

# A Master Plan for the Lower Neponset River Reservation

Boston, Milton, and Quincy, Massachusetts

Metropolitan District Commission



# A Master Plan for the Lower Neponset River Reservation

Boston, Milton, and Quincy, Massachusetts



## Commonwealth of Massachusetts

**William F. Weld**  
*Governor*

**Argeo Paul Cellucci**  
*Lieutenant Governor*

**Trudy Coxe**  
*Secretary,*  
*Executive Office of Environmental Affairs*

**Leo Roy**  
*Undersecretary,*  
*Executive Office of Environmental Affairs*

## Metropolitan District Commission

**David B. Balfour, Jr.**  
*Commissioner*

**Darryl Settles**  
**Avril Elkort**  
**Charles F. Wu**  
**Robert Carr**  
*Associate Commissioners*

**Julia B. O'Brien**  
*Director of Planning*

**David T. Queeley**  
*Project Manager*

December 1996

## Master Plan Consultants

**Planners Collaborative Inc.**  
*Planners and Landscape Architects*

in association with

**Camp Dresser & McKee**  
*Environmental Engineers*

**Judith Nitsch Engineering**  
*Land Surveyors*

**Main Street Design**  
*Interpretive and Environmental  
Graphic Designers*

**Wallace Roberts and Todd**  
*Planners and Landscape Architects*

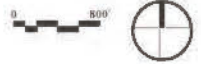
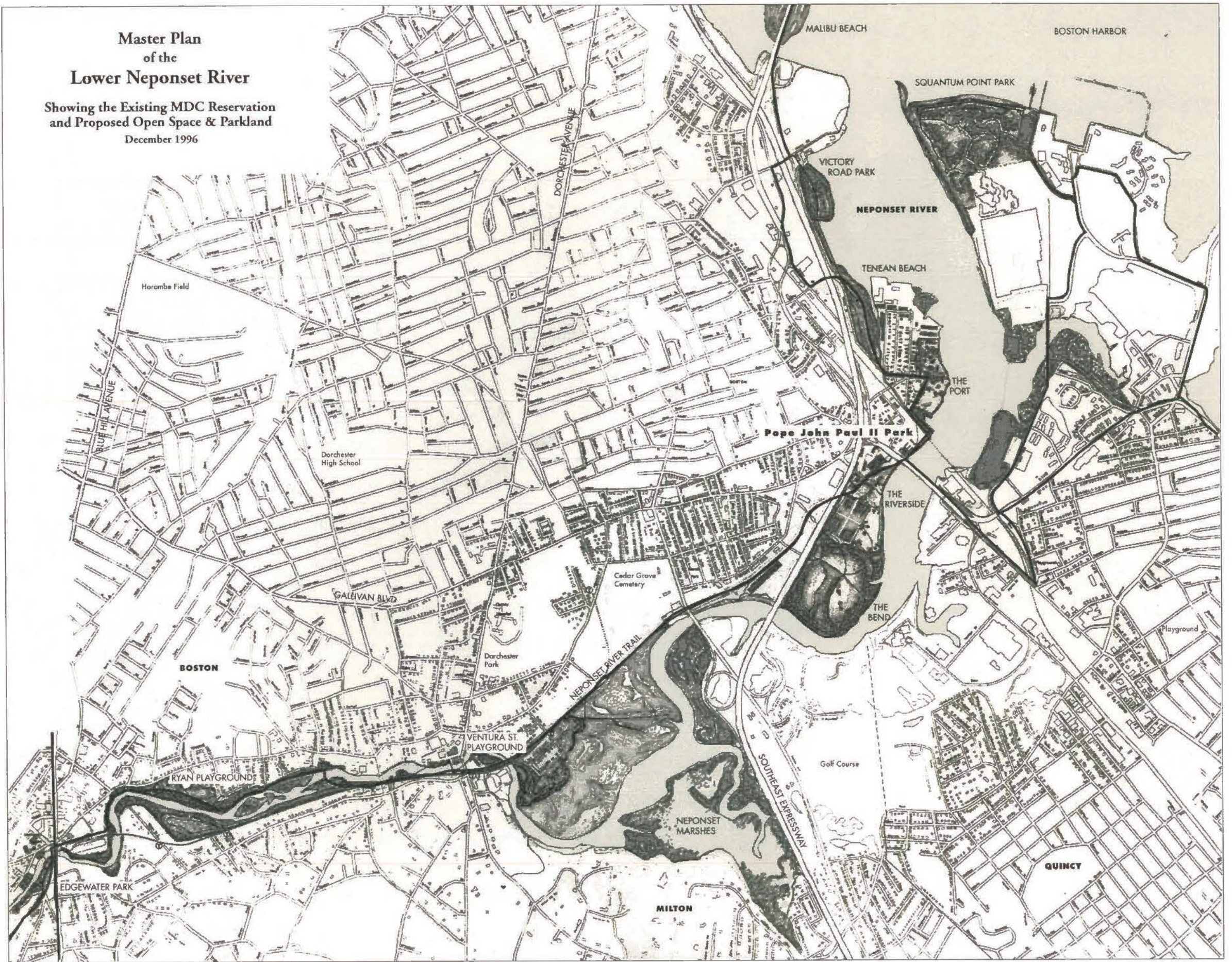
## Table of Contents

---

Introduction	1
The Plan	
Pope John Paul II Park	7
The Riverside	10
The Bend	15
The Port	18
Squantum Point Park	20
Edgewater Park	22
Neponset River Trail	24
Trail Connections	31
Watercourse	33
Funding, Costs, and Phasing	34
Public Safety, Maintenance, & Mitigation	37
Permits	41
Preliminary Design Drawings: Neponset River Trail	A-1

# Master Plan of the Lower Neponset River

Showing the Existing MDC Reservation  
and Proposed Open Space & Parkland  
December 1996





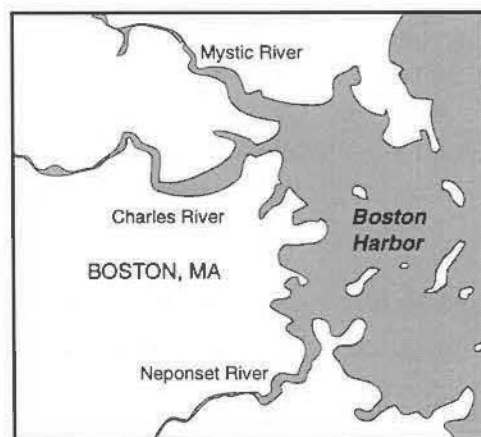
*Charles Eliot's 1893 Map of the Metropolitan Park System with the Neponset River Reservation in Lower Center*

## Introduction

This plan is about keeping a promise.

The promise was made in the late 1800s. Charles Eliot and Sylvester Baxter, two of the founders of the Metropolitan Park System, alarmed by the hasty pace of Boston's expansion, laid out an idea for a vast, interconnected system of parks, nature reserves, and scenic roadways in and around the city to ensure that a wide range of natural and recreation lands would be preserved and enhanced for the future.

Eliot and Baxter placed great weight on protecting open space and creating parklands along rivers and streams, especially the three rivers that flow into Boston Harbor: the Charles, the Mystic, and the Neponset. The reason so much importance was placed on these waterways grew from an awareness that rivers are vital sources of life. They understood that land along streams, when kept in a relatively natural condition, helps to keep river water clean, makes ideal habitats for fish and wildlife, and becomes sought after places for individuals and families seeking rest and recreation. In 1893, Eliot wrote: "Nature appears to have placed these streams just where they can best serve the needs of the crowded populations gathering fast about them."



*Rivers into Boston Harbor*

Of the three rivers, only the Neponset was never cut off from the sea by a dam across its mouth. As a result, each day a salty stew of river and sea water rises and falls with every changing tide. The river's wide and sandy mouth is lined with tall marsh grass that provides a fertile home for fish and wildlife.



*The Neponset Marshes*

And although roadways and buildings have been constructed along the river in recent decades, one can still find plenty of places where the natural course of the river follows a fluid and unmistakable rhythm.

Once, the Neponset River was considered a sacred place by everyone who lived near it. We know this because the river was given a name by Native Americans who named only important places. We also know by the choice of its name that it was special. The name "Neponset" means "Harvest River," which referred to the days during the year when Massachusetts tribe of the Algonquin Nation feasted off the schools of fish caught in the river, especially in the spring when the herring and smelts came in from the ocean to hurdle the rapids and spawn in the freshwater that flowed from the river's source 27-miles upstream.

The river's history as an abundant natural resource continued well after the Native Americans lived along its shores. Successive generations of Americans settled beside the river and used it for drinking water, food, irrigation, transportation, swimming, bathing, industry, and recreation. Today, as a result of Boston's growth as an urban center, more than 130,000 people live within a mile of the lower section of river between Squantum Point in Quincy, Malibu Beach in Boston, and Mattapan Square.

The river presents us with evidence of the foresight of Eliot and Baxter, especially in their prediction that natural places in and around Boston would become exceedingly scarce. Consistent with that vision, the MDC, since the 1890s has moved to protect hundreds of acres along the waterway, in-

cluding rich nature preserves and numerous popular parks. Acquisition of the Neponset Marshes began in 1896, making these salt marshes the earliest in the state to be protected as natural assets. In the one hundred years since, the MDC has actively worked to acquire approximately 750 acres along the Neponset. These acquisitions include preserving additional marshlands and upstream shoreline, developing playgrounds, such as the Ventura and Ryan Playgrounds, and acquiring formerly used lands, such as an abandoned train line and a closed landfill for reuse for recreation purposes.

This plan builds upon the course set by Eliot and Baxter. The course stresses the principles of wise land stewardship, of preserving sensitive wildlife habitats, of restoring damaged natural areas, and of opening portions of the outdoors for public use and enjoyment. It is a course that has stood the test of time, and one we can count on to guide us in the future.

In putting this plan into practice, the MDC needs partners. Neighbors are encouraged to become involved in the project. Local nonprofit organizations and business are urged to "adopt" portions of the corridor and new parks. And other local, state, and federal agencies are invited to participate. In the end, lasting stewardship of this gift of nature will require the commitment of individuals, the creativity of government and business leaders, and cooperation of all.



*The Neponset River below Mattapan Square*

### *Modern Visionaries*

Many residents of the Neponset River watershed have long had a vision of restoring the waterway to a place of prominence in every day life. This plan is a testament to their dedicated support and encouragement of the MDC. Many of the same citizens have worked tirelessly for the funds that will be needed to implement the plan's recommendations. The 1996 Open Space Bond Bill, which resulted in \$45 million being authorized largely to implement this master plan and carry out certain other river corridor projects, further illustrates the fruits of this dedication and hard work. The continuing energies of these many supporters, some of whom are identified below, will help assure that the promise of this plan is realized in the future.

#### *The Neponset Master Plan Citizens Advisory Council*

A Citizens Advisory Council (CAC) was established in 1993 by the Metropolitan District Commission to help develop the Lower Neponset River Reservation Plan and the Neponset River Trail. Members of this group representing neighborhood and civic associations, watershed and open space advocacy groups, public agencies, as well as individual citizens have participated in this master planning effort. Indeed, the CAC has been a key force in the creation of this plan. (See the document entitled Master Plan Appendix for a detailed description of the Public Participation and Inter-agency Coordination process.) While the CAC served as the principal avenue of public participation, several other groups were instrumental in the master planning process, both through the CAC and independently. These are described below.

#### *Neponset River Watershed Association*

The Neponset River Watershed Association (NepRWA) is a nonprofit membership organization that celebrates the river and advocates for its protection and improvement. Its membership represents, but is not limited to, the fourteen watershed communities between Foxborough and Boston. Along with local Conservation Commissions, NepRWA nominated the Neponset River Estuary for designation as an Area of Critical Environmental Concern (ACEC) in 1994. It has advocated for reestablishing anadromous fish runs to upper sections of the river. Its volunteers (Friends of the Neponset Estuary Subwatershed Group and Freshwater Urban Neponset Subwatershed Group) and staff have worked on monitor-

ing water quality and have assisted the Department of Environmental Protection in the preparation of the Neponset River Resource Assessment.

#### *Boston Natural Areas Fund and Trust for Public Land*

The Boston Natural Areas Fund (BNAF) as lead community organizer, and Trust for Public Lands (TPL) as the Metropolitan District Commission's acquisition partner, together have undertaken a four year citizen-based effort in 1995 to build public awareness and form constituencies for restoring and maintaining the Neponset River. This work has been supported by the Lila Wallace Readers Digest Fund. The project includes development of citizen stewardship through environmental education programs, community workshops, action projects, a Greenway Council, and special events focusing on the river. BNAF developed the Neponset River Greenway Youth Conservation Program and organized a corps of thirty Youth Conservation workers to construct a footpath along the river at Ryan Playground.

#### *Boston GreenSpace Alliance*

The Boston GreenSpace Alliance is a nonprofit membership organization which advocates for open space and improved management of Boston's parks. A few of its activities include: sponsoring education and action programs to plant and maintain trees, working with schools to promote environmental education, and collaborating with other nonprofits and community groups on a variety of environmental improvement projects in Boston and along the Neponset River.

#### *Civic and Other Organizations*

The following representatives of key neighborhoods or groups with an interest in the Neponset River have provided invaluable insights and information in the master planning and design process. A more complete list of organizations and participants may be found in the Appendix.

Bicycle Coalition of Massachusetts  
Boston Gas Company  
Cedar Grove Civic Association  
Columbine Cliffs Neighborhood Association  
Corcoran Jennison Management Company  
Forbes Museum  
Friends of Ryan Playground  
John P. McKeon AmVets Post 146  
Kennedy Playground Revitalization Committee

Keystone Apartments  
Lower Mills Civic Association  
Mattapan Family Services Center  
Massachusetts Electric  
Port Norfolk Neighborhood Association  
Trustees of the Reservations

#### *Elected Officials and Agencies*

Many other individuals, groups, and agencies have provided valuable contributions during the master planning and design process. A complete description of the public participation process with a list of participants is included in the Appendix. The following elected officials and agencies have been especially key in developing this master plan.

Senator Paul White  
Senator Diane Wilkerson  
Representative Thomas Finneran  
Representative James Brett  
Representative Brian Joyce  
Representative Shirley Owens-Hicks  
Representative Joseph Manning

Executive Office of Environmental Affairs  
Dept. of Environmental Management ACEC Program  
Department of Environmental Protection  
Department of Fisheries, Wildlife, & Law Enforcement  
Division of Marine Fisheries  
Massachusetts Riverways Program  
Public Access Board  
Office of Coastal Zone Management  
Metropolitan Boston Transportation Authority  
U.S. Environmental Protection Agency

The City of Boston  
The City of Quincy  
The Town of Milton



## Approach and Goals

This plan presents a program for improving the lower Neponset River Reservation, including the development of three new parks totaling 125 acres and a three mile-long multi-use trail. The plan focuses on preserving and enhancing the natural qualities of the river system, while increasing public access in appropriate locations. Site plans and concept designs have been prepared to reflect the unique natural and historic characteristics of the various sites.

The major goals of the master plan are as follows:

- Preserve, restore, and enhance the natural qualities of the river system.
- Increase views and public access to the river and reservation in appropriate ways and locations.
- Create a corridor plan which responds to the variety of recreational needs of the many communities in the area.
- Create opportunities along the corridor for people to learn about the river, local history and culture of the area.
- Connect the Lower Neponset River Reservation with the larger Metropolitan Park System.
- Ensure that the highest possible emphasis is given to public safety along the corridor.
- Incorporate maintenance standards and life-cycle cost effectiveness in the preparation of park and trail designs.

## NEW OPEN SPACE AND PARKLAND

### Pope John Paul II Park

This new 72 acre park located along the southern border of City of Boston's Dorchester neighborhood will be constructed on reclaimed lands. The park will be composed of three areas: the Riverside, the Bend, and the Port. The Riverside will be the center of the new park and where most of Pope John Paul II Park facilities will be located. The Bend will be the least developed of the three areas containing hillside meadows, a lookout, and walking trails; it may also include a golf learning center. The Port area of the new park will include a promenade, play spaces, and groves of trees laid out to recall a time when this area was known for its pine trees and pastures.

### Squantum Point Park

The plan for this 50 acre former U.S. Navy airfield will be to restore and manage the large central core as a wildlife sanctuary. The outer edges will be developed for more active use. The park also offers excellent access to Boston Harbor.

### Edgewater Park

This park will create a "town green" in Mattapan Square by connecting the north side of the river with a tree-lined field owned by the MDC on the south side. Underutilized today, the property will become a play space and provide a shady riverside seating area.

### Neponset River Trail

This three mile long multi-use trail will create opportunities for people to discover the river's rare beauty, interesting history, abundant wildlife, and vital neighborhoods.

The Neponset River Trail will form a vital link in a growing system of regional trails connecting the lower Neponset River with MDC parks and reservations at Boston Harbor. Squantum Point, Wollaston Beach, Blue Hills, Fowl Meadow, Mother Brook, Stony Brook, and Charles River. It will also create links with nearby municipal parks and open space.

### Watercourse

Improving the quality of water in the Neponset River is as important as making landscape improvements to the Reservation. The river also offers opportunities for a wide range of water-related recreational opportunities in the future.

### Maintenance & Public Safety

The MDC will assign maintenance staff and park rangers to the reservation. It is also working with the State Police, MBTA Police, and local police departments, to assure a well-coordinated security plan.

In addition to its own maintenance personnel, the MDC will also work with individuals and organizations willing to contribute volunteer time to helping improve and maintain the Reservation.

## Funding, Costs, and Phasing

Implementation of this master plan will cost between \$33 and \$39 million, or approximately \$260-\$297 per person for the 130,000 individuals living in the project area. Phase I (2-3 years) will cost approximately \$3 million and include construction of the Neponset River Trail from Beades Bridge to Mattapan Square, as well as the development of Edgewater Park. Phase II (3-5 years) will cost between \$17 and \$21 million and include the construction of the Riverside and Port areas of Pope John Paul II Park, and development of Squantum Point Park. Phase III (5-8 years) will cost between \$13 and \$15 million and include the construction of the Bend area of Pope John Paul II Park and other Reservation improvements.

Based upon staff requirements, and on experience with similar parks, an annual operating budget of approximately \$500-\$700,000 per year will be required to operate and manage the lower Neponset River Reservation. This translates to a cost of approximately \$3.85 to \$5.40 per person annually for the 130,000 individuals living in the project area.

The MDC will draw from existing agency funds to begin implementation of the plan. These funds will be supplemented by the recent passage of the 1996 Massachusetts Open Space Bond Bill, which appropriated up to \$45 million for implementation a number of the proposals contained in this plan and other open space and recreation improvements along the river. Other sources of funds will be sought for specific park development and management efforts. Federal funds will be sought as well.

A "Neponset River Adopt-A-Park Program" could provide a mechanism for individuals, businesses, and foundations to contribute funds for carrying out specific elements of the plan, especially for projects related to park educational and recreational programs, maintenance, and public safety.

### Permits

A variety of permits will be needed from federal, state, and local agencies for implementation of this master plan. See the Permit Section for more information on the permit process.

## POTENTIAL BENEFITS

The MDC's renewed commitment to protecting and enhancing the lower Neponset River as expressed in this plan has the potential for producing a large number of environmental and public benefits. These include the following:

### *Environmental Protection and Restoration*

The lower portion of the Neponset River is healthy, yet fragile natural resource. It is a home for many species of fish and wildlife. It is a place of enormous natural beauty and it is a rare find among the communities which have developed along its shores. Therefore, a primary focus of this master plan is to present a set of guidelines for increasing public access to this valuable resource, while protecting and enhancing the natural and wildlife qualities of the waterway. Additionally, a major thrust of this plan is aimed at restoring formerly commercial, and sometimes contaminated sites, for reuse as parkland and open space. For example, enactment of the plan will result in the following:

- Over 125 acres of vacant land, including a former landfill, will be converted to new parkland;
- An abandoned 3 mile-long rail line will be reclaimed and reused as a multi-use trail. As a key link in MDC's regional park system, the new trail will create opportunities for people to observe and enjoy the river's natural beauty and varied wildlife habitats;
- Over 2 acres of wetland at the former Hallet Street landfill will be restored;
- At least 5 acres of woody scrub uplands at Squantum Point will be restored by reducing the existing 950 space parking lot to approximately 225 spaces; and
- Nearly 1 acre of salt marsh along the edges of the new parks will be restored.

### *Recreation Center*

More than 130,000 people live within a mile of the lower Neponset River. Indeed, if the project area were a city, it would be equivalent to the *fourth* largest in Massachusetts. This is an important statistic because it helps us imagine how extremely large the demand is along the lower Neponset River for more parks and recreational opportunities.



*View of the Lower Neponset River, the Neponset Marshes, Portions of  
Dorchester and Quincy. Boston Harbor is in the Background*

Photo By J. Inglosby

A demographic analysis conducted during the course of the planning process found that there is a need for a variety of additional active and passive recreational facilities in the project area, including small parks, neighborhood playgrounds, and larger community parks. (See the Appendix for a discussion of the recreational needs of the planning area).

According to National Park and Recreation Association standards, there needs to be at least one more park at least 25 acres in size within the project area to fulfill the recreational needs of the surrounding population. The Association states that such parks should offer the public a wide variety of recreational resources to respond to the broad range of recreational interests of the general public, including: "areas suitable for intense recreation facilities, such as athletic complexes, large swimming pools, natural areas for outdoor recreation, such as walking, viewing, sitting, and picnicking, and should be easily accessible to the neighborhoods served."



*The New Parks will be Community Assets*

### *Resource for Elderly*

Like the rest of America's population, the median age of residents along the lower Neponset River continues to rise. Census information also tells us that there are a number of neighborhoods along the river with high concentrations of people over 65 years old. This means several things. First, elderly people typically become less mobile over the years and are more likely to seek outdoor recreation close to home. We also know from studies that the elderly generally seek certain types of recreational activities which are in relatively short supply in the area. These include places to take short walks and sit in attractive outdoor settings, places to meet others and participate in recreational and educational activities, and areas in which to garden.

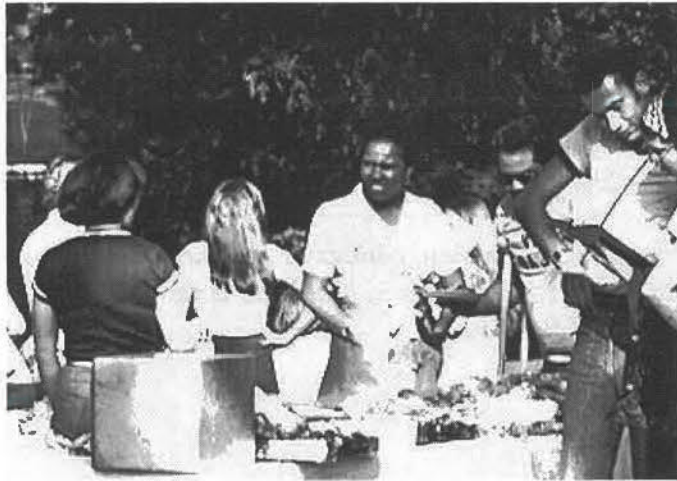
### *Youth Activities*

One of society's most pressing needs is to create more constructive outlets for children of all ages to develop and learn in positive, healthy, and supervised environments. Along with the need for tot lots and more recreational programs, there is a high demand in the project area for more play areas for girls and boys, especially soccer fields.

### ***Community Building***

The Neponset River possesses the potential for helping to reinforce community ties. The new parks and other improvements will create more attractive and secure outdoor places where individuals and family members can meet and participate in group activities on a regular basis.

MDC rangers and staff will sponsor an increased number of recreational and educational programs once the new parks are constructed. The lower Neponset Reservation will also serve as a resource that schools, sports leagues, and other community organizations can use to sponsor programs and enjoy.



*The River will be a Place for Festivals*

### ***Environmental Clean-Up***

The MDC must adhere to Massachusetts Department of Environmental Protection hazardous material regulations and landfill closure guidelines requiring clean-up of the properties located at the former Hallet Street landfill, Neponset Drive-In, and former Stearns Lumber Yard/Shaffer Paper site. In doing so, the MDC first will assess and correct the hazardous conditions of the sites, then assemble and transform these properties into a new public park and wildlife areas.

### ***Better Connections***

Over the last 100 years, the MDC has been acquiring open space and building parks and playgrounds along the Neponset River. This current initiative will knit together these existing resources into a unified system of parks and open spaces that will form the lower Neponset River Reservation.

Weaving through these recreation and wildlife area lands will be the Neponset River Trail, a multi-use trail that will follow the course of the river. In addition to the connections it will make with MDC's properties along the waterway, the trail will generate a number of opportunities for linking with other trails and parks in Milton, Quincy, and the Boston area. The "Trail Connections" section of this plan describes some of these future connections in more detail.



*Bicycling is Popular among Individuals and Families*

### ***Transportation and Clean Air Improvements***

The creation of a multi-use trail linking the lower Neponset River to University of Massachusetts' Harbor Campus, Castle Island, and downtown Boston will provide an off-road route for cyclists riding to and from work, reduce the number of cars using the roads, and slightly reduce the area's air pollution. It is widely accepted in transportation planning that such small reductions have the potential for promoting change on a larger scale over time.

### ***Nearby Parks and Open Space***

As many as 25% of the households in some neighborhoods along the lower Neponset River do not own cars, and therefore need parks and open space near to where they live, or readily accessible by the new trail or public transit.

### ***Environmental Education***

There is a need in urban areas for outdoor classrooms where students and others can come together to learn about the natural world. Along the Neponset River, there are many unique environments that increasingly are being used by community groups, environmental organizations, and the MDC as outdoor classrooms. These include areas as diverse as the grassy salt marshes located around the mouth of the river to the "rice islands" above Lower Mills. In the future, restoration of previously contaminated areas along the river will become equally important venues for offering environmental education lessons.

### ***History Lesson***

The history of the lower Neponset River is a rich one. This plan includes numerous recommendations for creating interpretive signs, design ideas, and programs for conveying historical information about the area's past to trail and park-users.



*The Neponset River has a Rich History*

### ***Economic Development***

In addition to the jobs that are created as result of constructing, maintaining, and securing parks, the types of recreational facilities outlined in this plan will attract park-goers, especially trail-users, who will purchase food, refreshments, and recreation-related products at stores in and around the park. Studies of similar trails in other parts of the country have shown that visitors spend from \$3 - \$11 each when using such trails.

## Project Location

Approximately 27 miles long, the Neponset River begins in the Town of Foxborough and drains nearly 120 square miles of land before it flows into Boston Harbor.



*Project Area: Lower 4 miles of 27 mile-long Neponset River with Headwaters in Foxborough, MA*

The lower Neponset River encompasses a four mile-long section of the Neponset River between the City of Boston's Mattapan and Dorchester neighborhoods, the Town of Milton, and the City of Quincy. More than 130,000 people live within one mile of this section of the river. In addition to flowing past a number of densely populated residential neighborhoods, the waterway passes several commercial and light industrial areas as it approaches the mouth of the river. This master plan focuses on presenting recommendations for preserving and improving public access to the lower Neponset River Reservation, which includes approximately 842 acres of MDC-owned upland, wetland, and river bottom between Mattapan Square and the river's mouth.

## Master Plan as a Guidebook

This master plan is intended to serve as a guide for making decisions about the future of the lower Neponset River Reservation, decisions which will address the short-term needs and long-term possibilities for improving and enhancing the waterway.

Few will deny that the river is an extraordinary natural and recreational resource. However, it is one that needs attention. In recent decades, sections of the river have become damaged by pollution, inappropriate development, and neglect. This plan is intended to ensure that the waterway is preserved, enriched, and brought to a condition where it will flourish again. It is about making an investment in a natural system and a public asset that promises immeasurable dividends.

The master plan describes a set of recommended actions for protecting and enhancing the lower Neponset River. It summarizes the planning and design proposals which were developed after a year long study of the waterway undertaken by the Metropolitan District Commission in 1995, and it encompasses the ideas, concerns, and aspirations of a wide range of individuals and organizations.

The plan is intended to be a flexible tool. While it represents a comprehensive set of actions which were carefully prepared and then discussed in numerous community meetings, specific elements of the plan may be revised over time as people's interests change, and as new information comes to light about the various proposals. The purpose of the plan is to construct a foundation and framework to support the decisions which will need to be made about the lower Neponset River in the future.

## Organization of the Plan

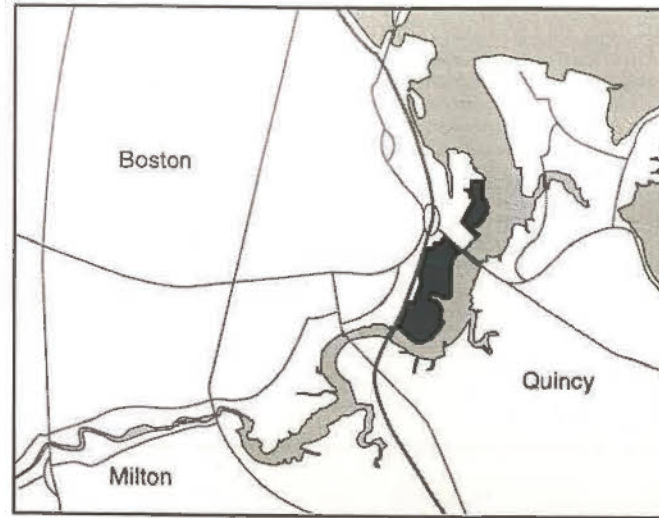
The Master Plan is published in two volumes: the Master Plan presents a range of initiatives for protecting and improving the lower Neponset River, the Appendix contains related and supportive material developed during the planning process.

The Appendix provides information about the history of this section of the waterway, ecological resources of the river, relevant demographic data, land use patterns, issues and opportunities identified during the process, and other related materials. The Appendix also includes a brief description of the waterway from Mattapan Square approximately 4 miles upstream to Paul's Bridge.

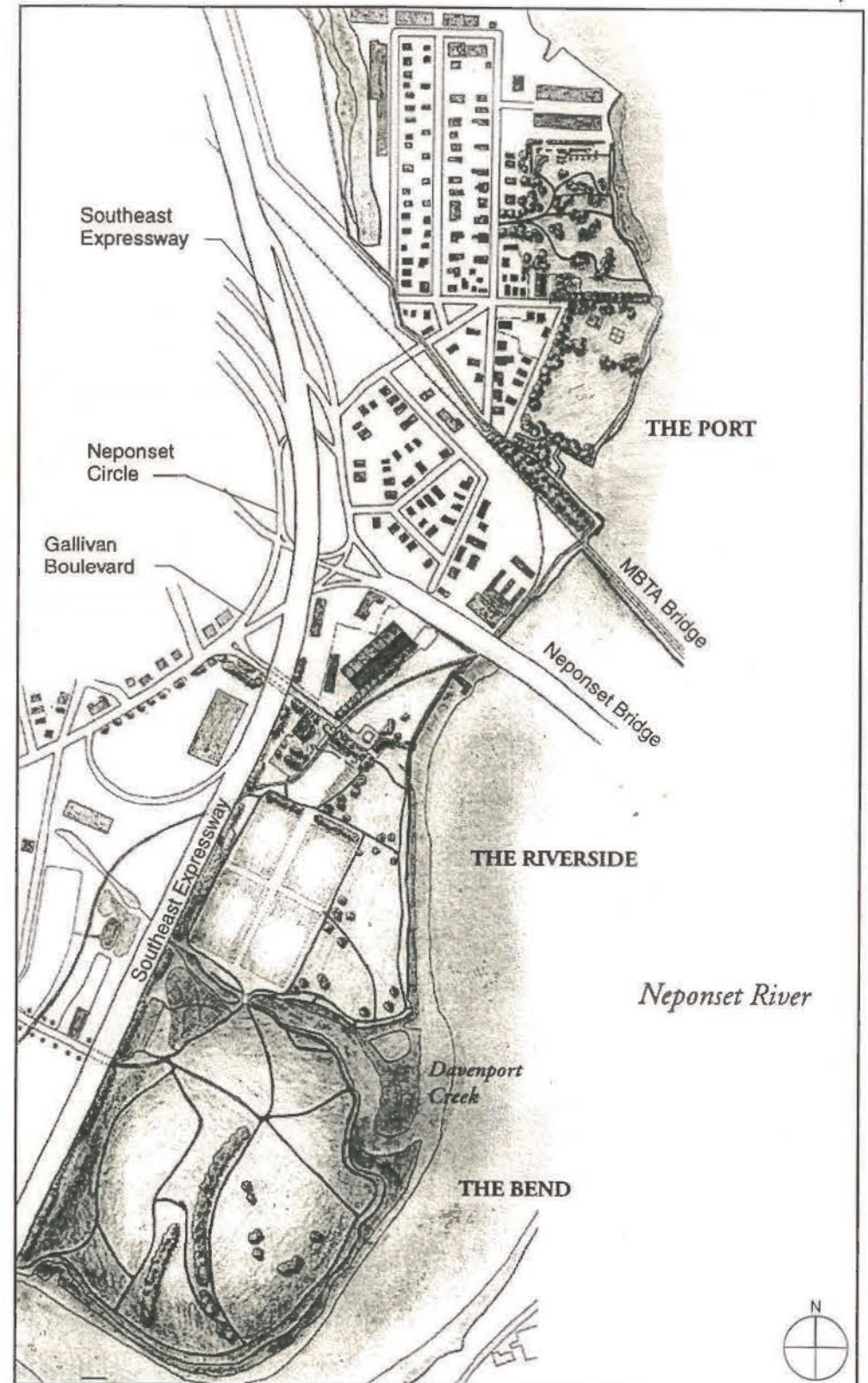
The MDC has planning maps, design drawings, and project slides which are available to the public for use as reference materials.

For more information, contact or call the MDC Planning Office, 20 Somerset Street, 8th Floor, Boston, MA, 02108, (617) 727-9693 x264.

## The Plan



*Highlighted Area: Pope John Paul II Park*



*Pope John Paul II Park includes: The Port, The Riverside, and The Bend*

# Pope John Paul II Park

## PLAN AND DESIGN

### Three Areas

Approximately 72 acres in size, Pope John Paul II Park is located on the southern edge of the City of Boston between the Southeast Expressway, Neponset River, and Port Norfolk neighborhood. While it will be managed as one facility, the park will consist of three distinct park areas.

**The Riverside:** Upstream will be a 26 acre park area referred to as "The Riverside," which was formerly used as a drive-in theater.

**The Bend:** Further upstream at the place where the river turns to the west will be the 31 acre park area referred to as "The Bend," which was once a City of Boston landfill.

**The Port:** Closest to the mouth of the river will be a 15 acre park area referred to in the plan as "The Port," which once housed a lumber yard, wharf, and fishing pier.

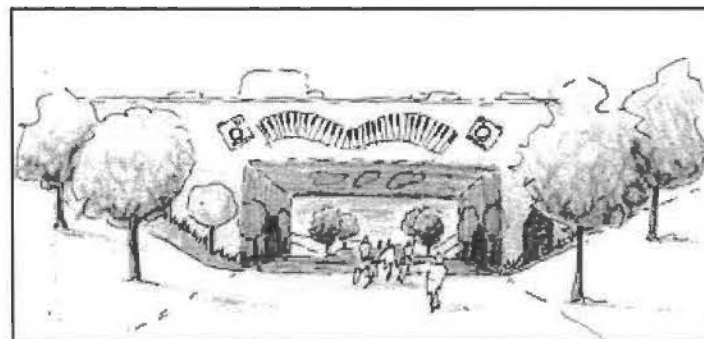
### Entrances

It is important to make connections between the park and surrounding areas. Since the park will be visually separated from most nearby neighborhoods and local streets by the 25 foot high Southeast Expressway, it will be necessary to construct prominent entrances and park edges that extend out from the new park and encourage the public to enter.

When creating new entrances into the park, the MDC will convert the three existing dimly-lit tunnels which lead underneath the Southeast Expressway into attractive and safe park entries. This will entail installing overhead lights, eliminating any water leaking into the tunnel from overhead, rebuilding some sidewalks and road surfaces, and creating colorful and inviting visual environments around the area leading into the entrances.

The entrances will be the single most important place to announce the park's existence, location, and identity. The design and operation of these areas will be as important to the new park as a coming attraction is to an upcoming movie, or a display window is to a store. Everything about the entrances must be welcoming. Every inch of them must say, "Please come in."

An eye-catching park entrance to the Bend at Hallet Street would be to paint a mural, or build a three-dimensional collage of some of the products once manufactured at the Keystone Building, such as cameras, pianos, and children's toys. These could be constructed as a community project by local designers and tradespeople to reflect the vibrant industrial history of the Keystone Building.

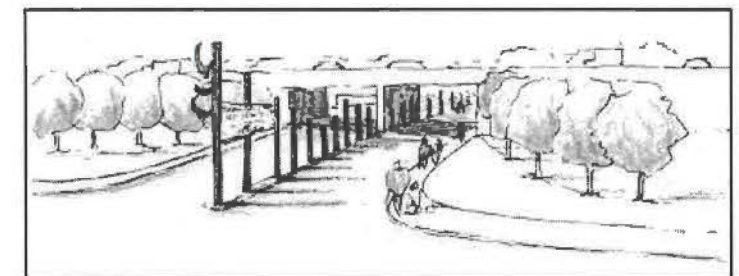


*Park Entrance at Hallet Street*

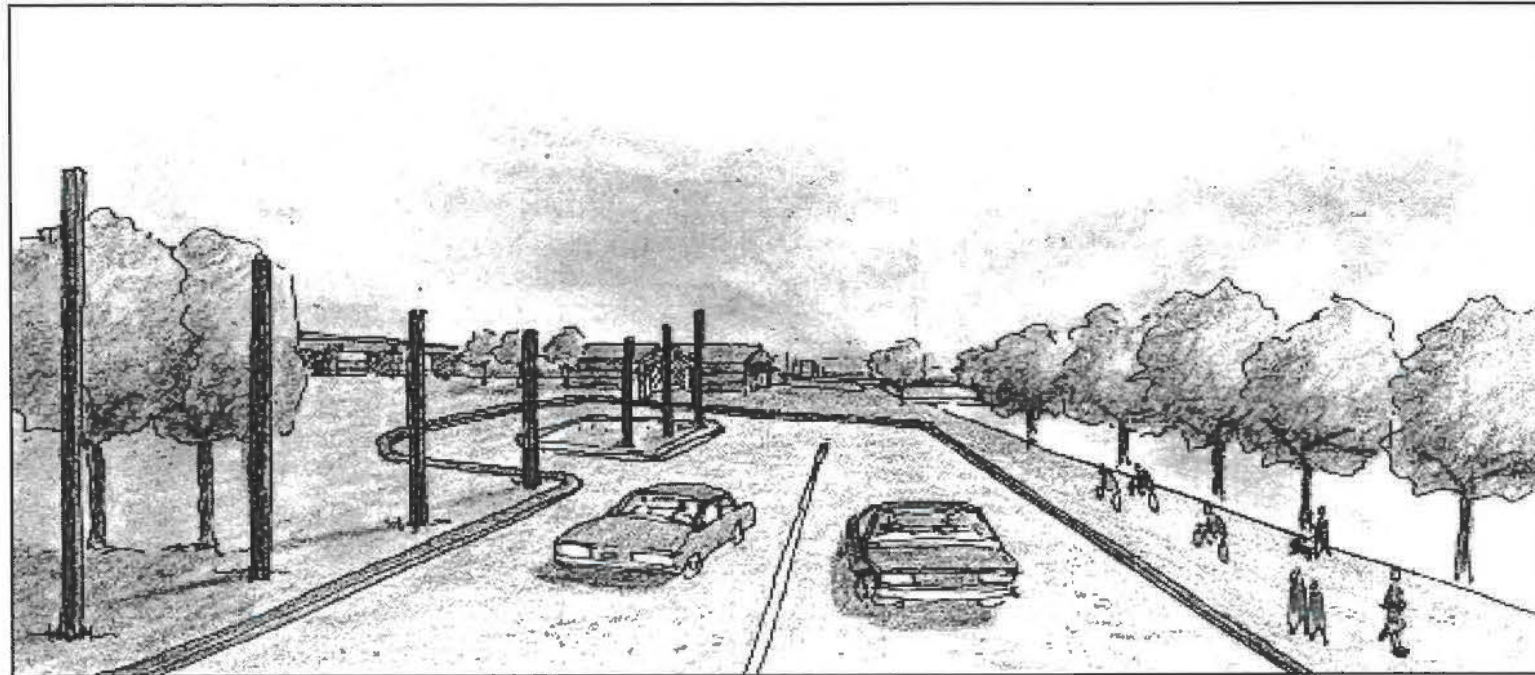
A mural or collage with a river and wildlife theme would help to create a friendly and informative gateway for park-goers entering the Riverside via the Neponset River Trail, a multi-use trail connecting the park to the harbor and points west.

The main entrance to the park will be located off Gallivan Boulevard near Neponset Circle in the same place as the former drive-in entrance. Since the new park will be a riverside park, the first thing the main entrance on Gallivan Boulevard will attempt to do is give the passersby and park-users a glimpse of the river. The Riverside's interior space has been organized around creating a clear view corridor from Gallivan Boulevard, past the main entrance, and to the river. Buildings, trees, and other design elements have been lined up in a row to dramatize the view. When someone passes by the park entrance sign stating, "Pope John Paul II Park – The Riverside" and turns for a closer look, the river corridor is immediately in view. This image should stay with people and draw them back to the park another time. For the individual who walks or drives to the park, seeing the waterway as soon as he or she turns into the entrance is desirable because of the inviting sense of the corridor's openness ahead.

The entrance design in this plan calls for a line of evenly-spaced wooden piles to begin at the main entrance, follow alongside the view corridor, and continue out into the river. These piers will accentuate the view corridor, create a visual separation between the new park and MDC's adjacent maintenance yard, and provide the focus for the first of a series of interpretive exhibits aimed at revealing the river's history. Wooden piles have been placed into the river ever since the time of the first European settlers as a way to create solid ground for moving people and goods across the marsh and



*Park Entrance at Neponset Circle*



*Proposed Park Entrance After Passing Under Southeast Expressway*

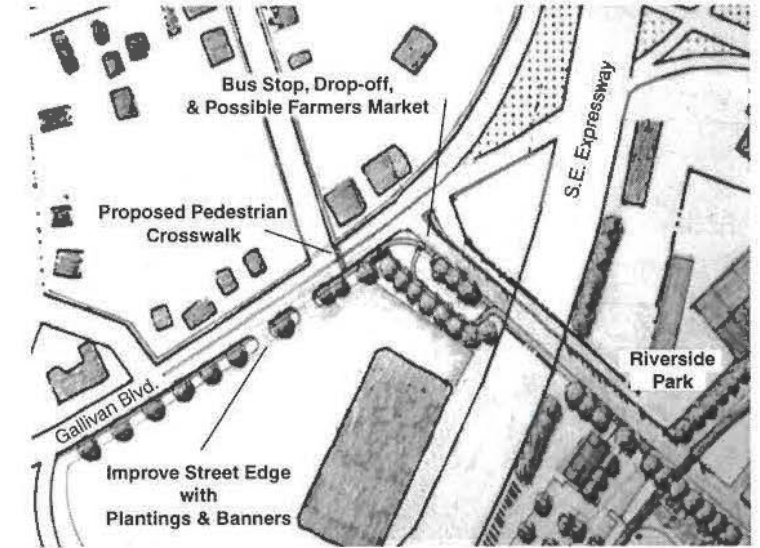
mudflats to and from boats docked in the river's deeper channel. Today, scores of wooden piles line the shoulders of the river, and like deserted cellar holes found in the forest, they live on as artifacts of the area's proud maritime past. This, and other tales of the Neponset River, will be explained in interpretive exhibits throughout the park.

One of the most important messages that the main entrance can convey is that the park is popular and well-used. This can be partially accomplished by expanding the existing entrance driveway off Gallivan Boulevard to create a sheltered "drop-off and pick-up" area. Users of the MBTA's "The Ride" van service and others with more time to drive into the park will find a second area to discharge and pick up passengers right outside the park center building. The MDC is investigating whether there is enough interest and space to use the Gallivan Boulevard drop-off and pick-up area as a roadside farmer's market on certain days of the week. As for new vegetation in and around the main entrance, it seems appropriate that tall grasses and other vegetation found along the river, should be planted at and along the main entrance to give the public a sense of the green space that awaits them inside the park.

Another way to generate activity around the main entrance will be to work with the MBTA to add the park as a stop on nearby bus routes. This will help to make the park more accessible for those who rely on public transit, and contribute to the park's overall level of use.

Periodic changes in the appearance of the main entrance will help to create an image that the park is a dynamic place. This can be accomplished by announcing upcoming events on the main entrance sign, and by changing certain plantings around the entrance from season to season.

With the new park attracting a large number of pedestrians to the area, the MDC will make a series of improvements to the area surrounding Pope John Paul II Park to ensure that park-goers know how to find and enter the new park safely. On Gallivan Boulevard, alongside the park's main entrance between High Street and Neponset Circle, the following improvements are proposed: marking pedestrian crossings and planting street trees and other vegetation. Signs stating: "Park Area: Watch for Pedestrians Crossing" should be placed at key locations. As a special priority, the MDC will ask the Massachusetts Highway Department to install one of these



*Main Riverside Park Entrance at Gallivan Boulevard*

signs, as well as rumble strips to cause reductions in speed, on the Gallivan Boulevard exit ramp off the Southeast Expressway.

A traffic study will be needed to determine the necessary steps for ensuring the safe passage of pedestrians across Gallivan Boulevard and Hallet Street to the new park. One key improvement might be the construction of a crosswalk and pedestrian-activated traffic signal on the Boulevard at the corner of Clover Street across from the park's main entrance. This will allow pedestrians on the north side of Gallivan Boulevard to cause traffic to stop so that they may cross to the south side of the Boulevard, and use the main park entrance. It should be noted that a pedestrian bridge is the least preferred option for crossing Gallivan Boulevard because these bridges are expensive to build, seen as long and difficult routes for many elderly and physically challenged individuals, and are sometimes visually incompatible with their surroundings.

Improvements to Gallivan Boulevards, such as hanging colorful "Back to the River" banners along the street and planting more street trees, will help improve the "asphalt strip" character of the commercial area located outside the park's main entrance. The banners will also help to remind passersby that there is a park and river on the other side of the rows of stores, parking lots, and highway. A number of local business and nonprofit groups have already expressed an in-

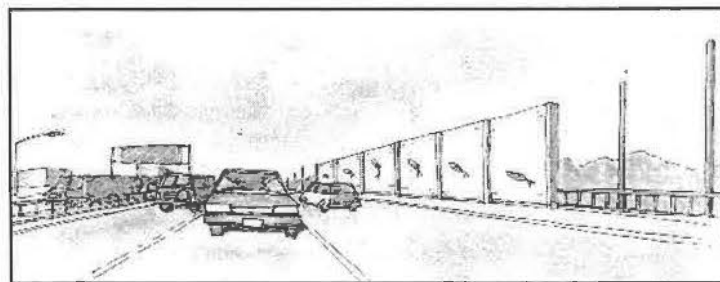


terest in having the name of their company or organization on these banners in recognition of the contribution of funds or labor to the proposed Neponset River "Adopt-a-Park" program.



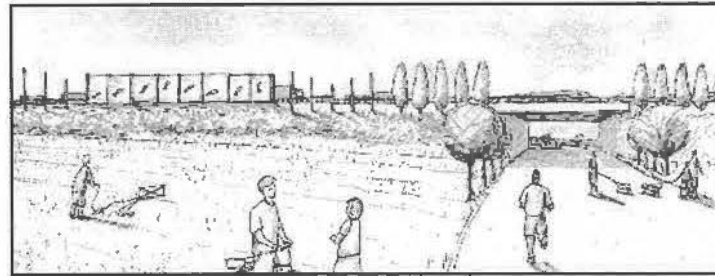
*"Back to the River" Banners along Gallivan Boulevard*

In addition to making these improvements to Gallivan Boulevard, steps for improving the character of the noisy and imposing Southeast Expressway will be explored. For instance, one idea will be to discuss the possibility of constructing "environmental education" sound barriers in certain places along the top of the embankment of the Southeast Expressway which will contain large cut-outs of various species of Neponset River wildlife. Designed to allow natural light to pass through the openings, the panels would form a series of silhouettes, which would resemble a moving image of birds flying and fish jumping, as if turning a picture "flip book"

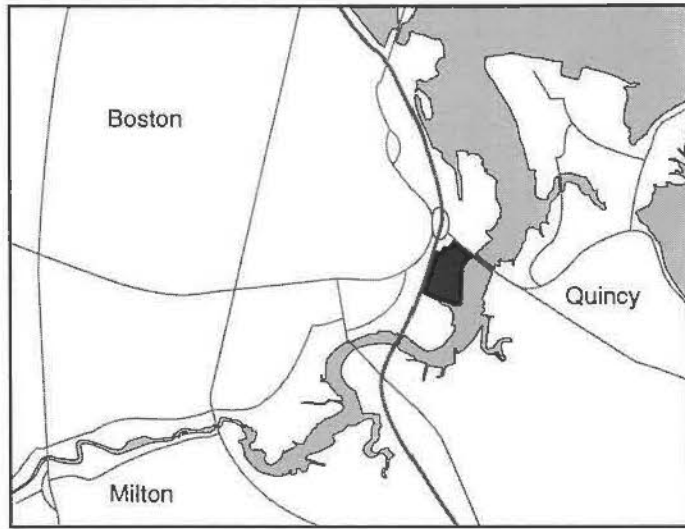


*Soundwalls along eastern edge of Southeast Expressway*

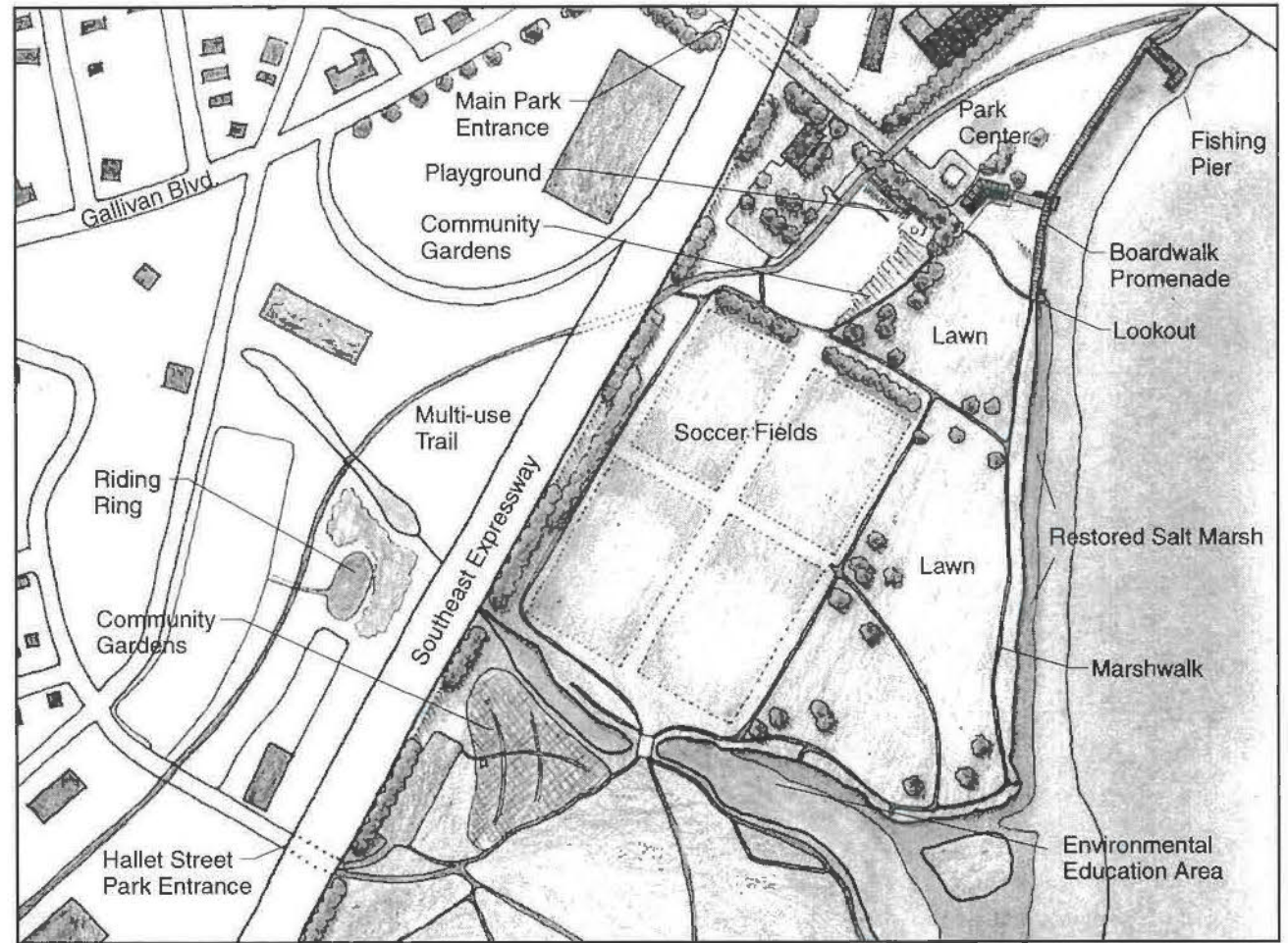
from the vantage point of passing motorists. As part of a larger design that includes a variety of vegetative plantings and wooden piers, the noise barriers would serve the dual purpose of helping to reduce noise levels inside the park, while also informing motorists that they are passing a special place. One criticism may be that the panels will distract motorists. However, when carefully placed and designed, the panels should, be no more intrusive than the billboards and signs which line our roads today.



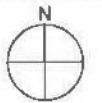
*View of Soundwalls from Park*



*Highlighted Area: The Riverside*



*Pope John Paul II Park: The Riverside*



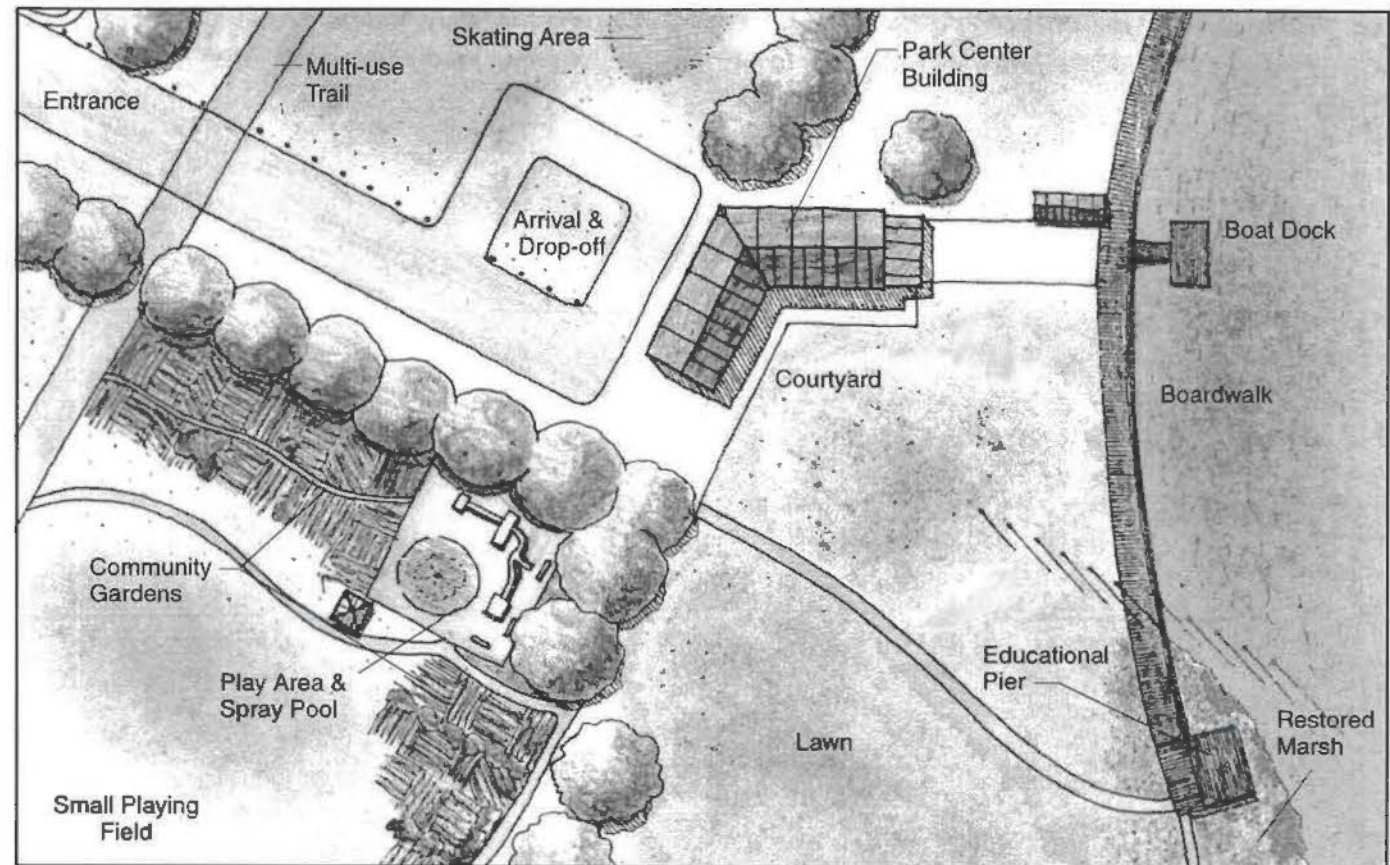
## THE RIVERSIDE

Of the three park areas, the Riverside is the most suitable for developing intensive park uses, and is where the majority of the Pope John Paul II Park facilities will be located. There are several reasons for this. One is that the soil on which it will be located appears to be relatively "clean" compared to the Bend area of Pope John Paul II Park. The Bend was used as a landfill and will have to undergo a more intensive environmental clean-up process that will result in the creation of a low hill that will cover and seal the old landfill. While the hill will be an ideal place for a number of recreational activities, such as walking, jogging, mountain biking, sledding, picnicking, gardening, and possibly learning golf and horseback riding, it would require extensive engineering and significant costs to construct level playing fields there. Redevelopment of the Riverside portion of the park will, however, result in a large and generally level area that can more easily accommodate playing fields and park buildings. The large level area will also make it easier for park-users of all ages and abilities to move around and enjoy themselves.

### *Clustering the Facilities*

A large number of the Riverside's activities will be located between the main entrance and the river. Concentrating activities in this area is desirable since many park-users will be small children, the elderly, and individuals with special needs who will appreciate being able to travel relatively short distances among the main entrance, parking lot, river, play area, food concession, and restrooms.

Another reason for clustering many of the park's recreational facilities in this area involves public perception. The future success of the park will depend, in large measure, on communicating to the public that the park is active during a large part of the day. Such an impression is important because many potential park-goers want to know in advance that they will be around other people in a comfortable environment before they go to a park. Establishing this image in the public's mind ahead of time will be especially important in light of the park's location on the other side of the Southeast Expressway.



*Plan: Park Center at the Riverside*

### *Parking*

A sidewalk and a two-lane road will lead directly from the park's main entrance toward the river. The row of wooden piles mentioned earlier will be on the left, and to the right, just past an existing MDC salt storage shed, will be the Neponset River Trail route through the park and a parking lot for approximately 58 cars. The parking lot will be the largest of five serving the Riverside, Bend and Port areas of the new park, which together will contain a total of approximately 128 parking spaces. This figure is comparable to the ratio of parking spaces at similar parks.

### *Play Space*

Beyond the parking lot and Neponset River Trail will be a small field, bordered on two sides by a children's playground, and spraypool. The playground, spraypool, and small field have been placed close to the parking lot and recreational building so that the adults and younger children playing here

will have a short distance to travel to the parking lot and the building's facilities. Locating the playground, spraypool, and field adjacent to one another will enable parents and counselors to sit in the shaded play area, while watching the children in the playground, spraypool, and field.

### *Garden*

A "teaching and community" garden will be located just down the path from the playground and serve as a place where representatives of different horticultural and garden clubs could teach a whole range of courses and workshops in gardening for beginners, as well as experts. The garden was placed in this location anticipating that a large number of older park-users will be interested in the garden, and are likely to prefer a location close to the recreation building.

Placing the garden next to the children's playground was also intentional. The experience of other similar arrangements of

play spaces and gardens has shown that some children become interested in gardening over the course of the spring and summer as the flowers and vegetables begin to grow. Some children will be curious, but refrain from becoming involved until special efforts are made to involve them. The gardening teachers could be encouraged to lay out different mazes each year with annual plants, and make other special efforts to involve the children. As the country's most popular leisure activity, gardening offers unlimited opportunities for creating interactive situations for people of all ages and backgrounds.

For those seeking their own garden plots, a community garden could be located next to the teaching garden. Additional community gardens will be also available in the Port and the Bend.

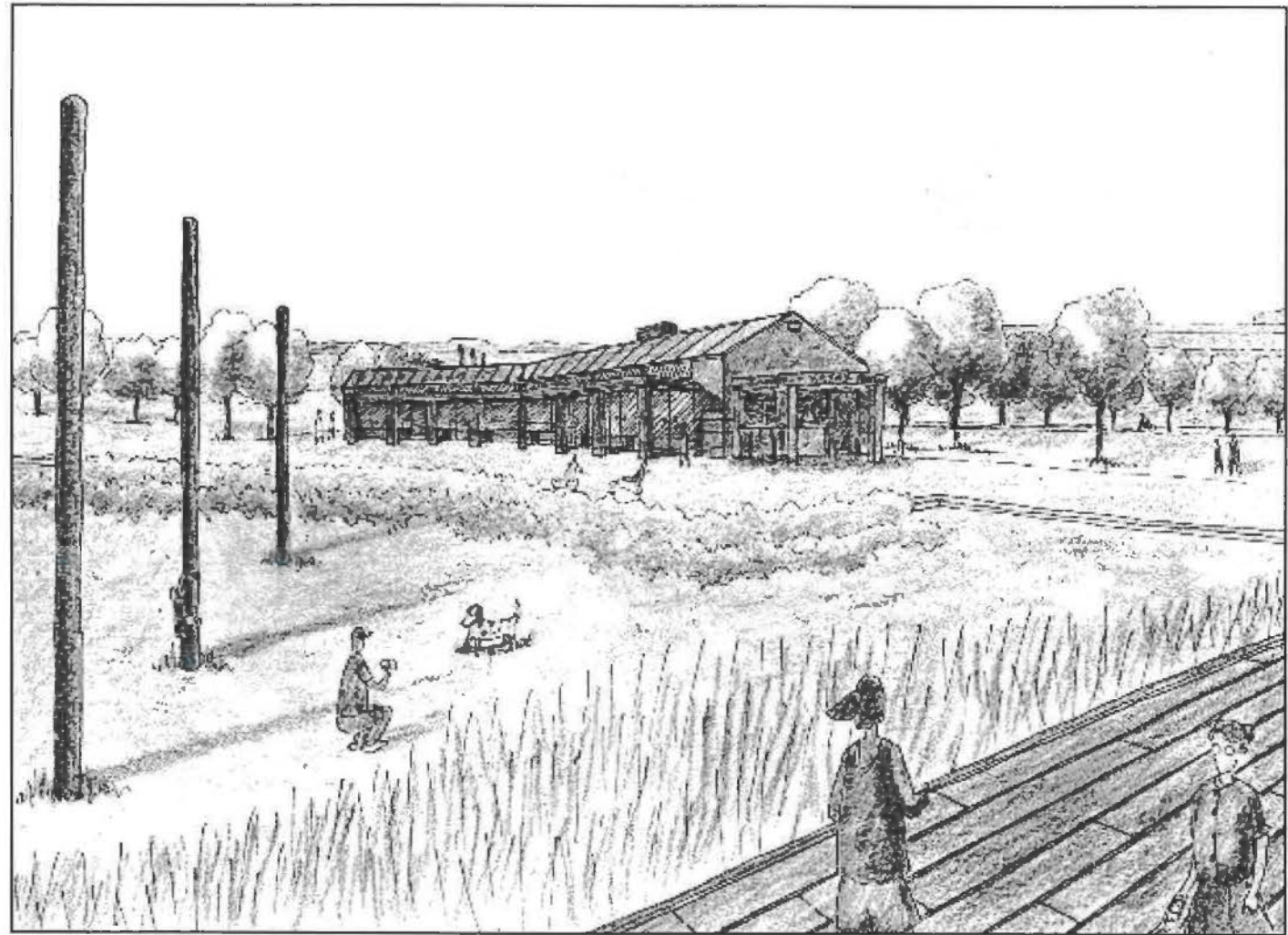


*Photo of Teaching Garden at a Park in Chicago*

### **Park Center Building**

Establishing a small, but dynamic multi-purpose park center building at the Riverside area is essential to achieving the goal of creating a park that is alive with activity from sunrise into the evening throughout the year.

Having such a park center building at the Riverside is important for another reason. This area was once part of Neponset Village before the Southeast Expressway and Neponset Circle interchange were built in the 1950s. There were places to buy a meal and eat along the river. It was a popular place for neighbors to sit along the river banks and talk. Former residents remember lights glimmering in the evenings as music played in the dance hall on the opposite side of the river. As



*View of the Proposed Park Center Building from Boardwalk*

they do today, many local residents fished at the end of Neponset Avenue. Even though they were not allowed, children swam. From here, families would climb into small boats and row across the mouth of the river to Squantum Point and Buckley's Bar to dig for clams.

With the image of a village in mind, the park center building and area around it are intended to create a central area where park-users can once again gather and sit and watch the light on the water, listen to music, eat outside, talk for hours, fish for blues and stripers, and climb into boats for a day on the river. The aim is to make a place where old community ties can be strengthened and new ones created.

Two wings of the approximately 2,500 square foot park center building would open up toward the river, forming a courtyard sheltered from the sound of vehicles passing on the Southeast Expressway, Neponset Bridge, and MBTA rail bridge. There could be an outdoor exhibit depicting the history and ecology of the Neponset River on the exterior wall that runs parallel with the river and row of wooden piers. This area could also be used for displaying temporary exhibits, including school projects and community artwork. The main entrance to the building would face the entrance road and passenger pick-up and drop-off. Inside would be the park ranger headquarters, maintenance staff offices, water fountains, public restrooms, and information display.

Along with MDC personnel who will be primarily responsible for managing the recreation building and parklands, there may be opportunities to share operation of the recreation building with one or more interested nonprofit groups. One example of such a co-management arrangement, and one which exemplifies the type and quality of park center building proposed in this plan, can be observed at the Community Boating facility along the Charles River Esplanade. Paid staff of the nonprofit organization operate the boat house, rent the boats, clean the restrooms, oversee environmental education programs, and sponsor special events.



Across the hallway from the ranger's offices, will be the "River Room," which would be a small education center for those interested in learning more about the Neponset River, including its history and ecology, as well as about the natural environment in general. The center could contain a space and facilities for demonstrations, as well as a fish tank, shelves of maps, magazines, books, and artifacts for viewing. Perhaps it will become a place where environmental literature, photos, and postcards could be purchased. Self-guided, audio tape tours of the river, similar to those used in many museums, could be rented here. Serving the same purpose as trail maps, these tapes would lead a person from point-to-

point along the river, and cover such topics as the river's Native American history, early settlement, industrial age, railway history, wildlife, and so on. Such tapes are extremely popular among visually impaired people, as well as older adults, many of whom are drawn to parks which offer a variety of interpretive tours.

Next to the River Room could be a storage room for patio chairs, sports equipment, gardening tools, and other equipment regularly used by park groups.

Down the hall from River Room might be a rental center, where park-users could rent bicycles, in-line skates, row boats, canoes, sea kayaks, and cross country skis and possibly ice skates in winter. Since there will be a number of businesses which would be interested in being located along the river and multi-use trail, it has been suggested that the MDC seek legislative authorization to lease the space as a private concession and have the revenues dedicated for park purposes.

In the recreation building could be a multi-purpose space, or Great Hall, where people can attend a lecture or class, read a book, play a game, hold a meeting, or watch a performance. The room might have a fireplace, a small raised performance area, movie projection screen, or kitchen area for groups sponsoring special dinner events. The walls could be used for exhibitions by local artists, students or community groups.

There will be a canteen at the end of the recreation building facing the river operated by either a nonprofit organization or business. A person purchasing food and refreshments here could eat beneath a shaded patio between the canteen and river, along the boardwalk, or inside the Great Hall.

### *Courtyard*

With the two wings of the recreation building reducing the sound of traffic, the main courtyard will be one of the quietest outdoor spaces in the park. A raised performance area will be located in the corner of the courtyard nearest the recreation building. During the summer, musicians and other performers will be scheduled to play here during lunch hours. The stage area will also be available to groups wishing to sponsor evening performances and concerts.

In recent years more and more parks are using lightweight outdoor chairs instead of fixed tables and benches in courtyards. It seems people enjoy the flexibility of moving chairs around, from pulling up a chair next to some friends, to sitting alone for awhile then moving depending on the sun.

It is planned that alongside the courtyard will be a circular outdoor fireplace available for scheduled use by groups on cold weather nights for outdoor sing-alongs, or to build fires on days when it is cold enough for ice skating. As is commonly done in parks without formal rinks, park personnel will fill with water and freeze the flat grassy area on the north-eastern side of the recreation building next to the existing maintenance building for winter skating.

### *Lawn*

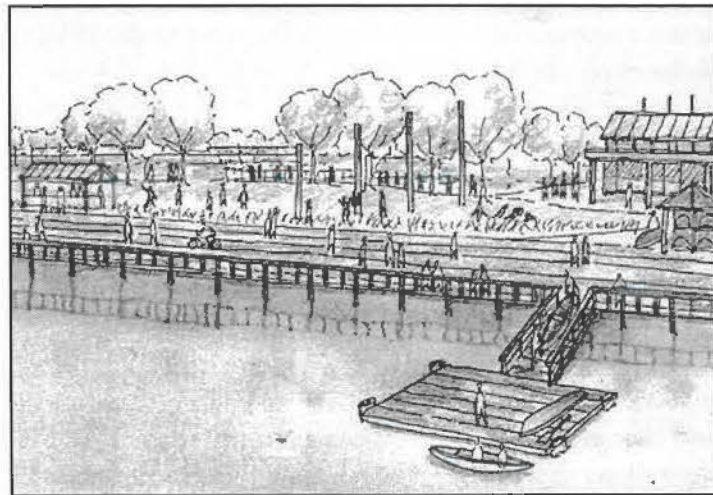
There will be a large lawn extending out from the courtyard toward the river. This will be an overflow area on occasions when the courtyard becomes too crowded, and a place for people who want to sit on the grass and listen to a performance, read, sun bathe, and spread out a picnic blanket. The lawn also will be the primary area in the park for holding large outdoor events, such as fairs and festivals sponsored by schools and civic groups. Art associations may want to use it for outdoor shows or for placing temporary sculpture installations.



*Example of Park Courtyard and Lawn*

### ***Boardwalk Promenade***

A 10-12 foot wide boardwalk will be constructed along the shore to allow park-users to walk close to river's edge. The boardwalk will run alongside the river for approximately 500 feet. A wooden pier, approximately 40-50 feet long, will be constructed at one end of the boardwalk nearest the Neponset Bridge for people to fish. In the middle, across from the park center building, will be a boat storage shed and dock. All along the boardwalk there would be benches, and possibly covered benches, for people to sit and look out over the river.

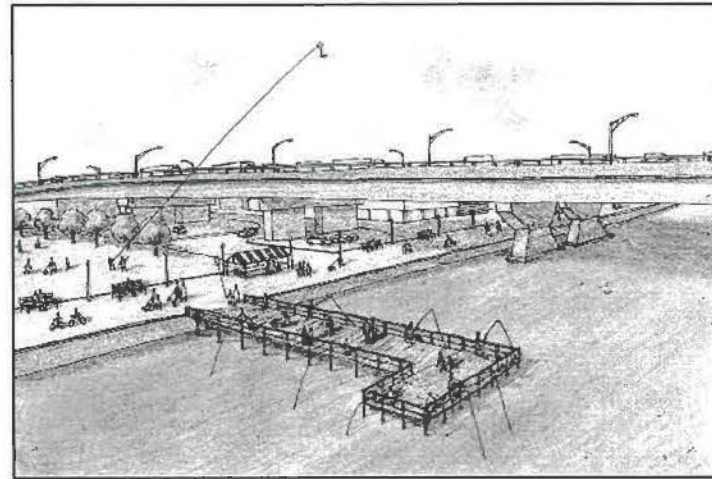


*Boardwalk Promenade and Boat Dock*

### ***Fishing Pier***

According to a biologist for the Massachusetts Division of Marine Fisheries, the best location for a fishing pier is at the end of the boardwalk alongside the Neponset Bridge because it will be over a small mussel bed. The bed attracts a wide variety of fish, including striped bass, which come to feed off the mussels. The existence of the bed is why so many anglers traditionally have fished from underneath the Neponset Bridge. The passing of schools of herring and smelt on their way upstream make this a popular fishing area.

Massachusetts Division of Marine Fisheries staff feel that a pier here would make this an even better fishing location because it would allow for fishing over the bed, as well as cast closer to river's main channel for other fish swimming in



*Fishing Pier*

the deeper water. The pier will also create a more attractive environment for the anglers compared to fishing under the dark bridge. Approximately 15-20 feet wide, the pier would be wide enough to accommodate both anglers and other park-users.

The Massachusetts Public Access Board, the public agency responsible for building facilities that allow the public to gain better access to the state's waters is a possible source of funding for at least half of the pier and a nearby parking lot. It is also could make the funds available within a relatively short period of time, which could open up this portion of the riverfront to public use in the near future.

### ***Boat Dock***

Along the boardwalk, across from the park center building, will be a boat storage shed and dock. While smaller in size, this boat dock might be a version of the popular Community Boating facility along the Charles River. There could be boats to rent, instructional classes, and races. One can imagine annual special events, such as a "Neponset River Regatta," made up of colorfully outfitted and brightly lit boats leaving from this dock to join boats from other marinas and boat clubs in a sunset parade along the river.

Limited dredging around the dock will be necessary so that boats can use the facility even when it is low tide. Dredging

around the dock will also allow motorized boats to use the dock for river cruises, trips to places inside the harbor, and for outings to the Boston Harbor Islands State Park. It will make the new park accessible to tour and ferry boats and will



*A Public Boat Dock on the Neponset Creates Opportunities for River and Harbor Cruises, as well as Outings to Boston Harbor Islands State Park*

enable those without their own boats to participate in the boating experience. Few other facilities in this plan will do more to create opportunities for the public literally to get "Back to the River."

### ***Lookout and Wildlife Education Pier***

A combination "lookout and wildlife education" pier would be located at one end of the boardwalk directly across from where the wooden piers lining the main entrance view corridor enter the river. The main entrance path would lead directly to this pier. The approximately 12 foot long lookout would create a fine vantage point for enjoying views of the river. Built into openings in the perimeter railing will be metal educational displays. Designed to allow natural light to pass through cut out shapes and letters in the metal, the displays would provide information about some of the wildlife once found, and still living along the river. This type of metal display has been recommended for use here, and on signs throughout the park, because it is durable, weathers well, and resists vandalism and graffiti.



David W. Stokes

### **Marsh Walk**

The boardwalk promenade turns into a meandering stone dust path after the lookout and wildlife education pier. The path will pass a large open field that can be used as an informal play and sports area. Along the river's edge, the path will pass a continuous area of restored salt marsh that will stretch all the way around the Riverside and the Bend, and include cord and spike grasses, goldenrod, and glasswort. Restoration of a salt marsh along this part of the park will reflect the historic natural character of the river and help to attract wildlife, such as herons, egrets, kingfishers, and migratory shore birds.

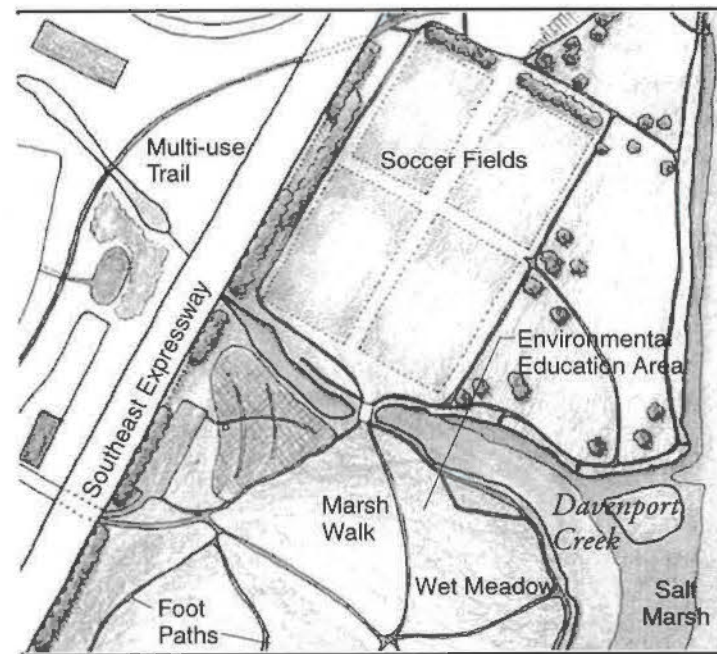
### **Soccer Fields**

There will be four soccer fields between the highway, park center area, and Davenport Creek on the west. More than any other recreational activity, there is an unmet and growing need for youth soccer fields in this portion of the metropolitan area. In the entire City of Boston, there is not a single dedicated soccer field. In the Town of Milton, there are only private fields. While the City of Quincy has a few dedicated fields, demand there exceeds supply, so many play on baseball fields when they are not in use.



According to local youth soccer organizations, the soccer fields would become a highly used "youth soccer complex." In addition to allowing their own young people to play against one another, the fields would allow these leagues to sponsor tournaments, which would allow their players to improve by playing against soccer players from nearby suburbs and other communities around the state.

The four fields have been laid out along an east to west axis to minimize the effect of sun shining in the players' eyes. According to the soccer leagues, players may use movable cones and goal posts to create smaller fields so that more than four games could be played at one time. The possibility exists for local soccer associations to play a major role in maintaining the fields, including rotating the layout so the fields will be evenly used. When the fields are not being used by the youth soccer leagues, the fields will be available for playing other sports.



*Soccer Fields/Davenport Creek Area*

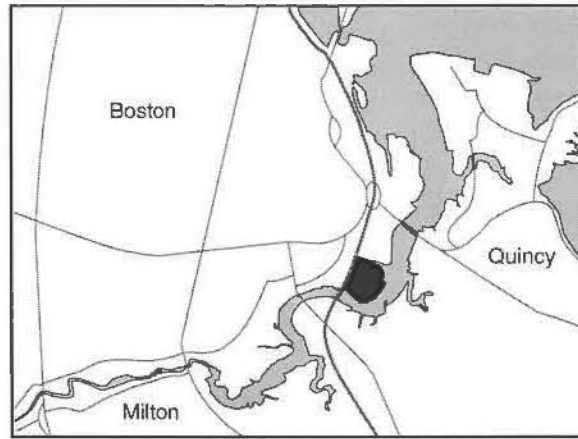
The soccer fields have been placed along the highway because they will generate a relatively high level of noise. Whenever possible, active recreational facilities such as these have been located away from the river, seating areas, lookouts, walking paths, and other quieter areas of the park.

### **Davenport Creek**

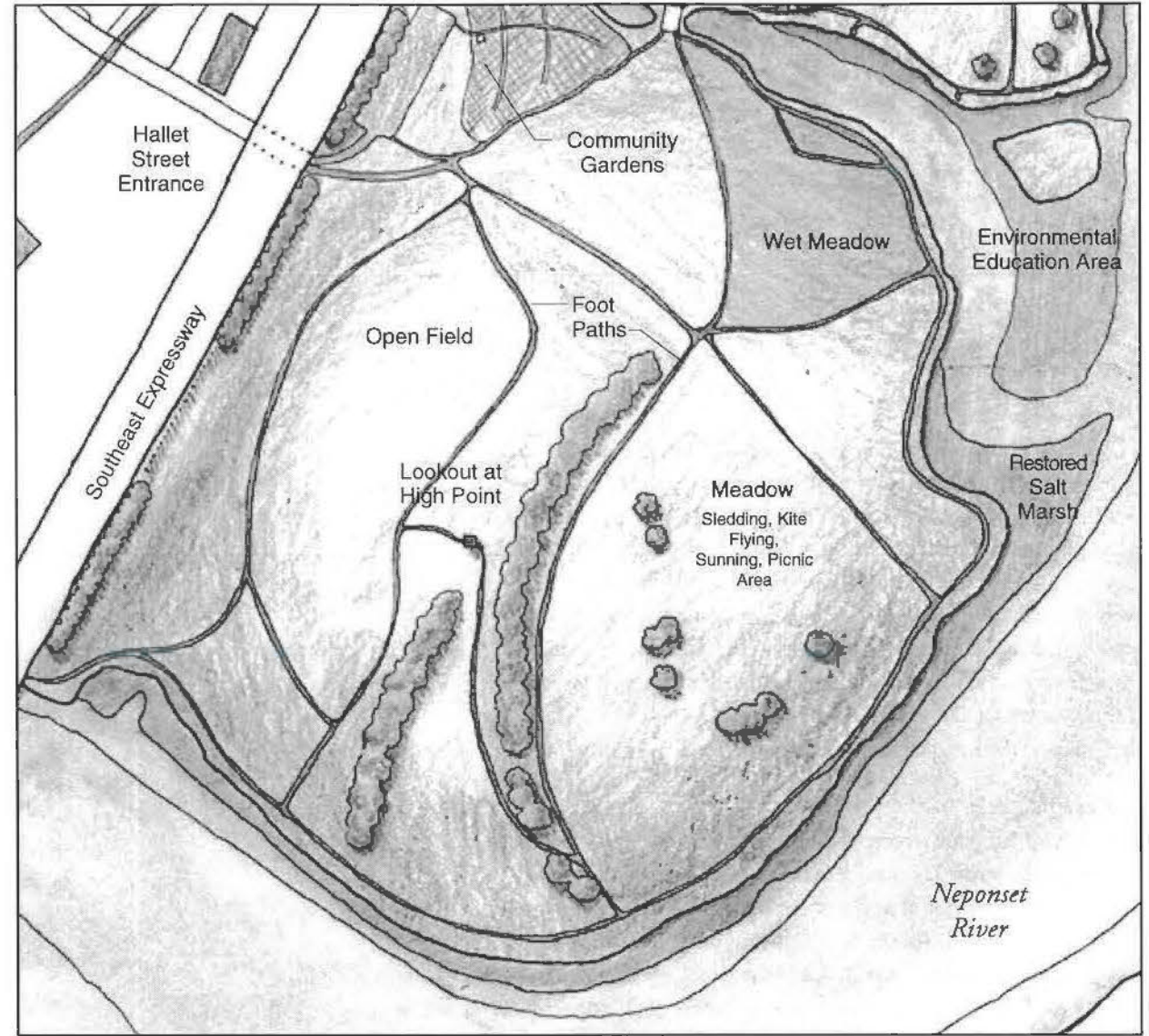
Davenport Creek is a small tidal stream flowing north to south that separates the Riverside and the Bend. The Creek is a favorite place for canoeists to come and watch herons and other birds in the trees along its shores. While much, if not all, of the vegetation here unfortunately will have to be cleared during the course of capping the landfill and the park redevelopment process, new plantings of salt marsh grasses and shrubs will attract wildlife back to this area.

A system of paths connecting lookouts and wooden platforms along the shores of Davenport Creek are intended to serve as an outdoor "Environmental Education Classroom." School groups, scouting clubs, and other organizations could set up experiments along the creek, such as collecting data on water quality, or observing the return and succession of plant and wildlife. This area could serve as a "field station" for those studying river.





*Highlighted Area: The Bend*



*Pope John Paul II Park: The Bend*





## THE BEND

Across Davenport Creek will be the 31 acre area of the park known in this plan as "The Bend." The name refers to the wide turn the river makes here to the west. It also refers to the meandering character of the paths, which have been laid out in response to the bend in the river, and which will provide park-users with a gradual ascent of the new hill that will be created when this former landfill is covered over with layers of clay and earth. Long rows of vegetation will wrap around the hill also reflecting the curved character of the site.



*Example of Path around The Bend*

The Massachusetts Department of Environmental Protection requires that before a park can be constructed on the former Haller Street landfill, the site first will have to be covered with approximately 2-4 feet of multiple layers of materials, such as clay or plastic, and soil. The reason is that today rainwater seeps into the landfill and drains into the Neponset River through the soil and groundwater. Along the way, the water brings with it pollution from the landfill.

The protective layer of clay or plastic, and soil placed over the site will act like an enormous umbrella to prevent rainwater from entering the old landfill and water table below. Instead, the rainwater will run off into newly created wetland meadows between the park and the river, where some of the water will evaporate, while the rest will continue to move across the top layer of soil, eventually reaching the river.

After the work described above is completed, the landform that is created will be as much as 35-45 feet high above

the river level. The height will depend on the thickness and number of layers that will be needed to cover the landfill. It will also depend upon how much extra fill the engineers determine will have to be added to offset the settling that will occur in the future. The site will also have to be graded into the shape of a small hill in order to create slopes to guarantee that the rainwater will drain off toward the new wetlands and river in spite of the inevitable settling of material.

Capping the existing landfill, as this process is called, will require the site be cleared of all the trees and vegetation, and The reason for this is that the "cap" will consist of a continuous sheet of clay or plastic that cannot have any breaks in it. Leaving existing trees on the site would create openings in the cap which would allow water to seep down into the old landfill and eventually drain into the water table and the river.

Fortunately, some new trees and other vegetation can be planted on the site once the capping process is complete. After the clay cap is in place, what is known as "fill soil" will be placed on top to further create the needed slopes to ensure proper drainage. In addition, a final layer of approximately six inches of clean top soil and an irrigation system will cover the entire site. This layer of soil will be thick enough to plant lawns and certain small plants which do not have deep roots that might penetrate the cap beneath the soil. In those places where trees will be planted, several feet of additional top soil will have to be added first to give the tree's roots adequate room to grow. The shape of the clay cap also has to be adjusted to accommodate the larger space each tree's roots need to grow. For this reason, usually smaller trees, and ones with shallow roots, are selected.

The placement of playing fields on the hill will entail extensive additional engineering, earthwork, fill, construction, and cost. Constructing a building's foundation on a landfill also costs significantly more, depending upon the shape and size of the structure, since the cap must be specially designed to hold the weight of each building.

### **Parking**

A sidewalk and a two-lane road will lead from the Haller Street entrance. Immediately to the left of the entrance road will be a parking lot for approximately 42 cars.

### **Garden**

Just past the parking lot will be a small field, then a potential community garden site. This would be the largest garden area in Pope John Paul II Park. Located near the entrance to the Bend, the garden would be a relatively short walk for residents of the Keystone Building and neighborhood. There could also be a drop-off for gardeners to unload their vehicles, water spigots, and a locked shed for storing tools and other gardening supplies. Development of a community garden here would depend upon joint maintenance arrangements that could be made between the MDC and community garden groups such as the Boston Urban Gardeners and Boston Natural Areas Fund.



*A Riverside Community Garden in Poland*

### **Open Field**

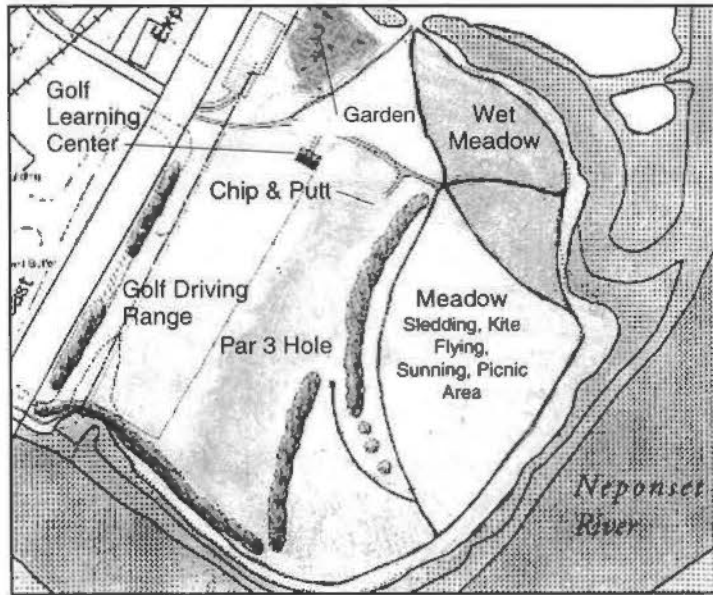
There will be a large grassy field to the right of the path leading into the Bend. While the field will not be level enough for playing regulation athletics, the slope will be gentle enough for informal sports, such as touch football and frisbee.

Keeping this area for use as a large informal play area will leave open the option of building regulation athletic fields in this location in the future. It may be found that the demand for sports fields in the surrounding area increases in time to a level where the added cost of regrading the open field and placement of additional loam are justified by the added benefits. Since projecting future demand is an inexact exercise, setting aside this part of the park for possible use as athletic fields, or a variety of other activities, allows the public and MDC to reach decisions about how to fully develop the Bend after other parts of the park are in operation and needs are better understood.

### ***Golf Learning Center Option***

The MDC is considering alternative uses for the open field. One is a "Golf Learning Center," a facility where people could come, learn about the game, and practice all aspects of their game, including driving, chipping, and putting. The Center would be comprised of a 25 bay driving range, a chip and putt area, a par 3 hole, and small learning center building. The building would be a place where equipment could be rented, instructional videotapes shown, and would be the golf equivalent of Community Boating on the Charles River.

The cap would have to be specially designed to allow for the installation of posts and 15-20 foot high net around the sides of the golf driving range and par three hole to prevent misdirected balls from injuring another golfer or park-user. Screening views of the nets would be difficult because only a small number of trees can be planted on top of the cap. Relatively low, woody shrubs, such as staghorn sumac will help help to partially screen views.



*Plan: Golf Learning Center Option*

### ***Lookout***

The top of the hill at the center of the Bend will be the highest point in the park. A lookout and seating area will be located here and will offer park-users broad views of the river and surrounding area.



In all of the park options for the Bend, a lookout and seating area will be located at the top of the hill. However, in some of the options, the final location of the lookout may vary to a degree depending on the final shape of the hill.

### ***Meadow and Sledding Hill***

On the riverside of the hill will be a large grassy meadow spreading out toward the river. This will be a place for people who want to walk, jog, fly a kite, sun bathe, spread out a picnic blanket, or mountain bike. Because of its location along the river and the hill's gradual slope toward a level area along the water, this will be a picturesque and safe place for winter sledding.

### ***Wet Meadow***

This plan is showing the creation of a "wet meadow" of tall grasses, cattails, rushes, and other wetland plants alongside Davenport Creek, which will require obtaining special permission from the Massachusetts Department of Environmental Protection. The wet meadow would be created principally as a place to catch, detain, and filter the rainwater coming off the hill before it drains into the river. It will also provide habitat for a wide variety of wildlife, including butterflies and birds. However, there is a possibility that the state regulatory officials overseeing the landfill capping process may determine that there will not be a need for detaining the rainwater. If so, this area could be used for other purposes, such as an extension of the meadow spreading out from the top of the hill, or an area of more garden plots, or for other activities.

### ***Marsh Walk***

The marsh walk that would begin the Riverside section of the park would stretch all the way around the Bend and pass a continuous edge of restored salt marsh.

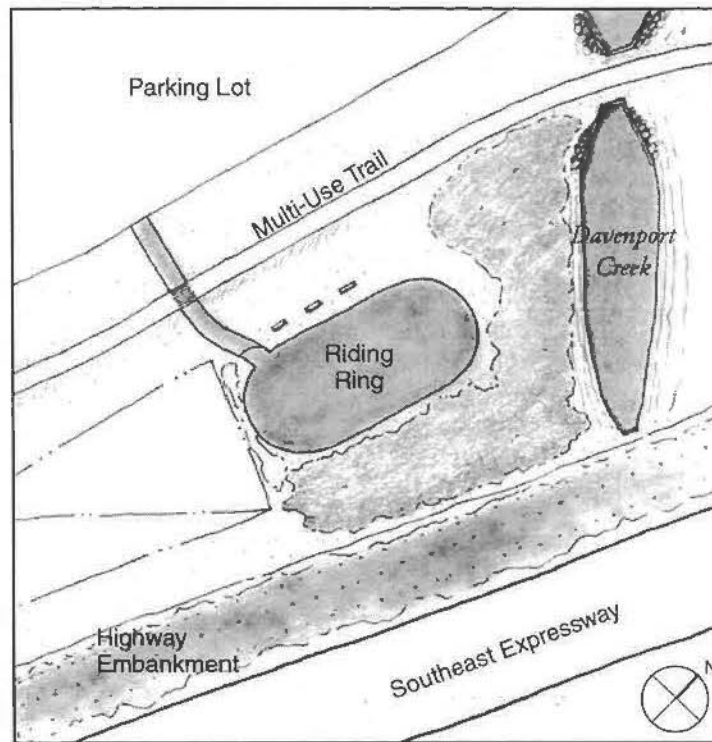


### ***Horseback Riding Ring and Trails:***

Just outside the entrance to the Bend is a possible location for a horseback riding ring. The ring would be on a piece of land currently held by the Massachusetts Highway Department and located between the Southeast Expressway, Davenport Creek, and future Neponset River Trail. There are no longer any stables or riding rings in Boston, and this ring would provide a place for riders to practice, beginners to learn, and for groups to sponsor shows.

Proponents of this proposal have suggested that horses would be trailered in daily. Riders would then hire a horse for a certain period of time. Individuals owning their own horses would be able to reserve time in the ring.

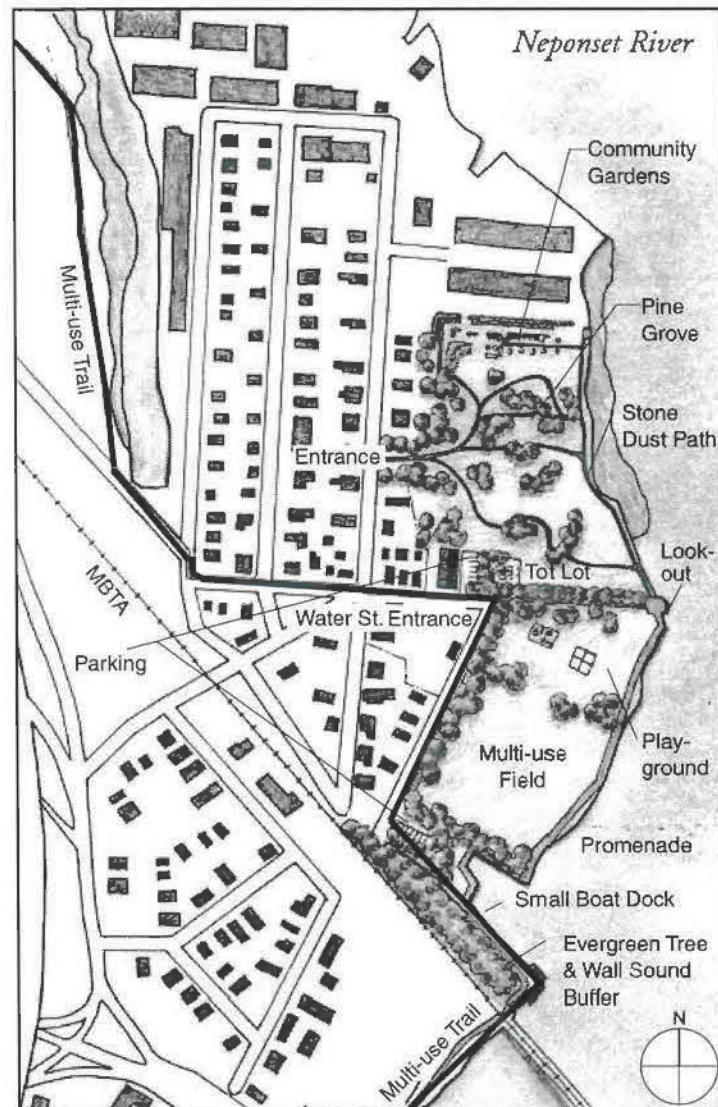




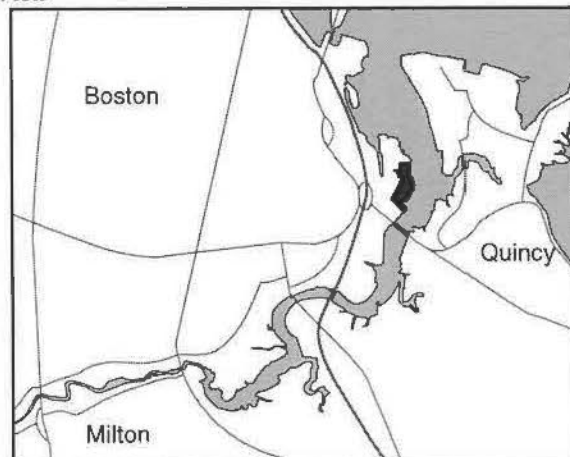
*Plan of Proposed Horse Riding Ring*

A ring here would be less expensive to build than inside the Bend and help generate park activity on the Gallivan Boulevard side of the park. However, either Ackerley Advertising or the Firefighters' Union that operates Florian Hall would also have to grant permission for horse trailers to cross their property to get to the ring.

In addition to creating a riding ring, there might be adequate space inside the Bend for bridle trails. One might follow alongside the marsh walk that will loop around the perimeter of the site. The other might follow the pedestrian trail that passes over the top of the hill. A trail-maintenance agreement between the riders and MDC would be necessary prior to developing the trails. The possibility exists for the community gardeners to help maintain the trail and stable through an "adopt-a-park" agreement in exchange for use of the manure as fertilizer or compost.



Plan View



Highlighted Area: The Port

## THE PORT

The section of Pope John Paul Park closest to the mouth of the river is referred to in this plan as the "Port." Originally this peninsula that separates the Neponset River from Dorchester Bay was used for pastureland. By the 1840s, it had become a thriving maritime center known as "Port Norfolk." Some of the better known businesses on the waterfront included the Putnam Nail Company, which in 1865 was Dorchester's largest employer with 100 jobs. The firm of George Lawley and Son built several America's Cup winning yachts, as well as torpedo boats and landing craft for the U.S. Navy during the Second World War.

On the Neponset River, two lumber wharf companies were begun to take advantage of the opportunity to load lumber from ships onto flatbed train cars of the nearby Old Colony Division of the New Haven Railroad line. The Sterns Lumber Yard, which is where the majority of this portion of the Pope John Paul II Park will be located, operated until the 1960s. Pratt Lumber Yard, which will form the remaining portion of the new park, operated a wharf that later became the base of the area's famous Flounder Fleet.



A. J. Stearns Lumber Yard, c. 1897  
(stacked with lumber)

Since this 15-acre park will directly border the Port Norfolk neighborhood, the plan includes more low-key recreational facilities, such as community gardens, open meadows, groves of trees, a small playground, walking paths, riverside promenade, with interpretive design elements to reflect the areas past. Additionally, a portion of the former Shaffer Paper property will be named after former State Senator Joseph Finnegan.

Depending upon the results of an upcoming study, preparing the vacant land for use as a park will possibly entail such steps as removing a small number of underground tanks, removing old asphalt and other debris still on the property, rebuilding sea-walls, and adding a layer of fresh top soil.

### Entrance

The main entrance to the Port will be from Water Street. This will be an entrance for neighborhood residents and for those coming to the park from the Neponset River Trail, which will run along Water Street and connect with the MDC park at Tenean Beach. From Water Street, the initial view into the Port will be shaped by the presence of a long tree-lined walkway leading directly to a wooden lookout over the water that will create a view corridor of the river. On the opposite shore will be a second lookout set along the same view corridor to help draw one's focus on the river. The direct alignment of the lookout on the opposite shore will also emphasize the growing width of the river's mouth. The pair of lookouts will be constructed in the same wooden pier style, as will all the other lookouts along the waterway, which will help to reinforce the image of a unified systems of parks and open spaces along the river.

### Parking

One of two parking areas will be to the left of this entrance. The two lots will have space for a total of approximately 12 vehicles.

### Tot Lot and Playground

A tot lot and small grassy field will be on the river side of the parking lot. On the opposite side of the main entrance will be a playground for older children. An important feature of



the playground will be a small spray pool. The concentration of children's activities in this area will allow adults to sit and watch the children play, while enjoying views of the river.

Reflecting the history of the site, stacks of lumber fastened into pyramid-like mounds would make excellent climbing structures. Wooden barrels of different heights and having the words "Putnam Nails" imprinted onto their sides could be set into the play area for children to climb.

### ***Pine Grove***

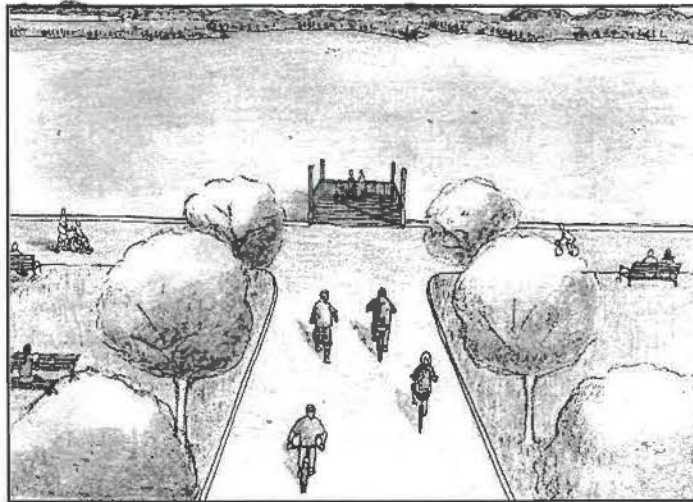
The area to the left of the tot lot has been designed to recall the time when the peninsula was known for its pine trees and pastures. Pine and several species of shade trees will be planted in grove-like clusters. In between will be a procession of grassy outdoor "rooms" leading from the neighborhood to the water's edge.



*Clusters of Trees Will Recall the Historic Landscape*

### ***Promenade***

The lookout at the end of Water Street will be the start of a promenade that will link up to promenade along the Riverside. Since the former lumber yard wharfs located here were built on top of massive tree trunks thrust into the river, it seems appropriate that the Port's promenade be constructed of wood. The promenade will not be a boardwalk that is partially over the water, as will be the case along the Riverside. Rather, a 10-foot wide wooded deck will be laid along the top of the Port's river bank between the Water Street lookout and the site of the former Pratt Lumber Yard wharf.



*Lookout at Water Street*

The wharf piers still remaining along the river will be removed. Although they are of interest from a historical perspective, they present a hazard due to their rotting condition.

### ***Community Gardens:***

One of the paths through the Pine Grove will lead to a small community garden. A number of residents of the community have expressed an interest in setting aside a portion of the park for gardening and the MDC will consider constructing a small storage shed here and provide running water for that purpose.



### ***Multi-Use Field***

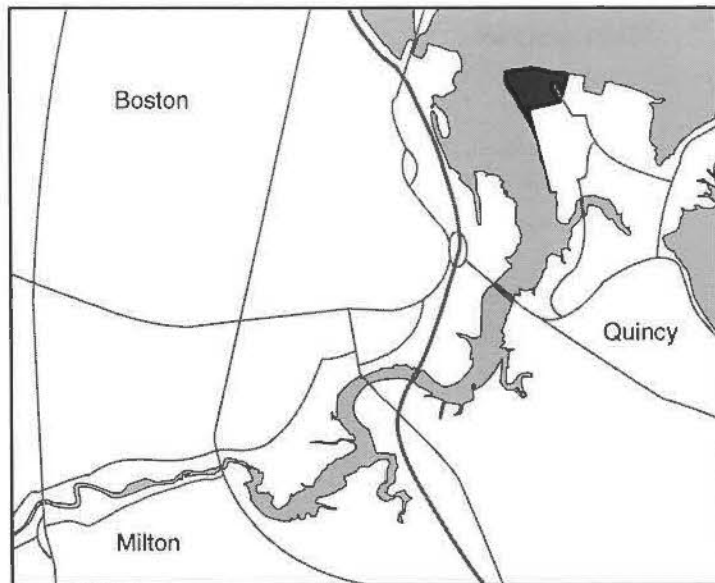
A multi-use field will be located between the promenade and Taylor Street. The field will be large enough for playing a variety of sports, such as touch-football, baseball, and volleyball. It will also be a place for sitting out on the grass, sunbathing, and picnics.

### ***Sound Barrier***

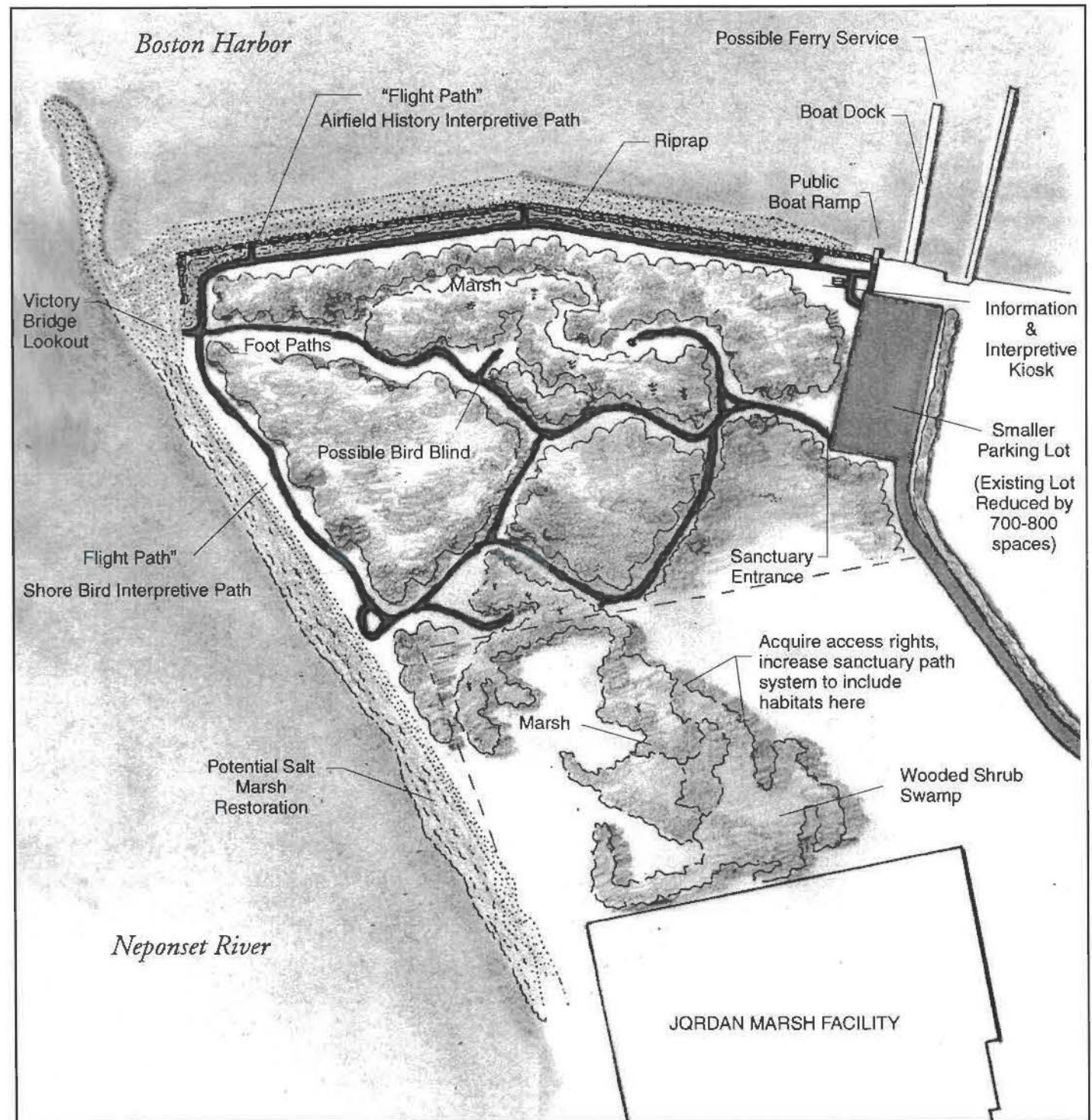
The MDC will request that the Massachusetts Bay Transit Authority plant rows of evergreen trees and extend the existing sound barrier across the entire length of the train bridge embankment as a way to reduce the sound of trains as they pass the park.

### ***Small Boat Dock***

This section of the Port, which was previously used by the Flounder Fishing Fleet, will be an area where small boats can tie up. The sea-wall will be reinforced. The promenade on top with benches, which overlaps with the Neponset River Trail as it turns upstream to connect with the Riverside, will be made of asphalt to allow bicyclists, skaters, and others to pass easily.



*Highlighted Area: Squantum Point*



*Plan of Squantum Point Park at Mouth of Neponset River*



## Squantum Point

The plan for Squantum Point, the second of three recreation areas the MDC will develop along the lower Neponset River, will be to restore and manage the large central core as a "wildlife reserve." Certain edges will be restored for more intensive public use.

The park and reserve will be located in the City of Quincy at the mouth of the river, between the waterfront community of Marina Bay and the Jordan Marsh warehouse. Previously used as a U.S. Navy airfield, Squantum Point was a training base for many New England flyers before going overseas.

Consisting of a large, upland freshwater marsh, salt marsh, sandy beach, and expansive tidal flats, the approximately 50-acre Squantum Point currently is home to a wide range of plants and animals, and each year attracts a large number of migratory birds. At low tide, between the beach and river, lies a wide expanse of mudflat that is exposed for periods of time which are too short to allow plants to grow. These mud and gravel flats are prime habitat for a variety of marine life, and for birds and animals that feed on them. The nearby upland marshes provide cover and other sources of food for local birds and animals, and is an essential feature of what attracts the migratory birds to stop here as they move along the coast. Egrets, herons, plovers, and terns are just a few of the many birds which can be spotted feeding on the clams, mussels, and worms living below the surface of the exposed flats.



The mudflat around Squantum Point is popularly known as "Buckley's Bar" and is one of the most productive "clam flats" in the state. Buckley's Bar has approximately 35 clams per square foot, compared to many commercial flats which contain no more than 10 clams per square foot. Spending a day on these flats clamming was a livelihood for some, and a popular pastime for many other residents of the area.

In recent decades, however, the water quality of the river and harbor declined to a level where the flats became grossly contaminated, and clamming came to a halt. Today, fortunately, the harbor and river are becoming cleaner. Harbor beaches are once again open for swimming during most of the summer. And while it is hoped that the quality of water in the Neponset River will someday flush out the pollutants in the mud flats, at the very least, the quality of the tidal habitat will improve, and the area's wildlife will benefit.

### *Ferry, Parking Lot, and Entrance Road*

In recent years, the Massachusetts Water Resources Authority has been using a portion of Squantum Point as a ferry terminal to transport construction workers across the harbor to the Deer Island Treatment Plant. In the future, when it is finished building the plant, the Authority will turn the ferry pier over to the MDC, which will make the dock available for public use. In particular, the pier will make an ideal site for ferries to the harbor islands and other locations along the harbor, river, and bay.



*MDC's Future Pier & Boat Dock at Squantum Point*

The MDC will "deconstruct" a portion of the large MWRA parking lot and entrance road to a size more appropriate for park use. The existing parking lot for approximately 1000

cars will be reduced to 200-300 spaces, and the four-lane entrance road may be narrowed to two lanes. The pavement over the unused portion of the parking lot will be removed and the area restored and seeded with native plant species to create wildlife habitat. The remaining parking lot should be sufficient to accommodate the future park, possible ferry service, and boat trailer parking.

### *Entrances*

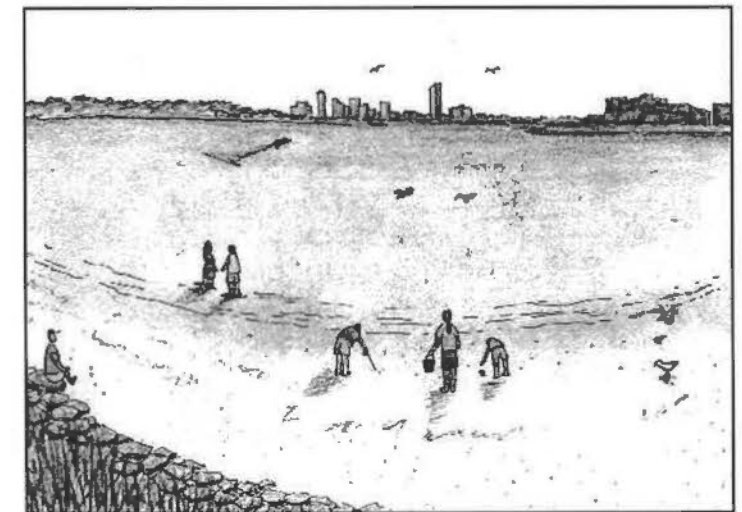
This plan shows two entrances into Squantum Point: one will lead into the wildlife sanctuary and the other to the waterfront. The entrance to the waterfront will be at the end of the parking lot closest to the bay, where there will be restrooms, and a kiosk containing a park map and educational materials.

### *Boat Ramp*

A boat ramp will lead from the parking lot into the bay. The Massachusetts Public Access Board has offered to fund the cost of constructing the ramp and any related improvements and could be ready to begin construction within 1-2 years.

### *Edge Restoration*

Certain waterside areas of Squantum Point require restoration. This will entail removing the existing rusting metal and rotting concrete sea wall and constructing a new sloping wall of large flat rocks, which is known as "rip rap." The existing seawall is a public safety hazard. The rip rap will be



*Restored edge at Squantum Point*

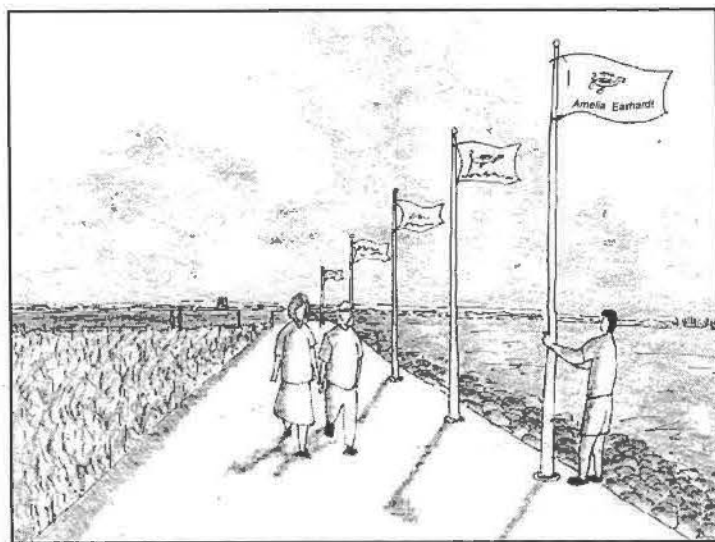
necessary to help limit the erosive wave action of very large storms on the bayside of the Point. The toe of the rip rap would be where the existing rotting structure now sits and slope upward from there. Several stairs or gently sloping openings will be left in the rip rap to allow for public access to the flats that surround most of Squantum Point.

### ***Flight Path***

The MDC is considering building "Flight Path," an interpretive around the edge of Squantum Point designed to educate the public about Squantum Point's history as one of New England's first airfields, as well as its importance as a home to many species of shore birds.

On the bayside, the Flight Path would follow the top of the rip rap sea wall, and would be marked by a row of flag poles displaying commemorative banners with the names of those who flew from the airfield, along with images of the different planes they flew. For example, two pilots who flew from the airfield include Amelia Earhardt and Joseph Kennedy, Jr. A local sponsor will be sought to fund this project, and volunteers would be sought to maintain the flags. Interpretive information about the flyers and history of the airfield would also be displayed in plaques set into the base of the different poles.

This portion of the Flight Path would terminate at a proposed lookout to be constructed at the site of the former



*Airfield Interpretive Banners at Squantum Point*

Victory Road Bridge, which once brought workers from Boston to the airfield and defense plants located at Squantum Point. The bridge was destroyed in the Hurricane of 1938. This lookout will provide park-goers with dramatic views of the wide, tidal mouth of the Neponset River. The possibility of constructing a matching lookout at the Commercial Point end of the bridge will be further explored.

On the riverside of the Flight Path, there is an opportunity to create an environmental education walk highlighting the many different species of shore birds found feeding on the tidal flats. This could be done by installing small wooden posts along the path at waist height. Metal plaques cut into the shape of some of the birds found along the flats would be set into the posts. The names and information about the birds will be on the riverside of the posts. People can quiz themselves on which birds they can identify by first trying to name a bird by its shape, then they can walk around to the riverside of the post to see if they were correct, and to learn more about that particular bird. The raised plaques will also allow people, especially those who are seeing-impaired, to use their hands to become familiar with the shape of the different birds.

### ***Fishing***

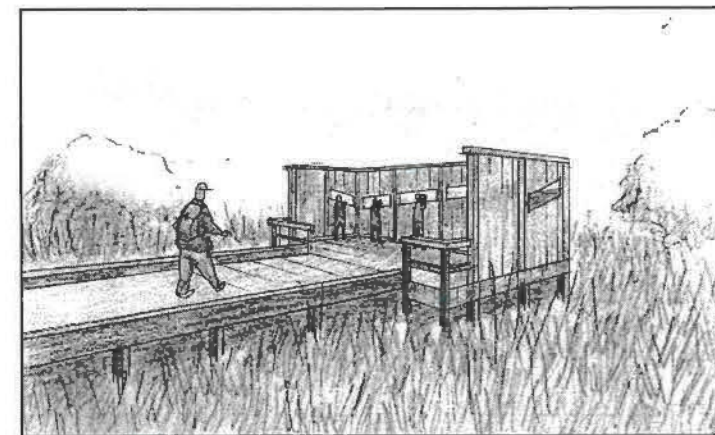
Fishing from Squantum Point occurs now, and will remain, no doubt, a popular activity in the future. Examples of fish caught here include striped bass and blue fish.

### ***Marsh Edge***

Along the river's edge, the path will pass a continuous area of restored salt marsh, and include cord and spike grasses, goldenrod, and glasswort. Restoration of a salt marsh along the riverside of Squantum Point from the tip of the Point to the Jordan Marsh facility will reflect the historic natural character of the river and help to attract wildlife, such as herons, egrets, and kingfishers.

### ***Nature Reserve***

A network of stabilized dirt or stone-dust footpaths will wind through the interior marshlands. The trails will be laid out to leave large portions of the interior undisturbed. One or two small wooden "bird blinds" may be constructed, which would allow trail-users to watch birds without disturbing them.

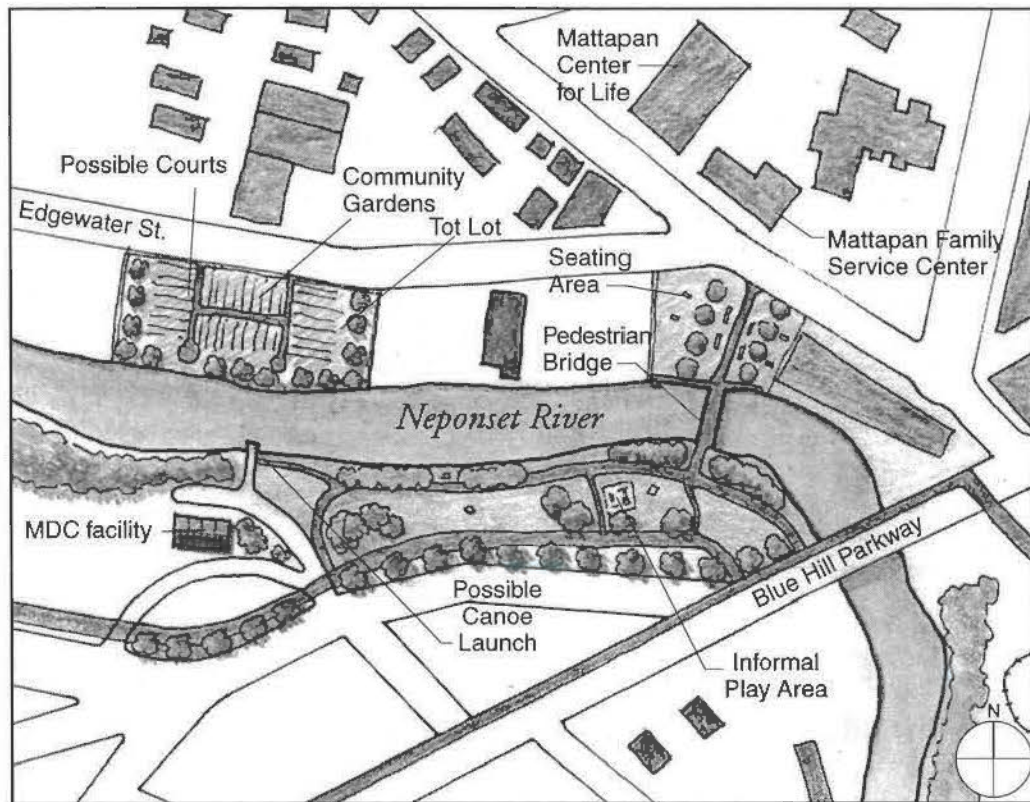


*Bird Blind*

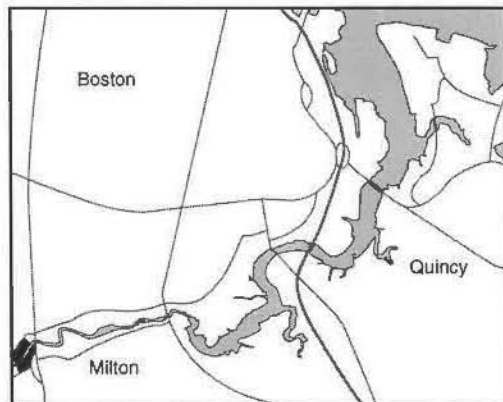
Regular efforts will be made to enhance the quality of this wildlife habitat by culling invasive, non-native vegetation, and by seeding and planting the area with native marsh and wetland species. Acquiring access rights to the marshes and wetlands on the adjacent property located on the southeastern side of the reserve would also create opportunities for wildlife observation in this marsh area.



## Edgewater Park



*Plan: Edgewater Park*



*Highlighted Area: Edgewater Park*

Edgewater Park is the third of three recreation areas that the MDC will develop along the lower Neponset River. The approximately 3 acre park will be located on both sides of the river just west of MDC's Blue Hill Parkway. On the south bank, the park will occupy a parcel of land currently owned by the MDC, which consists of a grassy field bordered on two sides by mature trees. On the north bank, the MDC may purchase several properties currently on the market, then redevelop these for use as parkland. The MDC will also work with the Kennedy Playground Revitalization Committee to reuse the former Kennedy Playground as a community garden, tot lot, and possible basketball court.

Along this stretch of the waterway, the river is clear, rocky, narrow, and resembles a mountain stream. The problem is that it is hidden from view. While the roads which pass by possess such names as River and Edgewater Streets, it is easy to pass through this area without knowing that the river even



*View of Sitting Area and Pedestrian Bridge*

exists. Fences, vegetation, and buildings block the views of the waterway.

While relatively small in size, Edgewater Park will be a large addition to the Neponset River Reservation because it will help to satisfy the unmet needs of neighbors for play areas, outdoor gathering areas, and it will increase visual access to the river. The new park will be located along Edgewater Street across from the Mattapan Family Service Center, Mattapan Center for Life elderly housing apartment building, and a number of small businesses and residences. The Family Service Center runs a large pre-school program for approximately 150 children per day, but currently has no yard or outdoor play area nearby for the children to use. An increasing number of local residents have also requested that the MDC create additional outdoor play areas and community gardens along this section of the river. These requests for play areas and open space improvements is supported by the demo-



*Mattapan Family Service Center*

graphic analysis conducted during the course of this planning process which shows that there is a high demand for additional playgrounds, tot lots, and neighborhood parks along this area of the river corridor.

In addition to the need for recreational facilities for young children, census data shows that there is also a high concentration of elderly living along this section of the river who tend to seek more passive forms of recreation, such as walking paths and outdoor seating areas. The development of a new 46-unit elderly apartment along this section of Edgewater Street will further add to the already high demand for outdoor walking and seating areas in this vicinity.

#### ***River Access and Seating Area***

One entrance to Edgewater Park would be located across from the Mattapan Family Service Center and the new 46-unit elderly housing development. The MDC has had preliminary discussions with local residents, representatives of various Mattapan business associations, and others to explore the feasibility of purchasing an unused parking lot for development of this section of the park.

If this portion of the park is developed, a path would lead from Edgewater Street to the top of the bank overlooking the river. Along the path would be benches and smaller paths that lead to seating areas. Some of these seating areas would have concrete or wood tables for playing games and for eating. Benches would also line the top of the river bank so park-goers may enjoy views of the river and the historic, arched granite Blue Hill Parkway Bridge.



*View of River and Parkway Bridge from Proposed Pedestrian Bridge*

#### ***Pedestrian Bridge***

A new pedestrian bridge would lead directly from the entrance path off Edgewater Street and cross over the river to the existing MDC open space on the south side of the waterway. The bridge would create an excellent opportunity for viewing this picturesque, but hidden section of the river. More importantly, it would create a safe, off-street route to the open field and play area on the other shore, while providing an easy way for residents of the elderly apartment building to enjoy the quiet of this shady riverside retreat.

#### ***Tot Lot and Community Gardens***

Another entrance to the park will be located further west along Edgewater Street at the site of the former Kennedy Playground. The existing wall along the street of the playground will be reconstructed to allow for clear sight lines into the park. The MDC is considering creating a tot lot and community garden in this section of the park during the first phase of development. Phase II might include the installation of a court and hoop for informal basketball games.

Both sections of the park would be connected by a sidewalk along the street. It may be possible to establish a foot path along the top of the river bank between these two areas as well. The possible acquisition of future parcels along Edgewater Street may allow the MDC to create a single band of parkland along this section of the river.

#### ***Play Area***

The MDC owns a large open field located on the south side of the river which would provide a play area for informal games. Because the field is wide and relatively flat, it is an ideal space for childrens' games such as tag and various types of ball games.

#### ***Lookout and Benches***

Good opportunities exist for creating several more seating areas with views of the river and bridge on the south bank of the river. Because Edgewater Park will be on the Neponset River Trail, which is planned to pass through here, it is expected that this lookout and seating area will be a popular stop for hikers and cyclists to rest along the way, as well as an attractive walking destination for residents of nearby neighborhoods.

#### ***Canoe Launch***

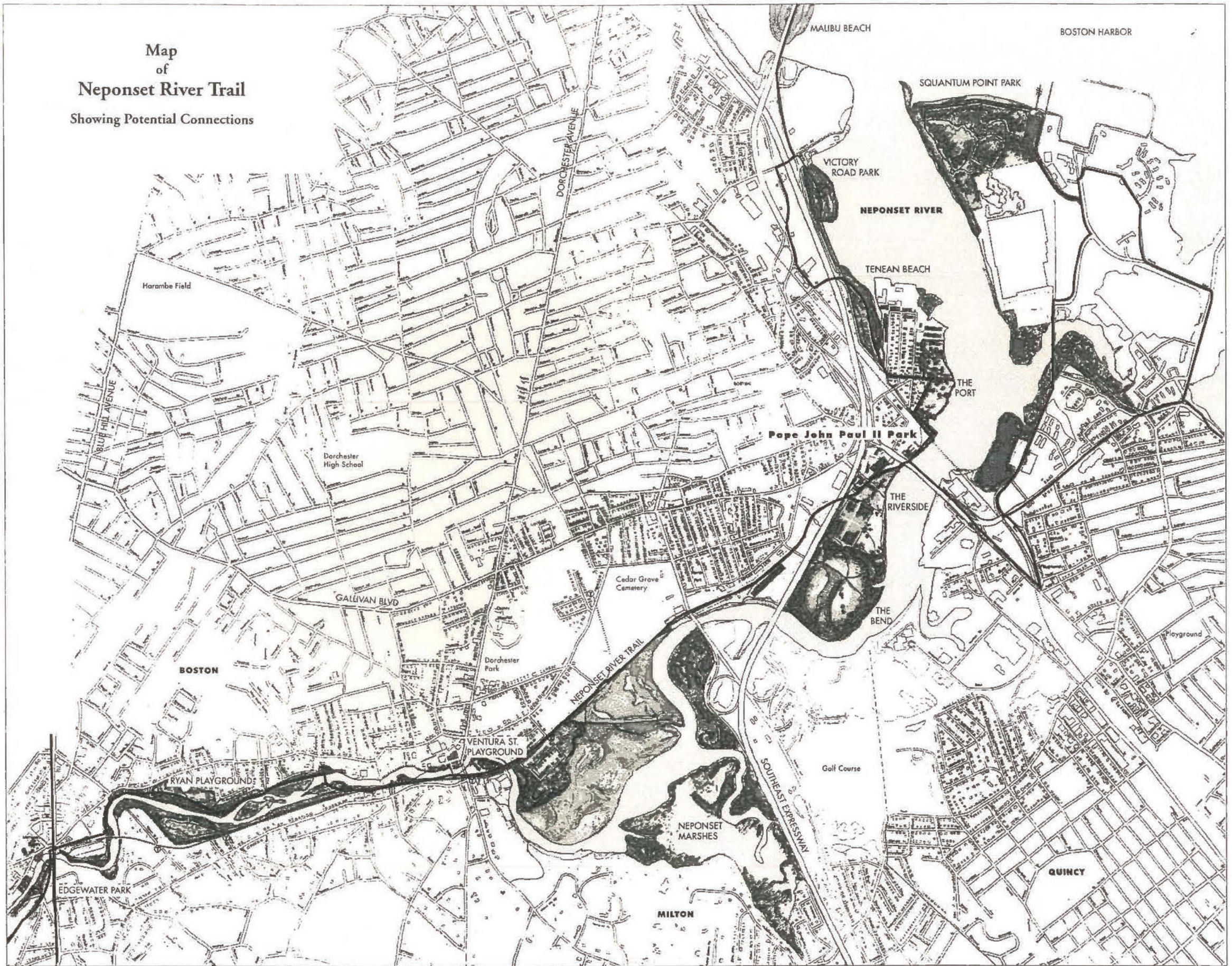
There is the potential for constructing a canoe launch along the river between the open field and the existing MDC maintenance building off Truman Parkway. The parking lot for the maintenance building would be available for canoeists to park their cars. The relatively steep banks here, however, may prevent the site from being developed for this use.



*View of River Near Mattapan Square*

## Neponset River Trail

Map  
of  
**Neponset River Trail**  
Showing Potential Connections



## Neponset River Trail

There are many ways to think about the Neponset River Trail.

If it were found in a house, the trail would be the hallway leading to all the rooms. If it were in a garment, it would be a single strand of thread that holds the fabric together. If it were found in nature, it would be the trunk of a growing tree.

A major value of the Neponset River Trail will be its ability to bring people to the river. Along the way, the trail will create opportunities for people to discover the river's rare beauty, interesting history, abundant wildlife, and vital neighborhoods.

The Neponset River Trail is about choices. As a key link in the MDC's regional park system, the trail will allow a pedestrian, bicyclist, and other trail-user to go in any number of directions and find an extraordinary range of places and parks, from Olmsted's seaside walk along Pleasure Bay to the crystal clear waters of Houghton's Pond, from the swallows overhead at Fowl Meadow to concerts on the Esplanade. Whenever and wherever a person enters the Neponset River Trail, what one sees will only be the beginning of what lies ahead.

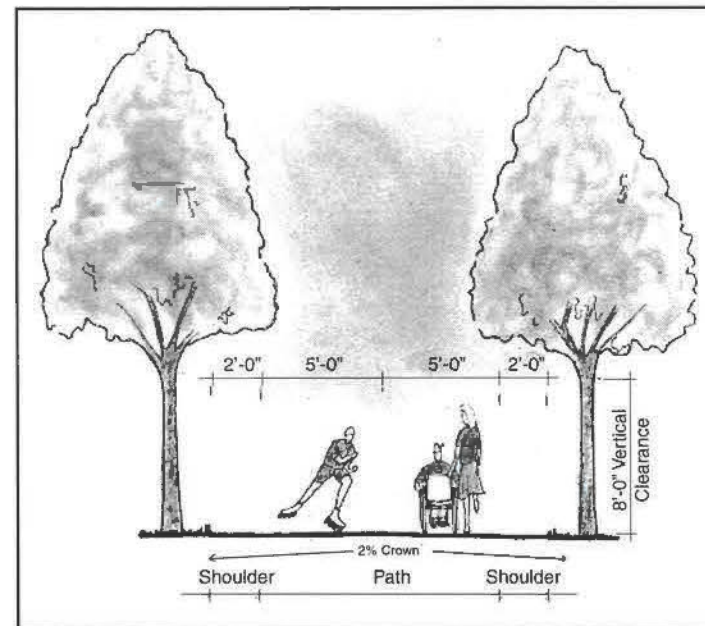


### **The Route**

This plan focuses on the 3 mile section of the Neponset River Trail between Pope John Paul II Park and Mattapan Square. In the future, the MDC will explore the possibility of extending the trail along the river for approximately 4 miles to connect with the Fowl Meadow Reservation.

Wherever there is sufficient space, the trail will be constructed as a separate off-road path. In those cases where there are no other alternative off-road routes, the users will be directed to follow roadway shoulders which are clearly marked as bike lanes.

Since an important goal for the trail will be to create opportunities for the public to see and rediscover this so-called "hidden river," wherever feasible, the trail will run parallel to the waterway, and have lookouts and side paths leading to the river off the main trail.



*Typical Section: Multi-Use Trail*

### **Use**

The Neponset River Trail will be open from sunrise to sunset all year round for use by pedestrians, runners, cyclists, skateboarders, in-line skaters, and cross-country skiers. Other than those needed for maintenance and security, no motorized vehicles will be allowed on the trail.

### **Dimensions**

The Neponset River Trail will typically have a 10 foot wide asphalt surface, with, 2 foot wide grass shoulders. This is a safe width for multi-use trails and gives trail-users a lane to move in either direction. The trail will also be wide enough to permit public safety, emergency, and maintenance vehicles to travel freely.



*MDC Maintenance Crew*

### **Maintenance**

The MDC will be responsible for maintaining the trail. At the same time, it will actively encourage local organizations and businesses to adopt sections of the trail. The objective is to foster a sense of ownership and stewardship towards the trail. This approach has proven successful in numerous instances throughout the MDC Park System, Massachusetts, and country.

### **Lighting**

The trail is not designed for night time use. No lighting is proposed except when the trail passes through tunnels or underpasses.

### **Public Safety**

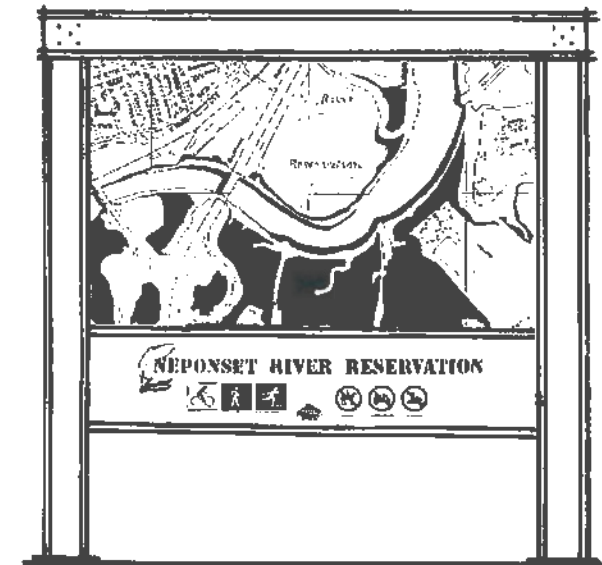
Studies of multi-use trails around the country find that the regular use of a trail is the best form of security. However, these same studies show that multi-use trails in urban settings require patrolling. The MDC is currently meeting with representatives of the Massachusetts State Police, MBTA Police, and Police Departments for the City of Boston and Town of Milton, to assure security for the trail. See the Public Safety and Maintenance section for additional information about public safety.



Entrance Sign at Adams Street



Directional Trail Signs



Street Entrance Sign/Orientation Map

*Metal Cut-out Trail Sign Types*

**Trail Signs**

A system of signs is recommended along the trail to provide the trail-user with a range of information, including: general orientation, upcoming street crossings, connections to other MDC Reservations and nearby parks, and directions to points of interest and shopping districts.

A common logo will be used to mark the trail and parks throughout the Neponset River Reservation. The logo of two fish jumping over waves symbolizes the origin of the Algonquian name “Nepunsep,” or “Harvest River.” The syllable “Nepun,” means harvest or late summer, and “Sep” means river.

These trail markers and other signs will be constructed of a variety of materials, including metal, granite, and wood. Typically, signs will be cut out shapes and letters in metal to

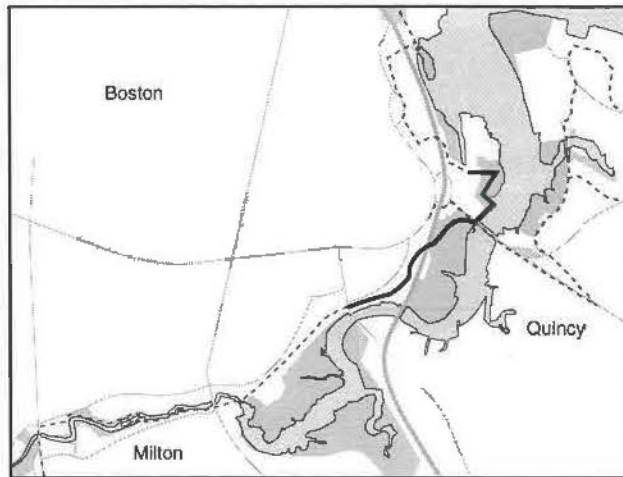
convey information. Designed to allow natural light to pass through the letters and shapes in the metal, these displays will be highly durable, weather well, and even if painted on or are scratched, will retain their shape and continue to convey their message.

Signs will be located primarily at trail entrances and intersections. This will help to reduce the number of signs along the trail and help to maintain the visual character of the different areas. In keeping with this objective, one proposal is to etch symbols into granite curbing at important places of interest along the trail to alert the trail-user to refer to corresponding numbered paragraphs in his or her Neponset River Trail Guide. For instance, a historic symbol in the trail would mean that there is a historic point of interest nearby. A symbol in the shape of a bird might mean a certain species of wildlife may be seen in the area. MDC trail guide booklets will be available at the Ranger Headquarters in the Riverside,

or at one of the participating local stores. Over time, it is expected that the presence of these markers will make a person curious enough to pick up a copy and go for a tour of the river. The trail markers may also attract the attention of trail-users travelling to other distant parks who may decide to stop and find out more about the Neponset River and the surrounding area.

***The Port to the Bend***

From the MDC’s Tenean Beach on Dorchester Bay, trail-users will enter the Neponset River Trail at the Water Street entrance to the Port area of Pope John Paul II Park. The trail will immediately turn to the right, continue to the MBTA bridge embankment, then turn south across the top of the wharf once used by the flounder fishing fleet. Once the trail reaches the river, it will turn upstream, pass under the Neponset River and MBTA bridges, then enter the Riverside area of the park.



*Trail Section Highlighted: Port Norfolk to Granite Avenue*

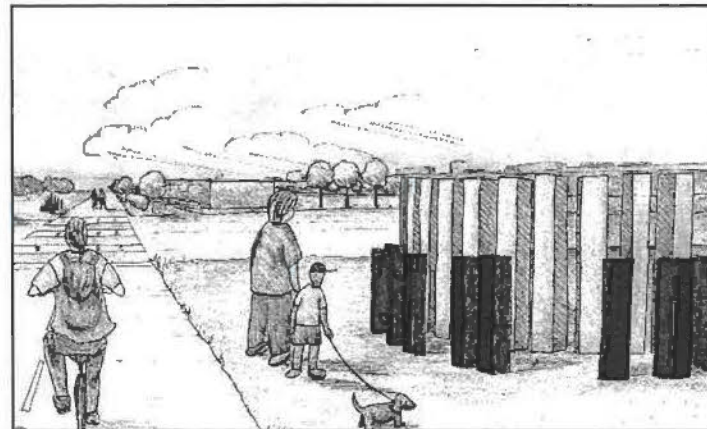
At the Riverside, there will be an intersection at the beginning of the boardwalk promenade and fishing pier. A sign will instruct bicyclists wishing to use the boardwalk to either lock his or her bike to a nearby rack, or dismount and walk the bicycle.

Those wishing to remain on the trail will follow the path as it bears to the right and crosses the park's main entrance road. Placed at this clearly marked crossing will be a park map and description of the variety of recreation facilities found in the Riverside. The map will also present alternative routes through the Riverside and Bend that will allow bicyclists and other trail-users to enjoy these areas, and easily return to the main trail.

Leaving the Riverside, the Neponset River Trail will pass below the Southeast Expressway and cross an existing small bridge that spans Davenport Creek. There will be a stone dust path off to the right leading along the edge of Davenport Creek. This path will become an attractive neighborhood entrance to the trail in the future after the quality of the water in the creek is improved, the trail built, and the debris and scrubby vegetation removed from the creek's banks. Willow trees and other appropriate vegetation will be planted along the creek, and along the main trail between the creek and the Hallet Street entrance to the Bend.

If constructed, the proposed riding ring will be located to the left of the trail after it passes Davenport Creek. There will be benches along the ring for trail-users and others to sit and watch the riders practice.

Good opportunities exist for creating interpretive rest areas along the trail where trail users can stop and learn more about a particular area's history, culture, or environment. For example, at Hallet Street a group of vertical granite blocks, cut into the shape of piano keys, could mark the spot where the trail crosses the entrance to the Bend. The granite piano keys would reflect the period when the nearby Keystone Building operated as a piano factory.



*Granite Piano Keys Recall Industrial History of Keystone Building, Originally a Piano Manufacturing Company, & Mark the Entrance to the Neponset River Trail at Hallet Street and Entrance to The Bend*

#### ***The Bend to Granite Avenue***

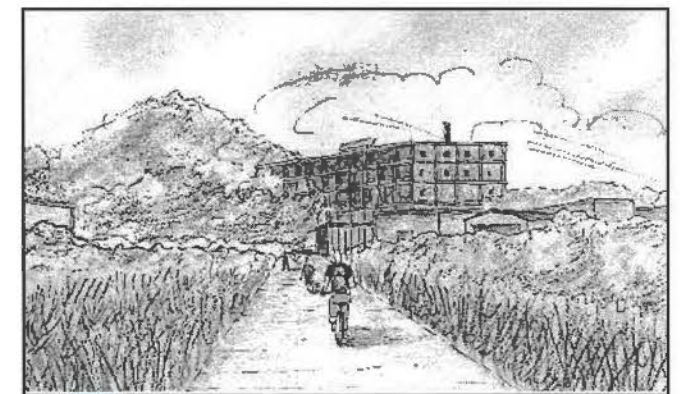
In this area of the trail, some of the occupants of adjacent properties have, over the years, begun to use parts of the former Conrail right-of-way for their own purposes. Prior to building the trail, the MDC will work cooperatively with abutters to use the properties which are being encroached upon for trail-related purposes, such as planting vegetation and creating trail-side parking.

Past the entrance to the Bend, the trail will pass behind the Keystone Building. The trail will widen to 12 feet in this area to minimize conflicts between wheeled trail-users and pedestrians, especially with respect to the large concentration of

elderly living in the immediately adjacent Keystone Apartment Building.

The MDC will also work with the owners of the Keystone Building to create several seating areas on the MDC land between the building and path. Seasonal flowering vegetation on the hillside across the trail from these seating areas would create a changing canvas of color for the enjoyment of those passing on the trail and those living in the Keystone Building.

West of the Keystone Building, the trail will pass through a 1000 foot long area of small industrial buildings, warehouses, and towing and salvage operations. The MDC owns a 50 foot wide right of way in this section which will be paved and landscaped. It is proposed that the area along either side of the trail be planted with certain species of grasses found along

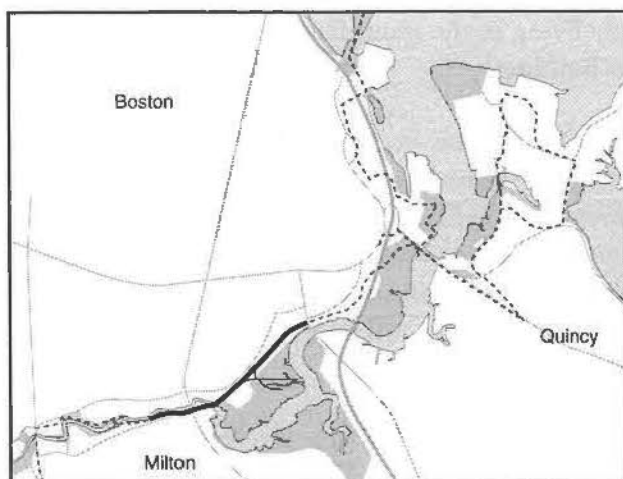


*Grasses along the Trail near Granite Avenue*

the river. This should help to call attention to the presence of the Neponset Marshes located west of Granite Avenue.

In the future, purchase of the land immediately adjacent to the river between the Keystone Building and Granite Avenue would turn this portion of the waterway into a small riverfront park.

The planned removal of two billboards from MDC property along the east and west sides of Granite Avenue will improve the natural character of this important trail and river crossing.



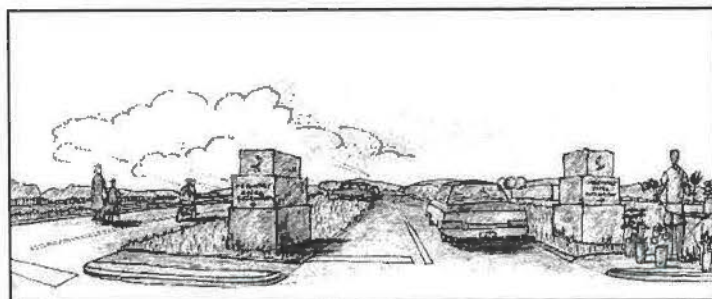
*Trail Section Highlighted: Granite Avenue to Central Avenue*

### **Granite Avenue and Granite Railway Trail**

The main entrance to the Neponset Marsh area of the trail will be on the west side of Granite Avenue. There will be an entrance sign along the street and a small parking lot will be located to the right of the trail.

Guiding trail-users safely across Granite Avenue will require that a number of improvements be made to this trail crossing, including: construction of a clearly-marked crosswalk, installation of a pedestrian-activated stop light, and application of different types of paving strips or markings to remind trail-users to slow down. Along Granite Avenue, trail crossing signs and rumble strips will be installed to alert motorists of the upcoming intersection.

The Massachusetts Highway Department will be asked to permit the MDC to paint a mural, or hang a banner, portraying a river theme against the side of the large concrete



*Granite Blocks Marking Granite Avenue Entrance to Neponset Trail & Marshes*



*Murals on Granite Avenue Bridge*

counterweight above the Granite Avenue Bridge. The large image of a scene along the river will call attention to the waterway and be a prominent invitation to use the Reservation. It is imagined that there will be different several banners for the different seasons of the year. The entrance to the trail along Granite Avenue could be marked with granite blocks to recall the role that granite played in the area's history. The gateway potentially could be made of granite from the nearby Adams Street Bridge slated for reconstruction. The Neponset River logo and a trail map of the marsh would be located on the blocks. The map would have special information about the nearby Granite Railway Trail. This walking trail would begin on the south side of the river, just beyond the Neponset Valley Yacht Club, and follow the upland edge of the marsh. The stone-dust trail would pass over a small wooded hill that once was a popular picnic area. The trail would continue along the back edge of the marsh to the remaining granite blocks of the wharf along Gulliver's Creek. Beginning in the 1820s, this wharf was used by the Granite Railway Company to transfer granite from the Bunker Hill Ledge Quarry in Quincy to sloops and schooners lined up along this wharf for transport for constructing the Bunker Hill Monument and other locations. There could be a historic marker on the wharf that will be visible to passing boaters.

### **Neponset Marsh Reserve**

West of Granite Avenue, the Neponset River Trail will continue along the river and remain 12 feet in width until it comes to a canoe and small boat dock, lookout and seating area, after which the trail will begin to gradually narrow to 10 feet. The trail will remain 12 feet wide up to this point because we

anticipate that residents of the Keystone Building and surrounding neighborhood will make this seating area and lookout a frequent destination on their daily walks.

Establishing a seating area and lookout at this edge of the river and marshlands is important because a number of people, who will not be able to walk the mile or so required to go down into the marsh and back, will have the opportunity to enjoy the outstanding views of the river and marsh from this easily reached location.

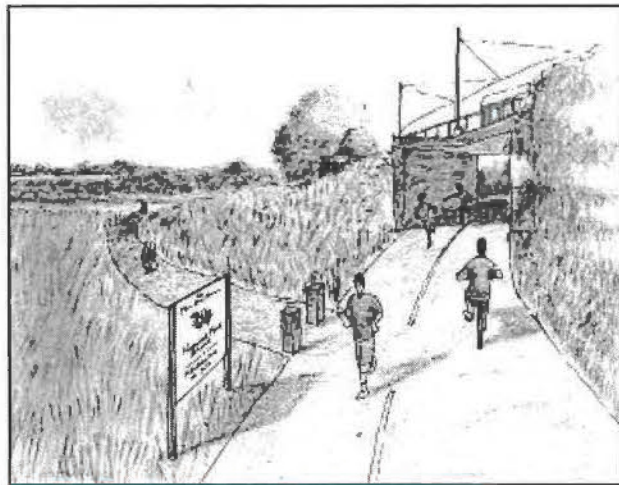
Approximately one quarter mile down the trail there will be a sign marking the beginning of a footpath that will lead into the large area of salt marshes that line the river. In addition to presenting MDC's park rules, the trail sign for the Neponset Marsh Reserve will explain the special rules governing the use of this abundant, but fragile wildlife area, such as: no dogs please, foot traffic only, and please remain on designated trails.

The main path through the marshes will follow the existing footpath on top of the MWRA pipeline to the edge of the river across from Gulliver's Creek. Smaller paths will branch off and lead to one or two bird blinds. These paths will follow the existing high mounds of soil in the marsh. The MDC will work with the Massachusetts Wetlands Restoration Program to enhance and protect this unique urban natural resource.

Leaving the marsh, the Neponset River Trail will pass beneath the MBTA train bridge, historically known as Shawmut



Junction, and enter an open grassy area. This small, meadow-like area will be cleaned of scrub brush and planted with flowers and other colorful seasonal vegetation.



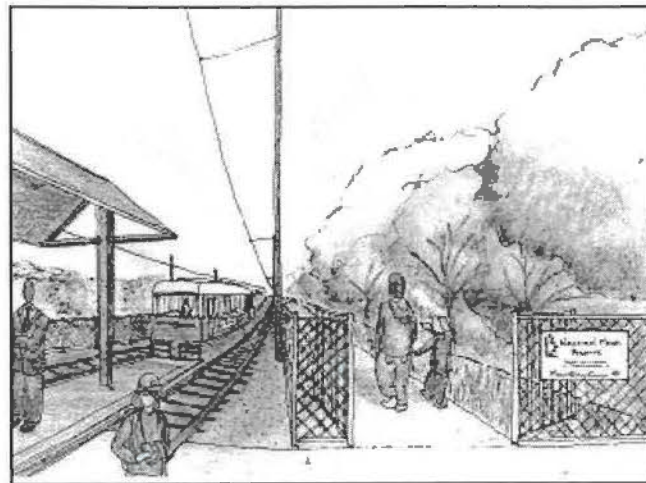
*Neponset Marsh Reserve Entrance at Shawmut Junction*

#### **Butler Street Station**

At the Butler Street T Station, installation of a gate in the existing station fence at the southeast end of the station would give pedestrians access to the network of footpaths that lead through the marsh. Once again, a trail sign will explain the rules governing the use of the Neponset Marsh Reserve and wildlife goals for the area. If it is found that this gate is promoting a level of use that proves to have an adverse effect on the marsh habitat and wildlife, then the gate will be locked.

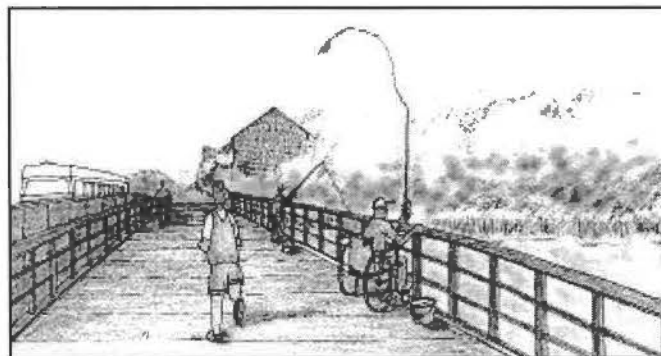
Trail signs at the T station would direct trail-users to a small wooded knoll alongside Ventura Playground, where Native Americans once fished and camped along the river. A number of improvements to the knoll, such as improving the existing foot paths, building a small boat tie-up, and selectively cutting tree limbs and other vegetation would improve views of the river and general use and access.

Clearing the area of the Neponset River Trail between the Butler T Station and Lower Mills of brush and overhanging tree limbs would create long and open views of this corridor. Selected remnants of the abandoned steel railroad bridge, which crosses the river 800 feet past the station, could serve as historic marker along this section of the trail.



*Entrance at Butler Street T Station to Neponset Marsh Reserve*

The railroad bridge over the river between the Butler Street T Station and Lower Mills will be replaced with 12-14 foot wide bridge. The bridge's extra width and railing will allow people to pause and enjoy the views of the river and historic Lower Mills, while allowing the traffic to flow along the trail unimpeded.



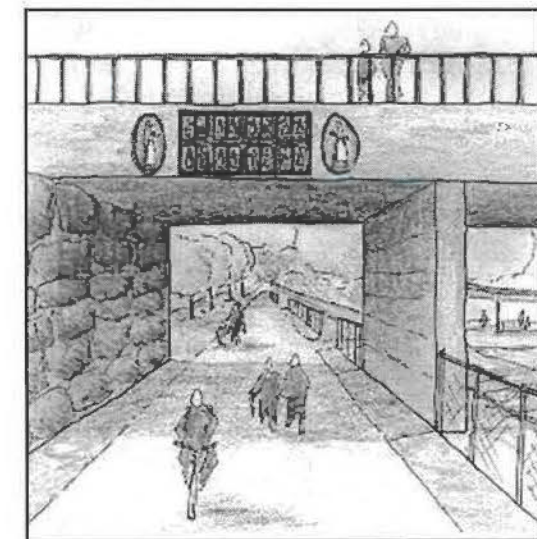
*New Bridge between Butler Street and Lower Mills*

#### **Lower Mills**

Coming into Lower Mills from Butler Station, the trail will pass the MBTA Milton Village T Station on the left. The MBTA will be asked to create an opening in the existing fence that separates the station from the abandoned Conrail right-of-way to allow trail-users to cross the trolley line. This gate will be especially important because it will give trail-

users access to the station or Adams Street via the station's stairs. The gate will also be used by canoeists carrying, or "portaging" their boats to get past the dam at Lower Mills without having to haul them across busy Adams Street.

An interpretive arts program for the trail might include a large replica of the bars of chocolate squares once made by the Walter Baker & Co. at Lower Mills on the sides of Adams Street bridge above the trail. The engraved metal squares would have the company's logo of a woman on each square carrying a serving plate of hot cocoa. With the reconstruction of the Adams Street Bridge, there are opportunities to reuse components of the bridge, especially the granite blocks, as interpretive elements and historic markers along the trail.



*Replica of "Baker Chocolate Bars" Marking Neponset River Trail under Adams Street Bridge*

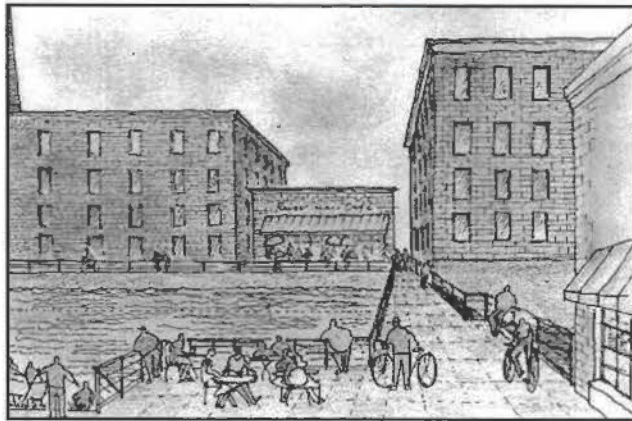
On the west side of Adams Street, next to the mill dam, trail-users could be directed to follow an arched brick walkway to enter the Lower Mills National Historic District, nearby Forbes House Museum, and Lower Mills shopping area. It will be from here that MDC Rangers will begin their tours of the historic district.

The MDC is exploring the possibility of installing a fish ladder at the Lower Mills dam via the Federal Section 319 Grant Program. A fish ladder will enable herring to bypass the dam and continue upstream to spawn. Future evaluations of the



*Possible Fish Ladder at Lower Mills Dam*

operation of the dam will determine whether the water level upstream may be raised one or two feet in the warm weather to allow canoeists and other small craft to float past shallow places in the river otherwise difficult to navigate. A major environmental review will be needed to determine the potential effects of both these projects on wildlife habitats up and downstream.

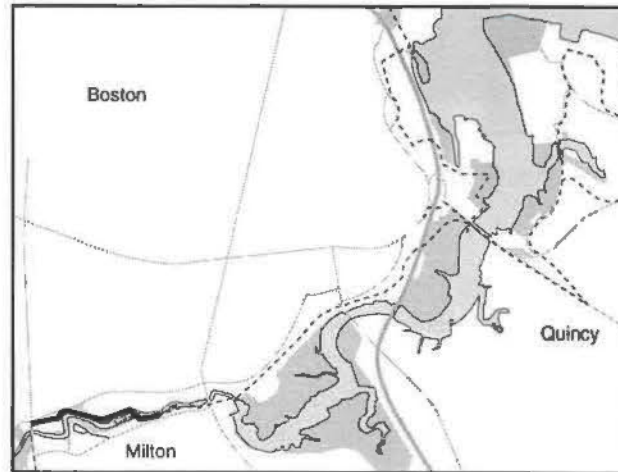


*Potential Riverfront Development at Lower Mills*

There are places on both sides of the dam that would make ideal locations for outdoor eating areas. Use of the area on the trail-side of the dam will require a potential developer to obtain a permit from the MDC. Proposals from developers are welcome because development of the riverfront will have positive benefits for trail-users.

Approximately 350 feet above the dam, there is sufficient space for a canoe launch and take-out.

Removal of overhanging tree limbs and scrub vegetation along the trail between Lower Mills and Central Avenue will create selected views of the river. Off to the right, a stone-dust footpath will lead to a small clearing along the river. The decking on the bridge crossing Pine Tree Brook will be replaced. A trail marker will be set in a granite stone near the brook. It will refer to a paragraph in trail guide booklet describing the wildlife found along the brook and this section of the river.



*Trail Section Highlighted: Central Avenue to Mattapan Square*

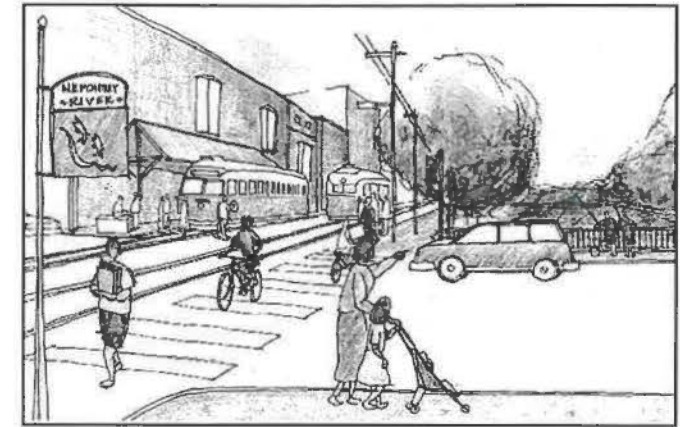
#### **Central Avenue to Mattapan Square**

The MDC has designated the area between Central Avenue and Ryan Playground a "Special Study Area." More information is being gathered, and additional public discussions are taking place, to determine an appropriate route for the Neponset River Trail through this area.

The trail route described in this plan will cross Central Avenue on the south side of the river. Central Avenue carries a large volume of traffic, therefore, it is important that the crossing be clearly marked.

The trail will continue on the south side of the river for approximately 700 feet, after which it will turn to the north and cross the river on a 14-foot wide bridge. Completing this crossing will require the cooperation of the Town of Milton.

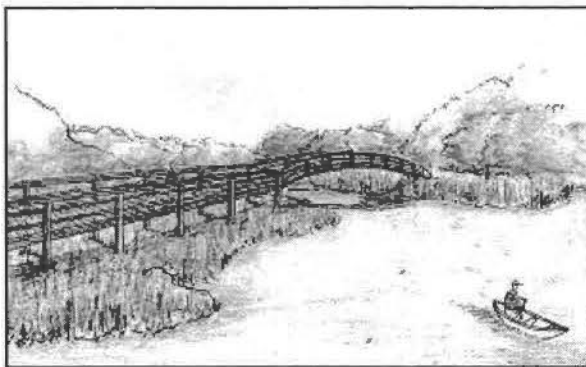
This location was selected for a river crossing in response to public interest that the bridge be visible from Central Avenue, and because the bridge will avoid the main body of



*Neponset River Trail crossing Central Avenue*

upstream islands which are used as habitat by a variety of wildlife, including several species of herons and turtles. There are no rare or endangered species found along this section of the river, and studies have shown that the species which live along similar-sized, and narrower streams, will become accustomed to human activity along the bridge and trail. Once the wildlife have become accustomed to the activity along the bridge, this area will be one of the finest vantage points for observing wildlife along the river, and a unique resource to the residents of Boston and Milton. To take advantage of this opportunity, a small lookout will be constructed off the bridge to give those who want to get off the trail and observe the wildlife. Others may simply stop to enjoy the views of the water and islands.

On the north side of the river, the trail will run west until it reaches Ryan Playground. Along this section of the trail, a neighborhood entrances that would lead to the path at the ends of Desmond and Duxbury Streets can be provided. Limbs of trees and underbrush will be cut to create views of the river at the ends of the streets. Two small seating areas along this section of trail will be built to allow park and trail-users to pause and enjoy the views of the river and the islands. The trail in this area will be aligned to follow the crest of the riverbank to allow for adequate distance between the path and neighbors' homes. Evergreen trees and replace the existing fence along this area can help to create a visual buffer and physical separation between adjoining residences and MDC property.



*River crossing*

At Ryan Playground, the Neponset River Trail will bend slightly to the right and away from the river. A stone-dust footpath will be built between the playground and the river, essentially following the path cleared by teams of teenagers working under the supervision of the Boston Natural Areas Fund during the summer of 1995.

Across from Ryan Playground, the development of a nature trail loop around the edge of an approximately 4 acre meadow that the MDC owns on the south side of the river is being considered. The footpath would include markers identifying species of plants and animals found in the area. The meadow would also be managed to ensure that the large center portion remains as a meadow. However, one edge of the meadow would be allowed to evolve into a forest so school groups and others can observe and study the "succession" process. If agreeable to neighbors, the entrance to the meadow will be at the Valley Road MBTA Station.

Courtesy of Boston Natural Areas Fund

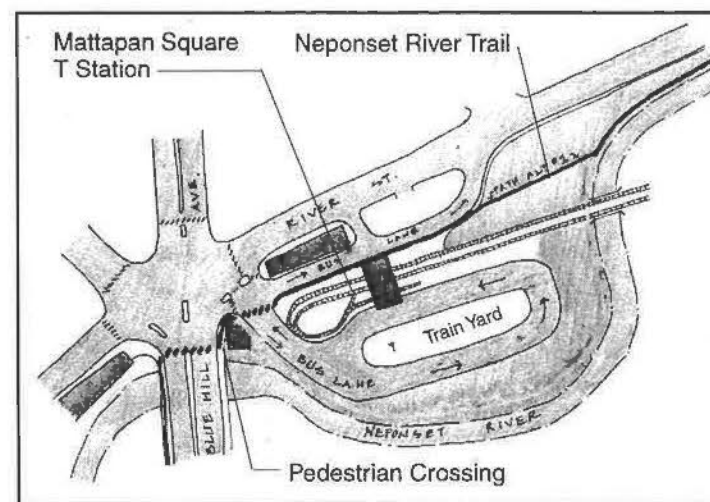


*The Neponset River between Lower Mills & Mattapan Square*

Leaving Ryan Playground, the trail will again follow the crest of the riverbank. Here again, there are opportunities to plant evergreen trees and a fence between sections of this portion of the trail and neighboring houses. However, between Ryan Playground and Fremont Street, where there are no houses, the existing fence along River Street will be taken down and one or more paths to the river may be created at either the ends of Fremont Street, Mamelon Circle, and Gladeside Avenue. Such paths will serve not only as neighborhood entrances to the trail, but will open up views of the rivers. There are outstanding views of the river from River Street, but these are hidden behind by the fence and second growth trees.

### **Mattapan Square**

Just east of the MBTA bridge that crosses the Neponset River, the trail will turn to the right and enter the Mattapan Square T Station. The trail will be clearly marked with granite bollards delineating it from the bus lane it parallels. There may be opportunities in the future to reroute the trail along the waterside edge of the MBTA Station.



*Plan: Neponset River Trail at Mattapan T-Station*

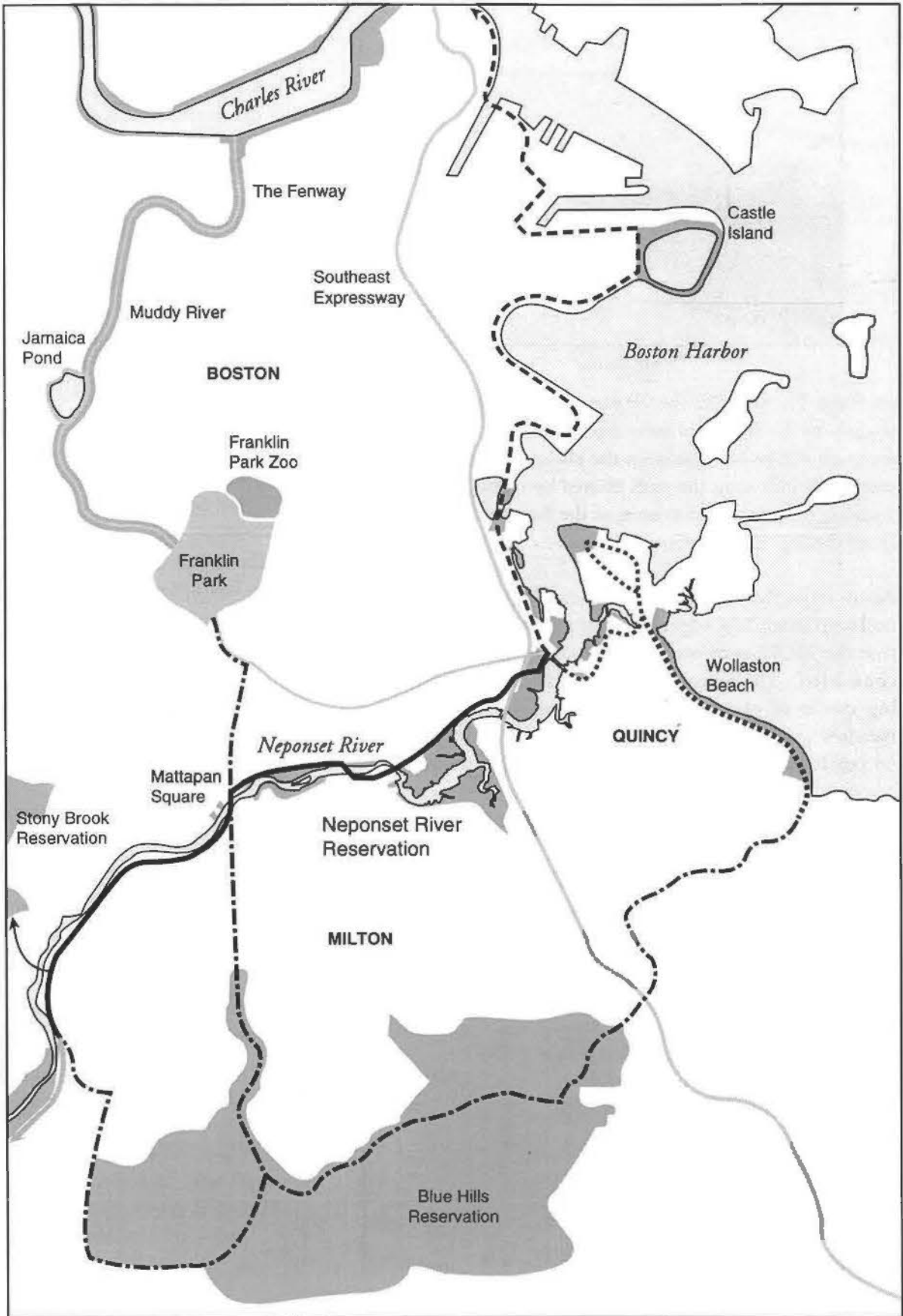
Just beyond the front entrance to the station, the trail will cross Blue Hill Parkway and connect with the proposed Edgewater Park. In addition to using attractive graphics to draw the attention of motorists to this trail crossing, the order of the traffic lights could be changed to allow for a pedestrian "Walk" phase to be incorporated into the current signal cycle.



*View of Mattapan Square with Blue Hills in Background. The Neponset River Trail will help Mattapan Square become a "Recreational Crossroads."*

Completing this trail connection to Mattapan Square is important for a number of reasons. One is that this section of trail along the river between Mattapan Square and Central Avenue will be one of the most attractive stretches along the entire river. Another reason is that Mattapan Square will become a "recreational crossroads." From Mattapan Square, park-goers will have more nearby large parks to choose from than any other point in the metropolitan park system. From here, in the future, the Neponset Trail will parallel the river and Truman Parkway until it comes to Fowl Meadow, one of Eastern Massachusetts' largest freshwater marshes. Also, to the west is the Stony Brook Reservation, Mother Brook, and Charles River Reservation. A mile and a half due south is the Blue Hills Reservation, the largest of MDC's reservations. Two miles due north is Franklin Park, the largest park in the Boston Park System, and the beginning of the Emerald Necklace. And for those wishing to go east, the Neponset River Trail will lead to the new Pope John Paul II Park, Wollaston Beach, Squantum Point, parks along Boston's waterfront, and ferries to the Boston Harbor Islands.

Making this one connection with Mattapan Square will create enormous possibilities for countless numbers of people for years to come.



*Map of Neponset Valley Trail*

## Trail Connections

### The Neponset Valley Trail

The Neponset River Trail will be one part of a larger system of trails referred to in this plan as the "Neponset Valley Trail" because several sections of the trail system will pass through the valley created by the Blue Hills to the south of the Neponset River and smaller hills on the river's north side.

One of the main benefits of the Neponset Valley Trail will be the opportunities it will create for residents to make connections to other parts of the Neponset River Reservation and parks in the Boston area. In the future, the trail will become a popular link in a system of multi-use trails that will lead from downtown Boston, meander past the scenic and historic Neponset River, join with the myriad of trails that wind through the Blue Hills, and loop back into Boston by passing alongside the sea and over 3 miles of swimmable harbor beaches.



*Downtown Boston: A Destination & Place to Start the Trail*

The defining feature of the Neponset Valley Trail is that it will go in many directions. In one direction, the trail will be for urban residents seeking an enjoyable bike ride, a stroll along the river, a hike in the woods, or a nap on a sunny beach. Going in another direction, the trail will be for suburban residents interested in a more pleasurable route into the city, a meal on Boston's waterfront, a basket of fresh fruits and vegetables from the Haymarket, or a day exploring a Boston museum. The trail will also connect with other trails leading south, further west, and to the north.

### Possible Trail Names

The Neponset Valley Trail will consist of four trails described below. In this plan we refer to the trails as the Rose Fitzgerald Kennedy Trail, Abigail Adams Trail, Kuchamakin Trail, and Neponset River Trail. These are working titles included here as examples of possible names.

#### *Rose Fitzgerald Kennedy Trail*

Running between Boston's waterfront and the Neponset River will be the approximately 6 mile trail referred to in the plan as the "Rose Fitzgerald Kennedy Trail." In honor of this extraordinary woman who gave so much to Boston, Massachusetts,



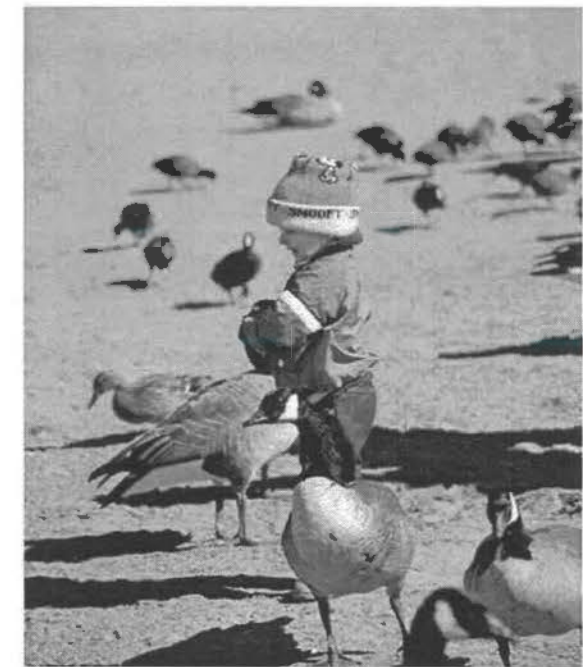
*John F. Kennedy Library on the Rose Kennedy Trail*

and the country, this trail will run alongside the harbor, follow existing MDC owned parks and parkways for most of the route, and lead to the John F. Kennedy Library at Harbor Point.

#### *Abigail Adams Trail*

Crossing the Neponset River Bridge will be the approximately 5 mile trail referred to in the plan as the "Abigail Adams Trail." The trail will connect with the Rose Fitzgerald Kennedy Trail in the Port area of the Pope John Paul II Park, span the Neponset River, turn east to Squantum Point and Wollaston Beach, go west along Furnace Brook Parkway, and lead to the Adams National Historic Site in Quincy.

In the future, the MDC will make a number of parkway improvements to enable this trail to be developed. For example, the MDC will improve the existing sidewalks along the Neponset Bridge to allow for bicyclists to cross. Along Commander Shea Boulevard and Furnace Brook Parkway, where there is sufficient space, the trail will be constructed as a separate off-road path. In those places where there are no alternative off-road routes, the users will be directed to follow roadway shoulders which will be clearly marked as bike lanes.



*The Neponset Valley Trail would Connect with 3 miles of Beaches*

#### *Neponset River Trail*

At Mattapan Square, the Neponset River Trail will run east for approximately 3 miles and connect with the Rose Fitzgerald Kennedy Trail and Abigail Adams Trail at the Port area of Pope John Paul II Park. It will also continue west along the river toward the Fowl Meadow Reservation, Stony Brook Reservation, Mother Brook, and Charles River. From Mattapan Square, other trail-users may wish to travel north along Blue Hill Avenue and connect with Franklin Park and the beginning of the Emerald Necklace.



*View of the Neponset Valley from the Kuchamakin Trail Section of the Neponset Valley Trail*

### ***Kuchamakin Trail***

Beginning at the Adams National Historic Site and extending further westward along Furnace Brook Parkway and Chickatawbut Parkway will be the approximately 10 mile trail referred to in the plan as the “Kuchamakin Trail.” Named after one of the former chiefs of the local Algonquin tribe, the trail will form a “skyline ride” across the northern ridge of the Blue Hills. The views from here of the Neponset Valley, the city, and harbor are truly extraordinary. The trail will also lead to many of the trail and park facilities located throughout this 6,000 acre mountain-like recreation area.



*Fishing in the Blue Hills Reservation*

Turning north, the Kuchamakin Trail will connect with the Neponset River Trail at Mattapan Square by following the Blue Hill Parkway’s wide, tree-lined median. Or signs will direct trail-users to follow clearly marked bike lanes along the parkway’s shoulders.



*The Trail will be a Community and Regional Resource*

### *Water Quality*

Just as there has been a renewal of interest in protecting and enhancing the land along the Neponset River, in recent years, there has been support for improving the river's water quality. Since the passage of the 1970 Clean Water Act, and due to the ongoing efforts of a large number of public agencies, municipalities, and private organizations working cooperatively as part of the Massachusetts Executive Office of Environmental Affairs' Neponset River Watershed Initiative, the Neponset River is becoming cleaner. What's more, there is every reason to believe that the progress will continue.

The emphasis of the Neponset River Watershed Initiative is on pollution prevention. This appears to be the best strategy for restoring the Neponset River, because in the long run, it does the most to protect the river for the least amount of money. Pollution prevention measures, such as those steps being carried out by the Boston Water and Sewer Commission, include eliminating "cross connections" between sewers and storm drains leading into the river, redesigning catch basins to collect oil and suspended particles before reaching the river, and educating the public about pesticide and fertilizer use, pet waste control, car oil recycling, and safe disposal of household cleaners.

In addition to future water quality improvements, a limited amount of dredging will be periodically needed to maintain the navigable main channel, and certain secondary channels of the lower Neponset River.

### *River Trail*

There is a second multi-use trail running along the Neponset River. That is the river itself. All manner of boats currently ply the waters of the river, from canoes to motor boats. There are several yacht clubs along the lower reach of the waterway. And there is a desire to make the river more accessible to individuals wishing to enjoy boating on the river.

The MDC plans to develop several sites along the lower Neponset River for canoeists and kayakers to launch and take out their boats. These sites range from areas where banks need clearing to one or two places where a small wooden or stone dock may be constructed along the river.



In the future, a canoeist or kayaker will be able to launch his or her boat either at Mattapan Square, Ryan Playground, or below Central Avenue on the north side of the river. There are also opportunities to develop other boat launch sites upstream of Mattapan Square. Those wishing to continue boating further east will be able to take out their boat above the Lower Mills dam, portage east along the Neponset River Trail, cross through the Milton Village T Station and, if permission is granted by the Town of Milton, launch their boat at the town's boat ramp along the south side of the river.

The boater will be able to tie up at either the hummock alongside Ventura Playground or at the foot of Hutchinson Field. The MDC will work with the Trustees of Reservations to repair the damaged wooden dock along the river and construct a footpath up to the top of the field. The view from here of the Neponset Marsh Reserve is considered one of the finest of the river. Across the street is the Forbes Museum, which will make a popular destination for boaters, as well as for those Neponset River Trail users making a side trip.



*The River is a Resource for All Manner of Boats*

Further downstream, there will be small wooden dock and parking lot on the north side of the river just above Granite Avenue at one of the main entrances to the Neponset River Reservation and Marsh Reserve. This will be one of the more widely-used facilities for launching and taking out canoes and kayaks.

### *Riverside Boat Docks*

Along the Riverside area of Pope John Paul II Park will be a boat storage shed and dock. As described earlier, there will be boats to rent, instructional classes, and races. Dredging around the dock will also allow motorized boats to use the dock for river cruises, trips to places inside the harbor, and for outings to the Boston Harbor Islands State Park.

### *Squantum Point Boat Ramp and Pier*

At Squantum Point, there will be a public boat ramp that will lead from the parking lot into the bay. The boat ramp will allow motorists to launch their boats, park their cars, and then take out their boats at a later time.

In the future, when the Massachusetts Water Resources Authority has completed its work at the Deer Island Treatment Plant, it will turn over its ferry pier at Squantum Point to the MDC, which will make the dock available for public use. Squantum Point Park would make an ideal point of departure and arrival for ferry boats to and from the Harbor Islands, as well as other destinations in and around Boston Harbor and Massachusetts Bay.



*Possible Ferry Service from Squantum Point to Harbor Islands*

## **Funding, Costs, and Phasing**



## Funding, Costs, and Phasing

### Funding

Funds to carry out the Neponset River Master Plan will come from a number of sources. The MDC will draw from existing agency funds to implement the plan. These funds may be supplemented by the recent passage of the 1996 Massachusetts Open Space Bond Bill, which appropriated approximately \$45 million for implementation of most of the measures described in the master plan. Other sources of funds will be sought for specific park development projects, such as working with the Massachusetts Public Access Board to construct a fishing pier on the river and boat ramp at Squantum Point. Federal funds will be sought as well.

The "Neponset River Adopt-A-Park Program" will provide a mechanism for individuals, businesses, and foundations to contribute funds for carrying out specific elements of the plan, especially for projects related to park educational and recreational programs, maintenance, and public safety.

User fees for permits to use the fields and other facilities can help pay for the operation of the park. Meetings, weddings, corporate picnics and other activities can all be marketed for a fee. Boat rentals, launching fees, and parking fees can all be charged and help offset costs.

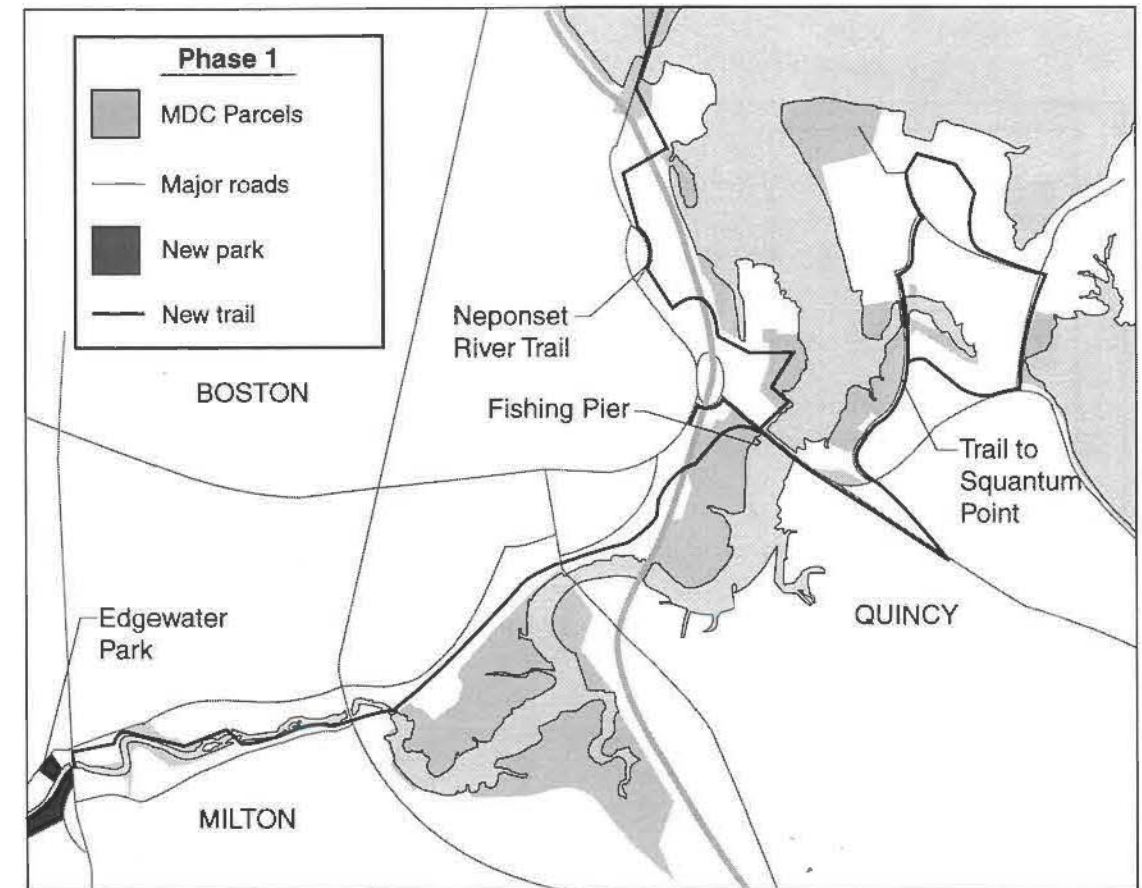
In addition, leagues and other user groups may contribute to the maintenance of the park with "in kind" assistance like field lining and other activities related to their use of the fields by the leagues.

### Costs

The following cost figures are preliminary, are presented in 1996 dollars, and do not account for inflation. The cost estimates are preliminary because the park projects described in this plan must undergo further study and refinement. Accurate costs can only be obtained after preparing final design and construction documents, and then obtaining bids from qualified contractors. A number of the potential park sites, such as the former Hallet Street Landfill, will require additional testing and analysis to determine the necessary steps for capping the area prior to park development and final cost determination.

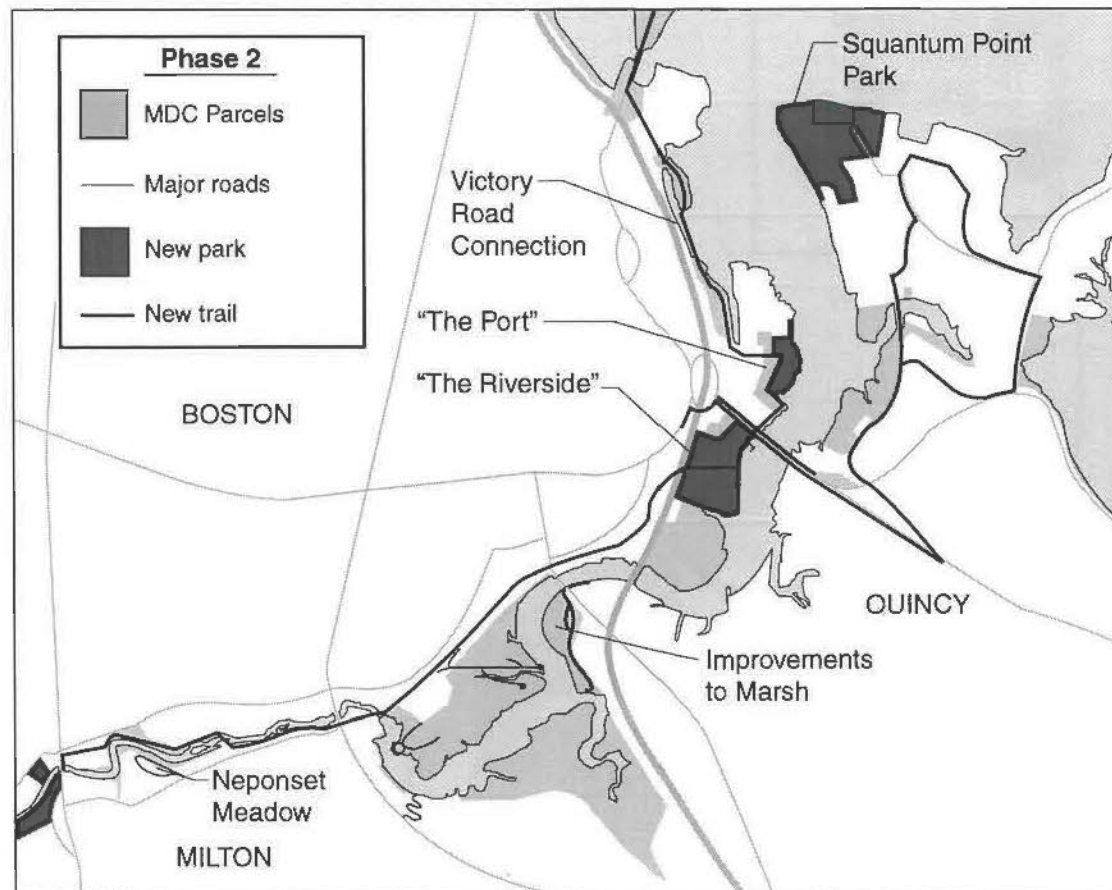
During the permitting process associated with the master plan, the MDC will evaluate alternative construction methods that reduce costs as the permitting agency allows.

The total cost for developing the master plan would be \$33.8 to \$38.6 million dollars or \$260 to \$297 per capita for the 130,000 citizens living in the primary planning area.



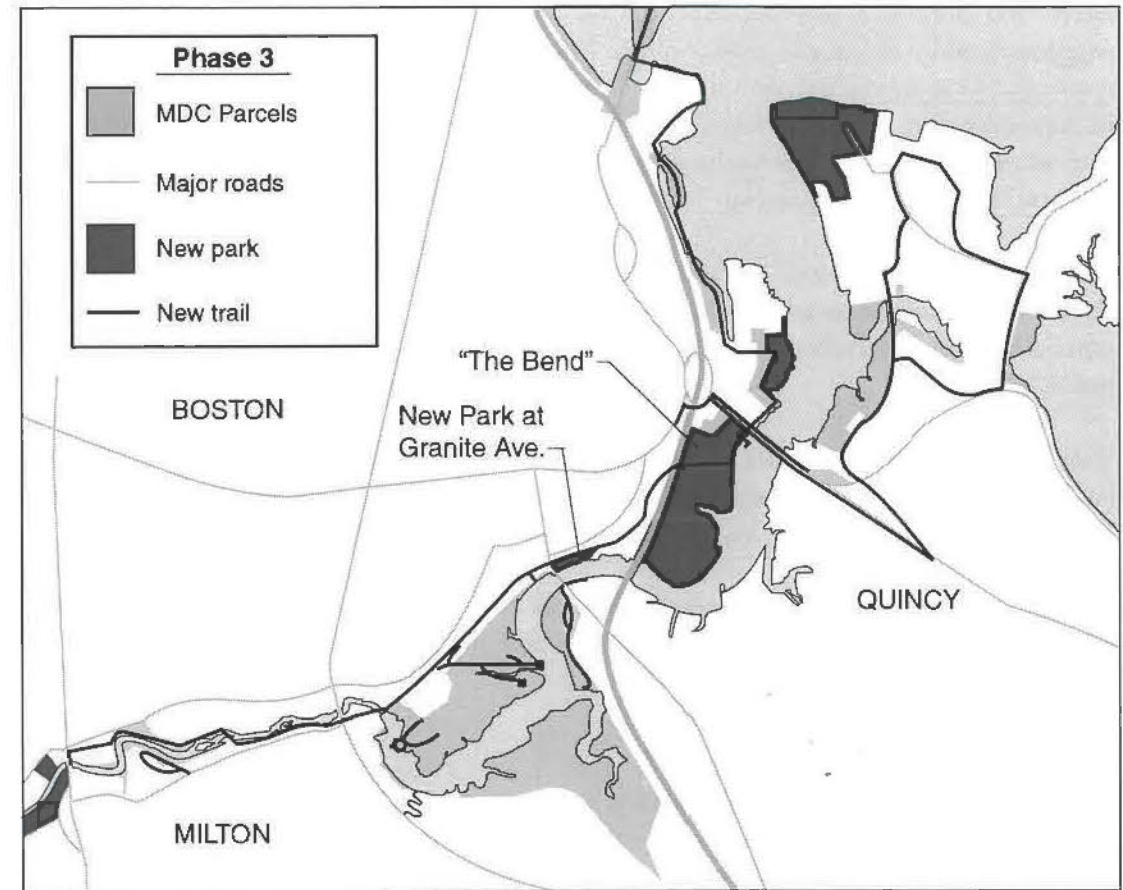
### *Phase 1 (Two to three years)*

- Construction of the Neponset River Trail from Beades Bridge to Mattapan Square and Wollaston Beach requires limited or no site remediation
- The MDC may purchase one or more additional parcels along Edgewater Street to create new Edgewater Park
- Construction of Fishing Pier
- Comprehensive Site Assessment of former Hallet Street and Drive-in properties



**Phase 2** (Three to five years)

- Developing parks at the former Neponset Drive-In and Stearns Lumber Yard/Shaffer Paper area should require less site remediation than capping the Hallet Street Landfill
- Squantum Point Park may require limited site remediation
- Neponset Marsh Reserve Improvements and the development of the Granite Railway Trail will occur subsequent to the development of the Neponset River Trail
- Development of the Neponset Meadow requires further public discussion, but limited or no site remediation
- Anadromous Fishery Restoration will require additional study of costs and impacts



**Phase 3** (Five to eight years)

- Due to the additional time required to complete the site investigation and capping process, the Bend, which will be located on the former Hallet Street Landfill, will take the longest of the new parks to develop
- If the MDC decides to purchase one or more of the parcels of property between Granite Avenue and the Keystone Building in Boston, the agency will be required to undertake a number of site remediation steps prior to developing a riverfront park in this area
- Once the main Neponset River Trail is conducted, the MDC will explore making other trail connections

## Master Plan Budget Summary

### PHASE I

#### Neponset River Trail:

Beades Bridge to Wollaston Beach & Granite Ave.	\$ 483,000
Granite Avenue to Mattapan Square	\$ 1,261,000
<i>Edgewater Park</i>	\$ 710,000
<b>Phase I Total</b>	<b>\$ 2,454,000</b>
25% Design and Contingency	\$ 613,500
<b>Total</b>	<b>\$ 3,067,500</b>

### PHASE II

#### The Port:

Port Norfolk Site Remediation	\$ 400,000	range	\$ 515,000
PJP II Park Development at Port Norfolk	\$ 2,350,000		\$ 2,350,000

#### The Riverside:

Drive-In Site Remediation	\$ 2,800,000	\$ 5,300,000
PJP II Park at Neponset Drive-In	\$ 5,150,000	\$ 5,150,000
<i>Squantum Point Park</i>	\$ 1,700,000	\$ 1,700,000
<i>Victory Road Boardwalk to Tenean Beach</i>	\$ 1,400,000	\$ 1,400,000
<i>Neponset Marsh Reserve Improvements</i>	\$ 115,000	\$ 115,000
<i>Granite Railway Trail</i>	\$ 26,000	\$ 26,000
<i>Neponset Meadow</i>	\$ 28,000	\$ 30,000

<b>Phase II Total</b>	<b>\$13,969,000</b>	<b>\$16,586,000</b>
25% Design and Contingency	\$ 3,485,250	\$ 4,146,500
<b>Total</b>	<b>\$17,461,250</b>	<b>\$20,732,500</b>

Note: Does not include cost for study of Anadromous Fishery Restoration or construction of new dams and fish ladders. Funds to conduct CSA Study shown in Phase II calculations.

### PHASE III

#### The Bend:

Hallet Street Landfill Remediation	\$ 5,200,000	range	\$ 6,400,000
PJP II Park at Hallet Street Landfill	\$ 4,100,000		\$ 4,100,000
<i>Riverfront Park (Granite Ave. Park)</i>	\$ 1,000,000		\$ 1,000,000
<i>Edgewater Park (addition parcels)</i>	\$ 160,000		\$ 160,000
<i>Other Bike Path Connections</i>	\$ 86,000		\$ 86,000
<i>Neponset River Trail around Commercial Point</i>	\$ 72,000		\$ 72,000
<b>Phase III Total</b>	<b>\$10,618,000</b>		<b>\$11,818,000</b>
25% Design and Contingency	\$ 2,654,500		\$ 2,954,500
<b>Total</b>	<b>\$13,272,500</b>		<b>\$14,772,500</b>

### Operating and Maintenance Budget

The staff for operating and maintaining the corridor will include a site supervisor and two rangers for seven day, full time operation of the Pope John Paul II Park, three maintenance staff for the entire corridor, and seasonal staff.

Some activities that require specialized skills or equipment or that are infrequent may be done best by contracting with others. Such activities may include line painting for the Neponset River Trail, retaining wall repairs, wildlife monitoring, field maintenance, and other specialized tasks.

Based on these estimates of staff requirements, and on experience with similar parks, an annual operating budget of approximately \$500,000-\$700,000 per year is required (or approximately \$3.85 to \$5.40 per capita for the 130,000 citizens living in the primary planning area). This would include approximately:

Full-time Regular Staff	\$200,000 - \$250,000
Seasonal Staff	\$40,000 - \$60,000
Operating Expenses	\$100,000 - \$200,000
Contracted Services	\$120,000 - \$250,000
<b>Total</b>	<b>\$460,000 - \$760,000</b>

Some portion of these annual costs will be offset by user fees and other park income. These figures are also expressed in 1996 dollars.

## **Public Safety, Maintenance, and Mitigation**

### PUBLIC SAFETY

Assuring the public's safety has been among the major concerns of the community and this planning effort. Studies of multi-use trails around the country find that the regular use of parks and trails is the best form of security. The use of trails means that there are more eyes on the public areas and less likelihood of problems. (See Appendix, Inventory and Analysis, for more information on security issues of other trails.) However, these same studies show that parks and multi-use trails in urban settings require good management and patrolling as well. The MDC is currently meeting with representatives of the Massachusetts State Police, MBTA Police, and Police Departments for the City of Boston and Town of Milton, and citizens, to assure security for the Lower Neponset River Reservation. The MDC is also exploring the necessary steps for assigning State Police details to take the lead in patrolling the parks and trail. In addition, the MDC will establish a program of having MDC Park Rangers patrol the parks and trail, and regularly lead interpretive tours of the natural and historic areas within the Reservation. Rangers, police, and citizens may have the opportunity to work together to enhance security along the trail. The Neponset River Trail might also include a series of "Emergency Call Boxes" along the corridor which will connect to the State Police dispatcher. Such call boxes are becoming standard equipment in many parks.

### MAINTENANCE

One of the most important maintenance strategies for the Neponset River Reservation is prevention of misuse and vandalism through increased use, positive uses, a sense of neighborhood ownership and stewardship, sustainable design, and timely repairs.

#### Increased Use and Positive Uses

As emphasized elsewhere, positive uses of the parks and lands that make up the Neponset River Reservation will reduce the potential for misuse. Visitors using the Neponset River Trail and other parks and open space along the river will discourage negative uses and reduce maintenance associated with vandalism. The new facilities will naturally attract users, but efforts will also be made to encourage increased use by school

groups, adult and family education programs, civic organizations, and by youth organizations and sports leagues.

#### Neighborhood Ownership and Stewardship

Another important strategy to prevent unnecessary maintenance and help with routine maintenance is to encourage a sense of public ownership and involvement. Fortunately, today there are many eyes on the Neponset River. Because of the years of environmental education and advocacy work undertaken by the Metropolitan District Commission, the Massachusetts Executive Office of Environmental Affairs, the Neponset River Watershed Association, the Boston Natural Areas Fund, Trust for Public Land, local conservation commissions, and other organizations and individuals, the basic philosophy of good stewardship for protecting and enhancing the quality of the Neponset River is well supported. What's more, these stewardship efforts have helped produce tangible results. Long stretches of open space along the river have been, or will be protected from development. The water quality of the Neponset River is progressively improving, and overgrown and litter strewn banks are being cleared.

The MDC will also encourage groups, businesses, and individuals to participate in its "Adopt-a-Park Program," which will solicit volunteer time and financial support for the betterment of the Neponset River Reservation. The MDC operates similar programs in other parks. Along the Neponset River, representatives of a number of local business and non-profit groups have already expressed an interest in participating in such a program. The various roles of volunteers can range from individuals helping to maintain the parks to others acting as "docents," that is, individuals who are knowledgeable about a particular subject, or area of the Reservation, who then volunteer to lead guided tours.

The Friends of Ryan Playground and other similar groups are successful examples of how this sense of public ownership, stewardship, and neighborhood involvement can assist the MDC in its park management.

Contracting with local community groups and nonprofits for some of the routine maintenance tasks like mowing and trail maintenance will also help foster a sense of local involvement and stewardship.

#### Sustainable Design

All building materials should be considered in terms of life-cycle implications and the impacts on the environment from their manufacture, transportation, and maintenance. The MDC's policy is to design and construct park facilities using durable materials which weather well and stand up to high levels of use and vandalism. For instance, metal signs and granite trail markers have been proposed for use throughout the reservation. Graffiti resistant coatings and vandal resistant materials should be used where possible. Reuse and recycling of existing materials, like the granite blocks salvaged from the reconstruction of the Adams Street Bridge, could contribute to the historic qualities of the area and save money. Plantings and ground covers will be selected to minimize the need for water and other types of maintenance.

Detailed site planning that takes advantage of micro-climate to increase solar gain and reduce the impacts of winter winds will be employed to the maximum extent possible. Energy efficient and resource saving devices including low-flow plumbing fixtures, solar hot water, passive solar heating, super insulation, and efficient heating and ventilating systems will be incorporated, whenever feasible, into the Park Center Building and any other multi-use structures that may be built.

#### Timely Maintenance

As a normal part of good stewardship, the facilities described in this plan will be inspected on a regular basis to identify a work program to provide needed repairs and improvements due to aging, winter damage, vandalism, and general use. The specific tasks described on the following pages will be performed periodically, and on an "as needed" basis to adequately maintain the parks and open spaces within the Reservation.

A special note is needed here regarding the need for timely repairs. A program of making timely repairs to the damage that does occur as a result of either vandalism or normal wear and tears is a critical part of any strategy to prevent additional vandalism. Regular maintenance and prompt repairs show that the area is cared for and reduce the temptation for others to copy acts of defacement. For example, maintenance staff will routinely carry paint to cover over graffiti as it occurs. Prompt action will discourage other vandalism.

## Maintenance and Mitigation Issues

Each major area of the lower Neponset River Reservation has associated maintenance issues such as control and management of vegetation, maintenance of the quality of wildlife habitat, construction mitigation, and other periodic and seasonal maintenance tasks such as litter pick-up, snow plowing, and repair of structures and signs. These maintenance activities are summarized for each area.

The entire river corridor should be managed and programmed as one entity. Maintenance of fresh and saltwater marshes, linear paths, passive and active recreational facilities, fishing piers, boat and canoe launches, and environmental education and recreational programs need to be coordinated along the entire length of the corridor by a single entity with total responsibility for both programming and maintenance. The MDC management of the Southwest Corridor is a good example of a linear corridor that is being managed as one entity by a single division.

The maintenance and mitigation items included below are representative and typical of the activities to be followed by the MDC. Since the primary goal of the Master Plan is to preserve, restore, and enhance the natural qualities of the river system, during and after park construction, the MDC will apply the most environmentally appropriate maintenance practices. For example, fertilizer, if required, will be applied in limited amounts and as far from the shoreline as feasible. If necessary and appropriate, invasive species and pests will be controlled by application of Integrated Pest Management (IPM) practices. When IPM is used, a plan will be prepared for each species to be managed. Only EPA approved solvents, sealants, wood preservatives, and paints will be used throughout the Master Plan area.

### Best Management Practices

As an Area of Critical Environmental Concern, the lower Neponset River Reservation warrants state-of-the-art construction mitigation techniques, environmentally sustainable designs, and maintenance measures to not only minimize adverse impacts to water quality and wildlife habitats, but also to improve the environment along the river for both wildlife and area residents. Recreation facilities such as parking areas, boat launching ramps, piers and floats, and buildings will be designed and constructed to minimize their impacts on water quality and habitat. The final designs for these facilities will include stormwater and non-point source pollutant management plans. Operation and maintenance of these and other recreation facilities along the river will require the activities listed in the following section. These on-going maintenance activities and stormwater control measures will conform to "Best Management Practices" (BMPs) and other applicable guidelines to assure that sedimentation, erosion, and pollution runoff are minimized. See the section on Permits for more information on design and construction guidelines.

## Squantum Point

The proposed facilities at Squantum Point include a parking area, signs and information kiosk, piers and floats, a boat launching ramp, a sea wall with stairs to an informal beach, a lookout with views over the river's mouth, and nature observation trails and blinds. The MDC will maintain the restored wetlands and marshes at Squantum Point with the goal of managing these areas as a nature preserve. Maintenance of Squantum Point will include the following tasks.

Regular Maintenance Tasks	As Required	Times/Year
Spring Cleanup & Facility Inspection		1
Plant Bed and Tree Pit Mulching		1
Plant Bed and Tree Pit Edging		3
Plant Bed and Tree Pit Weeding		7
Parking and Boat Ramp Surface Sealing	x	1
Catch Basin Cleaning	x	Fall
Parking Area Plowing	x	Seasonally
Pier and Dock Maintenance (Pull out in winter)	x	Seasonally
Boardwalk and Trail Surface Maintenance	x	Yearly
Invasive Species Monitoring and Control	x	4
Signs and Kiosk Maintenance	x	Monthly
Overhanging Plant Pruning	x	Fall

## Neponset Marshes

The facilities proposed for the Neponset Marshes include nature observation boardwalks off the road over the MWRA pipeline, a trail on the Quincy side of the river to the Granite Railway Pier, and gates, fences and guardrails. Maintenance of this predominantly natural area will include:

Regular Maintenance Tasks	As Required	Times/Year
Spring Cleanup & Inspection		1
Invasive Species Monitoring and Control	x	4
Overhanging Plant Pruning	x	Fall
Boardwalk and Trail Surface Maintenance	x	Seasonally
Signs Maintenance	x	As Required
Gate, Fence and Guardrail Maintenance	x	1
Habitat Improvements	x	As Appropriate

**Pope John Paul II Park**

The facilities propose for the Pope John Paul II Park, including the Port Norfolk section, include a boardwalk and hard surface promenade, parking areas, fishing pier, Park Center building, soccer fields, active lawn areas, passive lawn areas, community gardens, playground, tot lot, playgrounds, meadow and wet meadow areas, pathways, and restored salt marsh and environmental education area. Contracted maintenance of the restored saltmarsh will be required during the initial stages of its establishment. Major ongoing maintenance of this area will include:

Regular Maintenance Tasks	As Required	Times/Year
Spring Cleanup & Inspection		1
Plant bed and Tree Pit Mulching		1
Plant bed and Tree Pit Edging		3
Plant bed and Tree Pit Weeding		7
Plant Pruning		2
Plant Fertilizing		2
Mowing and Trimming all Lawn Areas		Weekly (1/2yr)
Fertilize all Lawn Areas		3
Lime all Lawn Areas		1
Weed and Pest Control	x	As required
Irrigation System Shutdown/Start Up, Head replacement, etc.	x	2
Aeration of Active Play Areas		3
Aeration of Passive Play Areas		1
Topdress Active Play Areas		2
Slice and Seed Active Play Areas		2
Slice and Seed Passive Lawn Areas		1
Land Fill Vent Maintenance	x	Monthly
Habitat Improvements		As Appropriate
Natural Areas, Wildflower Seeding	x	1
Invasive Species Monitoring and Control	x	4
Boardwalk/Promenade Maintenance.	x	As required
Signs Maintenance	x	Yearly
Gate, Fence and Guardrail Maintenance	x	1
Building Maintenance	x	Daily
Catch Basin Cleaning	x	Fall
Parking Surface Sealing	x	1
Parking Area Plowing	x	Seasonally
Play Equipment Maintenance & Safety Check	x	Yearly

**Regular Maintenance Tasks (Continued)**

	As Required	Times/Year
Replenish Play Area Sand	x	1
Park Furniture (Benches, etc.) Maintenance, Seal & Stain	x	1
Lighting Maintenance	x	As required
Litter Removal	x	Daily

**Neponset River Trail**

The Neponset River Trail will include the hard trail surface, stone dust side trails, bridges, a board walk across the river upstream of Central Avenue, parking areas, canoe landings, benches, gates and guardrails, fences, lighting, and security call-boxes. Maintenance activities associated with these facilities include the following:

Regular Maintenance Tasks	As Required	Times/Year
Spring Cleanup & Inspection		1
Plant bed and Tree Pit Mulching		1
Plant bed and Tree Pit Edging		3
Plant bed and Tree Pit Weeding		7
Mowing of Edge Strip		16
Catch Basin Cleaning	x	Fall
Parking Surface Sealing	x	1
Parking Area Plowing	x	Seasonally
Boardwalk and Bridge Maintenance	x	As required
Trail Surface Maintenance	x	As required
Park Furniture (Benches, etc.) Maintenance, Seal & Stain	x	1
Weed and Pest Control	x	As required
Habitat Improvements	x	As appropriate
Overhanging Pant Pruning	x	Fall
Lighting Maintenance	x	As required
Litter Removal	x	Weekly
Retaining Wall Maintenance	x	As required

**Edgewater**

Edgewater Park, an approximately 3 acre site just west of the Blue Hill Parkway, will have community gardens, a lookout and seating area, a pedestrian bridge, and a play area. It may also have a canoe landing, and lighting as part of the multi-use trail. Maintenance activities associated with these facilities include the following:

Regular Maintenance Tasks	As Required	Times/Year
Spring Cleanup & Inspection		1
Plant bed and Tree Pit Mulching		1
Plant bed and Tree Pit Edging		3
Plant bed and Tree Pit Weeding		7

Regular Maintenance Tasks (Continued)	As Required	Times/Year
Mowing of Edge Strip		16
Plant Fertilizing		2
Mowing and Trimming all Lawn Areas		Weekly (1/2 year)
Fertilize all Lawn Areas		3
Lime all Lawn Areas		1
Weed and Pest Control	x	As required
Aeration of Active Play Areas		3
Aeration of Passive Play Areas		1
Topdress Active Play Areas		2
Slice and Seed Active Play Areas		2
Slice and Seed Passive Lawn Areas		1
Catch Basin Cleaning	x	Fall
Parking Surface Maintenance	x	1
Parking Area Plowing	x	Seasonally
Bridge Maintenance	x	As required
Park Furniture (Benches, etc.) Maint., Stain & Seal	x	1
Lighting Maintenance	x	As required
Overhanging Pant Pruning	x	Fall
Litter Removal	x	Daily

### Equipment and Staffing

Most of the major maintenance issues discussed in the preceding section are typical of many other MDC park operations. The few exceptions, including salt marsh maintenance for areas of restored marsh, wildlife monitoring and management (including management for sensitive and state-listed species), and control of invasive non-native plants, require specialized skills. To assure that these important tasks are well managed, one park ranger assigned to the management of the Lower Neponset River corridor should be trained in biology and be an accomplished naturalist capable of overseeing these activities. Some of these specialized activities will be done by park staff, some by volunteers, and some contracted with university or private wildlife research groups. As noted in the management section, the monitoring and management of sensitive, state-listed species will be done in conjunction with the Natural Heritage and Endangered Species Program staff. (See the "Operating Budget" under *Funding, Costs, and Phasing*.)

Equipment requirements for the above maintenance tasks include pick-up trucks, equipped with snow plows; tractor with attachments for fertilizer and top dressing applications, sweeper, seeder, aerator, etc.; a variety of power mowers; electronic communications equipment; hand tools; chain saws and protective clothing; and power tools with portable generator. An irrigation system can be installed as part of the land fill capping process at Pope John Paul II Park and possibly reduce the requirements for topsoil from twelve inches to six inches. Such a reduction in topsoil would come close to paying for the cost of installing the irrigation system.

The staff for operating and maintaining the corridor will include a site supervisor and two rangers for seven day, full time operation of the Pope John Paul II Park, three maintenance staff for the entire corridor, and seasonal staff.

In addition to these regular staff there will be opportunities for volunteer assistance with spring clean up, wildlife monitoring, and a variety of other tasks that may be appealing for participation by nearby residents, students, naturalists, and others.

Some activities that require specialized skills or equipment or that are infrequent may be done best by contracting with others. Such activities may include line painting for the Neponset River Trail, retaining wall repairs, wildlife monitoring, field maintenance, and other specialized tasks.



**Permits**

## Anticipated Permits

Environmental permits and approvals are required whenever proposed work may affect certain environmentally sensitive resources including waterways, wetland resource areas, habitats of rare or endangered species, historic and archaeological sites, or when work involves cleaning up hazardous waste or capping solid waste landfills. A variety of permits will be needed from federal, state and local agencies for implementation of the Neponset River Master Plan.

### Area of Critical Environmental Concern

In March of 1994, the Neponset River Estuary was designated as an Area of Critical Environmental Concern (ACEC). This designation took effect on December 1, 1995, and encompasses the mouth of the river, all wetlands, and critical resources which fall within a 100 foot buffer zone from the edge of the river.

An ACEC is an area containing concentrations of highly significant environmental resources. The designation directs state agencies to administer programs and review projects subject to their jurisdiction in order to preserve, restore, and enhance the area's resources. State agencies are held to a higher standard of review for proposals that will alter these resources.

The concentrations of environmental resources within the Neponset River Estuary ACEC, give every phase of design, construction, and maintenance of the park facilities described in this plan increased significance. The proposed facilities provide access for enjoying the river as a recreational and environmental asset. People support environmental regulation to the extent that they value the natural environment and understand the relationship between their activities and natural processes. The opportunity to walk along a riverside path or observe nature in an area that is now largely abandoned and inaccessible will increase people's appreciation, understanding, and willingness to protect these environmental resources. The preceding section discussed the importance of sustainable design and maintenance. The environmental regulation process leading to the issuance of the following permits will assure that design, construction and maintenance results in minimal impacts to sensitive resources.

### Wetlands

The following table describes the estimated Wetland Area Impacts by Project Area and Master Plan Implementation Phase (impacts envelope). As indicated in the table on the next page, the sum of impacts to Buffering Vegetated Wet-

lands, Salt Marsh, and Tideland within the ACEC totals 0.49 acres, and 0.17 acres outside the ACEC. The sum of Wetland Resource Area Impacts other than Buffering Vegetated Wetlands, Salt Marsh and Tideland within and outside the ACEC totals 2.3 acres.

MDC Lower Neponset River Master Plan  
Estimate of Wetland Resource Area Impacts by Project Phase

Phase 1	Project Element	Resource Area	Length	Width	Impact
	Multi Use Trail - Bird Blind Near Shawmut Crossing	Salt Marsh	50 ft	8 ft	400 sq. ft. of shading
	Pope JP II Park - Fishing Pier	Beach & Land Under Ocean (LUO)	50 ft	20 ft	1,000 sq. ft. of shading and minimal impact from piles
	<b>Misc. Projects:</b>				
	Boat Dock at MRI	Salt Marsh and Land Under Ocean	45 ft	12 ft	540 sq. ft. of shading and minimal impact from piles
	Edgewater Park*	Inland Bank and Buffer Zone	650 ft	12 ft	7800 sq. ft. of grading and landscaping
	Canoe Launch Upstream of Dam*	Inland Bank	20 ft		20 linear feet of Bank stabilization
	<b>Phase 2</b>				
	<b>Squantum Point Park:</b>				2,000 linear feet of Coastal Bank stabilization
	Shore Line Enhancement	Coastal Bank	2,000 ft		
	Shea Boulevard/Look Out	Salt Marsh & Bordering Vegetated Wetland (BVW)	30 ft	10 ft	300 sq. ft. of shading
	<b>Multi Use Trail:</b>				
	Tenean Beach to Victory Park Br.	Land Under Ocean & Beach	875 ft	12 ft	10,500 sq. ft. of shading
	Rice Island Bridge*	BVW & Land Under Water	50 ft	10 ft	500 sq. ft. of shading
	<b>Pope JP II Park:</b>				
	The Port/Edge Improvements	Buffer Zone to Coastal Bank & potentially Land Subject to Coastal Storm Flowage (LSCSF)	900 ft	10 ft	9,000 sq. ft. of grading and landscaping
	Riverside/Edge Improvements	Buffer Zone to Coastal Bank & potentially LSCSF	650 ft	12 ft	7,800 sq. ft. of grading and landscaping
	Boat Dock Dredging	Land Under Ocean	100 ft	50 ft	5,000 sq. ft. of dredging to minus 6 ft., 400 sq. ft. of shading
	Look Out	Beach	20 ft	20 ft	400 sq. ft. of shading
	<b>Misc. Projects:</b>				
	Ventura Canoe Launch	Inland Bank	20 ft		20 linear feet of bank stabilization
	<b>Phase 3</b>				
	<b>Pope JP II Park</b>				
	The Bend - Edge Improvements	Buffer Zone to Coastal Bank & potentially LSCSF	3,300 ft	20 ft	66,000 sq. ft. of grading and landscaping. Associated with landfill capping

\* Denotes element is outside of ACEC

**MDC Lower Neponset River Master Plan  
Wetland Impacts Inside/Outside of ACEC**

	Inside ACEC (sq. ft.)	Outside ACEC (sq. ft.)	Total
<b>Bordering Vegetated Wetland &amp; Salt Marsh Impacts</b>			
Rice Island Bridge (Bordering Vegetated Wetland & Land Under Water)	500		
Bird Blind (Salt Marsh)	400		
MRI Boat Dock (Salt Marsh & Land Under Ocean)	540		
Shea Blvd. Look Out	300		
Total (square feet)	1,240	500	1,740
Total (acres)	0.03	0.01	0.04
<b>Other Resource Area (Land Under Ocean, Land Subject to Coastal Storm Flowage, Beach, Buffer Zones)</b>			
Fishing Pier	1,000		
Bridge - Tinean Beach to Victory Road Park	10,500		
Port - Edge Improvements	9,000		
Riverside - Edge Improvements	7,800		
Boat Dock Dredging	5,000		
Look Out	400		
Bend - Edge Improvements	66,000		
Total (square feet)	99,700	0	99,700
Total (acres)	2.29	0.0	2.29
<b>Bank Impacts</b>			
Edgewater Park		650	
Canoe Launch upstream from dam		20	
Squantum Point Park	2,000		
Ventura Canoe Launch	20		
Total (linear feet)	2,020	670	2,690
Total (square feet assume 10 feet wide)	20,200	6,700	26,900
Total (acres)	0.46	0.14	0.62
<b>Summary of Wetland Resource Area Impacts</b>			
Sum of Impacts to BVW, Salt Marsh and Tideland Impacts	0.49	0.17	0.7
Total Wetland Resource Area Impacts (other than BVW and Salt Marsh)	2.29		2.3

During final design, the MDC will prepare wetlands replication plans as part of the construction documents and specification for any wetlands alteration that requires such replication.

**Stormwater Control Design**

In addition to managing construction and maintenance activities in accordance with Best Management Practices (BMPs) and other applicable guidelines, all park facilities to be constructed in the ACEC will include state-of-the-art grease and oil traps and sumps will direct the stormwater to the existing City of Boston and City of Quincy stormdrains in the respective areas. Prior to construction, the contractor will be required to develop a pollution prevention plan that will specify measures to control erosion and sediment runoff, including adequate inspection and maintenance control measures that meet standards now being developed by the DEP Stormwater Advisory Committee.

In the course of capping the former Hallet Street Landfill in Boston, the MDC will explore the creation of a "wet meadow" of tall grasses, cattails, rushes and other wetlands plants alongside Davenport Creek. This wet meadow would be created principally as a place to catch, detain, and filter the rainwater coming off the hill before it drains into the river. At the Hallet Street Landfill, over 2 acres of wetland could be created. Over the entire estuary portion of the Master Plan area within the ACEC, nearly 1 acre of new salt marsh should be created along the edges of the new parks.

It should also be emphasized that runoff from the Squantum Point section of the estuary will decrease as the amount of impervious surface associated with the new park will be less than the present condition. At least 5 acres of woody scrub uplands at Squantum Point will be restored by reducing the existing 950 car parking lot to 225 spaces.

**Construction of Docks and Piers within the ACEC**

The docks and piers within the ACEC and throughout the Master Plan area will be designed in an environmentally sensitive manner and will be consistent with both Massachusetts Coastal Zone Management and Americans with Dis-

abilities Act guidelines. For example, none of the docks and piers currently proposed in the Master Plan will adversely affect rare, threatened, or endangered species habitat, as identified by the Natural Heritage Program. Another example is that the proposed piers in salt marshes will be of wood construction and have wood pilings; if treated lumber is used, only non-leaching types will be selected.

Prior to the preparation of construction level documents for any dredging, the MDC will consult with DEP and EPA and keep these agencies and MEPA informed as construction documents and specifications are produced.

#### **MEPA Approval**

The Secretary of Environmental Affairs issued a Certificate on the Environmental Notification Form and Draft of the Lower Neponset River Master Plan on May 15, 1996 (MEPA Approval). The Secretary determined that this Final Master Plan (FMP) and Appendix could be submitted instead of an Environmental Impact Report (EIR). A copy of the Certificate is included in the Appendix. As each project phase or group of projects within the ACEC moves toward construction, the MDC will work with MEPA to determine if a Notice of Project Change (NPC) will be required.

The following is a list of other Permits that will be required for the projects conceptually described in the Master Plan.

#### **Water Quality Certification (from DEP Division of Water Pollution Control)**

Section 401 of the Clean Water Act requires that states issue a Certification that any proposed filling of waterways or wetlands will comply with the state's Surface Water Quality Standards. The need for a Water Quality Certification is triggered when federal permit is needed for filling wetlands or waterways. Proposed activities such as repairing rip rap slopes, constructing new rip rap slopes for bank stabilization, canoe ramps and new piers and docks will involve placing fill in waterways and possibly wetlands, thereby triggering the Corps involvement. Therefore, a Water Quality Certification will be required.

The Massachusetts Department of Environmental Protection (DEP) has established two levels of review. Wetland impacts to vegetated wetlands or Land Under Water under 5,000 square feet are generally excluded from a 401 review. The DEP has determined that a project which will alter less than 5,000 square feet of wetlands and receives an Order of Conditions from the local Conservation Commission will comply with the state's Surface Water Quality Standards. If this threshold is exceeded, a Major Water Quality Certification will be required, which may take three to four weeks to prepare and five months for agency review. A Certificate from MEPA is required before this Certification can be issued.

#### **Coastal Zone Federal Consistency Review**

The Massachusetts Office of Coastal Zone Management (CZM) was established in accordance with the Federal Coastal Zone Management Act of 1972, as amended. The purpose of the Massachusetts CZM is to provide technical assistance to municipalities and state agencies with jurisdiction over coastal resources, ensure that responsibilities of Executive Office of Environmental Affairs agencies are administered in a coordinated and consistent manner, and to review projects proposed within the Coastal Zone for compliance with the CZM Policies established in 301 CMR 20.00.

CZM Consistency Review is required for any project which needs a federal permit for activities in the Coastal Zone and/or when a project located in the Coastal Zone is subject to review by MEPA. A federal permit which requires a CZM Consistency Statement from CZM is not valid until the Statement is issued. A CZM Consistency Review is often prepared as part of MEPA documentation or can be prepared as a stand alone document. Since the Neponset River Plan will require a Permit from the U.S. Army Corps of Engineers and MEPA review, a CZM Federal Consistency Review will be required for this project. It takes about two weeks to prepare a Consistency Review and there is no statutory time period for the CZM Office to complete their review and issue a Statement.

#### **Chapter 91 Waterways License (from DEP Division of Waterways)**

The Waterways Licensing Program was formally established in 1866 by the passage of M.G.L. Chapter 91. The origins of the law can be traced back to the Colonial Ordinances of 1641-1647 which granted to the public rights in tidelands and great ponds. Private ownership of property was extended (and still does extend) to the mean low water mark. The Colonial Ordinances allowed public access to tidelands (land between the mean high water mark and the mean low water mark) for the purposes of fishing, fowling and navigation (public trust rights). The Commonwealth's jurisdiction in accordance with Chapter 91 extends to the mean high water mark of tidal waterbodies and the ordinary high water mark of non-tidal waterbodies. In 1979, the Massachusetts Supreme Court extended the public trust rights to include "filled tidelands". Therefore, the jurisdiction of the Chapter 91 Waterways Licensing Program can include previously filled areas to the historic high water mark dating back to the 1640's.

This permit will be required for any work conducted at or below the mean high water mark such as rip rap bank stabilization projects, canoe ramps and new piers and docks. A Certificate from MEPA must be received before review of a Chapter 91 License application can be initiated.

Approximate time to file this permit is five weeks. The permit plans are required to follow the Massachusetts Land Court plan specifications and must meet be prepared on a specific size sheet. Approximate agency review time is twenty weeks.

#### **Landfill Closure Approval (Department of Environmental Protection - Division of Solid Waste Management)**

Unlined landfills present threats to the environment because water can percolate through the landfill waste. The leachate produced from water percolating through the waste can seep out the side of landfills and contaminate surface water, or can continue to migrate downward into groundwater. To protect water quality, human health and the environment,

the Massachusetts Department of Environmental Protection developed Regulation (310 CMR 19.000) to cap landfills with an impermeable cover to prevent water from percolating through the landfill waste.

The landfill closure process established by the DEP per the Solid Waste Regulations consists of three phases: The Assessment Phase, Design Phase and Implementation Phase. The initial phase involves the a series of environmental monitoring and evaluation of closure alternatives to determine impact of the landfill on human health, safety and the environment. The Assessment Phase involves preparation of an Initial Site Assessment (ISA). The ISA is conducted to characterize the landfill and surrounding environment. After review and approval of the ISA, the scope of the Comprehensive Site Assessment (CSA) is submitted to the DEP for approval. Having now received DEP's approval, the MDC will conduct the CSA. This requires extensive soil, groundwater and surface water monitoring, and a risk assessment. Upon approval of the CSA by DEP, a Corrective Action Alternative Analysis (CAAA) is prepared to evaluate various capping design options and address any outstanding issues regarding capping design such as wetland impacts, landfill gas venting, and post-closure use of the site. The Design Phase involves design of the appropriate cap including the low-permeability cap in accordance with the Regulations. Approval of the Corrective Action Design by DEP leads to the issuance of the permit to construct. The final phase is the Implementation Phase which involves capping the landfill in accordance with the approved plan and continued long-term maintenance and monitoring as required by DEP. Time required to complete the full review by DEP varies depending upon the types of waste disposed at the landfill and surrounding environment, but it normally takes at least eighteen months, but can take longer.

To date the ISA has been submitted and approved by DEP, and the scope of the CSA is being finalized for review by DEP. A significant portion of the CSA for capping the Hallet Street Landfill will involve human health and ecological risk assessments for re-use of the landfill as a public park.

### **Hazardous Waste Remediation (from DEP - Bureau of Waste Site Cleanup)**

The Massachusetts Contingency Plan (MCP) is the set of Regulations established to enforce Massachusetts General Law Chapter 21E. The purpose of the law is to ensure that the cleanup of oil and other hazardous materials is conducted to protect public health and safety, and to protect the environment. Recent changes to the Regulations remove the direct oversight by DEP of all sites. The DEP has established a protocol whereby individuals with the required education, training, experience and proven competence are certified as Licensed Site Professional (LSPs). LSPs effectively serve as agents of DEP to oversee the clean of oil and hazardous materials. DEP will continue direct oversight of large and/or complicated sites, and conducts quality control audits of cleanups by LSPs. The typical evaluation and cleanup process proceeds as follows: a Preliminary Site Assessment is conducted to review the site history and existing documentation to determine whether there is a possibility of hazardous materials on the site; the second step involves preparation of an Initial Site Assessment (Phase 1 Site Assessment) which is similar to the Preliminary Assessment but also involves soil sampling and analysis, groundwater sampling and analysis and installation of groundwater monitoring wells. The third step involves preparation of a Comprehensive Site Assessment (Phase 2 Site Assessment) which often involves additional soil and water analysis, groundwater flow studies and human and ecological risk assessments. Following the completion of the Phase 2 Site Assessment, a Remedial Action Plan is prepared, accepted by DEP and implemented. Post cleanup groundwater monitoring is often required for a period of time to ensure that all contamination was removed.

The former Sterns Lumber and Flounder Fishing Pier sites were used for commercial and industrial activities from the mid 1800's to the 1980's. Because of these past uses there was reason to suspect site contamination. The MDC commissioned initial evaluations of these sites and a report was submitted to the MDC in 1992. This report meets the criteria as a Phase 1 Site Assessment for the Sterns Lumber site and a Preliminary Assessment for the Flounder Fish Pier site. The assessment confirms the presence of contamination at the Sterns Lumber site and indicates that additional evaluation is

required at the Flounder Fish Pier to confirm the presence or absence of contamination there. Additional evaluations of the site and development of a remedial action plan is required before these properties can be cleaned-up and developed into public park land. Time period for this work is dependent upon funding by the MDC and conducting the required actions to complete the evaluation and cleanup process.

### **Historical and Archaeological Resources**

Please note that additional state approvals may be required from the Massachusetts Historical Commission for any work in areas of historic or archaeological significance, and the Executive Office of Transportation and Construction for review of any proposed construction on former railroad property. This form of review would be conducted as part of the MEPA Review process.

### **LOCAL PERMITS/APPROVALS**

#### **Order of Conditions (from the Boston, Quincy and Milton Conservation Commissions)**

The Massachusetts Wetlands Protection Act and Regulations were established to protect wetland resource areas because of the valuable functions wetlands provide such as: protection of public and private water supply; protection of groundwater supply; flood control; storm damage prevention; prevention of pollution; protection of land containing shellfish; protection of fisheries; and protection of wildlife habitat. Authorization is required from the municipal Conservation Commission for any work in and adjacent to protected wetland resource areas. Authorization from the Conservation Commission can be provided via two different mechanisms. Documentation of resource area boundaries and work within the 100-foot Buffer Zone to certain resource areas can be approved via a Determination of Applicability. An Order of Conditions (wetland permit) is required for any work within a protected wetland resource area, or when the Conservation Commission determines that an Order of Conditions will be required for work in the 100-foot Buffer Zone area. The Conservation Commission holds a public hearing to review the proposed activities subject to jurisdiction of the Wetlands Protection Act and receives input from the public before issuing a permit decision.

This project is located along the banks of the Neponset River and will involve work in wetland resource areas and within the 100-foot buffer zone to wetlands. Therefore, an Order of Conditions will be required for this project. Approximate time required to file a Notice of Intent including restoration/replication plans is three-four weeks. Agency review time and public hearing process is eight to twelve weeks (depending on the number of public hearings).

### **Zoning Approval**

Please note that approvals may be required by local Zoning Board of Appeals for work with the floodplain, Planning Board Review and authorization to connect to municipal utilities such as the Boston Water and Sewer Commission. Since this project is currently in the conceptual design stage, evaluation of these permitting requirements is beyond the scope of this document. These issues will be evaluated in their entirety as needed in the future with each permit application.

### **FEDERAL PERMITS/APPROVALS**

#### **U.S. Army Corps of Engineers Permit (Section 10 and/or Section 404)**

Work in wetlands and waterways is regulated by the U.S. Army Corps of Engineers (the Corps) under the authority of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. In Massachusetts the Corps has developed the Massachusetts Programmatic General Permit (PGP) to expedite their evaluation of permit applications and streamline the permitting process. There are three categories associated with the PGP, Category I, II and III. Category I is non-reporting for projects that impact less than 5,000 square feet of a federally-defined wetland or waterbody. If impacts to wetlands are greater than 5,000 square feet, but less than 1 acre, a Category II permit application must be filed. The Corps along with other federal resource agencies (U.S. Fish and Wildlife Service, National Marine Fisheries Service, EPA, and the Massachusetts CZM Office) reviews this application and determines that either: 1) the project meets the criteria of the PGP and can proceed with no changes and no addi-

tional Corps review is needed; 2) additional information is needed before making a permitting decision; or 3) the project does not meet PGP criteria and an Individual Permit is required. A Category III is an Individual Permit. Category III is generally reserved for large projects which exceed the established criteria for either Category I or Category II projects. Note, however, that the Corps may act at any time to exercise its discretionary authority and require an Individual Permit and /or and Environmental Impact Statement even if PGP criteria area met.

At this time we do not have an accurate estimate of total wetland impact. However, it is believed that this project will require either Category II or Category III approval. Category II permit application require about three weeks to prepare and eight weeks for approval. An individual Permit (Category III) application with an alternatives analysis would require about six months to prepare and up to three months for approval. The Corps strongly suggests early coordination with Individual Permit applicants to identify the scope of the alternatives analysis so that work can proceed in an expeditious manner. The Corps permit application is often submitted after local permits have been received.

#### **NPDES Permit (for construction activities)**

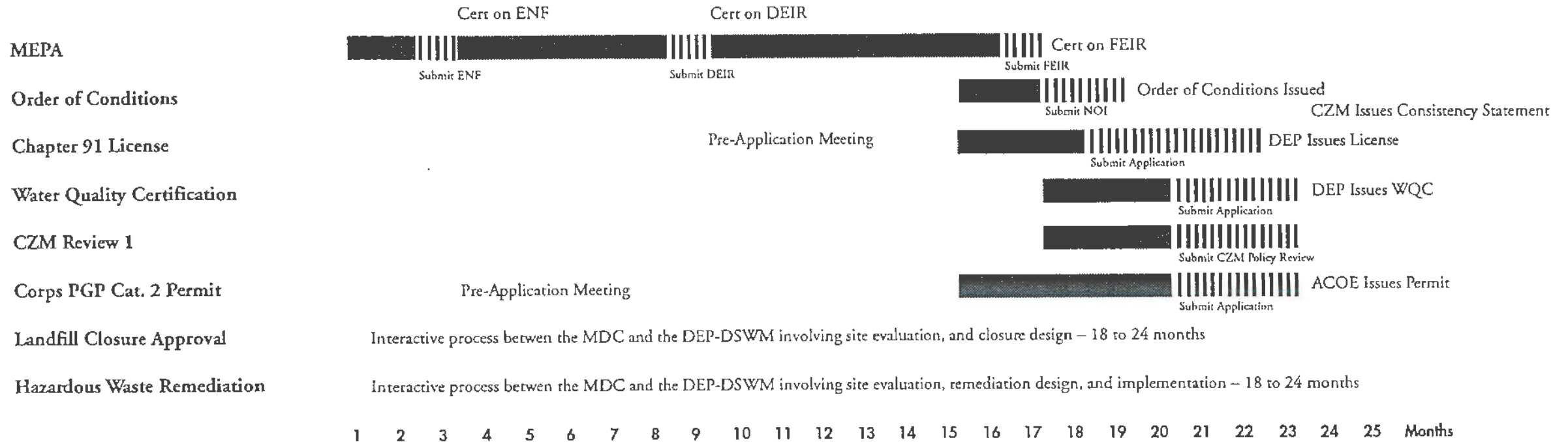
The National Pollutant Discharge Elimination System Permit (NPDES Storm Water Permit) program under Section 402 of the Clean Water Act was initially established to identify, regulate and reduce point source discharges of pollution to waterways (discharge of pollutants via a direct conveyance). Starting in 1992, the NPDES program also required permits for certain storm water discharges. A General Permit for construction activities was developed to regulate stormwater runoff from construction sites which will disturb five acres or more of land and discharge runoff to wetlands or waterways via a point source. To comply with this General Permit a Stormwater Pollution Prevention Plan is required and notice must be submitted to the EPA at least forty eight hours prior to the start of construction. A Notice of Termination must also be submitted when construction is completed.

Approximate time required to prepare the plan is two to three weeks. Coverage under the General Permit is automatic. To be in compliance with the General Permit, the Pollution Pre-

vention Plan (PPP) must be retained on site, and the Best Management Practices outlined in the PPP must be implemented. The EPA may ask at any time during the course of construction to review the PPP.

## MDC Neponset River Master Plan Schematic Time Line Schedule for Environmental Permitting

### PERMIT APPROVAL



**LEGEND**

Permit Preparation

Agency Review

Note:  
1. If not conducted as part of the MEPA Review

## Review of Permits Required for the Various Project Phases

This section presents a series of tables to identify the environmental permits will be required for each phase of the Neponset River Plan including:

- Bicycle Path from Neponset River Bridge to Central Avenue
- Squantum Point Park
- Pope John Paul II Park
- Bicycle Path Extension
- Edgewater Park

The typical sequence for filing and obtaining approvals for the various project phases would likely proceed as follows: Submit ENF and/or EIR (if needed) to receive final Certificate from EOEA for the entire project; submit the NOI to local Conservation Commission(s) and receive the Order(s) of Conditions as needed; submit the Chapter 91 License Application(s) for structures or fill at or below the mean high water mark; submit Water Quality Certification(s) and CZM Consistency Review(s) (unless CZM review is completed through the MEPA; and lastly submit an Army Corps of Engineers Permit Application (assume phases will meet PGP Category 2 criteria). The Schematic Time Line Schedule for Environmental Permitting presents a schematic schedule for receiving necessary environmental approvals. Time periods presented in the time line represent statutory review periods and do not reflect any unexpected delays that often occur during evaluation of comprehensive projects. This time line is presented for schematic purposes only and will need to be updated as the project plan progresses.

### Bicycle Path - Neponset River Bridge to Central Avenue

This aspect of the project involves construction of a bicycle path along the abandoned railroad right-of-way from the Neponset River Bridge in Dorchester, south to Central Avenue on the Milton/Mattapan line. Construction will occur within the Land Subject to Coastal Storm Flowage wetland resource area and within the 100-foot buffer zone to Coastal Bank, Salt Marsh and Bordering Vegetated Wetlands. This work will be limited to grading and paving to create a smooth level biking path. Other activities include reconstruction of the existing railroad bridge over the river in the vicinity of Medway Street, rehabilitation of the MDC Ventura Playground and construction of a canoe ramp at Ventura Playground.

The bicycle path has been identified as an early action item and money for its construction has been allocated. This phase of the project does not appear to trigger any MEPA thresholds described in the MEPA Regulations (310 CMR 11.25, 11.26 or 11.27). Moreover, the construction of the bicycle path does not constitute project segmentation because of the expected five to ten year time lag between phases and the fact that construction of the bicycle path is not dependent upon construction of the other activities identified in the Master Plan.

Permit	Preparation & Review Time
Chapter 91 License	25 weeks
Order of Conditions - Boston Conservation Commission	11 - 16 weeks
Order of Conditions - Milton Conservation Commission	11 - 16 weeks

### Pope John Paul II Park

The Pope John Paul II Park involves construction of a public park along the Neponset River on the former Hallet Street Landfill, the former Neponset Drive-In and the former Sterns Lumber Yard property. It will include natural areas, playing fields, play grounds, a park center with rest rooms, and a multi-use bicycle/walking path along the river connecting all three sites. Construction of canoe ramps may also be included to provide waterside access to the park. Work will also involve shoreline protection and enhancement along the river bank.

Permit	Preparation & Review Time
Corps of Engineers Permit	25 weeks
NPDES Storm Water Permit	3 weeks
Landfill Closure Approval	100 weeks
Chapter 91 License	25 weeks
Water Quality Certification	24 weeks
CZM Consistency Review	25 weeks
Order of Conditions - Boston Conservation Commission	11 - 16 weeks

### Squantum Point Park

Activities proposed at Squantum Point Park are limited to: 1) removal of paved parking lot, currently leased to the MWRA for the construction worker ferry terminal; 2) shoreline protection and enhancement; 3) landscaping improvements; and 4) construction of a canoe/boat ramp to provide water side access to the park.

Permit	Preparation & Review Time
Corps of Engineers Permit	25 weeks
Chapter 91 License	25 weeks
Water Quality Certification	24 weeks
CZM Consistency Review	25 weeks
Order of Conditions - Boston Conservation Commission	11 - 16 weeks



**Extension of the Bicycle from Tenean Beach to Victory Park and Morrissey Boulevard**

This bicycle path extension involves construction of bicycle path through the MDC's Tenean Beach, construction of a pile supported bicycle way over intertidal flats between Tenean Beach and Victory Parks and construction of the path along the abandoned railroad right-of-way through Commercial Point to Morrissey Boulevard.

Permit	Preparation & Review Time
Corps of Engineers Permit	25 weeks
Chapter 91 License	25 weeks
Water Quality Certification	24 weeks
CZM Consistency Review	25 weeks
Order of Conditions - Boston Conservation Commission	11 - 16 weeks

**Extension of the Bicycle Path from Central Avenue to Mattapan Square**

This bicycle path extension involves construction of the bicycle path along the Neponset River south to Mattapan Square. It would include construction of a bridge over the river carrying the path from Milton to Mattapan in the vicinity of Idaho Street. This phase of the project would also include improvements to the Ryan Playground in Mattapan, as well as landscaping improvements and a walking path to MDC land in Milton in the vicinity of Francis Street.

Permit	Preparation & Review Time
Corps of Engineers Permit	25 weeks
Chapter 91 License	25 weeks
Water Quality Certification	24 weeks
Order of Conditions - Boston Conservation Commission	11 - 16 weeks
Order of Conditions - Milton Conservation Commission	11 - 16 weeks

**Edgewater Park, Mattapan**

Construction of the proposed Edgewater Park in Mattapan would involve clearing, grading and landscaping as well as construction of a canoe/boat ramp to provide water side access to the park.

Permit	Preparation & Review Time
Corps of Engineers Permit	25 weeks
Chapter 91 License	25 weeks
Water Quality Certification	24 weeks
Order of Conditions - Milton Conservation Commission	11 - 16 weeks