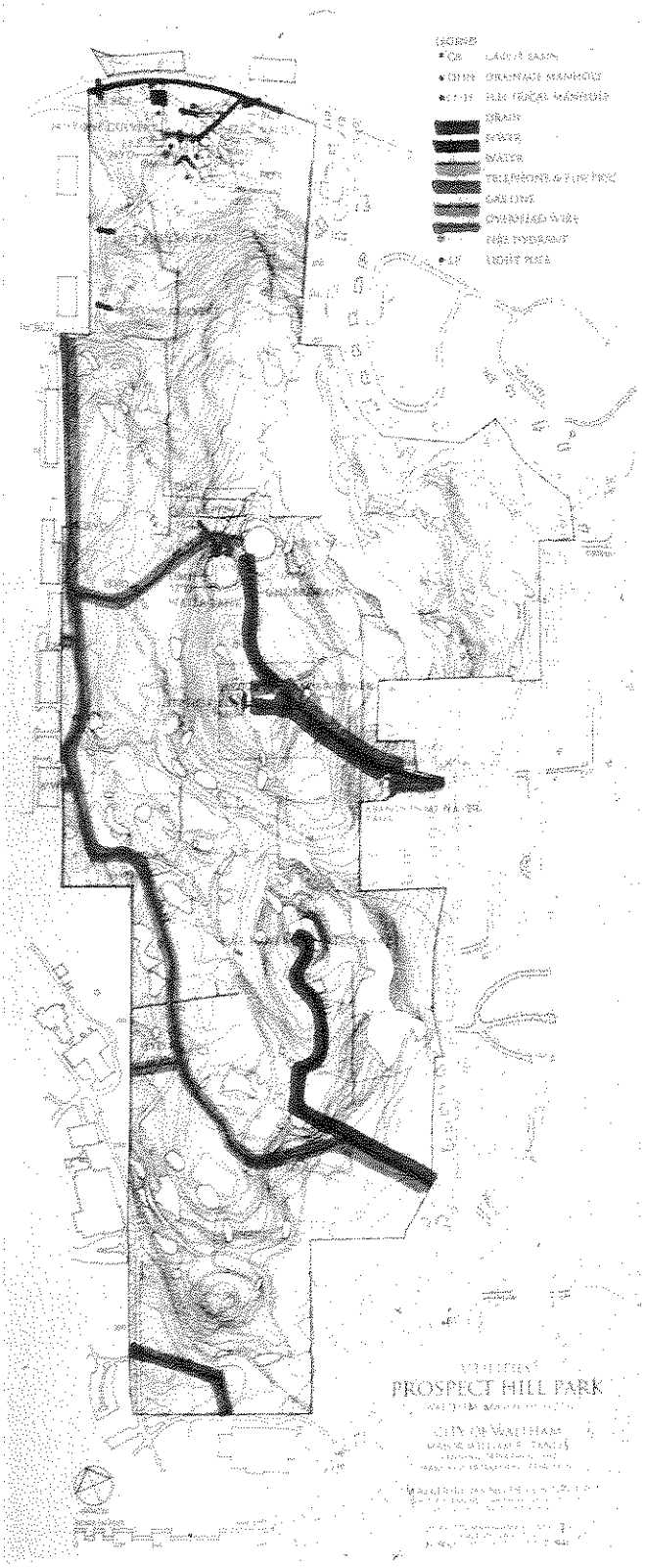


INFRASTRUCTURE

Storm Drainage *[brown]*: There are 4 storm drain culverts under park roads at the northwest portion of the site. Constructed of concrete with stone facing, all have cracks and need attention. There is a 30" reinforced concrete pipe point discharge onto park property from the west at the office park and a 36" reinforced concrete pipe point discharge onto park property at the northwest corner beneath Totten Pond Road. A 30" reinforced concrete pipe and stone headwall discharges storm water from the park at the northeast corner under Totten Pond Road. During periods of intense rainfall, the north end of the park floods with water levels almost reaching the base of the former ski slope.

Water Supply *[blue]*: A 24" main runs through the park from Prospect Hill Avenue along the west boundary to the northwest edge of the office park. It connects to the twin water storage tanks and 6 fire hydrants in the park are tied to these mains. The adjacent office park is served by two 8" and one 12" connection to the 24" main in the park. Buildings at the north end of the park are served by a 6" line. Capped wells or water pumps also exist in the park: one near the Party Pavilion south of Little Prospect; and one west of the valley between Big and Little Prospect, near former camp number 5. Another may exist near former camp number 1.

Flooding, October 1996



Sanitary Sewer *[grey]*: There is a sewer connection at the north end of the park serving the buildings in that area. The radar station has a leaching field. There are currently no other sanitary facilities in the park.

Gas *[green]*: There is gas service to the buildings at the north end of the park and above ground gas lines exist in Polaroid easement at the south end of the park.

Electric/Telephone *[red]*: Overhead telephone and signal wires enter the park from south east corner at the Prospect Hill Road entrance connecting to the fire tower at Little Prospect. Telephone and communication lines from Dale Street serve the radar station. A telephone line has been found running overland southeast of Big Prospect. Overhead telephone and electric lines extend the full length of the park along Totten Pond Road. Electric vaults and above grade controls exist at the north entrance with underground telephone and electric service to the buildings in the area. Site lighting at the north end of the site consists of roadway and flood lights. There are overhead wires and lighting at the former ski slopes. The condition of this service is unknown.

Utility services related to the former ski slope have not been shown. The condition of these services is unknown at this time.

MASTER PLAN RECOMMENDATIONS

PARKWIDE CONCEPT

The primary goal of this master plan is to renew Prospect Hill Park as a safe natural environment where Waltham's residents and guests can enjoy passive and active recreation on a year round basis. The basic concept is to restore the passive recreation areas, provide accessible pedestrian circulation to the summit of Big and Little Prospect allowing access for all to the panoramic views, restore the image of the park and permanently protect this open space with public access for all. The pedestrian system, planting and amenities such as shelters, picnic areas, benches and signs, provide the opportunity to accentuate the natural character of the park.

A secondary goal of this master plan is to increase awareness of the park, its assets and its potential, so that a broader spectrum of users might enjoy the recreation value of this beautiful natural environment. Although use of the park has historically been a family experience, many people have come to believe that Prospect Hill Park is an untapped resource. There is a strong desire for more people to take full advantage of the picnic and other resources available in the park including nature walks, hiking, walking, jogging, cross country skiing, and the potential conservation and education resource for public school children and others.

The goals and objectives that follow describe the broad aims or ideals for achievement. They result from meetings held during the past year where discussions took place in an attempt to identify both short and long term planning goals and desires. Out of this process, the following goals and objectives have been identified for Prospect Hill Park. The 1993/94 citywide survey results of needed facilities relevant to Prospect Hill Park included conservation areas, bike trails, hiking and skiing, and family picnic areas. These goals and objectives are also consistent with the goals and objectives of the 1994 City Open Space and Recreation Plan, and the Parks and Recreation Department Statement of Objectives.

Increase the quality and quantity of passive recreation opportunities, while maintaining and improving the quality of active recreation facilities.

Improve and upgrade current recreational facilities to expand use.

Provide recreation programs serving all ages and offering the opportunity to share common recreation interests.

Provide recreation opportunities and facilities for the special needs population.

Expand current recreation opportunities by developing trail systems for cross country skiing, hiking, bicycling and jogging.

Expand regional open space and recreation systems that cross municipal boundaries including connection to the Central Massachusetts Branch Rail Trail.

Provide such services on a self supporting basis at minimal cost to each participant.

Restore the scenic qualities of the historic landscape while solving contemporary problems of public safety, security, appropriateness of use, maintenance, management and preservation.

Permanently protect city owned open spaces and scenic areas including ecologically sensitive lands and wildlife areas.

Provide public education on the importance of open space and natural resource protection.

Initiate changes to existing park facilities, maintenance practices and management policies which are inconsistent with the historic intent and image, and/or contemporary park needs.

Integrate conservation and recreation lands and activities.

Provide opportunities for better management of conservation and recreation lands through joint efforts of various municipal boards and public and private interest groups

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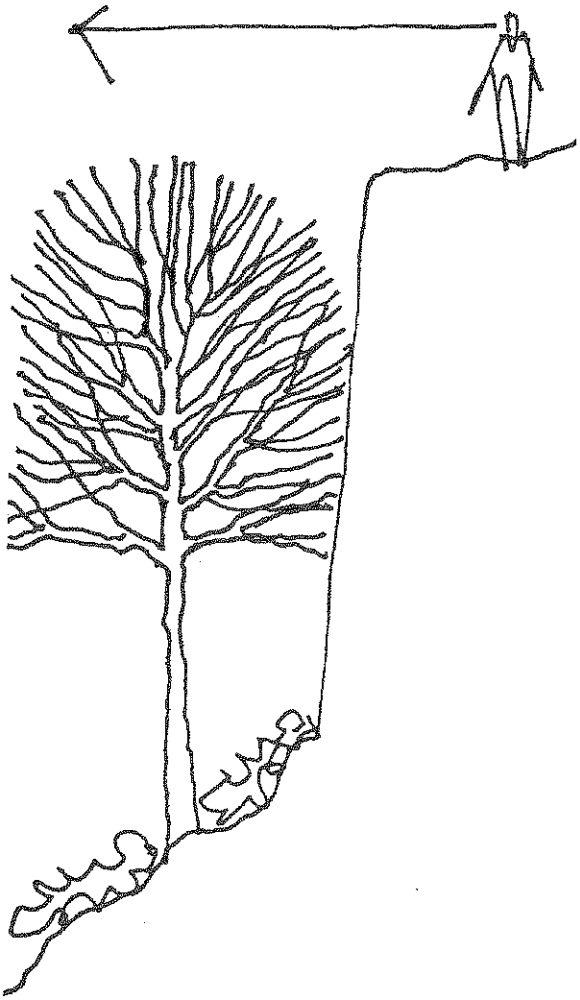
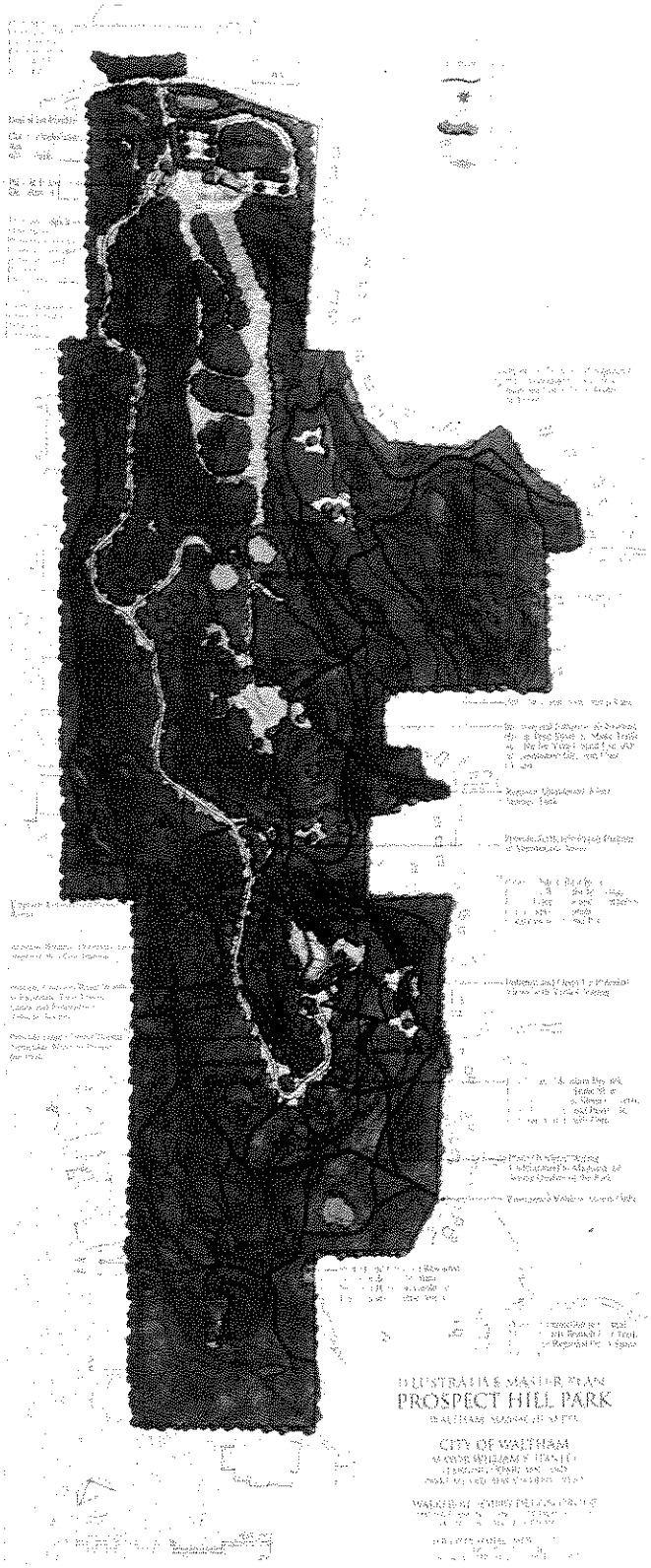
PARK USE

Vistas

One of the primary reasons this site was selected as a public open space is because it is the second highest point in the metropolitan area and offers exceptional views of the Boston basin. These spectacular views of the Boston region give it the potential to become a Massachusetts Department of Environmental Management designated scenic landscape. Most of the best potential views to the east and west are currently screened by vegetation. While these views were historically managed by periodic vista clearing, this work has not been done in quite some time. Over the years, trees down slope have grown to obstruct views. The revealing and enhancement of potential views should be done to increase use of the park as a regional destination.



Maintain Scenic Vistas



Summits
Some of the most prized locations in the park, the high points, have been consumed by non public uses such as the radar station, fire tower and water tanks. When and if possible, public access, vistas and scenic quality should be restored to the summits of Big and Little Prospect. If the radar station site should become available, the City should retain the option of maintaining the existing building for reuse in an appropriate park use. If the City is able to relocate its antennas from the fire tower to another suitable location, it has been reported that the Department of Environmental Management will abandon the fire tower and remove it from the site.

Screening
Elements that visually intrude on the park, like the adjacent office park buildings and parking, and the water storage tanks, should be screened from view with vegetation to enhance the woodland character of the park. It is necessary to screen adjacent office buildings on park property because of the scale of the buildings, narrowness of setbacks and lack of space for a planting buffer outside the park.

Historic Resources
In the 104 year evolution of the park, it has acquired numerous historic assets with a character appropriate to the rustic woodland setting. These features, including the stone stairs, stone causeways, stone culverts, stone fireplaces, pavilions and the Caretaker's Cottage, should be restored and maintained.

While the Massachusetts Historic Commission has no record of any archaeological investigations that have taken place in the park, significant findings were apparently made on Blue Hill in Milton which has many similarities to Prospect Hill. It is suggested that an archaeologist review the site to make a preliminary determination of any potential archaeological sensitivity or resources.

Recreation Facilities
The park's physical features should be updated and improved with new improvements that blend in unobtrusively with the rustic wooded landscape character of the park.

Picnic Areas: Picnicking has been an important activity in the park since its inception. Picnic areas near vehicular ways should be improved with complete furnishings and paved parking. The sense of separation between picnic areas and roads should be enhanced where possible to maximize the woodland experience. Picnicking in areas more remote from paved ways should be encouraged although furnishings, like tables and trash receptacles, need not be provided. The daily access and other requirements for refuse removal in these more remote areas could consume too much of the limited funds available for maintenance.

Site Furnishings: **A variety of types and ages of furnishings related to picnicking exists in the park.** A coordinated system of furnishings [picnic tables, benches, trash receptacles and fireplaces] that is thematically consistent, identifiable and compatible with the overall park image should be provided. Furnishings donated or brought in by others [such as the adjacent office buildings] should match the selected system so that all park users feel that the furnishings belong to the park and so that they can feel comfortable using them. The existing stone fireplaces should be restored and maintained. Benches should be reinstated at selected overlooks to make visitors more comfortable and encourage them to linger.

Skiing: The ski slopes at the north end of the park provided a very popular recreation activity since the late 1940's. The return of this activity could re-energize the park and the community. A five year time frame should be allowed to reinstate the former ski area to its former use level as a self supporting vendor operation. The ski operation requirements should be balanced with overall park needs and the operation of the Summer Camp by Park and Recreation Department in the same general area should be maintained. If a suitable vendor agreement is not obtained within the allotted time frame, the former ski slopes and related buildings should be utilized in an appropriate and effective manner.

Children's Facilities: The playground and Summer Camp pool at the north end of the park are both popular and conveniently located facilities. They are also subject to periodic flooding and very close to vehicular traffic. These facilities should be relocated to a safer location and updated to meet ADA requirements.

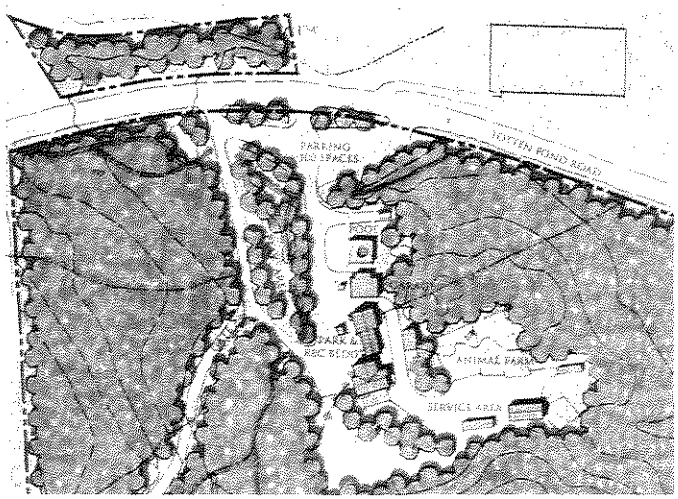
The condition of the animal farm facilities and animals has deteriorated significantly from lack of public support and financing. It should be removed and the land should be utilized more effectively.

Existing swing sets in picnic areas are quite old and should be updated with new equipment compatible with the setting and with safe and appropriate surfacing with adequate safety zones.

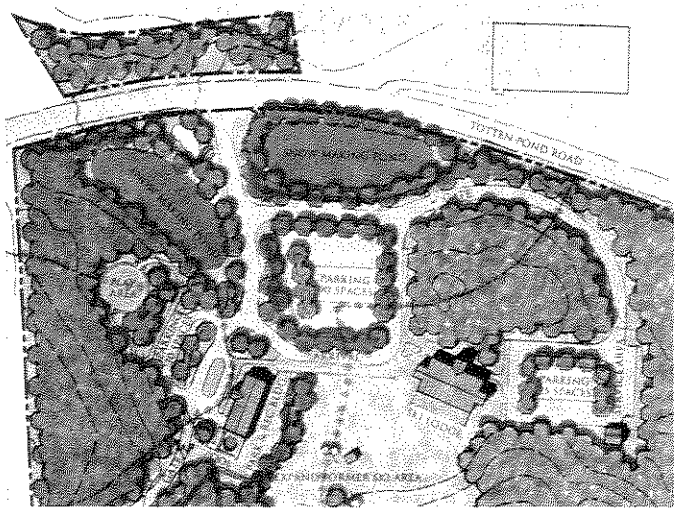
Recreation Programs

A primary means to overcome the perception that the park is underutilized is to expand recreation and education programming, and the dissemination of information about the park and what it has to offer.

Year round recreation and education programs should be increased and established in the park to serve the community and the region to improve park visibility. Activities for children and adults should be scheduled throughout the year. Programs should include guided tours and school field trips to increase awareness of Waltham's natural resources. Other programs or special events could include youth nature programs, bird walks, family weekend programs, an annual park birthday party, Earth Day events, a series of summer concerts, park clean ups and field days.



Plan of North End of the Park



Plan of North End of the Park with Potential Improvements

Existing Play Area

A flyer or handout should be developed which provides a park map, lists environments, recreational and educational opportunities, a calendar of events and a telephone number contact to improve community and regional park visibility and use. It should be available at an orientation kiosk and could be distributed to area Scouts, YMCA, Boys and Girls Clubs, Sports Clubs and Organizations, and Schools. The idea of a handout could be expanded to a quarterly or monthly newsletter, and/ or a web page focusing on a calendar of events and providing educational information or articles.

An Interpretive Center could be created, provided there is sufficient public support and financing. It could be utilized by local schools and Colleges to offer education in the park about the history, significance and special characteristics of the park. It could also house various collections of particular significance to the park such as native American or natural artifacts.

Public Conveniences

Rest Rooms: In a park of this size and with the recreation components included [namely picnic facilities], public rest rooms are an essential component. Although rest rooms were provided throughout much of the parks history, they are no longer present. Consideration must be given to the daily maintenance requirements of these facilities and their potential as targets for vandalism.

Public rest room facilities should be provided at the north entrance to the park, at the pavilion area near Little Prospect and in the valley between Big and Little Prospect so families can enjoy the park more comfortably. If this can not be accomplished in a permanent fashion, consideration should be given to the addition of self contained units, like clivus multrims, serviced by an outside vendor. The rest rooms should be handicap accessible.

Drinking Fountains: There were once five springs [one developed as a well] to offer water to park users. With current sanitary regulations, these are no longer available. Water for drinking and cleaning should be provided near picnic and playground areas.

Telephones: Telephones have become a necessity in contemporary society and there are none in the park. Public telephones should be provided near the playground at the north entrance and potentially near picnic areas.

Self Contained Clivus Multrim

Handicap Accessible Drinking Fountain

Signs

The park would benefit from a comprehensive, unified sign program. Signs should be highly legible, without being obtrusive, and should be compatible with the rustic woodland setting. They should be durable, vandal resistant and require a minimum of maintenance. The over all sign program should convey the following types of information:

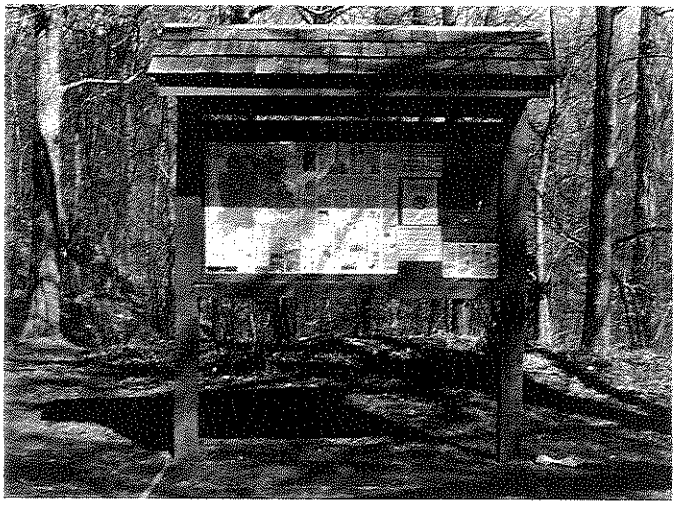
Identification: for formal identification of individual elements. These should be of a scale suitable for legibility by both pedestrian and vehicular traffic. Park identification signs should be provided at primary entrances welcoming prospective park users.

Regulatory Information: to provide both general and site specific rules and regulations. Rules and regulations pertaining to use of the park should be posted at appropriate locations.

Orientation: to orient visitors within a specific area. An orientation map and information kiosk for park users should be provided at major access points. This is an important component in public outreach to increase both park and trail use. Trail heads should be signed by name, distance, degree of difficulty and accessibility.

The practice of painting on rocks or pavements for trail markers should be terminated. Now that the park is no longer open after sunset, the reflective markers nailed on trees no longer serve a purpose. Most of the markers are bent, unsightly, and are being grown over by their tree hosts. The markers should be removed.

Interpretive Information: to explain the history, significance and special characteristics of particular components of the park. Interpretive exhibits at key points could focus on regional geologic significance, native wildlife and plants, and/or the history of the park and its use.



Orientation Sign at Middlesex Fells

Vehicular Circulation

Prospect Hill Park had become a dumping ground until this activity was recently brought under control by the Park and Recreation Department. Control of vehicular access needs to be maintained and improved to protect the park and limit illicit activities. The gate at the north end of the park should be the only means of vehicular access into the park. The gate at Prospect Hill Road should be maintained and opened only for emergency vehicle access. Gates at the west edge of the property should be removed with vehicular access prevented. The gates east of the water tank should be relocated to the east property line after the dump refuse in the area has been removed. While this gate location is appropriate today to discourage further dumping, it gives the impression that a significant area of the park is private property.

The safety and ease of access and egress to and from Totten Pond Road should be re-evaluated. With the high volume and speed of traffic on Totten Pond Road, access and egress is often and difficult and dangerous maneuver.

In order to maintain the scenic quality of the park and protect it from further vehicular damage, the extent of vehicular access should be limited by reducing the amount of paved roads, while maintaining access to major destination areas. Selected roads, particularly in environmentally sensitive areas, should be removed. In addition, edge control should be provided along vehicular ways where necessary to protect fragile areas of the park.

The primary vehicular routes inside the park vary in width from 12 to 20 feet. The narrow stretches present a public safety hazard, particularly during periods of heavy use when vehicles are partially parked on paved ways making passage even more difficult. A uniform paved road width of at least 18 feet should be provided throughout the park to facilitate two travel lanes and insure emergency vehicle access.

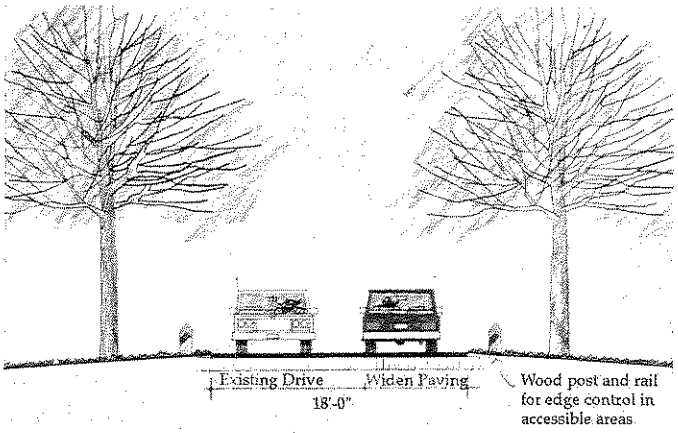
Many of the older and narrower park roads are in poor condition and should be repaved. Speed humps and rumble strips should be added at appropriate locations to keep vehicular speeds down to a safe level. A sharp and dangerous curve in the road below the turn off to Big Prospect should be redesigned to improve sight distance and safety as well as allowing space for screen planting at the adjacent office park.

Parking

The first impression of the Totten Pond Road entrance is a paved parking area which is often full of vehicles with people running across the road to the MDC rink. In addition to working with the MDC to resolve their overflow parking problems and related safety issues, the entrance image to Prospect Hill Park should be improved such that it is more inviting. Parking facilities should be moved further away from the road to allow space to develop an inviting entrance. Parking facilities should also be improved and expanded.

If an agreement is reached to bring a vendor into the park to manage the ski operations, consideration should be given to off site parking. The amount of space required to accommodate both passenger vehicles and buses will most likely be greater than the amount of space available without significantly altering the character of the north end of the park.

At other locations inside the park, sufficient paved parking should be provided at appropriate areas including picnic areas and other major destinations. If this amount of parking should prove insufficient for special events on peak weekends, consideration should be given to providing a shuttle service into the park from the parking area at the north entrance.



Section through Two Way Park Drive

Space for parking on the east side of the park is currently limited to on street parking at the various park pedestrian entrances. It is recommended that this practice be continued and that additional parking not be provided inside the park at these locations. The parking would tend to be less visible and consequently a probable control and management headache.

Pedestrian Circulation

The existing trail system is extensive but would benefit from improvement and enhancement. In addition to path repairs, dead ends should be eliminated and a few path extensions or additions should be made to facilitate utilization of the entire park. The location of new trails should be sensitive to existing plant and animal habitats.

Pedestrian paths are an integral component of regional open space and recreational systems that cross municipal boundaries. Expansion and improvement of the Prospect Hill Park System, including a connection to the Central Massachusetts Branch Rail Trail, is important in making it part of a greater open space system.

Trails should be made to accommodate different user groups and abilities, and suitable for year round use including walking, jogging, hiking, cross country skiing, snow shoeing, orienteering, nature study and bird watching.

Handicap Accessibility
There are accessible facilities in the park, including designated picnic areas. But some of the prime assets of the park are not accessible. All major destinations in the park should be accessible, including overlooks. Accessible overlooks should include Big Prospect [when and if it becomes available for public use], an area near the top of the ski slope and an area slightly north of Boston Rock. Selected trails providing a woodland experience should also be improved to be accessible.

Infrastructure
Overhead wiring should be placed underground to maintain the scenic quality of the park. Stone headwalls at culverts are in poor condition and should be restored.

PUBLIC SAFETY
Public Safety Hazards
Public safety hazards should be eliminated by repairing the stone steps and causeways, preventing access to the fire tower and removing trash from dump sites, the abandoned water storage tank, and hazardous trees and limbs. All main roads, pedestrian trails and high use recreation areas including picnic areas and scenic vistas should be surveyed by a certified arborist for hazardous trees to be removed or pruned. Trees in these areas need to be maintained by removing dead, dying and defective trees and pruning dead limbs for the protection of the public.

Trash and dump sites should be cleaned up for public safety and public health reasons. Visitors and neighbors should be educated about the detrimental impact of litter and dumping. Once the park is cleaned, an annual or semiannual clean up day should be scheduled to maintain the condition of the park. Special invitations should be sent to neighbors, civic groups, schools and youth groups to participate in park stewardship.

Public safety related to traffic is a concern at the Totten Pond Road entrance to the park. A traffic study should be undertaken to determine the best means to provide safe access and egress to the park and the necessary improvements should be made.

Public safety related to periodic flooding is also a concern at the north end of the park. A hydrology study of the north end of the park [including up and down stream contributing factors] should be undertaken to determine the cause [inadequate maintenance of storm structures and/or inadequate storm water storage and/or pipe outfall capacity] of periodic flooding conditions and the remedial actions required to alleviate these conditions should be implemented.

Security
Emergency call boxes should be provided at appropriate locations within the park.

Park Ranger
A caretaker has had a presence in the park during much of its history. In additional to maintenance responsibilities, the caretaker offered many of the positive aspects of a park ranger.

Park Rangers not only provide a unique visible asset, they also provide a sense of safety for each space they occupy which can encourage greater park use. Their uniformed presence augments regular police presence. Park Rangers are the eyes and ears of a park. They enforce park rules and regulations. More importantly, they handle nuisance and quality of life issues.

Park Rangers can be an educational resource for the public by providing public information, visitor assistance and educational programs. They can be goodwill ambassadors for the city, setting a high standard of respect for parks as public property.

A Park Ranger with conservation management, forestry management and public relations skills should be employed for Prospect Hill Park under the jurisdiction of the Park and Recreation Department. The park ranger's responsibilities should include public safety and education. Appropriate relationships and communications should be developed and maintained with the City Police Department for enforcement. The Caretaker's Cottage could be utilized as a headquarters for the Park Ranger.

LANDSCAPE CHARACTER

Vegetation

The following recommendations support the desire for a forested park populated with a mixture of healthy and vigorous trees that would maximize the entire realm of benefits associated with this woodland park. Forest management goals and objectives for Prospect Hill Park are derived from the following natural resource principles.

Tree Growth and Care: Forest management should be in accordance with the established principles of urban silviculture, the art of reproducing and managing forests while applying ecological principals to obtain sustained yields of forest benefits in urban regions. Traditional silviculture places emphasis on wood production, while urban silviculture emphasizes recreation and environmental protection as primary functions, but does not preclude the production and utilization of wood as a by product of management.

Recreation: Recreation use and enjoyment are an important function of a forest in an urban area. Forest management can provide a better setting for different kinds of recreation opportunities. Passive recreation opportunities should be developed and preserved so that residents may enjoy an outdoor experience in these woodlands.

Aesthetics: Areas should be recognized and preserved for their unique natural qualities and beauty. Forest landscapes should be managed for their visual quality including aesthetic enjoyment through the creation and maintenance of scenic vistas.

Water Quality: Prospect Hill Park should be managed as a natural watershed, protecting soils against erosion and filtering water for an ample supply of good quality water for wetlands and wildlife use.

Habitat: The park offers a critical habitat for an array of plants and animals. Forest management can maintain or enhance a particular set of ecologic conditions for wildlife habitat.

Education/Environmental Studies: Interpretation of the forest management of the Prospect Hill Park woodlands could provide the basis for an outdoor classroom related to environmental studies. City schools or youth groups could study and participate in the management of these woodlands. Educational interpretation of wetland sites could also be included.

Protection

The forest of Prospect Hill Park needs protection in a broad scale to safeguard against fragmentation of the landscape and maintain linkage to the larger network of open space in the Waltham, Belmont and Lexington area.

While the forest provides a natural protective cover for soils and other physical resources, specific resource areas including wetlands, wildlife habitats, geologic features and scenic areas need further protection and enhancement. Fragile areas like swamps, marshes, bogs, riparian edges, soggy meadows and woods are rich ecosystems and wildlife habitat. Proper protection of some of these areas requires limitations on some activities. The use or disruption of wetland sites should be discouraged. Invasive species such as Japanese Knotweed and Oriental Bittersweet should be removed. The installation and maintenance of structures, such as small weirs or dams, to hold water longer in some wetland areas should be considered.

Trees should also be protected from damage by park visitors and neighboring landowners. Visitors to the park should be educated in the proper care and treatment of trees on the property. Neighbors should be notified about tree preservation efforts and penalties.

The park edges were once fenced and much of that fencing is now missing making it difficult to maintain control over park property. A survey of the boundaries of the park should be completed. Park property lines should be fenced with gates to control uses and activities, and to prevent intrusions.

Forest Management

A Vegetative Cover Type Assessment was undertaken to identify existing plant communities [cover types]. Areas of similar associations of trees and plants were grouped together and identified generally as stands of trees. A stand is a part or subdivision of a forest where a contiguous group of tree species, size, age and general condition are uniform and distinguished from other areas. The cover types result from the fact that several species tend to grow in association with one another. Many factors may determine the mix of species in a given area, including elevation, aspect, soil type, land use history, available moisture and successional status. Fifty two stands of trees were identified in the park. These stands are noted on the Vegetation Plan and described in the Vegetative Cover Type Assessment included in the appendix of this report.

Stands of trees exhibiting a good to excellent health-vigor rating and above average site qualities represent areas of High Forest Management Potential. Seventeen stands were identified with potential where the application of appropriate forest management practices would yield the best return.

Increased diversity in terms of age, species and structure is beneficial to the park's vegetation. Many of the stands with High Forest Management Potential have unbroken overstory canopies and virtually no understory vegetation. The latter is an important habitat component for many species of wildlife. Treatments that open up some of the canopy and allows sunlight to reach the forest floor, such as improvement cutting and thinning, can be used to diversify habitat. These treatments stimulate undergrowth. Other areas of good potential that are populated with low quality trees may be clear-cut in patches to provide dense cover of new trees, shrubs and brush as well as necessary habitat.

Vista sites at overlooks should be clear-cut to provide uninterrupted views to the Boston skyline or the Cambridge Reservoir for aesthetic appreciation while also providing a different cover component in the park. The re-establishment of vistas would also serve as a wildlife clearing which could revert to second growth brush and herbaceous cover. A one to two acre clearing that removes dominant trees to 50 to 60 feet below the vista elevation should be sufficient.

FOREST MANAGEMENT POTENTIAL

Stand No.	Stand Type Forest Resource Benefit / Product
5	Oak/Hardwood Wildlife Habitat, Fuelwood, Aesthetics
9*	Mixed Hardwood Wildlife Habitat, Fuelwood, Sawtimber, Aesthetics, Education
10*	White Pine/Hardwood Wildlife Habitat, Fuelwood, Pulpwood, Sawtimber, Aesthetics, Education
11*	White Pine/Hardwood Wildlife Habitat, Fuelwood, Sawtimber, Aesthetics, Education
12*	White Pine Wildlife Habitat, Fuelwood, Aesthetics
16	Mixed Hardwood Wildlife Habitat, Fuelwood, Aesthetics
17	Oak/Hardwood Wildlife Habitat, Fuelwood, Aesthetics
18	Mixed Hardwood Wildlife Habitat, Fuelwood, Aesthetics
20	Mixed Hardwood Wildlife Habitat, Fuelwood, Aesthetics
28	White Pine Sawtimber, Pulpwood, Aesthetics
32	Oak/White Pine Fuelwood, Sawtimber, Aesthetics,
34	White Pine Sawtimber, Pulpwood, Aesthetics
38	Oak Wildlife Habitat, Fuelwood, Aesthetics
41	White Pine/Oak Wildlife Habitat, Fuelwood, Sawtimber, Aesthetics
44	Oak/Spruce Wildlife Habitat, Fuelwood, Sawtimber, Aesthetics
45	White Pine Plantation Wildlife Habitat, Pulpwood, Sawtimber, Aesthetics
47	White Pine/Oak Wildlife Habitat, Aesthetics

* Note: Stands in the "Worcester Pines" area are isolated and distinct from the rest of the park and are appropriate as forestry education sites. Most have High Management Potential and are in an area protected from vehicles.

Stands of good quality pole size [6"-12"] and larger trees on sites with good growing conditions should be thinned to improve species composition and the quality of residual trees. Unwanted species, poorly formed trees, over mature trees and diseased or injured trees should be removed. Well formed trees of desirable species capable of improved growth should be retained. These practices will generate income which should be sufficient to cover the cost of administering the implementation with a possible surplus.

Pruning

In addition to thinning, consideration should be given to pruning various stands. While pruning has little ecologic value except reducing the entry potential of disease organisms through dead branches, it has implications on habitat value, visual quality and fire protection. The retention of lower branches has several ecologic benefits including providing perches and nesting sites, and providing a food source with live branches in winter for browsing animals. On the other hand, the removal of lower branches may increase the visual quality of a stand as well as increasing the sense of public safety, providing easier access and improved understory visibility. Removing lower branches reduces the chance of a crown fire when surface fires move through a stand by reducing ladder fuels.

Fire Protection

The park has a long history of fire related problems and many areas still exhibit damage from recent and past fires. Trees, park improvements and visitors should be protected from dangerous wildfires. In general, wildfires are a people problem. They can be reduced through the enforcement of fire regulations. Cutting and removing brush and young trees as a fuel source is not considered an effective control for a park. During periods of high fire danger rating [the State Forestry Department rates and tracks fire danger], it may be necessary to close the park as it has been in the past. Open fires should be prohibited and extreme care should be taken with charcoal grills and fireplaces. It has been reported that the Fire Department used to burn brush at the summits. This should no longer be allowed.

Wildlife

Wildlife habitat should be maintained or improved to create favorable conditions for desired species. The creation of new wildlife habitat and the enhancement of existing habitat will increase the population and use of wildlife species in Prospect Hill Park. Forest management should focus on the basic necessities needed to maintain a wildlife population including the proper combination of food, cover [or shelter] and water. Management techniques to accomplish this include both tree removal and additional plantings. Botanic diversity should be increased to improved wildlife habitat value. Nesting boxes for songbirds would provide additional opportunities for viewing wildlife.

The park has been designated as a Priority Habitat of rare plant and animal species, and exemplary natural communities by the Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program. The Program reviewed the site and noted that Linear-leaved Milkweed, a "Threatened" species pursuant to the Massachusetts Endangered Species Act, currently exists in the park area. They also have historic records of Long-leaved Bluet, a "Threatened" species, and Sandplain Flax, a "Special Concern" species, in the area. It is recommended that the park property be surveyed for these species, particularly in areas where construction activity is anticipated.

It has been suggested that consideration be given to the nomination of Prospect Hill Park in the Areas for Critical Environmental Concern program which identifies and protects areas of regional or statewide significance. It includes resources like wetlands, wildlife habitats and scenic landscapes.

MAINTENANCE AND MANAGEMENT

A maintenance plan and schedule should be developed and established for the long term protection for the park. It should include the implementation of forestry management and conservation practices to insure the long term health of the forest.

Park rules and regulations should be re-examined in light of current issues and amended to formalize appropriate controls for the park.

The Director of Park and Recreation should be responsible for coordinating the various activities of City Departments, utility companies, Friends Groups, etc. that occur in the park and assisting with directing those improvements.

At the conclusion of this capital improvement program, the condition of the park should be re-evaluated appropriate improvements should be made.

FRIENDS GROUPS

Volunteer groups are an asset to Prospect Hill Park. They foster an essential spirit of stewardship, assist the Parks Department and help build an active constituency for the park. They also do much to increase public understanding of the unique character of Prospect Hill Park and bring needed energy and dollars for improvements. The Prospect Hill Advocacy Group is a nonprofit organization that leads citizen efforts to preserve and enhance the park, and to assure its continuance as a place for quiet recreation, free from encroachment and exploitation. Other groups, especially abutting neighborhoods, that may have specialized concerns regarding activities and facilities in the park that serve of affect their neighborhood or viewpoint are also encouraged to participate.

The Park and Recreation Department and Friends Groups should explore their potential relationship for the benefit of the park and develop a formalized agreement defining the role of Friends Groups in relation to the primary responsibility and control of Park and Recreation Department.

The role of the Prospect Hill Advocacy Group should be expanded to include the establishment of a Park Partners program with adjacent corporations and jointly involve them in park care and use, and fund raising for non-capital park improvements that are normally outside grant opportunities or the city budget. It is in the best interest of adjacent corporations to become involved and this would be an excellent vehicle. These improvements could include the employment of a Park Ranger and an outside vendor to service public rest rooms. A development officer who deals specifically with fund raising from private sources for the benefit of the park would be an excellent addition.

ACQUISITION

The City pursued an aggressive plan in the acquisition of land for Prospect Hill Park for a number of years in the early development of the park. Improvements to the park became secondary in the early years to the benefits of acquisition. As development encircled the park, acquisition became less of a priority to the City. In the 1993/94 citywide survey it was noted that 65% of resident land resource priorities include both maintenance and acquisition.

While the possibility of additional land acquisition is more limited today, the park should be expanded where possible and as opportunities arise to incorporate sites similar in terrain and character to the rest of the park and with potential for wetland resource protection, wildlife habitat and passive recreation/education, trails, control the edge of the park in regard to vehicular access, prevent potential visual encroachment on the park by future buildings, allow the park to have a visible presence on public ways, and/or facilitate a potential direct connection between the park and the planned Central Massachusetts Branch Rail Trail. The lack of visible presence from public ways has created a recognition problem for the park. Totten Pond Road offers the only significant visible presence of the park today.

The adjacent Water Department parcel at the end of Dale Street, which contains an abandoned water storage tank, should be incorporated into the park.

IMPLEMENTATION

PRIORITIES FOR IMPLEMENTATION AND PHASING
Project work at Prospect Hill Park is divided into several phases. The first five phases focus on improvement of the central portion and southern end of the park. The latter phases improve the north end of the park. Deferring these improvements allows time [5 years] for decisions and the necessary arrangement to be made regarding the return of skiing to Prospect Hill Park. These decisions will have implications on the actual type, location and extent of improvements. The actual order of events will depend completely upon sources and availability of funds, and the desires of the community.

Phase One - Restoration and Enhancement of the Prime Assets of the Park *[dark red]*: Restoration of the pavilion and two picnic shelters, improvements to Little Prospect and Boston Rock including a handicap accessible overlook, vista clearing, entrance signs and orientation kiosks.

Phase Two - Resolution of Public Safety Issues *[dark orange]*: Restoration of stone stairs, causeways, headwalls and hiking trails, pruning and/or removal of hazardous trees, removal of the abandoned water tank at Dale Street, widening of a narrow portion of the park access road, and restoration of the Boy Scout Lean Tos.

Phase Three - Use Enhancement of the Park *[yellow]*: Improvements to picnic areas, addition of a drinking fountain, public telephone, emergency call box, and comfort station, restoration of the Caretaker's Cottage, understory planting for wildlife habitat, widening of narrow park roads, paved parking areas and new swings.

Phase Four - Resource Enhancement *[green]*: Selective woods clearing, understory planting for wildlife habitat, screen planting along the western boundary and in the parcel opposite the Totten Pond Road entrance.

Phase Five - Improved Control of Park Perimeter *[blue]*: Perimeter fencing and road edge control.

Phases Six through Ten - the North End of the Park *[light yellow]*.

Phase Six - Initial Steps in the Reclamation of the North end of the Park: Relocation of Park and Recreation Department building, drop off area, vehicular control gates and Summer Camp pool.

Phase Seven - Recreation Facilities Improvements at the North end of the Park: Relocation of playground, addition of a drinking fountain, additional parking and new storm water detention pond.

Phase Eight - Resolution of Public Safety Issues [Traffic and Hydrology] at the North end of the Park: Improvement to access and egress at Totten Pond Road, parking improvements, new storm water detention pond, public telephone and emergency call box and utility improvements.

Phase Nine - Parking and Maintenance Improvements at the North end of the Park: Additional parking, vehicular gates, new maintenance building and removal of animal farm.

Phase Ten - Road Improvement and Ski Slope Restoration [Alternate]: Realignment of a section of road below Big Prospect and removal of abandoned ski equipment, utilities and buildings, and ski slope restoration.

Future Phase *[white]*: Improvements to Radar Station and Fire Tower sites.

MASTER PLAN COST ESTIMATE

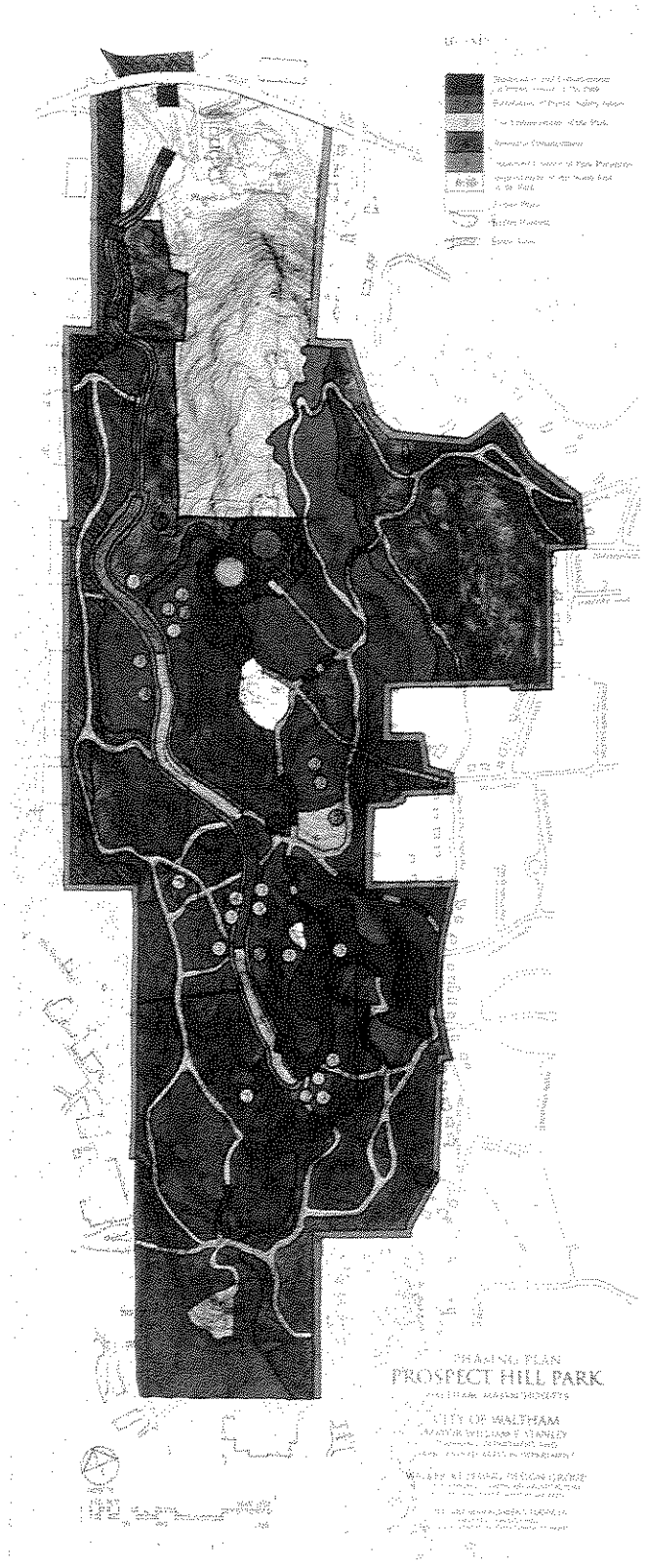
This estimate is presented in the phases described above. It has been broken down into $400,000 groupings to facilitate grant opportunities. The complexity of the last four phases is more easily presented in two groupings. The actual breakdown into four separate phases will be more easily determined once the actual type, location and extent of the improvements is ascertained.

The estimate should be considered preliminary in nature and used for discussion purposes only. Given the nature of the project, work performed by the City and/or civic groups could reduce this estimate substantially. Volunteerism has been a significant contributing factor in this park for a number of years. Many items should also be considered somewhat flexible because of the scale and level of detail development in the master plan. Because of the probable long range nature of this project, a factor for inflation has been omitted. Inflation could easily double this estimate in a very short period.

Costs related to improvements at the Fire Tower and Radar Station sites have not been included because the probability and timing of these improvements is undetermined at this time. Costs related to improvements to ski area facilities have also not been included because the actual allocation of costs will be not be determined until an agreement with a vendor is negotiated.

Non-capital improvement costs have also not been included. These items, such as a Park Ranger, may be appropriate for Friends Groups to target as funding opportunities.

Summary Master Plan Estimate	
Phase One	$400,000
Phase Two	400,000
Phase Three	400,000
Phase Four	400,000
Phase Five	400,000
Phase Six	400,000
Phase Seven	400,000
Phase Eight	400,000
Phase Nine	400,000
Phase Ten	400,000
Total	$4,000,000



Master Plan Cost Estimate

PHASE ONE
Restoration and Enhancement of Prime Assets of the Park

Item	Quantity	Unit	Unit Price	Subtotal	Total
Pavilion Restoration South of Little Prospect					
Roof Repair [remove and replace roof boards, remove and reset metal roofing]	1,400	SF	28	39,200	
Eave Replacement	150	LF	10	1,500	
New Ridge Casting	20	LF	200	4,000	
Cast Iron Support Post Collar Repair	4	EA	500	2,000	
Replace Support Post	1	EA	1,500	1,500	
Prepare, Prime and Paint		LS		7,500	
Remove Existing Paving	1,540	SF	4	6,160	
Flag Stone Paving	1,540	SF	15	23,100	
					84,960
Picnic Shelter Restoration @ Big Prospect					
Roof Repair [remove asphalt roofing, remove and replace rafter and roof boards, add cedar shingles]	650	SF	15	9,750	
Replace Rustic Cedar Support Post	1	EA	1,500	1,500	
Replace Missing Rustic Cedar Diagonal Braces		LS		1,500	
Prepare, Prime and Paint		LS		3,500	
Remove Ex. Paving	880	SF	4	3,520	
Flag Stone Paving	880	SF	15	13,200	
Vista Clearing		LS		3,000	
					35,970
Picnic Shelter Restoration @ Valley between Big and Little Prospect					
Roof Repair [remove asphalt roofing, remove and replace rafter and roof boards, add cedar shingles]	500	SF	15	7,500	
Prepare, Prime and Paint		LS		2,500	
Remove Existing Paving	660	SF	4	2,640	
Flag Stone Paving	660	SF	15	9,900	
					22,540

Little Prospect and Boston Rock Improvements					
Remove Existing Asphalt	16,520	SF	0.25	4,130	
Remove Existing Chain Link Fence	250	LF	4	1,000	
Trash Removal		LS		3,000	
Strip Topsoil and Stockpile	100	CY	10	1,000	
Excavation Removed from Site	575	CY	10	5,750	
Gravel Base Backfill	575	CY	10	5,750	
Fill @ Path	150	CY	10	1,500	
Asphalt Road Paving	18,000	SF	2	36,000	
Benches	6	EA	1,500	9,000	
Trash Receptacles	2	EA	500	1,000	
Metal Rail	250	LF	100	25,000	
Vehicular Gate	1	EA	3,000	3,000	
Repair Wall @ Parking	800	SF	10	8,000	
Remove and Reset Stone Treads South & East of Little Prospect	435	LF/R	20	8,700	
Topsoil Spread from Stockpile	100	CY	10	1,000	
New Topsoil	250	CY	30	7,500	
Seed Lawns	15,000	SF	0.10	1,500	
Planting		LS		15,000	
Vista Clearing @ Little Prospect		LS		10,000	
					147,830
Stone Gate Restoration @ Prospect Hill Road					
Remove and Reset Stones		LS		1,000	
					1,000
Entrance Sign @ Totten Pond Road					
Stone Piers and Foundations	2	EA	1,250	2,500	
Sign	1	EA	5,000	5,000	
Restore Disturbed Area		LS		500	
					8,000
Entrance Sign @ Prospect Hill Road					
Sign	1	EA	2,500	2,500	
					2,500
Orientation Kiosk @ Totten Pond Road					
Cedar Log Support Posts	2	EA	250	500	
Concrete Footings	2	EA	100	200	
Roofing	70	SF	15	1,050	
Display Case	1	EA	1,200	1,200	
Orientation Map	1	EA	1,800	1,800	
Map Dispenser	1	EA	100	100	
Painting and Finishing		LS		600	
Flag Stone Paving	170	SF	15	2,550	
Restore Disturbed Area		LS		500	
					8,500
Orientation Kiosk @ Prospect Hill Road		LS		5,000	
					5,000
Subtotal					316,300
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					47,400
Subtotal					363,700
Contingency [10%]					36,300
Total Phase One					400,000

PHASE TWO
Resolution of Public Safety Issues

Item	Quantity	Unit	Unit Price	Subtotal	Total
Restore Stone Stairs [Remove and Reset Stone Treads]					
Stair to Camp 3	220	LF/R	20	4,400	
Stair from Prospect Hill Road to Camp 9	230	LF/R	20	4,600	
Stair from Prospect Hill Road to Boston Rock	400	LF/R	20	8,000	
Stair South of Little Prospect	246	LF/R	20	4,920	
Stair East of Little Prospect	165	LF/R	20	3,300	
Stair North of Little Prospect	440	LF/R	20	8,800	
Stair South of Big Prospect	790	LF/R	20	15,800	
Stair to Summit Street	880	LF/R	20	17,600	
Stair to Worcester Pines	286	LF/R	20	5,720	
					73,140
Restore Stone Headwalls					
Repoint Masonry Joints @ NE 30" RCP	110	SF	5	550	
Repoint Masonry Joints @ East Entry	178	SF	5	890	
Repoint Masonry Joints @ West Entry	225	SF	5	1,125	
Remove and Reset Stones @ Middle Park Drive, East	124	CF	20	2,480	
Repoint Masonry Joints @ Middle Park Drive, East	530	SF	5	2,650	
Repoint Masonry Joints @ Middle Park Drive, West	485	SF	5	2,425	
Add Stone Walls @ Upper Park Drive, East	485	CF	30	14,550	
Add Stone Walls @ Upper Park Drive, West	309	CF	30	9,270	
Remove and Reset Stones @ Upper Park Drive, West	79	CF	20	1,580	
					35,520
Restore Upper Stone Causeway					
Reset Top Stones	135	LF	10	1,350	
Remove and Reset Stone Treads	99	LF/R	20	1,980	
					3,330
Restore Lower Stone Causeway					
Remove and Reset Stones	1,350	CF	20	27,000	
					27,000
Hiking Trails					
Fill Eroded Areas at Existing Trails	28,720	LF	1	28,720	
Remove Existing Reflective Markers		LS		600	
Trail Markers	274	EA	25	6,850	
New Hiking Trails	1,480	LF	2	2,960	
New Steps @ Worcester Pines		LS		8,000	
					47,130
Road Widening at Camp No. 6 [from 12' to 18']					
Remove Existing Asphalt	16,000	SF	0.25	4,000	
Tree Removal		LS		6,000	
Excavation Removed From Site	290	CY	10	2,900	
Gravel Base Backfill	440	CY	10	4,400	
Asphalt Road Paving	24,000	SF	2	48,000	
Speed Bumps		LS		550	
New Topsoil	670	CY	30	20,100	
Seeded Lawn	18,300	SF	0.10	1,830	
					87,780

Boy Scout Lean Tos					
Repoint Masonry Joints	380	SF	5	1,900	
Clean Masonry and Concrete	1,125	SF	4	4,500	
Repair Firepit		LS		600	
					7,000
Miscellaneous Removals					
Remove Water Tank @ Dale Street	1	EA	15,000	15,000	
Trash Removal		LS		5,000	
					20,000
Vegetation					
Hazard Pruning		LS		14,000	
					14,000
Subtotal					314,900
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					47,600
Subtotal					362,500
Contingency [10%]					37,500
Total Phase Two					400,000

PHASE THREE
Park Use Enhancement

Item	Quantity	Unit	Unit Price	Subtotal	Total
Picnic Areas					
Repair Stone Fireplaces	7	EA	1,700	11,900	
Repair Stone and Brick Fireplaces	3	EA	1,700	5,100	
Repair Brick Fireplaces	4	EA	1,700	6,800	
Picnic Tables	25	EA	1,100	27,500	
Trash Recptacles	21	EA	800	16,800	
Seeded Lawn		LS		10,400	
					78,500
Utilities					
Drinking Fountain @ Little Prospect	1	EA	3,600	3,600	
New Water Line to Drinking Fountain	600	LF	15	9,000	
Telephone @ Little Prospect	1	EA	1,600	1,600	
Emergency Call Boxes	1	EA	1,600	1,600	
Relocate Overhead Wires Underground [tel. & emergency]	1,000	LF	25	25,000	
Comfort Stations	2	EA	15,000	30,000	
Plumbing and Electrical Connections		LS		5,000	
					75,800
Caretaker's Cottage					
Roof Repair [remove asphalt roofing, remove and replace roof boards, add cedar shingles]	972	SF	20	19,440	
Window Replacement	8	EA	900	7,200	
New Shutters	16	EA	300	4,800	
Door Replacement	2	EA	1,200	2,400	
Remove Graffiti and Mold	1,680	SF	5	8,400	
Repoint Masonry Joints	966	SF	5	4,830	
Prepare, Prime and Paint [interior + exterior trim]		LS		5,000	
[Does not include electric or telephone service]					52,070

Gate at South Entrance					
Remove Existing Metal Gate	1	EA	250	250	
New Gate @ South Entrance	1	EA	2,500	2,500	
					2,750
Parking Area @ Camp No. 6 [10 spaces]					
Excavation Removed from Site	2,120	SF	0.25	530	
Gravel Base	39	CY	10	390	
Asphalt Road Paving	2,060	SY	2	4,120	
New Topsoil	27	CY	30	810	
Seeded Lawn	1,500	SF	0.10	150	
					6,000
Parking @ Water Towers [10 spaces]					
Excavation Removed from Site	2,120	SF	0.25	530	
Gravel Base	39	CY	10	390	
Asphalt Road Paving	2,060	SY	2	4,120	
New Topsoil	27	CY	30	810	
Seeded Lawn	1,500	SF	0.10	150	
					6,000
Parking @ Camp 9 [10 spaces]					
Excavation Removed from Site	2,120	SF	0.25	530	
Gravel Base	39	CY	10	390	
Asphalt Road Paving	2,060	SY	2	4,120	
New Topsoil	27	CY	30	810	
Seeded Lawn	1,500	SF	0.10	150	
					6,000
Road Widening West of Big Prospect [from 16' to 18']					
Remove Existing Asphalt	12,440	SF	0.25	3,110	
Excavation Removed From Site	230	CY	10	2,300	
Gravel Base Backfill	230	CY	10	2,300	
Asphalt Road Paving	13,750	SF	2	27,500	
New Topsoil	275	CY	30	8,250	
Seeded Lawn	15,400	SF	0.10	1,540	
					45,000
Road Widening Southwest of Little Prospect					
Remove Existing Asphalt	12,440	SF	0.25	3,110	
Excavation Removed From Site	230	CY	10	2,300	
Gravel Base Backfill	230	CY	10	2,300	
Asphalt Road Paving	13,750	SF	2	27,500	
New Topsoil	275	CY	30	8,250	
Seeded Lawn	15,400	SF	0.10	1,540	
					45,000
Subtotal					317,120
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					46,880
Subtotal					364,000
Contingency [10%]					36,000
Total Phase Three					400,000

PHASE FOUR
Resource Enhancement

Item	Quantity	Unit	Unit Price	Subtotal	Total
Vegetation					
Seedling Screen Planting @ Office Parks	25,000	EA	5	125,000	
Seedling Screen Planting @ Water Tanks	5,000	EA	5	25,000	
Understory Planting for Wildlife Habitat	20,000	EA	5	100,000	
Planting North of Totten Pond Road		LS		25,000	
Selective Clearing and Pruning		LS		40,000	
					315,000
Subtotal					315,000
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					47,500
Subtotal					362,500
Contingency [10%]					37,500
Total Phase Four					400,000

PHASE FIVE
Park Control Improvements

Item	Quantity	Unit	Unit Price	Subtotal	Total
Perimeter Fence					
4' ht Vinyl Coated CLF @ West Side	6,100	LF	15	91,500	
4' ht Vinyl Coated CLF @ East Side	10,600	LF	15	159,000	
4' Ht. CLF Gates	20	EA	275	5,500	
					256,000
Road Edge Control					
Stone Boulders at Road Edge	580	EA	60	34,800	
Wood Guard Rails	1600	LF	15	24,000	
					58,800
Subtotal					314,800
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					48,200
Subtotal					363,000
Contingency [10%]					37,000
Total Phase Five					400,000

PHASE SIX
Initial Steps in the Reclamation of the North end of the Park

Item	Quantity	Unit	Unit Price	Subtotal	Total
Parks and Recreation Building	4,000	SF	50	200,000	
New Swimming Pool	700	SF	100	70,000	
Utility Services		LS		20,000	
Earthwork	8,000	SF	0.25	2,000	
Gravel Backfill	100	CY	10	1,000	
Asphalt Paving	3,000	SF	2	6,000	
Curbing	200	LF	30	6,000	
Remove Existing Gate	1	EA	200	200	
Metal Gate with Stone Piers	1	EA	10,000	8,000	
Lawns		LS		3,000	
					316,200
Subtotal					316,200
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					47,300
Subtotal					363,500
Contingency [10%]					36,500
Total Phase Six					400,000

PHASE SEVEN
Recreation Facilities Improvements at the North end of the Park

Item	Quantity	Unit	Unit Price	Subtotal	Total
Relocate Play Area		LS		125,000	
New Parking Spaces	10	EA	1,000	6,000	
Asphalt Paths	1,500	SF	2	3,000	
Remove Existing Buildings	3	EA	10,000	30,000	
Misc. Removals		LS		5,000	
Earthwork	5,000	SF	0.25	1,250	
Gravel Backfill	100	CY	10	1,000	
Asphalt Paving	10,000	SF	2	20,000	
Relocate Utilities		LS		2,000	
Tree Removal		LS		5,000	
Retention Pond Excavation	7,500	CY	10	75,000	
Earthwork	10,000	SF	0.25	2,500	
Culverts	50	LF	200	10,000	
Lawns and Planting		LS		19,250	
Swings @ Picnic Areas	2	EA	5,000	10,000	
					315,000
Subtotal					315,000
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					47,500
Subtotal					362,500
Contingency [10%]					37,500
Total Phase Seven					400,000

PHASE EIGHT
Resolution of Public Safety Issues [Traffic and Hydrology] at the North end of the Park

Item	Quantity	Unit	Unit Price	Subtotal	Total
Tree Removal		LS		5,000	
Retention Pond Excavation	7,500	CY	10	75,000	
Earthwork	10,000	SF	0.25	2,500	
Remove Ex. Paving	35,000	SF	0.25	8,750	
Remove Headwalls & Culvert	2	EA	1,500	3,000	
Remove Lighting		LS	5,000	5,000	
Miscellaneous Removals		LS		2,000	
Culverts	160	LF	200	32,000	
Headwalls	4	EA	2,000	8,000	
Asphalt Paving	60,000	SF	2	120,000	
New Lighting	10	EA	3,000	30,000	
Drinking Fountain	1	EA	3,600	3,600	
Telephone	1	EA	1,600	1,600	
Emergency Call Box	1	EA	1,600	1,600	
Relocate Sign	1	EA		2,500	
Lawns and Planting		LS		14,500	
					315,000
Subtotal					315,000
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					47,500
Subtotal					362,500
Contingency [10%]					37,500
Total Phase Eight					400,000

PHASE NINE
Parking and Maintenance Improvements at the North end of the Park

Item	Quantity	Unit	Unit Price	Subtotal	Total
Remove Fencing and Small Buildings		LS		10,000	
Earthwork	120,000	SF	0.25	30,000	
New Service Building	900	SF	40	36,000	
Utility Services		LS		5,000	
New Asphalt Drive	12,000	SF	2	24,000	
New Asphalt Parking	50,000	SF	2	100,000	
New Lighting	4	EA	3,000	12,000	
Metal Gate with Stone Piers	1	EA	10,000	10,000	
Topsoil	1,600	CY	30	48,000	
Lawns and Planting		LS		40,000	
					315,000
Subtotal					315,000
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					47,500
Subtotal					362,500
Contingency [10%]					37,500
Total Phase Nine					400,000

PHASE TEN
Road Improvement and Ski Slope Restoration [Alternate]

Item	Quantity	Unit	Unit Price	Subtotal	Total
Road Realignment at the Base of Big Prospect					
Remove Existing Asphalt	13,800	SF	0.25	3,450	
Excavation Removed from Site	275	CY	10	2,750	
Gravel Backfill	265	CY	10	2,650	
Asphalt Road Paving	16,100	SF	2	32,200	
New Topsoil	330	CY	30	9,900	
Seeded Lawn	17,700	SF	0.10	1,770	
					52,720
Miscellaneous Improvements					
Relocate Vehicular Gate @ Water Storage Tanks to Property Line	1	EA	1,000	1,000	
Vista Clearing @ Southern End of Site Near Polaroid		LS		5,000	
					6,000
Removals @ Ski Slope					
Remove Buildings		LS		10,000	
Remove Ski Lifts		LS		10,000	
Remove Lighting		LS		5,000	
Vista Clearing		LS		5,000	
					30,000
Earthwork and Planting					
Repair Erosion	325,000	SF	0.10	32,500	
Seeding	325,000	SF	0.10	32,500	
Revegetation	325,000	SF	0.50	162,500	
					227,500
Subtotal					316,220
Professional Services [15%]: Inventory, Survey, Design, Engineering, etc.					46,780
Subtotal					363,000
Contingency [10%]					37,000
Total Phase Ten					400,000

APPENDIX

CHRONOLOGY

1882 The Massachusetts Park Act becomes law which states that a Park Commission is the only body authorized to acquire lands for park or playground purposes, for which appropriations have been made.

1891 City of Waltham adopts the Park Act favoring the establishment of a system of public parks for the City.

1892 Waltham forms a 5 member Board of Park Commissioners.

Metropolitan Parks Bill passes and a Board of Metropolitan Park Commissioners is formed with the charge of developing a comprehensive plan for laying out, acquiring and maintaining a system of public open spaces for the Boston metropolitan area. Charles Eliot is engaged as the landscape architect. Members of the Board visit Prospect Hill.

1893 In Mayor Erskine Warren's inaugural address, he states that "plans are now being perfected and surveys being made for what will be known in the future as Prospect Hill Park. Thousands will hail with joy this important movement, and generations yet unborn will rise to bless the forethought of those who gave them the freedom of these grounds."

Charles Eliot files a report to the Board of Metropolitan Park Commissioners on "the opportunities ... for the creation of ... public open spaces as may best promote the health and happiness of the inhabitants of the metropolitan district". He recommends that Prospect Hill and Bear Hill become a large public open space.

Waltham Park Commissioners begin preliminary work in regard to a system of parks and playgrounds for the city. First attention is paid to Prospect Hill because of the rapid encroachment of houses on the southeasterly side of the hill. Almost 83 acres are acquired by the end of the year, including the 2 summits. Work began improving the roadway to Little Prospect Hill [two thirds completed] and upon the park itself clearing underbrush, removing fallen trees and cutting out such trees as checked the growth of others. Every care is taken to guard against a repetition of brush fires which had in the past proved so destructive.

Charles Eliot joins the Olmsted firm.

1894 Addition of WL Clark land increases park to 101 acres. The entire park is cleared of brush and dead wood because of a spring fire on the south and east sides of Big Prospect. Work is underway to complete the road to Little Prospect and an additional road leading over the hill to Winter Street. It is intended to be a pleasure walk or drive as opposed to a public highway. Substantial seats and hitching posts are placed on the summit of Little Prospect. Rules and regulations for the proper and reasonable use of the park are posted. Concern is expressed about the possibility of an undesirable class of houses that might be erected on land bordering the park if additional land is not secured for the park.

1895 A good forest road, over two miles in length, is completed from Main to Winter Street. A pavilion is erected on the declivity of Little Prospect. Additional seats are placed on Little Prospect. Future considerations include a well, sanitary facilities and rustic seats in the forest. A man is employed from April to November to guard against fire and perform other necessary work such as repairing roads and cutting dead wood. Preliminary actions are taken towards securing additional land south and west of the park. A suggestion is made to construct a broad stone tower or rampart observatory on Great Prospect. No action is taken.

The Olmsted firm sketches a proposed roadway and possible boundary for the park. Eliot writes a letter to the Park Commissioners recommending enlarging the boundaries of the park.

1896 Addition of Bond, Buttrick, Hastings and Richardson lands increases park to 126 acres. Portions of the land are cleared of underbrush, fallen and dead trees. "Outlooks" are cleared. Signs prohibiting shooting are posted. Quail and partridge are noted in the park. Recommendations are made to add to the easterly slope of the park.

1897 A sanitary facility is erected near the pavilion because of increasing use of the park. The park entrance is marked by two large field stone posts. Clearing the "outlook" from Big Prospect is underway. Old wood roads are reopened. Acquisition of additional land for the park is recommended for the future.

1898 Care of and improvements to the park continue. About 1,000 feet of substantial wire fence is erected on the southerly line of the park with the intention of defining the boundary of the entire park. The partridge and quail population is increasing. A suitable entrance from Main Street to the park is again recommended. It was noted that the park was being used by people from surrounding towns and cities.

1900 A well is dug near Pine Ledge Spring.

1901 A new road, about 1,000 feet in length is built. The Massachusetts Fish and Game Commission donated a few English pheasants to the city which were placed in the park. An attempt to rename the park as "Banks Park" by the Board of Alderman is rejected by the Park Commissioners. A suitable entrance from Main Street to the park is again recommended.

1902 Concern is expressed about fire potential even though the building or setting of fires in the park is prohibited. Concern is also expressed about vandalism by cutting or marking seats or buildings. A recommendation is made for the preservation of the old [1635] "Squadron Lines", stone boundary walls within and adjoining the park. One crossed the park a little north of Little Prospect. Another lot of English pheasants were released to join the single remaining pheasant and the quail, partridges and rabbits in the park. Nature study as part of the school curriculum is recommended.

1903 Small Pines are planted to provide a diversity of foliage in the predominant Oak forest. The pavilion is repaired. An observation pole is erected on Great Prospect which is also used to raise the national flag on holidays. Hopes are noted for a stone observation tower on Great Prospect.

1904 Addition of Nehemiah Warren land increases park to 137 acres. A suitable entrance from Main Street to the park is again recommended. Brown Tail moths are discovered and eradication efforts are underway.

1905 The boundary fence is extended around the Warren acquisition, completing the enclosure of park land. A new road is opened through the new site. New stone seats and resting places are built. The first large fire in the park broke out on the westerly slope of Big Prospect. The central well furnished good water throughout the year while the two springs failed during dry weather. The Motor Cyclists of America held a well attended national hill climbing contest on the road leading to Prospect Hill. City Forester assists with extermination of large numbers of Brown Tail moths.

1906 Brown Tail moths have been eradicated from the park. Playground Committee is formed.

1907 The park is inflicted with Brown Tail and Gypsy moths in July. A 100 foot width is cleared along the boundary of the park to check the infestation. A suitable and dignified entrance to the park from Main Street seems possible.

1908 A great deal of effort is expended to repel the incursion of Gypsy moths.

1910 The war with Gypsy and Brown Tail moths continues.

1911 Routine work of care of park, repairing roads, cutting underbrush, and trees found dead or dying. Replaced 20 year old fence above road through "Bond land". First severe fire reported in several years burns several acres on land of Lawrence heirs. Only one man to care for the grounds. Attempts to stock park with pheasants not successful, assumed due to severe cutting of underbrush to assist in stopping the spread of moth pests. Before cutting rabbits and partridges as well as pheasants were observed there. Care of roads becoming a burden with increased use of automobiles. A portable stone crusher to assist with road repairs is suggested. Many roads follow old wood roads of former land owners. Commission goal to use roads as fire stops wherever possible. Easterly approach to park from Main Street to the park gate is not under control of the Commission. Concern about narrowness and potential dangers, and lack of pride in entrance. A 50 foot wide way had been laid out but not built.

1912 Purchase land of the "Worcester Pines", part of a 38 acre estate of late Rev. Benjamin Worcester. The purchase includes a 40 right of way extending Greenwood Lane into the park. The site is noted as a "reminder of the olden times when great forests of these trees covered our lands". Park size at 175 acres. The battle with moths continues. The advisability of reforestation is recognized, particularly in areas damaged by forest fire. Work commences with small Pines, Oaks and Chestnuts on the former Warren property near the shelter. The Board recommends and increased appropriation for the care and maintenance on the enlarged lands, marking of boundaries, improving the Greenwood Lane and Main Street entrances, and enlarging the tool shed.

1913 The Commissioners state that "the addition of the Worcester Pines Reservation makes a compact park of 175 acres available and accessible to all our citizens; a guarantee for future generations of a great breathing spot in our midst." Roads are subject to heavier wear than a few years ago because of automobile traffic. The park caretaker improves an old path from Big Prospect down the southerly slope by the wall to the Worcester Pines, clearing underbrush and adding broad stone steps. More small Pines are planted, taken from the natural supply at Worcester Pines. The park appears fairly free of moths. A Playground Department is noted as a subcommittee of the Park Commissioners.

There are hopes to restore many old boundary walls torn down in various areas in efforts to check the moths. Early deeds and records indicate that a Squadron Line passed through the park from northwest to southeast. These lines are often referred to as the Great Dividends in original land grants in the northerly part of the city. The divisions were divided into 4 divisions 160 rods wide, sometimes called squadrons. Lines dividing the were called Squadron Lines. The present Lexington line is the most northerly line. Other lines ran parallel at a distance of 160 rods.

1914 The ravages of Gypsy and Brown tail moths were added to by great numbers of forest tent caterpillars. English pheasants are still evident. A number of fires were noted including a 5 to 6 acre fire on the former Bond lot. The tool house built several years ago was enlarged. Concerns are again expressed about the easterly approach to park from Main Street that has not yet been built. A extension of Greenwood Lane to the park is recommended to facilitate access to the Worcester Pines.

1915 A separate Waltham Board of Recreation is established, the first such board in the Commonwealth. The Greenwood Lane extension is built with a turnabout terminating in the park. A new drive is proposed to skirt the eastern edge of the park from Bacon Street through to upper Main Street. A gravel pit is opened midway in the park to supply road material. The gravel roads need constant maintenance because of frost, rain and automobiles. Some dangerous curves are removed. Two remain. Reforestation continues with Pines and Hemlocks. The Commission assists combating the unemployment problem by employing 25 people per day for February and March to cut dead trees and underbrush. Work on approximately 80% of the park is completed.

1916 Natural rock steps are installed in 6 locations by the park keeper. A culvert is installed at a brook crossing near the entrance from Greenwood Lane. Neatly painted trash barrels and a tool house built into the slope are planned for the Worcester Grove. Road repair is accomplished. 30 parks signs and notices are repaired or painted. Vista clearing is provided at Little Prospect. A 60 foot high fire tower is proposed for Big Prospect. Forestry Department notes that expenses for work on the park are decreasing from year to year.

1917 State fire tower erected on Big Prospect. A second gravel pit is opened on Summit Road. Waste barrels at the pavilion and Worcester Pines. A new flag pole is recommended for Little Prospect.

1918 An estimated 4,500 trees are cut into firewood to relieve the shortage of fuel in the city. Consideration is given to planting 5,000 hardwood trees for the future. Road resurfacing and regrading must be done to repair the damage by heavy teams hauling cord wood. Two miles of new paths are constructed: one from the fire tower to Worcester Pines and another from Hermit Rock to Little Prospect. Stone steps are repaired and added to between Big and Little Prospect.

1919 Inquiries are received regarding camping in the park and some are granted. 70 trees are removed around the pavilion. 40 acres of underbrush are cleared. Maples and Pines are planted throughout the park. A new road is started below the pavilion to Glen Road, 1,000 feet long and 30 feet wide.

1920 20 permits are granted for camping and corn roasts. 35 acres of underbrush are cleared. 35 signs are relettered. The pavilion is repainted and many seats repaired.

1921 The addition of 14.9 acres from Maloy and Whitney increases park size to 190 acres. Land is also taken for crusher and park purposes. 50 acres of underbrush are cleared. A ice storm causes severe damage to trees on the south side of Big Prospect. At the instigation of the Waltham Chamber of Commerce, a tourist camp is established at Little Prospect.

1922 The tourist camp proves a popular resort. The Park Department recommends a temporary discontinuance of its use until improved and proper sanitary arrangements are made. 40 permits are granted for camping. 100 acres of underbrush are cleared. Trees damaged by the previous years ice storm are trimmed.

1923 55 permits are granted for camping. The Worcester Pines are becoming more popular. It is noted that roads need resurfacing and oiling each year.

1924 20 permits are granted for camping to people outside the city. An extra appropriation is used for cleaning underbrush.

1925 35 permits are granted to people from outside Waltham for outings and campfires. The pavilion and tool house are repainted.

1926 100 Pines are planted along several old paths which were reopened.

1927 The addition of 29 acres from T. Barnes increases park size to 219 acres. 20,000 Pine and Spruce seedlings were ordered with the long term goal of adding 100,000 evergreen trees to the park.

1928 Approximately 80% of the 20,000 seedlings planted are in healthy condition. This year fewer, but larger [2-3' height] plants are ordered: 200 Pinus mugho and 300 Pinus excelsa. The expectation is that evergreens will have a tendency to keep down the growth of brush. Waste receptacles and 6 settees are added near the road to Worcester Pines.

1929 1,400 trees [12" height] are planted: 400 Pinus Mugho, 700 Picea excelsa princess and 300 other Spruces.

1930 No new trees were planted although systematic planting of evergreens had been done for some years by the Forestry Department. Because of the serious unemployment situation the Park Commissioners authorized the Forestry Department to do work in the City parks.

1931 300 men were employed during February and March clearing underbrush and repairing and improving roads providing work for deserving and needy men recommended by the Emergency Employment Committee. A record of 47 excursions and outings in the park is presented. Coasting, snow shoeing and winter sports are enjoyed.

1932 Prospect Hill Park is the center of the Commission's activities in keeping the park clean, repairing roads, building brick fireplaces in each of the 3 camps, making an new entrance to camp 1 and cleaning and enclosing the spring at camp 1. Three camps are placed in service and 2,516 campers are noted in the camps from June through December. 1,000 persons are estimated to be in the park the view the partial eclipse on 31 August.

1933 Numerous visitors are recorded in the park. 5,130 campers are noted in the 3 camps. Civil Works Administration project completes the following: 3,200 feet of road from Edgehill Road; clearing of 100 acres of underbrush; trimming dead and overhanging wood; transplanting Pine trees; Construction of 6 stone and cement fireplaces, 5 toilets, 4 shelters, and 8 tables; repairs of settees; and addition, roofing and repairs on the caretakers headquarters.

1934 Emergency Relief Administration assists in improvement and development of the park: 5,400 linear feet of new roads; 9,500 feet of roads repaired, widened and graveled; 4,400 feet of new paths and stone steps; 1,000 feet of wood rail; ample parking spaces at the "Rock" and the "Tower"; 2 stone and concrete shelters and a fire place for the Boy Scouts; picnic camp construction including 4 shelters, 5 toilets, 6 stone fireplaces, 9 tables and 8 benches; and a storage addition on the caretaker's house. 555 parties totaling 11,460 people registered for use of the 8 camps. [A 1934 drawing illustrates 9 campsites, 9 fireplaces, 3 shelters, 1 pavilion, 11 tables, 7 toilets, 2 swings, 1 pump and 1 spring.]

1935 Various Emergency Relief Administration projects were continued through August. The new road from Winter Street was completed and stone piers were erected at the entrance. Old dirt roads were recrowned and oiled and the main macadam road was repaired. Rail fences were erected on the more dangerous curves. Much forestry work was done. 15,723 people registered for use of the camps. Winter sports are becoming increasingly popular.

1936 A considerable amount of forestry work is done with the assistance of the WPA. An estimated 24,900 people use the park.

1937 An estimated 22,613 people use the park. The need for a toboggan chute and improved skiing facilities are noted.

1938 A hurricane fells 2,500 trees on 21 September with Pines suffering the most. The Worcester Pines are a complete loss with less than a dozen left standing out of over a hundred. Camp 1 and vicinity were nearly cleaned out. Great efforts are made to clear the damage. An estimated 22,453 people use the park.

1939 Several glaring scars remain from the hurricane. Roads problems appear more acute each year. The type of road construction is insufficient for the traffic. Surface maintenance with oil and sand is an annual concern. Steep slopes and sharp curves need proper drainage. There are an estimated 18,467 visitors. A desire to extend winter sports is noted.

1940 There are an estimated 21,476 visitors.

1941 There are an estimated 30,679 visitors to camp picnic grounds.

1942 An estimated 27,443 people use the camp picnic grounds.

1943 An estimated 13,777 people use camps for picnics.

1944 An estimated 15,906 people use camps for picnics.

1945 An estimated 18,220 people use camps for picnics. A plan is prepared for the US Government to lease a portion of the site [Big Prospect].

1946 There are an estimated 16,228 people using camps for picnics.

1947 Prospect Hill Park is the center of controversy. The park remains the property of the City of Waltham. The Park Commission states its intention to maintain the natural and rustic environment, which was the intent and purpose for which the park was established. They state that the park does not lend itself for the development of playgrounds and such. The Highway Department oils, sands and grades the main park roads. It is noted that the practice of closing the park during extremely dry seasons will be continued to eliminate the threat of fire hazard. 18,361 people register for use of the camps.

1948 Land is acquired for a ski slope and construction begins late in the year with largely a volunteer effort. The Commission expresses its hopes that the area can be improved and extended to include beginner's slopes, tobogganing, coasting and skating areas, a warming house and a parking area. 14,248 people register for use of the camps.

1949 The Caretakers Cottage is leveled by fire on April 1st. A new stone building is erected in its place. The ski slope is improved and a "warm up hut" is erected at the foot of the slope. 25 lights are installed to permit night skiing. A path is installed connecting the ski area with an enlarged Winter Street parking area. 6 new fireplaces are erected and major repairs on old ones are completed. The roofs and floors of existing shelters are repaired. 8,343 people register for use of the camps.

1950 Volunteers continue to improve the ski area. The parking area is being extended as material becomes available. 14,340 people register for use of the camps.

1951 With vista clearing at Little Prospect, the Commission notes that there must be careful consideration not to remove too many trees. United States Government leases a portion of the site [Big Prospect where the observation tower now stands] for "observation and Radar experimental purposes". Availability may be restricted somewhat, although the Commission is making every effort to make it available with reasonable restrictions. The ski slope is greatly improved, although only 6 days are suitable for skiing. A proposal of experimenting with artificial snow is rejected by the Commission as not having proved satisfactory in other places. 9,610 people register for use of the camps.

1952 The United States Air Corps constructs a 1-1/2 story building for research purposes. The Commission notes that the former help in removing scrub and weed growth by the Forestry Department has not been available since 1930 when Forestry and Public Works merged.

1953 60th anniversary of the park. Brush was cleared and paths were opened. 14 days are suitable for skiing. Approximately 9,000 people use the camps.

1954 Two hurricanes damage the park late in the summer. The park is closed after the destruction and fire hazard of the 31 August hurricane. Roads were impassable with 147 trees felled and 144 trees damaged. Approximately 9,060 people use the camps. There is an intent to add new campsites. The ski area is popular, although only 2 days in December and 9 days in January are suitable for skiing. Park staff [3 permanent and 1 temporary employee] receive a new 3/4 ton 4 wheel drive Willys pickup truck with an 8,000 pound winch. A need is expressed to resurface the main road and rebuild secondary roads which suffer from increased heavy traffic from the Air Corps radar lab.

1955 The Public Works Department resurfaces the main road and parking areas at the two peaks. Park staff obtain a booster tank to help check the spread of fire. Adverse weather conditions lead to meager use of the ski facilities. 2 camps [15 and 16] are added. 729 camp site permits are issued for 8,912 people.

1956 A commercial request for permission to install a short wave receiver/transmitter radio antenna was rejected because of electrical hazard to park users and because it would cause other such requests. The Commission had a concern that the top of the park would become covered by such equipment. They stated, "In the interest of protecting the park users and preserving the natural beauty of the area it is the Commission's opinion that the action followed should set a precedence and be followed in the case of future requests." Future considerations for the park include: repairing secondary roads; erecting chain link fence in hazardous areas to protect children; increasing the number of camp sites; providing swings and slides at various camp sites; providing skating near the ski slope; providing a ball field at the bottom of the ski hill; and [in cooperation with the Recreation Department] providing a playground near the main gate for use of the Prospect Terrace apartments and neighborhood. 531 camp site permits are issued for 7,100 people.

1957 Ella Smith parcel added to park. Vandalism occurs throughout the park causes consideration of closing the park at dark. Road maintenance is becoming an increasing problem. 652 camp site permits are issued for 9,990 people. There are now 19 camp sites. 1,300 people use the tow and ski slope. Park staff includes 3 caretakers and 1 temporary person in winter.

1959 Vandalism remains the main item of concern. 745 camp site permits are issued for approximately 10,000 people.

1960 A 60 foot wide right of way is laid out for Totten Pond Road through the north end of the park, isolating the former north entrance.

1961 Vandalism results in the tow not being able to operate during the best ski weather. 531 camp site permits are issued for approximately 8,000 people. There are now 20 cook out areas.

1962 5,500 linear feet of road is repaired. Rent is increased in the lease to the Air Corps to cover the cost of road repair. A new 4 wheel drive utility truck is purchased to replace the Willys. Approximately 11,000 people use the park. Vandalism results in repair of fire damage to the warming hut and the purchase of 2 ski tow ropes. Snow is scant for skiing.

1963 A new fire tower is constructed 70 feet northeast of the summit of Little Prospect. Small area of inaccessible park property disposed to Polaroid. Vandalism causes closing of the park at sunset until 1 June. Ski conditions are adverse.

1964 Vandalism decreases. A 6 week day camp program proves a success. A year of little snow offers poor skiing. An easement over 8.85 acres of park land is granted to Polaroid Corporation to allow the construction of roads and utilities at the southwestern end of the park.

1965 The park is closed for 8 weeks due to drought and fire hazard, but reopens for Labor Day weekend. The park size is 246 acres with 7 miles of park roads and 23 camps. Vandalism wrecks the Caretakers cottage. A year of little snow offers poor skiing. Park staff includes 3 caretakers and 1 temporary person in summer.

1966 A year of little snow offers poor skiing. Vandals cut the ski tow rope 3 times.

1967 The Park Board and the Recreation Board combine into a Park and Recreation Board. Development of a complete skiing program and a family multi-use area is recommended. The 6 week day camp serves 360 children.

1968 Jaycees begin construction of a Ski Chalet. Snow making and T-Bar facilities are installed. Continuous improvement of the park is recommended including picnic areas, roads, parking, family and/or group shelter buildings, water for toilets and bubblers and a municipal pool. A Master Plan for development of the park is prepared by The Allen Organization of Vermont which includes all of the above and more. The park is open from 7:30 AM to 8:30 PM from April 19 to September 15. There are now 23 camp sites. 354 camp site permits are issued for approximately 8,052 people. The warming hut serves approximately 3,575 people. Some vandalism is reported.

1969 Establishment of Prospect Hill Animal Farm.

1974 Two water tanks are constructed north of Big Prospect. The westernmost tank is located on the site of a former borrow pit.

1975 Utility easements negotiated with Polaroid.

1979 Revision of park property line with adjacent office park.

1981 Establishment of a mounted horse patrol in the park as a function of the Civil Defense department.

1983 Park and Recreation Department records are destroyed by fire in August. Referendum to relocate an existing public way in part of the park.

1986 Lease of ski area to Beers Brothers "Ski Sports, Inc."

1988 Lease of ski area to William Krekorian "Ski Adventure, Inc."

1989 End of 41 years of skiing in the park.

1991 Prospect Hill Animal Farm is no longer financially supported by the City. The operation is maintained through volunteer efforts.

1992 Establishment of Prospect Hill Park Advocacy Group.

1993 Prospect Hill Park centennial celebration.

1996 Establishment of Ad-Hoc Committee/Prospect Hill.

APPENDIX

VEGETATION INVENTORY

VEGETATIVE COVER TYPE ANALYSIS
The following data was collected and assessed in the field to provide general knowledge about the characteristics, composition and condition of the forest resources of Prospect Hill Park. The following format was used to identify and assess the many stands and cover types found on the property. Each stand is delineated on the Vegetation Plan and observations were made for each regarding the composition, overall health and quality of the sites for supporting trees, shrubs and other plants.

The Map No. is the number of the stand that correlates with the Vegetation Plan. The Vegetative Cover Type results from the fact that several species tend to grow in association with one another. Many factors may determine the mix of species in a given area, including elevation, aspect, soil type, land use history, available moisture and succession status. The name of the cover type suggests the major component of the stand. Thus White Pine/Oak is primarily White Pine with a secondary component of Oak.

Map No.: 1
Vegetative Cover Type: White Pine/Oak
Dominant-Codominant Species: White Pine, Red Oak
Understory Species: Sparse, occasional Lowbush Blueberry and White Pine seedlings and saplings
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Fair
Comments/Observations: White Pine is about two thirds of the stock. Trees are mostly in the 10"-14" DBH range.

Map No.: 2
Vegetative Cover Type: Norway Spruce Plantation
Dominant-Codominant Species: Norway Spruce
Understory Species: Sparse
Management Potential Rating: High
Stand Health-Vigor Rating: Fair
Comments/Observations: Suppressed Spruce plantation probably planted 50 to 60 years ago. Spruce tree diameters range from 2"-10". Trees reside in the Codominant, Intermediate and Suppressed crown classifications. Dominant overstory trees are 8"-12" DBH Red Oak, Black Oak and Hickorys. There is a small component of superdominant White Pine trees. Needs gradual release from competing hardwood species and other Spruces to survive.

Map No.: 3
Vegetative Cover Type: Mixed Hardwood
Dominant-Codominant Species: Black Birch, White Oak, Red Oak
Understory Species: Blackberry, Rasberry
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Good
Comments/Observations: This is an area that was recently burned. Oak, Pine and Spruce were killed and there has begun a resurgence of hardwood seedlings and saplings (mostly Birch).

Map No.: 4
Vegetative Cover Type: White Pine/Oak
Dominant-Codominant Species: White Pine, White Oak, Black Oak, Red Oak
Understory Species: White Pine seedlings at openings in the forest canopy
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Good-Fair
Comments/Observations: Similar to stand No. 1. There are occasional Pitch Pines in this stand. Oak is generally poor quality growing stock. Site is better suited to Pine species.

Map No.: 5
Vegetative Cover Type: Oak/Hardwood
Dominant-Codominant Species: Red Oak, Black Birch, Red Maple
Understory Species: Sparse, White Pine, Hop Hornbeam, Red Maple
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: Red Oak pole size trees and sawtimber size trees are good quality on a good site. Red Oaks are in the 12"-20" DBH range.

Map No.: 6
Vegetative Cover Type: Oak
Dominant-Codominant Species: Red Oak, Black Oak, White Pine
Understory Species: Sparse, Black Birch
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: Oaks are 6"-10"DBH. Thin soils with ledge outcrops.

Map No.: 7
Vegetative Cover Type: Scrub Oak
Dominant-Codominant Species: Red and Black Oak, Hickory, Eastern Red Cedar
Understory Species: Sparse
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: Steep terrain. Ledge outcrop

Map No.: 8
Vegetative Cover Type: Oak
Dominant-Codominant Species: Red, Black and White Oak, White Pine, Paper Birch
Understory Species: Moderate, Black Birch, Hornbeam, Hickory
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Good
Comments/Observations: Oaks are dominant tree species, 10"-20" DBH.

Map No.: 9
Vegetative Cover Type: Mixed Hardwood
Dominant-Codominant Species: White Ash, Black Birch, Hickory, Sugar Maple, Red Oak, Black Locust, White Oak, Eastern Hemlock.
Understory Species: Dense, Spicebush, Hickory, Hornbeam, Red Cherry. Groundcover of Barberry, Ferns.
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: Spring is located at the base of a steep ledge on the west side of the stand. The spring is the source of the brook in this area. Dominant trees are 12"-24" DBH.

Map No.: 10
Vegetative Cover Type: White Pine/Hardwood
Dominant-Codominant Species: White Pine, Red Oak, Hemlock, Black Birch
Understory Species: Moderate, Hemlock and White Pine seedlings and saplings
Management Potential Rating: High
Stand Health-Vigor Rating: Good-Excellent
Comments/Observations: White Pine, Red Oak and Hemlock are the dominant and most frequent trees found here. Black Birch and some Hemlock are codominant and intermediate trees. The White Pine and Hemlock are approximately 20" DBH. Red Oak is generally 12"-18" DBH.

Map No.: 11
Vegetative Cover Type: White Pine/Hardwood
Dominant-Codominant Species: White Pine, Red Oak, Black Oak, Black Birch
Understory Species: Sparse, White Pine, Black Birch seedlings and saplings, Hornbeam
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: 75% of the trees are White Pine, generally 12"-16" DBH. The hardwood species, Red and Black Oak, and Black Birch are 8"-12" DBH. The preferred species to manage here would be White Pine. There are a few Paper Birch trees present in this stand.

Map No.: 12
Vegetative Cover Type: White Pine
Dominant-Codominant Species: White Pine
Understory Species: Sparse; Black Birch
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: This stand of trees is almost completely stocked with White Pine (90%+) and is an even age with a median tree DBH of 14". Possibly a plantation planting after the Hurricane of 1938.

Map No.: 13
Vegetative Cover Type: Oak/White Pine
Dominant-Codominant Species: Red Oak, Black Oak, White Pine
Understory Species: Moderate; Hornbeam, Black Birch, Hickory
Management Potential Rating: Low
Stand Health-Vigor Rating: Fair-Poor
Comments/Observations: This is a stand of pole size trees on a site of fair to poor quality. It is a steep rocky slope with an eastern aspect. Hardwood trees are scrub like.

Map No.: 14
Vegetative Cover Type: Hardwood Wetland
Dominant-Codominant Species: Red Maple, White Ash, Black Birch, Hemlock, Black Locust
Understory Species: Dense; Spicebush, Hickory, Red Maple, Honeysuckle, Winged Euonymus, Elderberry
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: Hardwood trees found here vary in size from 8"-18" DBH. Trees and shrubs are healthy and well suited for a wetland environment. There are dead and dying American Elms creating openings in the canopy and an opportunity for the production of dense understory vegetation. Dead Elms are also providing den and nesting sites for wildlife.

Map No.: 15
Vegetative Cover Type: Oak/White Pine
Dominant-Codominant Species: Black Oak, Red Oak, White Pine, Sassafras
Understory Species: Moderate, Hornbeam, Oak, Black Birch, Hickory, occasional Lowbush Blueberry.
Management Potential Rating: Low
Stand Health-Vigor Rating: Fair
Comments/Observations: A majority of the dominant trees species here are Red and Black Oaks, and White Pine. The White Pine is generally 10"-14" DBH.

Map No.: 16
Vegetative Cover Type: Mixed Hardwood
Dominant-Codominant Species: White Ash, Sugar Maple, Red Oak, Red Maple
Understory Species: Moderate, Sugar Maple, Hickory, Red Maple, Spicebush (along brook corridor)
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: This stand borders on the former ski slope on the east side. It is well drained with ample moisture and a northerly aspect. Tree growth is good on high value species of White Ash, Sugar Maple and Red Oak.

Map No.: 17
Vegetative Cover Type: Oak/Hardwood
Dominant-Codominant Species: Red Oak, White Ash, Sugar Maple, Red Maple
Understory Species: Sparse, Sugar Maple seedlings and saplings, Spicebush.
Management Potential Rating: High
Stand Health-Vigor Rating: Good-Excellent
Comments/Observations: This is another moist, well drained site of good quality tree growth similar to stand 16. The species composition is subtly different and there is an upland outcrop area adjacent to Prospect Hill Road. There are some high quality Red Oaks in the 18"-24" DBH range.

Map No.: 18
Vegetative Cover Type: Mixed Hardwood
Dominant-Codominant Species: White Ash, Sugar Maple, American Elm, Red Maple, Black Locust, Black Birch
Understory Species: Sparse, Sugar Maple, Spicebush
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Good
Comments/Observations: This is a moist site that gently slopes to a Forest Wetland area. About 75% of the trees are White Ash and Sugar Maple in the 10"-18" DBH range.

Map No.: 19
Vegetative Cover Type: Forested Wetland
Dominant-Codominant Species: Red Maple, White Ash, Black Birch
Understory Species: Dense, Spicebush
Management Potential Rating: Low
Stand Health-Vigor Rating: Fair
Comments/Observations: This is a wetland area of mostly Red Maple with White Ash and Black Birch on the somewhat better drained areas. Seasonally this area is flooded and probably dries up in the summer months. The understory vegetation is almost entirely dense Spicebush growth.

Map No.: 20
Vegetative Cover Type: Oak/Hardwood
Dominant-Codominant Species: Red Oak, Black Birch, Sugar Maple
Understory Species: Sparse, Sugar Maple
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: The dominant trees in this stand are mostly Red Oak (80%) with Black Birch and Sugar Maple being mostly codominant and intermediate trees. This area quickly rises up from the wetland into an upland type of stand. The Red Oak component of this stand is in the 10"-18" DBH range.

Map No.: 21
Vegetative Cover Type: Upland Oak/Hickory
Dominant-Codominant Species: Red Oak, White Ash, Hickory
Understory Species: Sparse, Black Birch, Black Oak, Black Cherry
Management Potential Rating: Low
Stand Health-Vigor Rating: Fair
Comments/Observations: Narrow area on the west side of Prospect Hill Road, along the western boundary of the park. Generally fair quality, but quality diminishes as it progresses uphill.

Map No.: 22
Vegetative Cover Type: Upland Oak
Dominant-Codominant Species: Red and Black Oak
Understory Species: Sparse; White Pine, Black Birch, Oak, Red Maple, Mapleleaf Viburnum, Black Cherry
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: The dominant trees here are low quality, small and scrub-like. Grass and sedge are prevalent as groundcover on this site.

Map No.: 23
Vegetative Cover Type: White Pine/Oak
Dominant-Codominant Species: White Pine, White Oak, Scarlet Oak
Understory Species: Sparse, White Oak, White Pine, Black Birch
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: Many large Red and Scarlet Oaks have basal damage and decay, possibly old fire damage.

Map No.: 24
Vegetative Cover Type: Oak/White Pine
Dominant-Codominant Species: Red and Black Oak, White Pine, White Oak
Understory Species: Sparse, White Oak, Black Birch, White Pine
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: Oak here is poor quality and low in vigor. Trees are somewhat shorter probably due to low soils productivity. About 70% of the trees found here are Oaks in the 8"-14" DBH range. There is a small component of Paper Birch. Moss, grass, sedge and Lowbush Blueberry occupy the groundcover level.

Map No.: 25
Vegetative Cover Type: Oak/White Pine
Dominant-Codominant Species: Red Oak, Black, Oak. White Pine
Understory Species: Moderate, White Pine seedlings, Black Birch, Red Maple
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: About 60% of the dominant trees are Red Oak and Black Oak. Pine is better suited to this high, dry upland site. The groundcover level is Lowbush Blueberry and Huckleberry.

Map No.: 26
Vegetative Cover Type: Oak/White Pine
Dominant-Codominant Species: Red Oak, White Oak, White Pine, Black Birch
Understory Species: Moderate, White Pine seedlings, Black, Birch, Red Maple
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Fair-Good
Comments/Observations: The dominant Red Oak and White Oak are fair-good quality trees in the 12"-18" DBH size range. White Pine is good quality, 12"-18" DBH, and more vigorous than the Oaks.

Map No.: 27
Vegetative Cover Type: Mixed Hardwoods
Dominant-Codominant Species: Paper Birch, Black Birch, White Pine, White Ash, Hickory
Understory Species: Sparse, White Pine , Black Birch
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Fair-Good
Comments/Observations: The largest component of dominant trees found here are Paper Birch and secondarily Black Birch. The trees are in the range of 8"-12" DBH. This association of trees is most probably due to a past fire on this site. There is some Hemlock in the intermediate height class and a small component of Sassafras. The slope is very steep and has a northeast aspect.

Map No.: 28
Vegetative Cover Type: White Pine
Dominant-Codominant Species: White Pine, Red Oak, Black Birch, White Ash
Understory Species: Sparse; Black Birch, Red Maple, Hornbeam
Management Potential Rating: High
Stand Health-Vigor Rating: Good-Excellent
Comments/Observations: This is probably a plantation of White Pine. The hardwood component is only scattered individuals amounting to about only 5% of the stock. They are 14"-18" DBH.

Map No.: 29
Vegetative Cover Type: Oak
Dominant-Codominant Species: Red Oak, Black Oak, White Oak
Understory Species: Sparse, Hornbeam, White Oak
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Fair
Comments/Observations: About 80% of the dominant trees here are Red Oaks, 8"-12" DBH. This stand is adjacent to the entrance road on the west side.

Map No.: 30
Vegetative Cover Type: Mixed Hardwood
Dominant-Codominant Species: Red Maple, American Elm
Understory Species: Dense, Spicebush, Honeysuckle, Blackberry, Multiflora Rose, Rasberry
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: A highly diverse community of second growth trees and shrubs. Part of this stand is a wetland. This was a disturbed site that is being reclaimed due to natural succession of tree and shrub growth.

Map No.: 31
Vegetative Cover Type: Mixed Hardwood/Old Field
Dominant-Codominant Species: White Ash, Quaking Aspen, Eastern Cottonwood, Paper Birch, Black Birch, Black Locust, Red Oak, Willow, Red Cedar.
Understory Species: Spirea, Blackberry, Multiflora Rose, Wild Apple, Elderberry, Pussy Willow, Staghorn Sumac, Rasberry, Ailanthus, Bittersweet Vine, Red Cedar
Management Potential Rating: High
Stand Health-Vigor Rating: Good-Excellent
Comments/Observations: This is the former ski slope that has not been maintained and is reverting to forest through the process of natural succession. The "second growth" trees and shrubs are highly beneficial for many species of wildlife. There is abundant food and cover to support many species of birds and mammals.

Map No.: 32
Vegetative Cover Type: Oak/White Pine
Dominant-Codominant Species: Red Oak, White Oak, White Pine, Black Oak, Black Birch
Understory Species: Sparse, Spicebush, White Pine, Black Birch, White Oak
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: This is a stand of very good quality 20"-24" DBH Red Oak, 14"-18" DBH White Oak and White Pine. The White Pine here is generally 10"-14" DBH, however there are about 6 large White Pine in this stand that are 30"-35" DBH. These are impressive, super dominant trees, some of the largest on the property.

Map No.: 33
Vegetative Cover Type: Forested Wetland
Dominant-Codominant Species: Red Maple, Red Oak, American Elm, Black Gum, White Ash
Understory Species: Dense, Summersweet, Sweet Pepperbush, Spicebush, Blueberry, Bull Brier
Management Potential Rating: Low
Stand Health-Vigor Rating: Good
Comments/Observations: 90% of the dominant trees here are 10"-16" DBH Red Maple. Most of this stand has standing water with associated marshy transition to surrounding upland areas. There is a dug channel outlet draining this wetland. A weir could be installed to regulate the level of standing water for wildlife purposes. There are numerous dead Elm tree trunks present. There are some underplanted Norway Spruce that are suppressed by the overstory trees. These trees are about 6" DBH and approximately 60 years old. Spruce plantings in the 1930's are referred to in the Chronology of the Park.

Map No.: 34
Vegetative Cover Type: White Pine
Dominant-Codominant Species: White Pine, Red, Black, and White Oak
Understory Species: Moderate: Black Birch, Black Cherry, Red Maple, Viburnum
Management Potential Rating: High
Stand Health-Vigor Rating: Good-Excellent
Comments/Observations: 90% of this stand is 10"-16" DBH White Pine with a small component of Red Pine and some invasive Oaks. It is probably a plantation planting. Some homeowners on the adjacent property have been cutting mature trees. Wild Grape is present.

Map No.: 35
Vegetative Cover Type: Oak/Hardwood
Dominant-Codominant Species: Black oak, Red Oak, White Oak, Shagbark Hickory, White Pine
Understory Species: Moderate, Hickory, Oak, Sugar Maple, Sassafras, Euonymus
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Fair-Good
Comments/Observations: A majority of the dominant trees are the Oaks which are 16"-26" DBH. There is a component of White Pine that was planted in rows located in the northerly portion of this stand. They are 12"-18" DBH. Old fire damage (basal scars and decay) is present in Oaks that are 24"-28" DBH. There is some Wild Grape. Litter and rubbish is a concern. There is a developed spring located in the extreme north end of this stand.

Map No.: 36
Vegetative Cover Type: Oak
Dominant-Codominant Species: Black Oak, White Oak, Paper Birch, White Pine, Pitch Pine
Understory Species: Sparse, Oak, Hickory, Black Birch, Aspen
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: Upland site that is dry, thin soil with low productivity. Steep slope has an easterly aspect. 80% of the trees here are Scrub Oak, 8"-16" DBH.

Map No.: 37
Vegetative Cover Type: Forested Wetland
Dominant-Codominant Species: Red Maple, Swamp White Oak, American Elm
Understory Species: Dense, Black Birch, Spicebush, Clethra, Highbush Blueberry, Speckeled Alder, Sassafras, Elderberry
Management Potential Rating: Very Low
Stand Health-Vigor Rating: Fair
Comments/Observations: 90% of the trees in this wetland site are Red Maple 8"-14" DBH. Some dead Elm is present.

Map No.: 38
Vegetative Cover Type: Oak
Dominant-Codominant Species: Red Oak, White Oak, Swamp Oak, Scarlet Oak
Understory Species: Sparse, Blueberry, Black Birch, Red Maple
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: This stand is a narrow band of good quality Oaks in a transition area from wetland to upland areas. Red Oak is in the 14"-26" DBH range.

Map No.: 39
Vegetative Cover Type: Oak/White Pine
Dominant-Codominant Species: Black Oak, Red Oak, White Pine
Understory Species: Huckleberry
Management Potential Rating: Low
Stand Health-Vigor Rating: Fair-Poor
Comments/Observations: Upland Oak stand of mostly Oak. White Pine is better suited for this site.

Map No.: 40
Vegetative Cover Type: Red Pine/White Pine Plantation
Dominant-Codominant Species: Red Pine, White Pine
Understory Species: Sparse
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Good
Comments/Observations: The White Pine component is more vigorous and healthy. Red Pines are generally 6"-11" DBH and the White Pines are 8"-18" DBH.

Map No.: 41
Vegetative Cover Type: White Pine/Oak
Dominant-Codominant Species: White Pine, White Oak, Black Oak, Scotch Pine
Understory Species: Sparse
Management Potential Rating: High
Stand Health-Vigor Rating: Good
Comments/Observations: White Pine is 60-70% of the dominant trees here and are in the 10"-18" DBH range. White Oak and Black Oak trees are 16"-24" DBH. The small component of Scotch Pine is dead, dying or in poor condition due to some insect infestation or disease.

Map No.: 42
Vegetative Cover Type: Oak
Dominant-Codominant Species: Black, White, and Red Oaks, White Pine
Understory Species: Sparse, White Pine
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: 90% of the trees here are Oaks that are 12"-18" DBH. The White Pines are 8"-14" DBH. Low productivity soils with ledge outcrops.

Map No.: 43
Vegetative Cover Type: White Pine/Hardwood
Dominant-Codominant Species: White Pine, Scarlet Oak, White Oak.
Understory Species: Sparse, White Pine, White Oak.
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: Low productivity site, Huckleberry groundcover and ledge outcrops. 70% of the dominant trees are 10"-18" DBH White Pine with some occasional Red Pine.

Map No.: 44
Vegetative Cover Type: Oak/Spruce
Dominant-Codominant Species: Red, Black and White Oak, Norway Spruce, Red maple, White Ash
Understory Species: Moderate, Hickory, Red Maple, Sassafras
Management Potential Rating: High
Stand Health-Vigor Rating: Good-Excellent
Comments/Observations: This is a predominantly Oak stand where the majority of the trees are 18"-26" DBH. There is a notable component of Norway Spruce that is in the Intermediate-Suppressed crown classes. These trees were planted probably 50-60 years ago and have struggled to survive while being overcrowded and overtopped by Oak and Hardwood trees.

Map No.: 45
Vegetative Cover Type: White Pine Plantation
Dominant-Codominant Species: White Pine, Red Pine
Understory Species: None
Management Potential Rating: High
Stand Health-Vigor Rating: Good-Excellent
Comments/Observations: 95% of the tree species found here are White Pine trees(10"-16") DBH and a small component of Red Pine in the northeast corner of the stand. The lack of understory trees/shrubs is due to the dense canopy preventing sufficient sunlight to support growth.

Map No.: 46
Vegetative Cover Type: White Pine
Dominant-Codominant Species: White Pine, Red Oak, Black Oak, Hickory, Red Maple
Understory Species: Sparse; White Pine
Management Potential Rating: Moderate
Stand Health-Vigor Rating: Fair
Comments/Observations: Probably a Pine plantation where 90% of the trees are White Pine in the 12"-16" DBH size. Lowland portions of this stand have good productivity. There is low productivity in ledge outcrop area. There is some Red and Scotch Pine in the northerly portions of this stand.

Map No.: 47
Vegetative Cover Type: White Pine/Oak
Dominant-Codominant Species: White Pine, Red Oak
Understory Species: Moderate, Black Birch
Management Potential Rating: High
Stand Health-Vigor Rating: Excellent
Comments/Observations: This is an impressive stand of immense White Pine and Red Oak. These are probably some of the oldest trees in the park. They certainly are the largest. This notable stand of large trees has many specimens which survived the Hurricane of 1938 and subsequent storms. Dominant White Pine are in the 20"-30" DBH range and have attained exceptional height. Red Oaks are 20"-40" DBH and have exceptional form. Other White Pines occupy the codominant and intermediate crown classes.

Map No.: 48
Vegetative Cover Type: Oak
Dominant-Codominant Species: Black Oak, Red Oak, White Oak, White Pine
Understory Species: Sparse, Black Birch
Management Potential Rating: Low
Stand Health-Vigor Rating: Fair-Poor
Comments/Observations: This stand is mostly Oak (70%) with a minor component of White Pine. The Oak is generally in the 8"-10" DBH class and slow growing.

Map No.: 49
Vegetative Cover Type: Oak/Hardwood
Dominant-Codominant Species: Red Oak, Black Oak, Hickory, White Oak
Understory Species: Moderate, Hickory, White Pine, White Oak
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: Oak is scrub like in growth habit, slow growing and 8"-18" DBH. Grass and sedge often occupy the groundcover level. Soil is shallow to bedrock in many areas.

Map No.: 50
Vegetative Cover Type: Upland Oak
Dominant-Codominant Species: Red, Black and Scarlet Oak, Hickory, Red Maple
Understory Species: Sparse, Hickory, Black Birch, Hornbeam
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: This is an area of Scrub Oak and hardwood on a very dry upland site. This stand has not attained crown closure and will probably not due to the low productivity and harsh conditions of the site. Trees are generally 4"-8" DBH and customarily short in height. Groundcover consists of grass and sedge.

Map No.: 51
Vegetative Cover Type: Upland Oak
Dominant-Codominant Species: Red, Black and Scarlet Oak, Hickory
Understory Species: Sparse, Hornbeam, White Oak
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: This is an area with very steep, ledgy terrain. Tree growth is restricted due to thin soils and lack of consistent moisture. Trees are scrubby, low vigor and shorter than normal. The site is not fully stocked and the groundcover mostly consists of grass/sedge.

Map No.: 52
Vegetative Cover Type: Upland/Pine
Dominant-Codominant Species: Scarlet, Black and White Oak, White and Pitch Pine
Understory Species: Moderate, White and Pitch Pine, Blueberry, Huckleberry, White Oak
Management Potential Rating: Low
Stand Health-Vigor Rating: Poor
Comments/Observations: A high dry site with slow growing Oak and Pines. Trees are scrub like and shorter than normal for their species. Some signs of old fire. Groundcover is Huckleberry and grass/sedge.

APPENDIX

AVAILABLE DRAWINGS

Date	File No.	Title
Files at CITY OF WALTHAM		
1875	35-10	Lands of Hastings and Fletcher [Parks]
1875	655	Lands of Farwell [Wadsworth]
12-1892	58	Working Plan of proposed Park [Moore]
12-1892	77	Plan of Proposed Park [Moore]
12-1892	623	Working Plans [Johnson]
12-1892	616	Plan of Lands on Prospect Hill [Johnson]
1-1893	59-63	Land of NW Farwell Heirs [Moore]
6-1894	59-2	Plan of WP Clark Lot [Johnson]
7-1894	14	Approx Plot, Old Road to Winter [Johnson]
8-1895	35-18	Lands between Prospect and Bear Hills @ 1" = 200' [linen] [-]
4-1896	39-4	Plan of Taking from Bond, Buttrick & Berry [Brewer]
5-1896	39-5	Plan of taking from Richardson [Brewer]
5-1896	625	Working Plan, Entire Park [Brewer]
7-1896	39-6	Contour Map, Easterly Slope [Brewer]
7-1896	39-6	Contour Map, Easterly Slope [trace] [Brewer]
12-1896	21-45	Plan Proposed additional taking, Bond [Brewer]
12-1897	39-11	Working Topo Map, Summit Big Prospect [Brewer]
12-1897	39-11	Working Topo Map, Summit Big Prospect [trace] [Brewer]
1897	39-9	Blueprint of Park ommission Map [Prospect Hill Park and Environs] @ 1" = 200' [linen] shows access from Main Street [Brewer]
1899	74-19	Prospect Hill Park & Environs & Views from Same [blueprint] [Chamberlain]
1899	74-19	Region around Prospect Hill @ 1:6000 [blueprint] [EG Chamberlain]
9-1904	21-16	Taking, Nehemiah Warren land [Brewer]
	39-23	Blueprint of Same
1908	60-46	Land of HL Moody & Co. [Cutting]
1911	39-9	Map of Prospect Hill Park, Its Approaches and Environs [Brewer]
1912	39-34	Worcester Purchase [JR Worcester]
3-1914	21-46	Copy of Worcester Purchase [JR Worcester]
11-1914	-	Plan and Profile of Prospect Hill Road [Brewer]
9-1917	74-26	Plan showing View from Prospect Hill [blueprint] [Dolber]
1-1921	62-39	W Plan of taking off U Main for Park Purposes [Brehm]
1-1921	21-54	Plan for added taking for Park, Malloy & Whitney Purchase [Brehm]
1-1921	62-39	Plan of Land Taken for Crusher and Park Purposes [rice paper] [RH Barney]
5-1927	21-123	Plan of Land conveyed to City by T Barnes [Heirs]
1-1931	1105	Prop P & P Road through Park, Westerly side [Beal]
3-1932	8-6	Proposed Hut [Worcester]
4-1932	77-43	Contour Plan, Proposed Location of Hut [paper] [Beal]
4-1932	77-43A	Cross Section of Proposed Location, Hut [paper] [Beal]
1934	1074	Plan Showing Prospect Hill Park, Its Approaches and Environs [Illustrates Various Purchases @ 1"=200' [linen] [Beal]
1-1934	8-14	Proposed Lean to For Boy Scouts [CWA]
2-1934	1090	Topographical Plan of Prospect Hill Park @ 1"=100' [linen], ski runs of later date shown [CWA]

2-1934	1091	Contour Proposed Prospect Hill Park [Trace & Blueprint] [CWA]
5-1935	47-58	Plan and Elevation, Long House, Boy Scouts @ 1/8" =1' [blueprint with details attached] [Beal]
5-1935	79-56	Boy Scout Long House, Plan and Elevation @ 1/8" =1' [blueprint]
7-1935	32-52	Park Roadway Entrance to Park from Winter [linen] ERA project [Beal]
8-1945	3-24	Proposed Lease and Easement [Radar Site] [blueprint] [Raytheon]
12-1948	65-87	Profile of Ski Tow [Beal]
12-1948	65-88	Plan of Ski Tow House and Tow [blueline] [Beal]
5-1952	57-91	Pump Sta & Pipe Line from SP to Tower on Hill [blueprint] [Cram & Ferguson]
4-1957	88-274	Land to be Conveyed by Ella Smith app SCL [print] [King]
1-1963	62-123	New Location of Fire Tower Mullen
8-1963	90-365	RLP Plan of Land of Easement for Polaroid for Rway & Installing Utilities and Order of Taking
8-1964	90-334	Easement Conveyed to Polaroid by City [Barnes]
5-1965	90-365	Proposed Gates in Easement Conveyed to Polaroid by City [Barnes]
10-1966	69-98	P&P Sewer Connection to Ski Tow Shack [Howe]
5-1968	1446	Master Plan for Development @ 1" = 100' [print] [Allen Org.]
2-1971	1-682	Plan of Lands belonging to Polaroid @ 1" = 100' [Barnes]
8-1972	97-7	Prop T-Bar Extension Ski Slope [Delaney]
10-1972	97-9	Topo Plan of Ski Slope [Delaney]
4-1974	1507	Topo of Portion N of Summit [Delaney]
4-1974	1509	Work Topo of Portion N of Summit [Delaney]
6-1974	-	Plan and Profile of Prospect Hill Road [Delaney]
8-1974	94-44	Plan Twin Water Storage Reservoirs [CD&M]
8-1974	94-53	As Built Plans, Twin Water Tanks [CD&M]
10-1974	94-45	Plan for Construction, 24" Water Main [CD&M]
10-1974	94-52	As Built Plans, 24" Water Constr [CD&M]
1-1975	6-192	WS&D Easement to Polaroid [Delaney]
1-1975	6-193	WS&D Easement to 4th Ave [Delaney]
1-1975	98-466	RLP WS&D Easement to 4th Ave [Delaney]
1-1975	98-467	RLP WS&D Easement to Polaroid [Delaney]
10-1975	99-9	Proposed Chain Link Fence @ Twin Water Tanks [Delaney]
3-1976	Folio	Rec S&W Pl Prospect Hill Road, Glen Road & Prospect Hill Lane [Delaney]
9-1977	99-56	Record Plan of Tanks & Controlling Water Mains [CD&M]
9-1977	94-58	As Built, 24" from Glen Road to Tanks [CD&M]
9-1977	94-59	As Built Plans, Twin Water Tanks Storage [CD&M]
6-1979	99-96	Prop Line Revision Prospect Hill Office Park [Cameron]
8-1983	1568	Topo Prop Road 5th Ave to Totten Pond Road [Cameron]
-	1610	Profiles and Cross Sections of Proposed Road from 5th Ave to Totten Pond Road [Sasaki]
4-1985	113-42	Working Plan Roadway to Radar Sta for resurf [Delaney]
1986	98-1103	Working Plan for Parking Spaces at Ski Tow [Delaney]
10-1986	1591	Working Plan of Lease Area @ Ski Tow [Delaney]
10-1986	5-52	Plan of Leased Area @ Ski Tow [Delaney]
8-1988	103-41	Working Plan of Area near Pool [Delaney]

Files at FREDERICK LAW OLMSTED
NATIONAL HISTORIC SITE

12-1892	1781-1	Plan of a Part of Prospect Hill Waltham for the Park Commission Showing the Approximate Location of Division Lines by Walls & Fences, also by Deed Descriptions, @ 1"=80', spliced sun print [also Index Map showing Old Roads, Streets, Paths & Division Lines @ 1"=550'] [J. Fred Mooe, CE]
12-1892	1781-2	Same as above with index map cut off Pencil note: "Proposed Roadway & Possible Boundary sketched in pencil, 12 February 1895, Gordon H. Taylor"

Other

8-1985		Prospect Hill Park Map @ 1:10,000 New England Orienteering Club

APPENDIX

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Books

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Newton, Norman T., *Design on the Land*, Belknap Press, Cambridge, 1971 [Chapter 22: Charles Eliot and His Metropolitan Park System].

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Proudman, Robert D. and Reuben Rajala, *AMC Field Guide to Trail Building and Maintenance*, Appalachian Mountain Club in association with the National Park Service, National Trails Program, 1981.

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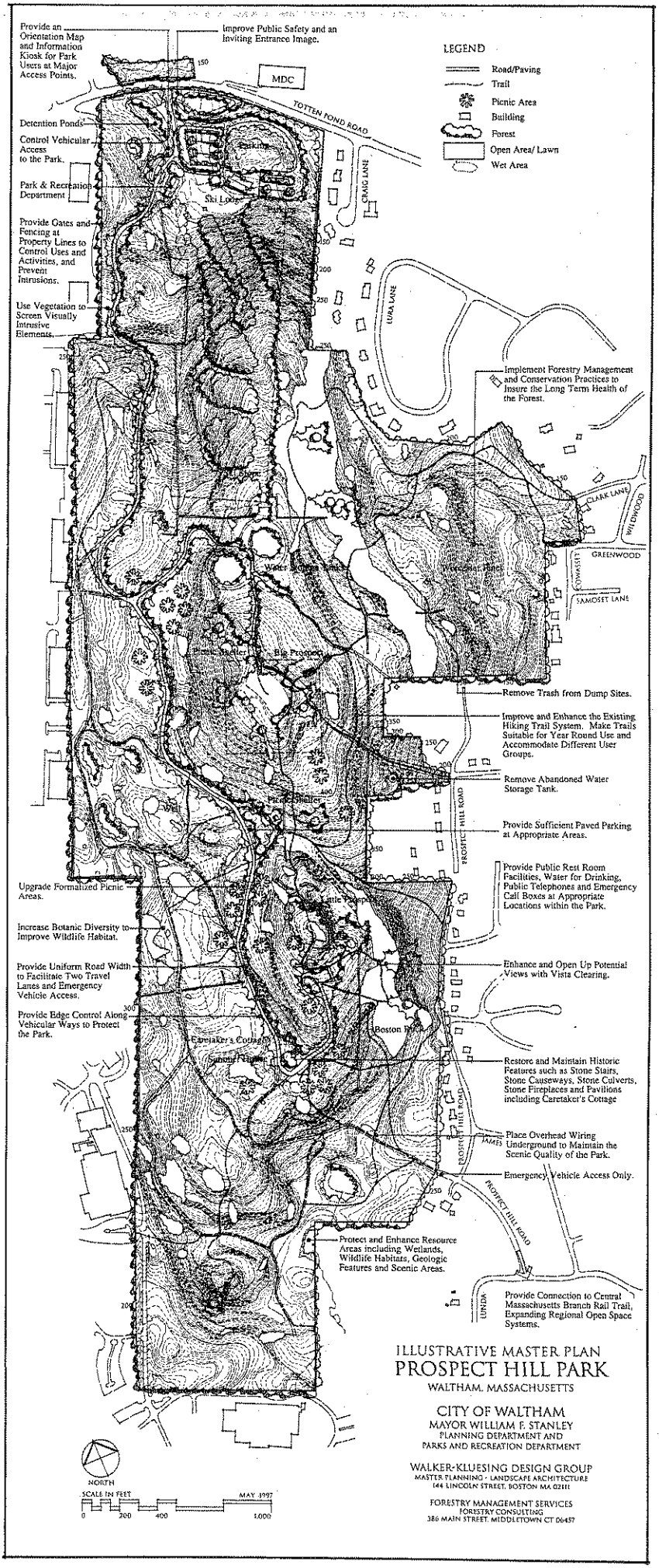
Ames, Eleanor G., *Park Rangers, Protecting Investment in Our Parks*, Maine State Landscape Architects Newsletter, Spring 1992.


Provide an Orientation Map and Information Kiosk for Park Users at Major Access Points.
Improve Public Safety and an Inviting Entrance Image.
LEGEND
Road/Paving
Trail
Picnic Area
Building
Forest
Open Area/ Lawn
Wet Area
MDC
TOTTEN POND ROAD
Detention Ponds
Control Vehicular Access to the Park.
Parking
Park & Recreation Department
Ski Lodge
CRAIG LANE
Provide Gates and Fencing at Property Lines to Control Uses and Activities, and Prevent Intrusions.
Use Vegetation to Screen Visually Intrusive Elements.
LUBA LANE
Implement Forestry Management and Conservation Practices to Insure the Long Term Health of the Forest.
CLARK LANE
WITDWOOD
GREENWOOD
OWASSET
SAMOSET LANE
Water Storage Tanks
Big Prospect
Remove Trash from Dump Sites.
Improve and Enhance the Existing Hiking Trail System. Make Trails Suitable for Year Round Use and Accommodate Different User Groups.
Remove Abandoned Water Storage Tank.
PROSPECT HILL ROAD
Provide Sufficient Paved Parking at Appropriate Areas.
Provide Public Rest Room Facilities, Water for Drinking, Public Telephones and Emergency Call Boxes at Appropriate Locations within the Park.
Upgrade Formalized Picnic Areas.
Increase Botanic Diversity to Improve Wildlife Habitat.
Provide Uniform Road Width to Facilitate Two Travel Lanes and Emergency Vehicle Access.
Provide Edge Control Along Vehicular Ways to Protect the Park.
Enhance and Open Up Potential Views with Vista Clearing.
Boston Post
Caretaker's Cottage
Restore and Maintain Historic Features such as Stone Stairs, Stone Causeways, Stone Culverts, Stone Fireplaces and Pavilions including Caretaker's Cottage
JAMES
Place Overhead Wiring Underground to Maintain the Scenic Quality of the Park.
Emergency Vehicle Access Only.
PROSPECT HILL ROAD
Protect and Enhance Resource Areas including Wetlands, Wildlife Habitats, Geologic Features and Scenic Areas.
LUNDA
Provide Connection to Central Massachusetts Branch Rail Trail, Expanding Regional Open Space Systems.
NORTH
SCALE IN FEET
0 200 400 1,000
MAY 1997
ILLUSTRATIVE MASTER PLAN
PROSPECT HILL PARK
WALTHAM, MASSACHUSETTS
CITY OF WALTHAM
MAYOR WILLIAM F. STANLEY
PLANNING DEPARTMENT AND
PARKS AND RECREATION DEPARTMENT
WALKER-KLUESING DESIGN GROUP
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