DEPT. OF PLANNING & URBAN DEVELOP.
Portland City Hall/4th Floor
389 Congress Street
Portland, Maine 04101

PORTLAND SHOREWAY ACCESS PLAN

MITCHELL-DEWAN ASSOCIATES

MARKET DECISIONS INC.

PORTLAND SHOREWAY ACCESS PLAN

SUBMITTED TO:

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PREPARED BY:

MITCHELL - DEWAN ASSOCIATES
70 CENTER STREET
PORTLAND, MAINE

MARKET DECISIONS, INC.
22 COTTAGE ROAD
SOUTH PORTLAND, MAINE

IN CONJUNCTION WITH THE CITY OF PORTLAND:

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DEPARTMENT OF HEALTH AND HUMAN SERVICES
LARRY MEAD, RECREATION SUPERINTENDENT

POLICE DEPARTMENT
LT. DOUGLAS COLE

CORPORATION COUNSEL
NATALIE BURNS, ASSOCIATE CORPORATION COUNSEL

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PLANNING APPROACH

1.0 INTRODUCTION

1.1 PURPOSE OF THE WATER ACCESS PLAN

It has been inevitable that the City's waterfront and islands would one day be'discovered'. There are few places in Maine where one can enjoy both the beauty of the sea, with all its moods, and the delights of well-knit neighborhoods, all within an easy reach of a major population center.

The call for a Shoreway Access and Open Space Plan for the City comes at a time of unprecedented growth and affluence throughout Portland, with the greatest pressure on the waterfront and islands. Visionary planning is needed to assure that the community will continue to enjoy its open space heritage, and at the same time increase its recreational base to meet the needs of the expanding population. Inherent in this challenge are the needs to protect the limited natural areas within the City, to recognize the very real requirements of marine dependent industries, and to consider the priorities and limitations of the City's budgetary policies.

The purpose of the Portland Waterfront Access Plan - as outlined by the City's Request for Proposals - is to analyze existing and potential open spaces and pedestrian access opportunities on Portland's waterfront along the Stroudwater, Fore, and Presumpscot Rivers, as well as on the islands. This report provides a blueprint for developing, conserving, and enhancing public access points within these areas.

In developing the recommendations for the Plan the consultant and the City were guided by a set of very specific goals:

- to maximize public access along all of Portland's waterfront, while respecting the integrity of existing neighborhoods and land use patterns

- to develop a plan that encourages the integration of walkways, shoreways and access points into future development plans for the waterfront and shoreland

- to develop an integrated system of pedestrian walkways to link existing City Parks, recreation areas, and open spaces

- to identify appropriate places and spaces for recreational open space, both active and passive, along or near the waterfront

- to identify the critical points within the waterfront neighborhoods where conflicts are most likely to arise over issues such as compatibility, scale, indigenous character, physical access, view corridors, invasion of privacy impacts, and open space preservation

- to develop standards for the Shoreway that address specific concerns for public access, handicapped use, visual access, neighborhood integrity, buffering, landscaping, and design quality and variety, within the context of the City's Comprehensive Plan

- to understand the need for flexibility on the part of the City in reviewing projects proposed for a very unique and fast-changing area

- to examine what improvements can be made on public property that could set the tone for private investment adjacent to the Shoreway

- to make specific recommendations for selected sites in Portland with regards to signs, landscaping, surface treatment, buffering, etc. in keeping with an overall theme for the Shoreway

- to encourage high quality landscape architectural and site design in future developments

- to develop a physical improvement strategy that will enable the City to implement the findings of this study in phases, in order to give a sense of both immediate gratification and long-term achievement

- to investigate the means to carry out Olmsted's concepts of Baxter's Parkway in the early 1900's.

The plan is meant to serve as a major component of the comprehensive open space and recreational plan for the City, integrating shoreway, island, and inland resources. This document provides the framework for an ambitious endeavor, one that cannot be completed overnight. The City is now in a position to establish an implementation strategy for the next decade and beyond. The strategy should outline the needed policy changes and budgetary requirements, as well as an annual priority list of improvements. In the short term it is important that the City begin to secure public access ways as development proposals that affect the Master Plan come before the Planning Board.

This document should also help set the tone for the City's policy responses to the water access issues that are currently the center of attention throughout the state. Portland's current residents, and those who will continue to be drawn by its natural features, economic opportunities, and physical presence, will certainly be the benefactors of such a long-range plan. The Master Plan at first glance may seem overwhelming, but with a commitment to its philosophy and its implementation, in attainable steps, its reality is within reach.

1.2 MEETING THE RECREATIONAL NEEDS OF A GROWING COMMUNITY

Access to the water is a fundamental recreation and open space resource. In the context of an urban area such as Portland, it provides a significant physical and visual opportunity to "decompress" from the rigors, tensions and pressures of living and working in an intensively developed community. Traditionally, many shoreway areas have been available for use by the public in Portland on an informal basis. Land was either vacant or not intensively used. Property values were low so that property owners were tolerant of such informal use.

In the past many water bodies were affected by the discharge of domestic or industrial wastes. With the passage of the National Clean Water Act, public money was committed towards the construction of water pollution treatment facilities. Development of areas along waterways has now become an attractive proposition, particularly for residential uses. As the City's economy has expanded, vacant land has become more valuable and previously overlooked land near waterway corridors is being discovered.

While the linear frontage of shore is fixed by nature, the demand on this resource is increasing. Portland is an urban community in a region undergoing a period of dramatic growth. This can be expressed in terms of more residents, workers and visitors in the City using a limited resource. With this growth pressure has come development of areas near the shore. The implications for shoreways as a resource is that more areas will likely become restricted for public access while demand for such recreational amenities rises. This issue is further complicated by the fact that although over one-half of the State's population lives in the coastal area it comprises less than twelve (12) percent of the State's land area. Ninety-six (96) percent of Maine's coast is privately owned.

There are a number of factors that influence the availability of water access in Portland. In addition, there is an increasing demand on such resources. These elements are highlighted below.

POPULATION

Portland has the largest population of any community in northern New England. Portland's population grew from 61,572 in 1980 to an estimated 65,366 in 1985. This reversed a downward trend from 1970 (65,116) and 1960 (75,566). From 1970 to 1985, the number of households increased 5,640 to 28,420. It is estimated that by 1995, the City's population will increase to 74,141. Portland has the highest density in the Greater Portland area with 3,017 people per square mile.

From 1970 to 1984 the Greater Portland area population increased by 22,589 to 175,910, an 11.8% rise. From 1970 to 1984, the number of households increased by 22,188.

HOUSING

In 1980 Portland had 27,440 housing units, a 17.6% increase (4,107) from the 1970 total. In terms of total housing units this was by far the largest increase of any municipality in the Greater Portland area. Over 1,800 housing units have been constructed since 1980. Based on 1980 data, Portland has two-thirds (15,084) of the area's multi-family housing.

Region-wide the number of residences increased 15,327 to 42,838 housing units (36.7%) from 1970 to 1980. A similar percentage increase has been experienced in Cumberland County to 1984.

Portland's zoning ordinance allows the development of housing at residential densities that are among the highest in the State. Multi-family housing is permitted in four of the six City residential zones on the mainland.

ECONOMIC

By all measure of economic indicators Portland and the Greater Portland area have experienced a dramatic expansion of commercial activities and employment. The Greater Portland Council of Governments indicate that from 1970 to 1984 employment in Cumberland County increased by 70.2%. The number of new business establishments during the same period increased 68.2%.

In Portland much of the growth can be attributed to the expansion of services. Major new downtown office complexes such as Portland Square, One City Center, and Financial Place symbolize the growth in business, finance, insurance, legal, and health services. Health-related facilities such as Maine Medical Center (at 3,400 employees, the City's largest employer) and other area hospitals have also expanded significantly over the past decade.

Important investments in the waterfront area are providing a significant stimulus for the expansion of marine related businesses. Major projects such as the Bath Iron Works Repair facility ($50 million expansion) and the Portland Fish Pier are expected to generate more than 2,000 new jobs.

Employment has been bolstered by a number of industrial parks and office complexes that have been developed on previously vacant land. These facilities have allowed existing businesses to expand (such as UNUM with 2,500 employees) or new businesses to move into the City. These parks include the Stroudwater Estates Subdivision, Pine Tree Industrial Park Subdivision, and the McAlister Farms Subdivision.

TOURISM

Tourism is Maine's second largest industry. Tourism indicators such as nonresident auto trips, restaurant and lodging sales suggest a significant number of residents that travel to Portland. There has been a major expansion in lodging facilities recently. The Portland area has over 2300 hotel/motel rooms, a 50% increase over the past three years.

Portland has a number of noteworthy attractions, such as the Old Port Exchange, the Art Museum, the Civic Center, the waterfront, and the islands, plus many cultural and entertainment facilities that lure visitors in increasing numbers to the City. For example ridership on Casco Bay Lines during the summer months (June through August) has increased 65% from 1973 to 1983, despite only a modest increase in year-round and seasonal population. The dynamic growth of tourism is predictable. Portland, a coastal city, is in a region noted for tourism and is within a day's ride of 60 million people.

LAND DEVELOPMENT ALONG WATERWAYS

There has been a dramatic increase in proposed development along the City's waterways over the last several years. Once shoreway parcels are developed, opportunities to conserve public access may be lost.

The last decade has seen the demise of several traditional water access points on the Portland peninsula. With the construction of the BIW overhaul facility the city lost a fishing pier favored by a large number of local residents. When the floating restaurant went in at DiMillo's, a once quiet overlook was closed off. With the construction of Chandler's Wharf condominiums public access has become limited.

Major projects along the Presumpscot River include the McAlister Farm Industrial Subdivision, the Butler Industrial Subdivision and the Presumpscot River Place Residential Subdivision. Along the Fore River large scale projects - including the Fore River Transportation Park, Thompson's Point, and the Waynflete School Athletic Facility - which in total constitute about two-thirds of the river corridor from the Veteran's Bridge to Stroudwater Village. Recent development along the Stroudwater River includes the Stroudwater Estates Industrial Subdivision, Regional Waste System's energy from trash facility, the UNUM complex, and Stroudwater Riveredge Residential Subdivision. The shoreline frontage of these parcels total about two-thirds of the southerly shore of the Stroudwater River.

SUMMARY

The decreasing availability of land and the increasing demand for water access is a product of the cumulative effect of development. While the numeric quantity of shore frontage is fixed, the demand on such resources by residents and visitors alike has been increasing. In many cases development has either limited or precluded physical access to the shore, further shrinking the availability of this finite resource.

Portland has acknowledged the tremendous demands that are being placed on its recreational and natural resources. The waterfront and waterways, which are prime attractions for development, are in danger of being shut off forever. The City must adopt a plan which preserves, improves, and integrates the remaining waterfront into the fabric of development so all might continue to enjoy that which sets Portland apart.

The City is at a watershed: it can either ignore the inevitable, or take steps to make Portland a landmark in public/private collaboration in the creation of a city wide trail and park system.

1.3 STUDY PROCESS

In 1983 Terrien Architects and Mitchell-DeWan Associates performed a Public Access Design Project for the Portland Waterfront. This study provided the City with a master plan and design guidelines for the peninsula, identifying points of potential public waterfront access that could be incorporated into development proposals. Since that time the development pressure on the waterfront has magnified, and has spread to include the the rivers and islands. The present study continues the planning efforts begun in 1983 and includes the riverfronts of the Presumpscot, Stroudwater, and Fore Rivers.
The Shoreway Access Study is the result of a collaborative effort between the City Planning Staff, the City Parks and Public Works Staff, the Recreation Superintendent, the City's Corporation Counsel, and the consultant team of Mitchell-DeWan Associates and Market Decisions, Inc.

The study was organized into four major phases, each dependent on material generated in previous phases:

Phase I - Inventory and Background Research of Shoreway Resources

Phase II - Walkway and Access Recommendations

Phase III - Guidelines for Implementation

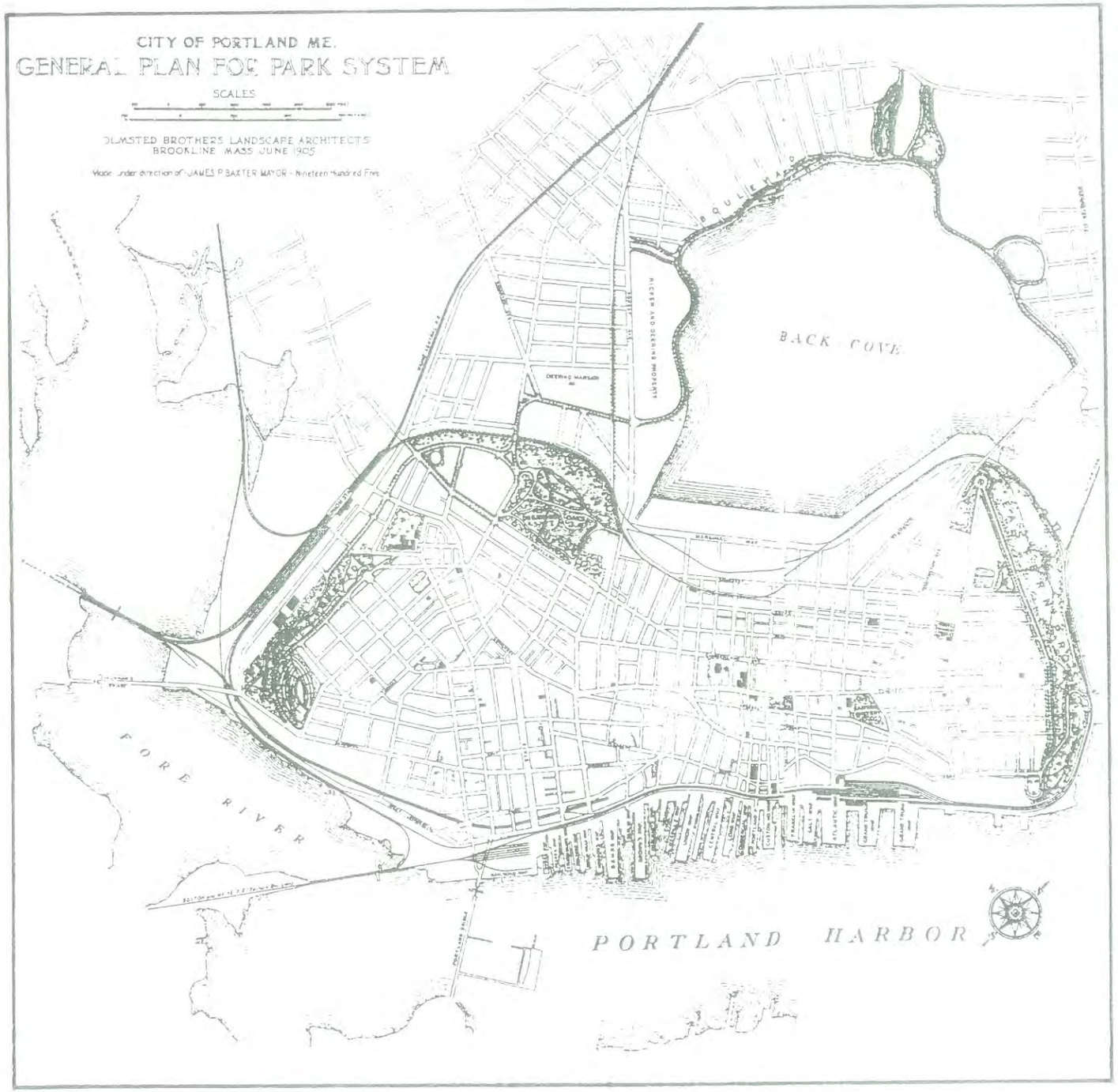
Phase IV - Final Shoreway Access Plan

The initial phase collected and mapped existing data on the waterfront and related inland parcels. The data which provided the greatest insight included the 1905 Olmsted Brothers' Plans for a Park System, and the City's land use, zoning, and property line maps. From this research a conceptual framework for the study was established, which is described in Section 2.2.

The second phase involved a considerable amount of field work, evaluating all the points of potential public access along the three riverfronts, Casco Bay, and the major islands. The consultant team and the Planning Staff evaluated each site in terms of its access potential, current land use, potential land use, views, natural constraints, and habitat value. Tie-ins to existing public property and other accessways were noted in an effort to develop an integrated plan for a City-wide trail system.

The third section of the study concentrated on management and implementation measures. While the goals of public access are appreciated in most quarters, the means to achieve them are complex, and often shrouded in complex contemporary legal issues. This section, developed by Market Decisions, examines the means by which the City can acquire the land necessary to make this plan a reality, and ensure the citizens that it will be managed properly.

The final component of the study was the preparation of this document, the result of many hours of collaborative effort between City Staff, the consultant team, and public and private interest groups.



2.0 PAST AND PRESENT VISION

2.1 A BUILDING BLOCK - BAXTER AND OLMSTED LEGACY

> 'We want a ground to which people may easily go after their day's work is done, where they may stroll for an hour, seeing, hearing, and feeling nothing of the bustle and jar of the streets, where they shall in effect, find the city, put far away from them.'
>
> - Frederick Law Olmsted, Jr.

Back Cove, the Eastern and Western Promenades, and Deering Oaks are outstanding examples of the benefits of visionary open space planning. These works are the result of the foresight of James Phinney Baxter, who served as Portland's mayor from 1893-1897, and then again from 1904 to 1905, in collaboration with the Olmsted Brothers, Landscape Architects. Not only are there lessons to be learned from the parks themselves, but also from the inspiring leadership and ideals exemplified by J. P. Baxter.

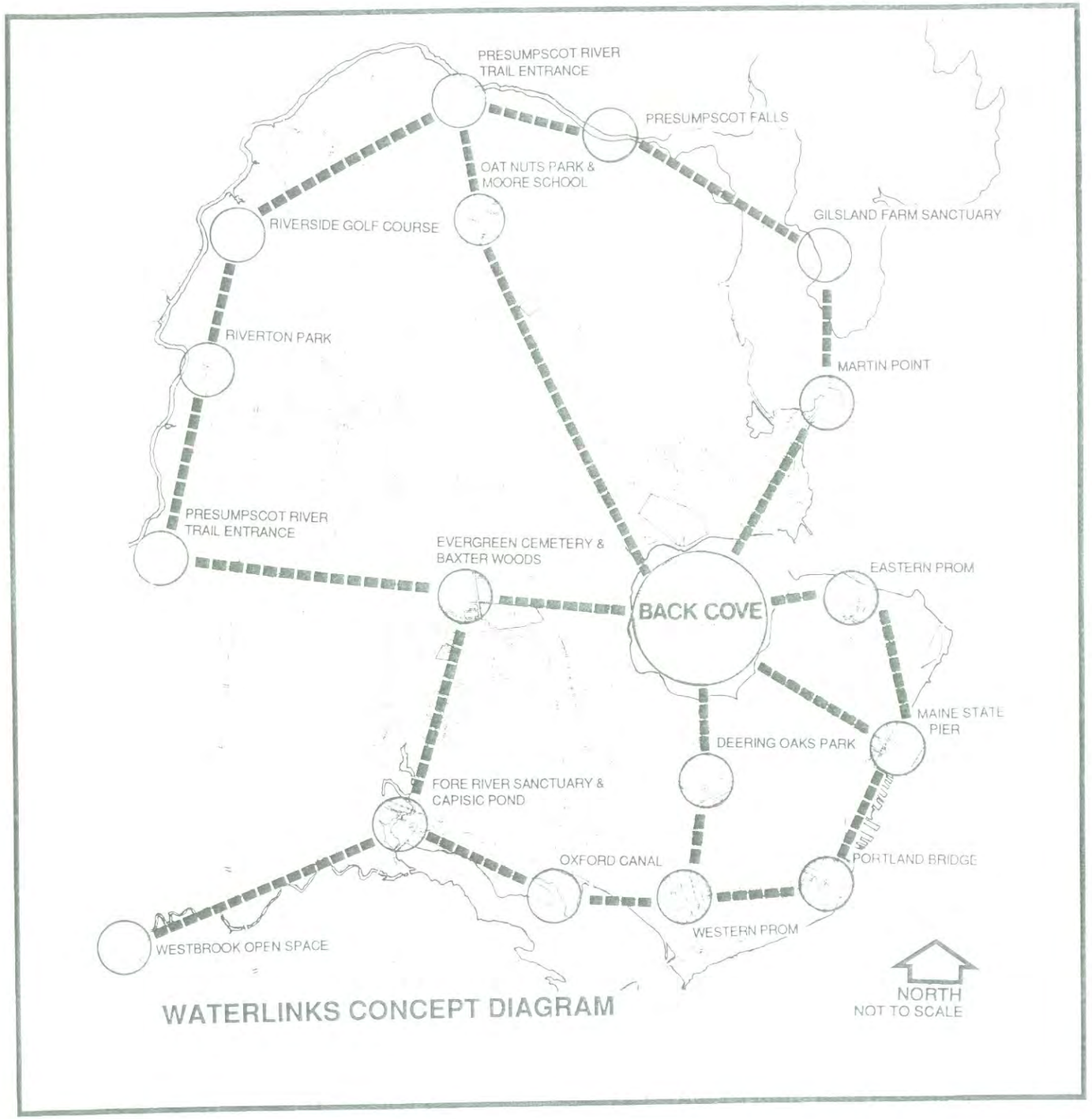
Baxter was inspired by the City Beautiful Movement in the 1900's and his extensive travels through parks in this country and Europe. Realizing the great public importance of parks and the general paucity of Portland's parkland, he made this commitment:

> 'I resolved to do all in my power towards the creation of a park system. With this end in view the surroundings of the lands already owned by the City, the possibilities of enlargement, and methods of connection were studied. It was necessary, also, to promote as much as possible the improvement of what we already had.'

The outcome of this study is depicted by the "City of Portland, Maine, General Plan for Park System" prepared by the Olmsted Brothers, Landscape Architects, in 1905 (see adjoining illustration). Baxter did not expect to accomplish this plan overnight, for as he put it '...everything of worth grows by slow accretions...' and felt it was his duty to set the foundation for his vision. Time was needed to face the economic and political realities of acquisition, development funding, and maintenance.

Acquiring land for the park system was no easy task. The Eastern Prom, for example, was used extensively by the public and most people assumed that it belonged to the City. Contrary to common belief, however, the entire Prom was privately owned and was liable to be developed. The Eastern Prom, as well as the other parks, was acquired by outright purchase and by arrangements for extended payment agreements, land donations, and improvements to City land holdings. Acquisition did not come without opposition, from both the City and the private landowners.

Baxter's beliefs and commitment to the plan helped to sway the opposition. He successfully appealed to their sense of civic obligation



WATERLINKS CONCEPT DIAGRAM

as well as to their purse strings. He was able to point to the Boston park system, where park improvements had resulted in an increase in land values. The presence of these parks attracted quality urban development, which increased the tax base in the city.

Parks were also viewed as luxuries for the rich to enjoy. Baxter pointed out that the rich constituted a very small, and mobile percentage of the total population. The 'grounds' were a necessity for those less affluent who were confined to the city or did not have property of their own in the country to retreat to.

Baxter believed that it was

> '...practicable to accomplish the entire plan which is here displayed ... without any strain upon the public purse, if the undertaking is economically managed. The sooner these improvements are made the better, for this generation should benefit by them, and it is to this generation that I address. I have found it to consist of three classes; a large class which is public spirited and ever ready to support meritorious projects; another large class apathetic and difficult to interest in public matters; and a small class composed of objectors to everything which they do not originate: ready, indeed, on all occasions to criticize and detract, and worse still to input unworthy motives to those who undertake any public work. To these I have nothing to say, but to those citizens who compose the first class I confidently commend the present plans. I also hopefully submit them to those of my fellow citizens who constitute the second class named, asking that they receive their careful consideration, and, if found meritorious, their approval. In submitting these plans of improvement to our park system, I recognize no party lines. The subject is of too great and too general interest for partisan consideration. All parties can alike lend support to a system of improvements for the general good, and I only ask that the citizens of Portland give their support to all efforts to accomplish the proposed improvements. It is of no consequence who is instrumental in accomplishing this work, it is only important that it be accomplished.'

2.2 PRESENT VISION - THE WATERLINKS CONCEPT

> The need still remains to provide 'grounds' throughout the City in which people from every neighborhood may easily go after their days work is done, where they may see, hear, and feel the rich natural and built environment of Portland. By discovering appropriate places to walk, jog, bike, swim, ski, sit, or sail, the citizens of Portland and its visitors should find the City an uplifting and welcoming environment to work, relax and reside.

It is this philosophy upon which this planning concept is based - an expansion of the vision of Baxter and Olmsted. The Shoreway Access Plan provides a direction to reinforce the greenbelt begun by Baxter and to take advantage of its success as a core for an integrated access and open space plan to meet the needs of a rapidly growing city.

In the ideal form, as illustrated by the Waterlinks Concept Diagram, the 'grounds' would be a series of open spaces and public recreation areas within neighborhoods, joined by linkages radiating from Back Cove. The outer ring of the diagram takes its form from the Stroudwater, Fore, and Presumpscot Rivers, as well as the Portland Waterfront. The Shoreway Access Plan should be considered as an integral part of a long-range concept that addresses the potential for an interconnected park system throughout the city.

The Waterlinks concept provides the following opportunities to conserve and enhance the city's open space and recreation resources.

- Implement and expand upon the historic Olmsted concepts of Baxter's Parkway.

- Integrate shoreway open space resources into a defined and cohesive walkway system.

- Link shoreway open space with the City's inland park system.

The Waterlinks Concept Diagram consists of three components: the focus, or heart; destination points; and linkages.

In the conceptual view of the City's open space network, Back Cove is seen as the focus, or heart. The Cove provides a wonderful spectrum of the city and acts as an impressive initiation point (or terminus) for a journey through Portland.

If Back Cove, which presently welcomes and invites large numbers of people, can be thought of as the heart of the concept, then the inland parks and open spaces can be considered the veins, and the shoreline the skin. All of which contributes to the life force inherent to the livability of Portland.

Back Cove was recognized as the center of the planning model because of its success as a public open space and its ability to pump life into the extremities radiating from it. Back Cove... with its panoramic views and the vantage point it affords of the city... the movement of distant traffic whirring across I-295... planes that seem to land atop the city skyline... sailboards and lobster boats cutting its water and the visible rhythm of the tide... walkers, joggers, and cyclists descending from surrounding neighborhoods... it is here that the city meets and where its heartbeat can be felt. What better point to start an exploration of Portland's rich heritage?

The Waterlinks Concept Diagram shows many of the open spaces found throughout the City. They would serve as destination points for recreational users while providing each neighborhood with a major public space. The places identified are either city owned properties, or potential city land holdings or easements. With some improvements these latter areas could provide much needed space for recreation, buffer zones, habitat preservation, or interpretative areas of natural and cultural features. Each destination would provide a different perspective of Portland and draw the user along the linkages from one point to the next.

Three primary groupings of destination points along a trail loop have been identified. Each represents a different facet of the city and takes expression from the urban, residential, or natural environment. The following section provides an overview of each loop and the major destination points along the way.

LOOP ONE:
BAXTER / OLMSTED GREENWAY

The first group, comprised of Deering Oaks Park, the Eastern and Western Promenades, the Million Dollar Bridge, and Maine State Pier, is a proposal to complete the work begun by Baxter and Olmsted. As envisioned in 1987 this concept would envelop the peninsula with a readily accessible greenway, reflecting the urban character of Portland and its intimacy with the sea, as it winds through the parks, the residential neighborhoods, and the working waterfront.

BACK COVE: The 'heart' of the water access concept, the inspiration of Baxter and Olmsted, one of the most popular open spaces in the City. Perimeter system of jogging/exercise trail in an historical landscape setting.

DEERING OAKS: One of the crown jewels in Portland's Park system. The Oaks is generally well maintained, adjacent to many popular residential neighborhoods, close to the University of Southern Maine, and the site of festivals.

EASTERN PROMENADE: One of the most scenic edges along the City's waterfront, in terms of its views outwards to Casco Bay, its mainland views framed by the grand homes lining the Promenade, and its Olmstedian setting. Active recreational facilities, programs, and festivals make this one of a key destination point. A wide cross section of the population now enjoys the area. With the improvements to Tukey's bridge will come a closer tie to Back Cove and the northern portions of the City.

WESTERN PROMENADE: Another very scenic edge along the City's waterfront, in terms of its panoramic views south to the Fore River, its grand collection of John Calvin Stevens estates lining the Promenade, and its Olmstedian setting. While this end of the City does not have the extensive recreational facilities found on the east end, it is the focus of considerable pedestrian interest due to its residential neighborhoods and the Maine Medical Center complex.

MILLION DOLLAR BRIDGE: The lifeline that connects the two sister cities. The new bridge should improve the present level of pedestrian access, with wide sidewalks and a designated bike lane. With special attention paid to lighting, benches, railings, and other pedestrian amenities, the new linkage to South Portland could be an exciting extension of both city's shoreway systems. A short section of the existing bridge abutments may be able to be rehabilitated to form a hard-surface plaza overlooking the International Ferry Terminal and the Fore River, an extension of the Harborview Park. Additional study would be necessary to determine if this concept would be structurally feasible and visually compatible with the surrounding neighborhood and proposed bridge.

MAINE STATE PIER: The Gateway into the City for visitors arriving via ferry from the island. Also a significant visual terminus of Franklin Arterial as it descends the hill down from Congress Street. With the construction of the new ferry terminal the pier will be the focus of a considerable amount of pedestrian traffic, from residents and visitors alike. Water access plans for Commercial Street call for the pier to anchor a major waterfront walkway system, with Phase One presently under construction south of the Thomas Block.

LOOP TWO:
STROUDWATER/FORE RIVER WALK

The second group, consisting of the Oxford Canal, the Fore River Sanctuary, Capisic Pond Park, the Stroudwater River, Westbrook open space, Evergreen Cemetery, and Baxter Woods would transport the recreationist into a more natural setting of riparian, marsh, and woodland habitats, interspersed with some fine suburban neighborhoods.

OXFORD CANAL: Remnants of the historic Cumberland and Oxford Canal are still to be found in several parts of the City, extending ultimately to Sebago Lake. Extensive areas of open space along the Fore River, many tracts of underutilized land, and an active interest in residential and recreational development make this node a logical target for waterfront access.

FORE RIVER SANCTUARY: One of the most surprising tracts of open space remaining in the City, containing waterfalls, active wildlife populations, and a wide variety of upland and wetland habitats. Surrounded on all sides by older neighborhoods as well as recent multiple family developments.

BAXTER WOODS: A vestige of a much earlier time in Portland's history, when the forests still covered the City. This legacy from the Baxter family, combined with Evergreen Cemetery, represents the major passive open space for residents of Deering Center. The ponds in the rear of the cemetery provide a park-like setting noted for attracting a wide variety of migratory birds.

WESTBROOK OPEN SPACE: A connection via the Stroudwater linkage to a large tract of undeveloped City-owned (Westbrook) land along the Stroudwater River within the floodplain.

LOOP THREE:
PRESUMPSCOT RIVER CORRIDOR

The third group of destination points focuses on the many aspects of the Presumpscot River. This loop would interconnect with the proposed Presumpscot River Trail, Riverton Park, the Riverside Golf Course, and Martin Point. Extensions into Falmouth would bring the river trail to the Gilsland Farm Sanctuary and beyond. This grouping

is a natural oasis within the city, distinctive in its opportunities for canoeing, walking, or cross country skiing along a long uninterrupted trail in a largely undisturbed setting. 'Oat Nuts' Park, Lyman Moore School would serve as intermediate points enroute to the Presumpscot River. More importantly the creation or improvement of recreational opportunities within these neighborhoods would begin to address the significant deficiency of such facilities identified by the City's 1974 Assessment of Open Space.

OAT NUTS PARK: A collection of small parcels of land that may lend themselves to acquisition by the City for open space purposes to serve the rapidly expanding North Deering neighborhood.

RIVERSIDE GOLF COURSE: One of the most popular year-round recreation areas in the City, bordering the Presumpscot River, with some potential to tie into abutting properties.

RIVERTON PARK: The remnants of the turn of the century park established at the end of the trolley lines to encourage weekend ridership. Great potential for riverfront access and community park use.

PRESUMPSCOT RIVER TRAIL: Potential for a joint project between the City of Portland and the Town of Falmouth to provide a hiking trail along the top of the riverbank through largely undeveloped properties, as well as canoe launch and tie-up sites.

MARTIN POINT: The major Gateway into the City from the north along Route One. Former hospital buildings, now used for offices and medical facilities, occupy a prominent position atop a bluff overlooking Portland to the east.

GILSLAND FARM SANCTUARY: Maine Audubon Society's headquarters. This 120 acre former saltwater farm is a popular destination point for nature lovers, students, and visitors to southern Maine. A link with the Falmouth Public Access plan.

PRESUMPSCOT FALLS: A point of scenic interest along the Presumpscot River; part of the Falmouth Public Access plan. An existing boat launch provides a minimal level of public access.

Many of these destination points should receive special emphasis as Gateways into the City and its grand park system: the Million Dollar Bridge, the Fore River Bridge, Stroudwater Crossing, Riverton Park, and Martin Point. In addition to their considerable recreational opportunities, these particular points serve as gateway markers for the traveller.

The Maine State Pier should receive special emphasis as the primary Gateway to and from one of Portland's most unique natural attributes, the Casco Bay Islands. One experience is to walk the mainland shoreway and feel the variety of the city ; another is to ride the ferry to any of the islands is to escape the notion of city altogether, to be removed to places truly set apart. The islands give the concept of a shoreway access plan a new level of excitement and dimension, an expression of the uniqueness that is Portland.

The linkages, shown by bold dashed lines on the diagram, are the desired pedestrian connections between the destination points. In this schematic form they illustrate a looped system that offers a variety of trips through Portland. The actual routes for the waterfront corridors are described in this report. The inland interconnections shown on the concept diagram are based on a brief review of available easements, city land holdings, and right-of-ways. Future studies should evaluate these potential linkages in a manner similar to this study, addressing available land use, traffic and safety issues, the projected user groups, and interconnections with the linkages and destination points identified here. The overriding goal of future work should be to maintain a sense of continuity, not only physically but psychologically, so that the linkage itself is a strong, identifiable component of the entire park system.

The recommendations of this study present the challenge to build upon the work begun by Baxter and Olmsted by providing plans and tools to complete his vision to meet today's needs. The following sections present the master plan, site plans, design guidelines, land acquisition and maintenance methods for fulfilling the vision for this generation.

2.3 PORTLAND SHOREWAY MASTER PLAN

Over the past decade many studies have been performed by both the City and its consultants relative to the issue of waterfront access. The concentration of much of this work has been on the most highly visible waterfront, namely the area between the Eastern Prom and the Fore River Estuary in Stroudwater. This study combines the recommendations of this previous work into a coordinated whole, united by a common vision of an interconnected waterfront walkway system throughout the City.

Some of the previous studies have concentrated on specific areas and have even led to approved long-range plans and implementation, e.g. the Eastern Prom and the walkway on Portland Pier. This effort has field verified the previously studied areas for their current conditions and incorporated the findings of these studies where appropriate. Where necessary modifications were made to accommodate the goals of the concept plan or to reflect changes in land use patterns.

Many areas of the City have either never been looked at from a water access perspective, or have only received a cursory examination relative to these concerns. These are the areas on which this work has concentrated, to bring the whole City up to the same level of planning. In several instances the recommendations indicate areas of potential collaboration between the City and its adjoining communities.

The Shoreway Master Plan is one of three interrelated components, along with the Concept Plan and the Shoreway Access Site Plans. The following section describes the purpose of each component.

WATERLINKS CONCEPT PLAN. In its ideal form, as illustrated in Section 2.2, the Waterlinks Concept Plan for open space and linkages describes a series of spokes, radiating from Back Cove, joining the major open spaces within neighborhoods and significant public facilities. This plan is an expression of a desire to see public access to the waterfront an easily obtainable reality for most of Portland's population, and the need to integrate Portland's recreational resources inland as well as along the water.

SHOREWAY MASTER PLAN. The overall plan for Shoreway Access covers the City and its Casco Bay islands. For ease in describing recommended actions the city has been divided into different planning units, following physical or cultural boundaries. A copy of the plan is included in a pocket bound into the end of the report.

The Master Plan is designed to summarize and illustrate the major recommendations from this study and previous ones. The format uses graphic symbols to depict specific actions for each planning unit. The plan for the Shoreway is shown as a continuous line, following existing city streets, easements, and parks. Where possible alternate routes are provided.

SHOREWAY ACCESS SITE PLANS. Access Site Plans for each of the City's waterfront planning units form the major component of the study, presented in section 3.0. The text is derived from field information (see Appendix B for a sample Inventory Form), research, and interviews. These plans make specific recommendations for implementing the access provisions within the various units that make up the master plan. They also record the significant site constraints that could affect the City's actions.

Developing these three components has enabled the City to look at Portland's Shoreway Access Plan in the context of the entire community; establish a goal for its form and function; and investigate specific integrated routes for a trail system. The planning process clarified significant issues that needed to be considered in the next step, i.e. setting priorities for implementation.

PRIORITIES

No one would anticipate that a City-wide system could be completed with any degree of alacrity, given the realities of budget, diverse property ownership patterns, regulatory constraints, and existing land use patterns. Implementation of the plan will require the City to adopt priority criteria to evaluate sections of the plan and opportunities that become available.

The following section recommends criteria for the City to use in evaluating implementation of particular segments of the trail system. The highest priority should be given to the following opportunities:

OLMSTED PLAN: Properties that allow the City to implement unrealized portions of the1905 Olmsted General Plan for Park System, City of Portland, Maine

ISLAND STUDY: Properties and associated improvements that would further the policies and recommendations made by the Department of Planning and Urban Development in the 1985, "Portland Islands Land Use and Zoning Study".

GATEWAY PLAN: Properties that will help the City implement the

recommendations made by the Planning Department in the 1983 Gateways to Portland study.

RECREATION PLANS: Properties and associated improvements that would further the goals and recommendations of various city recreation and open space plans.

PUBLIC PROPERTY: Properties that the City or State currently own or have an easement interest in.

POPULATION SERVED: Properties that will serve the greatest number of users, either local residents or visitors.

PUBLIC WORKS OPPORTUNITIES: Properties that may become available as a result of local, state, or federal public works projects, e.g. bridge construction, street reconstruction, state park development. In many of these situations the City may be able to provide input into the planning process that will help meet the goals of the Shoreway Access Plan, with minimal expenditure on the part of the City.

PRIVATE PARTICIPATION: Gifts of properties, easements, or other forms of access, given to the City, conservation organizations, or management entity, that could tie into the Access Plan.

EASE OF IMPLEMENTATION: Properties that present the least number of physical or environmental problems.

SCENIC DESIRABILITY: Properties that offer the recreational user the greatest opportunities for experiencing the surprising diversity of Portland's natural environment.

IMPLEMENTATION

After reviewing the Shoreway Master Plan in light of the criteria listed above the following sites are recommended as having the highest priority for implementation. The site plan narratives in Section 3.0, under " PHASING", give a complete listing of all the planning units and their recommended priority with a brief explanation. (See also "Appendix I Implementation Priority Matrix" for a concise listing of the planning units rated according to the criteria.)

The challenge of implementing the Shoreway Access Plan is eased by a number of factors. A significant amount of shore frontage property is already publicly controlled. These properties include among others Back Cove, Eastern Promenade, Martin Point, Riverside Golf Cove and Riverton Park. In addition, the plan wherever possible integrates existing streets and easements that are adjacent to shoreway areas. Prior to the initiation of this study there was a significant amount of interest expressed by private property owners in participating in a shoreway access program. These parcels include the Fore River Industrial Transportation Park, Stroudwater Estates Industrial Park, Regional Waste System, Presumpscot River Place Subdivision and others. It is hoped that the Shoreway Access Plan will generate further participation by property owners.

UPPER STROUDWATER RIVER TRAIL: Access to the Stroudwater River at the end of Hutchins Drive off of outer Congress Street, in the Stroudwater Estates industrial subdivision. Common open space that was dedicated as part of the subdivision include the steep slopes along the river, the floodplain of the river, a considerable wetland area that supports a diverse wildlife population, and portions of an existing trail system. The land ties into the Westbrook Open Space, noted on the Shoreway Master Plan, and a mile of relatively undeveloped riverfront upstream of the site. This site, one of the prototypes developed to show specific treatments, is illustrated as Section 4.1.

FORE RIVER TRAIL: From the newly developed Stroudwater Crossing commercial building developed on Congress Street, the Access Trail extends in two directions. Downstream, on the edge of the Fore River, the trail can follow the site of the former Cumberland and Oxford Canal, now a sewer easement, across the northerly border of the marsh to a City sewage pump station. From that point the trail can intersect Hobart Street and traverse other city streets, across the proposed Waynflete School Athletic Facility, to Thompson's point. This is the second of three sites developed to show prototypical conditions, i.e. boardwalks over marshlands, and is illustrated in Section 4.2.

PEAKS ISLAND: A public access system has been actively discussed on Peaks Island by a number of groups dedicated to promoting the natural and cultural features on the island. The City should continue to work with the Casco Bay Island Development Association (CBIDA), the Star Foundation, Maine Audubon Society, and others to promote the improvements to and expansion of the existing trail system. The trail system on the back shore of the island would be located primarily on land owned by the City, State, Maine Audubon Society, and the Star Foundation. See Section 4.3 for schematic plans for the Island.

PHOENIX PROPERTY - LONG ISLAND: A 178 acre tract of land on the western edge of Long island, presently the site of an unoccupied oil storage tank facility. As development pressure intensifies on all the Casco Bay islands, preserving large, publicly held tracts of land will become all the more valuable in retaining open space, oceanfront access, wildlife habitat, and the scenic character of the islands.

EASTERN PROMENADE RAILROAD PROPERTY: The discontinued rail line extends north from Commercial Street, past the BIW overhaul facility, below Fort Allen Park and the East End Beach. This property also includes Fish Point. It was also noted in the 1983 Public Access Design Project for its potential to provide a significant pedestrian link between the Eastern Prom/ Munjoy Hill area and the heart of the Portland waterfront. With development proposals currently in abeyance due to the moratorium on non-marine related activity in the waterfront zone, the City should avail itself of the opportunity to acquire this property for public access.

FORE RIVER SANCTUARY FOOTBRIDGE: The developer of Stroudwater Crossing has initiated discussions with the City concerning access to the Maine Audubon Society's Fore River Sanctuary. Concurrently, the developer of the proposed residential project on the property to the east has expressed a willingness to participate in the development of a footbridge as an extension of his open space system. The City should coordinate a meeting between the two developers and Maine Audubon to review the MAS management plan for the Sanctuary and the impact that this additional access would have on their property, programs, and management objectives.

IMPLEMENTATION

3.0 A CLOSER LOOK - SHOREWAY ACCESS SITE PLANS

INTRODUCTION

Specific information is provided for each of the planning units to assist the City in evaluating the immediate neighborhood and the steps that will be necessary to obtain the goals of waterfront access. A consistent format has been established to present the information that was gathered by field inspections, consultant research, input from the Portland Planning Staff and other City officials, and the contacts with other agencies, organizations, and private individuals. The following outline presents the critical points that are covered in the unit descriptions:

LOCATION: Where the planning unit is located within the City and its physical boundaries.

CURRENT LAND USE: Derived from air photo interpretation and field investigations on the part of the consultant, and land use maps supplied by the Planning Department.

OWNERSHIP: From the City of Portland Tax Maps and land use maps supplied by the Planning Department.

CULTURAL FEATURES: A summary of the various points of interest, architecturally significant structures, gathering points, water access points, etc., gathered by consultant field visits and Planning Staff input.

NATURAL FEATURES: A description of vegetative communities and wildlife habitats (gathered from consultant field inspections), geologic features within the tidal zone (taken from the State's Coastal Geologic maps), wetlands, significant specimen trees, water bodies, and other natural features observed in the field.

VISUAL QUALITIES: A qualitative evaluation of the existing visual environment (low, medium, high) based upon the judgement of the consultant. Where appropriate, descriptions are given of the views from the proposed access locations and the surrounding neighborhood.

CURRENT ZONING: From the City of Portland Zoning Map, with clarifications from the Planning Staff

CURRENT LEVEL OF ACCESS: An overview of the easements, ROW's, public roads, and informal means of gaining water access and providing parking spaces.

DEVELOPMENT PRESSURE: A summary of plans being considered by private developers and governmental agencies, as well as anticipated development or redevelopment in light of the current zoning ordinance and the nature of the site.

RECOMMENDATIONS: General and site specific recommendations for physical improvements to the planning unit to accommodate the objectives of the Water Access Plan. Where appropriate management and policy recommendations are made.

ANTICIPATED USERS: Types of people or groups who may be inclined to use the particular segment of the Master Plan.

INTERCONNECTIONS: Ways by which the Access Plan might tie into other segments of the City-wide plan, as well as into other public lands away from the water.

PHASING: Recommendations for implementation, depending on the compatibility with the Olmsted Plan , the City's Gateways study, City recreation plans, Portland Islands Land Use and Zoning Study, the population served, coincidence with public works projects, private participation, ease of implementation, and scenic desirability.

COMMENTS: Additional points of clarification.

The next three sections present the site plans for the following planning units:

3.1 RIVER CORRIDORS, COASTLINE, AND BACK COVE

Presumpscot River Preserve
Olympia Street Neighborhood and Martin Point Park
Casco Bay Esplanade Alternatives and Berwick Street Neighborhood
Hawthorne Street Neighborhood
Tukey's Bridge North, B&M Facility, CNRR
Tukey's Bridge South
Back Cove, Fall Brook, Payson Park
Mackworth Street
Franklin Street Arterial
Oak Cove Walkway - Marginal Way Alternative
Oak Cove Walkway - Forest Avenue Alternative
Lower Stroudwater River
Upper Stroudwater River - Hutchins Drive Trail
Fore River Sanctuary
Capisic Pond
Riverside Industrial Subdivision
Riverton Park
Riverside North Municipal Golf Course
Lower Presumpscot River Trail

3.2 CASCO BAY ISLANDS

Peaks Island
Long Island
Great Diamond Island
Little Diamond Island

3.3 PENINSULA ADDENDA

This section updates the recommendations that were made in 1983 in the Portland Waterfront: Public Access Design Project by Terrien Architects and Mitchell-DeWan Associates, to address current issues and recent development for the following segments of the Portland peninsula:

Eastern Promenade to BIW Waterfront
Commercial Street Waterfront Core
Western Promenade
Fore River

PRESUMPSCOT RIVER PRESERVE

LOCATION: Isolated land parcel on the east side of Interstate 295, fronting on the mouth of the Presumpscot River.

CURRENT LAND USE: Undeveloped

OWNERSHIP: State, with restricted access from I-295

CULTURAL FEATURES: NA

NATURAL FEATURES: Mixed second growth forest punctuated by a small pond. High salt marsh and mud flats abutting the river channel.

VISUAL QUALITIES: High. Considerable diversity of views to the east, contrasting the highly textural edges of the salt marsh and the periodically exposed mudflats with the open water beyond. The background is a configured wooded shoreline. The Martin Point Bridge frames the views of Macworth Island and beyond.

CURRENT ZONING: I-2: Industrial

CURRENT LEVEL OF ACCESS: Restricted. No access is permitted from I-295. The potential of a walkway paralleling the interstate from the south is limited by a steep rip-rapped embankment. Water access possible, but would have to be regulated and restricted to a designated area to prevent human impact on the salt marsh.

DEVELOPMENT PRESSURE: NA

RECOMMENDATIONS:

- In its present state, with such limited access, the land serves as a productive area for shorebird nesting. Any modifications to the land should involve careful evaluation of the environmental consequences of introducing people to this area.

- If access is to be provided at all it should be minimal, and limited to a simple tie-up facility for canoeists, with a simple, well marked trail leading to an overlook point.

INTERPRETIVE THEMES:

- Salt Marsh Ecology
- Shore Birds
- Maine Audubon Society

MEANS OF INTERPRETATION:

- Interpretative sign at canoe landing/ picnic area

ANTICIPATED USERS: Boaters (canoes, kayaks, row boats) and birdwatchers using the Presumpscot River Trail. One of the few designated tie-ups along the trail.

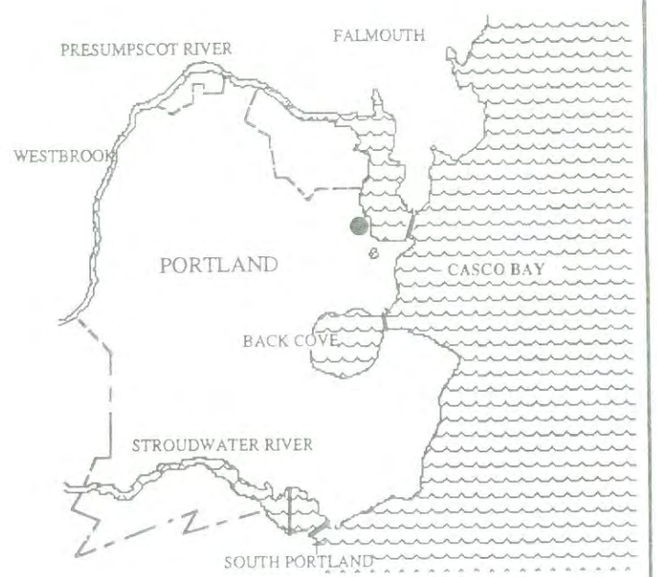
INTERCONNECTIONS:

- Proposed boat launch at the Martin Point Park

- Proposed boat launch and tie-up at Presumpscot Falls.

PHASING: Low Priority. Development should occur (with the cautions noted previously regarding habitat values) only after the Martin Point Park and Presumpscot Falls boat facilities are fully operational and the River Trail is used by a substantial number of people.

COMMENTS: See "A Review of Existing Public Plans and Studies Affecting the Presumpscot River" for previous relevant recommendations for this area.



KEY PLAN

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

BICYCLE ROUTE

FISHING PIER

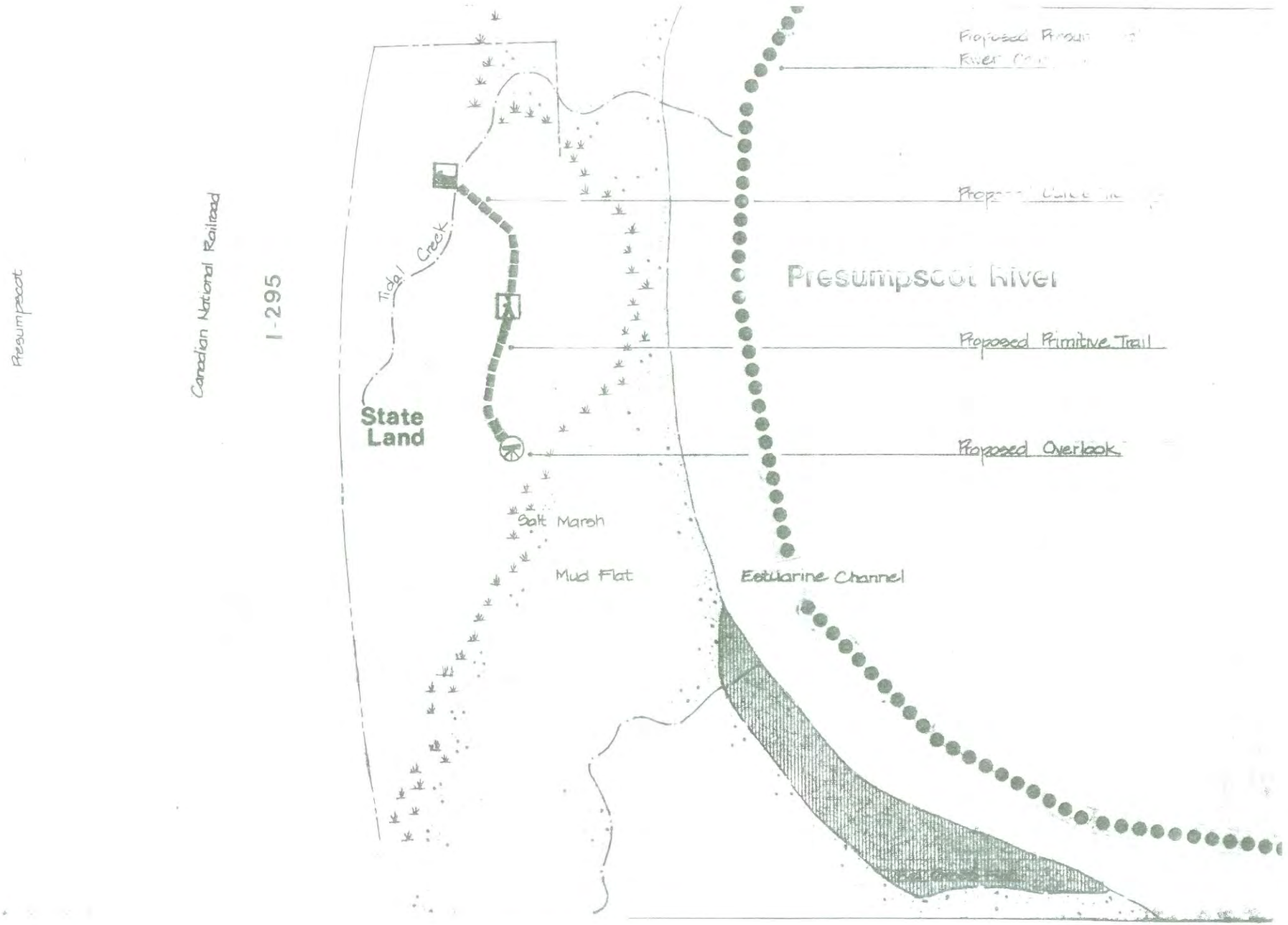
PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS

0' 50' 100' 200' 300' 400' 500' FEET

NORTH



PRESUMPSCOT RIVER PRESERVE

OLYMPIA STREET NEIGHBORHOOD & MARTIN POINT

OLYMPIA STREET NEIGHBORHOOD

LOCATION: Portion of the Martin Point Peninsula east of I-295 and northwest of Route One.

CURRENT LAND USE: Primarily single family residential with some commercial establishments along Olympia Street.

OWNERSHIP: Private and State (I-295 ROW)

CULTURAL FEATURES: Single family homes dating from the early 1900's and extending through the 1950's and 60's, in good condition.

NATURAL FEATURES: Deciduous upland providing feeding grounds for shorebirds; very sensitive to disturbance, i.e. foot traffic. Tidal creeks, low and high salt marshes, mud flats.

VISUAL QUALITIES:

- From neighborhood: High to Medium. Foreground: mudflats and I-295. Middleground: Presumpscot River. Background: residential and wooded shoreline with an undulating horizon.

- Within neighborhood: Medium. Very contained views with small lots and single family homes. No distinctive architectural styles.

CURRENT ZONING: R-5: Medium Density Residential.

CURRENT LEVEL OF ACCESS:

- The Right of Way for both Olympia and Vaill Streets dead end on the shoreline. No evidence of public use.

- The rest of the shoreline is being used by lot owners as maintained lawns and back yards, with a few docks extending into the river.

DEVELOPMENT PRESSURE: Slight: little available land; well established residential neighborhood.

RECOMMENDATIONS:

- Develop stronger linkages between this neighborhood and Martin Point, rather than increase the level of access for the public.

ANTICIPATED USERS: Continued usage by local residents.

INTERCONNECTIONS: Limited by the sensitivity of the shoreline characteristics and existing land ownership patterns.

PHASING: NA

MARTIN POINT PARK

LOCATION: A peninsula in Casco Bay on the east side of Route One, south of the Falmouth town line.

CURRENT LAND USE:

- Coastal Health Services (CHS) complex, with large parking lots, open lawns, and small picnic area.

- Portland School Department (PSD) administration buildings, with associated parking lots and minimal picnic area.

- The 'Seedlings' greenhouse: a social service program centered around a greenhouse and outdoor garden area.

- Undeveloped second growth forest land, with signs of informal gatherings. Well worn footpaths through the woods.

OWNERSHIP:

- U. S. Government
- State of Maine
- Private: Penobscot Bay Associates
- Cerebral Palsy Center

CULTURAL FEATURES:

- Distinctive architecture built for the former Marine Hospital.

- Old bridge abutments downstream from the present Martin Point Bridge, with a cobblestone roadbed extending partially to the river.

NATURAL FEATURES: Specimen mature oaks or steep embankments and ledge. High salt marsh; mudflats; eelgrass flats; low energy beach; boulder ramp (supratidal intertidal, and subtidal environments). Very fragile intertidal zone.

VISUAL QUALITIES:

- From the peninsula: High. Foreground: wide variety of natural environments. Middleground: Mackworth Island. Background: skyline of Munjoy Hill and the Eastern Promenade area; Fort Gorges and the Casco Bay Islands.

- On the Peninsula: Medium. Prominence and form of buildings are offset by the condition and location of parking areas and associated landscape details. Open lawns, mature woods, and rocky headlands provide a variety of spatial enclosures.

CURRENT ZONING:

- RP: Resource Protection
- R-5: Medium Density Residential

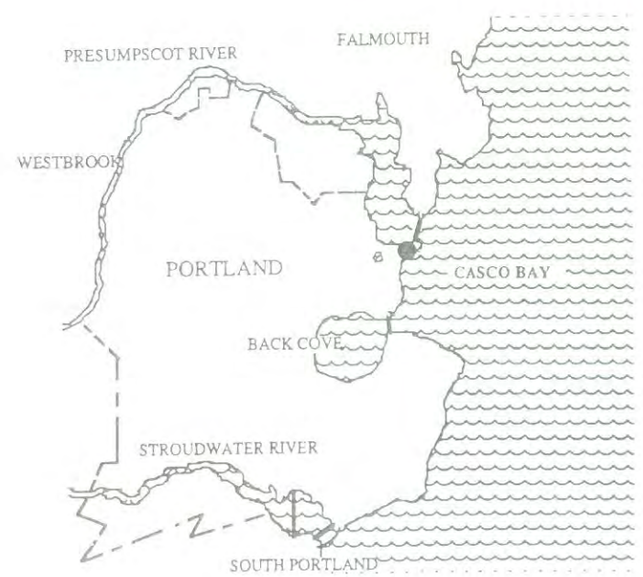
CURRENT LEVEL OF ACCESS:

- East Side of Route One: Paved driveways and sidewalks along Route 1; paved internal roadway system. Chain link fence hinders circulation between PSD and CHS.

- West Side of Route One: Old roadbed has been barricaded and grown over. No sidewalk along roadway. Speed of cars and existing vegetation within the right of way limits visibility and greatly impedes pedestrian access.

- Water: Steep slopes make water access difficult along most of the shorefront, except at old bridge abutment. Extensive intertidal zone.

- Parking: Spaces are provided now for the various agencies occupying the facilities. Most are available on the week ends for visitors, with many available on weekdays.



KEY PLAN

DEVELOPMENT PRESSURE: CHS has attemped to expand their operations in prior applications to the City. With significant waterfront property becoming such a scarce commodity pressure may be brought to bear to redevelop the point into a more intense use.

RECOMMENDATIONS:

- Portland should view Martin's Point as one of the principal Gateways into the City, and do everything within its power to protect and enhance the water access it now enjoys. Any development or redevelopment proposals should incorporate a significant public access component, with a recognition of the importance of visual access to the waterfront from Route One.

- Construct a boat ramp or canoe launch where the old bridge abutment exists next to Route 1. Its use would be dependent upon tidal conditions.

- Provide parking for up to six vehicles at the top of the slope leading to the boat launch. Care must be taken to avoid conflict with existing educational facilities on the adjacent property.

- Enter into a cooperative agreement with Penobscot Bay Associates for a public access trail along the top of the embankment on the waterfront edge.

- Enter into a cooperative agreement with the Portland School Department to allow the City to construct a public access trail, small picnic area, and overlook decks above the river. Agreement should also provide for weekend use of the existing parking facilities.

- Limit public access to the eelgrass flats below the rocky headlands by eliminating informal paths than now extend to the water's edge.

- Use the flat outcrop of rock between the Public School Administration Building and the Health Services property as the basis for a picnic area. Reconstruct the existing retaining wall below the parking lot. Open up views of the Presumpscot estuary and the City skyline to the east by selective thinning under the stand of specimen oak trees.

- Eliminate fencing where not currently required for security purposes, especially in the area between the Public School and Health Service properties.

- Provide design input to the School Department to help upgrade the exterior appearance of their physical plant. Survey and recommendations should include graphics, lighting, railings and fences, plantings, retaining walls, and miscellaneous furnishings.

- Provide access to the State and Federal land on the west side of Route One by means of designated crosswalks. Consult with City Traffic Engineer prior to any further planning for use of the property to evaluate sight distance for pedestrians, safe stopping distances, need for removal of understory vegetation, and other safety related issues.

INTERPRETIVE THEMES:

- Casco Bay History
- Casco Bay Islands
- Railroad transportation
- Old growth oaks
- Fort Gorges
- Lighthouse
- Marine Geology/Ecology

MEANS OF INTERPRETATION:

- Interpretive signs by recommended boat launch
- Overlook in upland area with interpretive signs

ANTICIPATED USERS:

- Walkers and bikers using the linkage between Portland and Falmouth

- Boaters launching small water craft for excursions into Casco Bay or up the Presumpscot River.

- Picnickers and other passive recreationists using the grounds and walkways.

INTERCONNECTIONS:

- End or beginning of the Presumpscot River Canoe Trail.

- Tie into the proposed Falmouth waterfront walkway system on the north side of the Martin's Point Bridge.

- Tie into the City Shoreway by extending the walkway along Route One to the southwest.

- Falmouth's proposed walkway and bikeway system

- Back Cove loop

PHASING: High Priority. The point has already been identified as a "Land Gateway" in a Gateways to Portland, by Douglas L. Mason, Nov. 1983. A variety of natural forms and views of cultural features give a strong image of Portland.

COMMENTS: See "Gateways to Portland" for a more extensive discussion of the potential of Martin's Point and specific design guidelines for landscape improvements.

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

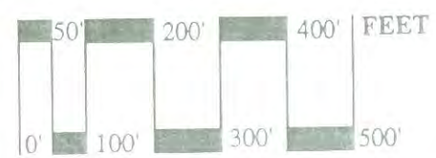
BICYCLE ROUTE

FISHING PIER

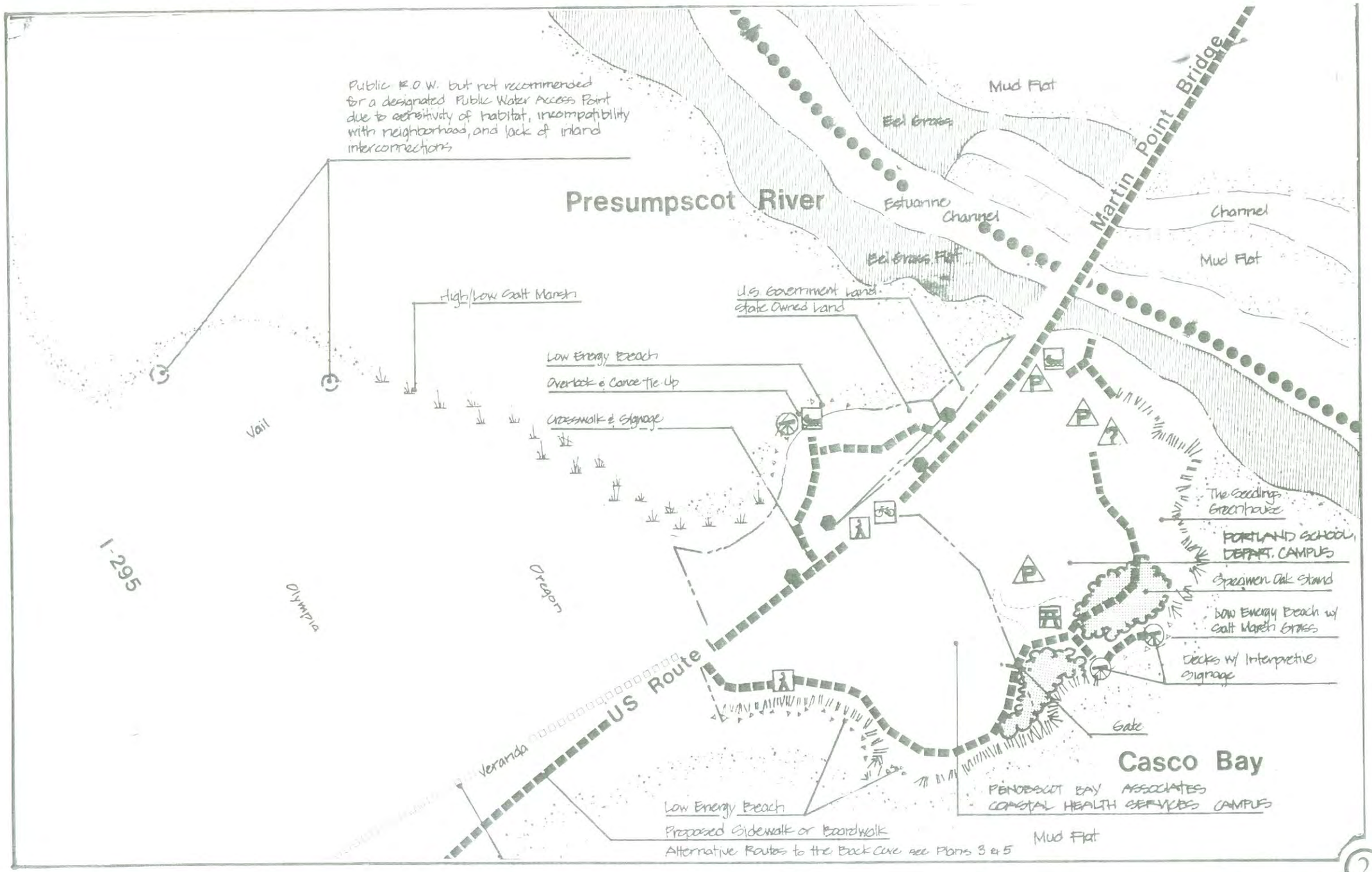
PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS



NORTH



2

OLYMPIA STREET NEIGHBORHOOD & MARTIN'S POINT

CASCO BAY ESPLANADE ALTERNATIVES & BERWICK STREET NEIGHBORHOOD

CASCO BAY ESPLANADE ALTERNATIVES

LOCATION: Connection between Back Cove and Martin Point: two alternative routes are possible:

Alternative 'A' : Route One between I-295 exit and Martin Point
Alternative 'B' : Veranda Street between Back Cove and Martin Point

CURRENT LAND USE:

Alternative 'A' : Off-ramp from I-295 to Route One
Alternative ' B' : Residential and commercial street

OWNERSHIP:
Alternative 'A' : Federal Government
Alternative 'B' : City of Portland

VISUAL QUALITIES:

Alternative 'A' : Medium to Low. immediately along Route One. Some interesting single family homes. Views to mud flats and marsh grasses. High from Route One looking east towards Casco Bay, the islands and boating activity.

Alternative 'B' : Low to medium. Landscape improvements would be needed along Veranda to improve its visual qualities.

CURRENT ZONING:

Alternative 'A' : R-5: Medium Density Residential
Alternative 'B' : R-5; B-1: Business; B-2: Business; I-2: Industrial.

CURRENT LEVEL OF ACCESS:

Alternative 'A' : Restricted: The Route One shoulder is wide, but provides no separation between the motorist, bicyclists, and pedestrian.

Alternative 'B' : Sidewalks along Veranda Street

DEVELOPMENT PRESSURE: Construction activity from Tukeys Bridge work has inhibited further development and/or redevelopment in the immediate neighborhood.

RECOMMENDATIONS:

Alternative 'A' : If the shoulder is to be used it should be separated from the Route One traffic by a substantial, but aesthetically pleasing barricade approved by MeDOT.

Optional routes would include a boardwalk from Martin Point to the Berwick neighborhood, or a pathway built into the side of the waterfront embankment. Neither alternative would be inexpensive, and both would most likely require permitting through the Army Corps of Engineers and the Department of Environmental Protection.

Alternative 'B' : Improvements should be made to the sidewalks along Veranda Street.

INTERPRETIVE THEMES:

- Casco Bay History
- Casco Bay Islands
- Fort Gorges
- Lighthouse
- Marine Geology / Ecology

ANTICIPATED USERS:

- Cyclists and pedestrians going between Martin Point and Back Cove
- Recreational users of the Water Access Route throughout the City
- Inter-community travellers between Portland and Falmouth

INTERCONNECTIONS:

Alternative 'A' : Back Cove; proposed CNRR fishing pier; Berwick neighborhood.

Alternative 'B' : Back Cove, with the others listed above as spurs off the main route.

PHASING: Moderate. Coordinate with improvements to Martin Point.

COMMENTS:

Alternative 'A' : The Route One alternative is preferred if the design and safety considerations can be accomplished. This option provides a more interesting sequence of views: marshes and mudflats, residential and industrial neighborhoods, open water and second growth woodland, long vistas to the islands and short views to Back Cove. With the interconnections noted above it would provide a much stronger identity as a special walkway.

Alternative 'B' : If the Route One alternative cannot be constructed the Veranda Street option will provide a direct connection between Martin Point and Back Cove. Kensington Street would need improvements to serve as a pedestrian spur to the proposed B&M waterfront and CNRR fishing pier.

BERWICK STREET NEIGHBORHOOD

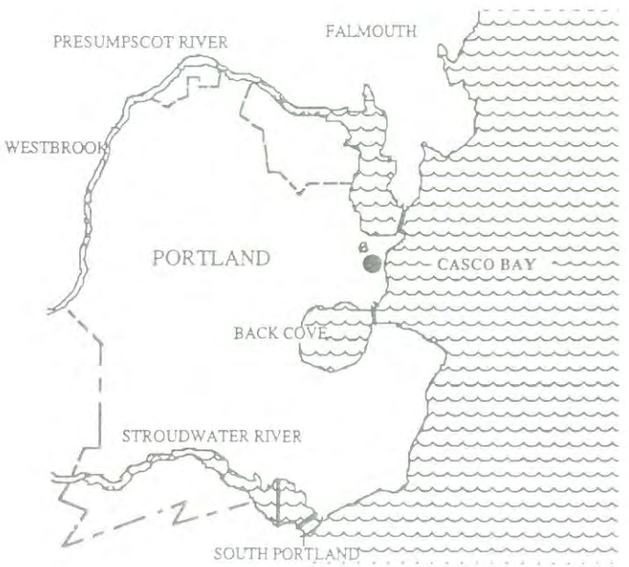
LOCATION: Bounded by I-295 on the west, Kensington Street to the south, and Casco Bay to the north and east.

CURRENT LAND USE: Single family homes on very small lots.

OWNERSHIP: Private. Approximately 100 lots; 50% of which have been built upon. State: I-295 ROW.

CULTURAL FEATURES:

- Interesting diversity in style, character, and spacing of homes. Very homogeneous neighborhood.
- Orientation to small pocket beaches at the foot of dead-end streets.



KEY PLAN

- Environmental intrusions include the aroma from the B&M bean factory and the noise from I-295.

- I-295 has cut the neighborhood off from the rest of the City, giving it a very private feeling

- Several gathering points exist within the community, including the beaches and the vacant woodlots west of Windsor Street.

NATURAL FEATURES: Mixed growth forest land where homes have not been constructed. Shoreline characterized by low energy beach (mixed sediment size, sand and pebble beach), ledge, and offshore mud flats. No substantial wildlife habitat. Shoreline could be tolerant to change if handled with sensitivity.

VISUAL QUALITIES:

- Within neighborhood: High. Spatial variations created by diversity of building arrangement; views at the ends of streets terminating in Casco Bay; topographic and vegetative changes; interesting mix of architectural styles.

- From the neighborhood: High. Views of Casco Bay and out to Martin Point; woods provide a visual and psychological buffer from I-295.

CURRENT ZONING: R-5: Medium Density Residential

CURRENT LEVEL OF ACCESS:

- Neighborhood is accessible only via Kensington Street off Veranda. One of the most self-contained communities within the city.

- Four of the streets (Berwick, Lennox, Kendel, and Watson) dead-end at the water. Watson provides the better access to a small pocket beach with a set of wooden stairs.

DEVELOPMENT PRESSURE: Susceptible to real estate speculation and intensified redevelopment due to its proximity to the water, natural amenities, and convenient location.

RECOMMENDATIONS:

- Establish a public right of way along the existing paved trail between I-295 and the undeveloped woodlots to the east. Extend trail from Kensington Street to Casco Bay, within the Interstate ROW.

- The following standards are recommended for the trail:

Resurfacing existing paved surface to establish a consistent width

Steps or a ramp to connect the walkway with the proposed Casco Bay Esplanade Alternative 'A'

Repositioning of the chain link fencing along I-295 as necessary

Directional signs in keeping with the overall walkway theme

Low level night lighting for safety of evening users, installed to minimize glare onto neighboring property

ANTICIPATED USERS:

- Walkers and bikers using the Water Access Trail

- Pedestrians and cyclists on route to and from Back Cove, Martin Point, and the B&M waterfront.

INTERCONNECTIONS: Link between Martin Point and the B&M Waterfront.

PHASING: Moderate. If the plans for a Casco Bay Esplanade described previously as Alternative 'A' are realized this linkage should be developed simultaneously.

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

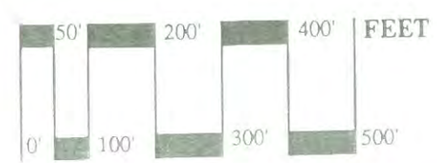
BICYCLE ROUTE

FISHING PIER

PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS



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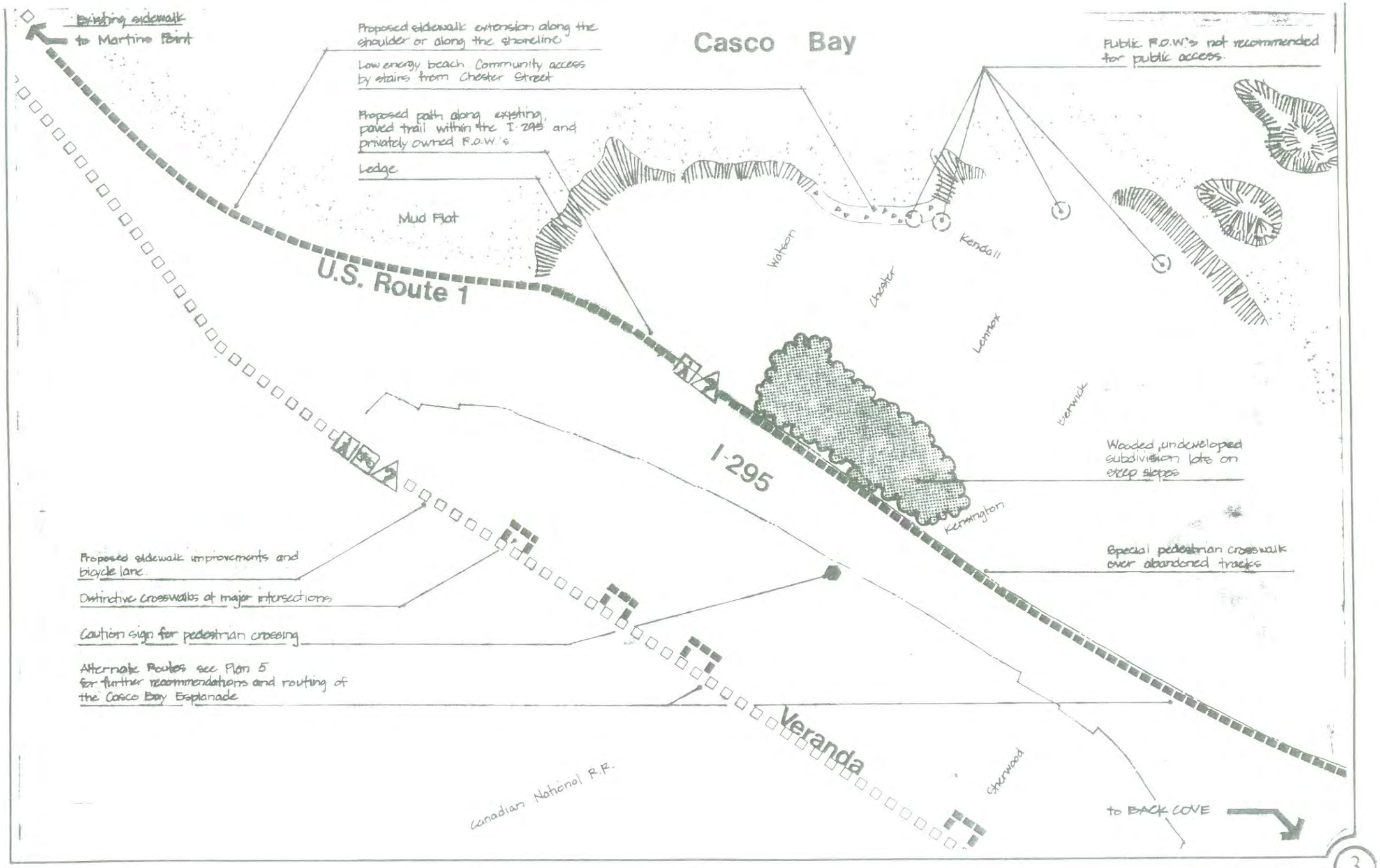


CASCO BAY ESPLANADE ALTERNATIVES & BERWICK STREET NEIGHBORHOOD

HAWTHORNE STREET NEIGHBORHOOD

LOCATION: Bordered by Veranda Street on the east, the Canadian National Railroad (CNRR) on the west, and I-295 on the north.

CURRENT LAND USE: Single family and multi-family residential; adjacent to commercial/industrial properties (e.g. a lumber yard).

OWNERSHIP: Private (100 +/- lots).

CULTURAL FEATURES: Single family homes dating back to the mid-50's.

NATURAL FEATURES: High salt marsh and mud flats.

VISUAL QUALITIES:

- Within the neighborhood: Low. Limited, contained views; little diversity; irregular pattern of development; lack of unifying theme or elements.

- From the neighborhood: Low. Conflicting, non-buffered adjacent land uses. Recently constructed transmitting tower in middle of salt marsh on man-made island.

CURRENT ZONING:

- R-5: Medium Density Residential
- I-3: Industrial (adjacent land)

CURRENT LEVEL OF ACCESS: Arcadia, Hawthorne, and Wordsworth Streets all have dead-end ROW's that extend to the salt marsh. No apparent signs of informal trails leading from these streets. Several vacant lots are found at the ends of these streets, giving some potential for small neighborhood parks.

DEVELOPMENT PRESSURE: Low, due to its position between the CNRR tracks and I-295.

RECOMMENDATIONS:

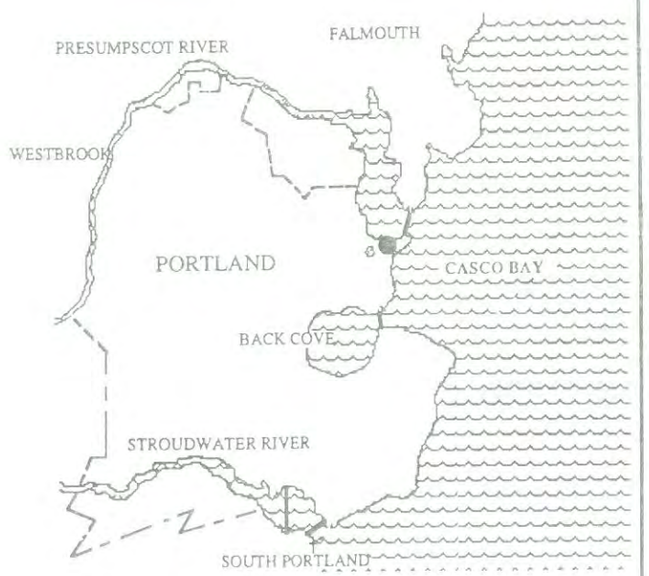
- The City should be in a position to negotiate with Canadian National Railroad for a public access trail along the R.R. ROW if there is any possibility that their spur over the Presumpscot River into Portland would be abandoned.

ANTICIPATED USERS: Use of the marsh and open space to be for the residents of the immediate neighborhood.

INTERCONNECTIONS: Potential for immediate interconnections is weak, due to the physical obstructions of the CNRR tracks and the interstate. Long term linkage to the water would be strengthened by the abandonment of the railroad line to the south and tying in Arcadia or Hodkins Streets via a bikeway and/or walkway.

PHASING: NA, unless CNRR were to abandon its line.

COMMENTS: Open salt marsh represents an important open space resource for the immediate neighborhood, as well as those travelling through on I-295. Some limited amount of passive recreation may be appropriate if neighborhood demands warrant it.



KEY PLAN

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

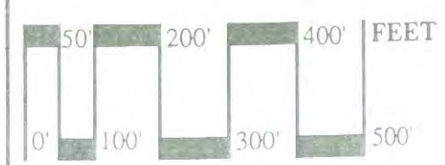
BICYCLE ROUTE

FISHING PIER

PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS



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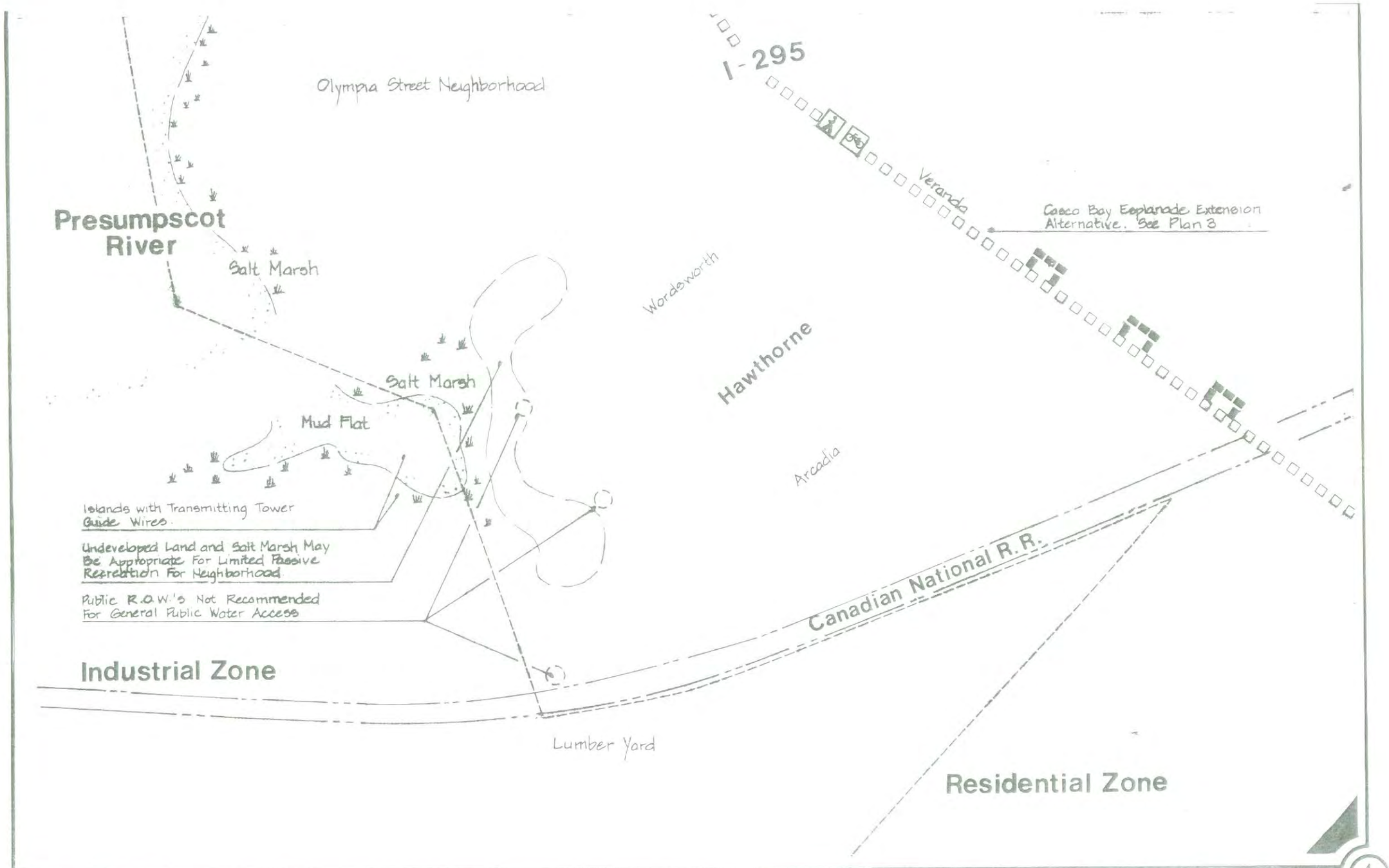


HAWTHORNE STREET NEIGHBORHOOD

TUKEY'S BRIDGE NORTH B&M FACILITY, & C.N.R.R.

TUKEY'S BRIDGE NORTH

LOCATION: The northern portion of the I-295 bridge which skirts Back Cove.

CURRENT LAND USE: Interstate traffic, with through lanes and interchanges under construction; informal footpaths along its western edge, used by joggers and walkers completing their circuit around Back Cove, and by cyclists and pedestrians going from East Deering to the East End. With the completion of the Tukey's Bridge construction the connection will be made between the northern and southern trails around Back Cove.

OWNERSHIP: State

CULTURAL FEATURES: Man-made land; Back Cove.

NATURAL FEATURES: Dredged channel; medium velocity tidal channel; coarse grained flat; mussel bar.

VISUAL QUALITIES: High. View from the bridge to the west was rated 'high' by the 1986 State Planning Office Coastal Scenic Inventory. View offers an everchanging vista of water and the diverse activity on Back Cove.

CURRENT ZONING:

- I-2: Industrial
- ROS: Recreational Open Space

CURRENT LEVEL OF ACCESS: Currently posted 'Restricted', but informally used by people. New bridge will accommodate pedestrians on the west side of the structure (paralleling the southbound lane).

DEVELOPMENT PRESSURE: NA

RECOMMENDATIONS: Establish a clear connection between the walking path on the west side of the new bridge and the proposed linkage to Martin Point.

ANTICIPATED USERS:

- East Deering neighborhood residents seeking a direct route to Back Cove.

- People travelling from Back Cove to Martin Point via the Casco Bay Esplanade.

INTERCONNECTIONS:

- Back Cove to Casco Bay Esplanade
- Back Cove to B&M / Webber Oil Property / CNRR pier.

PHASING: Medium. Will depend on the completion of the Casco Bay Esplanade (Route 1 / Berwick neighborhood / B&M).

BURNHAM & MORRILL WATERFRONT / WEBBER OIL COMPANY PROPERTY

LOCATION: B&M Bean Factory; Webber Petroleum; bounded by Casco Bay on the east and south, Sherwood and Berwick Streets on the north.

CURRENT LAND USE: Active baked bean factory; active petroleum products distribution facility; abandoned tank sites; transected by the abandoned railroad line of CNRR.

OWNERSHIP: Two private industrial landholders: 907,600 SF (B&M) and 251,510 SF (Webber).

CULTURAL FEATURES: Architecturally significant waterfront factory; local olfactory landmark

NATURAL FEATURES: Vegetation along the shoreline is typical of disturbed sites, with a preponderance of introduced, invasive species. Some areas of maintained lawns and landscaping in conjunction with the industrial uses. Shoreline consists of made land, mud flats and a mussel bar, leading to a dredged channel.

VISUAL QUALITIES:

- Within the B&M factory parcel: Medium. Well maintained grounds and significant building have stately appearance, somewhat offset by industrial character and organization of outdoor spaces.

- From the B&M site looking out: Medium to High. Water views afforded on 270 degrees, including the Eastern Promenade, Fort Gorges, the islands, boating activity on Casco Bay, glimpses of Back Cove. Visual detractors include loading operations for the factory, sewage treatment plant below the Eastern Promenade, and construction work on Tukey's Bridge (temporary situation).

CURRENT ZONING: I-2: Industrial

CURRENT LEVEL OF ACCESS:

- B&M parking lot and driveway off I-295; former access point has been relocated during the construction of Tukey's bridge.

- From Webber Oil parking area

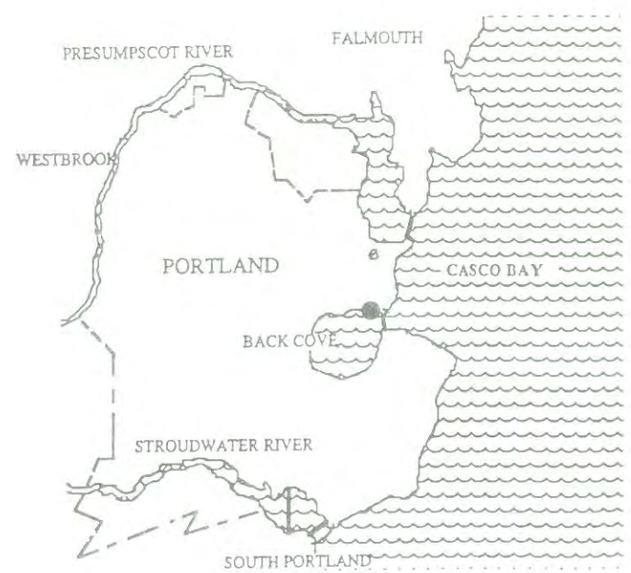
DEVELOPMENT PRESSURE:

- Webber Oil property represents a significant piece of waterfront property within walking distance of downtown, especially if the bridge were to be repaired. As such its highest and best use is most likely not being met at the present time.

- B&M Bean Factory has undoubtedly been the focus of many developers' plans for a Back Cove Gateway redevelopment complex. With its prominent location, sturdy structure, on-site parking, berthing potential, and waterfront situation, it would seem likely that some attempt may be made to redevelop this property (and Webber Oil) into a more intensive mixed use type of development. The completion of Tukey's Bridge, coupled with soaring waterfront land values and the ready availability of relocation sites for B&M could signal a radical change in a Portland landmark.

RECOMMENDATIONS:

- Provide a walkway from Sherwood Street to Tukey's Bridge along the base of I-295, pending an agreement with MeDOT and B&M to continue the path from the Berwick neighborhood.



KEY PLAN

- Any reuse of the B&M facility or the Webber Petroleum property should incorporate a significant public access component.

ANTICIPATED USERS:

- East Deering neighborhood residents on route to Back Cove
- People going from Back Cove to Martin Point.
- Long Term: new residents or workers in a redeveloped waterfront.

INTERCONNECTIONS:

- Proposed Casco Bay Esplanade (directly)
- Back Cove and Martin Point connection (indirectly)

PHASING: Mod. Should be established either simultaneously or prior to the improvements to Martin Point.

CNRR FISHING PIER / B&M WATERFRONT

LOCATION: Canadian National Railroad line north of the burnt-out trestle bridge.

CURRENT LAND USE: Abandoned railroad line, adjacent to active baked bean factory and petroleum products distribution facility.

OWNERSHIP: Canadian National Railroad

CULTURAL FEATURES:

- Remains of the swing trestle bridge that formerly connected the Portland Peninsula with the lines to the north
- Significant waterfront access point
- Gathering point for fishermen and local explorers

NATURAL FEATURES: Vegetation along the shoreline is typical of disturbed sites, with a preponderance of introduced, invasive (choking, zealous, weedy) species. Shoreline consists of mud flats and a mussel bar, leading to a dredged channel.

VISUAL QUALITIES:

- Along RR and industrial landscape: Low to medium. Scrubby growth, views of abandoned tanks and loading facilities of bean factory.

- From the RR and industrial sites looking out: High. Water views afforded on 270 degrees, including the Eastern Promenade, Fort Gorges, the islands, boating activity on Casco Bay.

CURRENT ZONING:

- I-2: Industrial

- B-1: Business

CURRENT LEVEL OF ACCESS:

- Via CNRR tracks from Veranda Street and Kensington.

- From Webber Oil Parking Area

- All access into these areas is informal and not presently condoned by the owners. Condition of the bridge and wharf are hazardous and pose a potential liability problem to the owners.

DEVELOPMENT PRESSURE:

-CNRR is considering abandoning this section of the tracks, but maintaining ownership of the ROW. Development of a north-bound connector along the present ROW would hinge upon the City's ability to acquire fee to the railroad property, or a long-term access easement over it.

RECOMMENDATIONS:

-Acquire CNRR line or establish public access easements with CNRR over the entire length of track that may be abandoned.

-If permanent easements are not possible the City should investigate the development of a walkway system on a temporary easement over the CNRR property. This may take the form of covering the tracks with a removable surface, or locating a trail to one side of the line.

-Work with town officials in Falmouth to investigate the possibilities of linking the two communities via the railroad line. Tremendous potential for a commuter bike-route into the Portland peninsula from the north.

- The existing pier should receive a through structural analysis prior to any action on the part of the City. It is apparent that a portion of the pier should be demolished to rid the present owners of an attractive nuisance. If possible use a portion of the fishing pier as an overlook, with appropriate surface and edge treatments to minimize the danger.

INTERPRETIVE THEMES:

- Eastern Prom
- Sewage Treatment Plan
- Blue mussel beds and other marine invertebrates
- History of trestle and rail transportation
- Fishing

MEANS OF INTERPRETATION:

- Improve trestle for pedestrian access
- Add interpretive signage or gazebo area

ANTICIPATED USERS:

- Short term: local neighborhood residents, especially from the Berwick/Kensington Street communities.

- Local fishermen looking for an isolated, attractive place to drop a hook.

- Water Access Trail users, exploring spurs off the main trail.

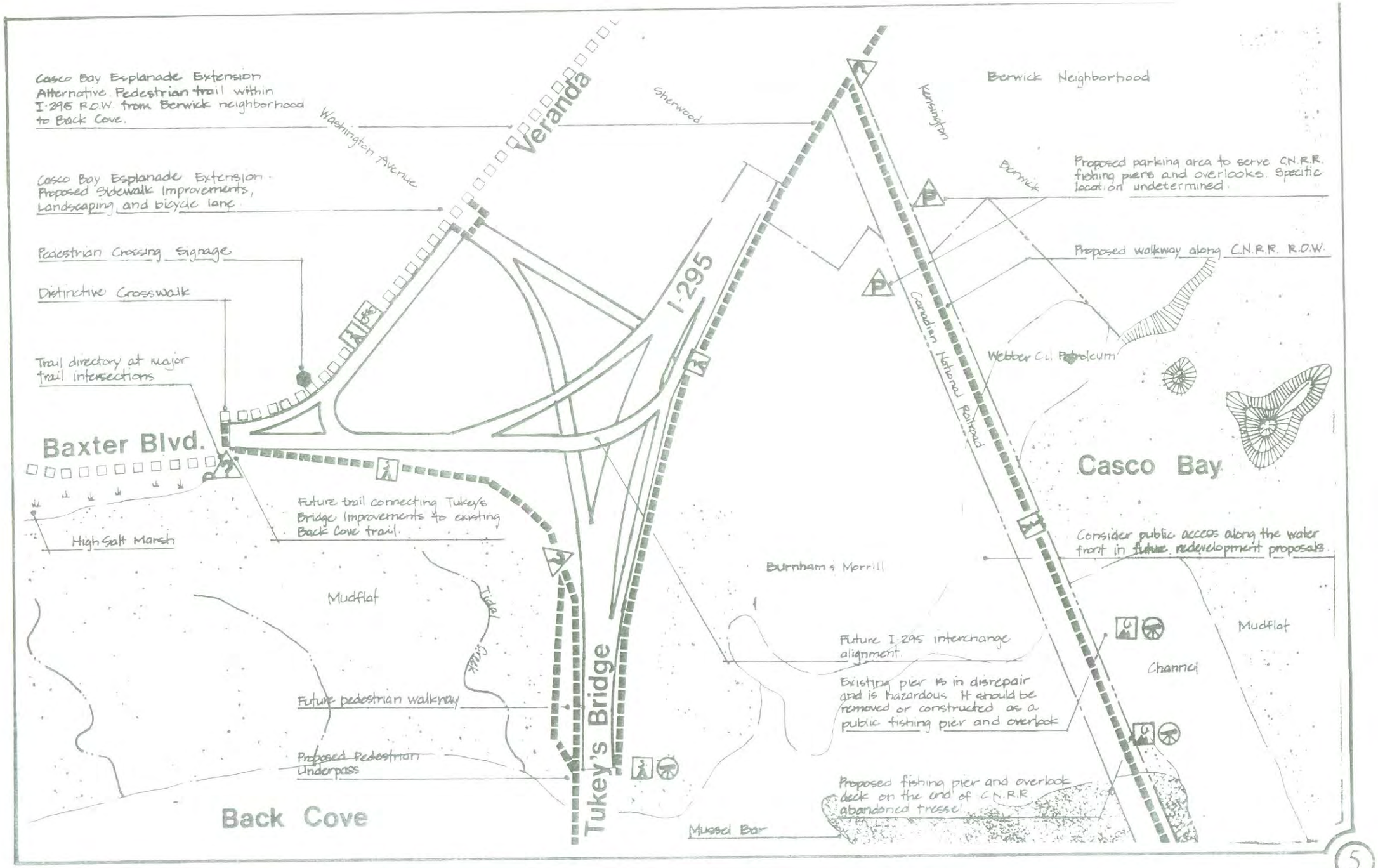
- Long Term: new residents or workers in a redeveloped waterfront.

INTERCONNECTIONS:

- Proposed Casco Bay Esplanade (directly)

- Back Cove and Martin Point connection (indirectly)

PHASING: Medium. An intriguing location to make accessible. The goals of public access to the waterfront can easily be met in this location without directly interfering with the established neighborhood land uses. It should be developed in conjunction with or after the Casco Bay Esplanade.



TUKEY'S BRIDGE NORTH, B & M FACILITY, & C.N.R.R.

TUKEY'S BRIDGE SOUTH

LOCATION: The southern portion of the I-295 bridge which skirts Back Cove.

CURRENT LAND USE: Interstate traffic, with through lanes and interchanges under construction; informal footpaths along its western edge, used by joggers and walkers completing their circuit around Back Cove, and by cyclists and pedestrians going from East Deering to the East End. With the completion of the Tukey's Bridge work the connection will be made between the northern and southern trails around Back Cove.

OWNERSHIP: State

CULTURAL FEATURES: Man-made land; Back Cove.

NATURAL FEATURES: Dredged channel; medium velocity tidal channel; coarse grained flat; mussel bar.

VISUAL QUALITIES: High. View from the bridge to the west was rated 'high' by the 1986 State Planning Office Coastal Scenic Inventory.

CURRENT ZONING:

- I-2: Industrial
- ROS: Recreational Open Space

CURRENT LEVEL OF ACCESS: Currently posted 'Restricted', but informally used by recreationalists. New bridge will accommodate pedestrians on the west side of the structure (paralleling the southbound lane).

DEVELOPMENT PRESSURE: NA

RECOMMENDATIONS:

- The State's plans for the landscape treatment of the walkway touch-down point on Washington Avenue should include:

- non-slip sidewalks
- directional signage
- benches
- significant plantings

- The landscape design elements should extend up Munjoy Hill as a visual guide for the Water Access Trail and as a way to further incorporate it into the neighborhood fabric.

INTERPRETIVE THEMES:

- Historical plans by Olmstead Bros./Baxter for Back Cove.
- Map of Eastern Prom walkway and public use areas and connections to Back Cove and Commercial Street

MEANS OF INTERPRETATION:

- Open up views at existing overlook
- Add signage and map

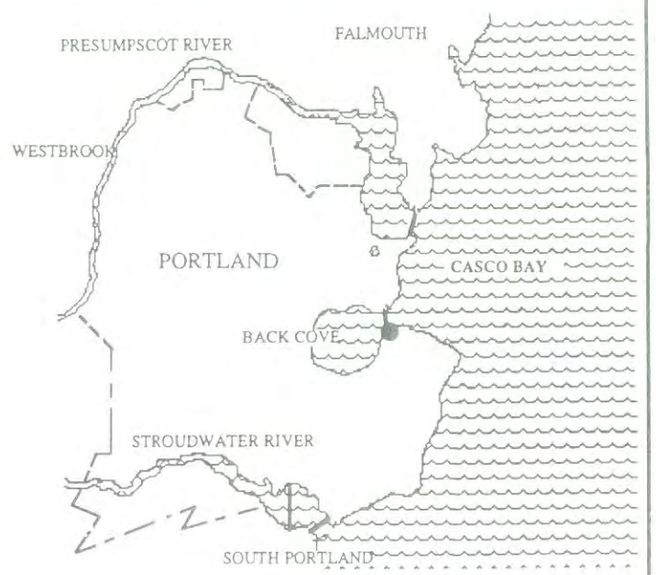
ANTICIPATED USERS:

- People travelling from Back Cove to the Eastern Promenade, and East Deering to the East End.
- Pedestrian and cycling commuters
- Travellers on the Water Access Trail.

INTERCONNECTIONS:

- Back Cove to Eastern Promenade
- East Deering to East End

PHASING: High. Walkway will be forthcoming with the completion of Tukey's Bridge. Other improvements should be planned to dovetail with the opening of the bridge.



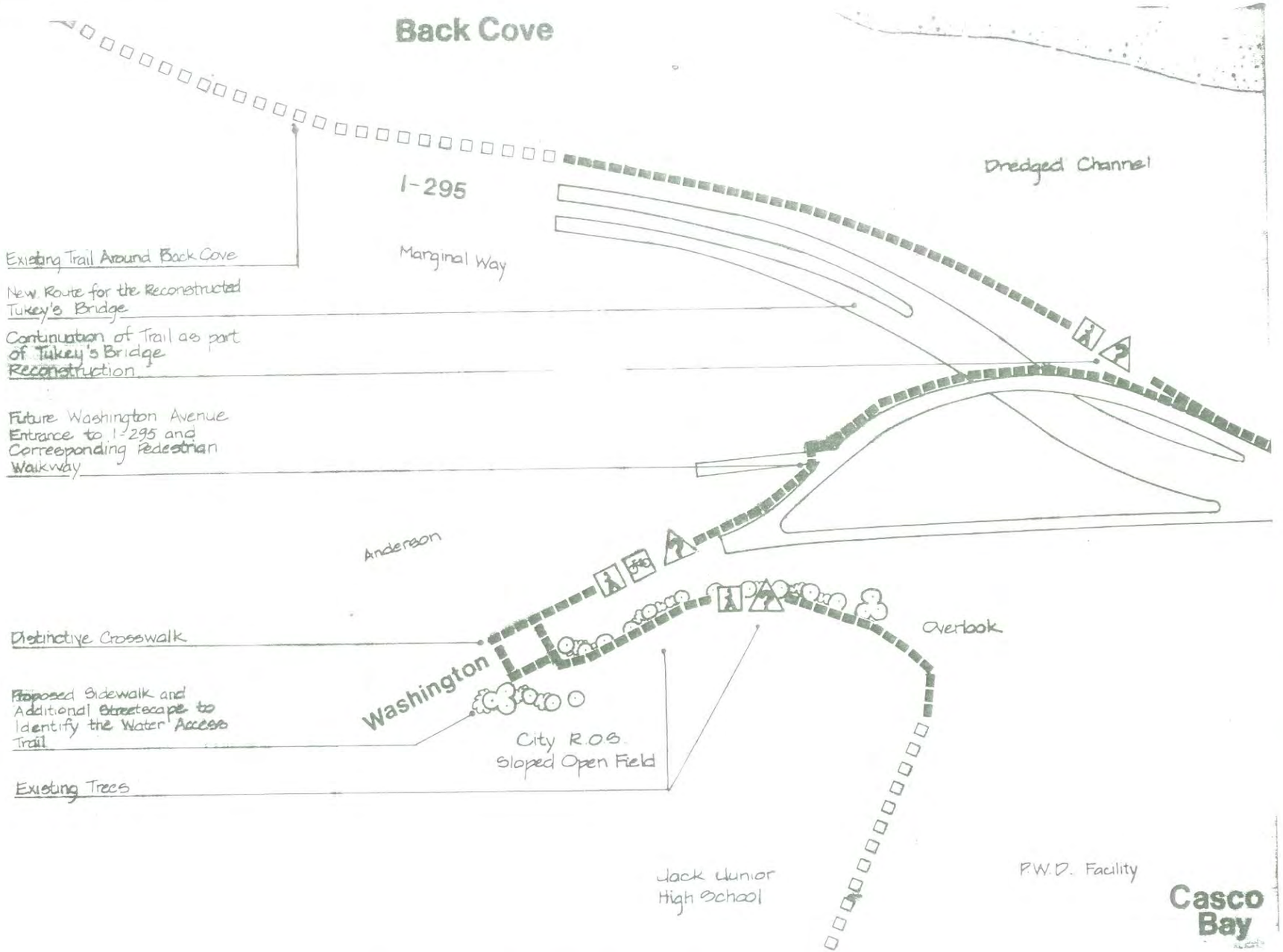
KEY PLAN

LEGEND

PARKING
DIRECTORY SIGN
HANDICAP ACCESSIBLE
RESTROOMS
POINT OF INTEREST
OVERLOOK
CANOE ROUTE
CANOE LAUNCH/TIE-UP
PICNIC AREA
PEDESTRIAN TRAIL
FITNESS TRAIL
WINTER SPORT TRAIL
BICYCLE ROUTE
FISHING PIER
PROPOSED TRAIL
EXISTING TRAIL
ALTERNATIVE ACCESS POINTS

0' 50' 100' 200' 300' 400' 500' FEET

NORTH


Back Cove
I-295
Dredged Channel
Existing Trail Around Back Cove
Marginal Way
New Route for the Reconstructed Tukey's Bridge
Continuation of Trail as part of Tukey's Bridge Reconstruction
Future Washington Avenue Entrance to I-295 and Corresponding Pedestrian Walkway
Anderson
Distinctive Crosswalk
Overlook
Washington
Proposed Sidewalk and Additional Streetscape to Identify the Water Access Trail
City R.O.S.
Sloped Open Field
Existing Trees
Jack Junior High School
P.W.D. Facility
Casco Bay

BACK COVE, FALL BROOK, & PAYSON PARK

BACK COVE

LOCATION: The greenbelt park around Back Cove, in the Ocean Avenue and Oakdale neighborhoods.

CURRENT LAND USE:

- Active Recreation: walking, jogging, par course, cycling (presently restricted to the street), sailboarding, soccer and ball fields (adjacent to I-295). Distances around the Cove are marked on the jogging/walking trail.

- Passive Recreation: bird watching (bird sanctuary), sitting, dog walking, driving for pleasure, enjoying the vistas.

- Commerce: lobstering.

- Municipal: snow dump on southern end; large parking facility.

OWNERSHIP: City of Portland

CULTURAL FEATURES:

- Remnants of the landscape architectural work of Frederick Law Olmstead, most notably the plantings, alignment of the roadway and walkways, curbing and gutter details, and small bridge/seating area over Fall Brook.

- Well landscaped, large older homes overlook the Cove from the surrounding streets.

- Several other parks and open spaces interconnect with the Back Cove system.

NATURAL FEATURES:

- Upland: well maintained park, with open lawns, old linden trees, flowering shrubs, and wildflowers.

- Shoreline: high and low saltmarsh, mud flats, coarse-grained flat, mussel bar, tidal creeks, dredged channel, medium velocity tidal channel.

- Wildlife habitat: high value for shorebirds, fish, marine invertebrates, etc.

VISUAL QUALITIES: High. View from and along Back Cove was rated 'high' by the 1986 State Planning Office Coastal Scenic Inventory.

CURRENT ZONING: ROS: Recreational Open Space

CURRENT LEVEL OF ACCESS:

- Easy access all along Baxter Boulevard and from Payson Park.

- Parking is available at the southern end of Back Cove, across from the new Shop'N'Save Plaza.

- The Cove is seen by thousands daily along Baxter Boulevard and I-295, especially at the Franklin Arterial off-ramp. Visual access to the water and the continuous changes brought about by tides, storms, wind, and sun, plays an important role in defining a strong sense of place.

- Baxter Boulevard as a proposed designated lane for cyclists to avoid conflicts between them and the pedestrians on the footpaths.

DEVELOPMENT PRESSURE:

- Most of the available open space within easy walking distance of Back Cove - e.g. the Fall Brook watershed, Forest Avenue, the USM Campus - has been developed in the past ten years, contributing to the popularity of the park.

- Sailboarding is a phenomenon that has grown in popularity in the past two years, contributing even further to the demand for parking and access to the water.

- With the completion of Tukey's Bridge will come additional recreational opportunities for people wishing to complete a circular route around Back Cove and the Eastern Prom, an idea that dates back to the earliest Olmstead plans.

- With the current demand on the City's parking resources transportation planners are proposing commuter parking areas on the south side of I-295 on the Peninsula. While these lots will not affect Back Cove directly, they will remove some of the sense of travelling through a greenbelt on I-295 entering the City. The loss of the open space on the south side of the Interstate will make the Back Cove an even more significant open space.

- As development on the Peninsula rises over the crest of Congress Street and Cumberland Avenue the land on the north slopes overlooking Back Cove may be subjected to increased interest, especially those that afford a water view.

RECOMMENDATIONS:

General

- In anticipation of the growth surrounding the Back Cove area the City should elevate this great natural and cultural resource to a position of even greater prominence in the fabric of the community. Future studies should examine the role that Back Cove now plays in the lives of those living near it, the potential for expansion of the park, the means of integrating future development proposals into the greenbelt concepts, and the adaptation of the original intention of the Olmsteadian plans in a contemporary setting.

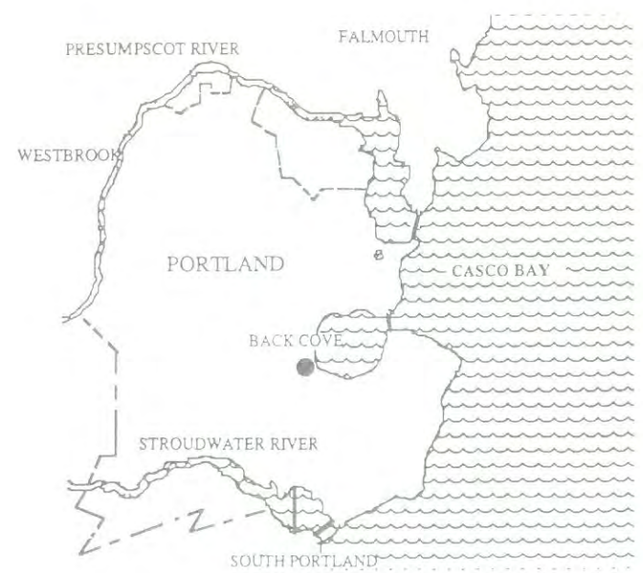
- With the upcoming Computer Assisted Height Study the City should have the capability to consider visual access to the waterfront as part of the planning and review process. Visual access to Back Cove should not be overlooked in future studies, policy statements, and zoning and planning guidelines.

Specific

- Reconstruct the existing masonry sitting bridge, as well as a second one that was removed several years ago, that was part of the original Olmstead plans. While the early design should be used as a point of departure, the City should take advantage of current technology to assure a permanent structure.

- Continue the tree planting and transplanting program along Baxter Boulevard to restore the allee of lindens to their former glory.

- Provide better facilities for bicyclists along Baxter



KEY PLAN

Boulevard, either as a separate designated lane, or a widened path paralleling the current footpath.

- Improve the appearance of the south shore parking area and snow dump to minimize its visual impact from the water and pathway. Low berms and ornamental shrubs would help screen the autos from traffic on Baxter Boulevard and Preble Street Extension. Incorporation of trees would help reduce its apparent mass and surface area, and provide some welcome shade for summertime users.

- If snow will continue to be dumped into Back Cove, the edge where the dumping occurs should be treated with a permanent surface - e.g. coarse cobblestones - to stabilize the bank and improve the general aesthetics of the area.

- Provide a centralized facility near the parking area for rest rooms, informational bulletin board, drinking fountain, etc.

- Install a series of interpretive signage along the pathways, describing the area's natural and cultural history.

- Provide a stabilized, designated location for sailboard enthusiasts to easily access the water at mid to high tide.

- The Maine Department of Transportation should investigate the sheet drainage coming off I-295 onto the stone-dust paths. Present condition is causing deep incisions into the surface.

INTERPRETIVE THEMES:

- Map of pedestrian way through city showing Back Cove as central dial to the system.
- Salt marsh ecology
- Natural Area designation by State Planning Office as shore bird feeding ground
- Lobstering in Back Cove
- Marine Invertebrates
- Olmstead design work/benches
- Recreational uses

MEANS OF INTERPRETATION:

- Signage along walkway

ANTICIPATED USERS:

- The designated starting point for many Water Access Trail users

- Core of the Water Access Trail for many users, or a terminus after a day-long excursion around the City.

- Local neighborhood use.

- Continued use by joggers, birdwatchers, walkers, sightseers

- Noontime ramblers from office developments on Forest Avenue, USM, and Marginal Way.

INTERCONNECTIONS: In the Concept Diagram for the Water Access Trail all paths ultimately lead to Back Cove.

PHASING: High Back Cove is functioning adequately under its present condition. With the improvements noted elsewhere (e.g. Tukey's Bridge, linkage to the Eastern Promenade and Martin Point, etc.) and the anticipated development in the immediate vicinity, more pressure will be brought to bear upon the park. With it will be a decline in the carrying capacity of the land without some major improvements.

COMMENTS: Access is sufficient at present to meet current demands. However the increasing popularity of the park, coupled with the great number of condominiums and apartments in the immediate vicinity, has put a strain on the capacity of the land to rejuvenate itself.

PAYSON PARK

LOCATION: Northern edge of Baxter Boulevard, in the Ocean Avenue neighborhood.

CURRENT LAND USE: City Park: playing fields, small arboretum, skating pond, playgrounds.

OWNERSHIP: City of Portland

CULTURAL FEATURES: Major City Park

NATURAL FEATURES: Open maintained grassed fields, mixed forest land, bordered by estuary. Fronts on Back Cove, with high and low salt marshes and mud flats.

VISUAL QUALITIES:

- Within park: Medium - low. Uninteresting spaces, incompatible structural elements.

- From the park: High. Waters of Back Cove, skyline of Portland.

CURRENT ZONING: ROS: Recreational Open Space.

CURRENT LEVEL OF ACCESS:

- Into Park: two entrances off Ocean Avenue, two off of Baxter Boulevard. No special accommodations for bicycles or pedestrians (i.e. lack of sidewalks and bike racks).

- To Back Cove: No sidewalks have been provided to link the park with Back Cove. No access to estuary, which may be desirable in consideration of the shorebirds seeking a secluded environment.

DEVELOPMENT PRESSURE: See #11 Back Cove.

RECOMMENDATIONS:

- Provide a sidewalk to connect the Park with the walking/jogging paths around Back Cove

- Improve the image of Payson Park with a new entrance(s) off Baxter Boulevard

- Consider the location and design of all structures within the park, especially as they are perceived from Back Cove. Redesign, and/or replace as necessary to preserve the visual integrity of the area as a whole.

- Interpretive signage in the Arboretum should reference other similar collections in the state, such as the Spring Point Arboretum in South Portland (on the SMVTI Campus) and the Maine State Arboretum in Augusta (off Route 9 opposite the Augusta Mental Health Institute (AMHI) Complex).

INTERPRETIVE THEMES:

- Fresh water marsh
- birds and other animals using area
- vegetation
- Arboretum signage

MEANS OF INTERPRETATION:

- signage

ANTICIPATED USERS:

- People going from Baxter Boulevard to Payson Park on the Water Access Trail.

- Local neighborhood use.

- Continued use by ball players, families using the playground, joggers, birdwatchers, walkers, sightseers, etc.

INTERCONNECTIONS: Back Cove

PHASING: High Payson Park functions adequately in its present condition. With anticipated development noted in #11, Back Cove, more pressure will be brought to bear on the park's resources. Identity of park would be strengthened by improvements noted.

COMMENTS: See "City of Portland, Inventory of Outdoor Recreation Rehabilitation Needs and Costs".

FALL BROOK

LOCATION: Fall Brook watershed, between Back Cove and Washington Avenue.

CURRENT LAND USE: Single family and multi-family homes, condominium and apartment development; church property.

OWNERSHIP: Private

CULTURAL FEATURES: Well maintained traditional neighborhoods, interspersed with newer, more intensively developed properties. Utility easements are located throughout much of the area along the brook.

NATURAL FEATURES: Primarily deciduous hardwoods on steep slopes along the watershed. Fall Brook is a shallow brook for the majority of the year.

VISUAL QUALITIES: Medium to Low. Vegetation has been removed over much of the easements for utility installation. Stream is relatively low key throughout much of the watershed with minimal variation. Value of the land lies in its potential as a buffer and open space linkage between diverse neighborhoods.

CURRENT ZONING: Primarily R-5 and R-3, with business zones on the fringes.

CURRENT LEVEL OF ACCESS: Some paths exist along the Fall Brook embankment, and / or following the utility lines.

DEVELOPMENT PRESSURE: Much of the major undeveloped properties have been built upon in the last ten years.

RECOMMENDATIONS:

- The Fall Brook Watershed represents an opportunity to extend the concept of the Water Access Trail throughout more of the City, as illustrated on the Concept Plan. A trail along the undeveloped portions of the brook, coupled with links following existing utility lines, would enable easier public access from outlying neighborhoods.

- In many instances the trail already exists. The City should require that future development, or intensification of existing development, preserve these trails where they exist, or incorporate space for links where they are necessary.

- At the point of initiation, where Fall Brook meets Back Cove, the trail would be most suited on the southwest side of the brook. Final location should avoid the steep slopes which characterize much of the watershed. An agreement would have to be worked out between the City and Back Cove Estates to allow the trail to continue.

ANTICIPATED USERS:

- Residents of the North Deering neighborhood to walk or jog to Back Cove or to other intermediate destinations along the way.

- Alternative spur for the people using Back Cove.

INTERCONNECTIONS: Ultimately the Presumpscot River Trail and intermediate destination points in North Deering.

PHASING: High. Action should be initiated by the City to assure access over the remaining undeveloped sections of the watershed, as proposed by the Fall Brook Watershed Study. This section of the Water Access Trail should be regarded as a model interconnection to tie existing residential neighborhoods into direct contact with the City's waterfront.

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

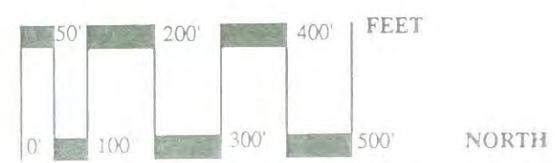
BICYCLE ROUTE

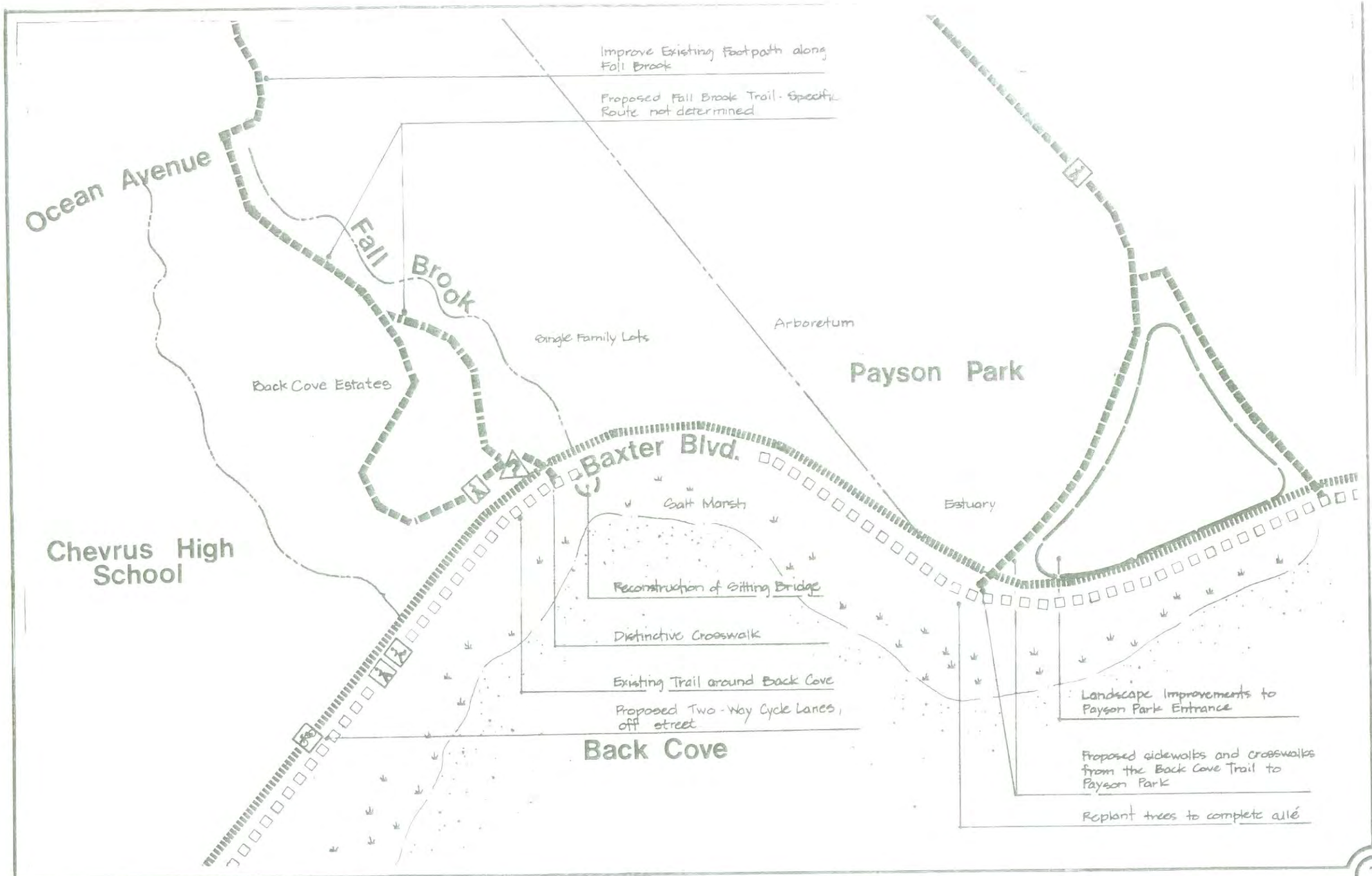
FISHING PIER

PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS





BACK COVE, FALL BROOK, & PAYSON PARK

MACWORTH STREET

LOCATION: In the Ocean Avenue neighborhood, extending west from Baxter Boulevard to Ocean Avenue, from the western shore of Back Cove.

CURRENT LAND USE: Single family homes on 1/4 Ac. lots.

OWNERSHIP: City streets; private property.

CULTURAL FEATURES: Well kept individual homes.

NATURAL FEATURES: Well maintained trees, lawns, ornamental plantings.

VISUAL QUALITIES: High. Visually unified, well scaled neighborhood.

CURRENT ZONING: R-3: Medium Density Residential.

CURRENT LEVEL OF ACCESS: Steps that lead from Macworth Street down to Baxter Boulevard are in disrepair.

DEVELOPMENT PRESSURE: Low: land use pattern well established.

RECOMMENDATIONS:

- Improve or provide sidewalks on one side of the street for its full length. Install periodic signage to indicate that this is a spur of the Water Access Trail.

- Plant additional street trees to contribute to the general aesthetics of the neighborhood and impart a sense of 'greenbelt' to the Trail.

- This section should be considered the first in a series that ultimately links Back Cove to Evergreen Cemetery, with connections at the Baxter School and Baxter Woods.

INTERPRETIVE THEMES:

- Woodland ecology
- Animal habitats
- History of Baxter Woods

MEANS OF INTERPRETATION:

- signage

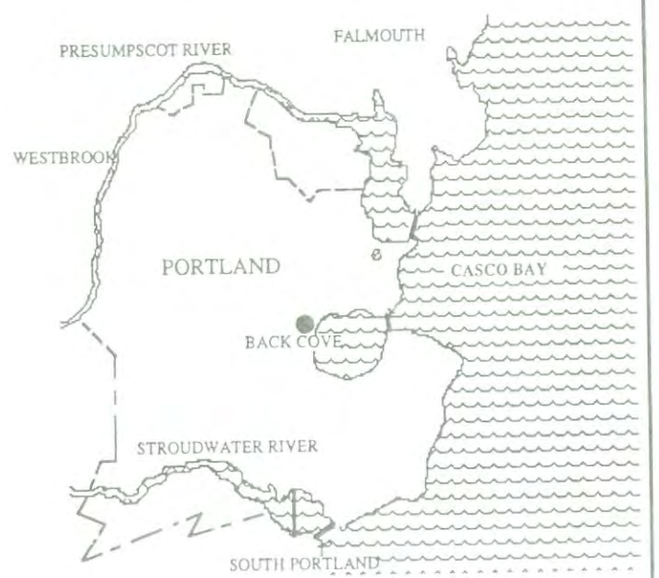
ANTICIPATED USERS:

- Local neighborhood users

- Recreationalist seeking alternative routes around the City.

INTERCONNECTIONS: Back Cove

PHASING: Moderate: minimal investment would be required on the City's part to initiate the work of integrating Back Cove into more of the surrounding neighborhoods.



KEY PLAN

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

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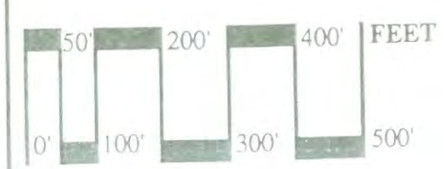
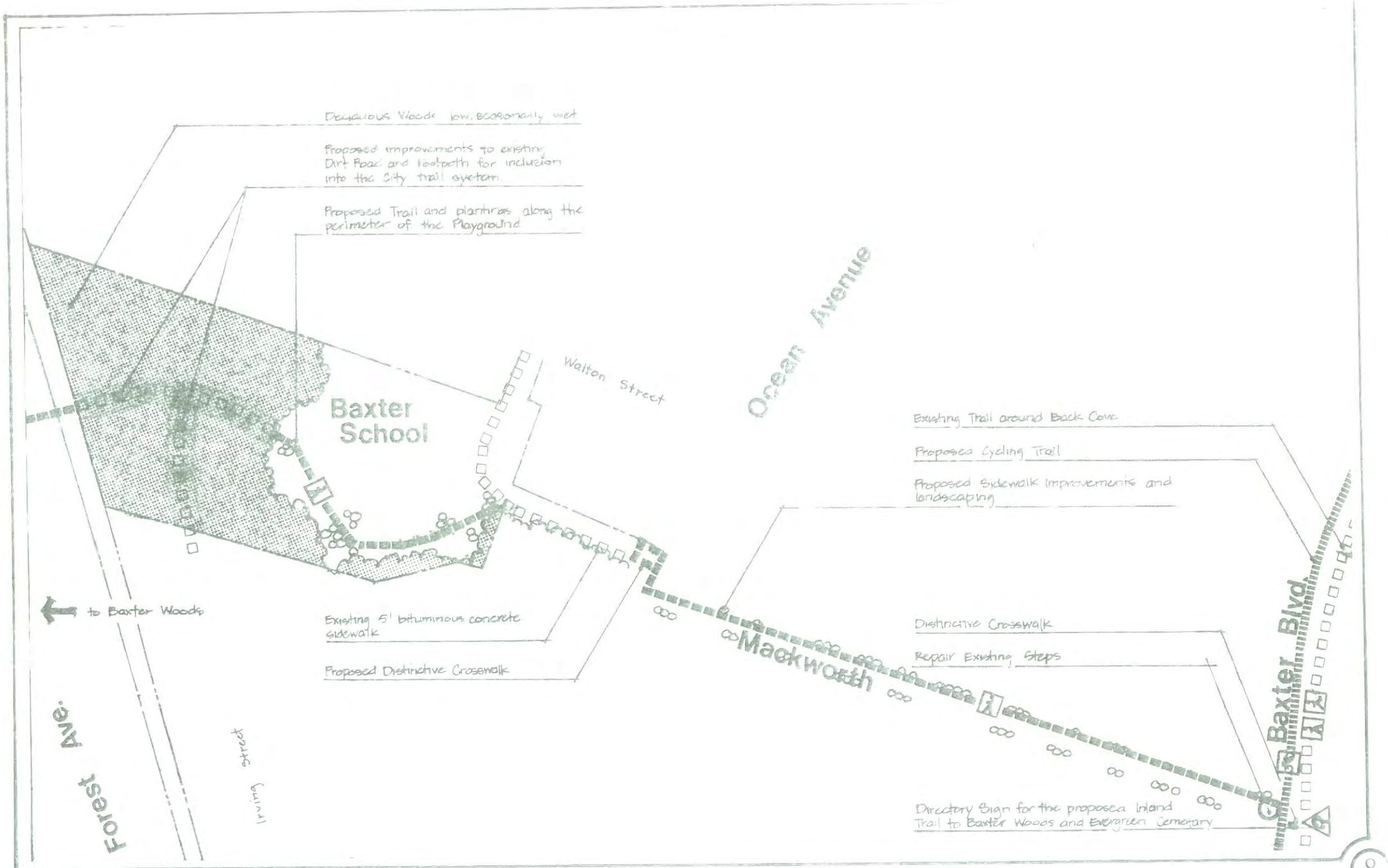
EXISTING TRAIL

ALTERNATIVE ACCESS POINTS



NORTH



MACKWORTH STREET & BACK COVE

FRANKLIN STREET ARTERIAL

LOCATION: The East End and downtown four lane thoroughfare which terminates on the Back Cove on the northwest and Maine State Pier on the southeast.

CURRENT LAND USE:

- Street: limited to vehicular traffic, no sidewalk on either side or a designated lane for cyclists (worn paths both sides of the blvd.)
- Adjacent Land: Industrial, multi-family residential, business, church, elderly housing, urban parks, waterfront commercial, commuter parking area.

OWNERSHIP: Street R.O.W.: City of Portland; Adjacent Land: City & Private

CULTURAL FEATURES:

- Cathedral of the Immaculate Conception
- County Courthouse
- City Skyline (i.e. City Hall, etc.)
- Lincoln Park
- Back Cove
- I-295 Interchange

NATURAL FEATURES:
- Tree lined boulevard, lawn

VISUAL QUALITIES:

- Northwest end of I-295 Interchange: High. Interesting landscape treatment which reinforces the circular form of the off ramp and effectively buffers I-295. Good use of form and color in the landscape.

- Northwest end from I-295 Interchange: High. The panoramic view north across the Back Cove. Enframement of the Cathedral on the hill to the south by the I-295 overpass .

- North of Cumberland: Fair. Little variation in color, form or texture in the plantings within the Boulevard. Linear planting arrangements within the medium strip do not help to reinforce the street or the driving sequence. The landscape as a whole appears worn - trees need pruning, light standards have been removed, fences are in disrepair, public housing needs major attention, and the well used paths randomly crossing the Boulevard detract from its potential.

- Along Arterial South of Cumberland Avenue: same as the northern portion.

- North of Cumberland: Adjacent Land: Low. To the west are large scale low lying industrial buildings with minimal plantings or architectural detail. Parking areas are generally not landscaped or buffered from view. No consistent architectural style or scale. No sense of place.

- Adjacent Land: South of Cumberland Avenue Along Arterial: Low - Medium. A more harmonious mix of architectural styles and scales, with extended views down side streets. Focus on waterfront activity at the foot of the arterial.

CURRENT ZONING:

- ROS: Recreation Open Space
- I-2, I-2b: Industrial
- R6: High Density, Multi-Family, Residential
- B-2, B-3: Business

CURRENT LEVEL OF ACCESS:

- Franklin Arterial: Designed for high volumes of vehicular use, though informal pedestrian and bike use within lawn areas are evident along entire length.

- Access to Back Cove restricted by chain link fence. Pedestrian traffic would have to cross several unmarked (for pedestrians) intersections and go under the I-295 bridge (within the State ROW)

DEVELOPMENT PRESSURE: This section is currently experiencing some of the most intense development pressures in the City, with the proposed office tower complex at Congress and Wilmont, the twin towers of the Financial Place opposite the Public Safety Building, the Ferry Terminal, rapid turnover of land on the east side of the arterial, and the City's proposal for a series of Park and Ride parking areas along I-295. All this activity will contribute to the demand for safe, well marked and well lit pedestrian routes to Back Cove and the Waterfront.

RECOMMENDATIONS:

- Install a gate in the existing chain link fence which separates the interchanges and Back Cove to allow more direct access to the Cove from the east end and downtown.

- Install a continuous sidewalk along the western side of the Franklin Arterial from the Back Cove to the Maine State Pier.

- Install rumble strips and signage along the I-295 north bound exit to caution exiting traffic of crossing pedestrians.

- Use directional and informational signage along the path to identify it as part of the larger trail system throughout the City.

- Clearly define crosswalks along the Arterial, using permanent insets in the pavement.

- Use additional plantings of trees and large-scale flowering shrubs within Boulevard to discourage pedestrian traffic within the median strip and encourage the use of crosswalks. More plantings should also be installed to buffer the industrial, business and residential areas from the arterial, direct the view, and add pedestrian scale.

- Treat the Franklin Arterial as the main artery into the City, which it is, making it a showcase unto itself rather than just a road to pass through to get someplace else. Lighting, banner holders, additional plantings, and colorful graphics would all add a ceremonial touch to one of the most important Gateways to the waterfront.

- City should study the need for a bicycle lane paralleling the roadway between I-295 and the waterfront. Once Tukeys bridge is reopened the City may see a rise in the number of cyclists using this route as the main entrance onto the peninsula.

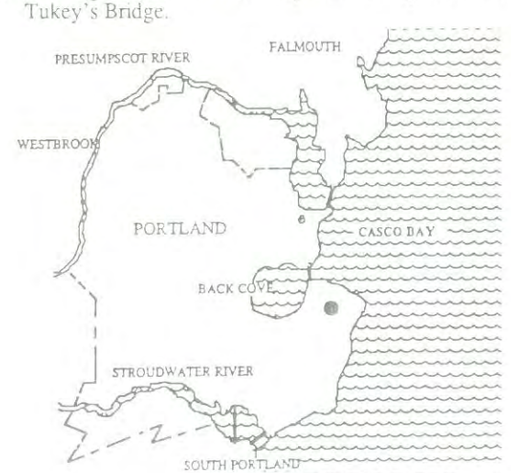
ANTICIPATED USERS:

- Commuters from the proposed 'Park and Ride areas' along I-295 walking downtown.
- People going to and from Back Cove.
- Downtown workers at lunch time out for a jog or a walk with Back Cove as a destination.

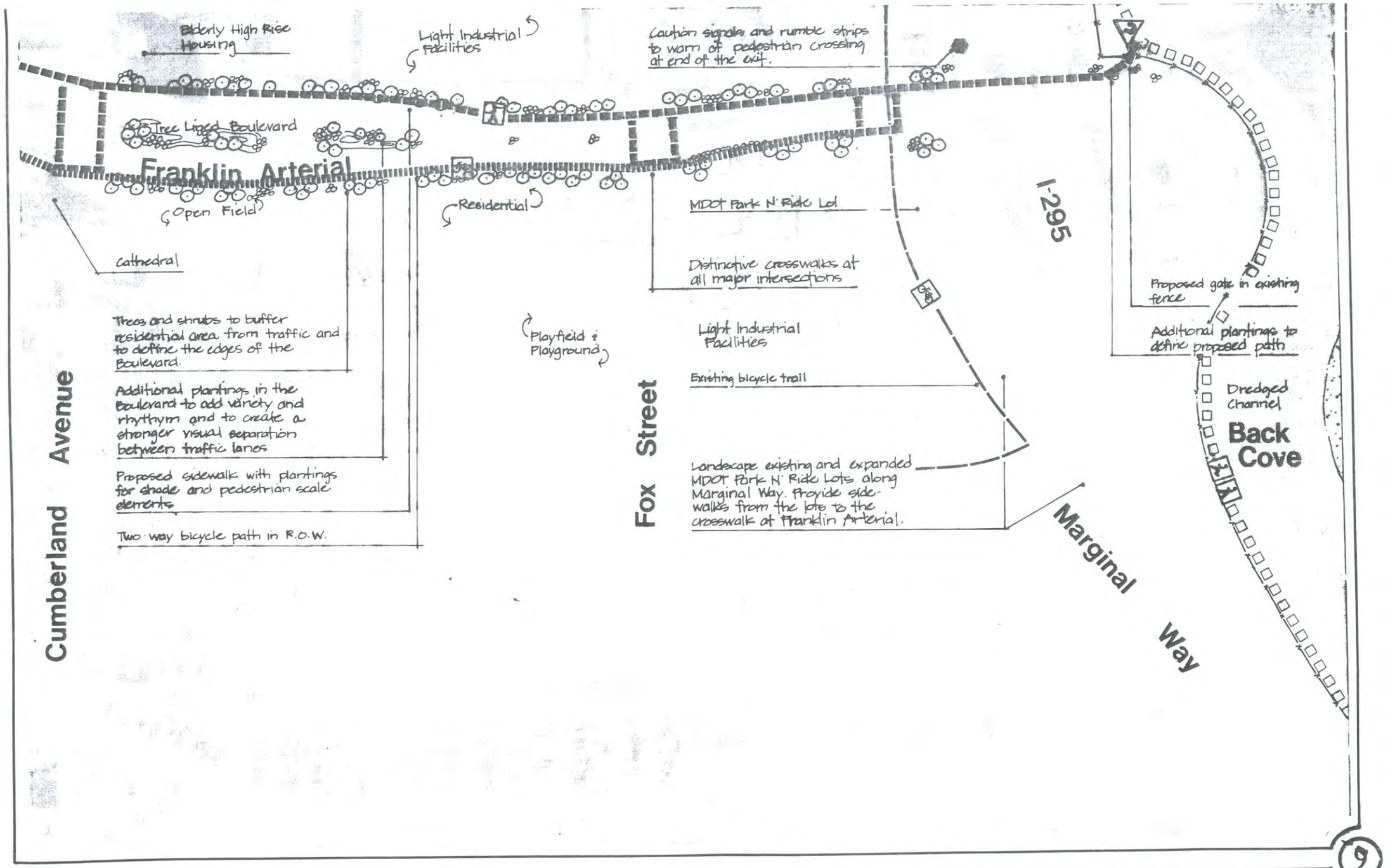
INTERCONNECTIONS:

- Back Cove and the Waterfront

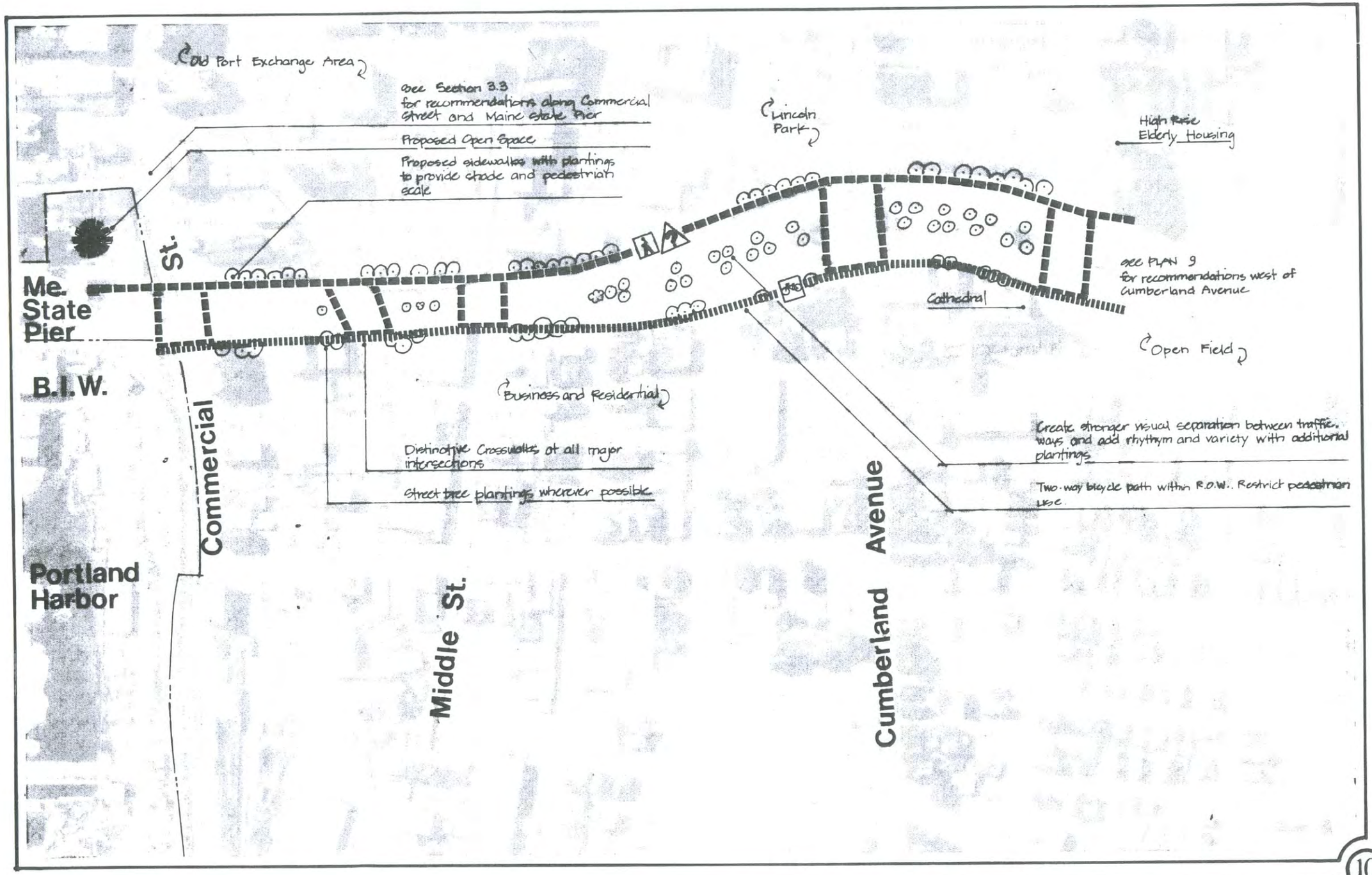
PHASING: High. Establish after completion of improvements to Tukey's Bridge.



KEY PLAN



FRANKLIN ARTERIAL NORTHWEST



FRANKLIN ARTERIAL SOUTHEAST

OAK COVE WALKWAY -MARGINAL WAY ALTERNATIVE

LOCATION: From the south shore of the Back Cove, east on Preble Street Extension, south on Marginal Way to the Forest Avenue extension into Deering Oaks Park.

CURRENT LAND USE: Industrial and Commercial (i.e. shopping plaza, diner, car wash, bank, miscellaneous industrial users.

OWNERSHIP:

1. Private
2. State (I-295 R.O.W.)

CULTURAL FEATURES: Miss Portland Diner: architecturally significant landmark and gathering point

NATURAL FEATURES: Virtually no natural features remain: intensely developed for parking, storage and buildings.

VISUAL QUALITIES: Along and from Route: Low. Indiscriminate site layouts with minimal or no landscape treatment and non-descript architecture. No sense of place.

CURRENT ZONING:

- I-2: Industrial
- B-2: Business

CURRENT LEVEL OF ACCESS: Accessible but no provisions for pedestrians or cyclists. 4 lane auto traffic.

DEVELOPMENT PRESSURE: Moderate: Proposal for 'Park and Ride Lots' along Marginal Way.

RECOMMENDATIONS:

- The ideal recommendation would involve acquisition of the land paralleling I-295 between the Franklin Arterial off-ramp and Deering Oaks to extend the Olmsteadian notion of a greenbelt parkway between the Oaks and Back Cove.

- A less visionary, but certainly more practical alternative, would involve a streetscape treatment to beautify the area and provide a separate identifiable place to walk and ride to and from Deering Oaks and Back Cove.

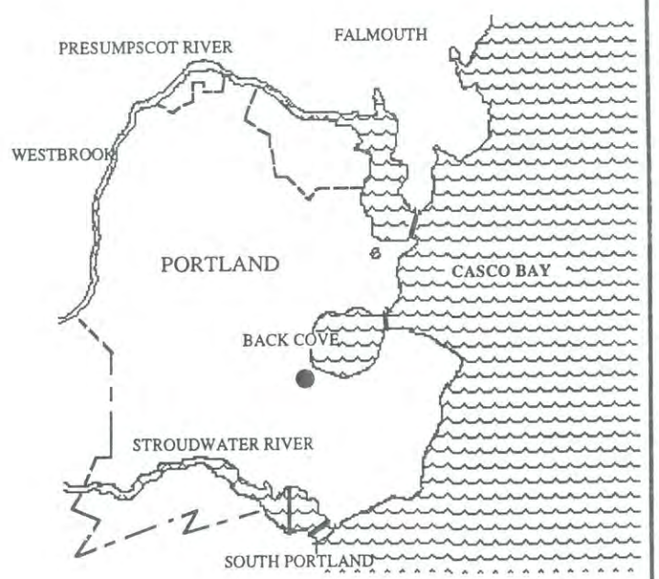
ANTICIPATED USERS:

- 'Park N' Ride' Commuters

- People traveling between Back Cove and Deering Oaks

INTERCONNECTIONS: Back Cove and Deering Oaks

PHASING: High. A commitment of support to a cohesive park system is necessary.



KEY PLAN

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

BICYCLE ROUTE

FISHING PIER

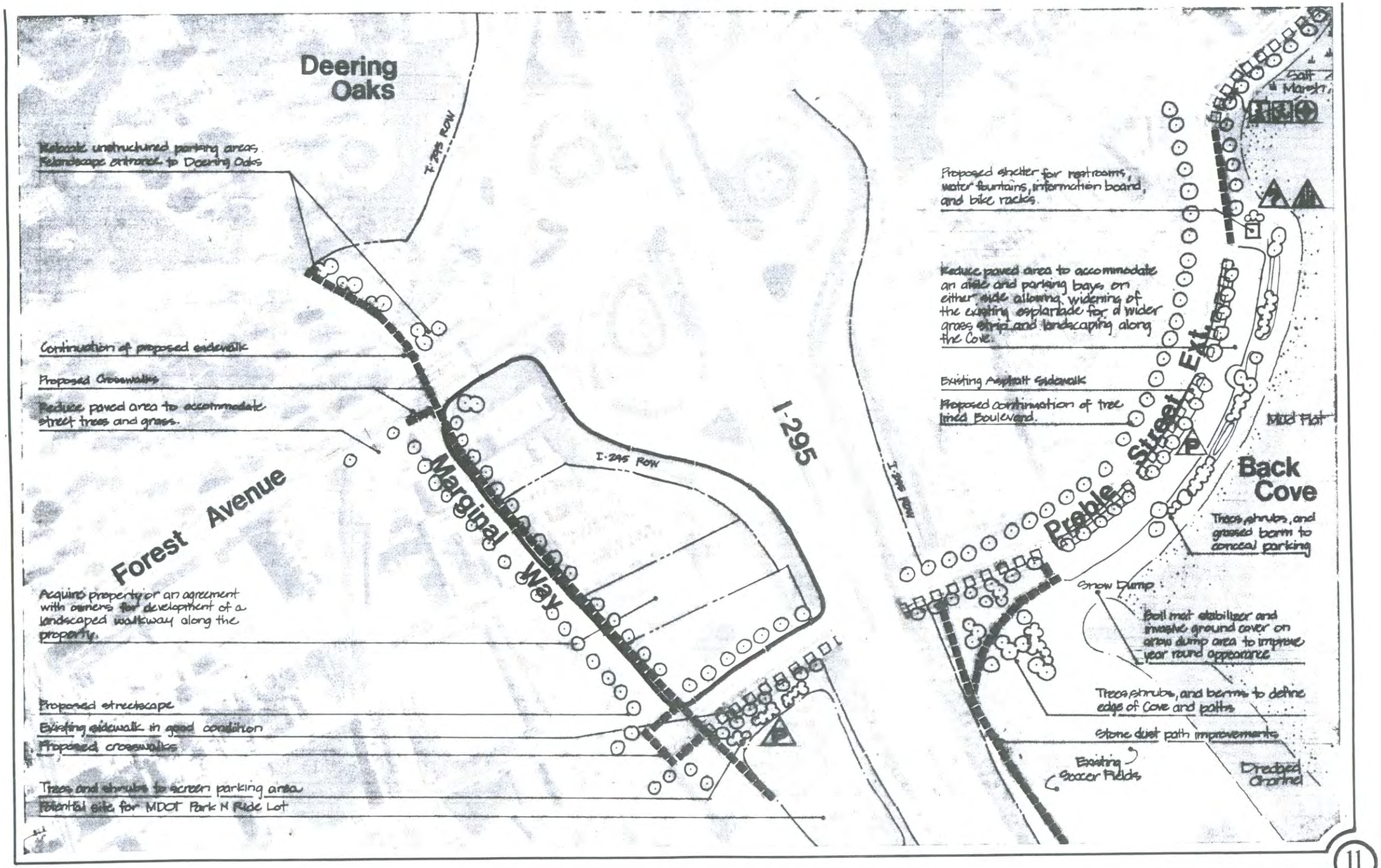
PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS

0' 50' 100' 200' 300' 400' 500' FEET

NORTH



OAK COVE WALKWAY - MARGINAL WAY ALTERNATIVE

OAK COVE WALKWAY
- FOREST AVENUE ALTERNATIVE

LOCATION: From Back Cove along Bedford to Forest Avenue to the Forest Avenue entrance into Deering Oaks Park.

CURRENT LAND USE: Light industry, commercial, business, and little league field

OWNERSHIP: City of Portland; Private

CULTURAL FEATURES:

- Little League Field
- University of Southern Maine (adjacent)
- Redevelopment along Forest Avenue

NATURAL FEATURES: Virtually no natural features left intact due to intense development; occasional street trees and grassed median strip

VISUAL QUALITIES: Bedford: Fair. Balance of open playing field and peripheral trees and low-scaled, well maintained grounds of business and commercial buildings.

Forest Avenue: Poor. Considerable amount of paved surfaces with little visual relief from plantings or distinctive architecture.

CURRENT ZONING:

- ROS: Recreation Open Space
- B-3: Business
- I-2: Industrial

CURRENT LEVEL OF ACCESS: Bedford - no sidewalks; Forest Avenue - sidewalks (both sides continuous)

DEVELOPMENT PRESSURE: Medium. Most of the available land has been developed within the last few years. Several redevelopment projects have substantially changed individual properties recently.

RECOMMENDATIONS:

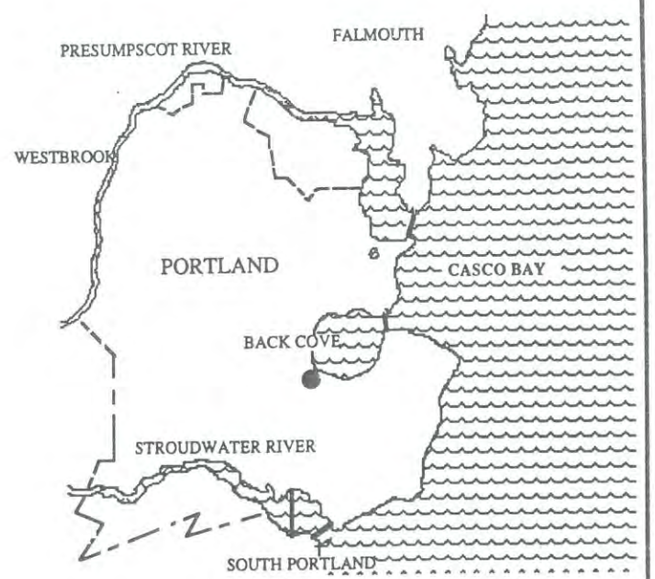
- Sidewalk improvements as needed (surfacing, curb-cuts, etc.)
- Continuation of distance markings for walkers/joggers
- Streetscape treatment (shade trees, lawn areas, ornamental shrubs to screen parked cars)

ANTICIPATED USERS:

- USM students walking to Back Cove
- People going to and from Back Cove and Deering Oaks

INTERCONNECTIONS: Back Cove and Deering Oaks

PHASING: High. A commitment of support to a cohesive park system is necessary.



KEY PLAN

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0' 50' 100' 200' 300' 400' 500' FEET

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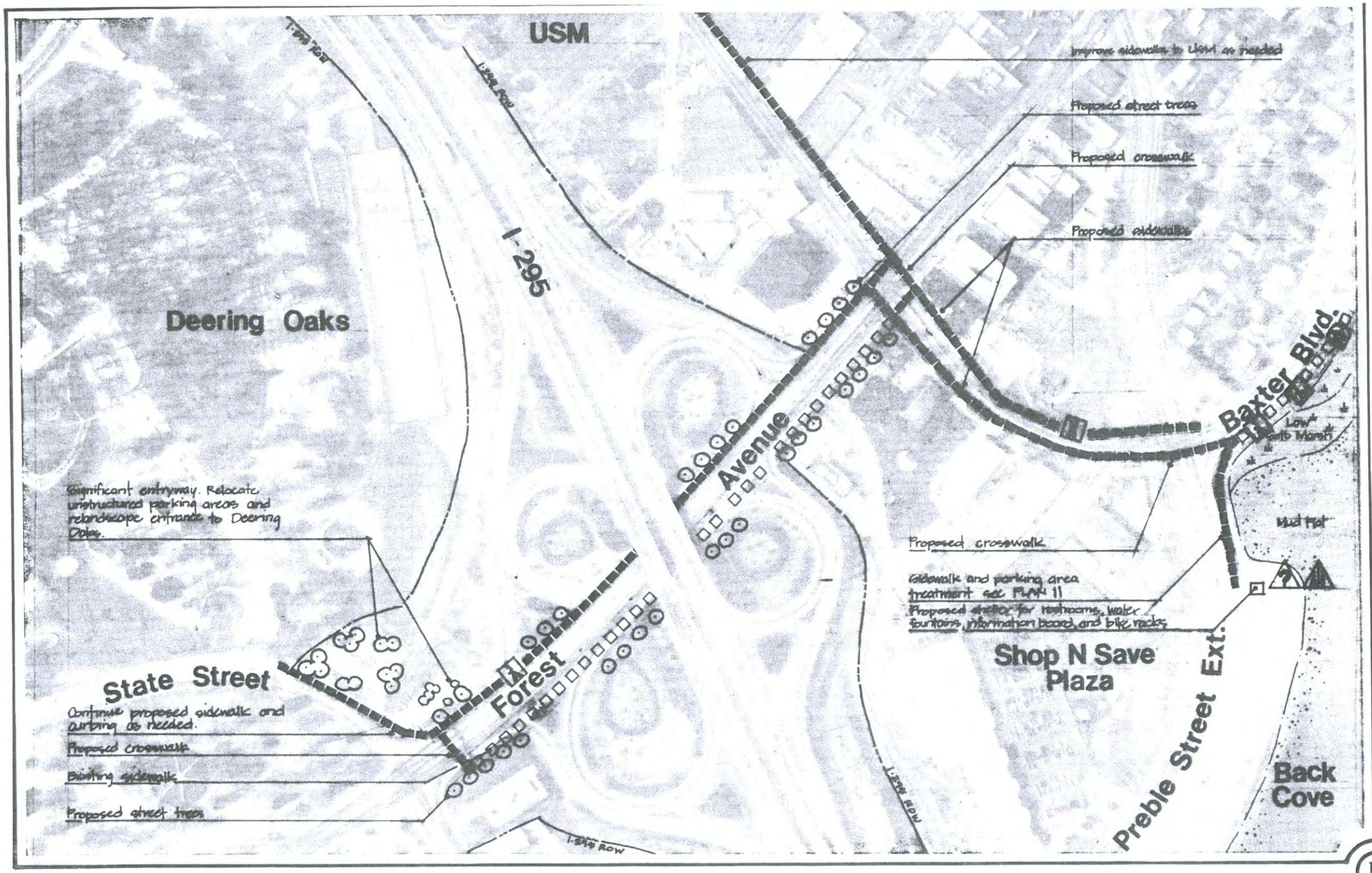


OAK COVE WALKWAY - FOREST AVENUE ALTERNATIVE

LOWER STROUDWATER RIVER

LOCATION: South side of the Stroudwater River: between the Maine Turnpike and Congress Street. North Side: east of the Portland Pipeline ROW to the Fore RIver, between Westbrook Street, Congress Street, and Garrison Street.

CURRENT LAND USE: Undeveloped woodland; back land of large landholders along Congress Street; major sewer interceptor; single family homes and public cemetery on the north side.

OWNERSHIP: Private: UNUM, Elks Club, Proposed Stroudwater River Edge Subdivision (residential); small individual lots on the north side; City of Portland: utility easements, Stroudwater Dam, Portland Water District parcel at the mouth of the River on Garrison Street Extension.

CULTURAL FEATURES:

- The Stroudwater Area, identified in the 'Portland Historic Resources Inventory', Maine Historic Preservation Commission, 1976: "Stroudwater was an active point of shipment for the colonial mast trade before the American Revolution. The village survives today as the city's only cohesive grouping of 18th and early 19th century houses (In Portland)".

- A very wide trail exists at the top of the Stroudwater River bank over the sewer line, paralleling the water for a mile; Maine Turnpike bridge.

NATURAL FEATURES

- Below dam: estuarine channel, with high and low salt marshes and mud flats

- Mature pine and mixed hardwood forest; dense understory vegetation prohibits direct access to the water along most of the length; good wildlife habitat; water controlled by dam in Stroudwater.

VISUAL QUALITIES: Medium: consistent vegetative cover throughout most of the length of the trail; trail follows the direct alignment of the sewer line, with little variation in width; straight pathway does not respond to curvilinear top of bank. Strong sense of visual relief after leaving the Congress Street and Maine Turnpike vicinity.

CURRENT ZONING:

- B-1: Business
- R-1: Low Density, Single Family Residential
- R-2: Low Density, Single Family Residential
- R-6: High Density Residential

CURRENT LEVEL OF ACCESS:

- Through Portland Water District ROW off Congress Street near Stroudwater; chained and marked Please No Trespassing: Public Water Supply.

- Via Portland Pipeline ROW off Congress Street.

- Through the UNUM campus off Congress Street.

- Access under the Maine Turnpike Bridge over the Stroudwater River is virtually impossible due to 1:1 slopes, dense vegetation, deep eroded gullies, small runoff channels, and legal restrictions.

- No apparent access from the water.

DEVELOPMENT PRESSURE: With the sewer line in place, flexibility of current zoning districts, proximity to Stroudwater's historic center, and active development surrounding large tracts of high value land, it is unlikely that this area will remain open for long.

RECOMMENDATIONS:

- The City, working through the Corporation Counsel and the Planning Staff, should begin discussions with property owners along this section of the Stroudwater River to inform them of their intent to develop a water access system across the back portion of their property. If plans have developed for the holding, they should be evaluated in terms of accommodating public access.

- For the trail to be most successful it should give the user a sense of separation from the potential commercial activity that may occur between the sewer line and Congress Street. Ideally a buffer of al least 100 feet of undisturbed vegetation should be maintained south of the trail.

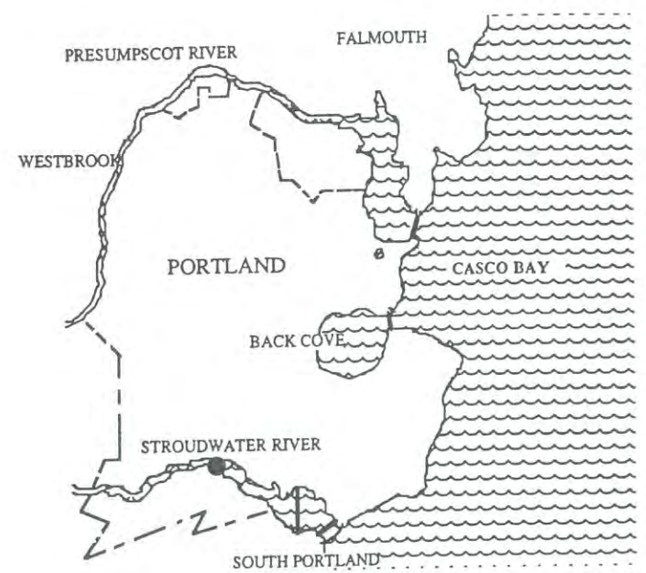
- A a reasonable alternative, the trail could be moved from its present location to a position on the embankment. Throughout much of the mile the slopes are in the 10-25% range, which would accommodate lateral movement. Final alignment should be done in the field, taking into account slopes, ravines, poorly drained soils and drainage courses, and the proximity of any proposed development. To make the trail as interesting as possible, the designer should first do a thorough assessment of the topography, any rock outcroppings, interesting old trees, sources of seasonal color, views of the river, or other unusual natural factors.

- The trail should be realigned wherever possible to avoid the linear alignment of the sewer line. Following the top of the embankment would give this section of the Stroudwater Trail a more interesting character, and allow the user to walk/jog in a much wider variety of conditions.

- In two or three location, preferably where the river takes a meander to the north away from the sewer line, an offshoot of the trail should be created, leading down to the river for added diversity. Final realignment should involve the input from a qualified wildlife biologist or officials from the Maine Department of Inland Fisheries and Wildlife.

- In order to extend the trail and encourage a wider variety of serious users the City should enter into an agreement with the Maine Turnpike Authority to install a pedestrian walkway under the Stroudwater River Bridge. This section would involve the installation of stone, concrete, or other permanent retaining wall between the river and undercarriage of the bridge. In this section the trail should be paved with bituminous concrete and equipped with a heavy duty guard rail. Provision should be made (i.e. with fencing approved by the State) to prohibit any access from the trail upwards towards the roadway.

- Since the current trail system interconnects with the exercise course on the UNUM property, the City should meet with officials of the company to discuss their policy of public access on their campus. The City should study the example of Pepsico's headquarters in Purchase, New York. Their facility has been designed to encourage public access throughout their



KEY PLAN

grounds which have been treated as an inviting, parklike setting for large pieces of contemporary sculpture.

- To encourage round-trips along the river corridor, the City should provide sidewalks along Congress Street, from the point of eastern-most access, to Hutchins Drive (Stroudwater Estates.) As a more pedestrian-oriented alternative, the City should develop a plan for off-ROW sidewalks, to be located within the front setbacks along Congress Street. This location would provide an attractive, landscaped path for all pedestrians along the street.

- Some thinning of the existing vegetation between the trail and the river may be desirable to give greater visual contact with the water, and provide opening in the woods that would add to the diversity of the habitat.

ANTICIPATED USERS:

- Joggers seeking an extension of the UNUM physical fitness course

- Birdwatchers and nature students

- People seeking a bit of solitude within the City

- Local residents of the Stroudwater Neighborhood, as well as employees of the new firms long Outer Congress Street and Hutchins Drive.

INTERCONNECTIONS:

- Upper Stroudwater River Trail
- Fore River Sanctuary and Trail
- Cross river trail into Westbrook
- Congress Street Parkway

PHASING: High. Priority should be given to acquiring pedestrian easements over the subject properties as soon as possible. City should make their intentions known to the affected parties in order to incorporate this section of the access trail into the owners' long-range plans.

COMMENTS:

- The quality of the existing development, characterized by UNUM's headquarters, should be matched by the attention to detail that is used in the development of this section of the access trail. The City Planning Staff should explore possible land use scenarios on all the undeveloped land between UNUM, the Stroudwater River, and Congress Street in order to better understand the potential relationships between exiting development, landmark structures, potential open space, possible access points, utility connections, and future building massing and locations.

- Mark Eyerman, former Westbrook City Planner recommends that a trail system along the Stroudwater River be carefully planned due to the history of slumps and slides along its banks.

LEGEND

PARKING

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HANDICAP ACCESSIBLE

RESTROOMS

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CANOE LAUNCH/TIE-UP

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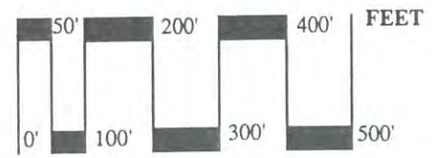

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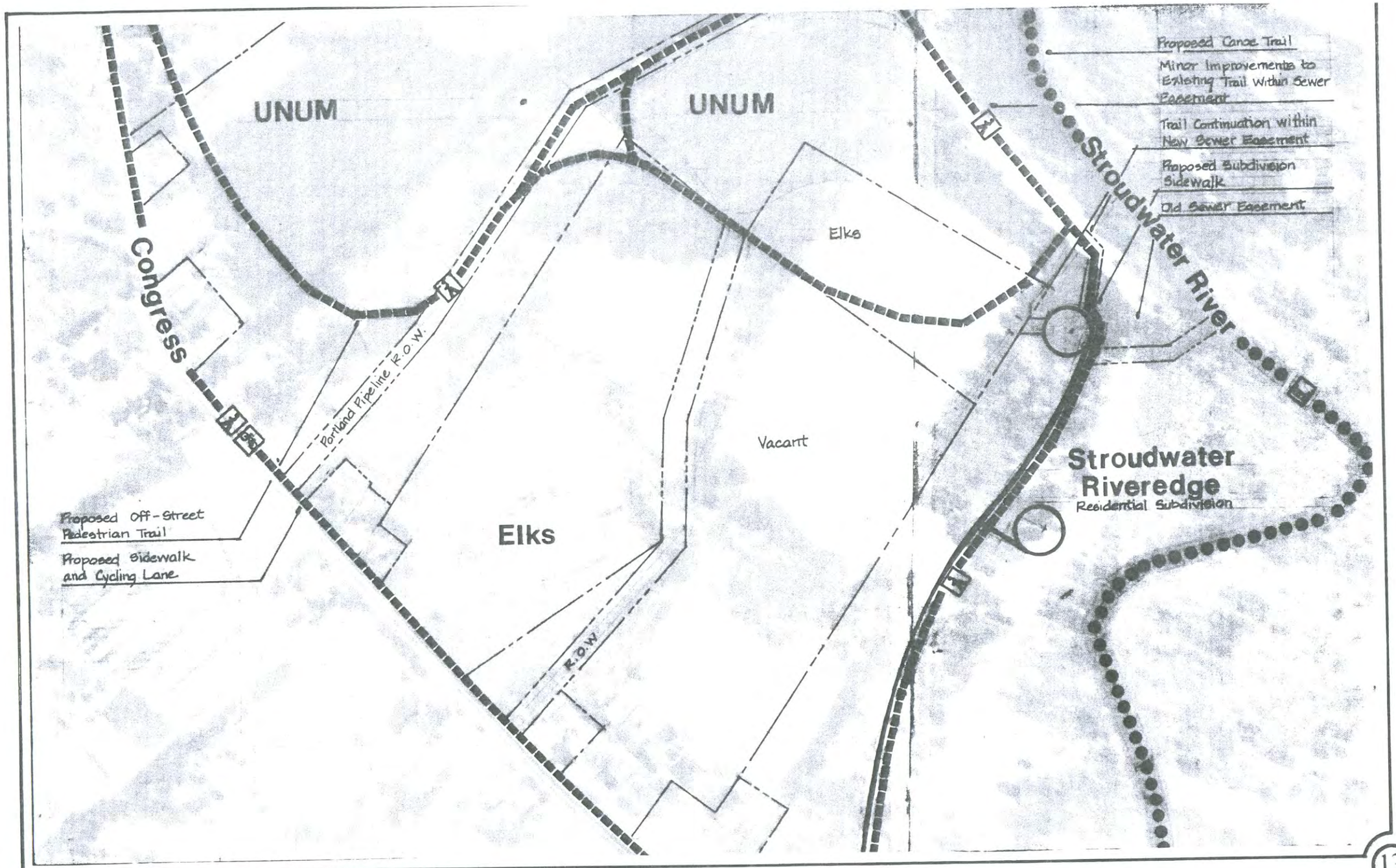
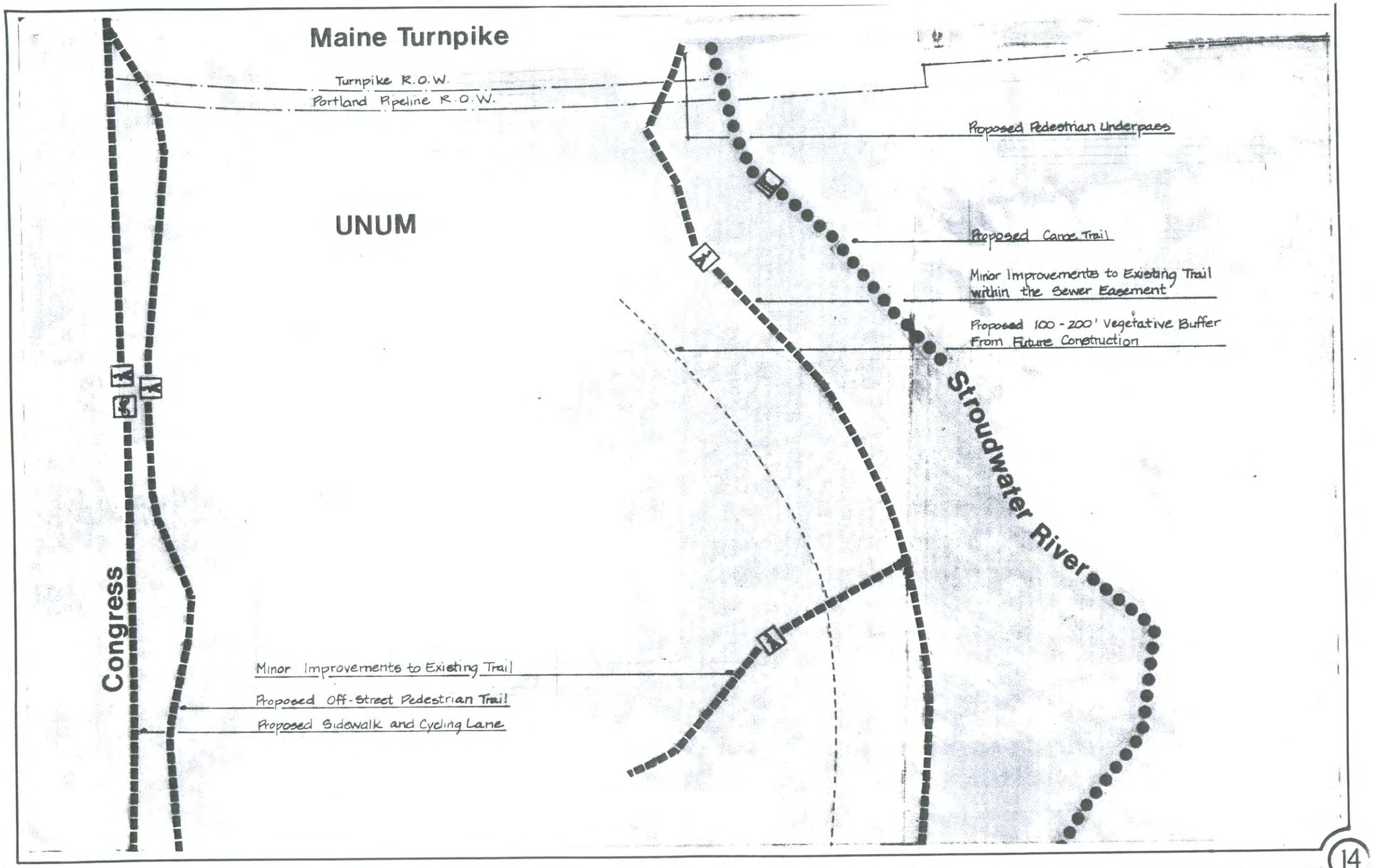


LOWER STROUDWATER RIVER


Maine Turnpike
Turnpike R.O.W.
Portland Pipeline R.O.W.
UNUM
Proposed Pedestrian Underpass
Proposed Canoe Trail
Minor Improvements to Existing Trail within the Sewer Easement
Proposed 100 - 200' Vegetative Buffer From Future Construction
Stroudwater River
Congress
Minor Improvements to Existing Trail
Proposed Off-Street Pedestrian Trail
Proposed Sidewalk and Cycling Lane

UPPER STROUDWATER RIVER HUTCHINS DRIVE TRAIL HEAD

LOCATION: South shore: from the Stroudwater River, between the Westbrook/Portland City Line and the Maine Turnpike Bridge, and Congress Street; North shore: from the river to Westbrook Street.

CURRENT LAND USE:

- South side: Central Maine Power Company transmission line; undeveloped woodland; industrial parkland; RWS energy from trash facility (under construction); City sewer pump station; Maine Turnpike bridge over the Stroudwater River

- North side: single family homes; undeveloped land

OWNERSHIP: Private:Stroudwater Estates Executive Park, Sturbridge Yankee Workshop warehouse; Regional Waste Systems; City (pump station); private homeowners on north side.

CULTURAL FEATURES: CMP transmission lines; granite marker at edge of transmission line; existing well defined trail along the top of the embankment above the edge of the river, west of Hutchins Drive; RWS facility; pump station; Portland Pipeline utility easement; Maine Turnpike bridge.

NATURAL FEATURES: Open woods leading to the river below the embankment between Hutchins Drive and the CMP ROW; dense wetland vegetation within the floodplain east of Hutchins Drive; mature pine and mixed hardwood forest above the floodplain; excellent wildlife habitat: much evidence of deer activity; black ducks on the river.

VISUAL QUALITIES: High. Considerable diversity in form, line, and texture both in the river and on land. RWS stack and new facility, while adjacent to the river, is not visually obtrusive, due in part to sensitive architectural treatment and siting.

CURRENT ZONING:

- Shoreland Zone
- I-1: Industrial
- B-1: Business
- R-1: Low Density Residential

CURRENT LEVEL OF ACCESS:

- Access from upstream under the Maine Turnpike bridge over the Stroudwater River is virtually impossible due to 1:1 slopes, dense vegetation, deep eroded gullies, small runoff channels, and legal restrictions.

- Principal access at the end of Hutchins Drive. Gravel has been placed at the end of the paved roadway. Potential exists for a canoe launch site with minimal gravel access road to water. Severe erosion now occurring on placed gravel.

- Trail continues across the CMP ROW into Westbrook. Opportunity to extend the trail for a considerable distance.

- No apparent legal access from the water. Small three wire suspension bridge under CMP ROW (with No Trespassing sign) afforded a way across the river.

DEVELOPMENT PRESSURE: Stroudwater Estates continues to develop as a mixed use 'Executive Park'. At the present time Hutchins Drive only extends to the bank of the Stroudwater River, but eventually will likely loop to the east and west along the top of the bank. The land that is of greatest benefit for a waterfront trail system has already been dedicated as open space.

RECOMMENDATIONS:

- See #29: Lower Stroudwater River for recommendations regarding access under the Maine Turnpike bridge. The interconnection of the upper and lower sections to the river will greatly add to its effectiveness as a major recreational resource.

- A well-defined trail leads from the end of Hutchins Drive to the CMP ROW. From there it extends into a large tract of undeveloped land in Westbrook. Interconnections should be planned with the City of Westbrook to extend the trail both along the river and across the river, which is fairly narrow at this point (20-25 feet in width).

- Just before the trail intersects the CMP ROW it descends an extremely steep (2:1 or greater), and very slippery slope. An alternative routing should be planned to avoid these slopes, or a series of railroad tie steps incorporated to ease the 20 foot grade change.

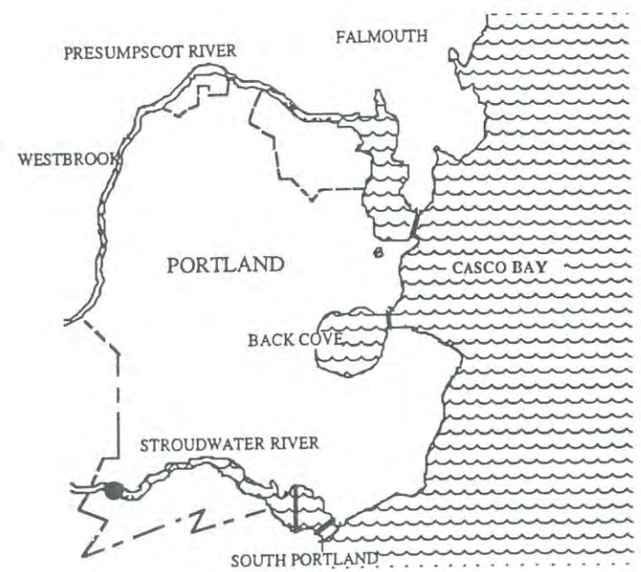
- The 'Stroudwater Estates Master Development Plan' by Land Use Consultants, Sept. 18, 1979, indicates additional lots to be developed behind the ones now being offered along Hutchins Drive. The existing trail seems to traverse the edges of the gradient of the riverbank on lot 29 and would render a significant portion of it undevelopable without substantial modification to the existing terrain. Filling these areas would necessitate relocation of the trail and the possible destruction of significant amounts of mixed woodland habitat. Site plans for all future expansion phases for Stroudwater Estates should include specific plans for incorporation of a public access corridor and a buffer zone to separate the trail system from the commercial development.

- While the existing trail offers the user a year-round corridor, an alternative location would be lower down the slope, at the limit of the floodplain. Care would have to be used in siting the trail to avoid soft soils and runoff patterns. A gravel surface - instead of woodchips - would be a more appropriate material to hold up under periodic inundations.

- At the present time parking for water access is not a problem since the hammerhead turnaround at the end of the road provides more than enough room. In the future, however, a few (6-10) parking spaces should be installed at the foot of Hutchins Road for canoeists and trail users. The existing eroded gravel slope that now leads to the waterfront should be regraded, loamed and seeded with a wildflower/conservation seed mix. A gravel path should be installed from the parking area to the river.

- A landscaped area with groundcover and low ornamental shrubs, accented by weathered boulders, should be installed at the terminus of Hutchins Road.

- Some thinning of the exiting vegetation between the rail and the river may be desirable to give greater visual contact with the water, and provide openings in the woods that would add to the diversity of the habitat.



KEY PLAN

ANTICIPATED USERS:

- Jogger and walkers seeking an extension of the UNUM physical fitness course

- Birdwatchers and nature students

- People seeking a bit of solitude within the City

- Local residents of the Stroudwater Neighborhood, as well as employees of firms along Outer Congress Street and Hutchins Drive.

INTERCONNECTIONS:

- Upper Stroudwater River Trail
- Fore River Sanctuary and Trail
- Cross river trail into Westbrook
- Congress Street Parkway

PHASING: High. Developers in the area (south side of the river) have already indicated a willingness to cooperate with the City in developing open space plans and water access points to the Stroudwater River. Priority should be given to firming up plans for pedestrian access and a small canoe launch as soon as possible.

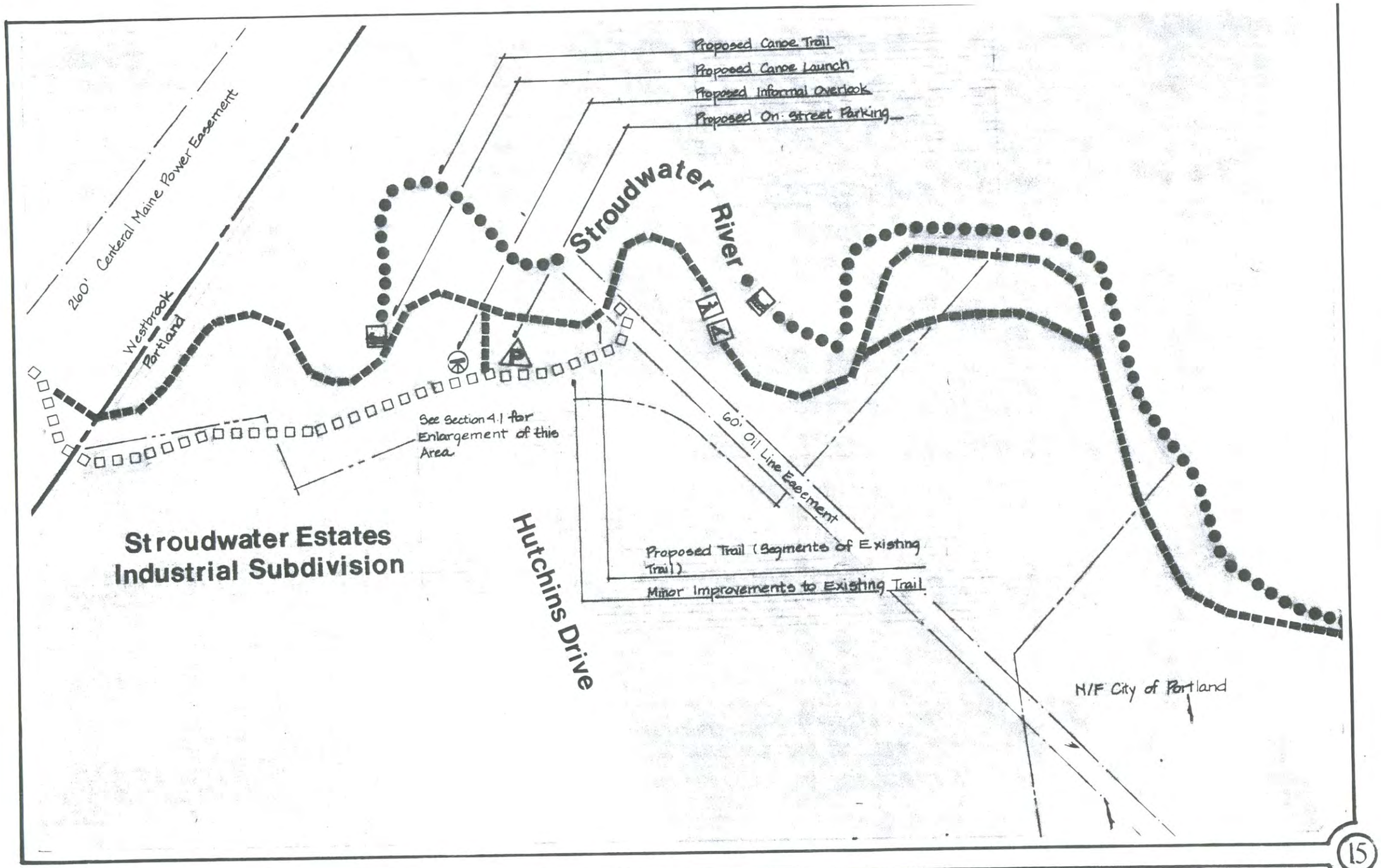
COMMENTS: This planning unit was used as one of the three prototypical areas. See Section 4.0 of this report for a plan enlargement and further discussion of the design of the Upper Stroudwater River Trail Head.

LEGEND

PARKING
DIRECTORY SIGN
HANDICAP ACCESSIBLE
RESTROOMS
POINT OF INTEREST
OVERLOOK
CANOE ROUTE
CANOE LAUNCH/TIE-UP
PICNIC AREA
PEDESTRIAN TRAIL
FITNESS TRAIL
WINTER SPORT TRAIL
BICYCLE ROUTE
FISHING PIER
PROPOSED TRAIL
EXISTING TRAIL
ALTERNATIVE ACCESS POINTS

0' 50' 100' 200' 300' 400' 500' FEET

NORTH



UPPER STROUDWATER RIVER - HUTCHINS DRIVE TRAIL HEAD

FORE RIVER SANCTUARY

LOCATION: 76 acre parcel south of Capisic Street and west of Congress Street. 'The only Distinct boundaries are the MAS/CMP and MAS/Portland Terminal Company lines. No record of any surveys exist in the files.'(1)

CURRENT LAND USE: "The Sanctuary receives very little foot traffic and is not publicized. ATV traffic is heavy in some areas... (it) is an oasis for wildlife. (1) MAS has developed an extensive trail system including the construction of two boardwalks over the marsh areas. Most of the trails are easily passable.

OWNERSHIP: Maine Audubon Society. MAS has been considering divesting itself of the sanctuary to the Forest City Land Trust, the City of Portland, or another interested party with the restrictions ...'that protect the wildlife values of the site and maintain it is permanent, forested open space.'

CULTURAL FEATURES:

- Maine Terminal Co. railroad track
- CMP high tension power line
- Network of foot trails, complete with colored blazing, footbridges, and boardwalks, constructed in the late 1970's
- ATV and dirtbike trails: non sanctioned use
- A large firepit has been constructed without MAS permission in the SW corner of the sanctuary
- Water and sewer lines crossing the site, with the water line protruding out of the ground by four feet on the NE corner
- Remains of the old Cumberland and Oxford Canal can be found along the southerly boundary; the towpath forms a useable trail adjacent to the marsh.

NATURAL FEATURES:

- One of the largest natural areas in the City: 76 acres of forested uplands, meandering creeks, tidal marsh, freshwater estuary of the Fore River; it is an island in a sea of development.

- Rich diversity of vegetative communities and abundance of edges provide excellent habitat for birds and other wildlife

- A waterfall that drops over fifty feet in 200 feet of distance

- Scattered stands of very large beech, pine, and hemlocks

- See appendix for a longer description of the Sanctuary; from

Fore River Sanctuary, Sanctuary Overview'.

VISUAL QUALITIES:

- Upland forest and undisturbed marsh areas: High. Great diversity of vegetation unique to each ecosystem and the changing sense of enclosure or exposure.

- Along the RR tracks and high tension power line: Medium to Low. Due to the rigidity of form and its incompatibility with the natural forms of the marsh and forest. High tension power lines across the marsh are visually obtrusive due to their size and the openness of the marsh.

CURRENT ZONING:

- RPZ: Resource Protection
- R-3: Medium Density Residential

CURRENT LEVEL OF ACCESS: 'There are seven usable access points to the sanctuary as well as access developed through ATV trespassers. The most easily located access point is at the end of Rowe Avenue, but it does not actually adjoin MAS property and requires trespassing over land owned by Central Maine Power Co. There is no current method of controlling access to the sanctuary.' (1)

DEVELOPMENT PRESSURE:

- MAS Sanctuary: Low. Protected by MAS now and any future divestiture would include tight restrictions.

- Abutting land: High. Extensive development now occurring or in the works for surrounding parcels. Limited by steep slopes, extensive wetlands, high levels of traffic on servicing roads.

RECOMMENDATIONS: Adherence to the MAS Management Plan recommendations:

IMMEDIATE NEEDS

- Post all boundaries with MAS sanctuary signs, especially at access points. Signs should be low key, subtle, and difficult to reach on foot.

- Post 'No Motorized Vehicles' signs at appropriate access points.
- Organize work crews to repair and/or post boardwalks and log bridges to alleviate immediate danger of liability.

ONGOING MAINTENANCE

- Install subtle distance markers for those using the sanctuary for walking and jogging

- Work with the developers of Stroudwater Crossing and/or Tidewatch Condominiums to install a pedestrian crossing at the river behind the new parking lot behind Stroudwater Crossing.

- Locate a separate lot on the opposite end that would be large enough to accommodate an occasional school bus without disruption to the neighborhood.

- Monitor boundaries, trail improvements, and access points at least three times each summer; weekly or even more often would be ideal to attend to any problems with maintenance or vandalism as soon as they occur

- Brush trails and reblaze if necessary in late May and again in mid-July.

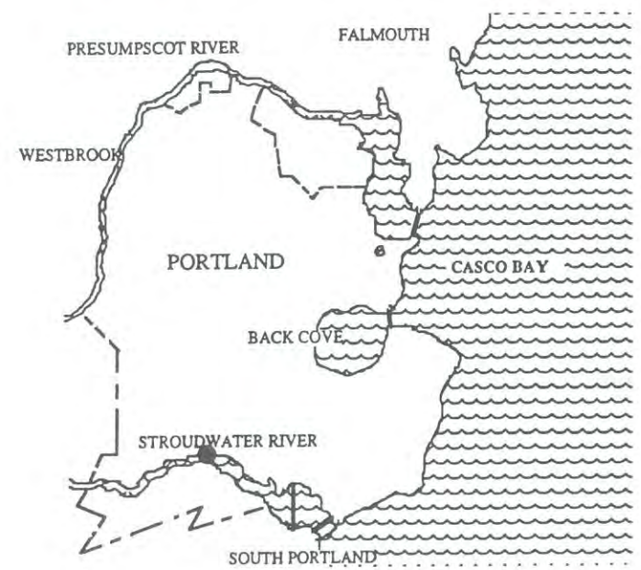
LONG TERM MANAGEMENT/OPTIONS

- Develop local stewardship committee to maintain trails, signs, assist in planning, and oversee appropriate use of the sanctuary on a weekly basis during the summer

- Pursue acquisition of adjoining property containing the waterfall

- Determine the best access points. Keep at a minimum and consider controlled access with gates to offset ATV problem

- Work with Maine Conservation Corps (MCC) crew to upgrade existing trails; delete trails to uncontrolled access



KEY PLAN

points; reblaze trails (current color-coded system is confusing); provide trail head markers

- Construct 'Fore Fiver Sanctuary' Signs for the main access point

- Work with abutters and police to eliminate ATV use and fires

- Pursue divestiture of the sanctuary to the Forest City Land Trust, the City, or another interested party

WATER ACCESS TRAIL SYSTEM

- Install interpretive signage in keeping with the themes developed in this report. This location should be thought of as the cornerstone of the interpretive efforts for the City, taking care to explain the special nature of this amount of undisturbed land in such proximity to a highly developed area.

- Make contact with the Wells National Estuarine Research Reserve for information on the value of the estuarine and salt marsh environments.

- Initiate a canoe route through the marsh; provide a self-guided tour brochure in keeping the objectives of the interpretive plan

- Groom the trails to accommodate cross-country skiers and snowshoers during the winter months

INTERPRETIVE THEMES:

- Natural Waterfall in Portland
- Oasis in middle of city
- Preservation as natural area for wildlife
- Salt marsh ecology
- Natural history of plants
- History of acquisition/protected from development
- Discussion of mammals and birds using area

MEANS OF INTERPRETATION/ACCESS RECOMMENDATIONS:

- Provide a footbridge to the Sanctuary from Stroudwater Crossing to serve as the main access point

- Reconstruct boardwalks to allow continuous access to trail system once again (boardwalks have been removed in some areas, hindering public access)

- Interpretive signage; trail markers keyed to maps

- Joint use agreement with the management of Stroudwater Crossing to allow parking in designated areas for access to the Maine Audubon Society land.

ANTICIPATED USERS:

- Office works on lunch breaks or at the end of the workday
- Neighborhood residents
- Canoeists and small boat owners touring the Fore River
- Field trips by foot, ski, snowshoe, and canoe for the general public and school groups
- Outdoor laboratory for studies in wetland ecology

INTERCONNECTIONS:

- Capisic Pond
- Stroudwater River Trail
- Congress Street Parkway
- Fore River Trail

PHASING: High. Its value as a preserved natural area within the city and abundance of natural resources make it a unique asset for public open space, if thoughtfully managed.

COMMENTS: Much of the information contained in this description of the Fore River Sanctuary was derived from the 'Fore River Sanctuary, Sanctuary Overview' (1) , prepared by the Maine Audubon Society (MSA), April, 1986; field observations; and the 'Fore River Sanctuary Management Plan' (2), prepared by Thomas Jewall for the MAS, August, 1977.

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

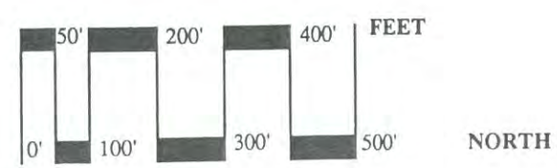
BICYCLE ROUTE

FISHING PIER

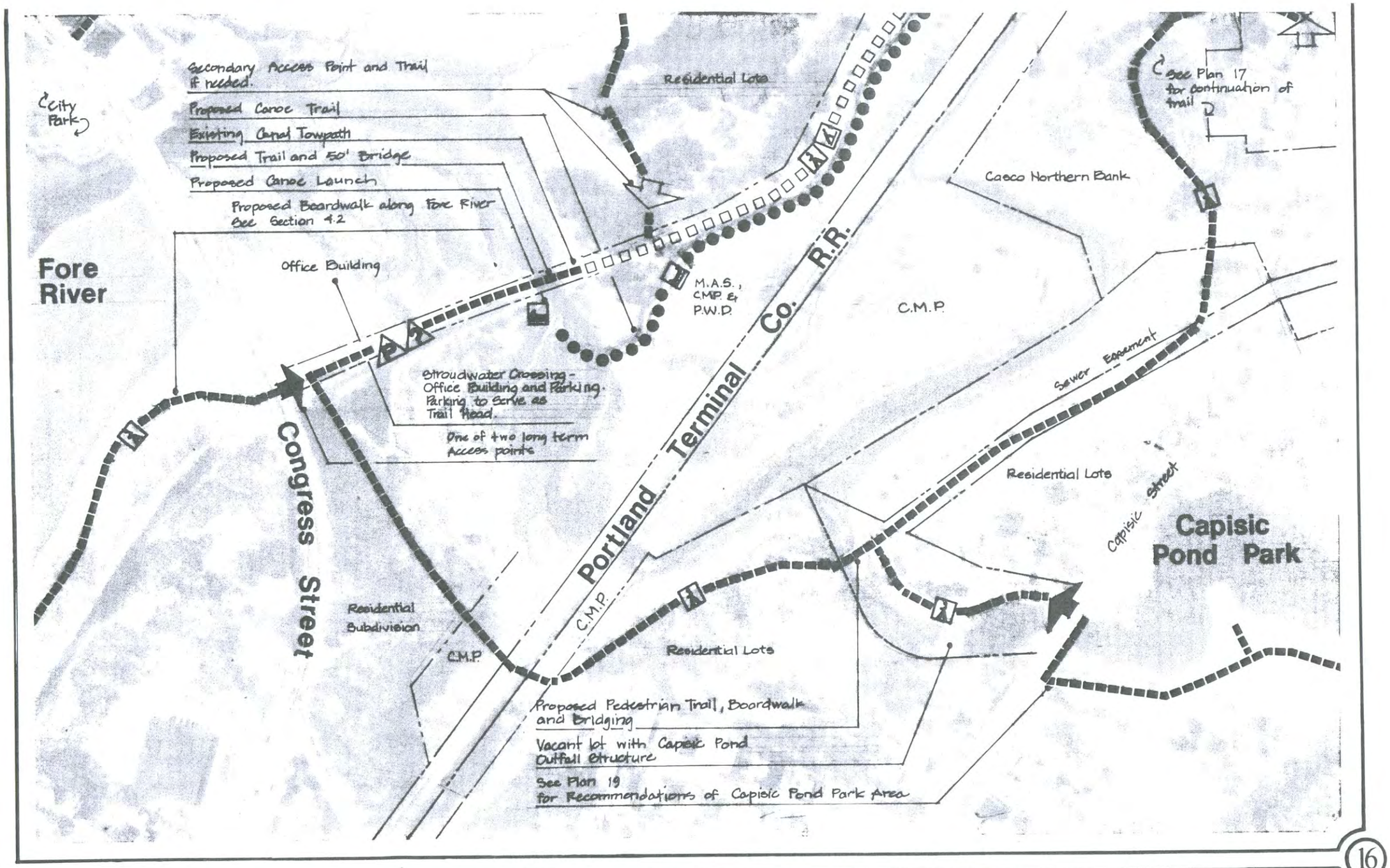
PROPOSED TRAIL

EXISTING TRAIL

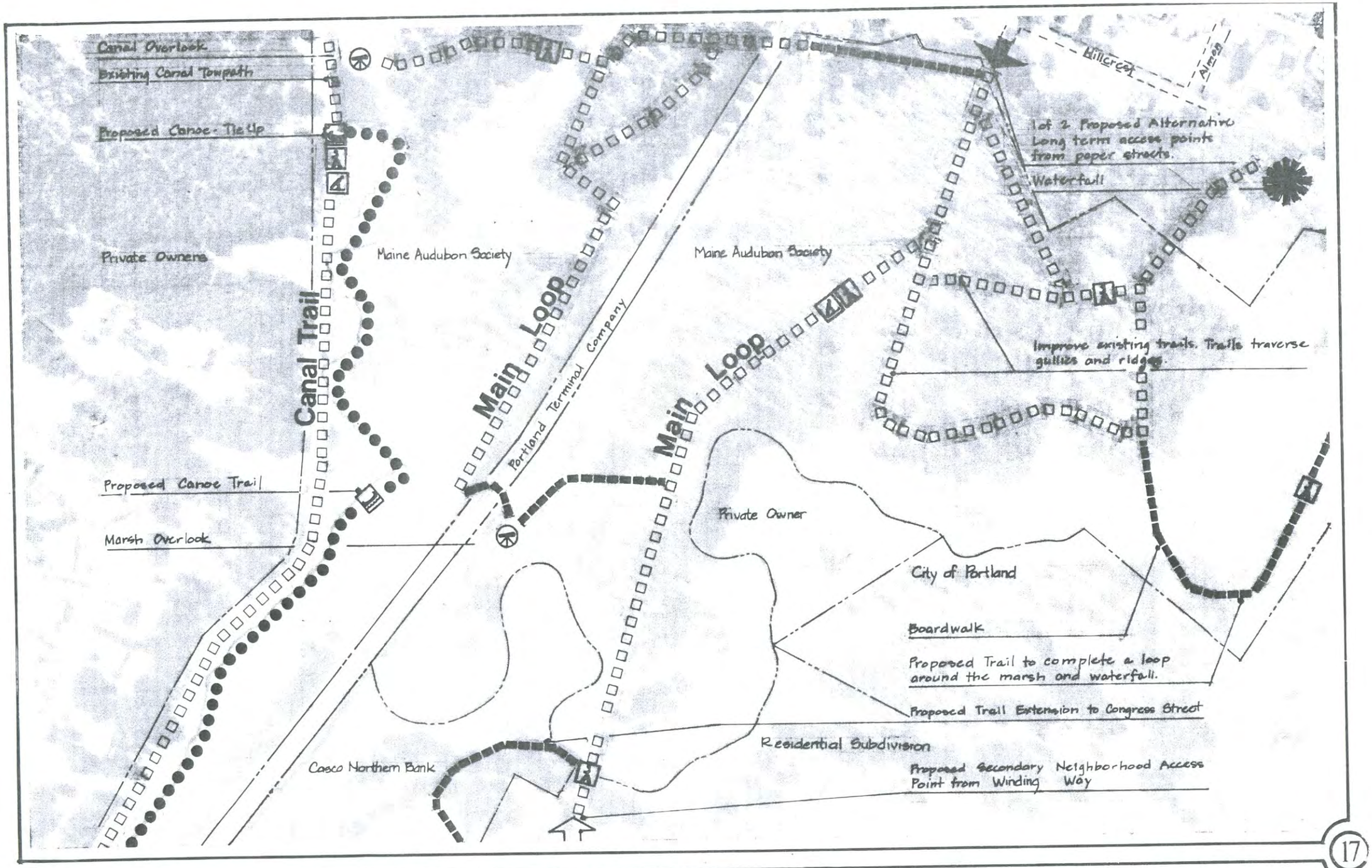
ALTERNATIVE ACCESS POINTS



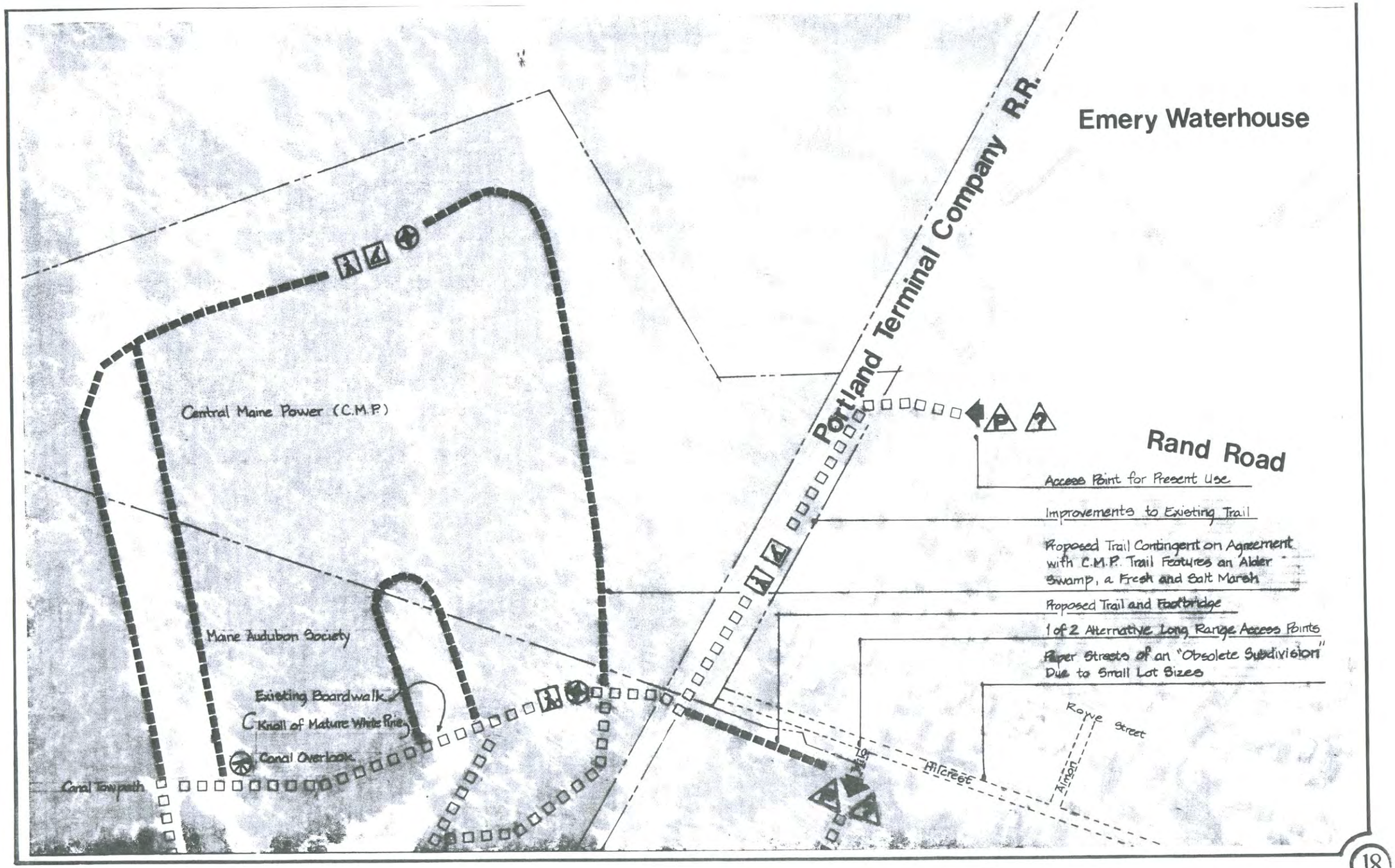
NORTH



FORE RIVER SANCTUARY - EASTERN SECTION & STROUDWATER CROSSING



FORE RIVER SANCTUARY - MID - SECTION



FORE RIVER SANCTUARY - WESTERN SECTION

CAPISIC POND

LOCATION: Bounded by Capisic Street to the south, Brighton Avenue on the north, Machigonne Street to the east, and Lucas Street on the west.

CURRENT LAND USE: Unpublicized City Park with a non-maintained, but passable dirt road across an open field; sewer easement; single family homes and professional buildings make up the abutting neighborhood

OWNERSHIP: City of Portland

CULTURAL FEATURES: Minimal development on-site: pathway, primitive footbridge, parking spaces for 1-2 cars. Adjacent land is developed with structures in good condition.

NATURAL FEATURES:

- Open field: raspberries, wildflowers, honey suckle, herbaceous biennials, thistle, milkweed, summac

- Pond: freshwater, cattails, lily pads, early spring algae; fed by a small creek

- Eastern Edge: weeded edge, mixed evergreen and deciduous growth (summac, birch, pine)

- Western Edge: residential, maintained lawns

VISUAL QUALITIES: Presently Medium; potentially High. With better management of the land and pond (e.g. protecting the pond from runoff from the adjacent lawn areas; maintenance of the open field and pathway) the area could become a very attractive addition to the neighborhood and the City's park system as a whole. The form of the pond with its existing vegetation has a pleasing composition, but needs selective thinning and some replanting to strengthen its inherent qualities, and add to the textural and spatial diversity. A new alignment of the path with a more naturalistic form

CURRENT ZONING:

- ROS: Recreation Open Space
- R-3: Medium Density Residential (abutting land)
- RP: Residence professional

CURRENT LEVEL OF ACCESS: There are currently six points of access, with the easiest being off Capisic Street. The others are footpaths from Machigonne, Eaton, Ridley, and Lucas Street, and a footpath and footbridge from Presnell Street.

DEVELOPMENT PRESSURE: High. Several PRUDs have been proposed for the immediate neighborhood, which will add considerably to the use pressure felt on the park.

RECOMMENDATIONS: Develop a master plan for redevelopment of the park, based upon the advice of the immediate neighborhood. Include a strong plan for continued maintenance. The plan should include the following:

- Install a parking area off of Lucas or Capisic Streets for up to five cars

- Initiate a program of trail improvements to include realignment and resurfacing

- Install several heavy duty picnic tables with easily maintained trash receptacles

- Develop a small overlook area with informal seating near the pond

- Add plantings where needed (see Visual Qualities section above)

INTERPRETIVE THEMES:

- Freshwater ecology
- Succession - transition from pond to marsh - filling itself in
- Wildflowers and herbaceous plants
- Micro habitat for small mammals perhaps deer (grass was matted down)
- Map of connection to other areas

MEANS OF INTERPRETATIONS:

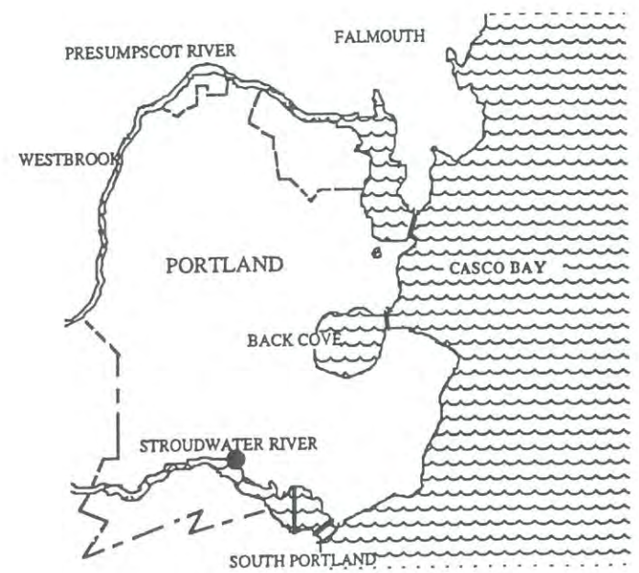
- Signage

ANTICIPATED USERS:

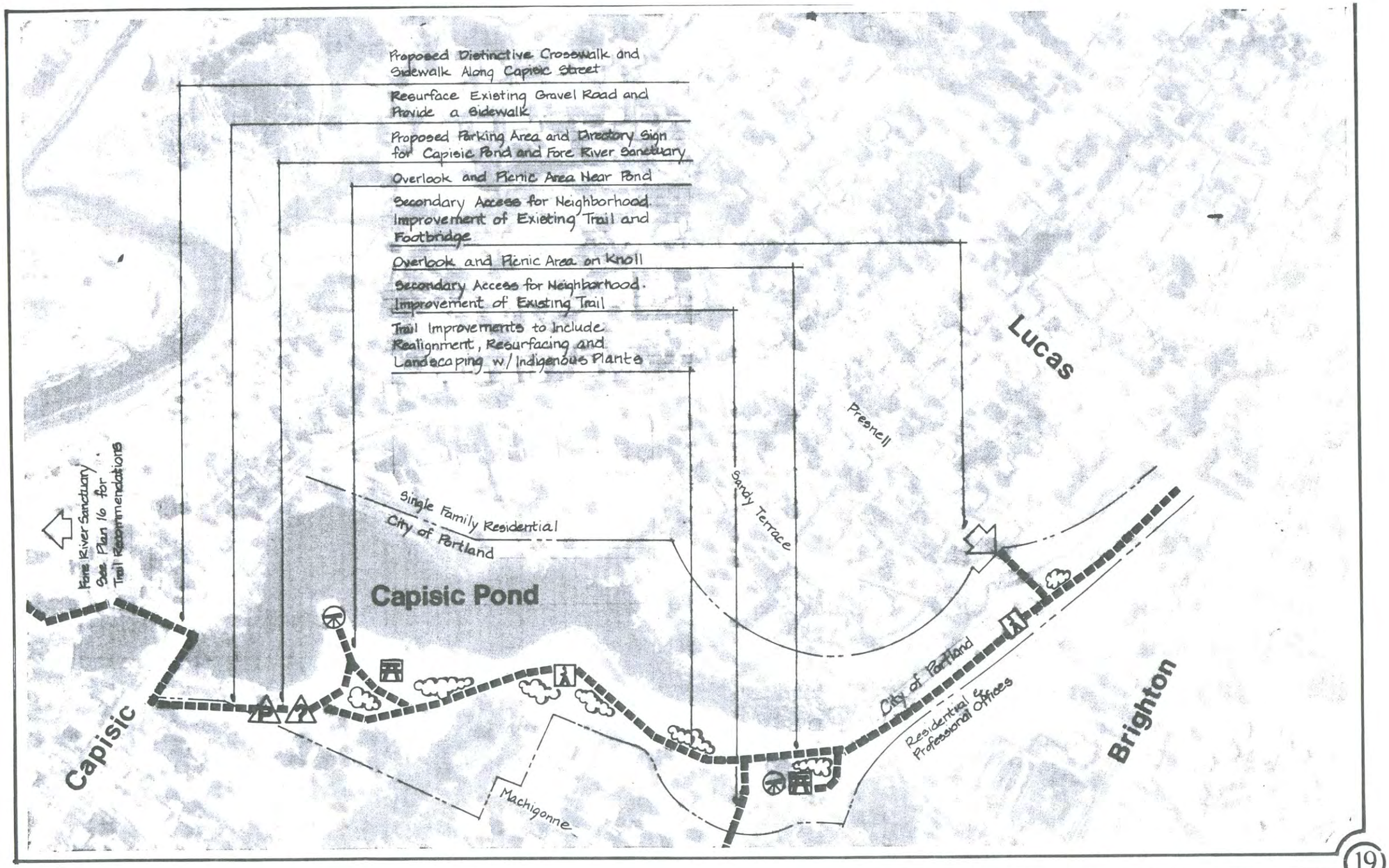
- Neighborhood residents
- City residents picnicking or strolling
- People from the Fore River Sanctuary

INTERCONNECTIONS: Fore River Sanctuary

PHASING: Medium. Important as an extension of the Fore River Sanctuary.



KEY PLAN


Proposed Distinctive Crosswalk and Sidewalk Along Capisic Street
Resurface Existing Gravel Road and Provide a Sidewalk
Proposed Parking Area and Directory Sign for Capisic Pond and Fore River Sanctuary
Overlook and Picnic Area Near Pond
Secondary Access for Neighborhood. Improvement of Existing Trail and Footbridge
Overlook and Picnic Area on Knoll
Secondary Access for Neighborhood. Improvement of Existing Trail
Trail Improvements to Include Realignment, Resurfacing and Landscaping w/ Indigenous Plants
Fore River Sanctuary
See Plan 16 for Trail Recommendations
Single Family Residential
City of Portland
Capisic Pond
Capisic
Machigonne
Sandy Terrace
Presnell
Lucas
City of Portland
Residential & Professional Offices
Brighton

RIVERSIDE INDUSTRIAL SUBDIVISION

LOCATION: Presumpscot River on the west, Riverside Street on the east, Forest Avenue on the north, and Warren Avenue on the south.

CURRENT LAND USE: Sporadic development of light industrial buildings along Riverside Street, with the land between the river and the facilities largely undeveloped.

OWNERSHIP:

- Private: McAlister Farm Industrial Subdivision, Butler Industrial Subdivision, Eileen Gurner, Lucas Tree Expert Co., Inc., Blue Rock Industries, Contracting and Realty Corporation - all major land holders adjacent to the River.

- Public: PWD 50 foot ROW

CULTURAL FEATURES: Industrial building; riverfront

NATURAL FEATURES: Good riparian habitat; open fields with herbaceous growth and mixed woods (pine, hemlock, apple, elm); many signs of wildlife (deer scat, musk, deer runs); topography deeply cut by tributaries and swales feeding the river; steep embankment (>30%)

VISUAL QUALITIES: High. River corridor is predominantly undeveloped, providing a great sense of seclusion. Water quality is improving, although it still exhibits a muddy brown color. Views along the corridor vary from those contained by wooded edges to open vista looking out to pastoral landscapes.

CURRENT ZONING:

- Shoreland Zoning
- I-1: Industrial
- B-1 Business

CURRENT LEVEL OF ACCESS: Through parking areas of industrial subdivisions, although some areas have been posted 'No Trespassing'

DEVELOPMENT PRESSURE: High, especially along the easily accessed streetfronts. No development has yet taken place within the zone most suitable for a water access trail system.

RECOMMENDATIONS:

- City should establish an agreement with the landowners to dedicate the undevelopable land along the immediate shoreland to limited public use and preservation. The area involved would consist of the land within 250 feet of the high water mark of the river, and would include the floodplain, areas of steep slope, existing trails, and enough land to establish a substantial buffer between the river and the developed industrial parks.

- Once the agreements are in place a primitive trail should be extended the length of the river, with improvement limited to blazes on trees, small scale footbridges, and culverts.

- A canoe launching area should be established at one point, determined by the degree of visibility provided, and the ease of access to the water. Parking for up to ten cars should be part of the overall plan for this more extensively developed area.

- The City should solicit corporate sponsorship for the development and maintenance of sections of the trail as a display of their commitment to community interests. This approach would also help provide outdoor recreational areas for their employees and help guarantee the longevity of the resource.

- If the Westbrook waterfront trail system is developed the two communities should explore the idea of a common bridge crossing within this section.

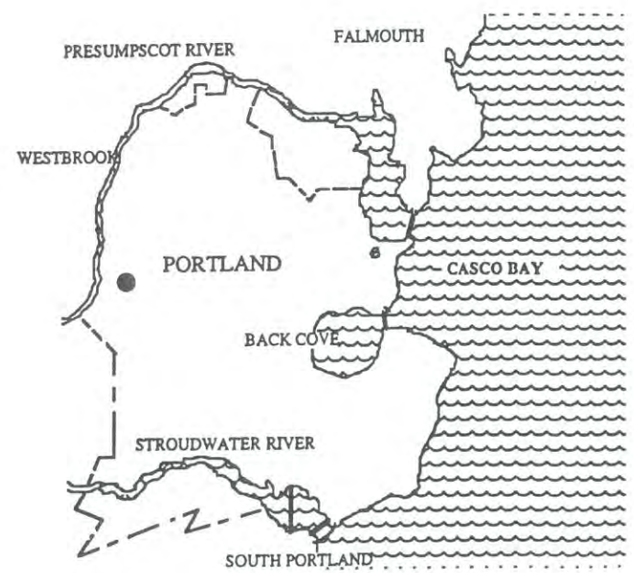
ANTICIPATED USERS:

- Employees of nearby industrial facilities

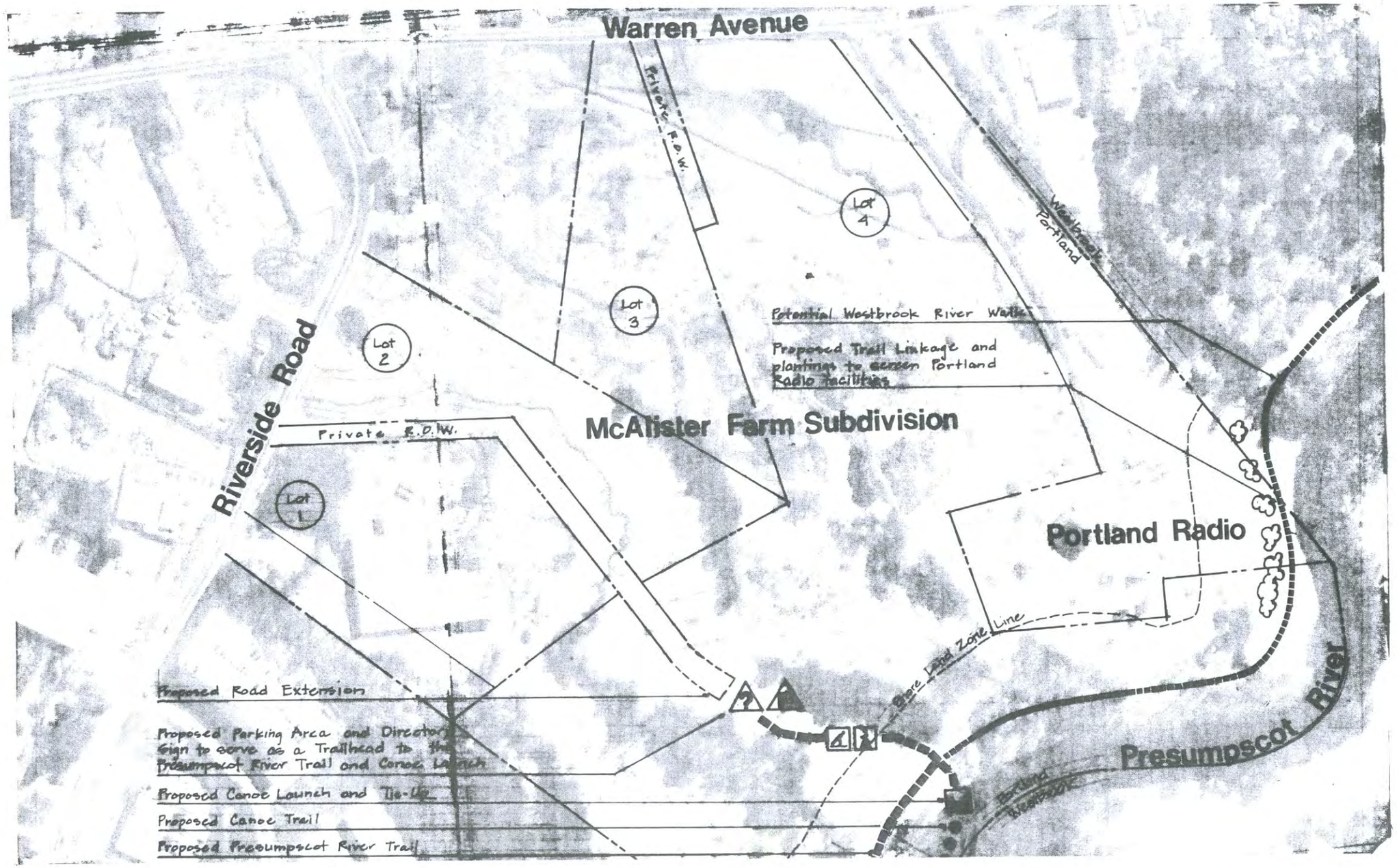
- People out for a short or day-long canoe trip, walk, or cross country ski

INTERCONNECTIONS: Riverton Park and the proposed Presumpscot River Seasonal Trail

PHASING: High: to start the negotiation with property owners before active development starts to occur within the zone identified above. Medium: to establish a trail. Time may provide a chance for improvement to the water quality and general attractiveness of the area.



KEY PLAN



RIVERSIDE INDUSTRIAL SUBDIVISION

RIVERTON PARK

LOCATION: Bounded by the Presumpscot River on the west, Forest Avenue on the south, and Riverside Street on the east.

CURRENT LAND USE: Unpublicized and generally non-maintained city park. Remnants of one of the area's Trolley Parks, with old paths, stone artifacts, walls, and steps; illegal dumping has occurred near the points of access; one active and one abandoned ballfield.

OWNERSHIP: City of Portland

CULTURAL FEATURES: Site of the Trolley Amusement Park that thrived from the 1890's to the 1920's.

NATURAL FEATURES: Mixed second growth forest, minimal understory vegetation

VISUAL QUALITIES: Low: Current lack of attention to the maintenance of the park disparages its visual quality; the undulating topography, forest canopy, and relationship to the river still presents a tremendous potential for redevelopment.

CURRENT ZONING: ROS: Recreation Open Space

CURRENT LEVEL OF ACCESS: Off of Forest Avenue southeast of the Riverton Bridge over the Presumpscot River; via View Street (undeveloped); no formal access points or informal paths down to the river.

DEVELOPMENT PRESSURE: Low.

RECOMMENDATIONS:

- City should consider a design competition to solicit ideas for re-using the park, with a heavy emphasis on social/ management plan.

- As an interim use the City should provide a small (10-20 car) parking lot to serve this park and provide access to the proposed Presumpscot Seasonal Trail.

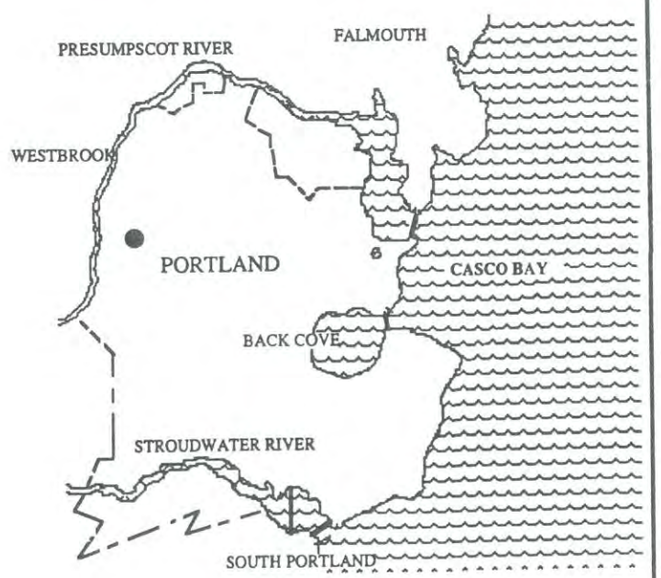
- Long-term improvements, once the clientele was well established might include a boat house reminiscent of the Riverton Park of old. This facility could provide boat rentals, launching, and tie-ups, as well as light refreshments.

- Other improvements to the area as determined by a Master Planning study of the park - both short-term and long-range - should include picnic tables and few sturdy shelters, benches, planting for seasonal interest, trash receptacles, interior circulation paths, maintenance paths, interpretive signage, blazed trails lead towards the golf course.

ANTICIPATED USERS: Westbrook, Falmouth, and Portland residents using the area for walking, skiing, snowshoeing, picnicing, canoeing

INTERCONNECTIONS: Presumpscot River Trail along the industrial section (#33); Presumpscot River seasonal trail

PHASING: Medium. Redevelopment of this parcel should be planned after securing access to the properties to the SW and NE. This parcel is key to the redevelopment of the Presumpscot River due to is visibility, accessibility, and historical use.



LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

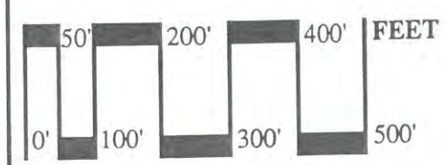
BICYCLE ROUTE

FISHING PIER

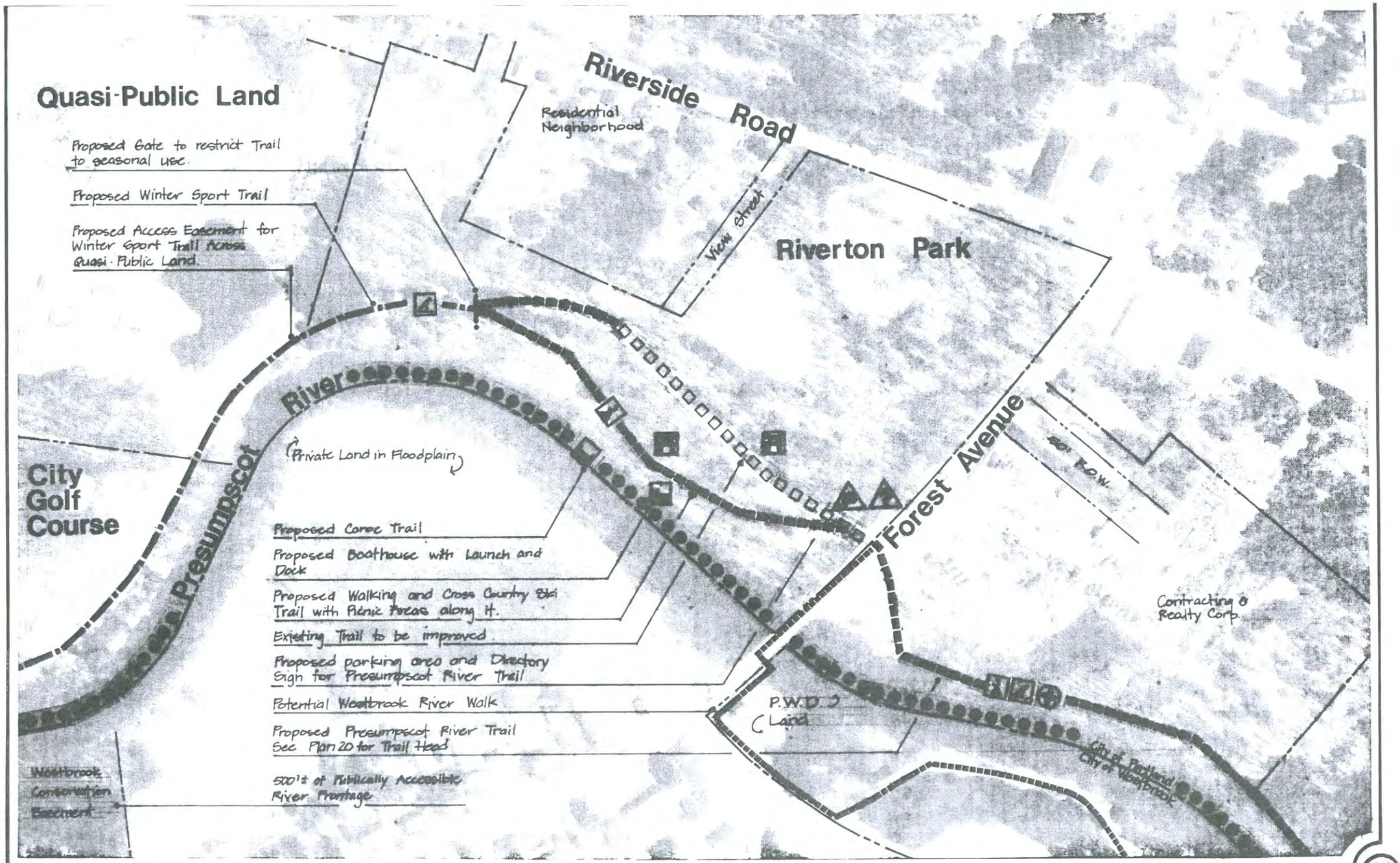
PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS



NORTH



RIVERTON PARK

RIVERSIDE NORTH MUNICIPAL GOLF COURSE

LOCATION: Bounded on the NW by the Presumpscot River, on the NE by Exit 10 of the Maine Turnpike, and Riverside Street on the SE

CURRENT LAND USE: Municipal Golf Course

OWNERSHIP: City of Portland; abutting land: State (ME Turnpike Authority), private

CULTURAL FEATURES:

- 18 hole, golf course, completed in 1937 on approximately 133 acres

- Clubhouse: 6400 SF four season facility with restaurant, bar, pro shop, locker and shower rooms

- Maintenance facility

NATURAL FEATURES: Greens, fairways, trees on golf course; small pond; river; riverbank erosion

VISUAL QUALITIES: Medium-high. Course is in fair to good condition, but light on plant material. Additional plantings would help separate adjacent fairways and give a greater sense of spatial enclosure. Undulating topography and the relationship to the river's edge adds substantially to the level of visual interest.

CURRENT ZONING:
- ROS: Recreational Open Space
- I-1: abutting land

CURRENT LEVEL OF ACCESS:

- Good access of Riverside Street at the clubhouse for those using the course for golf; well developed series of internal golf cart paths

- Fairways along the length of the river pose no physical restriction to lateral water access, but the presence of an active golf course poses a serious problem regarding safety and compatibility

DEVELOPMENT PRESSURE: Low.

- Acquire a public access easement along the river between the golf course and Riverton Park to allow the continuation of the concept over a much longer area

- Pedestrian access along the trail during the golfing season is not advisable unless the course was substantially reshaped to prevent balls from being hit in the general direction of the river.

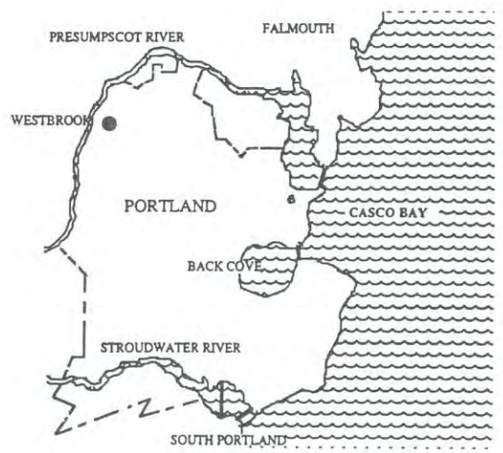
- The City should acquire an access easement from the State for the continuation of the trail under the Turnpike Spur Bridge over the Presumpscot River. (See the recommendations for the Upper and Lower Stroudwater River Trails for further discussions of this type of situation.)

ANTICIPATED USERS: Cross country skiers and snowshoers

INTERCONNECTIONS: Riverton Park; proposed Falmouth River Trail

PHASING: Moderate. Contingent upon the establishment of the Falmouth River Trail

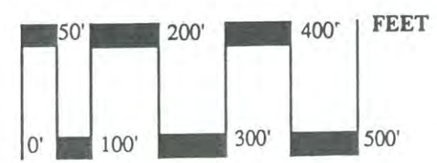
RECOMMENDATIONS: Establish a seasonal trail for cross-country skiers along the length of the river.



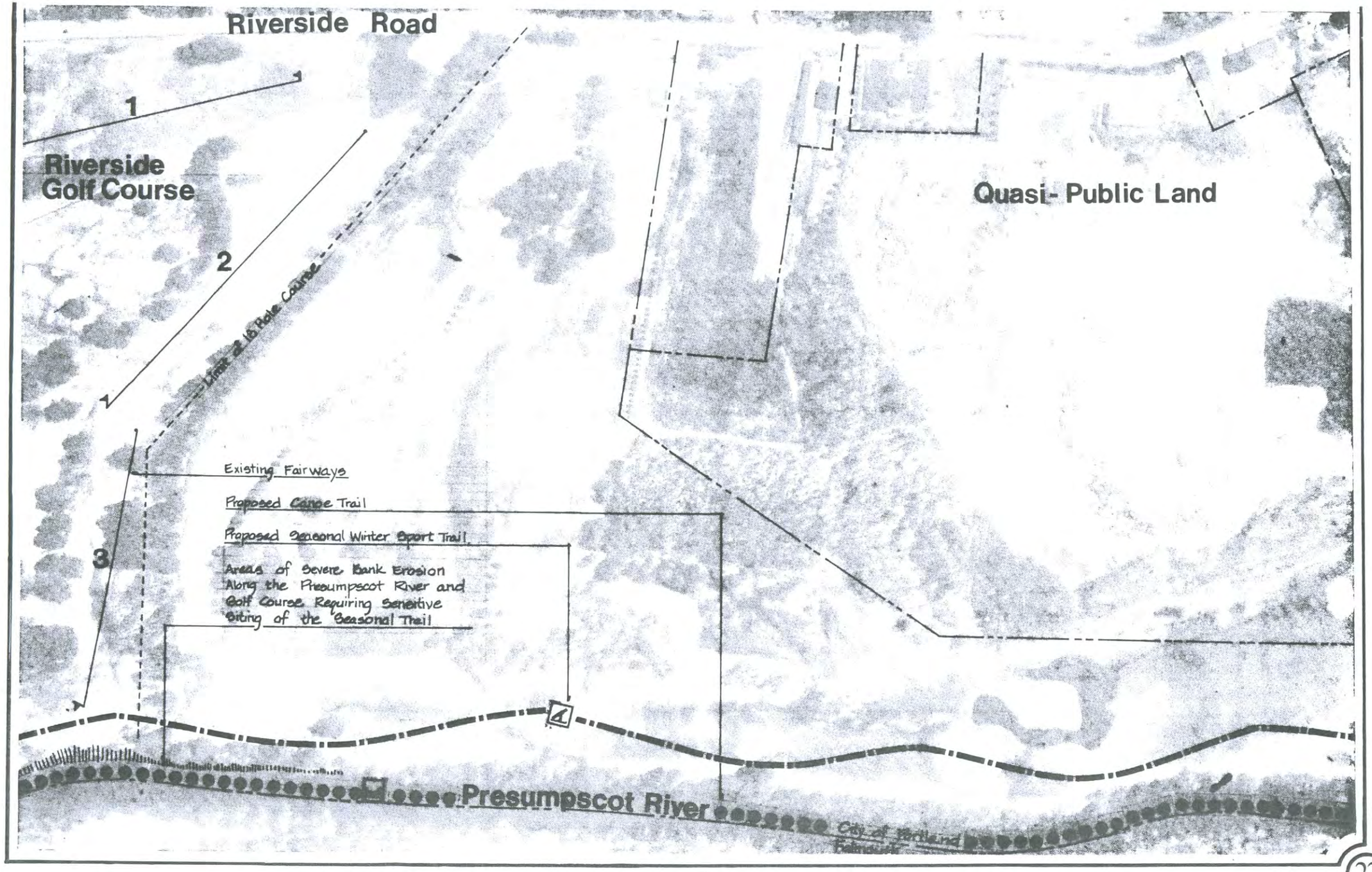
KEY PLAN

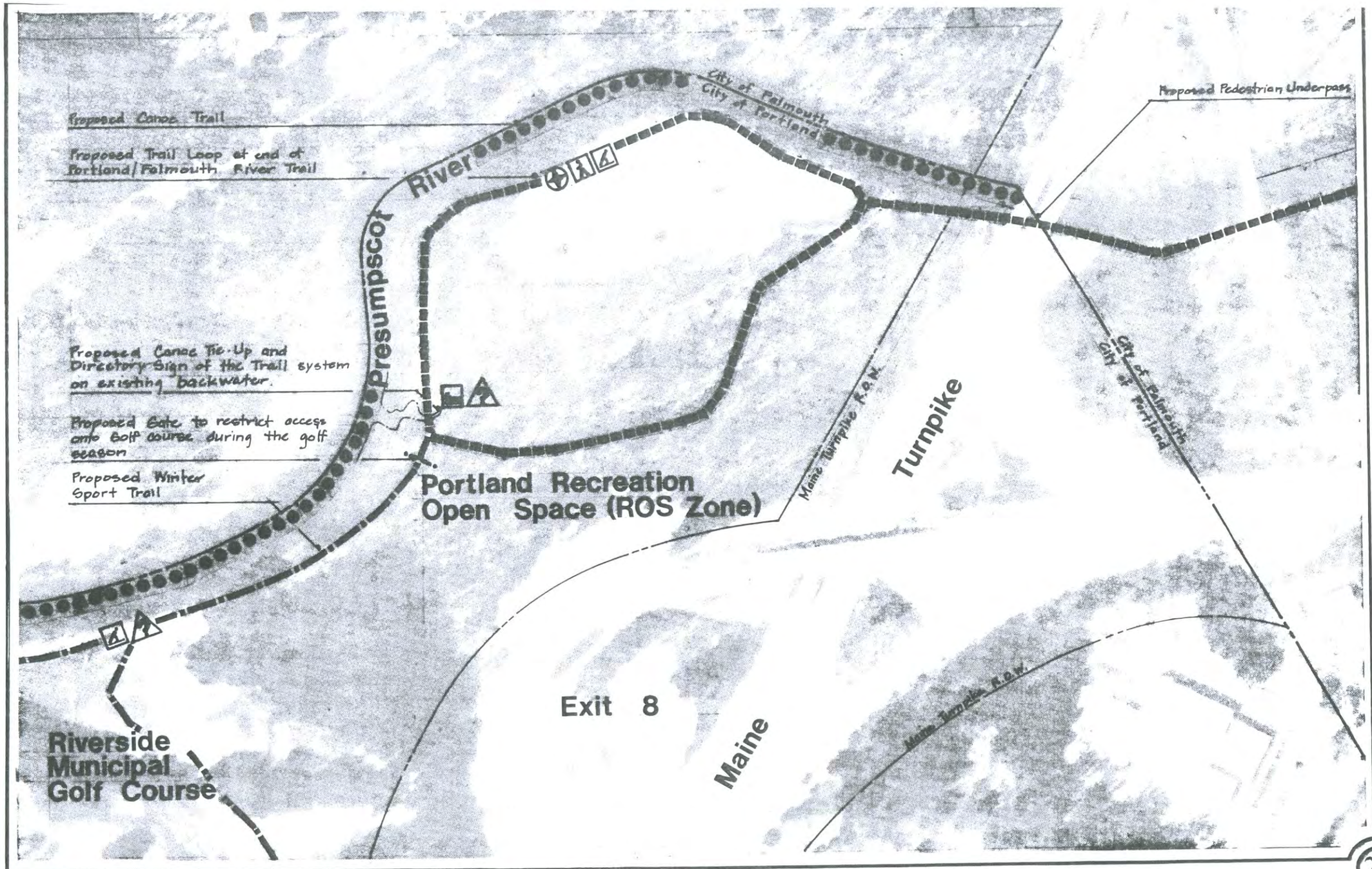
LEGEND

PARKING
DIRECTORY SIGN
HANDICAP ACCESSIBLE
RESTROOMS
POINT OF INTEREST
OVERLOOK
CANOE ROUTE
CANOE LAUNCH/TIE-UP
PICNIC AREA
PEDESTRIAN TRAIL
FITNESS TRAIL
WINTER SPORT TRAIL
BICYCLE ROUTE
FISHING PIER
PROPOSED TRAIL
EXISTING TRAIL
ALTERNATIVE ACCESS POINTS



NORTH


Riverside Road
1
Riverside Golf Course
2
Limit of 18 Hole Course
Quasi- Public Land
3
Existing Fairways
Proposed Canoe Trail
Proposed Seasonal Winter Sport Trail
Areas of Severe Bank Erosion Along the Presumpscot River and Golf Course Requiring Sensitive Siting of the Seasonal Trail
4
Presumpscot River
City of Portland
Falmouth



RIVERSIDE NORTH MUNICIPAL GOLF COURSE

LOWER PRESUMPSCOT RIVER TRAIL

LOCATION: The southern bank of the Presumpscot River, adjacent to the Falmouth town line on the east and west, north of Summit Street and southeast of where the Maine Turnpike crosses the river.

CURRENT LAND USE: Undeveloped property: currently under consideration by its owners is a single family subdivision: Presumpscot River Place.

OWNERSHIP: Private.

CULTURAL FEATURES:

- Possible Indian history: (Note: if the proposed subdivision is required to submit an application for a Site Location of Development Permit from the Maine Department of Environmental Protection they may be required to have an archaeological study done for the area; if sites are of any significance the developers may further be required to show how the proposed development will be planned to avoid disturbance.)

- Existing footpath at the top of the embankment

- Utility easement

- Borrow pit

- Rehabilitation of the Presumpscot River

NATURAL FEATURES:

- Upland: primarily deciduous trees and understory vegetation; some disturbed areas

- Riverfront: Mixed forest land (birch, oak, hemlock, ferns); small backwater inlet along the river with a shady bottom and a shoreline covered with dense fern growth; banks change from gravel and sandy soil to ledge at or near the surface

CURRENT LEVEL OF ACCESS:

- From the Presumpscot River, via canoe or light boat

- Bushwack in from the utility easement off Curtis Street

DEVELOPMENT PRESSURE: High. City of Portland has received plans for a residential mixed-use development incorporating 234 multiplex units and 40 single family homes. This same development also extends 1050 feet to the east and 1000 feet to the west along the Falmouth riverfront, showing an additional 246 units of multiplex housing. As presently configured the development would be set back 200 to 400 feet from the edge of the river, due to steep slopes and the many ravines.

VISUAL QUALITIES:

- Within upland environment: Low. Lack of reclamation efforts in local borrow pits; periodic clear cutting along the utility easement

- Along the river corridor: High. Exhibits high levels of diversity in vegetative cover and landform. Topography shows considerable undulation. Location of existing path varies from water's edge to the top of the embankment, affording a good variety of vantage points.

CURRENT ZONING: R-2: Low Density Residential (Single family homes on individual lots)

RECOMMENDATIONS:

- The city should actively continue its discussions with town officials in Falmouth to coordinate the development of the waterfront trail concept. Issues to be jointly addressed should include trail locations, optimum sites for canoe launching site, appropriate legal means to acquire access rights, management responsibilities, maintenance planning, etc.

- The City should at least require that the developer reserve land for a public access easement along the riverfront, even if the joint decisions with Falmouth have not been completed

-A designated trail system, with a 100-200 foot buffer zone, should be included as part of the open space component of the development

- The City should restrict view corridor cutting within this area to protect the watershed, maintain wildlife travel corridors paralleling the river, and preserve the visual integrity of the riverfront

- At the present time the trail development should remain relatively primitive, with blaze marking on trees and a dirt surface

- Provide culverts and small foortbridges as required to minimize disturbances to ravines and streams

- The small backwater may provide a suitable opportunity for a canoe tie-up; final decision on its location should be coordinated with the joint overall plan and further study of the riparian environment

- A master plan sign should be installed at the point of closest contact with the new development to show how the trail system has been coordinated with Falmouth, and where the points of interest are located

INTERPRETIVE THEMES:

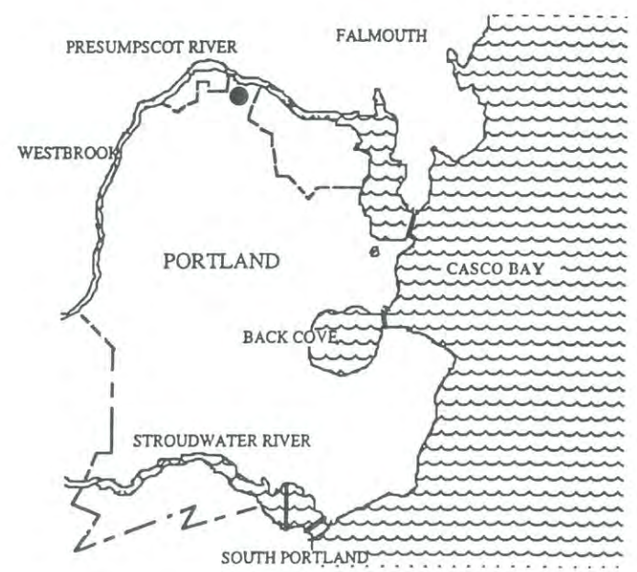
- Riparian ecology
- Fresh water invertebrates
- Fish in river
- S.D. Warren and paper mill
- Clean-up of river/pollution
- Westbrook/Falmouth/Portland relationships
- Walking trail information (if recommended)
- Historical uses of river
- Riverton Park/Role of the Trolley Companies
- Role in inland waterway canal and transportation

MEANS OF INTERPRETATION:

- Canoe Interpretive Trail along river
- Signage

ANTICIPATED USERS:

- Residents of the proposed neighborhood
- Falmouth walkers
- Cross country skiers and snowshoers travelling from the Golf Course
- Canoeists looking for an extension of their day on the river



KEY PLAN

INTERCONNECTIONS: Falmouth River Trail

PHASING:

- Access Agreement: High. With development along the river so imminent it is critical to acquire public access rights as soon as possible

- Development: Mod. Additional time will be necessary to continue with the joint planning effort described above.

COMMENTS: Only a small portion of a continuous trail along the southern bank of the Presumpscot River proposed jointly by the Portland and Falmouth Water Access Studies. Most of the land involved in the trail would be located in Falmouth. However, acquiring public access agreements across this relatively short segment in Portland is critical in making the trail continuous.

LEGEND

PARKING

DIRECTORY SIGN

HANDICAP ACCESSIBLE

RESTROOMS

POINT OF INTEREST

OVERLOOK

CANOE ROUTE

CANOE LAUNCH/TIE-UP

PICNIC AREA

PEDESTRIAN TRAIL

FITNESS TRAIL

WINTER SPORT TRAIL

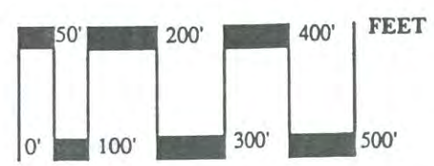
BICYCLE ROUTE

FISHING PIER

PROPOSED TRAIL

EXISTING TRAIL

ALTERNATIVE ACCESS POINTS



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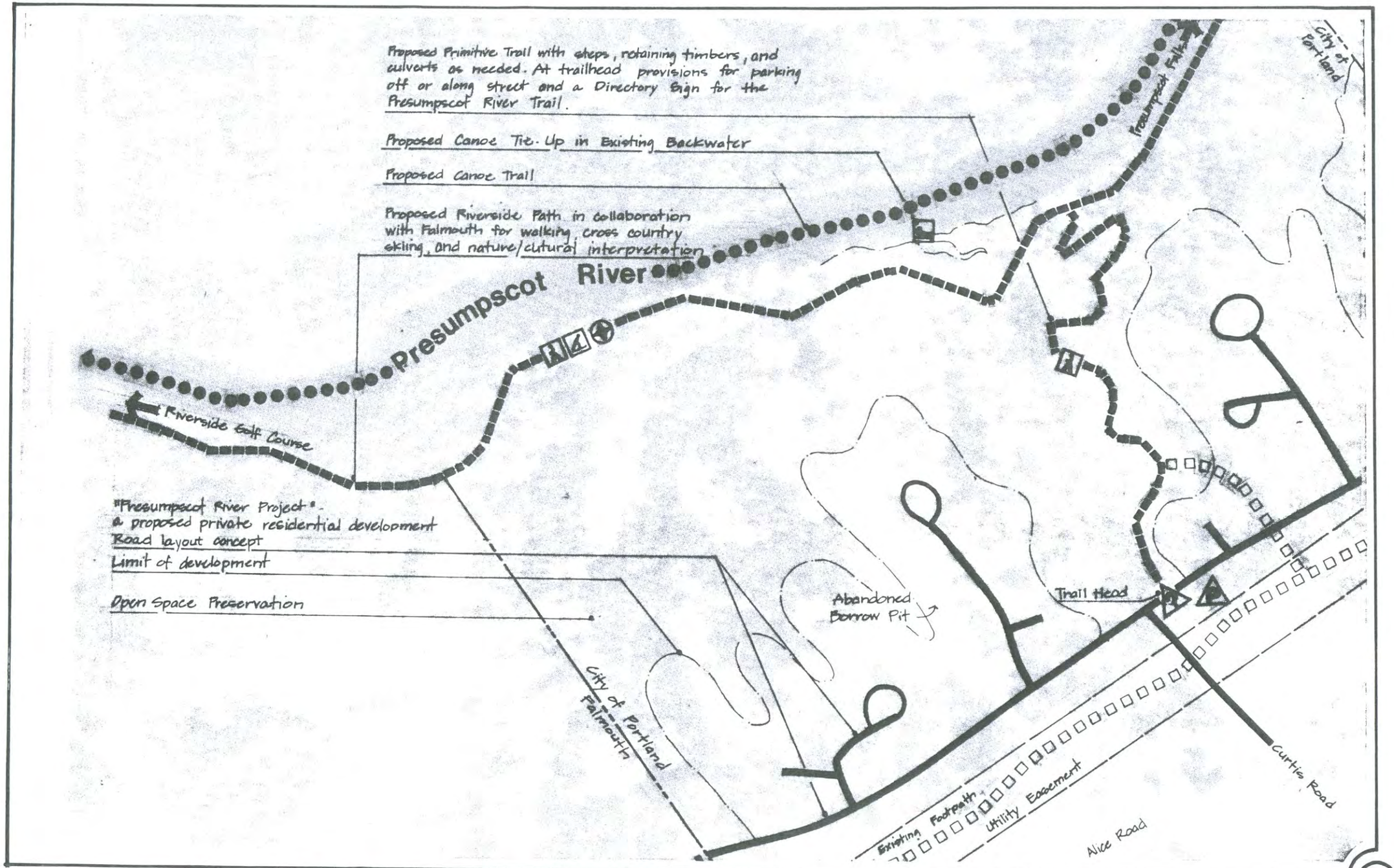

Proposed Primitive Trail with steps, retaining timbers, and culverts as needed. At trailhead provisions for parking off or along street and a Directory Sign for the Presumpscot River Trail.
Proposed Canoe Tie-Up in Existing Backwater
Proposed Canoe Trail
Proposed Riverside Path in collaboration with Falmouth for walking, cross country skiing, and nature/cultural interpretation
Presumpscot River
Presumpscot Falls
City of Portland
Riverside Golf Course
"Presumpscot River Project" - a proposed private residential development
Road layout concept
Limit of development
Open Space Preservation
Abandoned Borrow Pit
Trail Head
City of Portland
Falmouth
Existing Footpath
Utility Easement
Curtis Road
Alice Road

3.2 CASCO BAY ISLANDS

INTRODUCTION

The Casco Bay Islands are a unique natural resource. Their potential as an open space and recreation resource provides a unique backdrop to the more urban character of the Mainland. While the islands are physically separated by water , they have not been isolated from development pressures of the Mainland. The "Portland Island Land Use and Zoning Study" prepared in 1985 by the Greater Portland Council of Governments and the City of Portland, Department of Planning and Urban Development recognized the development pressures on the islands and established land use plan goals and policies accordingly. The Shoreway Access Plan begins to specifically address the concerns expressed in two of the five adopted policies which are:

> The City should adopt a policy of considering the islands as unique and valuable natural areas whose primary use is as seasonal residential and recreation areas. Appropriate year round development should be encouraged provided that the issue of municipal services delivery can be addressed.
>
> The City should improve open space and recreational opportunities on the islands to address the needs of residents and visitors. The City should encourage the retention and expansion of pedestrian access to the shoreline including acquisition of shoreline easements.

This study focused on the evaluation of shoreway access opportunities on Peaks, Long, Little and Great Diamond Islands. These islands were studied because of their current accessibility by public ferry and their larger resident and visitor population. Recommendations for the islands, for the most part, were based upon field investigation and relied heavily on conversations with representatives of island organizations. This section of the study conveys both the general recommendations for the islands and elaborates on the island specific recommendations as depicted on the Shoreway Access Master Plan.

GENERAL RECOMMENDATIONS

PUBLIC SHELTER. A suitable public shelter should be developed at each ferry landing to serve the needs of residents and visitors alike. The shelter should be a simple seasonal structure to include restrooms, interpretive material, water fountains, and an island directory sign. Public restrooms and water fountains are not generally available on the islands which is inconvenient not only for the recreationist, but also for the few merchants and restaurants who have facilities available. The directory sign should highlight the route of the Shoreway Access Trail, significant historical and cultural features, and a listing of island businesses. The signs could also list where a copy of the trail map could be purchased on the island. The sign could also serve as a community bulletin board to post upcoming events and meetings. Signs on the island should be kept to a minimum, but at a level sufficient to guide people along the trail system. By providing a directory sign at the landing and smaller versions at key spots along the system, the need for signs along the existing roads would be minimized. Trail marking in wooded areas could be accomplished with a non-obtrusive, low cost, low maintenance materials.

ISLAND CONSERVATION COMMITTEES. The City should support the efforts of organizations such as the Casco Bay Island Development Association (CBIDA), the Long Island Civic Association and the Oceanside Conservation Trust of Casco Bay in acquiring easements and land for recreation and open space purposes. An important role of these organizations could be to help organize volunteer efforts for the construction, maintenance and management of the trail system and open space resources.

ABANDONED CAR REMOVAL. Many of the undeveloped areas that could provide future open space and recreational opportunities have become graveyards for abandoned cars. The City should allocate money to remove cars from areas effected by the Shoreway Access Trail, and install vehicular blockades to minimize recurrence.

PARTICIPATION IN THE SHOREWAY ACCESS TRAIL SYSTEM. The Shoreway Access Trail System follows primarily existing roads or paths that provide visual and physical water access. There are many undeveloped private parcels that are shown on city plans having streets to the waters edge, but are not depicted on the master plan. Proposals for development along shoreway areas should conserve public access opportunities to the water. Although a given right of way may not be designated as part of the trail system such rights of way represent a significant resource. As the population grows and recreation needs change, theses rights of way could provide for further linkages to the shore.

SPECIFIC RECOMMENDATIONS

Specific information is provided for Peaks, Long, Great Diamond and Little Diamond Islands to assist the City in evaluating the shoreway access & open space opportunities on each of these islands. A similar format of outlining critical points used for the mainland planning units was also applied to the description of the islands. (See Section 3.0 for an explanation of the 'critical points'). These descriptions along with the master plan (see back pocket of this report) and site plans accompanying this section document existing conditions, recommended recreational use and related improvements specific to each island.

PEAKS ISLAND

LOCATION: Proposed trails include a perimeter route and a central trail from the ferry landing to the opposite side of the island, as well as secondary interior trails which primarily follow existing roads and paths.

CURRENT LAND USE: Undeveloped City parks, undeveloped State preserve, single family residences, small businesses, undeveloped Maine Audubon land.

OWNERSHIP: Private residential lots, City of Portland, State of Maine, Maine Audubon Society, Star Foundation.

CULTURAL FEATURES:
- Architecturally significant cottage style residences
- A series of military installations and barracks

NATURAL FEATURES: Shoreline character is predominately mixed sand and gravel on the western shore and gravel beaches on the eastern shore with occurrences of rocky/boulder ramps on the eastern and southern coastline. Vegetation on the island is dominated by coniferous forest and boggy depressions and ponds on the eastern side of the island. Bedrock near the surface contributes to the poor drainage in these areas. Some of the more distinctive natural features of Peaks include the following: Torrington Point (a rocky headland listed on the State"s Natural Areas Inventory as a scenic coastal vista point), the forest of the Daevis Sanctuary, Whaleback, and the State Preserve, the wetlands of the Star Foundation property. Notable but not as outstanding are the gravel beaches at the City Landing and Evergreen Landing.

VISUAL QUALITIES: High to low. On the whole, the island has high visual qualities due to its intrinsic natural and cultural features. The endemic homes along the network of roads leading to the public landing, village store and restaurant contribute to Peaks Island's strong village image. Along the proposed shoreway access route beyond the village the diversity presented by its natural features also adds to the islands visual interest. The settings of Ice Pond, Brackett Fish Pond, the woodland of the Daevis Sanctuary, the changing coastline geology, and the wetlands of the Star Foundation are prime examples of the scenic beauty the island has to offer. The island is also an exceptional vantage point for views of Portland's skyline and outward across the Atlantic Ocean. Areas along the proposed route suffering from a lack of management or supervision, resulting in low visual quality includes the City land fill, an abandoned barrow pit, vandalism of Star Foundation property, and a collection of abandoned cars on City property.

CURRENT ZONING:
ROS Recreation open space
I - R2 Island Residential
I - R1 Island Residential
I - B Island Business

CURRENT LEVEL OF EXCESS: Public pier on the southwesterly side of the island is serviced by CBITD and is connected with island roadways. Reconstruction of a pier at the site of the old army pier will provide additional public access.

DEVELOPMENT PRESSURE: The greatest potential is for infill development on recorded residential lots and conversion of seasonal homes to year round residences.

ANTICIPATED USERS: Residents and visitors exploring the islands. Residents have noted the increase of visits from area grade schools as well as guided walks by Maine Audubon Society, and the Maine Section of the Appalachian Club.

INTERCONNECTIONS: Existing paved and gravel roads and established shoreway paths are interconnected with one another. In a few selected locations, new trails are recommended in order to make the connection more direct or the trail more pleasurable for walking.

MASTER PLAN DESCRIPTIONS AND RECOMMENDATIONS:

MUNICIPAL LANDING: The ferry landing, the new public pier under construction and the City owned land now being used as a parking area should be redesigned to serve as a gateway to the island. A more efficient parking layout may accommodate the same amount or more cars in less area. Reclaimed space could be regraded and vegetated providing a setting for the proposed public shelter (see General Recommendations) and a walkway and seating area leading to the new public pier.

ISLAND BIKE ROUTE: The bike route proposed follows existing paved roads that include Island Avenue, Seashore Avenue, and Whitehead Street. Any future improvements to these main roads should include either an extended paved shoulder with bicycle and pedestrian lane marked or an unpaved traversable surface off the road to accommodate pedestrians and bikes.

CITY LANDING AND BEACH: A gravel beach, approximately 500' in length accessible from Welch Street.

EVERGREEN LANDING BEACH: A sand and gravel beach, approximately 300' in length and accessible from the dead end of Island Avenue.

WHALEBACK WALK: Proposed inland primitive trail across undeveloped private property connecting Evergreen Landing Beach and the Daevis Sanctuary. The proposed route would be via Brook Lane across the side lot line of six undeveloped lots to Reed Avenue. Daevis Sanctuary Shoreway Foot Trail begins in the northwestern area of the property.

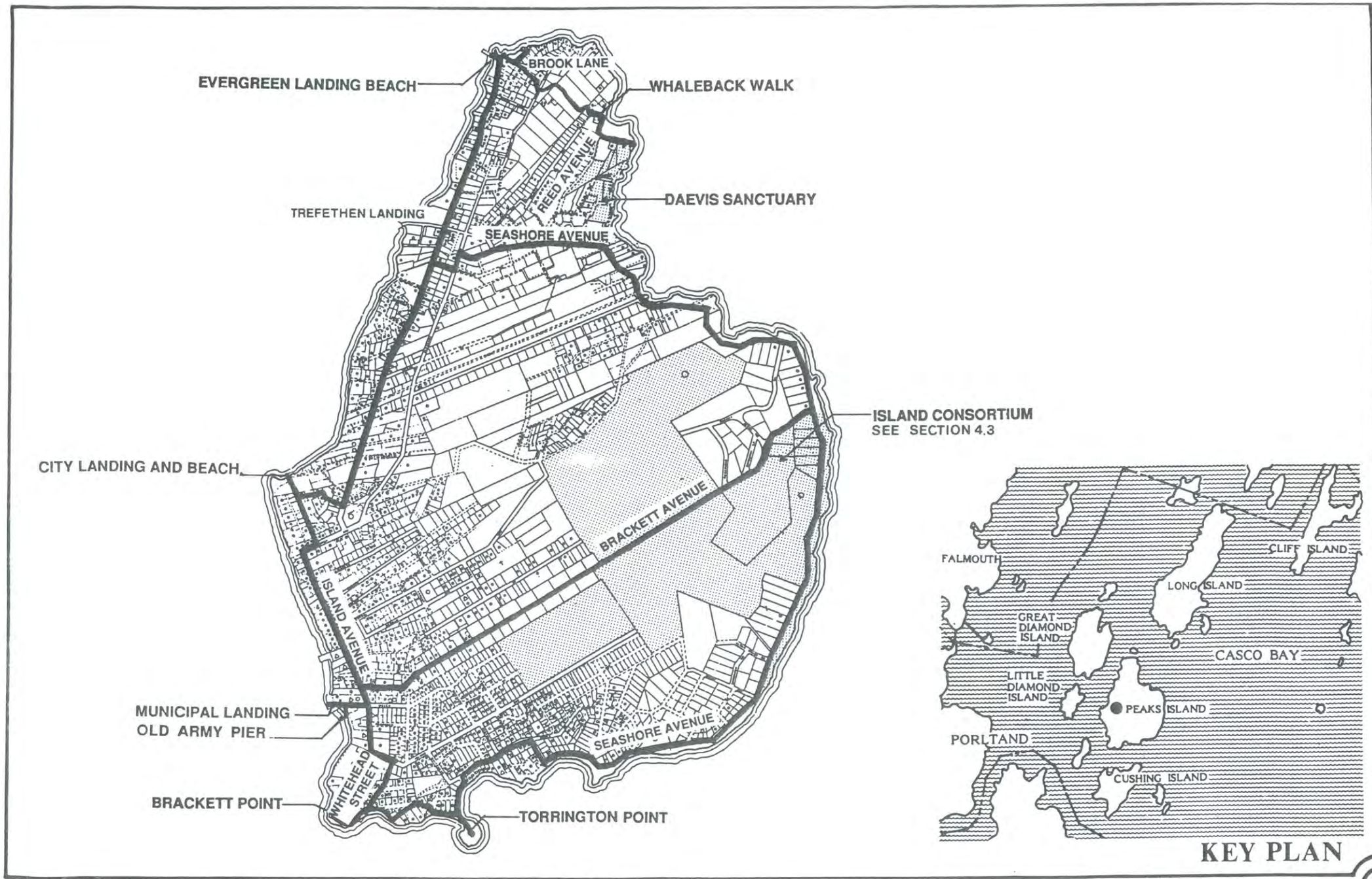
DAEVIS SANCTUARY: A Maine Audubon Society, seven acre parcel on the Northeastern shore of Peaks Island that has approximately 1,000 feet of frontage on the Atlantic. No M.A.S. activity has been developed on the sanctuary though the existing trails are maintained by an unknown party. It is currently being used by M.A.S. for day hiking and nature observation.

SEASHORE AVENUE ESPLANADE: Any future improvements to this road should include either an extended paved shoulder with marked lanes for bicycles and pedestrians or an unpaved off road shoulder to accommodate bikes and pedestrians. There are gravel pull-offs with trash barrels. These pull-offs could be improved upon by limiting some to parking and others to pedestrian s with rustic benches and re-established native plant material

ISLAND CONSORTIUM: A secondary interior trail system based upon existing and proposed foot paths that traverses land owned by the City, State, Maine Audubon Society and the Star Foundation. See Section 4.3 for a discussion of this proposal.

BRACKETT AVENUE PARKWAY: Any future improvement to this road should include either an extended paved shoulder with marked pedestrian and bicycle lanes or an unpaved traversable surface off road to accommodate pedestrians within state & city land holdings adjacent to Brackett Avenue.

TORRINGTON POINT, TORRINGTON TRAIL, BRACKETT POINT:A side loop of the Island Bike Route & Seashore Avenue Esplanade that features an existing bathing beach, scenic vistas of Portland and an historical cemetery.



PEAKS ISLAND

LONG ISLAND

LOCATION: The proposed trail designation includes a perimeter route along the island's northwestern shore and an inland route on the eastern with a central route from the ferry landing to the opposite side of the Island.

CURRENT LAND USE:Undeveloped residential parcels, single family residences, small businesses, old navy fuel storage facility.

OWNERSHIP: Private residential lots, City of Portland, State of Maine, Long Island Civic Association, Phoenix Resources, Northland.

CULTURAL FEATURES:
- Architecturally significant cottage style residences
- Old naval fuel storage facility
- Abandoned naval air strip

NATURAL FEATURES: A spruce forest densely covers the eastern shore of the Island. There is little development here. The coastline of the eastern shore is characterized by a combination of sand and gravel beaches, mud flats within coves and ledge. The coastline of the western shore is predominantly ledge and boulder ramps with a few small sand beaches.

VISUAL QUALITIES: High. The beauty of its white sand beaches, picturesque coves, and cottage groupings and common greens contributes to the exceptional scenic quality of Long Island.

Long Cove and Harbor Grace are the exemplary coves of Long Island for their refined and rustic visual qualities. Long Cove, the refined cove, is an inlet with perimeters defined by an inclined shoreline dotted with cottages and lawns with a vista toward the mainland. Harbor Grace , is the rustic cove, that looks out to the Atlantic Ocean. Its edges are low lying rocky shores with a few simple homes, lobster traps, sheds, boats, and docks. It also abuts a picturesque fresh water pond surrounded by forest. Both coves are memorable landscape compositions with identifiable foregrounds, middlegrounds, and backgrounds that warrant their high rating for visual qualities.

Of equal visual appeal for their views, shoreline forms, and textures are the beaches of Long Island. The noted beaches are inset so that the edges of the beach are defined by points of land that jut out into the water on both sides giving them a definitive shoreline form. Though similar in form, the beaches differ in texture and views.

Andrews Beach is owned and maintained by the State. It offers a view of the Atlantic with Vaill Island in the middle ground. Its white sand is cleared of debris to become a smooth surface that juxtaposes the preserved dune with its expanse of grasses.

Fowlers Beach also is a white sand beach, but has a coarser texture. Its ungroomed sand is interspersed with rockweed , outcrops of ledge, and a small association of dune grass. It looks out toward Hussey Sound with a limited vista to Great Diamond Island and Peaks Island.

Rohr Hill Beach is a pebble and rock beach that abruptly meets the edge of a mature spruce forest. It offers an unobstructed vista across the Atlantic Ocean.

Considered to be visually obtrusive on the island are the empty buildings and large paved areas of the inactive commercial properties along the western shore, as well as, the continuous chainlink fence that encloses the 178 acres of the old naval fuel storage property.

CURRENT ZONING:
IR - I Island Residential
IR - 2 Island Residential
I - B Island Business
ROS Recreation open space

CURRENT LEVEL OF ACCESS: Public ferry landing along with three sizable private landings which includes: Texas International Property, Doughty's Landing and Cleaves Landing, the two latter landings at the end of public streets.

DEVELOPMENT PRESSURE: There is considerable potential for infill growth on existing small lots on City streets. A 178 acre parcel owned by Phoenix Resources presents the possibility of a large scale development because of its existing infrastructure: roads, docks, and service lines.

ANTICIPATED USERS: Residents and visitors exploring the islands. Andrews Beach is used extensively by bathers during the summer.

INTERCONNECTIONS: Existing gravel, dirt and paved roads and established foot trails are interconnected to form trail loops.

MASTER PLAN DESCRIPTIONS AND RECOMMENDATIONS:

PONCE LANDING EXTENSION AND WATERFRONT PARK:Acquisition of land immediately north of the public ferry landing to provide a site for a public park and shelter (see general recommendations). Any future development of the old naval fuel storage property should incorporate the waterfront park that would lead to and from the ferry landing.

CLEAVES LANDING:The landing at the end of Island Avenue that provides access to a small gravel beach.

ROHR HILL BEACH AND TRAIL:Minor improvements and access agreements for the public use of existing foot trails across undeveloped parcels. The primitive trail starts near the Old YWCA property along the shore and Rohr Hill to a dirt road north of Beach Cove. The dirt road ties into Fern Avenue Bike Route segment. Any future development in this area should incorporate the trail into its common open space or street system so that the continuity of the public trail is maintained. The shoreline that parallels the trail is largely undeveloped, consisting of rocky, pebble beach.

ISLAND BIKE ROUTE AREA: A rest area in the Harbor Grace area that provides a vantage point of the harbor and the fresh water pond. Preferred siting would be along the northeastern edge of the fresh water pond. Intrusion should be limited as the pond is noted as habitat for a variety of ducks and herons. This location presently would require an agreement with the private landowner of the old naval fuel storage facility property.

ANDREWS BEACH: 16.45 acres of maintained State Sandy Beach with informal parking area at the end of Beach Avenue. The beach is frequently and intensively used by residents and visitors during months of June-August.

BEACH AVENUE PARKWAY: Any future improvements of this road should include an extended shoulder for a bicycle and pedestrian lane or an off road surface that is traversable. The existing road conditions on the hill down to the beach are hazardous for bikes due to its ruts and steep slope.

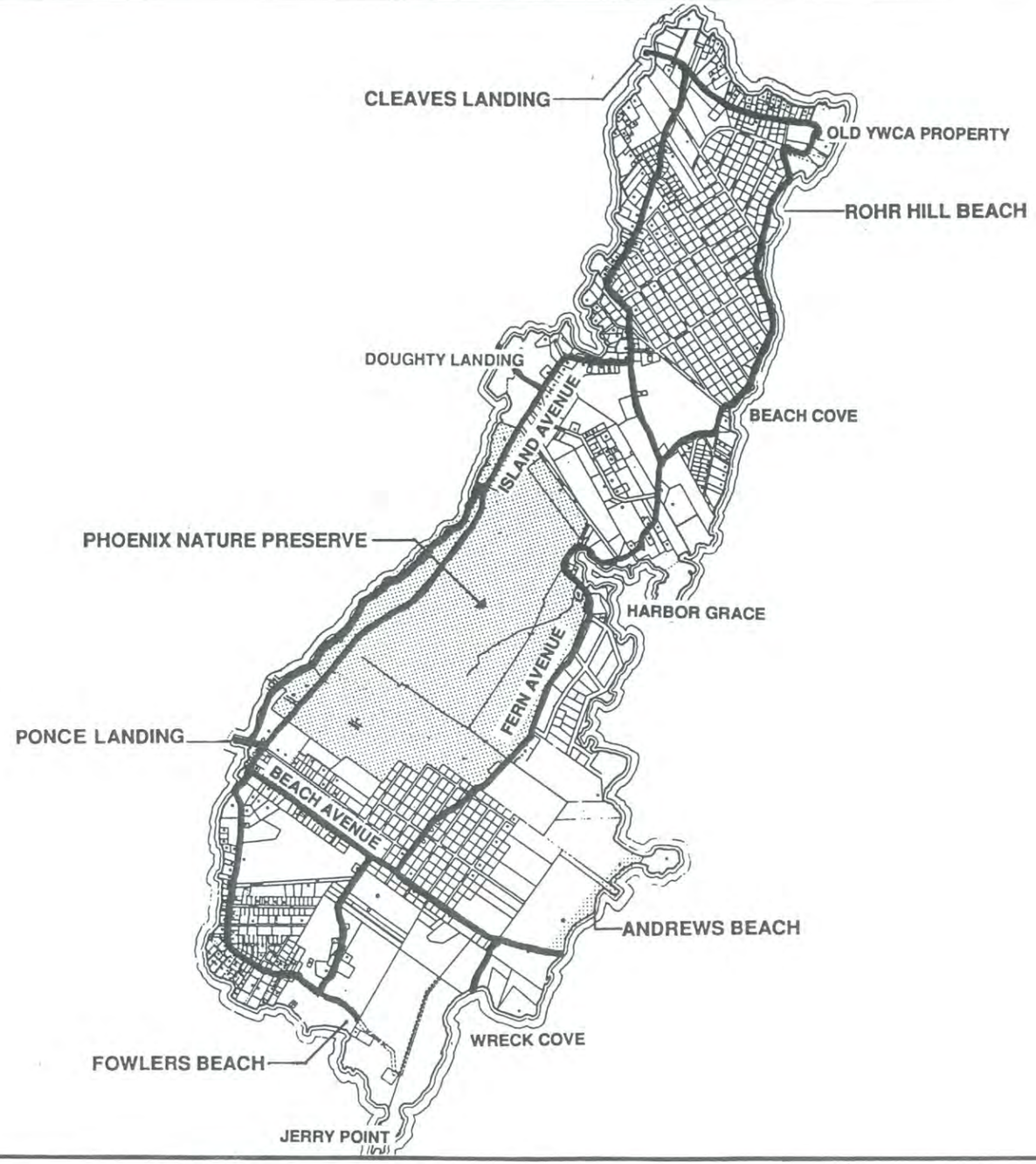
FOWLERS BEACH: Beach owned by the Long Island Civic Association that is used frequently by island residents. Accessible from the Fern Avenue. The Beach is ungroomed sand with dune grasses, rock weed, and outcrops of ledge.

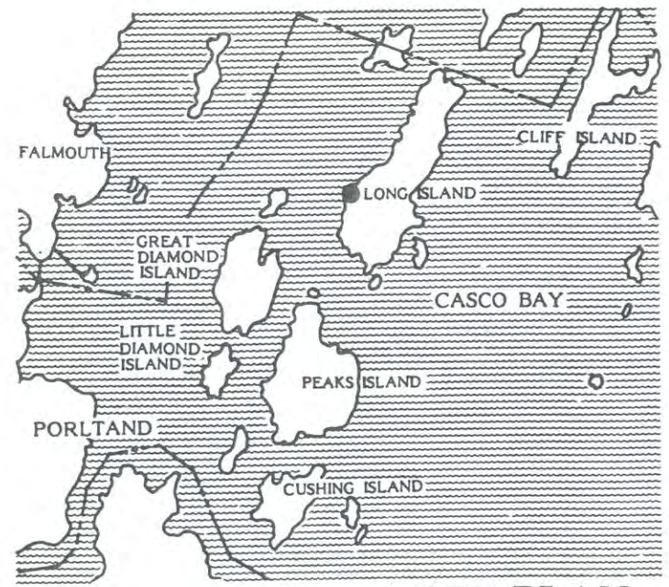
PHOENIX NATURE PRESERVE: The City should support the efforts of the Phoenix Nature Preserve Committee in promoting the purchase of the old naval fuel storage facility . This parcel represents a particularly unique open space resource. It is the largest privately held yet undeveloped parcel (except for the naval improvements) on the islands and within the city. Its natural features include 4,000 feet of shoreline, a large forest, and a fresh water pond near Harbor Grace.

ACCESS NEAR OLD YWCA PARCEL: In 1980 the city vacated portions of Lennox Avenue and Ocean Avenue on the eastern end of Long Island adjacent to the old YWCA parcel. Although it was the intent of the city that easements be reserved to conserve adequate access to the shore, the description of an easement delineated in the executed easement does not match with the intended location of the existing accessway . The City should resolve this issue to meet the original intent of the street vacation approval.

BAYVIEW SUBDIVISION: Within the past year, Northland as part of the Bayview Subdivision donated an eight (8) acre parcel to the Long Island Civic Association for open space and recreation purposes. The city may want to consider assisting the Civic Association in developing recreational amenities for the site.

WRECK COVE: The city owns a parcel off Beach Avenue with about 300 feet of shore frontage. The shoreline consists of ledge and gravel beach.





KEY PLAN

LONG ISLAND

GREAT DIAMOND & LITTLE DIAMOND ISLANDS

GREAT DIAMOND ISLAND

LOCATION:Proposed trail system that coincides with existing village streets and dead ends.

CURRENT LAND USE:
- Single family residences
- Small City park with playground

OWNERSHIP:Private house lots, Diamond Island Association, Diamond Cove Associates, City of Portland, State of Maine (pier).

CULTURAL FEATURES:
- Architecturally significant cottage style residences
- Fort McKinley, a former military facility, is listed on the National Register of Historic Places.

NATURAL FEATURES: Western shore is predominantly mixed sand and gravel beach while the eastern shore is characterized by ledge bluffs.

VISUAL QUALITIES: High. Sparsely populated with well kept homes, rolling lawns, perennial beds, and unobtrusive grass / gravel roads. Adding to the visual interest of the island are the views from the western shore of Fort Gorges and Portland's skyline.

CURRENT ZONING:
IR - 1 Island Residential
IR - 2 Island Residential
IR - 3 Island Residential
I - B Island Business

ANTICIPATED USES: Residents and visitors exploring the islands.

INTERCONNECTIONS: Existing gravel roads and established shoreway paths are interconnected with one another.

RECOMMENDATIONS: Shoreway access network currently exists. This includes existing gravel roads and established paths to the shore. The roads to be included in the network are Nancy Lane, Waymouth Street, Spring Avenue, Meadow Avenue, Crescent Avenue, Nicholas Street, and the approved pedestrian trail that is included in the Diamond Cove Development. Signs should be provided to direct access users to appropriate shoreway trails.

LITTLE DIAMOND ISLAND

LOCATION: Proposed trail system that coincides with the existing village streets and dead ends.

CURRENT LAND USE: Single family residences

OWNERSHIP:
- Private house lots
- Little Diamond Island Association
- State of Maine (pier)
- St. Joseph's Convent and Hospital

CULTURAL FEATURES:
- Architecturally significant cottage style residences
- Walking path "streets" integrated into the natural landscape

NATURAL FEATURES: Old Growth Forest on the northern portion of the island, identified by the State Natural Areas Inventory. Its western shore is characterized by ledge and gravel beaches and the eastern coastline by ledge and mud flats.

VISUAL QUALITIES: High. Sparsely populated with well kept homes, rolling lawns, perennial beds, and unobtrusive grass / gravel roads. Adding to the visual interest of the island are the views from the western shore of Fort Gorges and Portland's skyline.

CURRENT ZONING:
IR - 1 Island Residential
IR - 2 Island Residential
I - B Island Business

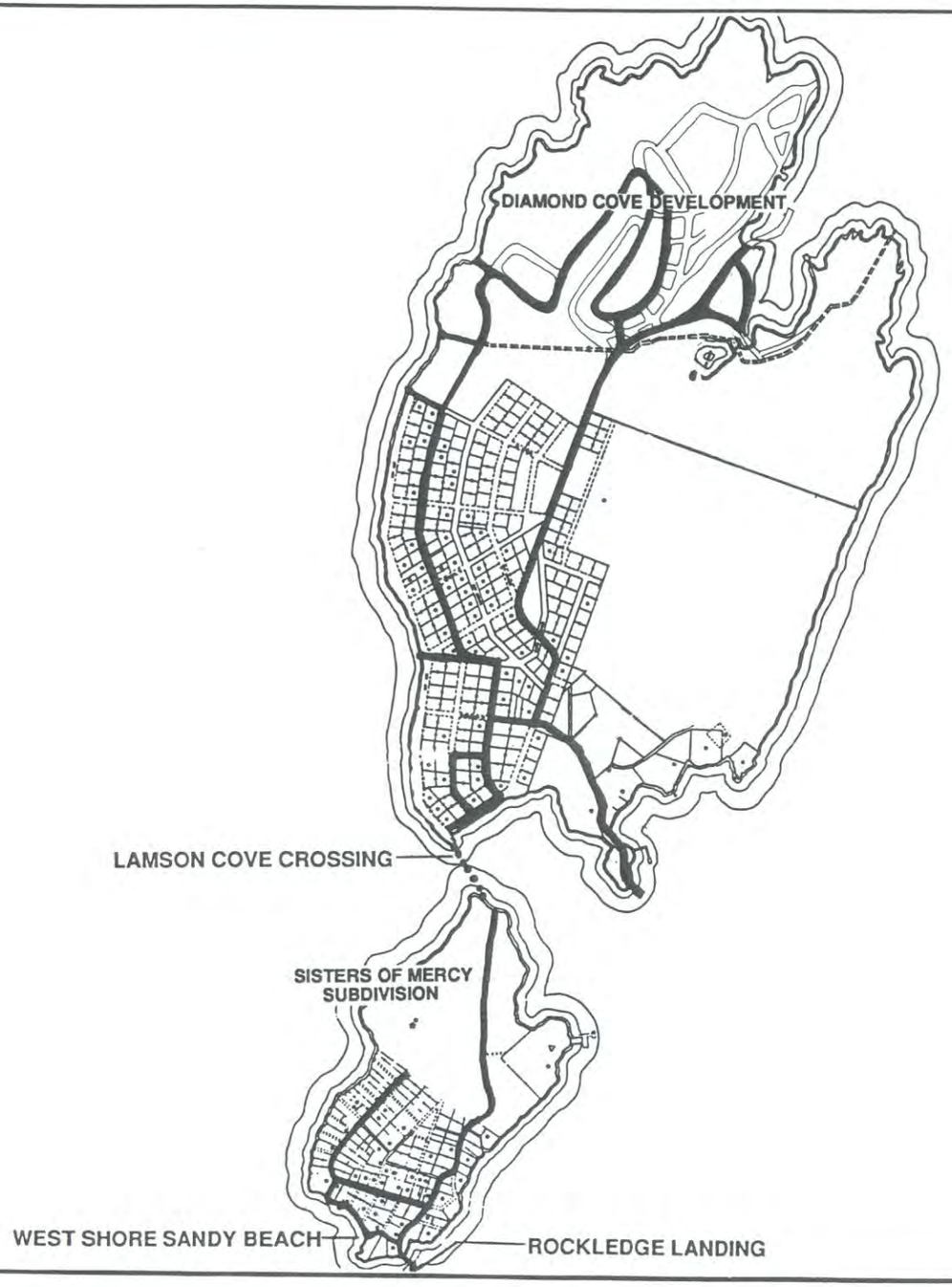
CURRENT LEVEL OF ACCESS: Public pier on southerly side of the island is served by CBITD and is connected with the island roadway. Tidal sandbar from Great Diamond Island during low tide.

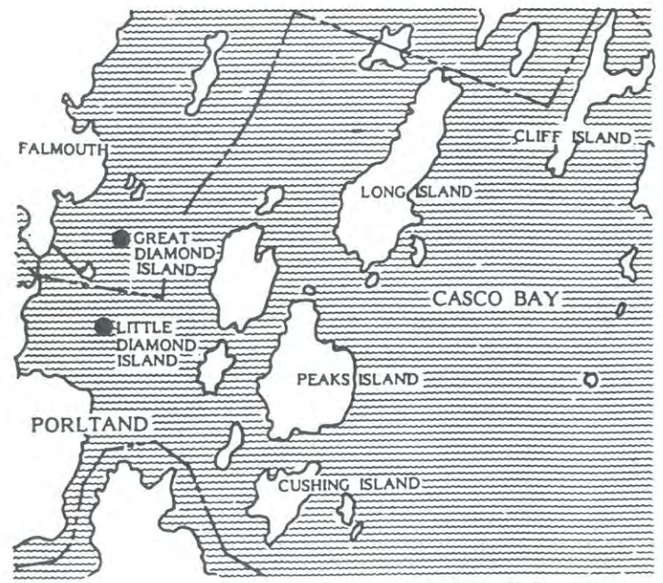
DEVELOPMENT PRESSURE: Approved residential subdivisions on the Ted Rand and St. Joseph's Convent and Hospital properties.

ANTICIPATED USERS: Residents and visitors exploring the islands.

INTERCONNECTIONS: Existing gravel roads and established shoreway paths are interconnected with one another.

RECOMMENDATION: Shoreway access network currently exists. This includes existing grass ("street") paths and established paths to the shore. Signs should be provided to direct access users to appropriate shoreway trails. The roads to be included in the network includes Rockledge Avenue and its extension through the Sisters of Mercy Subdivision, City View Road, Fessenden Avenue and Anderson Avenue.





KEY PLAN

GREAT DIAMOND ISLAND LITTLE DIAMOND ISLAND

3.3 PENINSULA ADDENDA

This section updates the recommendations that were made in 1983 in the Portland Waterfront: Public Access Design Project by Terrien Architects and Mitchell-DeWan Associates, to address current issues and recent development for the following segments of the Portland peninsula:

EASTERN PROMENADE TO BIW WATERFRONT

The City adopted the Management Plan - Eastern Promenade and Fort Gorges by Applied Economic Research, Land Plan Associates, and Childs Engineering, 1986. As an outgrowth of both earlier studies an East End Beach Redevelopment Plan is being prepared by Woodard and Curran, Inc. and Skinner and Lambe, Inc..

Waterfront residential development is presently under a City of Portland and voter initiated prohibition which has blocked a proposal from Eastern Point Associates for a mixed use development on the east side of Bath Iron Works. Included within the Eastern Point proposal were substantial waterfront access improvements.

The City should make every effort to secure for public use the existing unused railroad right of way from the B & M facility, across the trestle, along the Eastern Promenade and to Commercial Street. This part of the railroad line has not been used since the trestle was damaged by fire. Also the tracks leading to this line along Commercial Street are to be removed. Acquisition of this railroad property would provide the public an important link between the existing park, downtown, and water access and recreation opportunities.

COMMERCIAL STREET WATERFRONT CORE

Work is nearing completion on the walkway behind the Thomas Block and on Portland Pier. This is the first phase of the waterfront access system that was first proposed in the 1983 plan. Work is also in progress on the construction of the new ferry terminal for Casco Bay Lines at the foot of the Franklin Arterial. Original plans included a major pedestrian plaza to welcome residents and visitors to the City. Rehabilitation work is scheduled to begin on Commercial Street to implement a major program of street and pedestrian improvements.

The Central Wharf development proposed by the Liberty Group has undergone a substantial number of changes due to the City's concern for visual and physical public access to the waterfront.

The new Million Dollar Bridge should improve the present level of pedestrian access to South Portland, with wide sidewalks and a designated bike lane. Special attention should be paid to lighting, benches, railings, and other pedestrian amenities to make the new linkage to South Portland an exciting extension of both city's shoreway systems.

A short section of the existing bridge abutments may be able to be rehabilitated to form a hard-surface plaza overlooking the International Ferry Terminal and the Fore River, forming an extension of the Brackett Street Park. Additional study would be necessary to determine if this concept would be structurally feasible and visually compatible with the surrounding neighborhood and proposed bridge.

WESTERN PROMENADE

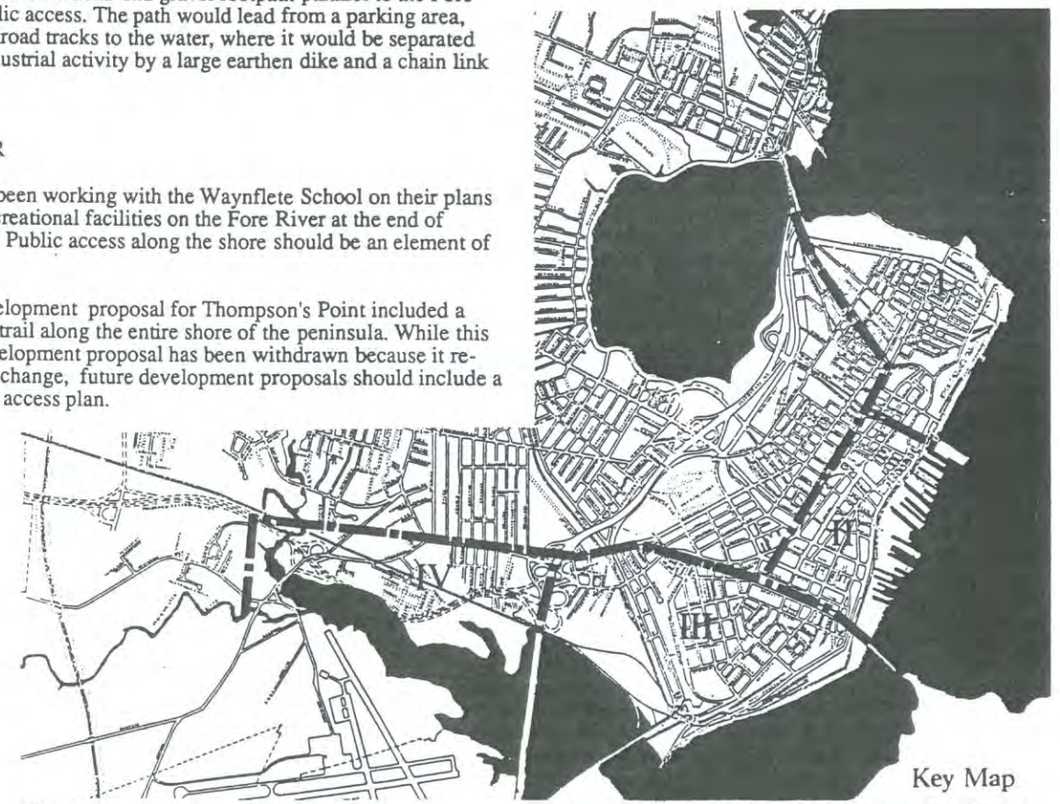
A new four unit structure has been built on Danforth Street at the base of Vaughn, blocking future access (and visual access) to West Commercial Street. A means of bringing pedestrian traffic from Commercial Street to the Western Prom should be provided. Alternatives include purchasing a ROW between the Commercial and Danforth Streets, or designating a footpath extending from Valley Street up to the Western Prom.

The Fore River Transportation Park, proposed by Merrill Transportation, has included a dead-end gravel footpath parallel to the Fore River for public access. The path would lead from a parking area, across the railroad tracks to the water, where it would be separated from their industrial activity by a large earthen dike and a chain link fence.

FORE RIVER

The City has been working with the Waynflete School on their plans to develop recreational facilities on the Fore River at the end of Hobart Street. Public access along the shore should be an element of this facility.

A recent development proposal for Thompson's Point included a public access trail along the entire shore of the peninsula. While this particular development proposal has been withdrawn because it required a zone change, future development proposals should include a similar public access plan.



KEY MAP: I EASTERN PROM II COMMERCIAL STREET WATERFRONT CORE III WESTERN PROM IV FORE RIVER

This illustration was copied from, Portland Waterfront Public Access Design Project, prepared by Terrien Architects and Mitchell - DeWan Associates, December 1983. Additional excerpts from previous reports can be found in Appendix G and Appendix H.

4.0 THREE PROTOTYPES

The following three sites were selected for preliminary site planning:

- Upper Stroudwater River trailhead, along the shorefront of Stroudwater Estates commercial park
- Fore River Trail near Stroudwater Crossing and the Maine Audubon's Fore River Sanctuary
- Peaks Island Consortium

This section of the report includes the preliminary site plans for each of these different segments of the master plan for the shoreway access trail system. These sites were chosen on the basis of the potential applicability to other situations within the City. They also represent some of the diverse environments the trail system will encounter from river banks and floodplains, to marshes, and island forests and coastline. As the plans will demonstrate the design response should vary as well to provide appropriate protection to the existing environment from increased pedestrian traffic. These three areas also stand a very good chance of implementation within the foreseeable future, given the nature of land development activities in the immediate vicinity and the ownership of the individual sites. The plans were annotated to show design intent and factors to consider in the actual layout and siting. Applicable design standards can be found in Section 5.0 of this report. The following section describes the design intent of the plans illustrated on the next three pages, giving suggestions for materials, surfaces, and treatments of the major components of the design.

4.1 UPPER STROUDWATER RIVER - HUTCHINS DRIVE TRAIL HEAD

Existing Trail: At the present time a well-worn dirt path is located on the top of the embankment, and serves as a very usable access way to the River. Improvements to the trail should include construction of a series of railroad tie steps on the Westbrook end of the trail, in an area of severe slopes, and selective thinning of the trees to ensure the safety of the trail user. A small portion of the trail may have to be relocated as the abutting lots are developed.

Proposed Trail: The plan calls for several trails to connect the parking area with the river and canue launch. Trails should be located so their maximum slope does not exceed 8% in any one segment. The surface should be a dark-colored crushed gravel to prevent washouts in spring floods and to facilitate proper drainage.

Canoe Launch: To avoid problems with high water in the springtime the canoe launch should minimize any projections into the river channel. The shoreline should be stablilized with railroad ties or pressure treated timbers, integrated into a few simple steps that will allow easy access to a canoe.

Lawn Overlook: At the end of Hutchins Drive the shoulder should be extended in a semi-circular form, fine graded and planted to a conservation mix lawn. Below the overlook the existing woods should be selectively thinned and limbed up to open up a filtered view to the Stroudwater River.

Seating: Rustic benches, constructed from a six-foot section of split logs, should be installed in three or four locations throughout the riverfront. Benches should be mounted on notched logs and secured with threaded steel rods. Surfaces that come into contact with users should be planed smooth, without removing the saw or ax marks.

Plantings: The plantings indicated on the plan have been designed to restrict access into the dense vegetation near the river and add some notes of seasonal color. Since the area seems to be heavily populated by wildlife the final selection should include species which are noted for their ability to provide food and cover.

4.2 FORE RIVER TRAIL BOARDWALK

Boardwalk: Design of the boardwalk should be performed by a professional engineer, after a thorough evaluation of the site, with a special emphasis on subsurface conditions and the impacts of ice and tidal action. The sketches included with the plan indicate that the boardwalk should elevate the user off the surface of the marsh two or three feet to avoid the necessity of a guardrail. The walk should be constructed of pressure treated members, with a 2x6 decking, using a continuous 2x4 member for a wheelstop. Optimum width of the walk is six feet, measured on the outside of the wheelstops. The boardwalk design should incorporated a series of curved sections to meander through the marsh and add visual interest for the user and observer alike.

Walking Trail: As the trail descends the slope towards the marsh a series of switchbacks may have to be incorporated into the design to minimize the slope on the trail. Simple posts and rails should be installed on the outside of the switchbacks to keep users on the trail and prevent riverbank erosion. The trail should be five feet in width, and constructed of woodchips. except in areas of steeper slopes, where crushed gravel would be more appropriate.

Congress Street Crossing: The beginning of the trail will cross Outer Congress Steet to gain access to the Stroudwater Crossing parking lot and the access into the sanctuary land beyond. A painted crosswalk should be installed on Congress Street after an evaluation by the City's Traffic Engineer. Warning signs should be posted to alert motorists to the pedestrian crossing.

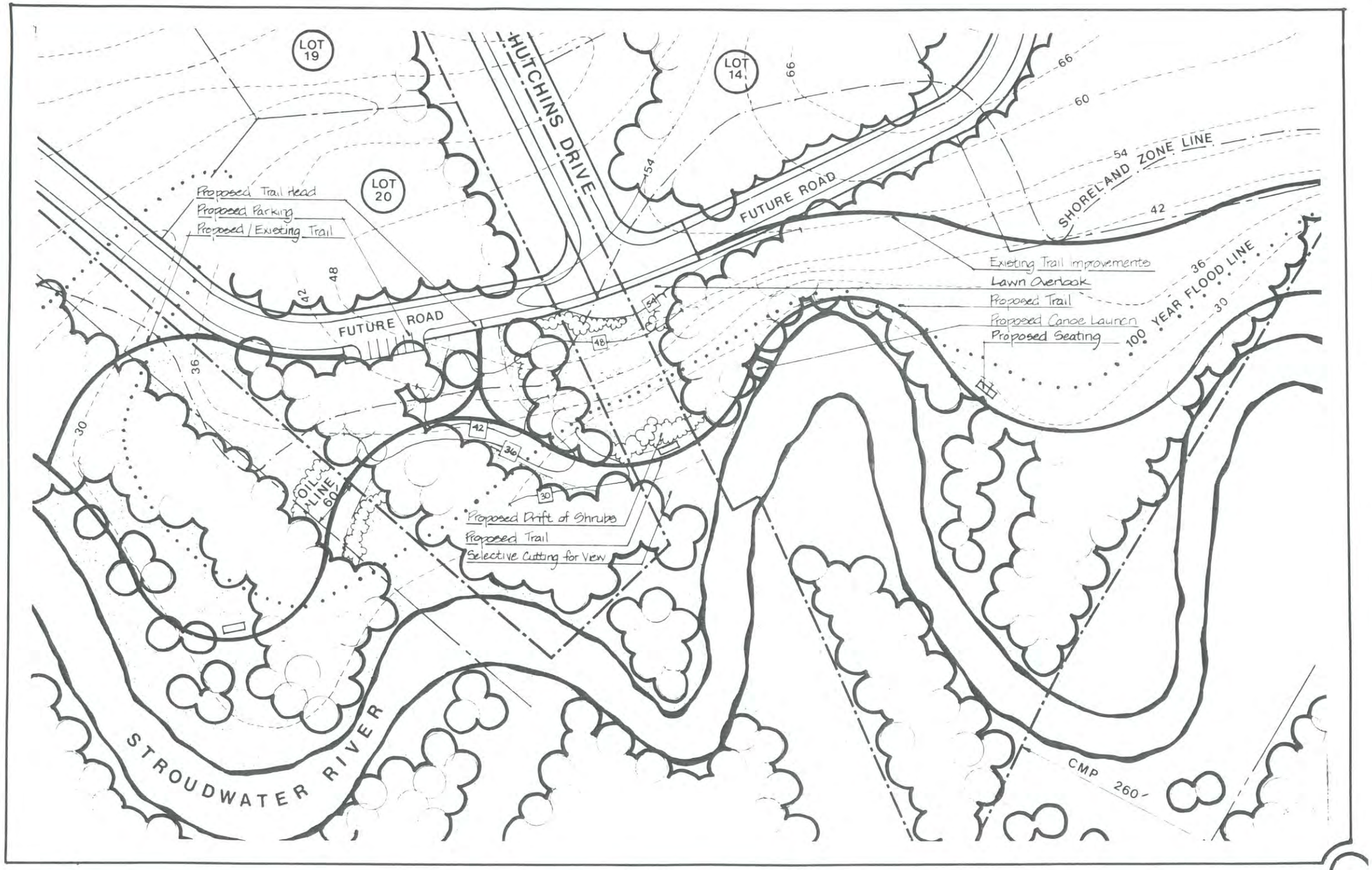
4.3 PEAKS ISLAND CONSORTIUM TRAIL

Walking Trail: At the present time a series of well-worn paths arelocated on the top of the bunkers, in the woods and fields, and along the waterfront. Excellent views out to the ocean can be found at the top of the bunkers, looking over a series of shrub wetlands and rolling meadows. Improvements to the trail should include replacement of a series of steps that ascend the steep slopes on the bunker, installation of sturdy benches or sitting platforms, erosion control measures on the steeper portions. Some sections of the existing trails near the bunkers are severely overgrown and virtually impassable. Brush should be cut back to allow for year-round access.

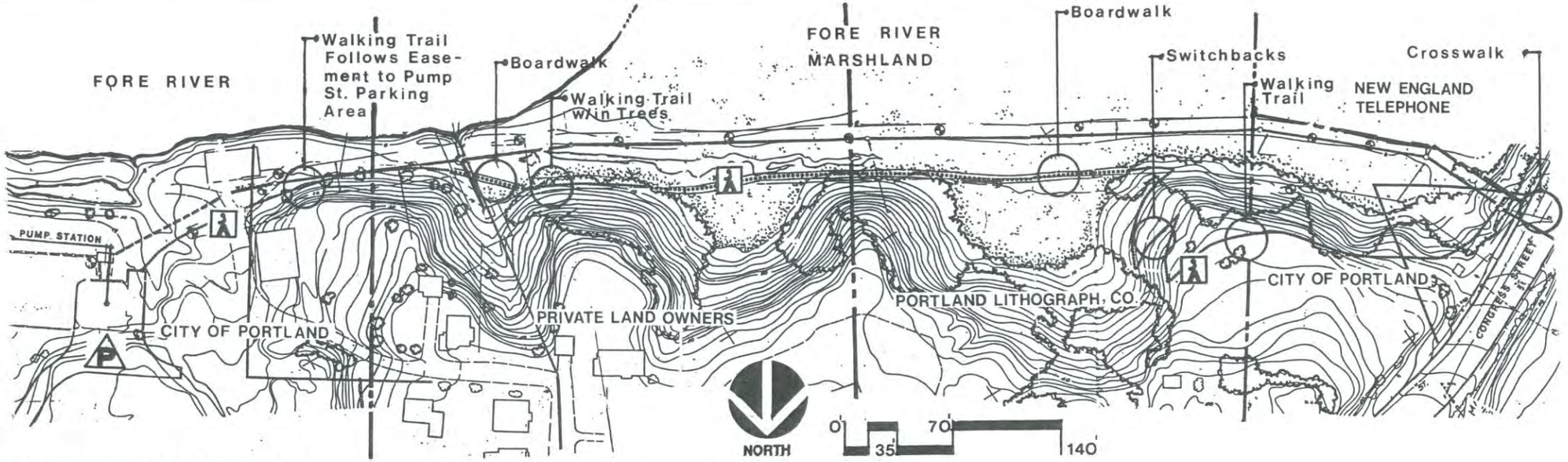
Markings: Trail markers should be kept very simple and unobtrusive. The AMC recommends the use of small (3-4" diameter) can tops, painted with a background color to add a slight amount of contrast. A numerical or letter code painted or screened onto the marker should be used to key the trail to a map of the island. Markers should be located every 100-300 feet, depending upon the number of intersections and the density of the vegetation.

Management: A management consortium, consisting of groups that have an active interest in the recreational use of Peaks Island, should be organized to assume responsibility for the development and maintenance of the trail system. The City should take an active role in helping to organize the consortium, providing technical staff, meeting space, mapping, aerial photographs, and other tools and support to get the effort off the ground.

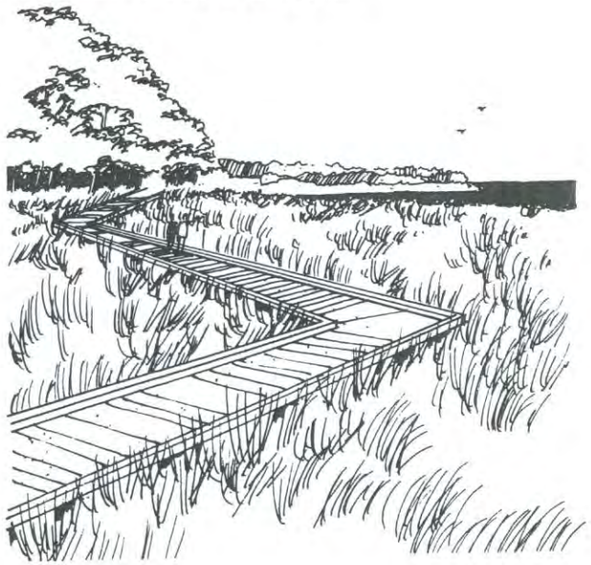
Access Restrictions: The site plan indicates several areas for Emergency and Maintenance Vehicle Access Only. These are primarily existing gravel roads that have traditionally been convenient places to abandon cars and dump miscellaneous trash. The City should install heavy duty posts and chains,with appropriate signage, to limit unauthorized access to these trail sections. In addition, all dumped material and abandoned vehicles should be removed a soon as they appear to demonstrate the City's active interest in maintaining the visual quality of the area.



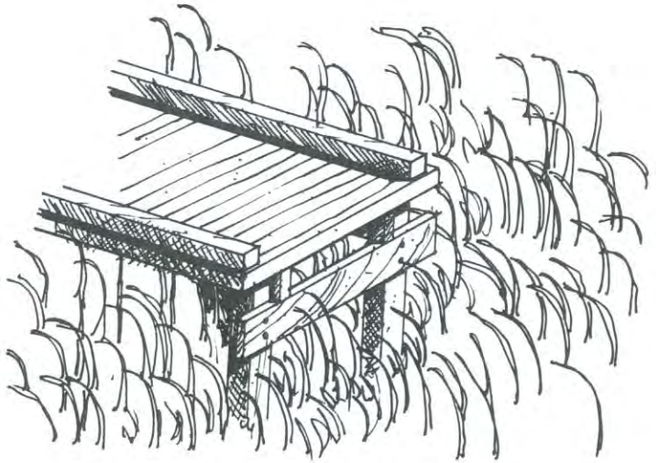
4.1 **UPPER STROUDWATER RIVER - HUTCHINS DRIVE TRAIL HEAD**



BOARDWALK LOCATION PLAN

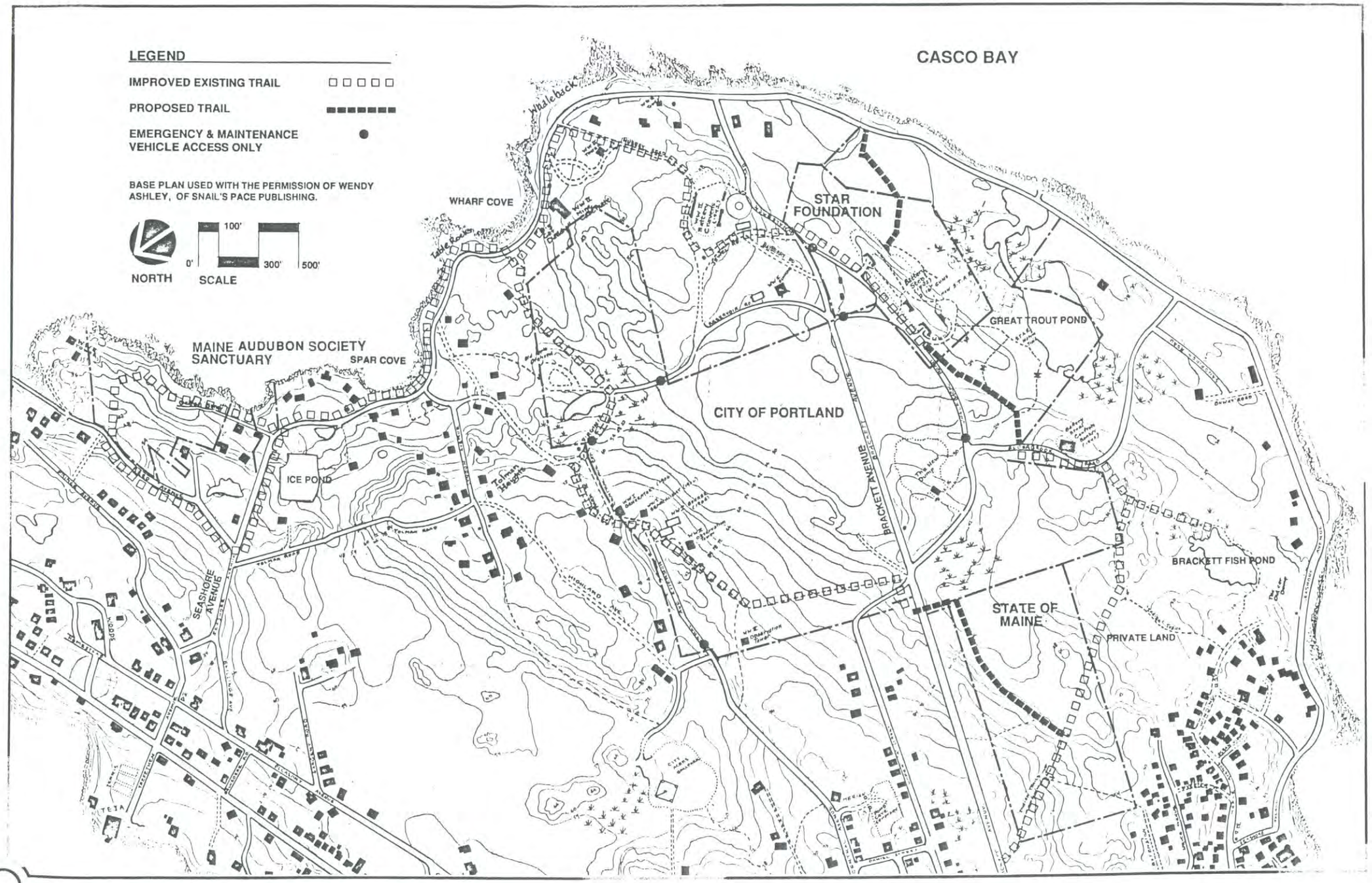


BOARDWALK PERSPECTIVE



BOARDWALK PERSPECTIVE / SECTION

4.2 FORE RIVER TRAIL BOARDWALK



4.3 PEAKS ISLAND CONSORTIUM MAIN TRAIL

5.0 LAND ACQUISITION METHODS

The land included within the shoreway plan probably will fall into four broad categories:

(1) land that is publicly owned;

(2) land over which the public presently has right of access as the result of an easement or other agreement;

(3) land that is privately owned but which the City hopes to acquire in fee simple;

(4) land that is privately owned but over which the City hopes to acquire an easement for access.

The third and fourth categories of land will be the most difficult to fold into the shoreway access plan: the purchase of land in fee simple because there must be a willing seller and because of the cost to the public; and the acquisition of easements across private property because there will be concerns on the part of private property owners about loss of privacy, liability of the property owner, and similar concerns.

There has been a number of property owners who have already expressed interest in participating in a shoreway access program. Based on previous experience, it is likely that most of the shoreway linkages will be in the form of easements voluntarily provided by property owners. For a developer or corporation this provides an excellent opportunity to participate in a very visible community program. The publication of the shoreway plan will help immeasurably in seeking the participation of property owners.

Acquisition in fee simple: The major question—assuming that a landowner is willing to sell his or her property for this purpose (and assuming that a property owner willing to sell only enough land for the shoreway is not placing his lot into a nonconforming situation as a result)—is funding. Possible sources of funds include:

(1) Local tax dollars, either through the general fund or the capital improvement program. The viability of these sources depends directly on the priority given the shoreway access program versus other City needs.

(2) Coastal Zone Management funds, including (a) a waterfront action grant (competitive; 50-50 match; limit of $50,000 per community) which can be used for land acquisition for public access, and (b) if there appears to be reason for it, a regular CZM planning grant for the purpose of deed research that might reveal existing public rights-of-way to the waterfront. If a waterfront action grant is sought to implement a small part of a large project, it would be necessary to select a segment of the shoreway that can stand on its own.

(3) Land and Water Conservation grant, funds for which have been severely cut ($300,000 available statewide in 1987), so that there is an upper limit of $75,000 per community. The community must match with 50% or more of local, private, or certain federal funds (CDBG is an eligible match).

(4) State coastal acquisition funds, depending on the rules and regulations established for the distribution of the recently approved state bond issue of $35 million.

(5) Private donations or below-market sales of the shoreway access lands in return for income tax considerations or for philanthropy. If the City chooses to pursue this route, it would be important to call upon an experienced organization such as the Maine Coast Heritage Trust as an advisor both to City and landowner. The possibility of private donations of land (or easements) will be enhanced if interested nonprofit organizations, such as land trusts, are made an integral part of the shoreway access program. Some property owners inclined to make donations of land would prefer to put the land into the hands of such a private nonprofit, whose charter strictly limits what can be done with the land and whom they therefore trust to give the land absolute, long-term protection.

Acquisition of easements: While easements may be purchased using the same types of funding sources as described above (except Land and Water Conservation funds), the main thrust should be to seek donations of easements by property owners whose lands are to be crossed by the shoreway. Easements raise two sets of issues: privacy issues and liability issues.

Privacy must be addressed through design, management, and education. Design must place the shoreway in as unobtrusive a place as possible while still meeting its objectives, and it must take particular care that lighting, landscaping materials, fencing/buffers, etc., are sensitive to the needs and desires of the property owner. Management must adopt and strictly enforce rules regarding hours of operation (daylight only); properly care for the walkway, including litter control; strictly prohibit motorized vehicles; and offer the necessary security measures, including routine patrols along the shoreway. Education must allay fears of huge increases in public traffic and convince property owners of the soundness of the design and management provisions of the plan. It can point to experience elsewhere, which shows no increases (in fact, in some cases reductions) in vandalism as the result of public access ways. Such documented experiences are available from the long-time public access program of the California Coastal Commission as well as projects such as the Spring Point Shoreway in South Portland.

The liability issue appears already to be covered, in large part, by state statute. The liability questions faced by the property owner is: What is his/her liability for personal injury or property damage suffered or caused by an easement user (a) within the easement premises, and (b) elsewhere on the owner's property? These issues are more fully discussed in Section 7.0.

Acquisition through regulation: This is not a type of acquisition (as fee simple or an easement is); rather, it is a way to achieve acquisition. Through the City's police powers, it is possible (though not yet entirely certain, without qualified legal analysis) to use the techniques of exactions and development fees to acquire or help finance the acquisition of shoreway lands.

Exactions—the requiring of developers to finance, build and dedicate to public ownership certain improvements—are commonly used by Maine's towns and cities in their subdivision regulations for such infrastructure as streets, sidewalks, sewers, and drainage facilities that are either on-site or directly adjacent to the development. There has been less experience (but certainly some) with exactions for parks and off-site facilities. In the more common exactions (on-site streets, sewerage, etc.) the "rational nexus" of improvements—that is, their direct relationship to the demands of the development—is readily evident. The rational nexus criterion also is evolving as the test for off-site exactions. The keys to meeting the test appear to include (1) the existence of a master plan for the improvement, showing how various small parts of the plan fit into the whole, and (2) exacting only that which bears a direct relationship to the demands or needs or benefit of the development.

The shoreway master plan should fulfill the first of these requirements; and to the extent that the planned shore rational nexus probably can be established. In any case, experience elsewhere suggests that, especially where the development is nonresidential, developers willingly comply with the master plan as long as such cooperation assists in obtaining timely approval of their projects.

Development (impact) fees are a possible way of obtaining developer contributions toward implementation of a master plan when the shoreway does not actually cross the development parcel but it can be assumed that the inhabitants of the development are potential users of the shoreway. This tool is legally untested in Maine. But one of the major tests probably is whether the fee is being used as a tax on one part of the population (developers and their subsequent buyers or tenants), which would be illegal, or as a fee for which there is a rational nexus or connection to the development. To qualify as a legitimate tool—in the absence of enabling legislation from the state—the fee must be assessed on all new development (typically triggered by the issuance of a building permit); must be in direct proportion to the burden to be placed on the facility by the development; must be in accord with a master plan; and must include a provision that the fee will be returned if the improvement is not built within a reasonable period of time.

Financing the Improvements

Once the various segments of the shoreway access are acquired, the improvements recommended in this plan need to be financed. The sources of funds for land acquisition typically also are available for improvements on the land. In addition to federal and state grants, which are and probably will continue to be limited, it will be necessary to emphasize local sources. This includes the City's C.I.P., through which implementation of the shoreway plan can be phased

over a number of years. But there may be some creative sources to be employed as well, such as:

* the City's gift catalog.

* an Adopt-a-Park program, in which corporate or other sponsors could "adopt" a particular segment of the shoreway, finance the improvements according to a comfortable schedule, and receive recognition for it.For example, Blue Cross and Blue Shield of Maine donated a fitness trail for the Back Cove Walkway. Deering Ice Cream, Inc. provides funding to have the Back Cove Walkway plowed during the winter.

* agreements with developers; as indicated above, many developers are willing to negotiate public amenities that both enhance their own projects and that facilitate project approvals.

* an active Conservation Commission (see Section 6.0, "Management") that is empowered to sponsor fundraising efforts, in cooperation with neighborhood stewardship groups, land trusts, and similar private organizations.

6.0 MANAGEMENT

There are a host of management issues in any recreational facility. If anything, they become more complex when the facility is a linear park that runs for a number of miles to various parts of the City, partly on public land and partly on private land.

The management issues that should be addressed as part of an implementation plan include:

(1) responsibility for overseeing the acquisition and access way development effort;

(2) responsibility for day-to-day maintenance;

(3) responsibility for ongoing security and patrolling, and for adoption and enforcement of park rules—a crucial issue from the point of view of private property owners affected by the shoreway;

(4) cost of operation and maintenance, including security; and

(5) seasonality of operations.

Overseeing implementation: All of these categories of management issues are important; however, none is likely to be consistently or satisfactorily addressed unless an entity within the City family is assigned the responsibility for overseeing the effort and for keeping a pulse on its implementation.

There are arguments, pro and con, for that responsible entity to be a City department, such as the Department of Parks and Public Works or the Planning Department. The arguments for it are the clear lines of responsibility already established, the availability of city staff expertise, and the established presence of such departments as line items in the City's budget, which should enhance the chances of funding the shoreway. Arguments against it are that the staffs in most City departments already are stretched to their limits with ongoing responsibilities, the likely difficulty in assigning the task to a single person who can provide long-term continuity, and the fact that community involvement (which will be critical to the success of the plan) would not be as natural if the program is part of the City's bureaucracy.

Similarly, there are arguments for and against vesting oversight of the program with a volunteer nonprofit organization, such as a land trust or conservation group. In favor of this approach would be the natural commitment of the group to the plan's success and the likelihood of strong volunteer, fundraising and other grassroots efforts that would reduce the cost of implementation. Such an organization is not encumbered by the rules and regulations under which government must operate. Therefore, a trust can be more flexible when dealing with a landowner who has special needs. Arguments against this approach are the fact that volunteers, though well intentioned, are nevertheless volunteers, and there is no guarantee of follow-through; and that a shoreway such as that proposed has serious enough management issues—and is itself a serious enough policy matter—that the City must accept some baseline responsibilities for implementation, maintenance, and security.

The optimal approach is one that combines the strengths of these two alternatives. Therefore, it is recommended:

* that the City seriously consider establishing a Conservation Commission to serve as the official City body charged with oversight of the shoreway access plan, including the acquisition of easements over privately held segments;

* that the key City departments (Public Works and Parks, Police, Planning) each assign a person to the Commission as an ex officio member and to assist with routine staffing functions; and

* that the Conservation Commission, once established, actively work with neighborhood stewardship groups—those that may already exist as land trusts or similar groups, groups that may already own access way land such as the Audubon Society, and those that the Commission may have to help organize—to assist in various operations, publicity, programming, and maintenance functions.

The City already is empowered by state law (Title 30, Section 3851, M.R.S.A.) to establish a Conservation Commission. It therefore would have an identity and legitimacy that another ad hoc appointed body might lack. It is empowered by state law to accept gifts in the name of the City and to acquire land with the City Council's approval. Its duties are well focused on the proper use, protection, and improvement of open spaces, and it is the type of official City body around which citizens interested in the shoreway concept can rally. At the same time, it would be a City body with ties to the relevant City departments and, presumably, would have legitimate opportunities to make its case for City operating and C.I.P. funds at the appropriate times.

The Conservation Commission, according to state law, may have up to 7 commissioners appointed by the City Council. It would be important that these commissioners represent those with vital interest in the shoreway and how it is implemented.

Maintenance: The maintenance of existing City recreational facilities is the responsibility of the Department of Parks and Public Works. The principal recreational maintenance activities include mowing, litter control and trash removal, major repairs to facilities, and maintenance of plantings. The maintenance tends to be seasonal, but during the winter months, the staff does winter maintenance for the school department. According to the Superintendent of Parks and Islands, the present 20-person staff is stretched to its limit, especially in the summer.

The City—specifically the Department of Parks and Public Works—must be enabled to provide basic maintenance for the shoreway access system. This is already the case with those parts of the system in the urban part of the City already in place, but capacity will need to be expanded for remote parts of the system. The Conservation Commission and neighborhood stewardship groups can assist, and even assume primary responsibility for maintenance tasks, but the capacity must be available in the Department of Parks and Public Works should that assistance fail. This probably means some additional temporary summer employees in the Department, and/or the creation of new year-round flexible positions to be shared between the Parks and Public Works staffs.

Creation of new year round positions would enable additional park maintenance work to be completed during the summer and would assist snow removal operations during the winter. In addition,according to the Department of Parks and Public Works Director, would be a need for equipment to be acquired. Currently the City is in need of 3 large lawn mowers, two slope mowers and 3 or 4 turf sweepers. Acquisition of this equipment would assist maintenance of the existing park system as well as any other maintenance responsibilities of the trail system. There is likely to be some interest by neighborhood and community groups in assuming certain maintenance responsibilities for portions of the trail system. A letter of understanding should be developed so that the responsibilities of each party is clearly defined.

The Department of Parks and Public Works is in the process of researching the potential costs of operation and maintenance, and the formulation of an illustrative budget should be a high priority for the Conservation Commission, in cooperation with the Department of Parks and Public Works. For illustration, the City of South Portland's Parks and Recreation Department estimates the cost of maintaining a 2-mile length of a similar public walkway/access system at $30,000 per year; and to maintain a fully implemented, 20-mile system at $125,000 - $150,000 per year, with 4 additional employees and equipment. Depending on the level of volunteer effort, these figures may or may not be representative of Portland's needs.

Security: The Portland Police Department presently patrols all of the City, including recreational facilities. Police officials indicated that they do not think new patrols will have to be added to serve the access way system, although the existing patrols would need to be adjusted.

The Police Department's major concerns about an access way system are:

* A design that keeps motorized vehicles, including ATVs, off the trails;

* A design that separates the walkway from main roadways;

* Provision of lighting in parking areas;

* Enactment of a "dusk-to-dawn" ordinance so that the system is open during daylight hours only;

* The posting of park rules so the police can enforce them;

* Concern that the development and promotion of new "remote" areas will open up new places for congregating and partying; and

* Provision of restroom facilities that are staffed (by other than the Police Department), both to keep the facilities clean and to discourage vandalism.

In addition to the normal police patrols, possible security measures include:

* A park ranger program to patrol the more remote parts of the trail network. Such a program is used at the South Portland Spring Point Shoreway during summer months. The program uses vocational technical students who are in law enforcement programs. The park rangers are not empowered to make arrests, but are equipped to communicate with police officers should the need arise; their presence itself acts as a deterrent.

* Neighborhood stewardship groups acting as the "eyes and ears" for the Police Department. The department points to the Tyng-Tate Park as a good example of how this has worked well. This should be an integral part of the Conservation Commission's management effort.

* A mounted patrol would be appropriate for much of the trail network, but would not be appropriate for more

remote, less developed trails that would be vulnerable to damage by the horses.

* Finally, the City may wish to consider phasing in an emergency voice communications system along the trail network as it is implemented. Such a system, if deemed necessary, would be an effective security device, but may cost on the order of $1,300 per box plus wiring.

Programming: The purpose of the shoreway access plan is not highly structured recreation or the attraction of tourists; rather, it is to provide informal leisure along Portland's shoreline for the City's residents. The access way's main use will be ad hoc and unstructured.

Nevertheless, segments of the shoreway lend themselves well to more organized recreation and education. Examples of organizations that could be expected to use the system in a programmatic way include:

* the City's Recreation Department, which might sponsor hikes and lectures;

* the Audubon Society and similar groups, which might use the system for hiking, birdwatching, and nature interpretation;

* the University of Southern Maine, which might use it for academic programs, lectures, and exercise programs;

* the School Department, which might use it for educational purposes;

* outing clubs, which might organize hiking and canoeing trips along the system.

7.0 LEGAL TOOLS

PUBLIC ACCESS PROPERTY INTERESTS

There are a variety of options available to land owners who are interested in participating in the Shoreway Access Program. These options range from the granting of an easement to City ownership of a Trail Segment . The broad of range of property interests provides flexibility in implementing the shoreway access system since the type of conveyance can address the specific needs and concerns of an individual property owner. Below is a summary of the these property interests.

1. Fee Simple - The City would become total owner of the property and would assume all responsibility for all duties of ownership, including maintenance and upkeep. This would be accomplished by means of a deed, or a bequest in a will.

2. Life Estate - This would be measured by someone's life -possibly grantor's. The City would be entitled to ordinary uses, would be responsible for maintenance and liable for damages to the property.

3. Joint tenancy - This interest is owned together with another person; when one joint tenant dies, the other succeeds to his interest. All joint tenants have the same right of ownership - each has a right to possession of the whole, which is subject to the rights of the other co-tenants. This interest must be created by an instrument (e.g., a will or a deed), which specifically states that the persons shall be joint tenants with a right of survivorship. The advantage to this is that the City would automatically become sole owner upon the death of all other joint tenants and the property would not pass through probate. Certain actions by one of the tenants may sever a joint tenancy: a sale of a tenant's interest, the execution of a mortgage on the property by only one of the joint tenants. This severance results in a tenancy in common.

4. Tenancy in common - This interest has no right of survivorship. The tenant can sell interest to another, and determines to whom the property will pass upon his death. Tenants in common have the right to use the whole of the premises, subject to the co-tenant's right to possession.

5. Easement - An easement gives the holder the right to use property. The owner of the property continues to have full ownership, but cannot interfere with the right of the easement. This interest should be created by a written instrument and can be of limited or unlimited duration. The holder of this type of easement cannot convey it to someone else. Some may choose to convey property to the City and retain some sort of easement over that property by an express reservation in the deed.

6. License - A license is an informal permission to enter upon someone's land; it is not required to be in writing. A license can be revoked by the grantor at any time. The holder cannot transfer the license to another party.

Property owners should be advised to consult with a lawyer or an accountant about potential tax consequences or benefits.

LIABILITY ISSUES

14 M.R.S.A. Sec. 159-A limits liability for recreational or harvesting activities. This statute states that an "owner, lessee, or occupant of premises shall owe no duty of care to keep the premises safe for entry or use by others for recreational or harvesting activities or to give warning of any hazardous condition, use, structure or activity on these premises to persons entering for those purposes." Premises are defined as improved and unimproved lands, private ways, building and structures on the land and waters on, though or adjacent to land.

Under this statute, permission to use land for one of these purposes does not extend assurance to the user that the premises are safe nor does it create a duty of care. The giver of the permission does not thereby assume responsibility for the person to whom the permission has been granted.

Liability still exists under this section for "willful or malicious failure to guard or to warn against a dangerous condition, use, structure, or activity". Liability also exists when consideration is paid for the permission (except for consideration paid by the State). In addition, liability exists when an injury is caused by a person who received permission to use the land to a person to whom the giver of the permission, the owner, the lessee or the occupant owed a duty to keep the premises safe or to warn of danger.

This statute should cover most situations where public access to the shore is allowed over private property. Neither the owner of the land nor the City would be liable for any injuries occurring on the property under this statute. The contention that the list of recreational activities outlined in the statute is complete and that any other activity not included therein is not covered by the statute has been rejected by the courts. In that case, the court stated that if an injured person's presence fell outside of the recreational permission, that person would have to prove some other authorization on the land or would be a mere trespasser. Under Maine law, a landowner owes no duty of care to a trespasser except to refrain from wanton, willful, or reckless negligence.

Persons who are on the land for purposes other than recreational use would not be covered by this statute. For example. if the owner of the land had someone come onto the property to repair something, that person would be entitled to the same standard of care normally extended to an invitee. Thus, this statute only covers the recreational user. It does not cover everyone who is likely to enter onto the land. The owner will have the same responsibility to these people as existed before the granting of the shoreway access.

If a person left the area designated for public access and entered another area of private property, that person would be a trespasser and entitled to the limited duty of care outlined above. The landowner might also be able to claim protection under the statute; however, the effect would be substantially the same. There is a slightly different standard of care when the trespasser is a child who is harmed by an artificial condition upon the land. The possessor will be liable in that case if : 1. he knows or has reason to know the place where the condition is located is one where children are likely to trespass; 2. the condition is one of which the possessor knows or has reason to know and which he realizes or should realize will involve and unreasonable risk of death or serious bodily injury to such children; 3. the children do not appreciate the risk because of their age; 4. the risk to children outweighs the utility to possessor of maintaining the condition and the burden of eliminating it; and 5. the possessor fails to exercise reasonable care to eliminate the danger or otherwise protect children. This type of situation is best illustrated by an uncovered well on the property. If a child should wander from the area where public access is allowed to an area where there is an uncovered well and subsequently falls into the well, the landowner could be liable. In order to avoid this liability, the landowner would have to place some type of fence around the well and possibly also have to post signs warning of the danger. The owner would probably have to maintain this fence and make sure that it was not vandalized or taken down so that access to the well would be possible . This duty,however, does not extend to natural conditions on the land such that if there were some type of large rock and children were hurt by playing on it, the owner would not be liable for their injury.

It is difficult to imagine any situation where someone who allows public access to his land for recreational purposes will not be covered by 14 M.R.S.A. Sec. 159-A. However, if such a situation should arise, persons entering on the land would either be trespassers subject to the limited duty outlined above or would be invitees. This would depend upon the owner's role in that person being on the land whether he invited them or whether they simply came on their own. If the owner made it known to the public that his land was open for this use, even those persons whom he did not personally invite would probably be classified as invitees. The duty owed by a landowner to invitees is to exercise reasonable care to keep the premises reasonably safe. This is a higher standard of care than that required under the statute or the duty owed to a trespasser. While it is not likely that this situation would come up given the current state of the law in Maine, it may be wise to warn landowners who are considering participating in the public access program that this is a possibility even though it is not likely that this would happen.

SAMPLE EASEMENT

A sample easement has been developed by the City's Corporation Counsel and is shown in Appendix C. This particular form has been drafted to include an easement for pedestrian access as well as a conservation easement for the property itself. Depending on the interests of the property owner, a conservation easement may or may not be included.

It should be emphasized that the final language of an easement may vary from the sample form depending on the characteristics of a property and the concerns of an individual landowner.

APPENDICES

APPENDIX A - METHODOLOGY

The Waterfront Access Plan is the result of a collaborative effort between the City Planning Staff, the City Parks and Public Works Staff, the Recreation Superintendent, the City's Corporation Counsel, and the consultant team of Mitchell-DeWan Associates and Market Decisions, Inc. The study was organized into four major components, each dependent upon material generated in previous phases. The following is a summary of the methodology used during the course of developing the plan.

PHASE 1 - INVENTORY AND BACKGROUND RESEARCH OF SHOREWAY RESOURCES

Background Research

The initial phase of the study involved the collection and mapping of existing data on the waterfront and related lands, including:

Ownership patterns within the study area:

- City property
- Dedicated streets
- Vacant property
- Recreational sites and open spaces
- State property
- Federal property
- Railroad property
- Utility company land and easements
- Conservation group holdings and easements
- Private property

Pedestrian access points
Potential easements for pedestrian identified
Water access points
Zoning districts
Status of development proposals
Critical Areas Program registered sites
Coastal geologic features
State Planning Office visual studies
Medium intensity soils mapping
COG Land Use Maps

A considerable number of related studies have been performed on the waterfront over the last few years by the City and outside consultants. In some instances, e.g. the Eastern Promenade and the Commercial Street waterfront area, recommendations made earlier have been used as the basis for the framework for this report. All earlier recommendations were field checked to ensure their continued viability, given the changes to the zoning ordinance and the general pattern of development in the City over the past several years.

The following were among the studies reviewed and incorporated into this document. A complete listing of the related documents is included in the Bibliography.

Olmsted Plans for various parks and open spaces Portland Public Access Design Project Study Eastern Promenade Management Study
Portland Islands Land Use and Zoning Study
Fore River Sanctuary Management Study
City recreation plans and planning documents for various parcels
COG Public Access Inventory Study

In the past several years the adjacent communities of Falmouth and Westbrook have also realized the value of providing the means to ensure continued public access to their waterfronts. Meetings were held with appropriate community officials to determine the extent of and commitment to planning strategies for common waters (Presumpscot and Stroudwater Rivers).

Conceptual Plan

One of the most striking elements of the work that was accomplished in the Baxter/Olmsted era was the commitment to a vision of an interconnected park system to make open space available to everyone within the City. The success of the Eastern Prom, Deering Oaks, Western Prom, Back Cove greenbelt is one of the most outstanding legacies of that vision.

In developing a conceptual framework for this study the Olmsted plan was reviewed to determine where it could be expanded to incorporate more of the City, and where gaps should be filled in to make the looped system complete. In its ideal form, as illustrated in this report, (See section 2.2 - Present Vision), the Concept Plan for open space and linkages describes a series of spokes, radiating from Back Cove, joining the major open spaces with identified neighborhoods and significant public facilities.

The realities of existing land use patterns and proposed development have led to the conclusion that the ideal system would require significant acquisition on the part of the City and a restructuring of portions of the zoning ordinance.

This should not dispel a commitment to the concept plan. Application of the principles should be a consideration in future studies, Site Plan and subdivision reviews, and changes to the ordinances. With the plan in hand the City will be in a better position to guide volunteer efforts on the part of property owners, who will be able to see how portions of their land fits into an integrated whole.

Inventory Form for Field Evaluations

A field evaluation form was developed that was then filled out during field investigations and supplemented with on-site photographs and office research. These forms served as the basis for on-site recommendations for future improvements. The form examined six major criteria which would have a bearing on future locations for water access points:

Compatibility
Site Characteristics
Construction Considerations
Access
Land Availability
Corridor Continuity

See APPENDIX B for an example of a form.

Field Survey of Selected Sites

The consultant and the City Planning Staff conducted field inspections of selected sites and corridors within the study area, recording observations on the inventory form. Sites selected for evaluation were derived from the initial research, air photo interpretation, and a review of previous mapping and planning efforts. An attempt was made to visit all points of potential water access, concentrating on those sites and/or linkages which showed the most initial promise to meet the established goals.

A significant portion of the water access opportunities along the Presumpscot River are limited by the steep banks and remote locations. The field evaluations in this situation were performed by canoeing the length of the river in the study area, with periodic ascents to view the landside terrain.

Field work for this project assessed:

Current land use
Presence and condition of structures
Adjacent land use and condition
Neighborhood land use
Accessibility (mode, difficulty, obstacles)
Surface gradient and drainage
Vegetation patterns and types
Development potential
Water characteristics (edge condition, gradient of shoreline, clarity)
Visual qualities of site
Views from site
Ecological characteristics
Degree of modification
Recreational use potential

PHASE 2: WALKWAY AND ACCESS PLAN

Schematic Walkway and Access Plan

Based on the information collected during Phase 1, alternative walkway and access plans were developed. At this level the planning and review process concentrated on the concepts and general locations for walkways and access points, with consideration given to the actual implementation or structuring. All walkway locations were evaluated to test their compatibility with the Concept Plan described earlier.

The findings from the Portland Waterfront Public Access Design Project and the Eastern Promenade Management Plan were reviewed and integrated into the study, with additional recommendations as needed.

Schematic maps were prepared, using screened copies of the 1"=200' air photos from the Greater Portland Council of Governments (GPCOG) to illustrate key findings and recommendations. The maps show existing and potential linkages and open spaces, the major opportunities for the development of shoreway access as well as the obstacles identified by the Planning Staff and the consultants.

Develop Criteria for Evaluating Public Acquisition

In order to complete the overall concept it became obvious that certain limited numbers of properties may have to be acquired. The City Planning Staff, as part of their executive summary, compiled a list of these properties and evaluated them on the basis of:

- Intensity of current utilization
- Type of current use: commercial, residential, vacant, utilities, transportation, etc.
- Potential for alternative routes
- 'Highest and best use' of the property
- Relocations required

Priorities for acquisition were established with the Planning Board and City Council, based upon the criteria of:

A. Properties that must be acquired to complete a critical link in the overall Shoreway plan
B. Properties that would be desirable to acquire to complete a vital link, but where alternative alignments are possible
C. Properties necessary to create open space opportunities adjacent to the Shoreway in highly populated areas
D. Properties necessary to create open space opportunities adjacent to the Shoreway in less populated areas.

Reference to Other Shoreway Projects

During the course of the work the consultants discussed various aspects of Spring Point Shoreway in South Portland and the Royal River Parkway in Yarmouth as examples of successful water access projects. As the master planners and designers of both projects MDA had first hand knowledge of the processes and pitfalls associated with these long-term efforts. (See Appendix E for a summary of conclusions).

Design Elements

Design standards were presented describing typical situations and treatments. An effort was made to concentrate on those elements which would have the most universal applicability, including walkway surfaces, railing details, and boardwalks. This section was not intended to supply the City with working drawings, but rather to provide a design direction to help unify the overall image of the Shoreway. At the same time there is a recognition of the distinctively different types of waterfront environments within the City, each demanding sensitive, and often distinctive types of treatments. Since the project will most likely be completed in many diverse phases, and by many separate parties, standards will be necessary to maintain a high level of aesthetics.

Handicapped accessibility recommendations were incorporated in the design standards, following the guidance provided by Barrier Free Site Design, U. S. Dept. of Housing and Urban Development, and Accessible Fishing: A Planning Handbook, New Mexico Department of Resource Management and Development, and other current sources.

Adjacent Land Use Recommendations

As part of the schematic planning, the consultant examined adjacent City-owned land and developed descriptions for conceptual improvements, concentrating on the means to tie these lands into the Shoreway. Recommendations were illustrated on the 200 scale base sheets.

Preliminary Site Plans

Working with the consultant, the City Planning Staff selected three diverse sites for preliminary site planning:

- Upper Stroudwater River trailhead, along the shore of Stroudwater Estates industrial park
- Stroudwater Crossing and the entrance to Maine Audubon Land
- Peaks Island Consortium

These sites were chosen on the basis of the potential applicability to other situations within the City. The staff also felt that these three areas stood a very good chance of implementation within the foreseeable future, given the nature of land development activities in the immediate vicinity and the ownership of the individual sites. The Plans were annotated to show design intent and factors to consider in the actual layout and siting. Simple cross sections were prepared to show widths, grade changes, transitions, buffering, and other required elements.

PHASE 3: IMPLEMENTATION PLAN

Develop Implementation Plan for Shoreway.

Public access to the shoreline can be accomplished and managed by a variety of methods. These methods fall into two broad categories: acquisition and regulation. Market Decisions, Inc. prepared an implementation plan that shows the advantages and disadvantages of both options, with specific reference to the study area. The City Corporation Council researched legal issues related to access and related issues, developed joint use agreements and easement forms between the City and landowners.

Executive Summary

An executive summary of this document was prepared by the City Planning Staff and the consultant for distribution to the development and residential communities to promote participation in the Shoreway access system.

PHASE 4: FINAL SHOREWAY ACCESS PLAN

The final phase of this study involved the synthesis of previous phases' findings and conclusions into a report. Several drafts of the report were prepared by the consultants for review by the City. Report content and format were examined so that the final report would represent the City's plan and policy for shoreway access. The final report format arrived at presents the Portland Shoreway Access Plan in three parts - " Planning Approach", "Implementation" and "Appendices". The first part of the report, "Planning Approach", was written for reading by the general public. It introduces the general background and proposals of the Portland Shoreway Access Plan. The second part, "Implementation", delves into the specifics of the plan intended to be used by the City and the private participants in the implementation of the plan. The "Appendices" provides additional insight on the topics previously covered in the report.

Also part of this phase was the mock-up of a summary leaflet. An 8 1/2" x 14" leaflet with a concise narrative, map, and graphics was designed for wide dissemination to the development community and the public to promote participation in the implementation of the Portland Shoreway Access Plan.

PORTLAND WATER ACCESS STUDY INVENTORY.

APENNDIX B FIELD EVALUATION FORM SAMPLE

AREA	ZONING
UNIT	

COMPATIBILITY

	EXISTING	POTENTIAL
LAND USE		
ADJACENT LAND USE		
USERS		
HAZARDS		
BUFFERS		
NEIGHBORHOOD IMPACT		

SITE CHARACTERISTICS

	EXISTING	POTENTIAL
CULTURAL ARCHITECTURE		
HISTORICAL FEATURES		
GATHERING POINTS		
ENVIRONMENTAL INTRUSIONS		
NATURAL VEGETATION		
MARINE, WATER AND SHORELINE CHARACTER		
WILDLIFE HABITAT		
SENSITIVITY TO CHANGE		
VISUAL VISUAL QUALITY	FOREGROUND	BACKGROUND

CONSTRUCT. CONSIDER.

SOIL STABILITY (EROSION)	
TOPOGRAPHY	
DRAINAGE	

ACCESS

	EXISTING	POTENTIAL
CAR		
BIKE		
PEDESTRIAN		
BOAT LAUNCHING / MOORING		

LAND AVAILABILITY

EXISTING				POTENTIAL
		PUBLIC OWNERSHIP OPEN ACCESS		
		PUBLIC OWNERSHIP- LIMITED ACCESS		
		PUBLIC OWNERSHIP- NO ACCESS		
		PRIVATE OWNERSHIP- ACCESS BY EASEMENT/R.O.W.		
		PRIVATE OWNERSHIP-INFORMAL ACCESS/NO FORMAL AGREEMENT		
		PRIVATE OWNERSHIP-NO ACCESS		

CORRIDOR CONTINUITY

	EXISTING	POTENTIAL
PHYSICAL OBSTRUCTIONS		
INLAND INTERCONNECTIONS		

OTHER COMMENTS

RECOMMENDATIONS

APPENDIX C SAMPLE EASEMENT

- SAMPLE PUBLIC ACCESS EASEMENT -

EASEMENT DEED AND INDENTURE

THIS INDENTURE made by and between _____ Maine corporation of Portland, Maine, (hereinafter referred to as the "Grantor") and the City of Portland, a body corporate and politic (hereinafter referred to as the "Holder").

W I T N E S S E T H:

WHEREAS, this Easement Deed and Indenture is created pursuant to Title 33, Maine Revised Statutes, Sections 476 through 479-B, inclusive, as amended; and

WHEREAS, the Holder represents to Grantor that it is a governmental body as defined by Title 33, Maine Revised Statutes Annotated, Section 476(2) as amended; and

WHEREAS, the Grantor holds title to certain real property as described in a deed from _____ and recorded at Book _____, Page _____ in the Cumberland County Registry of Deeds and indicated on the plot plan entitled _____ prepared by _____ which is attached hereto, the original of which is recorded at the Cumberland County Registry of Deeds in Plan Book _____, Page _____ (the "Plan"); and

WHEREAS, a portion of said property consisting of _____ acres more or less of meadow with frontage on _____ and approximately _____ feet of frontage on the _____ river, as described in Exhibit A attached hereto and made a part hereof by reference (the "Protected Property") remains in a substantially undeveloped, open and natural state, provides scenic enjoyment to the general public when viewed from the public waters of the _____ river and the public roadway of _____ road, and has significant scenic, aesthetic, scientific and ecological value; and

WHEREAS, pursuant to the grant of this easement to Holder the Grantor desires to preserve in perpetuity the Protected Property's value as a scenic and natural area and habitat for flora and fauna with an associated right for members of the public to gain access to the Protected Property and over the Protected Property to the waters of the _____ river for quiet, passive recreational uses which shall not conflict with the Protected Property's natural value on the terms hereinafter set forth; and

WHEREAS, the _____ river is subject to considerable development pressure; and

WHEREAS, any significant change in the natural, scenic, and open condition of the Protected Property would have an adverse effect on the opportunity for the public to enjoy visual and physical access to the _____ river landscape; and

WHEREAS, the _____ river is unique in being a relatively intact coastal ecosystem and, as such, is an unusually important habitat for birds, fishes, marine and terrestrial mammals, and flora; and

WHEREAS, the Grantors and Holder recognize the uniqueness of the Protected Property as a Maine coastal property and the scenic, aesthetic, and special character of the _____ river region in which the Protected Property is located, have the common purpose of conserving the natural values of the Protected Property and the access to the Protected Property and the related river vista by the conveyance of a Conservation Easement on, over and across the Protected Property, which shall benefit, protect and conserve the natural values of the Protected Property, conserve the scenic, aesthetic and ecological values of the _____ river region, conserve and protect the animal and plant populations, and prevent the use or development which would conflict with its natural, secnic, and open condition or with the access to and scenic enjoyment of the Protected Property by the general public;

NOW THEREFORE, in consideration of the foregoing and the covenants herein contained, the GRANTOR HEREBY GRANTS to the HOLDER, its successors and assigns, as an absolute and unconditional gift, forever and in perpetutity:

1. A Conservation Easement in gross over the Protected Property on the terms and conditions set forth herein (the "Conservation Easement");

2. A right of pedestrian access over pathways approximately but not less than five feet (5') in width over other land of the Grantor adjoining the Protected Property, said pathways to be located as shown on the Plan for the purpose of utilizing the Conservation Easement, subject to the reserved rights of the Grantor set forth herein, including the right of relocation of said pedestrian pathways at the expense of Grantor, its successors and assigns in order to develop and make use of said adjoining land of the Grantor, which relocation shall be subject to the approval of the Holder which shall not be unreasonably withheld or delayed (the "Pedestrian Easement").

(Collectively the "Easements").

1. Purpose

It is the dominant purpose of these Easements to preserve and protect in perpetuity the natural, open space, scenic, aesthetic and agricultural features and values of the Protected Property. In so doing, it is the purpose of these Easements to foster the continuation of responsible conservation practices and passive recreational uses.

2. Conservation Easement

The affirmative rights conveyed by this Conservation Easement are the following:

A. The right of the Holder to identify, to preserve and to protect in perpetuity the natural, open space and aesthetic features and values and the agricultural and water quality of the Protected Property.

B. The right of the Holder to enter upon and inspect the Protected Property at any time in any manner that will not unreasonably interfere with the permitted uses being made of the Protected Property at the time of such entry, provided that the Grantor shall have the right to designate and change any access over other land of the Grantor.

C. The right of the Public to view the Protected Property from the public waters and the public roadway in its natural, scenic, and open condition, provided herein that nothing shall impair the Grantor's rights to construct and maintain structures on other land of the Grantor.

D. The right of the public, subject to the terms and conditions hereinafter set forth, to use the Protected Property for day hiking and for access to the _____ river; and

E. The right of the Protected Property to be free of any taint, corruption, or pollution of whatever character arising from any use not permitted hereunder.

F. The right of the Holder to enforce by proceedings at law or in equity the covenants herein set forth.

3. Public Outdoor Recreation

The members of the general public shall have a right and license for use of the Conservation Easement, the Pedestrian Easement and the Vehicular Easement for day use, for hiking, for access to the _____ river for fishing and swimming, and for other forms of passive outdoor recreation during the hours of sunrise to sunset, subject to all applicable laws and regulations concerning such activities, provided, however, that no motor vehicles (including recreational vehicles, all terrain vehicles,

motorcycles, dirt bikes and snowmobiles) shall be permitted on the Protected Property (except in an emergency and when necessary to accomplish the right reserved by Grantor herein) without the express permission of the Grantor and the Holder, their respective successors and assigns. No camping, tenting, fires or the possession or use of alcohol or drugs shall be permitted on the Protected Property. Neither the Holder or the Grantor, or their respective heirs and assigns, assume any obligation for maintenance or safety of the Pedestrian Easement, the Vehicular Easement or the Protected Property for public use or any liability to the general public for accidents, injuries, acts, or omissions. Notwithstanding the rights and license for public use herin contained, the Grantor reserves for itself, its heirs and assigns, the right to control, by posting or other means the number of persons who may use the Protected Property and Easements at any one time and any use by the public which is destructive (i) to the natural values to be conserved by these Easements, or (ii) to other members of the general public and their non-destructive, quiet use of the Protected, or (iii) to the reasonable quiet use and enjoyment of private property by the owners of the Protected Property, by owners of property neighboring the Protected Property, and by other owners of property on the _____ river, including the Grantor, its successors, heirs and assigns. Nothing hereunder shall be deemed to dedicate, create or sanction any rights to the public by adverse possession or otherwise, except as expressly set forth herein and the Holder, its successors and assigns shall have the exclusive right to administer, enforce, or agree to any future modification, amendment or release of the easements, without need for the consent or approval of the public or any entity acting on their behalf.

4. Monitoring and Enforcement Rights of Holder

The Holder, its successors and assigns, shall make reasonable efforts from time to time to assure compliance by Grantor with all of the covenants and restrictions herein and shall make periodic inspections of the Protected Property. For such inspection and enforcement purposes, the Holder shall have the right of access to the Protected Property at reasonable time and in a reasonable manner provided that the time and manner of such inspection does not unreasonably interfere with the uses of the Protected Property permitted hereunder. Holder shall prepare and keep on file a monitoring report for each such inspection and make such reports available to the Grantor, its successors and assigns.

In the event the Holder becomes aware of an event or circumstance of non-compliance with the terms and conditions herein set forth, Holder shall notify Grantor of such event or circumstance of non-compliance via certified mail, return receipt requested, and demand corrective action sufficient to abate such event or circumstance of non-compliance and to restore the Protected Property to its previous condition. Failure by the Grantor to cause discontinuance, abatement or such other corrective action as may be reasonably demanded by Holder, shall entitle Holder to bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of these easements to obtain injunctive relief. If such court determines that Grantor has failed to comply with these Easements after notice and

reasonable opportunity to cure, Grantor shall reimburse Holder for any reasonable costs of enforcement, including court costs and reasonable attorneys fees, in addition to any other payments ordered by such court provided that such obligation of reimbursement created hereunder shall not be deemed to establish any inchoate lien of any nature on any other land of Grantor nor shall such obligations take priority over the lien of any mortgage or security interest held by an institutional lender. The foregoing limitation shall not restrict the Holder's ability to seek legal and equitable remedies for any breach hereof. These Easements and related rights may be enforced, administered, modified and amended only by the Grantor and Holder, their assigns, and by no other person, except as specified in 33 MRSA Section 478.

5. Costs and Taxes

Grantor agrees to bear all costs and responsibility of operation, upkeep, and maintenance of the Property, and does hereby relieve, indemnify and hold harmless the Holder therefrom, provided, however, that Grantor shall not be liable for any monitoring and enforcement expenses incurred by Holder except as expressly provided herein. In addition, Grantor agrees to pay any and all real property taxes and assessments levied by competent authority on the Protected Property or on these Easements.

6. Grant in Perpetuity

The terms of the Easements and this Indenture shall bind the Grantor, its successors and assigns forever and the Holder and its successors and assigns and shall be a burden on the Protected Property running with the Protected Property in perpetuity and shall be recorded in the Cumberland County Registry of Deeds. A copy of the restrictions contained in these Easements or an incorporation by reference deed shall be included in any subsequent deed or legal instrument by which Grantor conveys any interest (including a leasehold) in the Protected Property, provided that failure to include the foregoing shall not affect the validity of any future deed, but which conveyance shall be nonetheless subject to the terms of this Easement Deed and Indenture.

7. Holder and Subsequent Transferees

By acceptance of these Easements, the Holder covenants and agrees with the Grantor, its successors and assigns but not as conditions to these Easements or as restraints on alienability: (1) that it will hold these Easements in perpetuity for the purposes for which Holder, its successors and assigns, were organized; (2) that it will not transfer these Easements, except to an entity which as a condition precedent to such assignment agrees that it is willing and able to enforce the rights granted in these Easements, which entity shall also have purposes similar to that of the Holder and which encompass the purposes set forth in these Easements. These Easements may not be transferred in any event except with the prior consent of the Grantor, its successors and assigns, which shall not be unreasonably withheld.

8. Miscellaneous

(a) The fact that any of these prohibited uses, or other uses not mentioned, may become greatly more economically valuable than permitted uses, or that neighboring properties may in the future be put entirely to such non-permitted uses, has been considered by Grantor in granting this Easements. It is Grantor's belief that any such changes will increase the benefit of the continuation of these Easements, and it is the intent of both the Grantor and Holder that any such changes should not be deemed to change conditions permitting termination of this easement.

(b) The inability to carry on any or all of the above uses, or the unprofitability of doing so, shall not impair the validity of these Easements or be considered grounds to terminate or alter these terms.

(c) If any provisions of these Easements or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of these Easements and the application of such provisions to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

(d) Should it be necessary at any time in the future in connection with any action of the Holder to obtain the agreement or approval of the Grantor, its successors or assigns, in connection with any matter relating to these Easements, the agreement or approval of the owner or owners of a majority interest in the Protected Property or of any Association organized by Grantor to administer the Protected Property at that time, shall be deemed to be the agreement or approval of all the owners of the Protected Property.

TO HAVE AND TO HOLD the said Easements unto the said Holder and its successors and assigns forever.

IN WITNESS WHEREOF, the said Grantor has set its hand and seal on _____ (date).

_____

_____ by: _____

Witness Its

The above and foregoing Easement Deed and Indenture is HEREBY ACCEPTED AND AGREED TO by the City of Portland, Holder as aforesaid, on _____ _____ (date).

City of Portland

_____ by: _____

Witness

0441H

STATE OF MAINE
County of Cumberland, ss.

Personally appeared the above-named _____ in his said capacity, acknowledged the foregoing instrument to be his free act and deed, and the free act and deed of said corporation.

Before me,

_____
Notary Public/Maine attorney at Law
Name:

STATE OF MAINE
County of Cumberland, ss.

Personally appeared the above-named _____ in his said capacity, acknowledged the foregoing instrument to be his free act and deed, and the free act and deed of said corporation.

Before me,

_____
Notary Public/Maine attorney at Law
Name:

0441H.04

APPENDIX E- SHOREWAY ACCESS CASE STUDIES

Many lessons can be learned from other cities and towns that have put shoreway access plans into effect. Reference has been made throughout this effort to the successes and occasional failures of two noted examples: Spring Point Shoreway in South Portland, and the Royal River Park in Yarmouth.

SPRING POINT SHOREWAY, SOUTH PORTLAND

OVERVIEW

Spring Point Shoreway is a mile-long waterfront park linking Fisherman's Point and Willard Beach with the municipally owned Spring Point Marina. A master plan was initiated by Mitchell-DeWan Associates in 1977, funded by a National Endowment for the Arts CityScale grant. Over the course of a year the planning study explored possible uses for the land; investigated the natural, legal, and institutional restrictions; and proposed an ambitious program calling for a joint use agreement between the City and the State (SMVTI Campus).

The final plan acted as a long-term development document, an HCRS funding application, a management guideline, and a package of design standards. NEA chose to honor the project by including it in their publication Design Arts.

Construction started in 1978 with improvements to Willard Beach to change the user emphasis from local teenagers to region-wide families. An adventure playground was added, the parking area made more accessible, plantings and fencing were installed to separate public and private properties, and the first of a series of interpretive signs were designed and installed. With these improvements and others in later phases, the user population rose from 33,000 in 1977 to over 150,000 in the mid 1980's.

Shoreway visitors can enjoy the mile-long walkway, three playgrounds, a coastal arboretum, two picnic areas and a picnic shelter, lookouts, seating areas, and easy access to the waters edge. The interpretive program tells the story of the rich natural, cultural, and scenic heritage of Spring Point and Simonton Cove. The Maine Association of Planners (MAP) selected Spring Point Shoreway as the 1985 Project of the Year, a tribute to the dedication of the City in realizing a long-term open-space goal.

POINTS OF REFERENCE

PLANNING. The master plan was approved and adopted by the City Council, with a commitment to appropriate $50,000 a year for the first five years towards its implementation. The plan was used as the application to HRCS (Heritage, Conservation and Recreation Service) for LAWCON (Land and Water Conservation) matching grant funding. After the first year's funding was approved the plan on file with the state was used as a major part of the application for subsequent years' funding. When a Coastal Grant fund made monies available for water access projects, the City had a plan already completed and was able to successfully compete for funding.

PUBLICITY. The City publicized the concept widely during its formative stages to test citizen's support for future funding. SPS appeared high on a broad-base survey of the population concerning public improvements to be included in the capital improvement program. The project was the subject of many articles in the Portland papers as work progressed. It got another major boost in 1985 when the MAP award was announced and publicized.

LOGO. Mitchell-DeWan Associates designed a logo to symbolize the shoreway and its position on the waterfront. It was subsequently used on the trash containers, signage throughout the park, directional signage, flyers, and interpretive exhibits.

DESIGN VOCABULARY. The designers realized that implementation would come in many phases, but wanted the park to be consistent in its appearance throughout. The master plan and the initial phase developed design guidelines for bollards, lighting, playgrounds, fencing, signage, plantings, seating, pathways, and other improvements which were subsequently used throughout the mile-long shoreway. The fencing detail - a simple post and rail design with a beveled edge to discourage sitting - was picked up by SMVTI (the adjoining Southern Maine Vocational Technical Institution) and used throughout their major open spaces.

COOPERATIVE CONSTRUCTION. As a way of stretching the limited funding available several innovative construction methods were used for the Shoreway. The students of SMVTI were instrumental in constructing and installing the picnic shelter and the heavy duty picnic tables. The HCRS funds provided the school with the funds to purchase materials, and the school supplied the labor. The same arrangement was used for much of the first phase planting program. The Public Works and Parks and Recreation staff were responsible for the installation of the initial playground on Willard Beach, the improvements to the parking area, the drop-off at the beach, and many other smaller projects. The use of force-account work saved the City a considerable amount of money and gave the City's work force an interesting opportunity to make some dramatic changes. The local garden club took over a small section of the arboretum and established a sea-side perennial garden. Everyone involved in the effort expressed a great deal of pride in the work that they performed.

VISIBILITY OF INITIAL EFFORTS. The first phase of the project restored Willard Beach, once the focus of a much grander era in Maine. The initial reaction was very positive, as evidenced in the dramatic increase in visitors throughout the year. The infusion of monies for infrastructure improvements was matched by a surge in rehabilitation of many of the older private neighboring properties and a considerable amount of new construction.

DESIGN ADAPTABILITY. The 1978 master plan called for a series of trails and overlooks for the mile-long park. As the implementation planning progressed many opportunities arose to create special places that were not initially anticipated. The arboretum site, for example, was still a classroom building at the time of the master plan. By the time the land was reviewed again, the building had been destroyed by fire. Through discussions with SMVTI it was decided that the arboretum would be an opportunity for another cooperative venture, this time with the Plant and Soils Department.

DESIGN QUALITY AND STANDARDS. From the very start it was decided that the Shoreway should be seen as a permanent fixture on the South Portland waterfront. While budgetary constraints played a role in determining the limits of work an emphasis was placed on using high quality materials. Play equipment, bollards, and fencing were specified to withstand the exposed site and the anticipated numbers of visitors. Plant material was also sized accordingly and reviewed by the City Arborist. In some instances it was not necessary to spend a small fortune to achieve a pleasing result. The trash cans were simply recycled 55 gallon drums, painted a nautical blue and silkscreened with the Shoreway logo. In order to ensure greater quality control the City required that contractors wishing to bid on projects submit a listing of similar installations as well as a list of active references.

INTERPRETIVE PROGRAM. This section of South Portland was one of the oldest, and most historic parts of the City. A series of interpretive signs were developed by Mitchell-DeWan Associates, in conjunction with the Cape Elizabeth - South Portland Historical Society, to present the cultural history of the area, which included shipbuilding, the early settlements, the fortifications, and the Civil War era. Additional exhibits were prepared on the natural history, the geologic functions of the beach, the bird life at the edge of the ocean, and the views from the shoreway.

THEME EVENTS. Once the park was finished the City organized a dedication ceremony during the first annual Spring Point Festival. Since then the festival has grown to become a popular summer event, similar to those held at the Eastern Prom and at Deering Oaks.

MAINTENANCE. The City's Parks and Recreation Department usually provides 2-3 persons to maintain the Shoreway on a full-time basis during the summer months. While this is a very high maintenance area, consisting of many grass areas to be mowed, shrub beds to be weeded, playgrounds to be policed, trash cans to be emptied, and litter to be picked, it does point out the need for adequate planning for long-term care of a trail system. Cost estimates given by the City range from $30 to 50,000 per mile of trail system for a year. The final costs for maintenance will vary widely, and will be a function of the area of landscaping that needs attention, the visibility of the project, and the anticipated usage.

ROYAL RIVER PARK, YARMOUTH

In 1976 Moriece and Gary of Maine, (Terry DeWan, project designer) developed a master plan for the use of a large tract of land between East Elm Street and Bridge Street on the Royal River. Working with a dedicated citizen's committee a detailed study was made of community needs, previous uses and problems with the land, and its natural constraints.

The program for the waterfront park, one of the largest public open spaces within the community, tried to balance the needs of the nearby Rowe elementary school, an active summer recreation program, local neighborhood residents, and the town as a whole. The master plan went through several changes before it was accepted by the Town Council.

Implementation through the use of BOR/HCRS funding was accomplished over four phases. Mitchell-DeWan Associates was selected to finish the last phase, which regraded eight acres of industrial ruins into rolling fields, landscaped woods, and a broad riverfront amphitheater. Due to the success of the park to date the town is considering installing an exercise course, building a bandstand, and extending the park further down the river.

POINTS OF REFERENCE

MASTER PLAN. The master plan for the park was very specific in describing the types of improvements necessary to achieve the town's goals of a continuous waterfront trail system.

CONSISTENCY IN IMPLEMENTATION. Due to funding considerations the first three phases of the implementation were designed by three different design firms, resulting in some inconsistency in the overall design. Since the master planning document did not develop performance criteria to be used in the park, the designers did not have an opportunity to take advantage of the earlier discussions relative to the design intent.

FLOOD HAZARDS. While the master plan recognized the hazards of the Royal River floodplain and recommended that permanent installations be kept out of the danger zone, the first phase included a waterfront trail in the floodplain that was later damaged by severe flooding. Additional damage was incurred by culverts that washed out in heavy rainstorms.

USE OF SLUDGE. During the last phase of construction the town was forced to look to alternative means to rehabilitate eight acres of industrial ruins into a series of landscaped open fields. Working with Resource Conservation Services of Yarmouth, the area was regraded and treated with over 900 tons of papermaking sludge from the S. D. Warren mill in Westbrook. Savings from this program, over the use of a more traditional topsoil application, amounted to over $75,000. With the current level of concern regarding the possible health risks associated with the use of this type of sludge it is doubtful if Portland should consider it as a soil substitute. However, the composted sludge produced by the Portland Water District has proven to be an excellent soil amendment and may be a way for the City to recycle some of its own waste for the public good.

INTERCONNECTIONS. Realizing the popularity of the Royal River park the town has acquired additional land downstream for an eventual extension. In the meantime the Open Space Committee of the town has developed a plan for public access over much of the river frontage to preserve an opportunity to continue the concept over the next several generations. The Zoning Ordinance has been revised to reflect a concern for public access and open space preservation. It now requires that certain subdivision applicants submit alternative plans for clustering their developments. The conditions under which the Board may require a cluster plan include: properties over twenty acres in size, a recommendation from the Conservation Commission regarding preservation of significant natural features, and a determination that the land is on the town's Open Space Map overlays (Trails, Resource Protection-Tidal Marsh, and Important Visual Open Space). In at least one instance this has resulted in a developer offering to negotiate a public access easement along the river as part of a large single family neighborhood.

VISIBILITY AND SECURITY. One of the recurring criticisms heard in Yarmouth about the Park is the problems with undesirable activity occurring on the more remote sections of the trail. Given the nature of the land it would have been impossible to have every segment to be totally visible for surveillance. The more intensively developed areas with concentrations of improvements such a picnic tables, benches and plantings - are easily reached by foot patrol. The parking lot is on one of the busier streets in the community, and is able to be gated closed if the situation warrants.

APPENDIX F - DESIGN ELEMENTS

When dealing with a plan as ambitious as this, covering an entire city, bringing people through environments that range from downtown urban to semi-wilderness, necessity will demand a high level of flexibility and adaptability to changing conditions. While the trail needs to respond to the aesthetics of the immediate enviroment, a well thought out set of design guidelines should be adopted to maintain a unified appearance throughout its length.

The phasing for the project will undoubtably take many years to accomplish. During that time many personnel changes will be made among those responsible for the design and administration of the trail. The recommendations presented in this section are meant to serve as a vehicle to promote design continuity throughout the length and life of the project.

The following section provides design guidelines and outline specifications for landscape elements which may be used to implement the Access Trail throughout the City.

GENERAL COMMENTS

Design details used should exemplify the highest standards of quality design. With the City playing a lead role in waterfront access planning and implementation it should set an example for the private sector to follow.

Quality. Many of the areas where improvements will be made are out of the way, and quite susceptible to abuse. The quality of all materials should be first class and rugged, and not invite abuse by the delicateness of their construction.

Flexibility in the design of specific elements needs to be considered. Trail locations that only require a thirty inch gravel footpath this year may grow in popularity, necessitating a wider trail or a harder surface in the future. Decisions regarding materials, sizes, and location should weigh the impact of additional user demand.

Simplicity should be a hallmark in the design of all structures, from bridges and access points to picnic tables and information kiosks. A unified design vocabulary should be established early in the implementation process and continued throughout which is reflective of the character of an area.

Maintenance must be a primary consideration for all improvements. All items should be designed to require minimal painting or adjusting to make them safe or secure so they are not the source of constant aggravation to those responsible for maintenance.

Final Site Design should be the result of an evaluation of the specifics of each individual situation. The guidelines given in this report are keys to help the designer implement the overall concept of waterfront access. Specific problems related to slope, accessibility for the handicapped, drainage, privacy, ecological constraints, etc. will have to be dealt with on a case by case basis.

HANDICAPPED ACCESSIBILITY

Overview. The City should examine all of its recreational facilities to see how they comply with the most recent SPECIFICATIONS FOR MAKING BUILDINGS AND FACILITIES ACCESSIBLE TO AND USABLE BY PHYSICALLY DISABLED PEOPLE - ANSI A117.1 (1980). This report recognizes that not all sites will be able to be made accessible and recommends using the four levels of accessiblity concept outlined in ACCESSIBLE FISHING (see below).

Accessible Sites meet or exceed ANSI Standards and are accessible for most people with disabilities to use without assistance.

Useable Sites might not meet all required ANSI Standards, but are useable for the 'average' disabled person.

Difficult Sites are useable by the more athletic disabled person without assistance, but the more typical disabled person would require assistance.

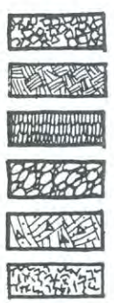
Inaccessible Sites are not designed to meet the needs of the disabled.

Reference. Two excellent sourcebooks for implementation standards for accessibility in outdoor settings are ACCESSIBLE FISHING: A PLANNING HANDBOOK, by Richard S. Nordhaus, Min Kantrowitz, and William J. Siembieda, prepared for the Resource Management and Development Division of the New Mexico Natural Resources Department, 1984, and BARRIER FREE SITE DESIGN, by the American Society of Landscape Architects Foundations and the U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1975.

Surfaces for Walkways

Soft

- crushed rock
- earth
- lawn-grass
- river rock
- soil cement
- tanbark



Comments

Soft Surface Characteristics

- IRREGULAR AND SOFT SURFACES MAKE WALKING EXTREMELY DIFFICULT FOR PEOPLE WITH MOBILITY HANDICAPS.
- POOR SURFACES FOR WHEELCHAIRS AND OTHER SMALL-WHEELED VEHICLES.
- THE BLIND HAVE DIFFICULTY WITH ORIENTATION.
- SURFACES ARE SUSCEPTIBLE TO EROSION.
- SURFACES WILL WITHSTAND ONLY LIGHT TRAFFIC.
- SURFACES ARE USEFUL FOR AREAS WHERE LIGHT PEDESTRIAN TRAFFIC WILL NEED A MODERATELY FIRM SURFACE, I.E. RECREATION AREAS, PARKS, NATURE AREAS, ETC.
- HIGH MAINTENANCE REQUIREMENTS, LOW INSTALLATION COSTS.

Variable

- cobble stones
- exposed aggregate
- flagstones
- sand-laid brick
- wood deck
- wood disks in sand

Variable Surface Characteristics

- IRREGULAR SURFACES AND WIDE JOINTS MAKE WALKING EXTREMELY DIFFICULT FOR PEOPLE WITH MOBILITY HANDICAPS.
- JOINTS EASILY TRAP CRUTCH AND CANE TIPS, HEELS, NARROW WHEELS; JOINTS SHOULD BE FILLED AND NO WIDER THAN ½".
- IRREGULAR SURFACES MAKE MOVEMENT DIFFICULT FOR WHEELCHAIRS AND OTHER SMALL-WHEELED VEHICLES.
- ICE AND SNOW CAN BE A PROBLEM BY DAMAGING THE SURFACE OR BEING DIFFICULT TO REMOVE.
- MODERATE MAINTENANCE REQUIREMENTS, MODERATE TO HIGH INSTALLATION COSTS.

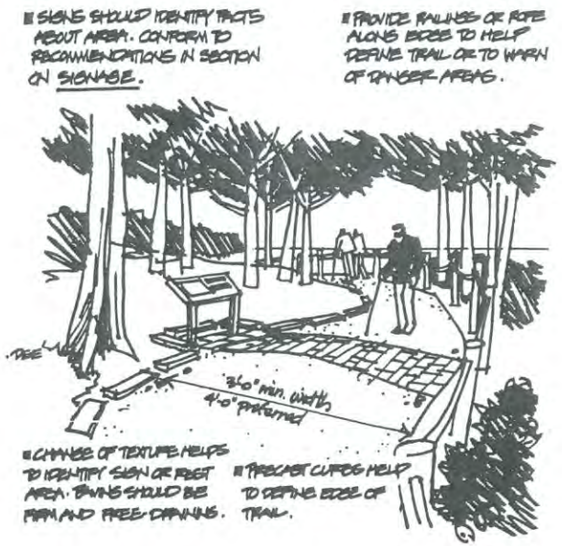
Hard

- asphalt
- concrete
- tile/brick in concrete

Hard Surface Characteristics

- FIRM AND REGULAR SURFACES FOR WALKING AND MOVING WHEELED VEHICLES.
- JOINTS ARE KEPT TO A MINIMUM, LESS THAN ½" WIDE AND FILLED.
- ICE AND SNOW REMOVAL POSSIBLE WITHOUT EXTENSIVE DAMAGE TO SURFACES.
- HIGH INSTALLATION COSTS, LOWEST MAINTENANCE COSTS.

INTERPRETIVE TRAILS FOR THE HANDICAPPED



PAVED WALKWAYS

Material Selection. In many areas of the City the Trail should take the form of a paved walkway, either in new construction or rejuvination of existing sidewalks. Paving materials should match or complement those found in the immediate surroundings, with the Trail distinguished by graphics or other means.

Types. See 'Portland Public Access Design Project' for specific examples of paving types and patterns than may be appropriate for the City.

TRAILS

Materials. Types of construction activity should be determined by the site. In some instances hand labor might be the most appropriate way to install a footpath over a particularly steep slope or through a wetland. In most instances, however, the trails can easily be constructed or improved by mechanical means, using proper construction techniques and cautions.

Specifications should be tightly written for all construction activity associated with the trail. There are many sensitive habitats which could be disturbed unless care is taken during the planning and construction phases. Consultation from wildlife biologists may be necessary to avoid unnecessary disruption to habitats during breeding seasons.

Surfaces should be a function of the degree of accessibility desired, the number of anticipated visitors, and the site conditions present. Wood chips, compacted soil, and compacted gravel will be suitable for the more rural locations where a 'difficult' degree of accessiblity is appropriate. In more urban situations the trails should be constructed of asphalt or concrete with a well-defined edge or low curb.

Maximum slopes should not exceed 1:20 (5%) for accessible trails and 1:16 (6.25%) for useable trails. Trails with slopes up to 1:12 (8.33%) define a difficult condition for the disabled user.

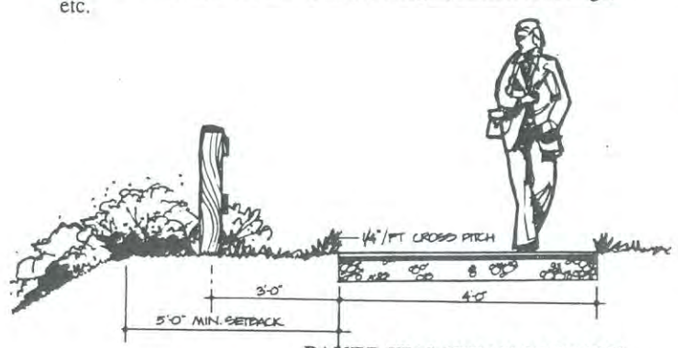
Cross slopes (measured perpendicular to the direction of travel) should be designed to efficiently drain the surface of all trails and walkways. A cross slope of 1:50 (2%) is recommended.

Provision for drainage must be included in all trail and walkway design to prevent washouts and undercutting of the surface, flooding during storms, and icing during spring thaws. In more natural settings where accessibility is not a consideration waterbars should be used every 50 - 100 feet to divert water off the trail into defined drainage ditches.

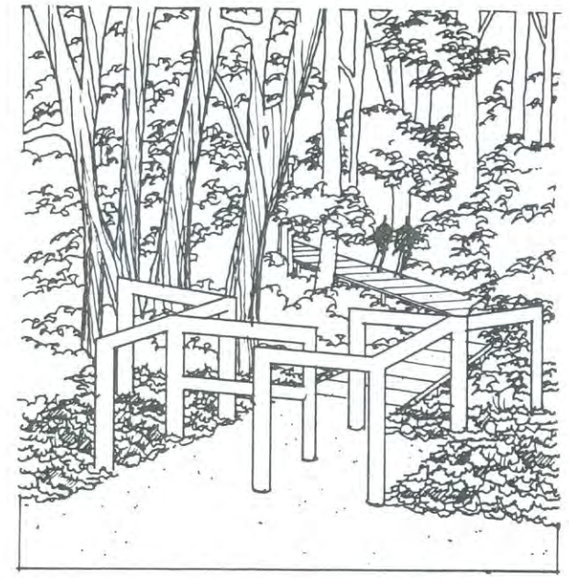
Width should also vary according to the site, the degree of accessiblity desired, and the anticipated level of use. A three foot trail should be considered an absoluted minimum in all areas where accessibility is desired. In areas where accessiblity is not a criteria trail widths may be reduced to 32 inches or less. Four feet should be considered the standard. To accomodate wheelchair users on trails or walks less than five feet in width the City should provide passing areas five feet square every 200-500 feet.

Obstacles must be removed to ensure that nothing overhangs the pathways more than four inches, if the bottom of that obstacle is more than 27 inches above the walking surface. Care must be taken in planting new shrubs and low trees to avoid branch growth that would interfer with safe passage over the trails. All vegetation should be pruned to a minimum of 8'-6" from the trail surface, and higher if the trails are heavily used by cross country skiers or snowshoers.

Tactile warnings should be provided at all potentially dangerous areas: intersections, crosswalks, stairs, bridges, stream crossings, etc.



PAVED WALKWAY SECTION



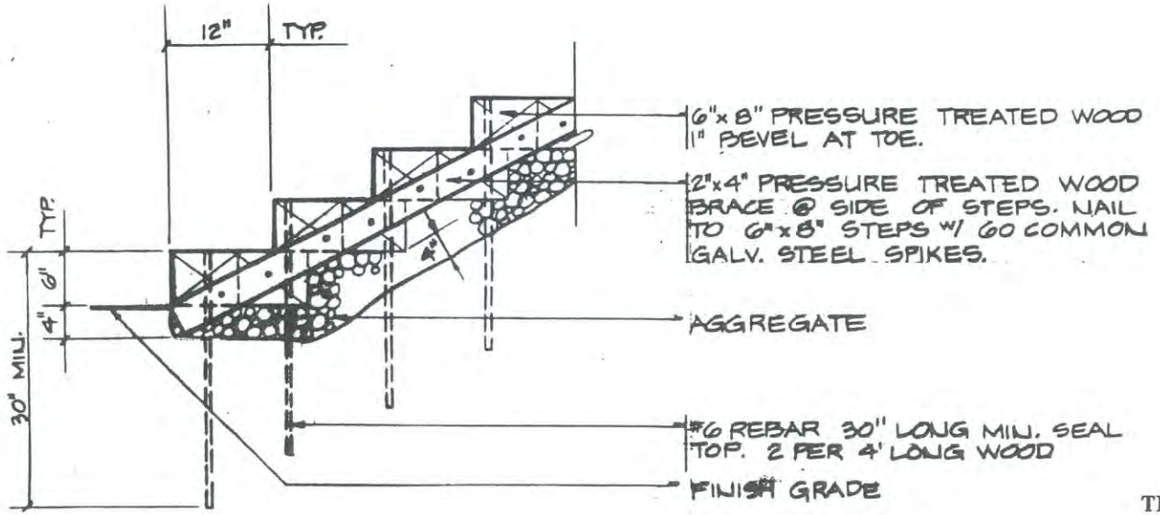
TRAIL BARRIERS

Trail barriers In certain instances, e.g. at the edge of sensitive wildlife habitats or wetlands, it may be desireable to restrict the use of the trail system to pedestrians and bar the use of motorized vehicles. The illustration above shows one means of eliminating this problems, through the use of wooden posts or concrete filled steel poles set in the ground, exposed to a height of three feet or more. The arrangement of the posts in a maze will allow the walker to pass through, but will not allow ATVs, motorcycles, or other vehicles to pass.

BOARDWALKS AND OVERLOOK DECKS

Material specifications. Where boardwalks or overlook decks are called for all members should be constructed of wood that has been pressure treated for below-ground installations. All hardware should be galvanized. Exposed metal surfaces should be treated with two coats of flat black rust-proof paint.

Installation procedures. Where possible boardwalk sections should be prefabricated off-site to facilitate ease of construction and minimize the potential for disruption to the site. Contractors selected for the installation should be experienced in this type of carpentry. Consultation with the carpenter during the design phase will often result in more efficient, simplified construction that may end up saving the City time and materials costs. Engineering evaluation of the underlying material will be critical to prevent the boardwalk from rising or popping out of the ground during future springtimes. In some situations the support posts might be driven in at a 10 degree angle (from the vertical) to give the boardwalk more structural integrity.



TIMBER STEPS

SMALL BOAT LAUNCHES

Locational criteria. The limited number of small boat launches that have been recommended in the report were selected on the basis of the following locational criteria: navigability of the waterway, limited number of obstructions in the river or stream, ease of current or potential access, availability of existing parking or potential for parking areas, limited impacts on wildlife habitats. Before commencing the final design for boat launches at any of the points selected the City should examine all of these factors in a more quantitative manner.

Relationship to natural environment. The presence of free flowing water is often coupled with wooded wetlands and other productive natural environments. The design of the boat launches and their appurtenant facilities should be especially sensitive to the potential impact that may occur to the wildlife habitats. Unless heavy user demand is anticipated the City should install the minimum facilities necessary to accomplish its water access goals.

PICNIC TABLES AND BENCHES

Siting criteria. Sites should be nearly level (from two to six percent slopes), well drained, and have access to drinking water and a parking area. Three hundred feet is the maximum distance that people are usually inclined to walk to a picnic site. The most successful sites are those situated to take advantage of a water view, while offering the users some degree of privacy.

Material and design specifications. The most attractive and traditional picnic tables and benches are constructed of heavy wooden members. The City should consider using purpleheart wood from South America in order to resist carving and unauthorized engraving. While this wood is considerably more expensive than its domestic counterpart it has proven to be an effective material to use in vandal-prone areas.

Maintenance considerations. The picnic site must be accessible by a small truck to facilitate daily maintenance by the City or other group responsible for its upkeep.

Handicapped access. Follow the guidelines given above to ensure that all access to the picnic areas are in compliance with national standards. The ends of the tables, on ones side at least, should extend between 18 and 25 inches beyond the legs to allow wheelchair armrests to fit underneath. The pathway should extend to the table to facilitate wheelchair access. A turnaround space of at least thirty inches should be provided on the ends. Benches should be provided with backs and armrests to help the elderly as well as those with physical disabilities to raise and lower themselves.

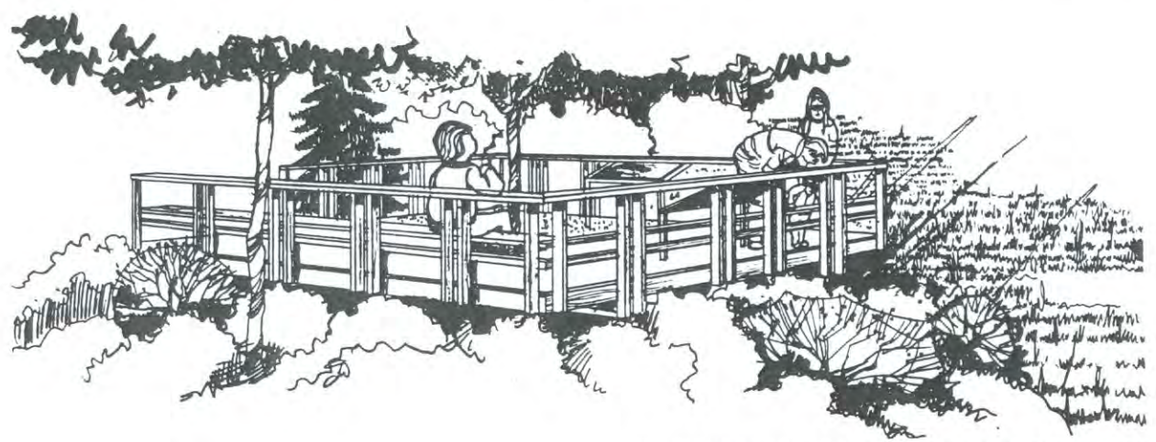
TRASH RECEPTACLES

Locational criteria. While the inclination may be to locate trash receptacles where they are easily accessed and emptied, these locations may not be the closest to the points of trash generation. It may be better in the long run, in terms of maintaining a clean shoreway environment, to distribute the cans at more frequent intervals where people tend to congregate. At picnic sites the City should provide one receptacle for every four tables. Along walkways the cans may be spaced every 3-500 feet, depending upon anticipated level of use.

Appropriate design. Trash containers are one element which can easily be used throughout the City on the shorefront accessway. Recycled oil drums, cleaned and appropriately painted, can be an inexpensive yet attractive means of handling this functional problem. A logo, used on interpretive signage, directional graphics, and t-shirts, can be silk-screened onto the cans to make them more easily identifiable, and encourage their use. Holes should be drilled in their base to allow water to drain. Cans should be inspected periodically, and damaged ones removed and replaced.

INTERPRETIVE SIGNAGE AND OTHER GRAPHICS

Materials. Several types of signboards are available which may be appropriate for use along the shorefront. Where text is to be combined with graphics (e.g. in the development of interpretive signage) the Metalphoto process of photoengraving images onto heavy aluminum plates has proven to be quite satisfactory, especially where the plates have been covered with Lexan or other types of protective covering. Silkscreening onto special display boards may be the best method of preparing large exhibits or signs. Consultation with a reputable sign manufacturer or display fabricator prior to designing the signage system will give the City a better idea of the various options brought about by changing technology.



INTERPRETIVE SIGNS ON OVERLOOK DECKS

Content. Five different types of signage may be warranted throughout the shoreway:

DIRECTIONAL: indicating route location or changes in directions

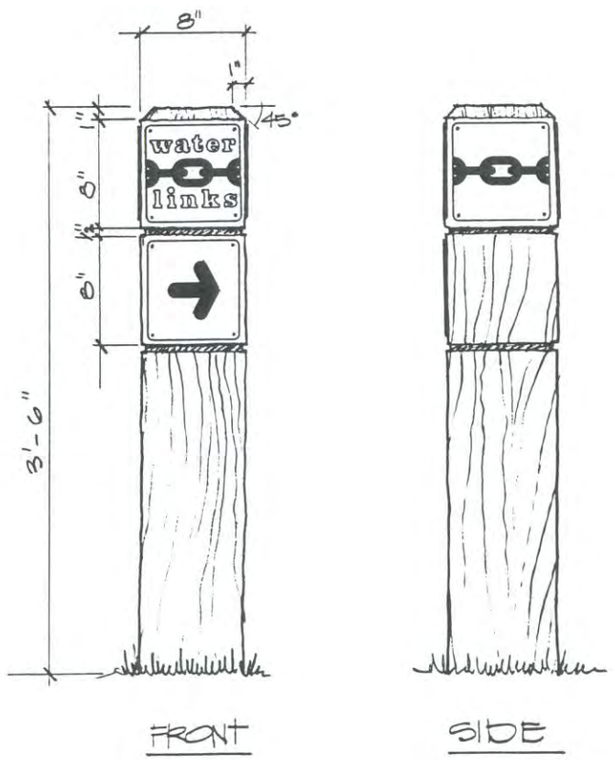
INFORMATIONAL: showing overall plans for specific areas and how the specific trails work within that system;

IDENTIFICATION: specific information regarding parking, rest rooms, overlooks, etc.

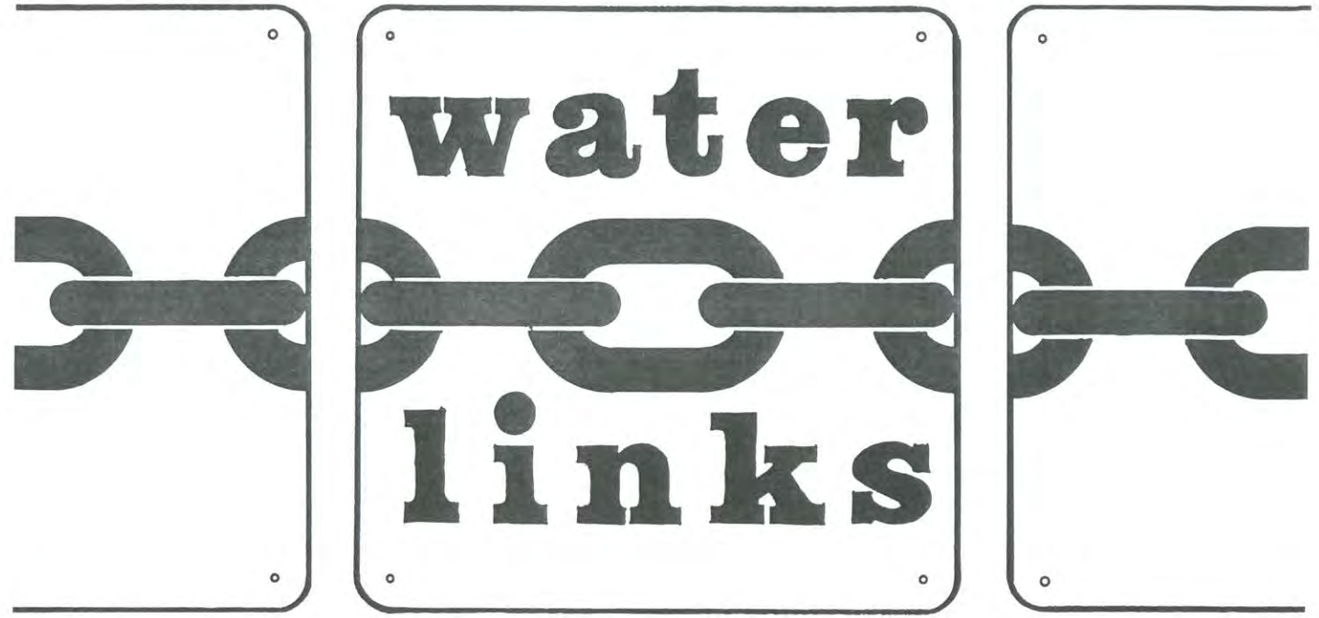
REGULATORY: rules and regulations

INTERPRETIVE: telling the story of a particular place: natural or cultural history

Adherence to an overall theme. Environmental graphics can greatly contribute to a sense of an exciting, unified access system. All graphics used for the project should follow a set of standards that address layout, format, lettering size, use of a logo, color, materials, etc. A graphic consultant should be retained to develop this system, which can also be adopted for use throughout all the City' park system.



DIRECTIONAL SIGN

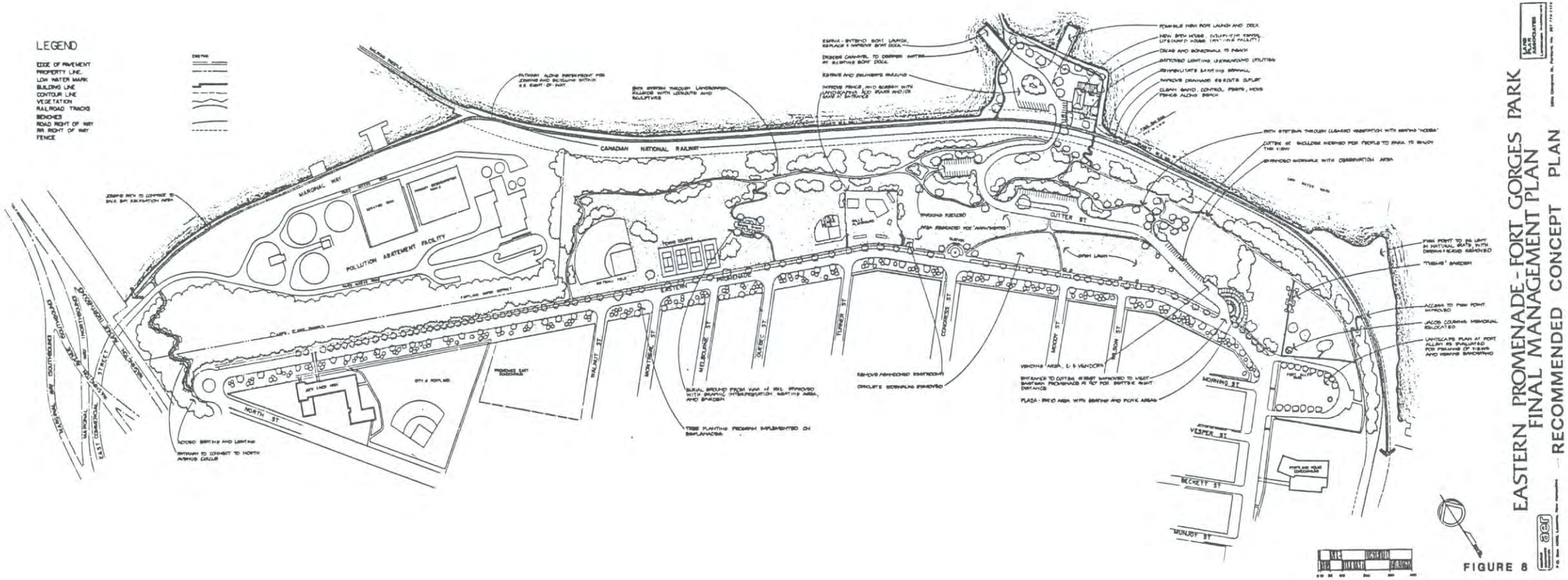


EXAMPLE OF AN IDENTIFIABLE LOGO TO MARK THE TRAIL SYSTEM

APPENDIX G EASTERN PROMENADE MANAGEMENT PLAN

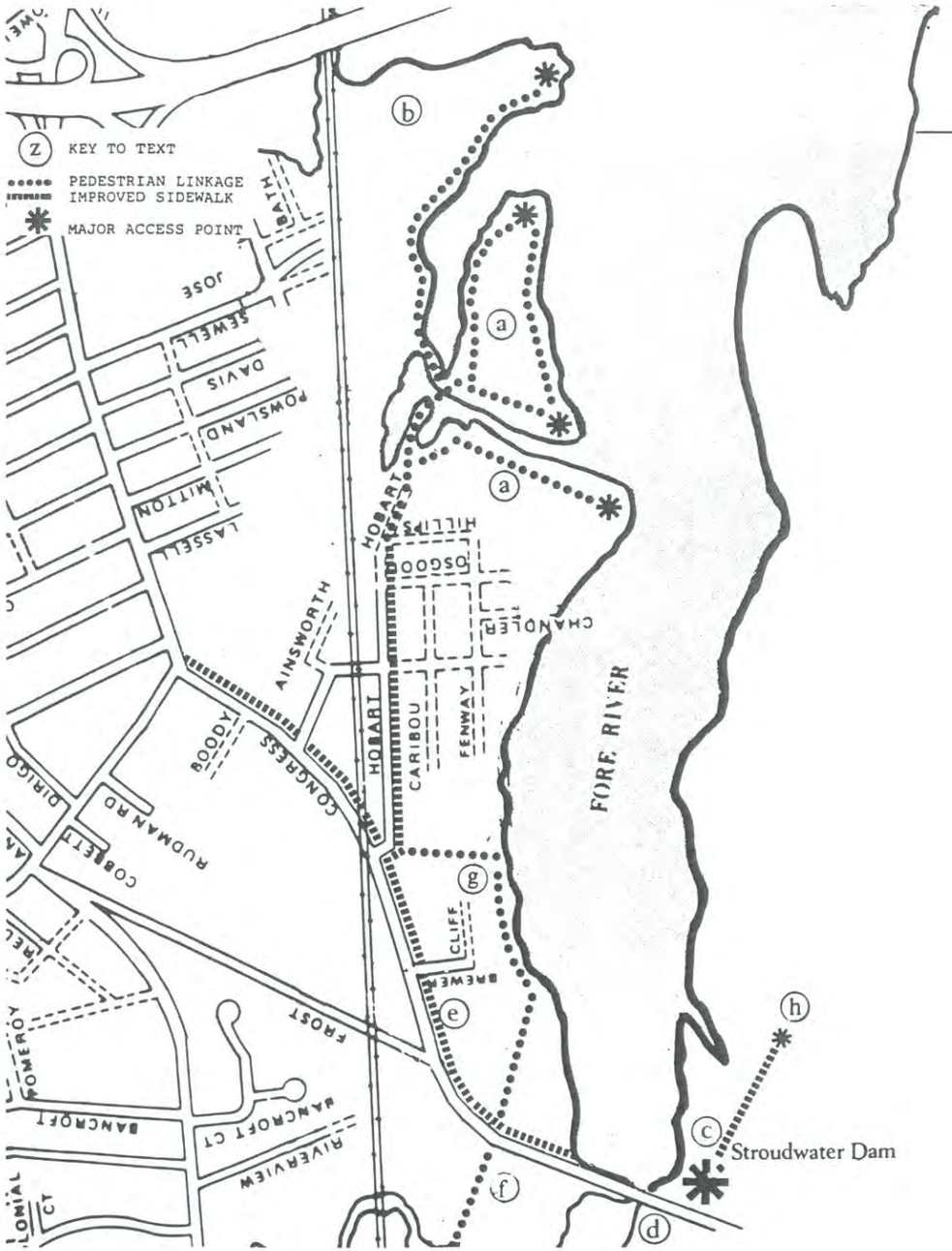
COPY FROM, THE EASTERN PROMENADE - FORT GORGES PARK FINAL MANAGEMENT PLAN,

PREPARED BY APPLIED ECONOMIC RESEARCH AND LAND PLAN ASSOCIATES.



ACCESS RECOMMENDATIONS

Fore River



APPENDIX H FORE RIVER ACCESS RECOMENDATIONS

COPY FROM , PORTLAND WATERFRONT PUBLIC ACCESS DESIGN PROJECT,TECHNICAL REPORT, PREPARED BY TERRIEN ARCHITECTS AND MITCHELL - DEWAN ASSOCIATES.

a. City should reexamine its zoning for the undeveloped land between Hobart Street and Thompson's Point. This oak covered spine is one of the few natural waterfront areas left in the City and has tremendous potential for expanded/ concentrated residential development in the vicinity of Hobart Street. Land is generally very steep, with deeply incised ravines and sensitive embankments. Cluster type of development should be encouraged to preserve natural appearance of this point and its backwaters.

b. Thompson's Point owners should comply with minimum standards regarding waterfront dumping, wetland alterations, proper disposal of waste materials, and screening of view of stockpiled materials from the water and I-295. Image of Portland would be greatly improved if a comprehensive effort was made to organize, landscape, and improve the entire area, especially as seen from the Interstate. Thompson's Point, as the terminus of the old Cumberland and Oxford Canal, is an area of State-wide historic significance. As the starting point of a potential trail system, linking the Fore River with Maine Audubon Society's Land, an area should be set aside for parking, water access, and interpretive exhibits.

c. Develop a long-term improvement plan for the small Stroudwater Park on Outer Congress Street. Locate/relocate trees to focus views to water; improve condition of bus shelter or install a structure in keeping with historic character of neighborhood; provide benches for water viewing. Opportunity for water access for small boats and canoes if parking and boat put-in provided.

d. Encourage church and store to redefine parking areas and add landscaping to complement park and help unify corner.

e. Provide sidewalk improvements and landscaping to establish a strong pedestrian link between the river crossing and the neighborhoods along Congress Street.

f. Development plans for the present Aceto Landfill off Congress Street should allow for a 50-75' buffer strip to bring the Maine Audubon 2 mile trail system to a point of public access. Ten to twenty spaces of parking would also be desireable in the general area.

g. Extend the MAS's trail system across Congress Street to the eastern bank of the Fore River to City's Pump Station and up to Hubart Street. Hobart Street trail will require a footbridge to cross the old canal to gain access to penisula.

h. City should acquire small piece of property adjacent to Stroudwater River Dam to provide canoe access. Extend linkage/sidewalk improvements from Stroudwater Park. Several parking spaces will be required for canoe access point.

APPENDIX I
IMPLEMENTATION PRIORITY MATRIX

DEFINITIONS OF PRIORITY CRITERIA

OLMSTED PLAN: Properties that allow the City to implement unrealized portions of the1905 Olmsted General Plan for Park System, City of Portland, Maine.

ISLAND STUDY: Properties that will help the City implement the recommendations made by the Planning Department in the 1985, "Portland Islands Land Use and Zoning Study".

GATEWAY PLAN: Properties that will help the City implement the recommendations made by the Planning Department in the 1983 "Gateways to Portland" study.

PUBLIC PROPERTY: Properties that the City or State currently own or have an easement interest in. A "yes" indicates that either the entire or the majority of the planning unit includes public land or easement. A planning unit that only includes public land would be noted by a"no" under "PRIVATE PARTICIPATION". On the other hand, a unit that has a "yes" under "PUBLIC PROPERTY", and a "yes" under "PRIVATE PARTICIPATION" would indicate that implementation involves primarily public property, but also some private land.

POPULATION SERVED: Properties that will serve the greatest number of users, either local residents and/or visitors.

PUBLIC WORKS OPPORTUNITIES: Properties that may become available as a result of local, state, or federal public works projects, e.g. bridge construction, street reconstruction, state park development. In many of these situations the City may be able to provide input into the planning process that will help meet the goals of the Shoreway Access Plan, with minimal expenditure on the part of the City.

PRIVATE PARTICIPATION: Need of voluntary donations or purchases of properties, easements, or other forms of access, given to or purchased by the City, conservation organizations, or management entity, that could tie into the Access Plan. An asterisk above a "yes" indicates that either an agreement has been reached or a willingness to participate in the Portland Shoreway Access Plan has been expressed by the private land owner.

EASE OF IMPLEMENTATION: Properties that present the least number of physical, environmental, and legal obstacles.

SCENIC DESIREABILITY: Properties that offer the recreational user the greatest opportunities for experiencing the surprising diversity of Portland's natural environment.

IMPLEMENTATION PRIORITY

Because the Portland Shoreway Access System is an intergrated trail system it is important that every planning unit be considered equally significant to its success. Securing access agreements should be a high priority for all the planning units, so that as funds become available the opportunity to develop a shoreway access trail system still exists.

This document provides the framework for an ambitious endeavor, one that cannot be completed overnight. For this reason implementation priorities have been recommended. The priorities, based on current conditions, clarify a point of beginning for a development strategy. The future may present advantages or circumstances that alter the list of priorities. No matter what the order, it is important that steps are made to see that the Master Plan becomes reality.

ABBREVIATIONS

NA : Not Applicable
HI : High
MOD : Moderate
LO: Low
SEAS. : Seasonally
* YES : An agreement has been reached; or a willingness to participate has been expressed to the City of Portland Department of Planning and Urban Development.

PRIORITY CRITERIA	PLANNING UNITS																											
	PRESUMPSCOT RIVER PRESERVE	OLYMPIA STREET NEIGHBORHOOD & MARTIN POINT	CASCO BAY ESPLANADE & BERWICK STREET NEIGHBORHOOD	HAWTHORNE STREET NEIGHBORHOOD	TUKEY'S BRIDGE NORTH, B&M FACILITY, & C.N.R.R.	TUKEY'S BRIDGE SOUTH	BACK COVE, FALL BROOK, & PAYSON PARK	MACKWORTH STREET & BACK COVE	FRANKLIN ARTERIAL N.W.	FRANKLIN ARTERIAL S.E.	OAK COVE WALKWAY - MARGINAL WAY ALTERNATIVE	OAK COVE WALKWAY - FOREST AVENUE ALTERNATIVE	LOWER STROUDWATER RIVER	LOWER STROUDWATER RIVER - UNUM	UPPER STROUDWATER RIVER - HUTCHINS DRIVE TRAILHEAD	FORE RIVER SANCTUARY	CAPISIC POND	RIVERSIDE INDUSTRIAL SUBDIVISION	RIVERTON PARK	RIVERSIDE MUNICIPAL GOLF COURSE	LOWER PRESUMPSCOT RIVER TRAIL	EASTERN PROMENADE TO B.I.W. WATERFRONT	COMMERCIAL STREET WATERFRONT CORE	WESTERN PROMENADE	FORE RIVER	PEAKS ISLAND CONSORTIUM TRAIL	LONG ISLAND PHOENIX NATURE PRESERVE	GREAT DIAMOND & LITTLE DIAMOND TRAIL SYSTEM
OLMSTED PLAN ISLAND STUDY	NO	NO	NO	NA	YES	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	YES	YES	YES
GATEWAY PLAN	NO	YES	NO	NA	YES	YES	YES	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	NA	NA	NA
PUBLIC PROPERTY	YES	YES	YES	NA	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	NO	YES	NO	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES
PUBLIC WORKS	NO	NO	NO	NA	YES	YES	YES	NO	NO	YES	YES	NO	NO	NO	YES	NO	NO	NO	YES	YES	NO	YES	YES	YES	NO	YES	NO	NO
PRIVATE PARTICIPATION	NO	YES	NO	NA	YES	NO	YES	YES	NO	NO	YES	NO	YES	YES	* YES	* YES	NO	* YES	YES	NO	* YES	YES	* YES	NO	YES	* YES	YES	* YES
POPULATION SERVED	LO	MOD	LO	NA	HI	HI	HI	MOD	HI	HI	HI	HI	MOD	MOD	MOD	MOD	MOD	LO	MOD	MOD	MOD	HI	HI	HI	MOD	SEAS HI	SEAS HI	SEAS MOD
EASE OF IMPLEMENTATION	HI	MOD	MOD	NA	MOD	HI	MOD	HI	HI	HI	MOD	HI	MOD	MOD	HI	HI	HI	MOD	HI	HI	MOD	HI	HI	HI	MOD	HI	LO	HI
SCENIC DESIRABILITY	HI	HI	MOD	NA	HI	HI	HI	LO	MOD	MOD	MOD	MOD	HI	HI	HI	HI	HI	MOD	MOD	MOD	HI	HI	HI	HI	HI	HI	HI	HI
IMPLEMENTATION PRIORITY	LO	HI	MOD	NA	MOD	HI	HI	MOD	HI	HI	HI	HI	HI	HI	HI	HI	MOD	MOD	MOD	MOD	MOD	HI	HI	HI	HI	HI	HI	MOD

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AUTHOR: Greater Portland Council of Governments
DATE: 1986
SCALE: 1" = 200'
AREA: Greater Portland
SOURCE: GPCOG

NAME: Back Cove, Portland, Me.
AUTHOR: Olmsted, Olmsted and Eliot
DATE: 1896
SCALE: 1" = 100'
AREA: Back Cove
RELEVANCE: Historic

NAME: City of Portland, Maine
AUTHOR: unknown (presume City of Portland)
DATE: unknown
SCALE: unknown
AREA: entire mainland of Portland, excludes islands
SOURCE: City Planning Office
RELEVANCE: base sheet for 3 detailed maps for final master plan

NAME: Cliff Island
AUTHOR: JHC
DATE: Jul 28 64
SCALE: 1" = 500'
AREA: Cliff Island

NAME: Donald O.Butler Subdivision
AUTHOR: Land Use Consultants
DATE: Aug 27 81
SCALE: 1" = 100'
AREA: Presumpscot River
SOURCE: CPS 12

NAME: Eastern Point Portland, Me.
AUTHOR: Sasaki Assoc.
DATE: Dec 9 86
SCALE: 1" = 100'
AREA: Fort Allen Park, Portland Me.
SOURCE: CPS 8

NAME: General Plan for Park System
AUTHOR: Olmsted Bros.
DATE: 1905
SCALE: 1" = 1000'
AREA: Portland
RELEVANCE: Historic

NAME: General Plan for Western Promenade
AUTHOR: Olmsted Bros.
DATE: 1905
SCALE: 1" = 200'
AREA: Western Promenade
RELEVANCE: Historic

NAME: Great Diamond Island
AUTHOR: JHC
DATE: Jul 28 64
SCALE: 1" = 500'
AREA: Great Diamond Island

NAME: Jerry Point, Preliminary Subdivision Plan
AUTHOR: Land Use Consultants
DATE: Feb 86
SCALE: 1" = 100'
AREA: Long Island
SOURCE: CPS 18

NAME: Little Diamond Island
AUTHOR: JHC
DATE: Jul 28 64
SCALE: 1" = 500'
AREA: Little Diamond Island

NAME: Little Diamond Island, Recording Plat of Land
AUTHOR: Owen Haskell,Inc.
DATE: Sep 7 84
SCALE: 1" = 50'
AREA: North Half, Little Diamond Island
SOURCE: CPS 18

NAME: Long Island
AUTHOR: JC
DATE: Jul 24 64
SCALE: 1" = 500'
AREA: Long Island

NAME: Lot 4 Butler Subdivision
AUTHOR: Land Use Consultants
DATE: Apr 5 85
SCALE: 1" = 40'
AREA: Presumpscot River
SOURCE: CPS 12 A

NAME: Martin's Point Health Care Center
AUTHOR: Keith, French, & Assoc.
DATE: Jun 24 86
SCALE: 1" = 30'
AREA: Presumpscot River
SOURCE: CPS 10

NAME: McAlister Farm Subdivision
AUTHOR: McAlister, Jeffrey
DATE: Jan 26 87
SCALE: 1" = 100'
AREA: Presumpscot River
SOURCE: CPS 11

NAME: Official Map, City of Portland
DATE: Feb 74
SCALE: 1" = 800'
AREA: Mainland Portland

NAME: Official Map, City of Portland
AUTHOR: Portland Planning Dept.
DATE: Jun 3 74
SCALE: 1" = 800'
AREA: Mainland

NAME: Official Map, Islands, City of Portland
AUTHOR: Portland Planning Dept.
DATE: Feb 27 73
SCALE: 1" = 1000'
AREA: Islands of Portland

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AUTHOR: Portland Planning Dept.
SCALE: 1" = 2000'
AREA: Islands

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AUTHOR: JHC
DATE: Jul 21 64
SCALE: 1" = 500'
AREA: Peaks Island

NAME: Peaks Island, Portland Island Index
AUTHOR: Greater Portland Council of Governments
DATE: 1984
SCALE: 1" = 200'
AREA: Peaks Island

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AUTHOR: Camp, Dresser, McKee Inc.
DATE: Aug 81
SCALE: 1" = 400'
AREA: Fore River

NAME: Pollution Abatement Facilities, Portland
AUTHOR: Camp, Dresser,& McKee Inc.
DATE: Feb 75
SCALE: 1" = 100'
AREA: Portland
SOURCE: CPS 9

NAME: Portland
AUTHOR: Greater Portland Council of Governments
DATE: Jul 76
SCALE: 1" = 1000'
AREA: Portland

NAME: Portland Harbor: Free Street to Congress Street, excluding Commercial
AUTHOR: Greater Portland Council of Governments
DATE: Nov 4 86
SCALE: 1" = 200'
AREA: Portland Harbor
SOURCE: City Planning Staff

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AUTHOR: Greater Portland Council of Governments
DATE: 1984
SCALE: 1" = 200'
AREA: Great Diamond, Cushing, and Little Diamond Islands

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DATE: 84
SCALE: 1" = 200'
AREA: Long, Cliff and Cow Islands

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AUTHOR: Greater Portland Council of Governments
DATE: 4 84, 7 84
SCALE: 1" = 2000'
AREA: Portland

NAME: Preliminary Layout of Athletic Facilities, Waynflete School
AUTHOR: Dufresne-Henry
SCALE: 1" = 100'
AREA: Portland
SOURCE: CPS 4

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AUTHOR: Land Use Consultants
DATE: May 10 83
SCALE: 1" = 50'
AREA: Portland
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AUTHOR: Land Use Consultants
DATE: Jun 26 84
SCALE: 1" = 40'
AREA: Falmouth
SOURCE: CPS 13 B

NAME: Presumpscot River Project
AUTHOR: Land Use Consultants
DATE: Apr 79
SCALE: 1" = 100'
AREA: Portland/ Falmouth
SOURCE: CPS 13

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AUTHOR: Dept. of Public Works
SCALE: 1" = 200'
AREA: Peaks Island

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AUTHOR: Portland Planning Dept.
DATE: Feb 20 74
SCALE: 1" = 800'
AREA: Mainland, Portland

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AUTHOR: Camp, Dresser & McKee Inc.
DATE: Sep 83
SCALE: 1" = 600'
AREA: Stroudwater River, Fore River

NAME: Stroudwater Estates
AUTHOR: E.C. Jordan
DATE: Dec 13 85
SCALE: 1" = 100'
AREA: Stroudwater River, Portland
SOURCE: CPS 1

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AUTHOR: L. Wallace
DATE: Oct 57
SCALE: 1" = 20'
AREA: Fore River

NAME: Stroudwater River Edge
AUTHOR: Land Use Consultants
DATE: Feb 87
SCALE: 1" = 50'
AREA: Stroudwater, Portland
SOURCE: CPS 3

NAME: Thompson's Point, Sewall St., Portland, Me.
AUTHOR: HTA/OEST Associates Inc.
DATE: an 13 87
SCALE: 1" = 80'
AREA: Thompson's Point, Fore River

NAME: Zoning Map, Mainland, Portland
AUTHOR: Portland Planning Dept.
DATE: Mar 58
SCALE: 1" = 800'
AREA: Portland