AUGUSTA GREENWAY

1986

a park proposal

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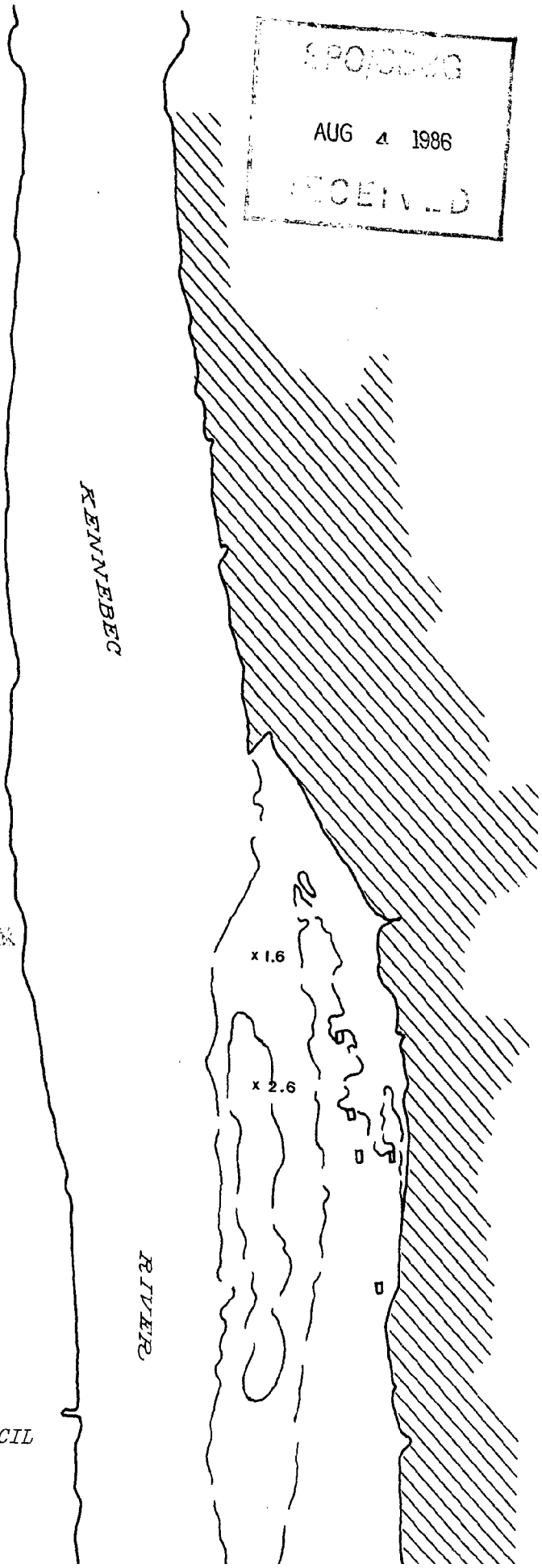

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AUGUSTA GREENWAY

A PARK PROPOSAL

JULY 1986

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Introduction

The Augusta Greenway study is being undertaken as a result of a Resolution ... to create a Greenway on the East Bank of the Kennebec River in Augusta (H.P. 1017-L.D. 1468) passed by the State Legislature in June, 1985 and also as the result of a successful application for funds under the Maine Coastal Program Planning Grant made by the City of Augusta in August, 1985. The Resolution proposes a study area of the State-owned Augusta Mental Health Institute (AMHI) property, while the Planning Grant Award encompasses the larger area extending from the Edwards Dam to the Chelsea Town Line on the east side of the River. The timing is highly appropriate in light of the legislation initiated by the Governor and passed in March, 1986: An ACT to Enhance the Sound Use and Management of Maine's Coastal Resources. (L.D. 2167) and An ACT to Authorize a General Fund Bond Issue in the Amount of $10,500,000 for Coastal Access, Harbor Improvements, and Marine Laboratory Improvements. (L.D. 2250).

L.D. 2167 is concerned with identifying and designating "Heritage Coastal Areas ... areas containing an assemblage of geological, botanical, zoological, historical or scenic features of exceptional state or national significance." The location of Fort Western and the Kennebec Arsenal, as well as the scenic features of the shoreline, make the study area a likely candidate for designation as a "Heritage Coastal Area." This same act also states that "municipalities may extend or adopt zoning and subdivision controls to protect any public rights for physical or visual access to shoreline" as well as "promote public access to the shoreline." The establishment of a municipal park in Augusta would accommodate both the historic and coastal access provisions of this legislation.

This analysis and proposal is the most recent of a number of previous studies which have looked at development possibilities along the Kennebec River Corridor in general, and specifically, at park development along the Kennebec River shore in Augusta. The value and desirability of establishing a park along the shore was recognized nearly thirty years ago in the Preliminary Plan Report for the City of Augusta. This document states that "on a river valley basis, there would be justification for extensive State Park holdings interspersed with federal, or municipal, or county, or private holdings for recreation, [and] for public preserve ... under land use standards, all up and down both banks of the Kennebec River." (Blackwell 1959:17). It also proposed "... a 15 year to 30 year program of gradual public land acquisition along both banks of the Kennebec River throughout Augusta." (Blackwell 1959:36).

The most comprehensive park study was conducted in 1974 by Moriece and Gary of Maine, Inc., with the study area extending along the eastern shore of the River from Fort Western southward to the Chelsea/ Randolph town line. Establishment of a State Park was proposed to include the entire length of the study area. The current proposal encompasses a smaller area, and urges the establishment of the Greenway as a municipal park facility of the City of Augusta; the scale and focus of the two proposals differ, although some elements of the Moriece and Gary plan are incorporated in the present proposal. Both the Kennebec River Greenway Feasibility Study and the companion Master Plan Report are excellent sources of background and reference material and should be consulted in order to obtain a deeper understanding of the historical and physical nature of the proposed park site.

While previous studies and the recently enacted coastal legislation can be viewed as positive action and serve as incentives for developing parkland, there are additional, more broadly based arguments which lend strength to any park proposal, and when considered along with the specifics of this particular proposal, make a convincing case for the Augusta Greenway. These include concern for preservation and conservation along with economic considerations and a regard for aesthetic qualities.

Increasingly, preservation and conservation of open space has become a major concern of federal, State and local agencies and officials. Lists of open space benefits have become popular among both planners and preservationists; some of these can be extensive, confusing and, more likely than not, redundant. In order to make sense of the many preservation and conservation issues, one must approach open space in terms of some kind of basic function. There are essentially three:

* "The first is for the establishment of recreational opportunity.
* The second is for the establishment of attractive community design, a visually pleasant landscape, and the environmental amenity this supplies.
* The third is for the maintenance of natural processes - in a word, conservation." (Little 1969:9)

These three functions are addressed briefly here, but each of these, separately and together, are the major influence on the park design which is presented in a separate section of this report.

As will be discussed further, the City of Augusta's Recreation and Parks department operates eighteen park facilities, none of which, however, provide the passive features nor the extent of accessibility to the River which the proposed park would provide.

The second and third functions, namely a "visually pleasant landscape" and "conservation" can be combined here for a common purpose. A minimum of construction or development is proposed while the larger elements of the plan recommend thoughtful clearing of underbrush along the shoreline and slopes, careful use of ornamental shrubs and flowers as screening devices, and the design of trails or footpaths utilizing natural or semi-hard non-permanent paving surfaces. The intent is to produce a setting which is pleasant for the user, visually stimulating to the observer, and which also will not negatively impact or be impacted by the natural processes which a tidal river and its shoreline is subject to.

Thus far, economic considerations have not been addressed, but they too are a positive inducement for open space preservation and park development. Simply stated, "open space produces municipal income negatively - by costing less to service. It produces positively by adding value to adjacent properties." (Little 1969:91) The "negative" income as it applies

to the study area is admittedly not very significant, but the "positive" income could be. The cost to the City of some possible land acquisition, or of acquiring easments - both of which could remove property from the City tax rolls, would be compensated for by, at the very least, maintaining current property values in the surrounding area, and more probably by increasing them with a resultant increase in assessed valuation. This has proven to be true in a number of research studies throughout the country specifically concerned with parks and their effects on adjacent land use and land values. Moreover, this positive effect can extend to the larger community-accessible open space and parks promoting the image of a more "livable" city. A recent conversation with William Sprague, Jr., a local realtor, confirmed that the premise - "municipal revenues increase with amenity" - holds true for the Augusta area. While the purpose of acquiring open space may not be a financial one, acquisition nearly always requires financial justification; there is evidence that open space and parks "pay off" for a community.

Finally, the excellence of the site and its proximity to water may be the most obvious and compelling argument put forth for proposing this park. Water has a natural attraction for people and is a prime focal point for outdoor recreation. A report of the Outdoor Recreation Resources Review Commission appointed by President Eisenhower in 1958 states that "wherever they live, most people seeking the outdoors look for water - to swim and fish in, to boat on, to walk, picnic and camp by, and just to look at." (Little 1969:11) This location in the heart of a developed, urban area has the potential for providing both availability and accessibility to the River and its natural surroundings. Indeed, the position could be taken that developing the park as a preservation and conservation measure <u>should</u> be rather than <u>could</u> be done. Landscape architects have urged that "the more accessible the water body and its shores are to user concentrations, the greater should be the value placed on protecting or improving its aesthetic qualities." (Litton 1974:261) The Kennebec as both a renewable and a renewing resource could be restored to a position of importance and a source of pride for the City of Augusta. (Kaplan 1978:186).

While the nearly completed Waterfront Park on the west side of the River is a fine example of providing an amenable public area on the Kennebec, it is, however, restricted by size and the immediate proximity of downtown buildings. The proposed park will provide a larger site and a more natural park setting; it would be the "rural" complement to its more "urbanized" sister park across the River.

Analysis

City Park Facilities

The parks which are managed by the Parks and Recreation Department of the City of Augusta meet the recreational needs of Augusta's residents with one exception - there is no large "district" park (20+ acres) owned and administered by the City. The smaller and more localized parks are generally balanced and fairly well distributed throughout the City. The municipal park system is comprised of 9 playlots (.25-2 acres), 6 vest pocket parks (2-5 acres), and 3 neighborhood parks (5-20 acres). The National Park Recreation and Open Space Standards recommends one district park to serve a population of between 10,000 and 50,000, and a service area with a radius of 3 miles. Suggested special areas and facilities in a district park include plazas, historical sites, tree lawns, boating facilities, trails, and an outdoor theatre/band shell. The proposed Augusta Greenway Park is an appropriate choice to fill the district park void.

The design proposal incorporates all of the suggested special areas and the Park's accessability and centrality of location are encouragements to its use by the entire Augusta community.

The proposed park is ideally situated to serve as a visual and physical link with the major cultural and historical features located in Maine's capital city. Among these are Fort Western, the Kennebec Arsenal (both of these on the National Register of Historic Sites), the State House, Blaine House, and the Maine State Museum and Library. The park could serve as a "thread of continuity between the past and the present" - between the historic sites of early settlement in Augusta and the current seat of Maine government, by using the existing "natural areas of river, field and trees to form frameworks that link the old areas with the new." (Mann 1973:92). In addition, a more unified park system would result from linking the existing Capitol Park, Waterfront Park, the Pine Tree Arboretum and the City Boat Launch with the Greenway Park in order to provide a range of active to passive recreational opportunities within the urban center.

Topography/Floodplain

For the most part, the study area from Fort Western to the southern edge of the AMHI property and roughly extending back 100 feet from the shoreline, is characterized by a sloping river bank. The severity of the slope ranges from moderate (8%-15%); to severe (15%-25%) to extremely severe (+25%). Slopes of 15% and greater are located in a thin band between the 20 foot and 30 foot contour lines below Fort Western and the First Church of Christ Scientist. It resumes again east of Sturgis Lane and continues, nearly uninterrupted, through to the southern edge of AMHI property. This long band occurs between the 20 foot to 50 foot contour lines to the edge of the former Kennebec Arsenal; from this point to the end of the park, the slope is contained within the 10 foot to 40 foot contour lines. Soils on these slopes are fairly unstable and have a potential for erosion, and therefore unsuitable for high intensity recreational development. The best use of this land would be of a passive nature; a well designed trail/footpath along the ridge would cause minimal disruption to the natural topography and yet would occasion a feeling of privacy and exciting views of the River below and the opposite shore.

The areas of the shoreline which are not appreciably sloped (between 0%-8%) are located within the floodplain. The relatively flat parcels of land, the shore below the banks of the Church and including the Augusta Boat Launch and City property south of the Memorial Bridge (Lots 188, A & B, and 10B) are all within the 100 year flood level which at this location is 38 feet above base elevation. This "flat" land is ideally suited for more intensive recreational usage. The design for this area should, however, discourage construction of large permanent structures, and any surfacing which may be done should be of materials which can withstand the yearly flooding of the Kennebec River.

There are, then, important physical constraints which along with the natural processes off river flooding and tidal ebb and flow, combine to limit the design options and recreational uses of the Greenway. This need not be a negative factor, since these very constraints provide the opportunity for creative development of a park facility which will be truly unique in the City.

Land Ownership/Land Use

A land ownership inventory was conducted and State Property, City Property and privately owned property were mapped as part of this study. (Appendix A) The section along the river from Cony Street extending south to the beginning of the AMHI grounds is held primarily by the City with three major exceptions which are privately held. Lot 187 (Map 38) belongs to the First Church of Christ Scientist, Lots 10A and 18-23 (Map 37) are held by the Kennebec Valley Medical Center, and Lot 10 (Map 37) the Augusta Lumber Company is the property of Helen Jones (trustee). This parcel is currently for sale and acquisition of all or part of it should be seriously considered. The AMHI property Lot 8 (Map 10) and Lot 10 Map 13) are State owned. South of AMHI and extending to the Chelsea Town Line (map 82) all of the land is privately owned.

Land Use for the study area was also mapped utilizing the City of Augusta's land use definitions and classifications. These include: Residential - a) single family and b) multi-family; Commercial; Institutions/Organizations; Transportation/Utilities; and Open Space/Recreation. The map also indicates hard surfaced parking areas associated with a particular land use. The land adjacent to the study area bounded by the Eastern Avenue Rotary (north), Middle Street (east), Arsenal Street (west) and the AMHI property boundary (south) is for the most part Residential with Business/Professional uses interspersed throughout. This is mentioned in order to point out that a park development would serve a significant local population.

West of Arsenal Street and extending to the AMHI grounds uses are mixed. There is a small residential component; two areas of non-conforming commercial use; one large parcel (Augusta Water District) utility use and the largest remaining area is nearly evenly divided between institutional and open space use. The entire AMHI property is categorized as institutional/ organizational. South of AMHI and continuing to the Chelsea Town Line, residential use predominates; there is an additional commercial use fronting and extending back from Hospital Street, and open space represents the large tracts of undeveloped land.

Land Use Regulation

The study area is presently regulated by an overlap of General and Shoreland Zoning, as well as a Flood Damage Prevention Ordinance. This brief review describes aspects of each regulatory tool as it applies to the proposed park area.

General Zoning: Effective date - November 1983.

The study area largely exists in an EBP, East Side Business and Professional District, with a small area to the South in an RU, Rural zone. It is bounded to the North by a CB, Local Business District and to the East by Residential, RB1 and RA zones. The EBP zone permits residential and business/professional and government office development. Hospitals, clinics and other large medical service facilities which could create greater than normal impacts are permitted as special exceptions. The stretch of study area existing south of the AMHI property and extending to the Chelsea line is in the Rural zone and permits all types of develoment permitted in EBP and virtually all other types of development under Special Exception criteria. Dimensional requirements and standards are delineated according to use proposed.

Shoreland Zoning: Effective Date - May 1974

Three shoreland protection zones exist within the study area. These are General Development - GD; Resource Protection - RP; and Limited Residential and Recreational Area - LRRA. Uses permitted in these districts are permitted if and only if other federal, state and municipal codes are met. Virtually all of the immediate riverbank from the southern border of the First Church of Christ Scientist to the Chelsea line exists in a Resource Protection zone. RP zones permit the following: outdoor conservation and recreational uses; piers, docks, floats for recreational purposes if capable of seasonal removal; forestry, agricultural, hoticultural and aquacultural uses not requiring alteration of a shore, bank or floodplain. Special exception uses include: accessory structures and uses related to permitted uses; essential public works projects; single family residences on 3 acre lots with standards for subsurface waste disposal, setbacks and minimum frontage. This area is bounded to the north to the limit of the study area by a General Development zone. The Fort Western museum as well as the Church mentioned above exist in this zone.

The General Development district permits basically all types of development with some standards. One use, campgrounds, requires Planning Board review. The LRRA zone permits RP uses that are permitted by right; agricultural and forestry uses, recreational uses provided by public and/or non-profit agencies; residential (1 & 2 families) and accessory structures subject to minimum dimensional and setback requirements. Special Exception uses are accessory structures and uses related and necessary for uses permitted by right; sand, gravel and loam excavations; municipal uses, churches, public utilities, home occupations and state government activities.

Flood Damage Prevention Ordinance: Effective date - February 1981

Finally, the Flood Damage Prevention Ordinance is directly related to the National Flood Insurance Act of 1968. It identifies special flood hazard areas and establishes a permit system and review procedures for development activities in the designated areas. The river itself and areas of its banks exist in Zone A1-A30 - areas of 100 year flood with 38' contour, the area most susceptible to severe flooding is the Boat Landing Facility and existing snow dump area. Development standards within these zones address new construction; new or replacement water supply systems; on-site waste disposal; electrical and other utilities; flood carrying capacity of watercourse; new or substantially improved residential and nonresidential structures; as well as floodway provisions.*

The City of Augusta is currently reviewing and revising its Comprehensive Plan, and if the park plan is accepted, it may be more efficient to combine these existing ordinances into a single ordinance and amend it in order to better accommodate park design and goals.

* Zoning information provided by Kathy Fuller, City of Augusta Planning Department

Aside from land use regulation, there are additional restrictions on some of the land within the proposed park area boundaries. Land which is directly beneath the Memorial Bridge is owned (fee simple) by the Maine Department of Transportation under their standard "Right of Way" arrangement. No structure can be built and any changes in surfacing and/or landscaping require their permission. The Augusta Sanitary District holds easements for the "purpose of installation, construction, reconstruction, repair and maintenance of a sewer and drainage line." This traverses private property between Brooks Street and the northern boundary of AMHI property which is to the east of Arsenal Street and roughly parallels the 50 foot contour line. The width is ten feet. The easement is continued across the AMHI property; for this stretch, the width is twenty feet. The easement does not allow construction of a permanent building; paving, walkways, and parking facilities are permitted. The easements are mentioned here since they have an influence on the subsequent design proposal.

Work Program

There is, finally, a consideration of the necessity of establishing a time scale and work program for the park development. There are two choices: development of the Park as one single unit with work being done concurrently, or a program of phased, consecutive development. Given the fact that there are no intense development pressures on the land in question and no urgency to "save" the land now or lose it forever, it is advisable and more feasible to plan, design and build the park in a consecutively phased program. There are three strong arguments for doing so:

* Cost. Money can be more effectively budgeted for a relatively short-term development phase than for a larger long-term development, e.g. inflation and cost increases which are likely to occur during a multi-year building program. Grant money is more likely to be awarded for a single purpose project which would be completed in a one or two year period.

* Promotes Completion of the Total Planned Program. Well thought out phases, however many, which are relatively complete and independent in themselves can, when finished, serve as a building block or foundation for the completion of subsequent phases. It is important that each phase function as a complement to another. As each component is successful this stimulates the interest and desire to have the entire park design accomplished.

* Flexibility. A staged development allows the luxury of assessment and re-evaluation at various times - at completion of one phase and/or before beginning a subsequent one. Changes in design, as well as possible changes in function and proposed usage, can be accommodated more easily.

Design Proposal

What is presented here is really more of a conceptual proposal than a final, fixed design proposal. What will be the most suitable uses for the park considering its site, topography, surrounding areas and other factors of its situation? What is the best way to maintain the special "natural" feeling of this shoreland area? The basic idea which is central to this design proposal is that of concentrating the more active, intensive recreation near downtown and to have the succeeding sections which extend south along the River's edge to be used for the more passive manner of recreation. This concept is due largely to constraints of topography and recognition of natural processes, as noted earlier; it is also influenced by recent studies and various other greenway park proposals which indicate that parks are used primarily for passive pursuits; and that there is a dominance of informal, passive activities. (Lavery 1975:117).

A well designed park facility can only further enhance the current revitalization efforts occuring in downtown Augusta and will significantly improve the appearance of the eastern shore of the River. This is an area of high visibility to Augusta residents as well as people passing through the City; an amenable park setting combined with the shopping and lunching opportunities downtown and the nearby historical and cultural facilities will hopefully encourage vistors to stop and enjoy the Capitol City.

The proposed elements should be taken as thoughtful suggestions for what the Greenway Park could offer, in a unique setting, to the residents of Augusta and the larger State community.

PHASE ONE

Clearing of any low scrub or undergrowth which may be present as well as screening of unwanted visual elements is mentioned in the Phase One design, it will be assumed as an element in the subsequent phase designs.

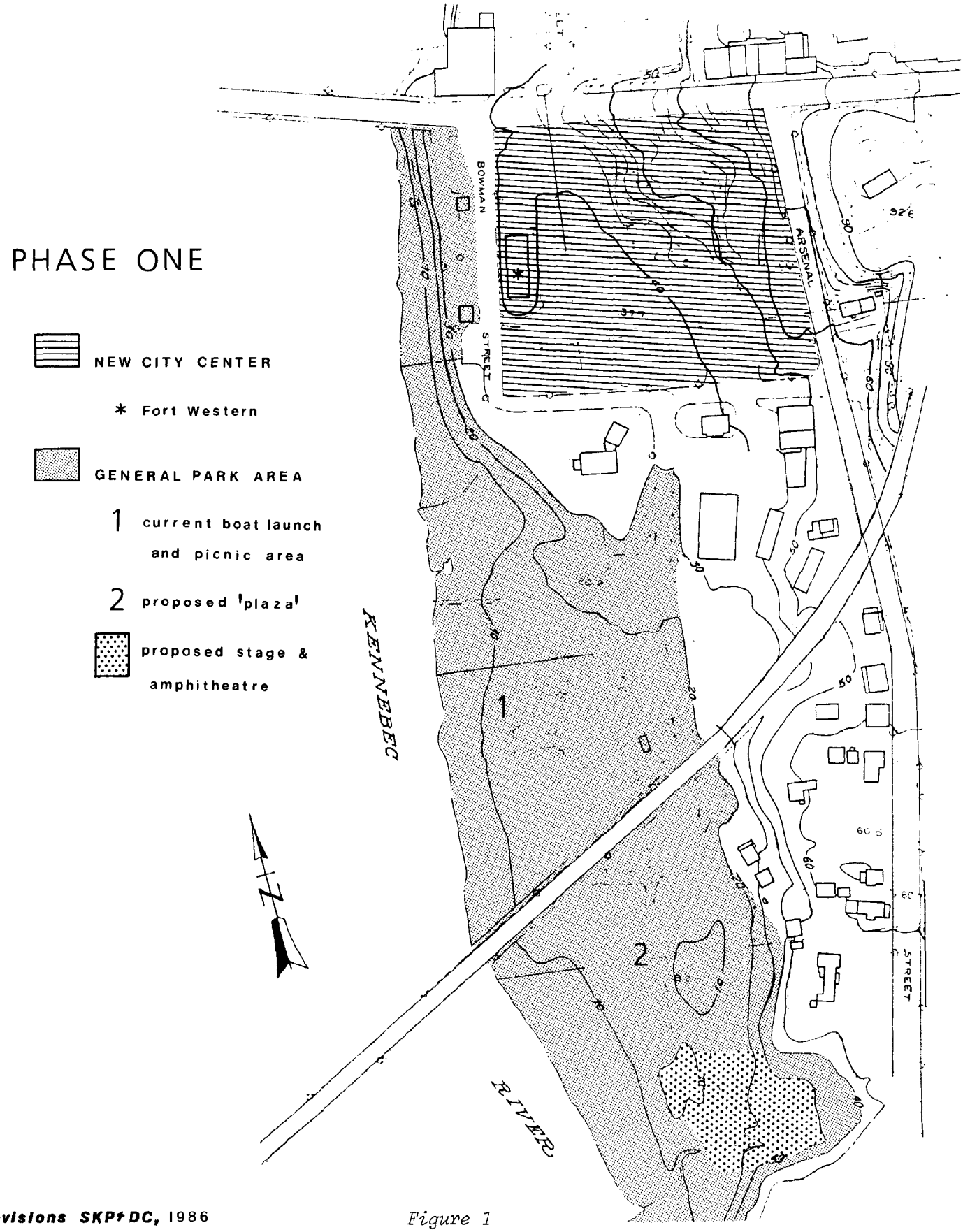
What is intended in Phase One (Figure 1) is to provide the City with what has been and still is lacking: a centrally located, large open area for relaxation, activity and social contacts. It is designed to serve as that common element in most New England towns - the village green or town square.

There are three major elements. The first is to provide a pathway directly linking Fort Western to the current boat launch-picnic area. The second is to design and landscape the City property south of Memorial Bridge in a slightly more formal manner to include some areas of hard surfacing so as to evoke a "plaza" setting. The third takes advantage of a natural "bowl" area at the back of the plaza and calls for a simply designed and constructed amphitheatre.

Additional suggestions include lighting for evening use, providing bicycle ranks, and providing an artificial ice skating rink. This, as well as any additional design features should encourage four season use of the area.

PHASE TWO

The second phase (Figure 2) is designed to function as a transitional area from active recreation to more passive recreational opportunities. It calls for a trail/path to be placed along the more level ridge area of the riverbank. This could be for walking, jogging and perhaps bicycle traffic. This trail could be located to coincide with the Augusta Sanitary District's easements which they have already obtained. Occassional complete clearings should be made for viewing the River and stairs provided for direct access to the shore. The pathway would continue along the Kennebec Arsenal grounds to the Arsenal granite wall, where a more formal element would include decorative benches and lighting and a stylized railing, perhaps of iron with granite posts. This would provide a striking view from across the River. A break in the wall and a ramping down to a former landing is still intact, although repairs are needed. This landing provides an unobstructed view of the River, north and south.



Revisions SKP+DC, 1986

Figure 1

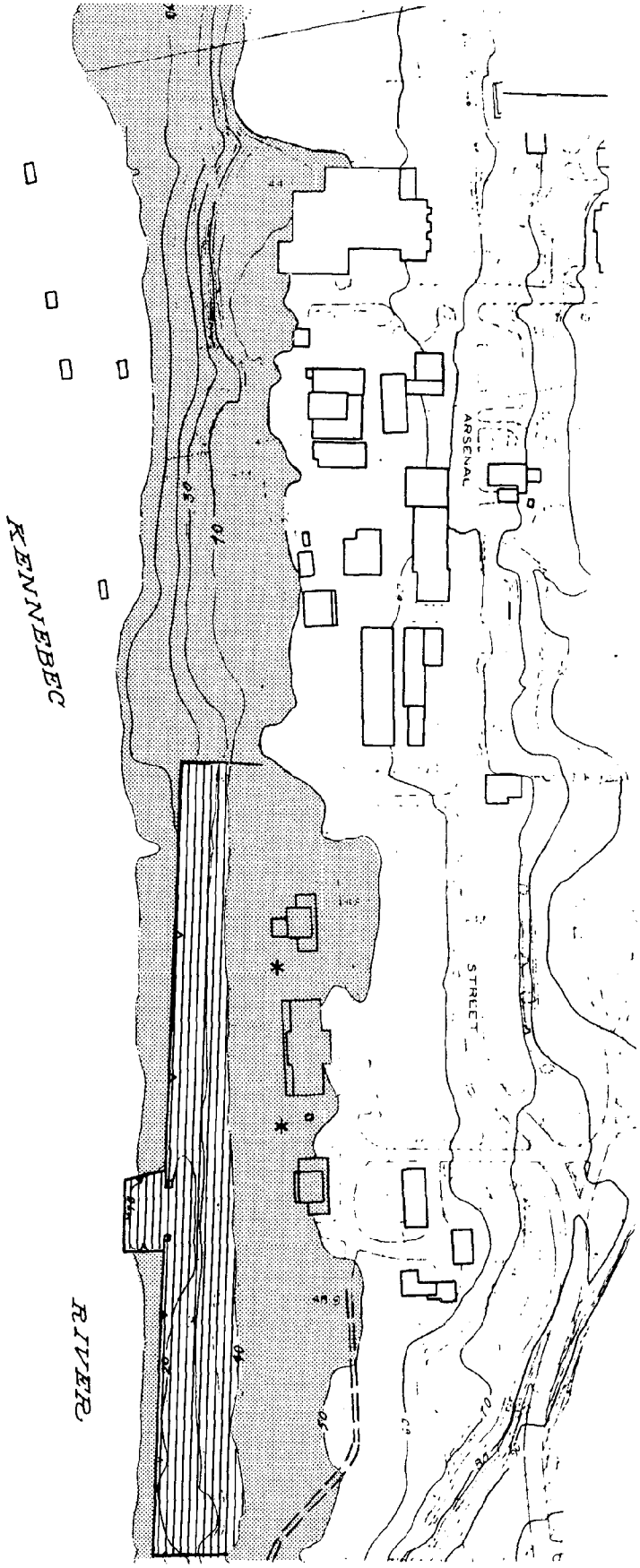
SOURCE: Original mapping compiled by JAMES W. SEWALL COMPANY for the Coastal Zone Management Survey, 1978.

PHASE TWO

GENERAL PARK and TRAIL AREA

* Kennebec Arsenal Buildings

proposed lighted 'esplanade'



Revisions SKP+DC, 1986

Figure 2

SOURCE: Original mapping compiled by JAMES W. SEWALL COMPANY for the Coastal Zone Management Survey, 1978.

Other additional considerations include low landscape lighting, interpretive facilities for the Arsenal buildings and wall, and restoration of the granite wall and walkway. Additional landscaping should provide for an interesting and pleasant surrounding for users as well as provide a dramatic and inviting view for people across the River or on the Memorial Bridge.

PHASE THREE

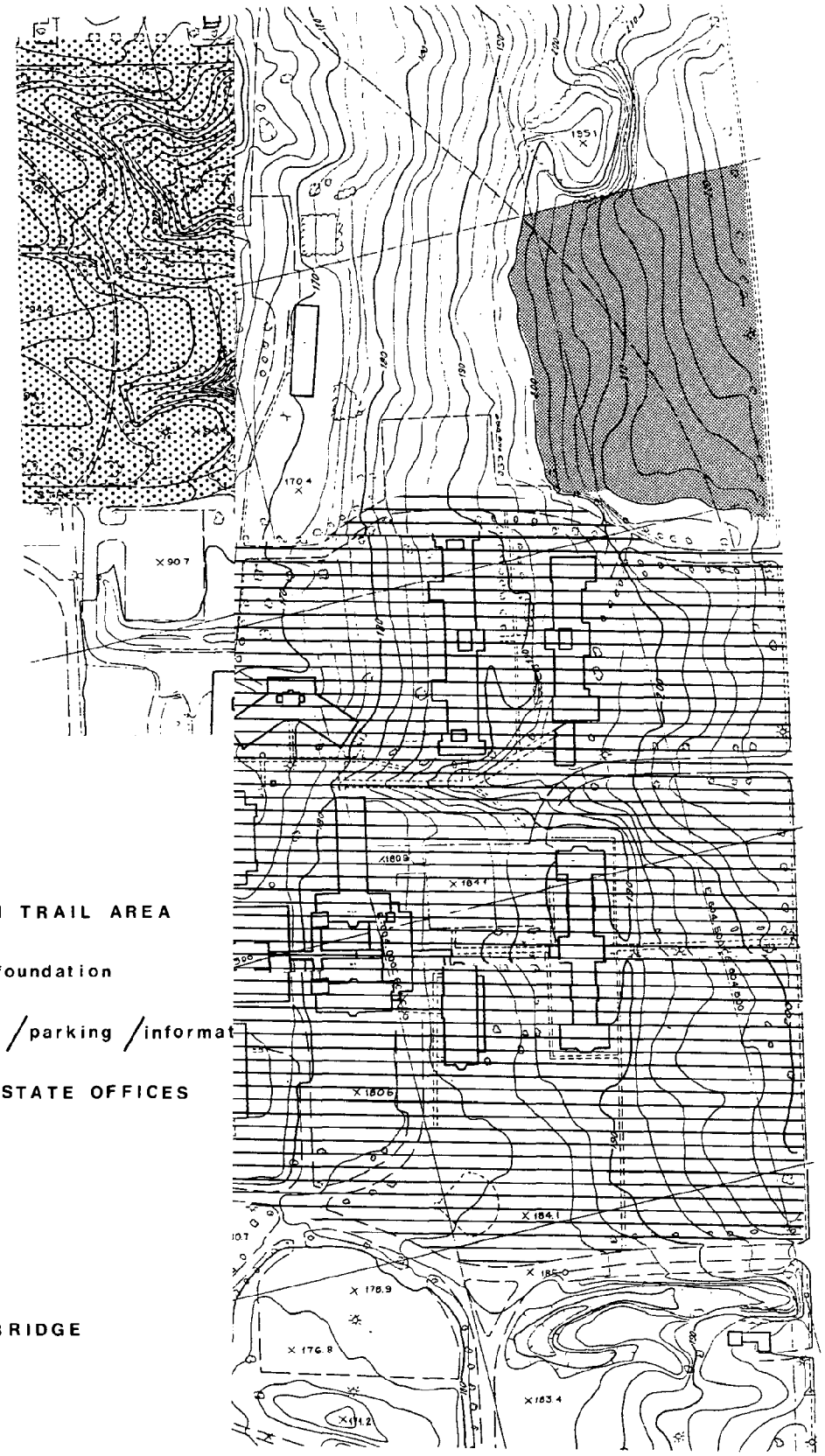
The large AMHI property provides the "pastoral" and reflective section of the Park. It is basically a continuation of the path along the ridge and following the Sanitary District easment (Figure 3). The path could be widened to include, if desired, a section of physical exercise stations. These are becoming a more common feature in park design and are in use in Portland and Waterville. Again, visual clearings and stairs to the shore are suggested.

A turn-in and parking area is provided off Hospital Street. From this point, one has an impressive and panoramic view of the City; the State Capitol building is in almost direct alignment with this area. An informational kiosk is suggested and would be most helpful to visitors. Connecting trails should be placed to join with the main trail as well as an additional trail or directional sign for the Pinetree Arboretum.

PHASE FOUR

This is viewed as the long range completion of the park project (Figure 3). A footbridge, extending from the coaling dock on AMHI property across the river to Capitol Park, would be a pleasant and efficient way to complete the loop from downtown to the State Capitol and would effectively link all of the City's historical and cultural facilities mentioned previously. Visitors could spend the day in the museums, see the historical sites, shop or lunch downtown and enjoy some relaxation along the River - all on foot and at their own pace without the interruption of driving and parking a car three or more times.

It is understood that this last phase will be a costly one, but it is hoped that the success of both the downtown improvements and the completion of the previous park phases will generate the desire to have the bridge built. A bridge will require the careful consideration of the many parties involved - the City, AMHI and the State. It should be pointed out, however, that intelligent and suitable design can help alleviate potential problems.



PHASE THREE

GENERAL PARK and TRAIL AREA

* coaling dock foundation

scenic lookout / parking / informat

AMHI BUILDINGS / STATE OFFICES

PHASE FOUR

CAPITOL PARK

PROPOSED FOOTBRIDGE

Revisions SKP+DC, 198

SOURCE: Original mapping compiled by JAMES W. SEWALL COMPANY for the Coastal Zone Management Survey, 1978.

Recommendations

This study will, in many ways, raise questions which are unable to be answered here, and additional expertise from landscape architects, engineers and recreational planners will be needed. Additional recommendations are outlined below, but the first and strongest of these is for the establishment of an advisory committee comprised of City and AMHI representatives, local residents, etc. This can ensure that citizen needs, desires and concerns are considered and hopefully resolved. Nothing is so dismal as a facility, particularly a public park, imposed with a minimal consideration of what is desired on the part of the potential users. Involvement in the planning and design process will hopefully (and usually does) encourage maximum use and enjoyment of the Park.

Recommendations also include:

- securing an alternative site for the current snow dump

- assess parking demands for park uses; will additional space be needed?

- consult with Department of Conservation Parks and Recreation, Augusta Recreation and Parks, landscape architect, recreational planner for final design and layout of park facilities.

- pursue land acquisition; (parcel 19, map 37, the proposed amphitheatre site is owned by Kennebec Valley Medical Center with an assessed valuation of $400).

- obtain recreation easements from private property owners; these would be an overlay on the current Sanitary District easements.

- ensure that final layout has provisions for accessibility by handicapped/elderly persons

- pursue possible funding sources: Department of Conservation's Land and Water Fund; there is also a Municipal Recreation Fund which is presently seeking re-funding; Coastal Access Fund (if bond is approved in November's general election); additionally, private health care providers have been a source of funding for PARCOURSE equipment and installation (physical exercise stations).

- unite the current Waterfront and the proposed park as a single, identifible recreational facility. Select a name and designate park as "East" and "West."

- seek involvement and support from local groups such as the Chamber of Commerce, Kiwanis, etc.

- promote community involvement; perhaps a "naming" contest; also possibility of developing a park "logo" for T-shirts, posters, etc. to keep park in the public eye and to be a minor source of fund raising for special projects.

BIBLIOGRAPHY

REPORTS AND ORIGINAL STUDIES

Blackwell, John T.
1959 City of Augusta Preliminary Plan Report. Boston, Massachusetts.

City of Portland. Planning Office
n.d. "Willamette River Greenway." (as contained in the Comprehensive Plan.). Portland, Oregon.

Duensing, Edward and Evelyn Klingler
1980 The Urban Waterfront as a Recreational Facility. n.p: Vance Bibliography. (June).

Fiore, Frank and Tim Glidden
1973 Resources Evaluation and Development Recommendations for the Lower Kennebec River Corridor. n.p.: Maine State Planning Office.

Hardy, Joseph
1985 Maine Rivers Access and Easement Plan. Augusta, Maine: Maine Bureau of Parks and Recreation.

Kehoe, Betsy
1982 Rediscovering the Eastern River: An Access, Visual and Site Analysis. n.p.: Center for Natural Areas.

Mallar Development Services, Inc.
1982 The Kennebec. Augusta, Maine: Southern Kennebec Valley Regional Planning Commission.

Mertes, James D. et al
1972 Trinity River Greenway: A Prototype. Lubbock, Texas: Texas Tech University, Water Resources Center.

Moriece and Gary of Maine, Inc.
1974 a Kennebec River Greenway Feasibility Study. Portland, Maine.
1974 b Kennebec River Greenway Master Plan Report. Portland, Maine.

Potomac Planning Task Force
1967 The Potomac. Washington, D. C.: United States Government Printing Office.

Rudner, Heidi and Charles F. M. Watson
1975 Kennebec River Basin Overview. n.p.: New England River Basin Committee.

Schroeder, Timothy D.
1981 Local Parks and Recreation Services and Property Values: a Review and Bibliography. Public Administration Series; Bibliography # P-640. (January).

State of Maine. Department of Conservation
1982 Maine Rivers Study. Final Report. n.p.

Townsend, Clint
1971 Kennebec River Corridor Proposal. n.p.: Northern Kennebec Valley Regional Planning Commission and the Natural Resources Council.

BOOKS AND MONOGRAPHS

Arnold, Joseph L.
1969 The New Deal in the Suburbs. Columbus: Ohio State University Press.

Ashbaugh, Byron L. and Raymond J. Kordish
1971 Trail Planning and Layout. Washington, D.C.: National Audobon Society, Inc.

Barlow, Elizabeth
1972 Frederick Law Olmsted's New York. New York: Praeger Publishers.

Fabos, Julius, Gordon T. Milde and V. Michael Weinmayer
1968 Frederick Law Olmsted, Sr. Founder of Landscape Architecture in America. n.p.: University of Massachusetts Press.

Halprin, Lawrence
1972 Cities. Cambridge, Massachusetts: MIT Press.

Lavery, Patrick, editor
1975 Recreational Geography. British Columbia: David and Charles, Ltd.

Little, Charles C.
1969 Challenge of the Land. New York: Pergamon Press.

Litton, R. Burton Jr.
1974 Water and Landscape. Port Washington, New York: Water Information Center, Inc.

Mc Harg, Ian L.
1969 Design With Nature. Garden City, New Jersey: Doubleday and Co.

Mann, Roy
1973 Rivers in the City. New York: Praeger Press.

Schmertz, Mildred F., editor
1970 Open Space for People. Washington, D.C.: The American Institute of Architects.

Shivers, Jay S. and George Hjelte
1971 Planning Recreational Places. Cranbury, New Jersey: Associated University Presses, Inc.

Sutton, S.B., editor
1971 Civilising American Cities. Cambridge, Massachusetts: MIT Press.

Whyte, William S.
1968 The Last Landscape. Garden City, New Jersey: Doubleday and Co.

Wurman, R.S., Alan Levey and Joel Katz
1972 The Nature of Recreation. Cambridge, Massachusetts: MIT Press.

JOURNAL ARTICLES

Elson, Martin
1979 "Recreation, greenbelts, and local plans." Oxford Working Papers in Planning Education and Research. vol. 37:34-72.

Jackson, Arthur
1982 "The Capitol Area Greenway Program: private land goes public." Carolina Planning. 8:32-34. Winter.

Kaplan, Rachel
1979 "Citizen participation in the design and evaluation of a park." Environment and Behavior. 12(4): 494-507.

no author
1979 "Green environment in urban areas." Professional Institutions Council for Conservation Report. 3(79).

Simpson, John D.
1979 "Bringing neighbors together in Street Parks." Parks and Recreation. 14(10): 34-38.

APPENDIX A

LAND OWNERSHIP INVENTORY

This inventory was conducted in January, 1986 and is current to that date. Subsequent changes in ownership since then may have taken place. The tax rate in January, 1986 was $25.75 per $1,000.00 of the assessed value.

MAP 10

Lot #	Property Owner	Tax Value	Assessed Valuation
8	State of Maine (AMHI)	exempt	58,383,000
8A	City of Augusta		

MAP 13

9	Augusta Sanitary District		
10	State of Maine	exempt	10,200

MAP 37

1	Helen Jones (trustee)	172.52	6,700
8	Kevin Moriarty	847.17	32,900
9	Victor McCourtney	932.15	36,200
10	Helen Jones (trustee)	6,808.30	264,400
10A	Kennebec Valley Med. Ctr.	1,524.40	59,200
10B	City of Augusta	exempt	17,500
11	Helen Jones (trustee)	87.55	3,400
12	" "	48.92	1,900
13	Gregg Distributors, Inc.	79.83	3,100
14	" "	82.40	3,200
14A	" "	18.02	700
15	" "	172.52	6,700
16	" "	5,935.37	230,500
17	" "	41.20	1,600
17A	" "	10.30	400
18	Kennebec Valley Med. Ctr.	110.72	4,300
19	" "	10.30	400
20	" "	exempt	2,000
21	" "	exempt	3,800
22	" "	exempt	2,600
23	" "	exempt	2,600
24	Alexis Ouellette	999.10	38,800
25	Armand Brealt	620.57	24,100

MAP 38

Lot #	Property Owners	Tax Value	Assessed Valuation
165	Augusta Water District	4,913.10	190,800
166	Cushnoc Title, Inc.	exempt	8,100
167	Thomas Coughlin	785.37	30,500
168	Cushnoc Title, Inc.	exempt	25,400
169	Maine Health Facilities Auth.	exempt	17,000
170	Cushnoc Title, Inc.	exempt	20,500
171	Effie Wilcox	724.15	26,200
172	Stanley and Mary Ann Campbell	1,163.90	45,200
173	Kenneth Vashon	754.47	29,300
174	Vesta Golden & Susan Gould	692.67	26,900
175	Robert Stram	1,027.42	39,900
176	combined with lot 175		
177	Augusta Water District	exempt	5,000
178	City of Augusta	exempt	13,700
178A	" "	exempt	105,100
179	J. Concannon	723.57	28,100
180	City of Augusta	exempt	25,300
181	" "	exempt	12,200
182	" "	exempt	9,900
183	" "	exempt	135,600
184	" "	exempt	11,700
185	" " (Fort Western)	exempt	181,000
186	" "	exempt	60,700
187	First Church of Christian Science	exempt	57,900
188	City of Augusta	exempt	21,900
188A	" "	exempt	7,600
188B	" "	exempt	10,000
189	Marcel Carrier	466.07	18,100
190	Jeannine A. Dostie	298.70	11,600
191	Armand & Jeannine Breault	38.62	1,500
192	City of Augusta	exempt	51,400
192A	Augusta Parking District	exempt	16,900

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