

Water's Edge

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Submitted to the Department of Urban Studies and Planning on May 22, 1997, in partial fulfillment of the requirements for the Degree of

Master in City Planning at Massachusetts Institute of Technology
June, 1997

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Abstract

A crash in the population of fish stocks that have traditionally been harvested by the fishermen of Gloucester, Massachusetts has led to an economic recession in the community. Wanting to remain a maritime dependent, but being unable to support the faltering fishing industry, Gloucester must explore new ways to combine maritime activities with new alternative uses to create a viable economic future. Water's Edge uses the design process to explore how maritime industrial activities can be combined with retail, wholesale and educational enterprises to create mixed use facilities. Using an area of Gloucester Harbor called Harbor Cove as a site, an overall program, urban design scheme and architectural design is developed that attempts to satisfy the needs of the fishing industry, the desires of the community at large and the regulatory frameworks that currently exist. A "narrative" is created for Harbor Cove that connects specific parcels and businesses in an interlocking strategy aimed at using the concept of a working waterfront as attraction for outside visitors. Urban and architectural design is used to create destination attractions that will function primarily as maritime industrial areas, and secondarily as wholesale and retail markets that trade on the fact that they are part of a working waterfront context. An education center is designed that teaches visitors about the various fishing and maritime industries in the Harbor and allows them to learn about those activities through both passive and interactive experiences. Furthering the interconnected relationship of the different elements of the Harbor Cove narrative, a cooperative is proposed and designed that serves as a retail outlet for part of the catch that is landed in the Harbor. The cooperative is entwined with the both the educational facility, markets and landing areas as part of an urban strategy for improving one of the central civic spaces in the community. Design is given the highest priority in Water's Edge as a tool for solving several of the economic problems that are faced by Gloucester Harbor.

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Introduction

The maritime communities of the United States are currently in crisis. They are facing a future where the activities they have relied on for centuries to provide livelihood for their residents; the fishing, shipping, transportation and other maritime industries, are changing rapidly. In many instances, this change is making the traditional industrial processes that were developed in these communities largely irrelevant. Containerized shipping has consolidated the global shipping industry in manner that now allows several major ports to service vast geographic regions, such as on the West Coast of the U.S. Only a short time ago a multitude of smaller ports handled this trade, and prospered because of it. Environmental degradation has caused fish stocks to decline the world over, forcing historical fishing communities to watch their fleets shrink drastically as an ever diminishing resource base pushes more and more fisherman out of business. Water's Edge asked a very specific question about one of these maritime communities, and the harbor within it. The community is Gloucester, Massachusetts, and the question is, how can Gloucester's harbor diversify its usage to provide a maximum benefit to the community in the face of a severe maritime industrial

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Gloucester at the turn of the century. Harbor Cove today still retains the same configuration as it did nearly 100 years ago, making it the most historically relevant area of the Harbor.



depression? And more specifically, how can new uses and activities be structured so that the primary uses of the Harbor remain maritime industrial dependent? The method that will be used to answer this question is that of design. Water's Edge will utilize an urban design and planning proposal to provide one possible solution for Gloucester's current economic problem. This thesis examines the general state of Gloucester Harbor, its physical and economic health, and proposes several specific design interventions that will enable the community to remain maritime dependent, yet prosper from a diversity of activities that differ from those previously relied upon for support.

Gloucester as a community is contending with a very serious problem. The fish stocks that its fleet has relied upon for centuries to provide food, employment and support for a large portion of the community are disappearing. And as these fish stocks diminish, so to does the ability of Gloucester's maritime industries to thrive and prosper, to continue making Gloucester what it has always been, an exceptionally significant maritime community. Water's Edge is a tool that can be used to combat this threat, and to assist in allowing the residents of Gloucester to enjoy a future that is as equally bright as their past.

In particular, Water's Edge is a vision of one possible future for an area of Gloucester Harbor called Harbor Cove. Harbor Cove has been the historical center of the fishing industry in Gloucester, and is consequently one area of the

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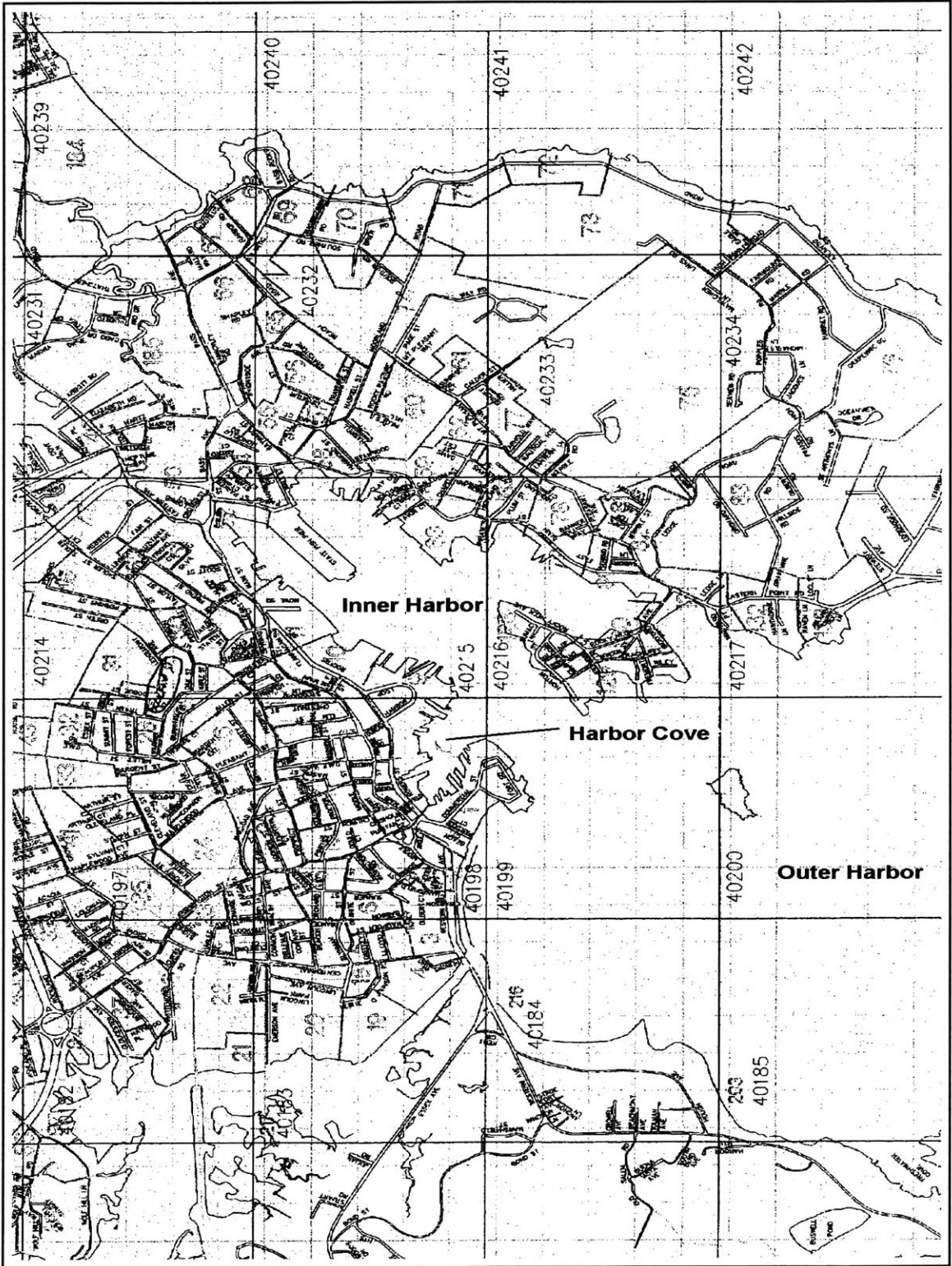
*Harbor Cove dock and pilings.
Much infrastructure in the Cove is
in need of repair and replacement.*



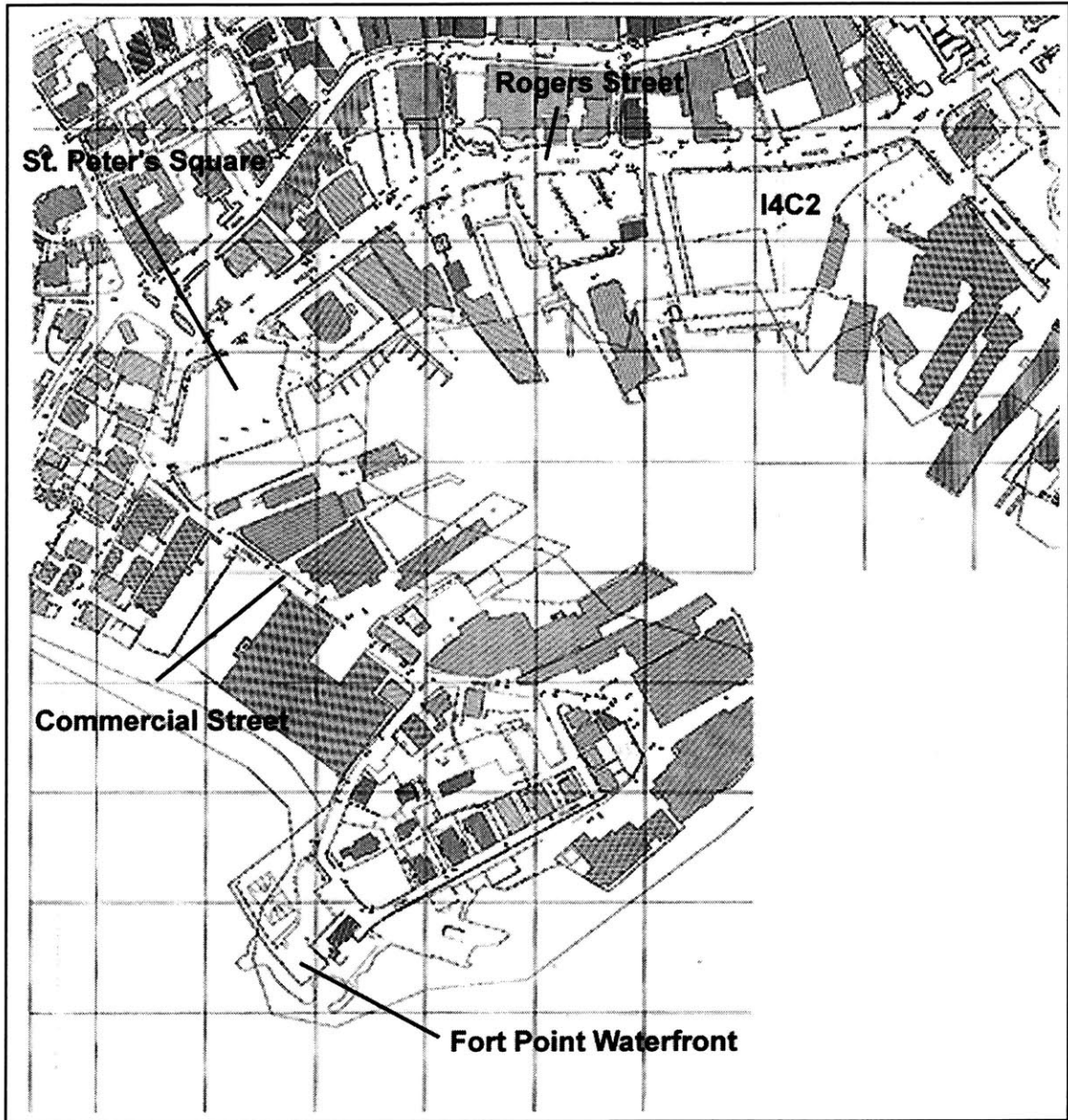
Harbor that has been particularly hard hit by the down-turn of the fish stocks. In the past six years, the amount of fish harvested by Gloucester's fleet has fallen by half, and the number of commercial vessels utilizing the Harbor as a base has as well dropped by as much. With no near term solution for improving the size of landings in the Harbor, Gloucester must now look for new ways to develop and evolve as a maritime community. One solution will to capitalize on the maritime history and character of the Harbor, and to use them as assets to leverage a variety of alternative uses. A primary element of this thesis will be to design new uses and places within Harbor Cove that maintain the Cove's status as a "working waterfront," while at the same time allowing a variety of different activities to be introduced and developed that, in fact, will prosper and succeed *because* they are located on a working waterfront. The key, and lynch pin to the success of Water's Edge, will be to create an environment where new activities remain subordinate to the maritime industrial nature of the area, yet are still able to provide significant, viable opportunities for the portion of the Gloucester community that relies upon the Harbor.

Some of these uses will include tourist related facilities that attract visitors interested in enjoying a working waterfront atmosphere. Also proposed will be an education center that teaches visitors about Gloucester's maritime history and informs them about how various maritime industries function. What

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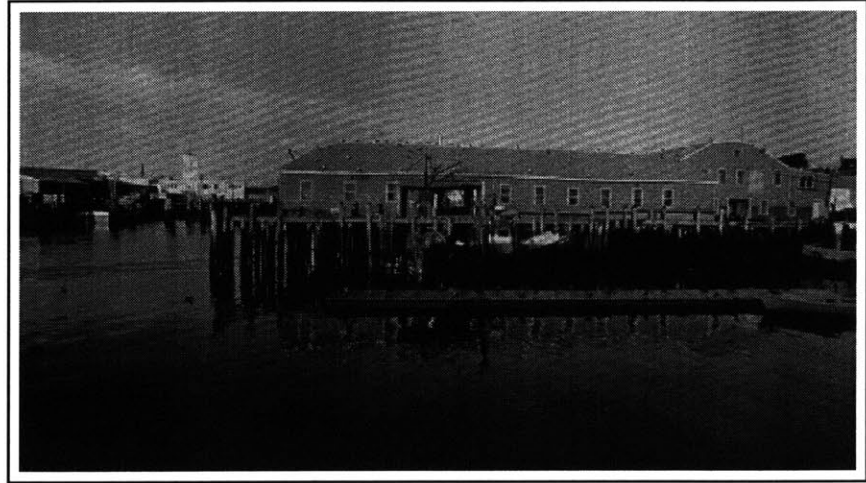


Gloucester Harbor and Surrounding Town Area



Harbor Cove

Example of mid-20th century harbor architecture. View from mouth of Harbor Cove.



will separate these interventions from typical waterfront redevelopment schemes is that in Gloucester, the proposed facilities and activities will be related symbiotically to the existing maritime industries in the Harbor. The activities proposed in Water's Edge could not succeed without being surrounded by *viable* (not simply decorative) maritime industries, and those industries themselves will be bolstered and improved through their relationship with the interventions.

Water's Edge will specifically address five sites within the Harbor Cove area. These sites have been chosen because of their strategic importance within the Cove as well as the opportunities their locations offer in working to create a continuous context throughout a large portion of the area. The sites are as follows:

I4C2

Rogers Street

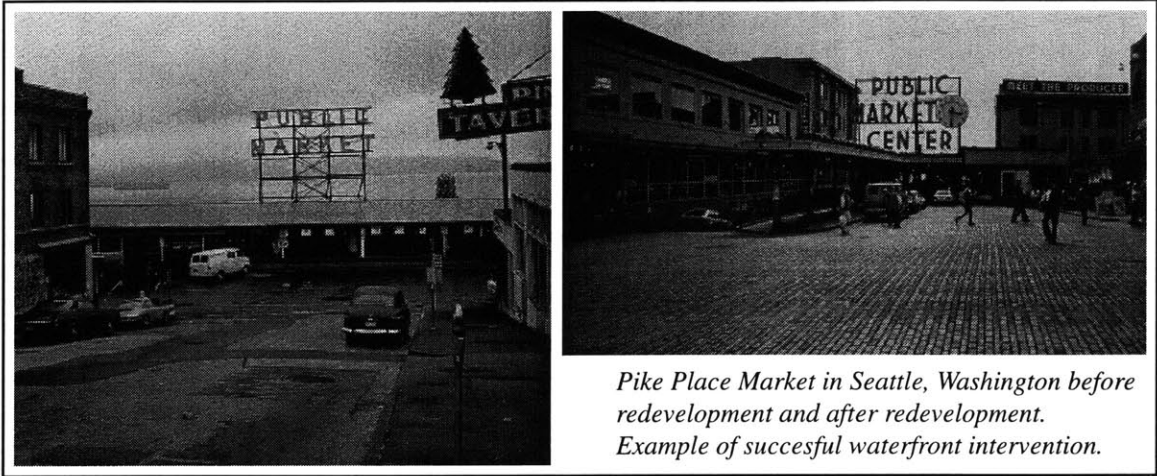
St. Peter's Square

Commercial Street

Fort Point Waterfront

Using these five areas as sites, Water's Edge will attempt to answer the above mentioned questions through an urban design proposal and program. The

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program will outline what activities go on which site and why, and will also explain how those activities function to support the maritime industrial dependence of the Harbor. The design proposal will then present physical plans for two of the sites. Precedents and justifications for chosen structures, shapes and site plans will be made so that the reader will be able to understand how the designs serve to answer the underlying thesis of Water's Edge; how can Gloucester diversify it's Harbor activities while at the same remaining maritime dependent?

The proposed activities, when looked at as whole, form a single "narrative" that runs throughout Harbor Cove. While each activity and place can function and be enjoyed in isolation, they are designed to work in an interlocking fashion, one playing off of another, some more dependent on others for support and viability. The narrative as whole will be called "The Gloucester Waterfront Experience." The individual elements of the narrative are outlined below and a brief description of each provided along with its location.

Atlantic Gateways: An interactive education center located on the I4C2 parcel of land. The site will also house the related Gateway Cruises departure terminal situated on the waterfront portion of the parcel and a transient vessel sailing marina.

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The Rogers Street Merchants: A street-scape improvement plan and infill proposal for several vacant parcels on Rogers Street between Atlantic Gateways and St. Peter's Square. A handful of new shops are proposed, combined with landscape improvements to make the street more pedestrian friendly as well as to be a conduit for movement to St. Peter's Square.

The Fisherman's Cooperative: A casual dining pavilion situated along the northeast edge of St. Peter's Square. Several fast food eateries will serve a variety of fishes and seafoods and will be owned and operated cooperatively by a local fisherman's organization.

St. Peter's Square: The Square will be improved spatially to make it a more hospitable pedestrian environment and to provide a better festival space. St. Peter's Square will act as a nexus for the larger Harbor Cove narrative.

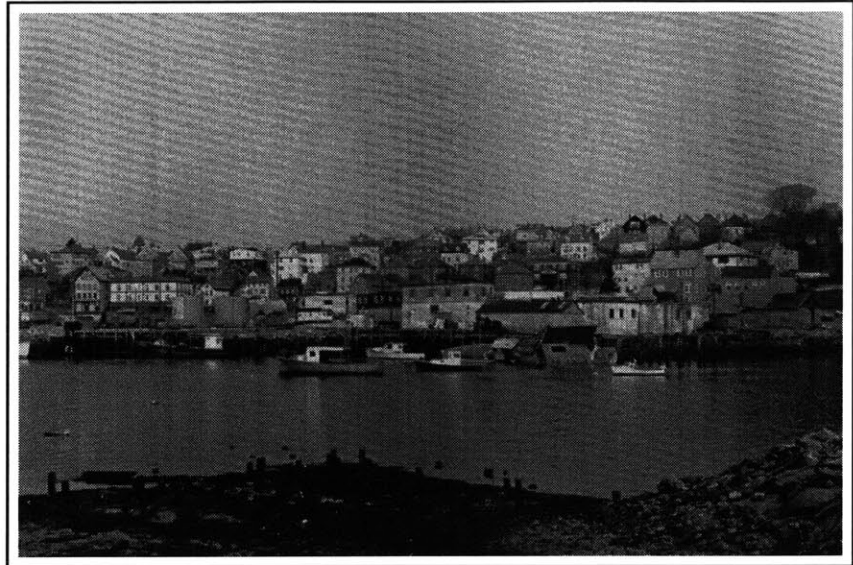
Atlantic Pier and Market: Combining both maritime industrial uses with a retail and wholesale fish market, The Pier and Market will function as a landing and transfer facility for a portion of the local fleet. Located on the eastern edge of St. Peter's Square, the facility will respect Designated Port Authority (DPA) regulations, while at the same time creating a mixed use environment that satisfies the economic needs of local fisherman. As Atlantic Pier and Market is a lynch pin for the entire Gloucester Waterfront Experience, a higher level of detail will be reached in its physical design than in the other elements of the narrative.

The Fort Point Waterfront Park: A waterfront park that wraps around the tip of Fort Point peninsula. It will connect to the St. Peter's Square area via a trail and signage system that will enable users to experience broad waterfront vistas only minimal distances from downtown Gloucester.

The above mentioned facilities are intended to serve as visions of a possible development trajectory for the future of Harbor Cove, and by extension, Gloucester Harbor as whole. They are designed with the intention of serving as solutions to some of the critical issues facing Gloucester today, namely the problems of economic development in the face of a maritime industrial crisis, and the desire on the part of the community to maintain its maritime character in the face of this crisis. The activities and structures that will house them are aimed at providing viable economic livelihoods for those involved with them,

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Gloucester's Inner Harbor. Residential views of the Harbor necessitate contextually appropriate development.



Harbor and the history of the community. Gloucester is, and always will be, a maritime community. Water's Edge provides an opportunity through which to realize this future, and to attain it in a fashion that is supported by the community at large and through methods that works towards the betterment of Gloucester.

Like all proposals, Water's Edge must have a beginning, a middle, and an end. To propose interventions of the scale listed above, an understanding of the issues facing Gloucester must first be reached. For this reason, Water's Edge will begin by outlining the critical issues facing Gloucester Harbor, and Harbor Cove in particular. These issues will then be followed by a brief discussion of the current physical state of the Harbor and its facilities, so that one might better visualize it as a place and to create a context into which the above mentioned proposals will be inserted. Following this description will be an analysis of public opinion within the Gloucester community regarding the future of the Harbor in an attempt to illustrate that the proposed developments are in harmony with the desires of the community as a whole. The Program for the redevelopment proposal will then be presented, along with a discussion of how it meet the needs of the Harbor, its users, and the community. Finally, the physical designs themselves will be laid out, explanations for how they function will be made, and

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a discussion of their historical precedents and place in the future of Gloucester made. The Program and design proposals will take up the bulk of Water's Edge and are intended to function as the primary components of the project. The design process will be explained and a variety of iterations leading to the final designs will be shown. Concluding remarks regarding the Gloucester, Water's Edge and the project as a whole will then be made.

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*Harbor Cove landing facility.
Vessels up to 70' can be handled by
Cove piers.*

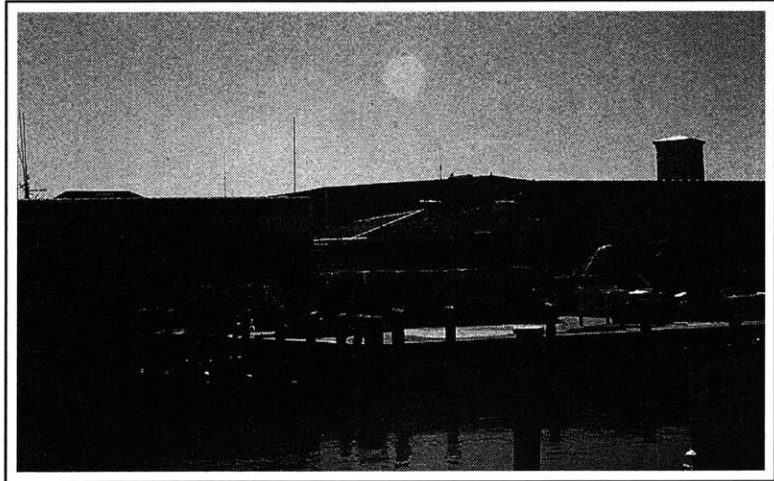


Present State of the Harbor

Before continuing on to the specific details of Water's Edge, it is important to first understand the present state of the Harbor, in order to better grasp the underlying motivations for individual elements of the Proposal. As mentioned previously, Gloucester Harbor is the oldest working harbor in the nation, with a past that dates back 350 years. As such, it has a rich history that is integral to New England's heritage and to the United States' as a whole. Gloucester's history is, however, at a turning point. While upheaval is the catalyst for change, and change often sparks innovation, today's Gloucester is facing a crisis that is threatening its very integrity as a maritime dependent harbor and community.

A recent and severe decline in the fish stocks of the New England coastal waters and the George's Bank area has brought the economic viability of the Harbor's present day fishing practices in to question. During much of the 1970s and early 1980s, the commercial fishing fleet in the Harbor enjoyed considerable growth with the establishment of the 200 mile limit that excluded foreign competition. Landings increased from 57,000 tons in 1975 to 90,000 tons in 1980. Along with an increase in the actual size of landings, the dollar value of the catch also increased by 60 percent. About 150 million pounds were landed in 1983 with a dollar value of \$38 million. A slight decline in the catch was then experi-

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Private Wharf off Commercial St.

enced in the mid 1980s, however much of the lost tonnage was low value species that were being processed at a protein recovery plant that operated on the State Fish Pier until 1984 (Tocco '94).

The size of the catch then recovered in the late 1980s up until 1990, when 126 million pounds were landed. Although the size of the catch was improving, its real value was decreasing. At \$40 million, the value of 1990 landings was considerably lower than those of 1983. Since that time, the decline in stocks and value has been precipitous. In 1991, landings fell to 100 million pounds valued at \$30.4 million and then fell again by nearly 50 percent in 1992 to 52 million pounds valued at \$17.3 million (Tocco, '94). Unfortunately, most of these losses have been in high value species, further exacerbating the problem. Fish stock declines have continued to this day, however the fall has leveled out somewhat in the past several years and it is felt by many, including Coastal Zone Management officials that stocks may begin to increase within a five to eight year period (Rafferty, '97).

In considering the geographic area of the Inner Harbor that extends from the Fort Point neighborhood off Commercial Street all the way to the Paint Factory on Rocky Neck, an extensive mixture of uses, public and private docks, wharves and structures can be found. The majority of the uses along the Harbors edge are, however, maritime dependent and, more particularly, related to the fishing industry. As such, the decline in the fishing industry has been felt

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throughout the Harbor. Several large processing plants now either stand empty or are severely under-utilized. Although a new State Fishing Pier, constructed in 1993, has completed in the Inner Harbor, it stands largely unused. While many of the private docks and wharves along the Harbor's edge remain, they are nearing the end of their life cycles and are in need of repair and replacement. With a severe depression in the fishing industry, the funds for these improvements are unlikely to be forthcoming. 1993 figures for the amount of repairs needed by all private wharves in the Harbor were estimated at \$5.2 million (Terkla, '94).

Most of the larger industrial fish processing facilities are located along Rogers Street on the northeast finger of the inner harbor. Along with these processing facilities, several other refrigerated warehouses and ice making plants are in this area. These types of facilities take up large tracks of land, comparatively, and have consequently created a significant physical barrier between the street and the Harbor, inhibiting public access to the water. Due to the placement of these facilities on the waters edge, many of the smaller finger piers that once existed in this area of the Harbor have since disappeared. Along with processing facilities, the northeast end of the Inner Harbor is also home to many of the vessel servicing businesses that are sited on both sides of the State Fish Pier.

Recreation and service enterprises occupy much of the eastern edge of the Harbor, extending from the State Fish Pier up into the Rocky Neck area and actually encircling Rocky Neck itself. This stretch of the Harbor's edge houses a range of services. Both industrial vessel servicing and recreational marinas can be found here along with a sprinkling of homes and businesses in the Rocky Neck Colony.

At present, there are 24 sites along the waterfront with multiple commercial fishing vessel berths. There is also 13,195 linear feet of additional dock space that can be used by vessels ranging in size from 20 to 50 feet. In addition to these figures, the State Fish Pier, a 650' fixed concrete structure, can accommodate 22 vessels with lengths between 55 and 90 feet. Floating piers in the Harbor also provide slips for an additional 42 vessels 25 to 50 in length (Terkla, '94).

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Harbor Cove berth space. Dockage and berth space is dependent on business arrangements with landside operator.

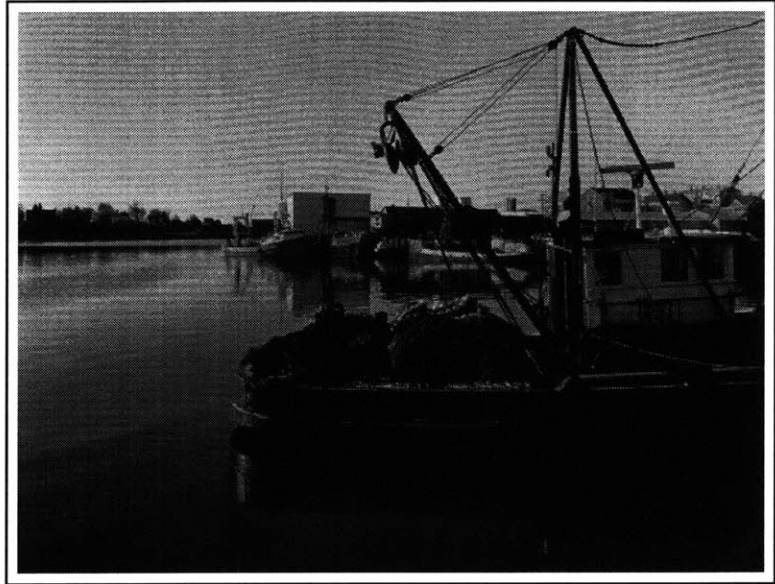


The majority of commercial fishing vessels, especially the larger ones, tie up along wharves owned and operated by fish wholesalers and processors or other related uses. Berthing space is usually provided via a business agreement with the property owner, either to sell them the catch or to purchase fuel or some other service. The lobster vessels tend to be on moorings or to rent space at marinas in the Harbor such as International Seafoods and Beacon marine.

While a variety of unique enterprises and uses still exist in many parts of the Harbor, much of the traditional, historic structures and have been replaced with more modern facilities. Harbor Cove stands apart in this current incarnation of the Harbor as one of the last sites where traditional finger piers still dominate the water's edge. Being the original heart of the fishing industry, Harbor Cove has retained much of its historic configuration. Although it is now home to many modern buildings, the Cove represents the clearest example of Gloucester's history as an embodiment of daily fishing activity. For this reason, it is important to preserve Harbor Cove in a maritime dependent status and to retain its character. The proposals in Water's Edge endeavor to just this, while at the same time realizing that in the current economic situation, the most rational approach to maintaining the character of the Cove is to understand that a diversity of uses must be created. These uses will all be subordinate to the maritime status of the Cove, and will in fact play off of that status in a manner that in fact increases the

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Gloucester's fishing fleet is older than many in the region. It is, however, capable of high production volumes.

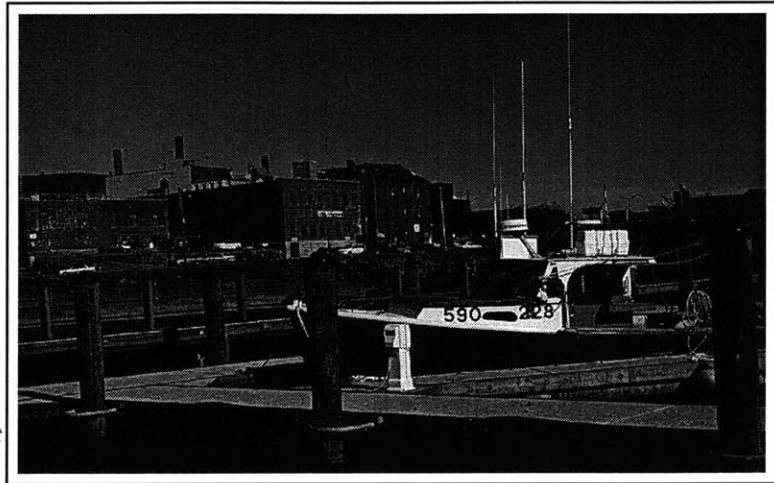


importance of fishing related activities. These activities will become the lynch pin for the success of other enterprises.

The Fishing Fleet

Estimates as to the exact size and character of Gloucester's fleet vary widely. The Fisherman's Wives Association breaks down the fleet as having 120 boats over 5 tons, 150 smaller lobstering boats and the remaining vessels falling into a range of categories. In 1993 the Urban Harbors Institute inventoried the Harbor and found that there were approximately 150 commercial fishing, 150 coastal lobster, 8 excursion and 330 recreational vessels operating out of the Inner Harbor. Another report issued in 1993 by the Northeast Fishery Management Council provides a slightly different representation of the fleet. The Council estimated that approximately 120 vessels use Gloucester as homeport, and that of these there are about 32 trawlers, 40 gilnetters, 14 medium sized vessels (including two hookers), 25 day boats, 4 purse seiners, one scalloper, one large hook boat, three or four Scottish seiners and one menhaden boat. In addition to these vessels the Council found that between 20 to 36 transient vessels use the Harbor

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Lobster Boat docked at public finger pier

a different times during the year.

These varying estimations illustrate the difficulty in pin pointing the exact size of the fleet. It appears though, that the numbers do converge on a figure of just around 300 active boats using the Harbor at any one time. The past decade and a half has seen a significant drop in the size of the fleet. In 1983, there were approximately 235 vessels over 5 tons using the Harbor while in 1993 that number had fallen to 120 twenty. With much of the decline in fish stocks coming in the early 1990s, it can be inferred that many of these losses occurred during that time period.

As fishing fleets go, Gloucester's is considered to be somewhat older than most. This is perhaps a function of the Harbor's economic condition combined with the long history of fishing that would create an accumulation of older vessels. While it is unreasonable to assume that many of these vessels will be replaced during the current downturn in the fishing industry, newer vessels will, at some point, be a part of the Harbor's fleet in the future. Future vessels may not require piers and landing facilities as they are presently built today. Although there is widespread opinion that fish stocks will rebound, they will, in all likelihood, never reach previous levels. This situation will require greater efficiency in harvesting, necessitating more cost effective and flexible boats. The Atlantic Pier and Fish Market speaks to this need by providing a flexible use

structure that can easily be retrofitted to meet the changing needs of future fishing fleets.

The Planning Process

In 1994, The Governor's Commission on Commonwealth Port Development released its Final Report on the status of ports and harbors in Massachusetts. The report raised two important issues regarding Gloucester. The first issue was a deep concern over the previously mentioned decline in fish stocks and its impact on the well being of the Harbor. The other primary concern revolved around the issue of "process." The Commission expressed a pessimism about the ability of public officials and leaders in the private sector to adequately address the issues facing Gloucester, and to act aggressively in solving these problems. In order for Gloucester's Harbor and waterfront to remain viable and competitive in the face of increasing regional and global competition, the Commission felt that more assertive action must be taken before Gloucester is allowed to fall so far behind other harbors and towns that it becomes no longer a competitive location for industry and commerce.

Just over a year prior to the release of the Commission's report, Gloucester had adopted a Gloucester Harbor Plan in July of 1993. A sub-textual reading of the Commission's report is that it was not satisfied with the 1993 Harbor Plan, and expressed the above mentioned concerns in its own report as a catalyst for encouraging Gloucester officials to make more substantive efforts in working towards Gloucester's future. Whether such criticism was merited is unclear. What is clear, however, is that both during and following the release of the Commission's report, Gloucester undertook a number of studies and projects dealing with the Harbor's development and future positioning.

In 1993, A Harvard Graduate School of Design graduate-level studio looked at the Harbor in an effort to analyze many of its pressing issues and formulate planning strategies and design proposals based on the existing conditions. The Gloucester City Council, in February of 1995 adopted "The City Plan: An Action Plan for the Future." While this plan was an attempt at addressing the

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Cape Town Harbor, 1940s. Image clearly illustrates a common waterfront typology utilized in many regions.

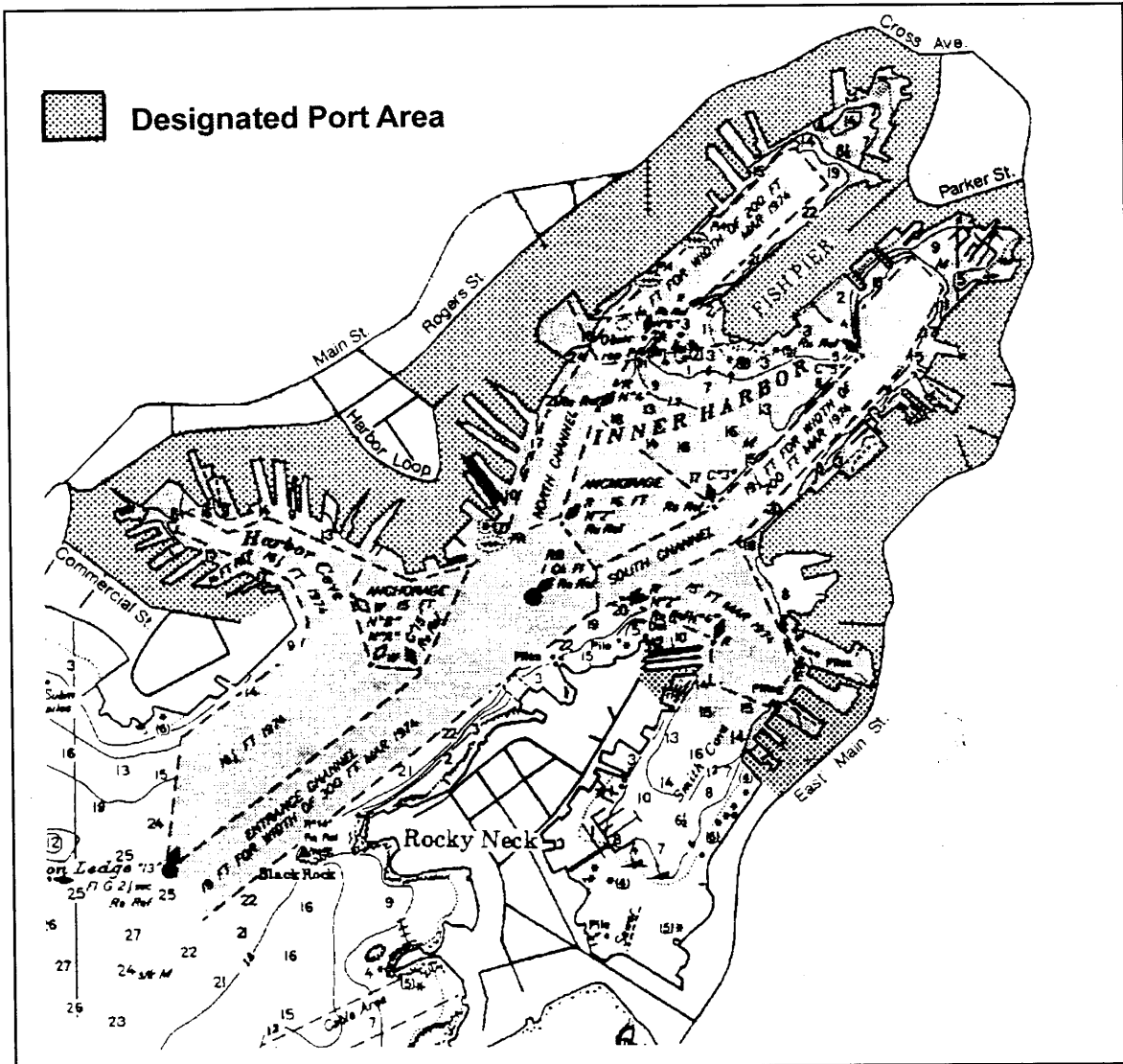


community of Gloucester as a whole, it included specific actions and initiatives aimed directly at the Harbor. Also undertaken during this time was the “Gloucester Waterfront Study: Land Use and Economics,” a study completed in August of 1994 by the Urban Harbors Institute. Along with the above mentioned studies, there is presently a Municipal Harbor Plan being formulated with assistance of outside consultants and planners. The effectiveness of these plans and studies can only be realized in hind sight. However, they do indicate that a general process of preparing for the future is taking place in Gloucester, and that the community and the Harbor clearly understand that unless proactive efforts are undertaken, Gloucester’s future will be far less bright than its past.

Designated Port Area and Other Landside Regulations

In order for Water’s Edge to be a viable and well thought out proposal, it must address and adapt to the variety of agencies and regulatory bodies that have jurisdiction over parts of the harbor area. Similar to most harbors, a host of institutions have authority regarding landside and waterside activities in the Harbor. In the case of Gloucester, some of these bodies include the Army Corp of Engineers, responsible for many of the dredging activities, the Environmental Protection Agency which regulates sewer, water and industrial discharge into the

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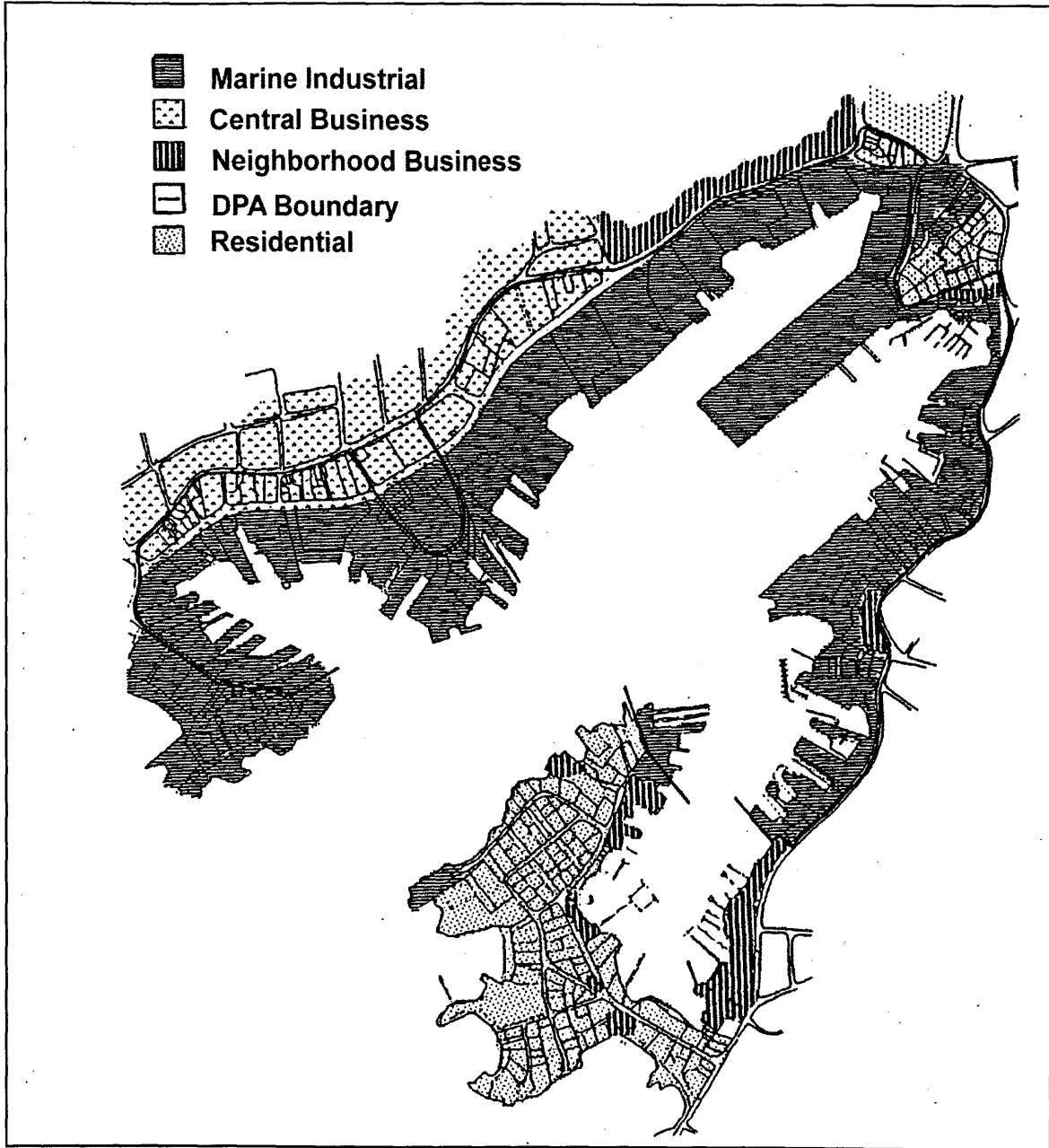


Gloucester Harbor's Designated Port Area
(DPA)

Harbor, the Massachusetts Department of Environmental Protection that administers the Chapter 91 Waterways Licensing Program, as well as host of other agencies (ICON, '97). Analyzing the regulatory environment of the Harbor is beyond the scope of Water's Edge, and is in fact a thesis unto itself. Several particular regulations, however, must be understood in order to fully comprehend some of the justification behind several of the proposed interventions, specifically Atlantic Pier and Market, The Fisherman's Coop and Atlantic Gateways. The two regulatory frameworks that will be detailed below are the Designated Port Area (DPA), administered by the Massachusetts Coastal Zone Management Office (MCZM), and the Marine Industrial Zone (MI) that falls under the auspices of the Zoning Board and City Council.

The DPA covers most of Gloucester's Inner Harbor with the exception of parts of Smith Cove and Rocky Neck. The essential characteristics of the DPA are that land falling within its boundaries must maintain primarily water-dependent marine industrial uses. The regulations stipulate that no more than 25% of land within the DPA be put to commercial use. Along with this requirement, no new residential, hotel and recreational marinas may be developed in the DPA (Terkla, 94). Like all regulations, the DPA is open to some interpretation regarding exact definition of uses and whether use proportions may be traded between parcels inside the DPA. The intention of the regulations are, however, to maintain the maritime character of the Harbor and protect it from uses that would benefit mainly from waterfront locations without matching the context of surrounding businesses. The DPA boundaries were recently redrawn to exclude Main Street and the east side of Rogers Street. Before, the DPA had extended all the way up to Main Street. Although the spirit of DPA regulations must be commended, the regulations have led to a number of problems in relation to encouraging investment and development in the Harbor. These issues will be discussed below.

Parallel to the DPA, the Marine Industrial Zone works to ensure water-dependent uses are maintained on the Harbor's edge. Like the DPA, the MI prohibits residential, hotel and selected non-marine uses. It also requires special permits for institutions, restaurants, retail development, marine services, freight



Gloucester Harbor's Marine Industrial Zone

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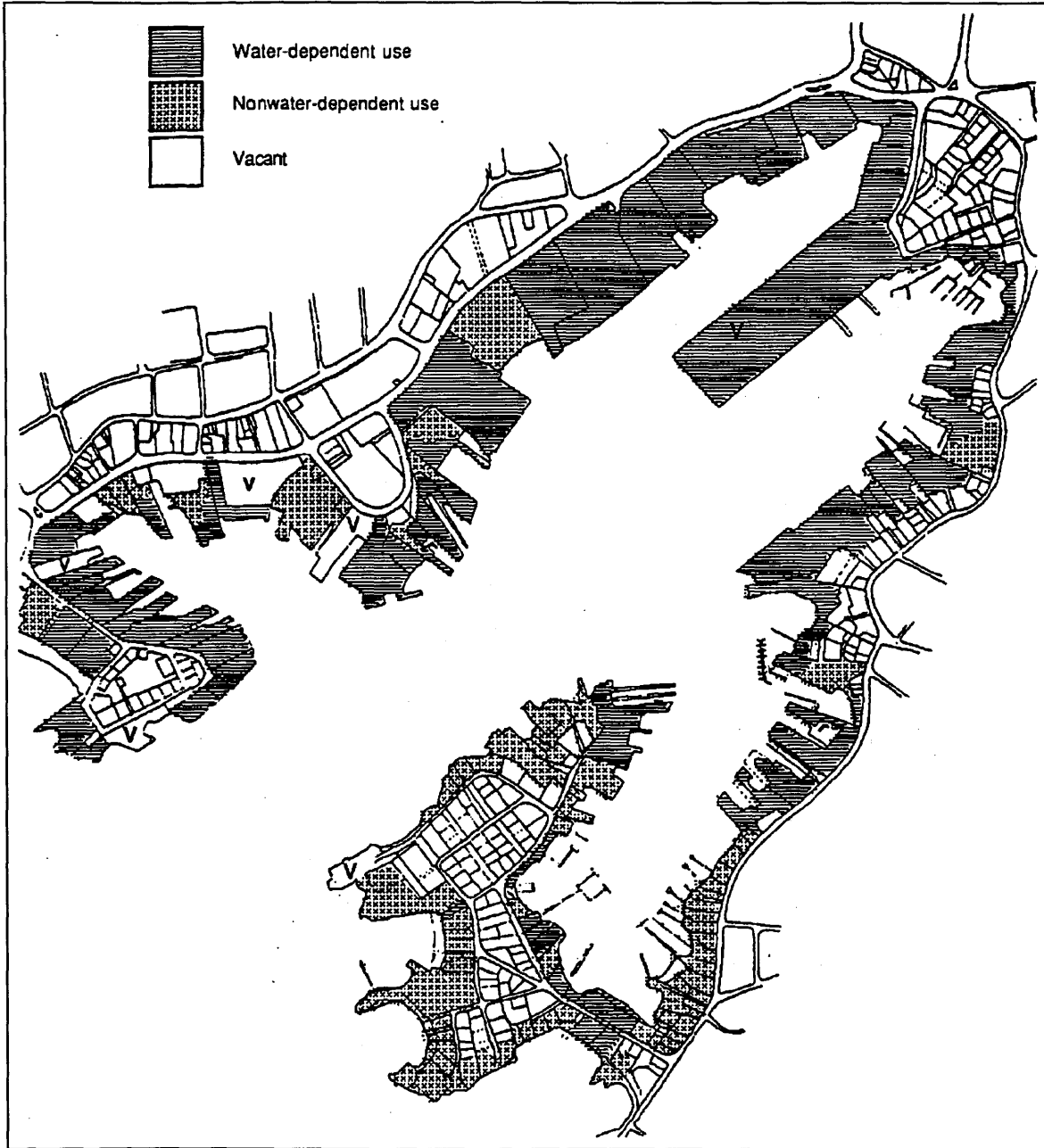
or transportation terminals, and several other uses. Along with these requirements, no use on the water's edge is allowed unless it requires access to vessels (Terkla, 94). The MI has been criticized over the years for the wide latitude of uses that it has allowed, diminishing in some regards, the unique resource of the Harbor. Again, like the DPA, the character of the MI must be seen as a positive effort at preserving the integrity of the Harbor as a working waterfront. The restrictions have also created complications.

In an environment with a flourishing fishing industry and other prospering maritime industries, the problematic nature of the DPA and MI are substantially muted. When businesses that locate on the Harbor's edge can find reasonable success through maritime related activities and industries, the regulations function only to ensure that conflicting uses are not allowed to locate in the Harbor and mar its aesthetic, functional and culture characteristics. Clearly, a waterfront hotel would be severely out of context and inappropriate sited along side a protein recovery plant.

Unfortunately, when a downturn occurs, such as the current crisis of the George's Bank fisheries, the economic viability of maritime dependent industries is considerably diminished. Maintaining regulations that require land uses be dedicated to faltering industries greatly distorts real estate values and impairs owners abilities to diversify their resources. This is currently the case with Harbor Cove and the State Fish Pier. Logically, many of the landing and processing facilities located along Commercial Street would be better served by relocating to the State Fish Pier. Access to the Pier is easier for both landside transportation as well as for vessel dockage. The State Fish Pier, was in fact, intended to be a relocation site for many businesses in the Harbor.

Business owners within the DPA are, however, impaired by the fact that the parcels they own and may wish to sell in order to move to the State Fish Pier are constrained by the uses allowed. The sale price for a piece of property within the DPA is lowered for the reason that any buyer must use the parcel for a maritime related activity, even though maritime dependent industries are presently very depressed. The cost of moving to the State Fish Pier is such that it cannot be justified with the current land values that exist.

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Land use patterns bordering the harbor

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The above situation illustrates the complexity of new development within Harbor Cove. Water's Edge is designed to operate within this difficult situation and to succeed because of it. By proposing only uses that are maritime dependent, or closely related, Water's Edge meets the letter of the law in terms of regulations, while at the same time creating a "mixed use" environment.

Under scrutiny, Atlantic Gateways, The Fisherman's Coop and Atlantic Pier and Market can all be justified within both the DPA and MI framework. Atlantic Pier and Market clearly meets all of the requirements listed above as its ground footprint is dedicated 100% to maritime dependent uses. The restaurant on the second floor of the facility would be allowed based on two issues. One, it is a seafood restaurant that sells fresh fish from the landing facility and market below. Secondly, restaurants can operate with a special permit issuance that should be obtainable with little difficulty. The Fisherman's Coop is allowable for similar reasons and indeed is one of the most marine dependent facilities in the overall proposal as it will be owned and operated by a fisherman's cooperative.

Atlantic Gateways will require a particular interpretation of DPA and MI but is allowable under both. The facility's entire focus is on maritime industry and history. Although much of the activity on the site does not actually undertake maritime industrial production, the uses are maritime industrial dependent because they trade on the history and knowledge of those activities. That is, the facilities success is dependent on the fact that it is sited on a working waterfront, and that its customers will come to learn about the activities that surround it. Visitors to Atlantic Gateways are drawn to it because it is on, and part of the Harbor. There is a symbiotic relationship between Atlantic Gateways and the surrounding waterfront. The waterfront is revitalized by the visitors drawn to Atlantic Gateways and the knowledge those individuals gain from their experience at the facility, and the facility is able to draw visitors because it is uniquely situated on the Harbor. As a maritime education center, it is clearly dependent on the success of the maritime activities surrounding it. Without those activities, it would become simply a passive museum, disconnected from the context of Gloucester Harbor. As the Gateway Cruises terminal is part of the larger facility, the direct maritime dependency of the facility is further bolstered. It is difficult

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to argue that boats taking passengers out to witness fishing and other maritime activities first hand are not maritime dependent.

The above descriptions of the regulations and explanations as to how Water's Edge meets them is intended to illustrate some of the broader issues that underlay a redevelopment initiative in Harbor Cove. The problems and contradictions of I4C2, DPA and MI must all be addressed if a redevelopment effort is to occur. Based on analysis of a public opinion survey, it would appear that many individuals concerned with the Harbor's future are interested in addressing these issues and working towards a prosperous future. A discussion of that survey will be included later in this section, along with analysis and commentary as to how they support the proposals in Water's Edge.

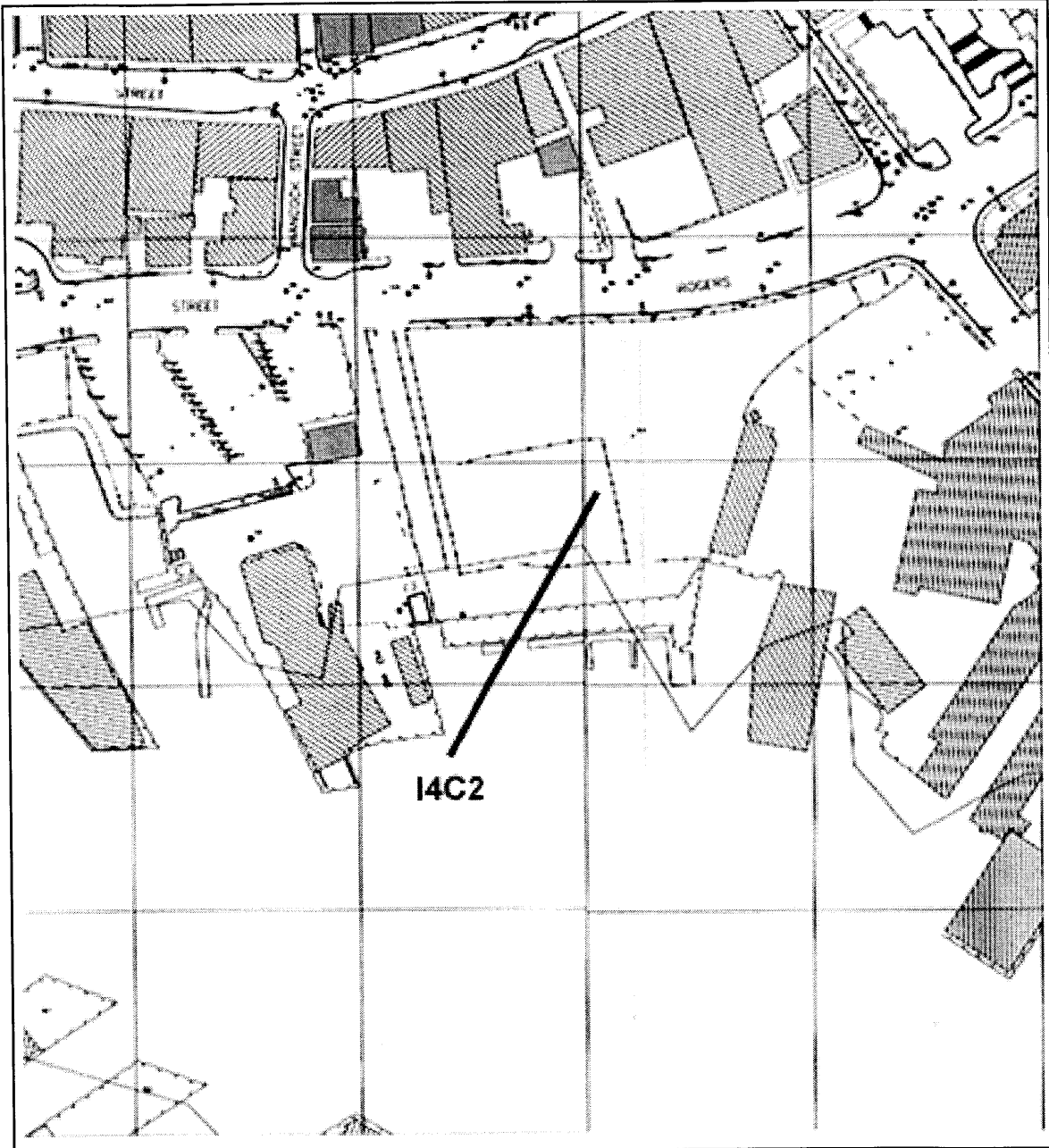
I4C2

A primary stumbling block for a redevelopment initiative in Harbor Cove is the status of the I4C2 parcel. Without a resolution to the legal dispute currently tying up the parcel, it will be nearly impossible to create a coherent strategy and narrative that would bring the Cove together into a singular entity. A brief description of the parcel and the dispute surrounding it will be outlined below.

The I4C2 parcel address is 65 Rogers Street. It is bordered on the west by Rogers Street, on the east by the Harbor's edge, to the north by the lumber yard and to the south by the Gloucester House Restaurant. The parcel is prime waterfront property. Being just over 2 acres, it is an ideal location for an education or research center. It's central location and extremely close proximity to downtown Gloucester and Main Street make it a high value parcel in the Gloucester context. Unfortunately, it has been the subject of a long and protracted legal dispute that has held up its development for almost two decades now.

The nature of the dispute surrounding the parcel is one of access and competition. While the exact details of the dispute are complex and have become muddled over time, the original problem arose from a mixed use development

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The I4C2 parcel bordered by Rogers Street and Harbor Cove

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The I4C2 parcel viewed from the waterfront. Rearrange of buildings fronting on Main Street can be seen in background.



proposal that was put forth by the owner of I4C2. At issue was access to the adjoining parcel on which is located the Gloucester House Restaurant. The Gloucester House had, for some time, enjoyed an easement that gave it vehicular access to Rogers Street, without which it was physically separated from the street. The I4C2 proposal ended this easement. As would be expected, the owner of the Gloucester House promptly sued to maintain his easement.

Unfortunately, the dispute degenerated into a personality conflict and test of wills that has lasted to this day without resolution. Several dispositions of the property have occurred since the original law suit was filed, as well as foreclosures undertaken. The end result has been that the original landowner now has possession of the parcel but is severely fettered in his ability to develop it.

The present situation of the parcel is that the owner is interested in selling it to the City for redevelopment, but is asking roughly four to five times the parcel's actual worth. Understanding the value of the parcel to the City in regards to redevelopment initiatives for the area as a whole, the owner appears to be using the City's desire to see the parcel developed as leverage to receive a higher than market price. He is currently asking over \$1.5 million for the parcel when its estimated real worth is somewhere in the neighborhood of \$400,000. The site itself has been assessed at only \$275,000 (Roth, 97). Negotiations are currently taking place whereby the City will be able to take possession of the

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Fishermen on the breakwater in Lanes Cove.



property for a higher than market value (some where around \$600,000) without appearing politically to be caving in to the owner. The outcome of this situation is unclear and the site continues to stand vacant. There will, at some point, have to be a resolution to the dispute as development of the land is critical to the future health of the Harbor and the Community as whole. Water's Edge assumes that a solution will be found and proceeds under the notion that land will be freed up at some point in the near future.

Gloucester Harbor Public Opinion Survey

In order to justify the type and scale of interventions being proposed in Water's Edge, the backing of Gloucester as a community is critical in order for success to be achieved. Without general consensus of future redevelopment initiatives it would be difficult and quite risky to undertake any major projects in the Harbor. Bearing this in mind, a public opinion survey regarding the future of the Harbor was distributed amongst individuals participating in a public harbor planning meeting. The results of the survey were quite revealing, and contributed significantly to the overall program that has been developed for Water's Edge. Utilizing public opinion data, the programmatic aspects of the various intervention proposals were tailored to meet both what the public felt

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Local fisherman, circa 1900. Fishermen in Gloucester have historically included both traditional artisans and commercial harvesters.



was needed in the Harbor, as well as well to work as a foundation for alternative uses that may not have been specifically mentioned by survey participants, but that meet their general perception of Harbor needs. An analysis of the survey will be presented below and then will be followed by a discussion as to how the different elements of Water's Edge either meet the survey results, or build upon them. A quantitative analysis of the data collected will be included in an appendix to Water's Edge.

Survey Overview

The format of the survey was divided into three basic parts. The first portion asked for general information about the participants; occupation, area of residence, interest in the Harbor and, optionally, name, address, etc. The second portion of the survey asked participants to list and rank what they felt were the three biggest opportunities for improving the Harbor, and what they felt were the three biggest challenges facing Harbor improvement. They were also asked what they didn't like about the Harbor in its current state. The last part of the survey asked participants to rank the importance of a number characteristics of the Harbor such as its value as a visual amenity to the city, recreational aspects of the Harbor, its economic potential and several other issues. This last portion of the

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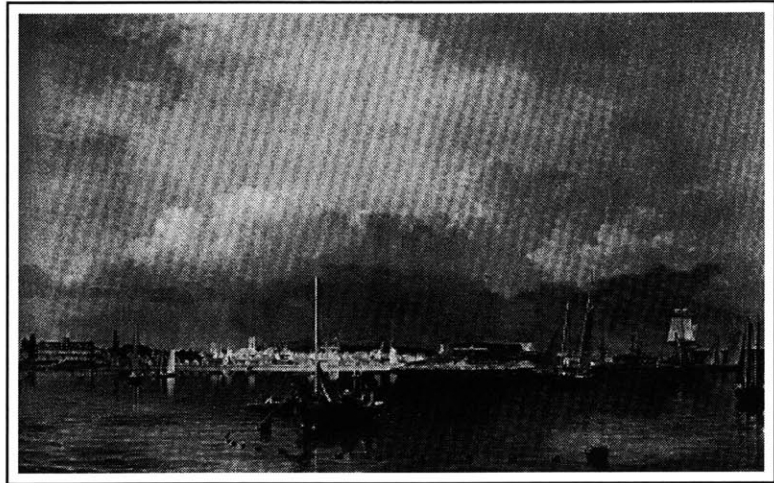
survey also asked participants to rank how important they felt it would be to encourage certain activities in the harbor. Some of these activities include tourism, maritime industries, retail outlets and a variety of other activities.

The results of the survey proved to be highly insightful. Several expected attitudes towards the Harbor were reinforced by the data collected, while at the same time ideas that may have been less obvious were brought to the fore. In short, the survey revealed that most respondents had a strong desire to maintain and encourage the fishing and maritime industries that now predominate Harbor uses. There was a strong sense of the importance of Gloucester's heritage, and a recognition that such a heritage can best be maintained through fostering many of the current industries in the Harbor. With this in mind, most respondents were also aware of the need to diversify Harbor activities so that a stable and prosperous future can be achieved for the community at large. A variety of different ideas were suggested as possible opportunities to explore. Such ideas ranged from the construction of museums and education centers to creating maritime research facilities and recreational boating piers. What was especially encouraging about the survey responses was that they illustrated a very clear sense of community identity and an understanding that this identity can only be preserved through an evolution of the activities now taking place. The general attitude towards using Gloucester's history to encourage tourist related development was one of reluctant understanding. Many respondents expressed the opinion that indeed some tourism may be beneficial to the economic health of the Harbor, but that the Harbor's real future lay in other forms of development. These ideas will be more clearly elaborated upon below.

In considering the challenges facing improvement of the Harbor, the highest number of respondents listed some form of Community Action as the biggest problem. Within this category, the number one concern among respondents was that they felt that reaching a general consensus on how and what to develop would be the most difficult task. Apathy, a lack of creativity and an inability to work together were also primary concerns for many respondents. Along with these issues there was a perception among some individuals that the political authority in Gloucester was less than responsive to public opinion.

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Early recreation on Gloucester Harbor. Today the harbor is largely dominated by maritime industrial vessels.



While such opinions are clearly signals of real problems facing Harbor improvement, they also denote a basic understanding, on the part of survey respondents, of the hurdles that must be scaled in order to achieve common future goals. By expressing anxiety about the prospects of gaining consensus, respondents indicate that they themselves may be open to the compromises that will necessarily have to be made in order to proceed in the future. The data collected from this portion of the survey need not be construed as pessimistic. Rather, it should be seen as a guide to future planning actions.

Of almost equal concern as the above mentioned issues, the decline of the fishing industry was said to be a major challenge towards improving the Harbor. This is not surprising. What is of interest, however, is that it is also the fishing industry that was felt to be one of the best opportunities for future growth. Respondents felt that the fishing industry and other maritime industries were the past, and are the future, of Gloucester. The current downturn in fish stocks was recognized to be a fairly serious paradigm shift regarding how maritime industries will develop in the future but that with appropriate investment and adaptability, a viable fishing industry could be maintained for some time to come. Almost all respondents, at some point on the survey indicated a concern for the maritime uses of the Harbor and the need to capitalize on them as a strengths rather than liabilities.

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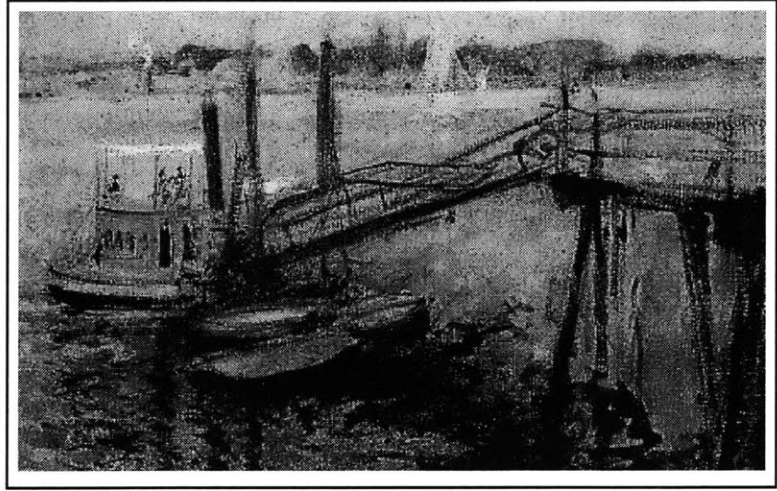
The maritime industries were not felt to be the only activities that need encouragement, and in fact, diversifying Harbor activities was mentioned repeatedly by survey respondents. Many respondents did indeed feel that maritime uses were central to the Harbor but that these uses needed to be complimented by appropriate other activities. Some of these activities include developing a museum or a marine research facility on the I4C2 site. The development of tourist related businesses was mentioned by a number of respondents, however, exactly what type of tourism was left vague. An issue related to diversifying harbor activities that was revealed through the survey were objections to the current zoning and regulatory conditions of the harbor. Several respondents specifically mentioned that the DPA restrictions placed on waterfront property fettered their ability to develop new businesses and saw the regulations as unfair. It is interesting to note that while some respondents also mentioned that waterfront development is made easier by the fact that waterfront property is relatively inexpensive, other respondents cited the above mentioned regulations as having a detrimental affect on property values. The correlation between these two issues should be noted and considered in future planning decisions.

As might be expected, a high number of respondents listed a lack of funding as a major challenge for improving the Harbor. Stimulating investment, and in particular, capital reinvestment, are issues that were mentioned as being problematic. Although there was concern about funding new development opportunities, the Seaport Bond Bill was listed by a small group of individuals as offering an important opportunity that should be pursued.

The survey illustrated that there is cross section of individuals interested in improving the Harbor, and that while their occupations and interests differ markedly, they have quite similar goals and visions of the future. It is clear from the occupational profile portion of the survey that the pool of respondents was weighted towards those relying directly or indirectly on the Harbor for income. There were enough respondents from the community at large, however, to draw reasonable conclusions that the people of Gloucester have parallel concerns about how to improve the Harbor as well as what major issues should be pursued as development opportunities. Clear conflicts exist, like what to do with I4C2, but

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Turn of the century ferry in Gloucester as painted by Henry David Twachtman. Today no ferry services the Harbor.



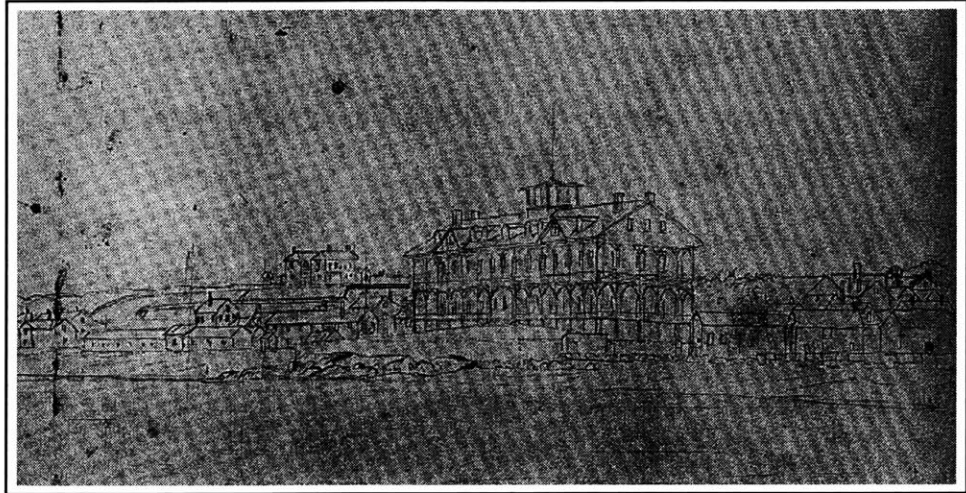
there are also promising confluence of perspectives such as the feeling that some tourism may be good although it must be subordinated to other economic activities.

As the survey illustrates, there is a diversity of opinion on the Harbor. However, there is also a fortunate convergence of ideas about what can and should be done. Water's Edge seeks to capitalize on these ideas and work to create an environment filled with commonly accepted activities and facilities. Atlantic Gateways clearly meets the public desire for an education facility to be built. The facility takes this essential notion of a place that conveys information about Gloucester and the maritime industries, and expands it into an experience that meets many of the other desires of the community. It not only educates visitors about Gloucester, it also works to directly stimulate economic activity for maritime dependent uses via the Gateway Cruises docking terminal that will be largely run by commercial boat owners in the Harbor. Both the Fisherman's Coop and Atlantic Pier and Market directly support and encourage the fishing industry, an issue that has shown to be of key public concern in the survey. The facilities, in a very unique and creative manner, balance the public's desire to remain a maritime community, with it's understanding that tourism, and a diversification of uses, are needed for the Harbor to grow in future. While not specifically mentioned in the survey, the Rogers Street improvement initiative proposed

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in Water's Edge adds retail activity that was mentioned as being lacking by a number of respondents. Also Fort Point Park provides open space and public access to the water that was listed repeatedly as being needed. The interventions in Water's Edge all function to incorporate public desire and needs with new initiatives that creatively build on the history of the Harbor and its current status as expressed through the survey.

This section will now be followed by the Program for Water's Edge and a detailed discussion of the individual elements and how they are intended to function. The Program will further illustrate how the public opinion survey data was incorporated into the overall proposals.



Pavillion Hotel, 1850

Harbor Cove Program Elements

When looking at the Harbor Cove, and considering strategies for its redevelopment, five distinct areas will be programmed for; Commercial Street, St. Peter's Square, I4C2, Rogers Street and the Fort Point area. An overall theme will be outlined below that connects all five sites programmatically and is aimed at creating a "day trip" experience for visitors that mixes with the essential industries that are located in Harbor Cove. The "day trip" experience for visitors is intended to be just that, an experience that will take up the bulk of one day and provide the visitor with multiple experiences that occur through interaction with the maritime environment of Harbor Cove. The five specific sites mentioned will each provide a unique, singular experience, building upon one another in an effort to create a "flow" of activities pulling visitors through and around Harbor Cove. While the intention is to create a series of places that each offer a different experience to the visitor, and work in concert with one another, each site will be specific in its use and intent such that it alone will provides satisfaction when enjoyed in isolation.

For the sake of ease in explanation, I4C2 will be used as a starting point to outline what the programmatic themes for each site are and how they interrelate. All narratives require a starting place, and in the context of the Harbor Cove

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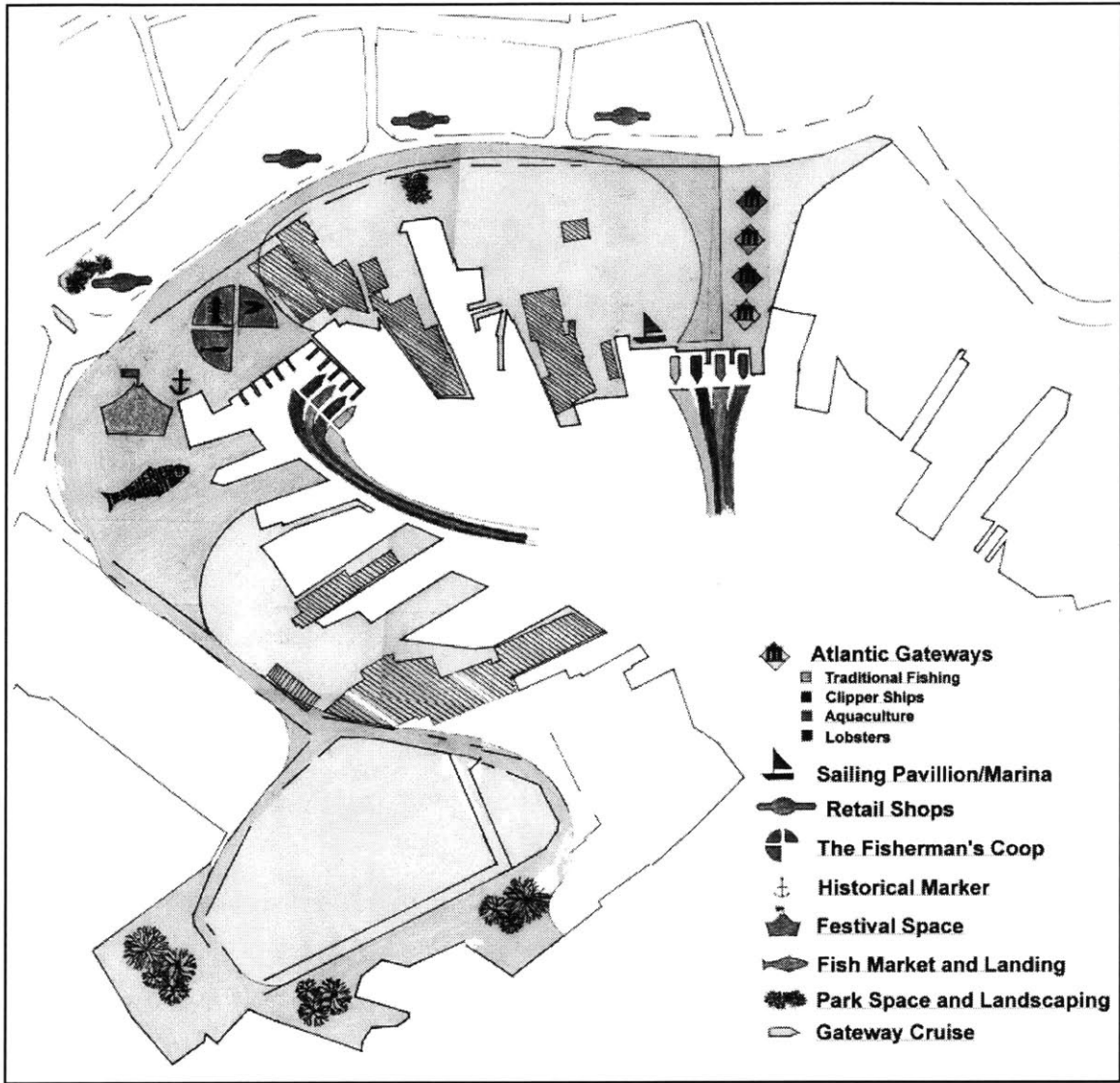
experiential narrative, I4C2 will be considered chapter one. Differing markedly from written prose, however, the visitor (or experiential “reader”) is perfectly free to start and end the Harbor Cove experience at any physical point. The themes presented, however, will be intended to be built from one point to the next, with I4C2 as the start.

Atlantic Gateways

Situated on the I4C2 parcel, Atlantic Gateways is an interactional education center designed to inform visitors about maritime industries and cultures through passive and direct stimulation experiences. As an educational tool, passive experiences are useful in some contexts where richer interaction activities are impossible to create. Direct stimulation as an educational tool, however, is far more effective and is, in fact, a commodity that consumers are willing to pay for. The premise being, people like to learn, especially when the process is fun and not encumbered by the idea of work. For this reason, Atlantic Gateways will develop the basic concept of a museum, a place of education about particular events and ideas, into a more interactive facility. The experience will be divided as such.

One half of Atlantic Gateways will be housed in a large structure on the northern half of the site. The architectural style will borrow heavily from wharf structure typologies, particularly the long wharf warehouse of the mid 19th century. Within these shed like structures will be a series of “Gateways,” each related to a distinctive maritime activity or theme. Examples of these include a traditional fishing gateway, a sailing gateway (particularly historic), a gateway about the lobster industry, an aquaculture gateway and a gateway devoted to marine ecology and conservation. Thematically, the gateway concept is intended to expose visitors to ideas and information that is about some of the industries that are located in Harbor Cove. The educational effort therefore being directed at creating a base of knowledge for the visitor when there are inside the Atlantic Gateways facility that they can then draw upon later to understand the maritime industrial activities that are taking place around them in the Harbor and the Cove.

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Harbor Cove Program Elements and Locations

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A working waterfront, Victoria, B.C. Maintaining a similar image and activity level is critical to the success of the Harbor Cove interventions.

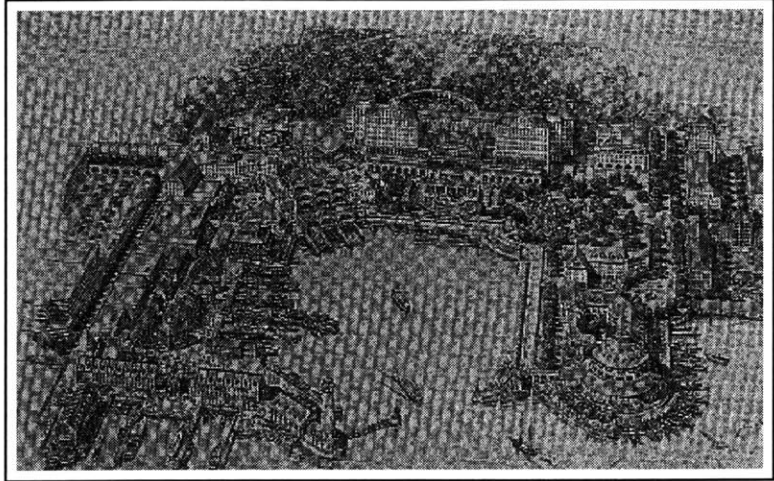


While distinctly separate as elements, each Gateway will be placed such that visitors can easily move amongst them. The Gateways themselves will be constituted of both passive displays that convey information through visual and auditory methods, as well as through direct physical interaction.

In The Life Cycle of a Lobster Gateway, for instance, visitors will be able to view tanks of live lobsters inside of which will be placed actual baited lobster traps. The trapping process will be made plain to visitors, educating them about how and why the traps work. Along with the trapping process, visitors will be able to learn about other aspects of the lobster industry such as harvesting procedures, sale and transportation, the types of vessels used and the traditions of lobsterman. One tank, for example, could be dedicated to lobsters preparing to molt, so that viewers will be able to understand how lobsters grow and shed their shells. An interventional experience regarding how lobster traps are built would be set up, allowing children to help construct a lobster trap, and then potentially submerge it in one of the tanks and watch it actually trap a lobster. At certain time intervals during the day, the traps will then be emptied with the participation of interested visitors who will learn how the traps are handled safely. A mock-up lobster boat could be constructed over one of the tanks and visitors could join a “lobsterman” on the deck once an hour as he empties the traps, of course placing the inhabitants safely back into the tanks to be captured another day.

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Mission Bay Redevelopment Plan, San Francisco. While differing in context from Gloucester, the scheme illustrates a modern waterfront “narrative.”



A direct connection between this element of Atlantic Gateways and the Fisherman’s Coop will be made via an advertising pitch, conveyed either through signage or audio means, for “The Lobster Stand” located conveniently just down Rogers Street at The Fisherman’s Coop on St. Peter’s Square. At the gateway itself, visitors will be offered discount coupons for a fresh boiled lobster or a cup of chowder. Similar themes housed in the Atlantic Gateways warehouse will have ties in to other elements of Harbor Cove.

The second half of the Atlantic Gateways experience takes place directly on the waters edge where a small fleet of boats are waiting to take visitors out onto the sea itself for a direct sensory educational experience. To be specific, visitors to the Atlantic Gateways complex will be able to purchase tickets for rides on boats related to the gateway display. A visitor to the “Trawler 27” fishing gateway inside of the warehouse complex can buy a ticket for a ride on a traditional trawler. The boat will either take the visitors out to watch a real trawler set and retrieve its nets, or the trawler itself will engage in some actual fishing activity, allowing people to participate in the experience themselves. Other Atlantic Gateways events will have related boats moored on the waterfront. Examples include the above mentioned lobster boat, a research vessel equipped with specialized scientific equipment, an aquaculture experience and a historic sailing vessel.

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Functionally, visitors to Atlantic Gateways will be able to purchase tickets for Gateway Cruises either at a centralized ticket counter near the exit of the facility, or at electronic ticketing machines placed at the Gateways themselves. An important component of the Atlantic Gateways concept is that by combining a number of themes into one structure, a multi-visit draw will be created. On one visit, a parent and child might view all the Gateway experiences and then participate in the lobster cruise. On a following weekend, the same family might return to enjoy the marine ecology experience and cruise. The importance of repeat visits is critical to maximizing the utility of Atlantic Gateways and Harbor Cove in general.

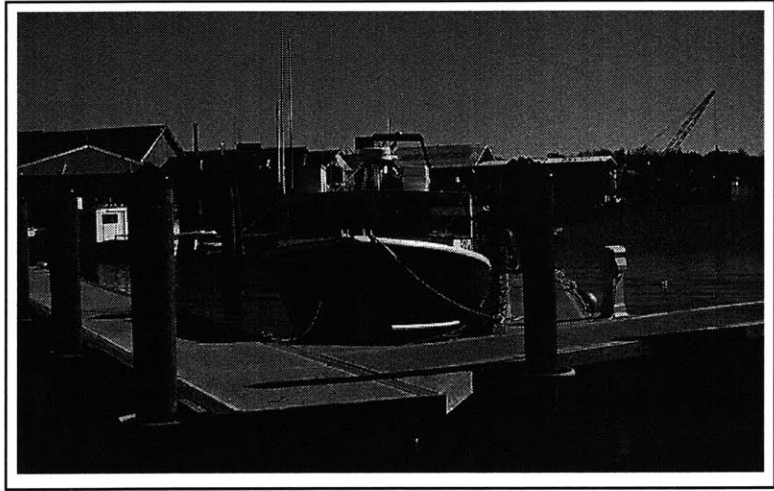
Another aspect of the Gateway Cruises is that they will begin at the exit from the Atlantic Gateways facility, and will conclude at St. Peters Square, dropping off visitors in front of The Fisherman's Coop that has already been plugged during the Gateways experiences. As Harbor Cove is a relatively small area, landing visitors at the Square will create no logistical problems and will greatly increase flow throughout the entire Cove, allowing visitors a richer visit and increasing their exposure to the various retail enterprises.

The experiential elements of Atlantic Gateways are critical to its success. Without the opportunity to actually participate in the maritime activity, visitors will be left with only a modified museum experience, something they can have almost anywhere. It is the fact that they can not only learn, in a passive mode, about some industry important to Gloucester, and then to participate in a very direct and sensory stimulating way to that activity that will draw them to Atlantic Gateways. Visitors will leave Gloucester not only enthused about their own personal day trip experience, they will also feel a closer tie to Gloucester as a community. They will have gained some analytical knowledge about what takes place in Gloucester's Harbor, and also understand experientially what those activities are like.

For the residents of Gloucester, Atlantic Gateways offers several advantages. On the one hand, it showcases the many maritime industries important to the health of Gloucester as a community, and therefore gives visitors to Gloucester a better understanding as to why they should support local and

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Gateway Cruises departure point (I4C2 waterfront). By improving and redesigning the existing pier, larger motorized vessels and sailboats can be accommodated.

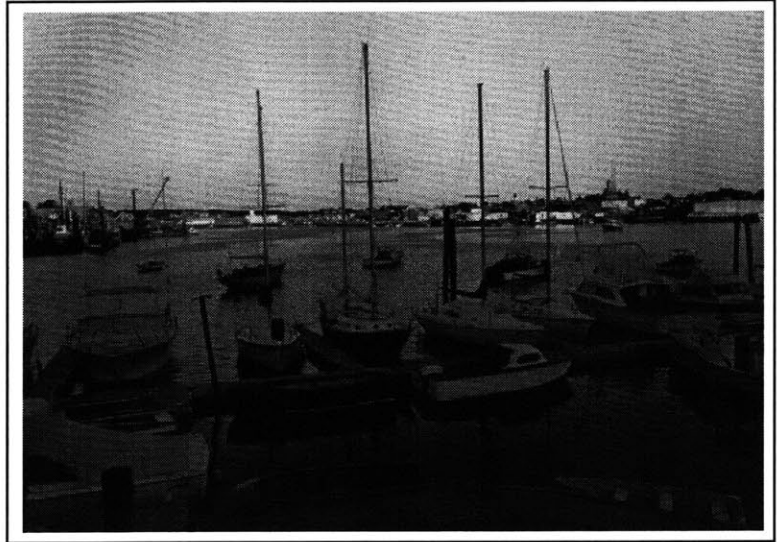


regional fishing activities. The public, in general, is reluctant support issues that it does not understand. Therefore, when initiatives such as the Sea Port Bond Bill come up, individuals living outside of Gloucester will be more inclined to support such funding if they have had a positive, educational experience such as the type Atlantic Gateways will offer. The other important advantage of Atlantic Gateways is that of direct economic activity. Not only will Atlantic Gateways provide land-side employment to local residents, the waterside activities will provide fisherman and other boat owners opportunities for income. Local boats will obviously be used for the Gateway Cruises and a harbor fisherman could easily earn supplemental income taking passengers out several days a week when not fishing. As well, being such a large attraction in the Harbor, Atlantic Gateways will stimulate ancillary economic activity throughout the Harbor, and will assist in supporting the other enterprises proposed in this thesis.

Along with the Atlantic Gateways experiential learning center, I4C2 will also house a transient vessel marina. This facility will be directed at sail boats plying the coast of New England. Such boats will be able to land at the Atlantic Marina where they will find full marina services within a traditional fishing community context. Services such as showers, fuel, boat parts, communications (FAX, phone, email, etc.) and groceries can be purchased at the terminal. While small in actual size, the facility will provide an important juxtaposition to the

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Several sailing facilities currently exist in the Harbor. However, as this image shows, none serve transient vessels and most tend to be informal and poorly organized.



maritime industrial dominance with Harbor Cove. By providing dockage space for sailing vessels, Harbor Cove will improve its aesthetic character and create a more diverse waterfront scene that will attract more visitors and locals to the waters edge.

Programmatically, the marina will be intended to function as a low cost alternative to Marblehead (just south of Gloucester) with a more traditional character. By stopping in Gloucester, sailors will be able to service their boats at a lower cost than they would at the high end services offered in Marblehead, they will also enjoy the atmosphere of a working maritime community. The terminal will be primarily a seasonal facility that might either close down in the winter, or shift towards servicing local vessels that may need temporary space in the off season. As the construction costs of the facility will be kept to a minimum, the flexible nature of its usage will not be a problem.

Architecturally, the facility will be related stylistically to Atlantic Gateways. Although much smaller in size and shape, the facility will utilize 19th century wharf typologies that will allow it to blend with the Atlantic Gateways complex. Using a warehouse shape, the structure will be built with wood and glass that will convey a contemporary theme in a traditional vehicle.



Rogers Street in its current state

Rogers Street

The next chapter in the Harbor Cove narrative involves the stretch of Rogers Street between I4C2 and the intersection in front of St. Peter's Square. This section of road is currently underutilized and functions primarily as a vehicular artery. The street is, however, very precious in that it skirts the edge of Harbor Cove and could, if properly designed and encouraged, provide a high value site for retail uses. As the Designated Port Area regulations prohibit the use of non-maritime dependent activities on waterfront property, retail uses that tie in with the larger Harbor Cove redevelopment strategy could logically be sited along Rogers Street.

At present, the street-scape of Rogers Street is quite boring and pedestrian hostile. There are few businesses that actually front onto the street and many of the structures along it are the backs of store that open on to the portion of Main Street that is up the hill from Rogers Street. A metaphorical reading of this situation might be that the community has turned its back on the Harbor, a situation that will be remedied by Water's Edge.

The interventions programmed for Rogers Street are simple and unobtrusive, but will serve to create a more interesting and usable urban space. Within the three block stretch mentioned above there are approximately 4 (depending on

feasibility) open sites that have the potential for new structures to be built on them. While limited in number, these in fill sites offer just the right amount of retail activity to enliven the street, while not overwhelming it. New businesses should be constructed on these sites that tie in with the overall Harbor Cove strategy and continue the narrative that was begun at Atlantic Gateways. Examples of businesses that tie in with Atlantic Gateways include a Maritime history bookstore, a gallery selling work from the Rocky Neck artists colony located across the Harbor, and a clothing store that sells maritime clothing (i.e. slickers, sweaters, etc. that would actually target fisherman but would also be attractive to visitors).

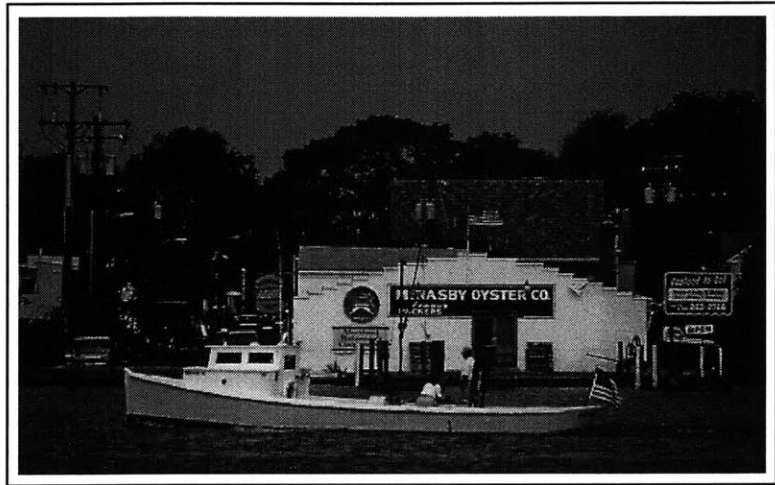
Along with a proposal to increase retail activity on Rogers Street, improvements should be made that encourage pedestrian flow. Widening the sidewalks is critical to this end as the sidewalks at present are quite narrow. This would not be difficult to accomplish as space is available along the edges of the walks opposite the street, thus allowing the sidewalks to be enlarged with no loss of street width. Adding benches and landscaping several “nodes” will provide for a casual atmosphere that benefits both locals and visitors by creating a more pleasant pedestrian environment. Of critical importance, however, is that streetscape improvements to Rogers Street will improve pedestrian flow and access to St. Peter’s Square and Atlantic Pier and Market, both important locations to the Harbor Cove narratives and sites that will be elaborated upon below.

St. Peter’s Square

In terms of civic space, St. Peter’s Square is critical to the community of Gloucester. It is one of the few places in the Harbor where the public has direct and easy access to the water’s edge, and where a public landing exists. Unfortunately, as the Square is currently configured, it offers little to actually attract residents and visitor’s. The Square is essentially a parking lot with a wide sidewalk along the Harbor. The sides are bounded by an appliance store, a fish landing facility and an extremely diffuse intersection of Rogers, Main and Commercial Street. What the Square is lacking is essential definition and a sense

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Oystermen's cooperative, Annapolis, MD. Successful cooperatives can be found in many harbors throughout the country.



of place. The below listed proposals will provide this physical definition and will create viable commercial activity and civic space that will give St. Peter's Square the identity it is currently lacking.

As a part of the larger Harbor Cove narrative, St. Peter's Square should be seen as a confluence point for several story lines; an area of interrelationship that is crucial for creating focus between the needs of Gloucester as a community, and the community's ability to attract visitors from outside. The Square will be made to function as a point of juncture for the pedestrian flow moving along Rogers Street from Atlantic Gateways, the sea via the fish landing that bounds the Square and the community at large through acting as a site for annual and sporadic festivals, as well as being a return landing for Gateways Cruises passengers. Two specific interventions will be outlined below that will serve to define and intensify St. Peter's Square.

The Fisherman's Coop

Currently, the parcel on the north side of the Square is used as an appliance store. This use will soon cease as the parcel falls within the DPA and MI, yet has no maritime dependent activity. By redeveloping this site into a restaurant complex that is cooperatively owned by local fisherman, the maritime

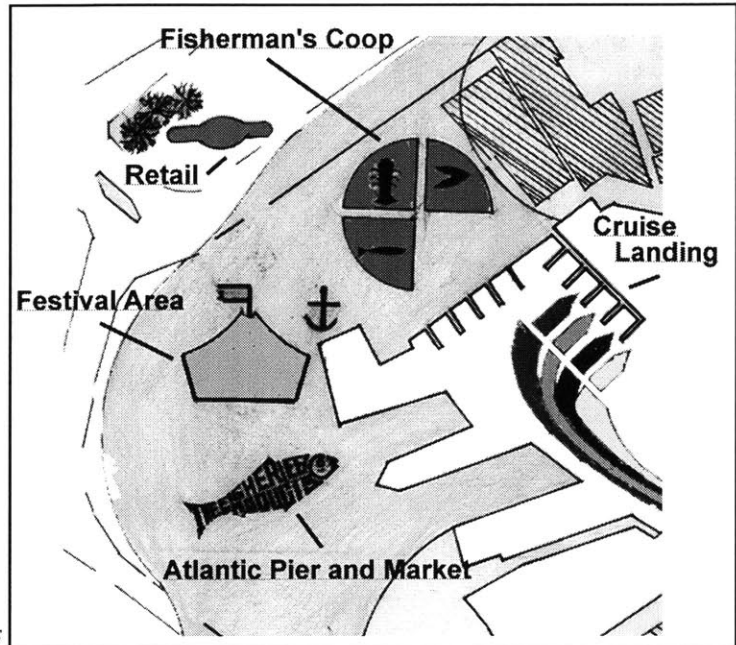
dependent status of the parcel would be respected while at the same time a vital new attraction would be provided for visitors and locals. The basic concept would be to create a cooperative of four to five restaurants that each serves a particular species of fish that is harvested by the local fleet. Specifically, using a casual dining theme (essentially carry out), restaurants such as a lobster and crab stand, a fish and chips shop, an oyster and clam counter and other varieties would be run cooperatively by a local fisherman's organization. The fisherman would themselves provide the fish, and would in some instances use underutilized species on a rotating basis when such species are in season (i.e. skate, mackerel, shark, etc.).

The cooperative will provide enhanced income for local fisherman by providing a direct retail outlet for their products. While the cooperative will be billed as a casual and low cost eating experience where regional fare can be sampled, its cooperative status will increase margins on the catches landed. Along with acting as a conduit for fish products, the cooperative will also create employment opportunities for local residents.

Structurally, the Gloucester Coop will be built so that it is open and easily accessible, almost creating an extension of the Square itself. During the annual Fisherman's Feast, as well as during other intermittent festivals, the Coop will essentially spill out into the Square with additional stands and tables that will create a vibrant and lively atmosphere. The architectural theme of the Coop will again borrow heavily from traditional 19th century harbor structures, utilizing simple wood shed construction with open counters that front onto both the Square as well as internal spaces between sheds. Large picnic tables covered by wooden trellis work will provide dining spaces with views of the Harbor as well as activity within the Square.

Thematically, the Gloucester Coop will fit into the Harbor Cove narrative in several ways, and will specifically be linked to Atlantic Gateways experience. The first method will be direct tie-ins at the Gateways themselves. As mentioned previously, visitors to The Life Cycle of the Lobster gateway will not only learn about the lobster industry, they will also receive a coupon for 10% off of a fresh steamed 2 pounder. An advertising plug at the Gateway will cue visitors to The

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St. Peter's Square Program Elements

Lobster Stand at the Coop, as well as being alerted to the Stand upon disembarking from the Gateway Cruise that lands at the St. Peter's Square docks, a mere twenty yards from the Stand itself. Other Gateways will have similar experiential relationships with the Coop that bring the visitor full circle from passive learning to full dining experiences.

An additional possibility for the Fisherman's Coop would be to extend its range of activities to include business from the Atlantic Gateways experiential cruises that take visitors out into the ocean. Depending on what type of relationship would be arranged with the Atlantic Gateways business entity, fisherman moonlighting as Gateway boatman might in fact act as an extension of the Cooperative, allowing multiple fisherman to benefit from the business generated out of the Gateways.

As we can see, the Coop now has three distinct relationships with Atlantic Gateways and the Harbor Cove experience; it has the advertising plug at the various Gateways themselves, it has the fact that Gateways Cruises actually land directly in front of the Coop, and it has the potential for an extension of the Coop business into handling the cruises themselves. A fourth relationship exists

that ties the Coop in to the Harbor Cove narrative. It is location in that the Coop is the transition point for the pedestrian flow moving up Rogers Street towards St. Peters Square.

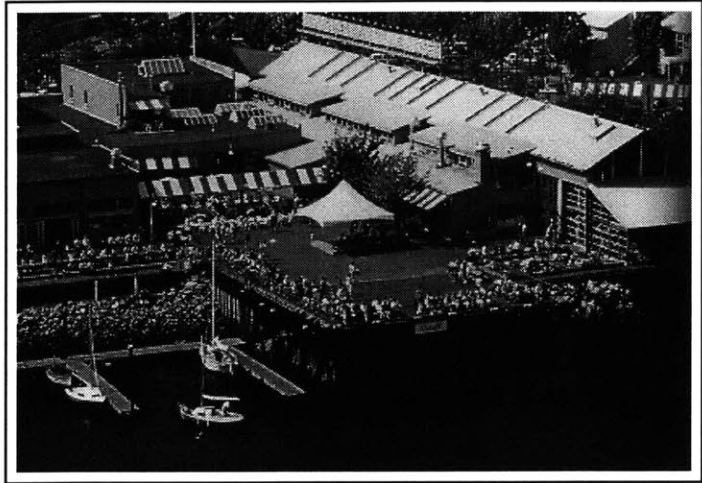
In terms of flow, the Harbor Cove narrative now moves in two directions from Atlantic Gateways, it moves on the water via Gateway Cruises that leave from Atlantic Gateways and returns to St. Peter's Square, and it moves along Rogers Street as pedestrians walk from Atlantic Gateways to the Square, passing the various maritime related shops and eventually reaching the Coop on their way to the Square. The Coop now acts as a point of transition from one experience to the next, and what experience is better for a transition than a meal. Physically structured to be open and easily accessible, the Coop will funnel pedestrians off of Rogers Street and down between its food stalls as they walk towards the waters edge, stopping for a snack along the way. Passengers disembarking from the cruises will walk up the dock landings and be placed directly in front of the Coop, where they will be enticed to enter and eat before moving on to experience Atlantic Pier and Market that will be outlined below.

Atlantic Pier and Market

On the opposite side of St. Peters Square from The Fisherman's Coop, Atlantic Pier and Market will be built. At present, the businesses that now sit between Commercial Street and the harbors edge are constituted primarily of fish landing and processing facilities and support services. Atlantic Pier and Market is the lynch pin for the entire Harbor Cove narrative and will be a primary point of interaction between the present needs of the Harbor fisherman, and their ability to diversify their activities in the currently depressed economic environment. Atlantic Pier and Market will be a multi-use facility, uniquely organized to handle the current needs of the fishing fleet in the Cove. It will combine marine industrial uses with a wholesale fish auction facility, a retail fish market and a full service restaurant. All of the needs will meet DPA requirements for maritime dependency, yet will increase uses of the site significantly into crucial new economic activities that will benefit both the community at large, and the fishing

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*Waterfront market, Vancouver, B.C.
Image illustrates the incorporation of
historical typological shapes with modern
waterfront architecture.*



fleet particularly. Rather than simply being a transit and processing facility for fish, as it is now structured, the site will have a value added component gained from its retail and wholesale outlets. Fisherman associated with the facility will benefit significantly from capturing the added revenues gained through these businesses. The exact program for the site will be outlined below.

Atlantic Pier and Market will be composed of four very distinct, symbiotically related elements. The four elements are as follows; a marine industrial landing facility, a wholesale fish auction staging area, a retail fish market and a full service restaurant with patio dining. All of the elements will be housed in one structure that will allow efficient flow of people and goods between the various zones. Architecturally, the structure will synthesize contemporary design themes currently being used in many waterfront redevelopment schemes with traditional materials and shapes. The structural aspects of the Pier and Market will be further explained in the next section, as will architectural plans be presented. For the sake of clarity, however, it should be noted that the structure will essentially be a long narrow warehouse divided into two sections with a second story portion on one end, and an overhanging covered market area that faces St. Peters Square. The auction and retail market will interact loosely with the Square. The restaurant will be on the second story, overlooking the Harbor and landing, with the remainder of the structure dedicated to landing and processing.

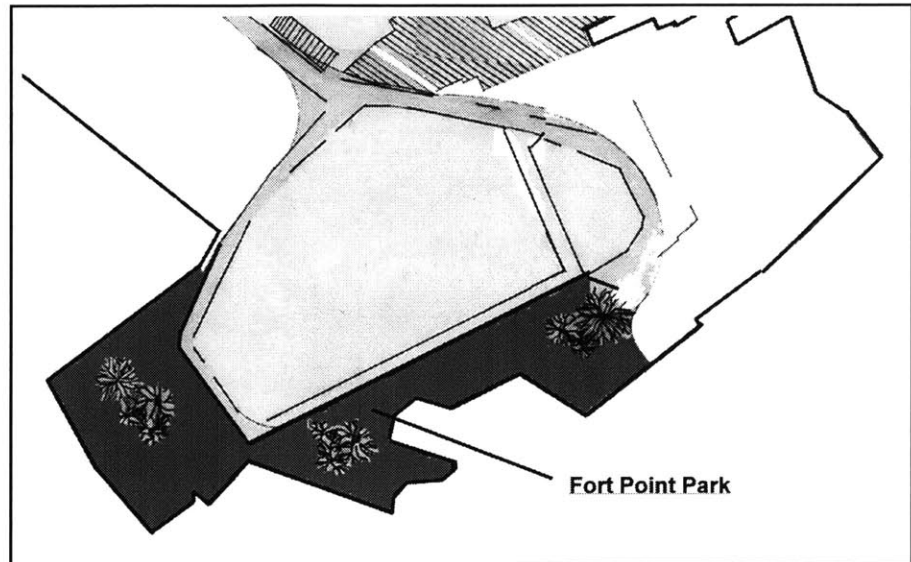
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The zones will be distinctly separate, so that one does not interfere with another, however, at the same time they will be permeable and interactive, helping to create a unique waterfront experience filled with activity.

The backbone of the scheme, and the driving engine behind the entire Water's Edge proposal, will be a marine industrial landing facility that will service many of the boats in the Gloucester fleet. The landing and processing area will take up most of the lower floor of the structure. It will be a normal landing facility, much like the current ones on the site, and will be used to land catches and partially process some fish as well as move others on to larger processing facilities around the Harbor. What will be unique to this facility will be that it will also shunt some fish off to the two markets that will be located on the north side of the building that faces the Square. The interior side of the building will be strictly marine industrial and will be dedicated solely to the activities that now exist. The markets will be built as symbiotic elements from which regional businesses can purchase wholesale fish at an auction, and where tourists and residents can buy retail fish for personal consumption.

The experience of going to the Fish Market will be designed to make visitors feel that they are visiting an actual working waterfront, which they will be. Tourists will be able to watch trawlers unload their catch, watch that catch move through the facility to its industrial outlets, and also see that same catch placed out for sale in the auction and market. It will be an extremely rich sensory environment because it is predicated on the notion of actual real activity (as silly as that may sound). People know the difference between what is real and what is a construction intended to remind them of some real activity. Atlantic Pier and Market is special because it gives visitors the experience of a waterfront, while also offering them the more entertainment oriented services that they enjoy, such as eating and browsing.

The two markets, retail and wholesale, will be oriented out towards St. Peter's Square, thus helping to define the Square spatially, and functioning to improve the level of activity taking place there. Visitors will flow across the



Fort Point area

Square between The Fisherman’s Coop and Atlantic Pier and Market, continuing along the Harbor Cove narrative.

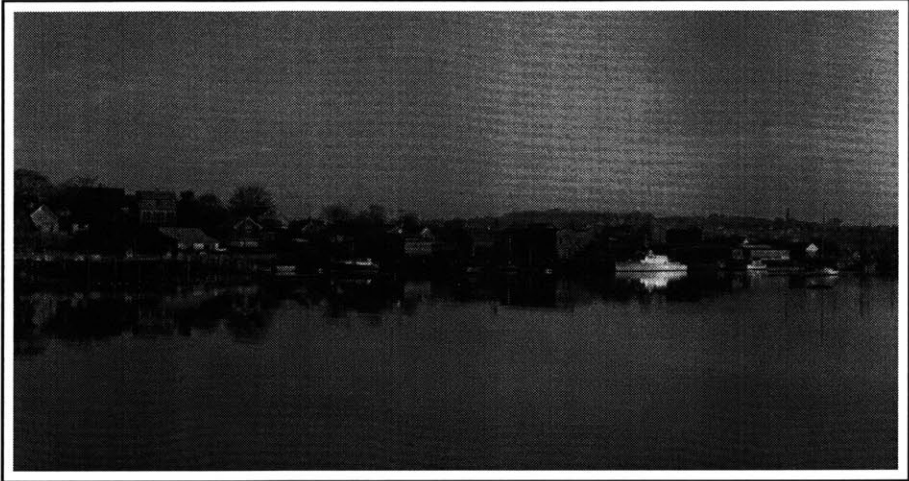
On the second floor of the Atlantic Pier and Market facility will be a full service restaurant that will serve local catch as well as fish from other regions. This element of the facility is intended to be a higher end dining experience, thus taking it out of competition with The Fisherman’s Coop, and providing a special dining atmosphere. Trading on the fact that the restaurant is located above an actual pier and fish market, the restaurant will play up it’s unique location overlooking the Harbor and landing area. Access to the restaurant will be gained via a stairway procession on the north side of the building that begins next to the fish markets. Patrons will, in effect, have to walk through the fish market in order to enter the restaurant, enhancing the entire experience and creating a more lively atmosphere.

Fort Point Park

Continuing the Harbor Cove narrative to its completion, Fort Point Park will be a waterfront park that wraps around the tip of Fort Point, located on the currently unused land in this area. The park will provide aesthetically pleasing

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View from Fort Point peninsula looking towards the Inner Harbor. Photo taken prior to construction of State Fish Pier.



open space areas for Gloucester residents and visitors to Harbor Cove alike. It will be composed of a waterfront trail system that links it to the St. Peter's Square area, a basketball court, a promenade as well as significant landscaping and green space. Programmatically, the park is intended to create additional public waterfront access that is currently severely lacking in the Harbor. With few points of direct access to the water throughout much of the Harbor, Fort Point Park will serve a critical need in the community. Providing a non-industrial waterfront atmosphere, the park will a valuable asset to the community and will serve to increase land values for the adjacent Fort Point neighborhood. In its present condition, the land at the tip of Fort Point is currently extremely dilapidated and underutilized, providing no additional benefit to the local neighborhood nor adequate access for the rest of the community.

By connecting the park to St. Peter's Square via a sign and trail system, visitors to Harbor Cove and its attraction will be able to further augment their Gloucester Waterfront Experience with a stroll out to the Park to enjoy a serene and natural setting. The park will create a perfect juxtaposition to the bustle and activity taking place in the rest of the Cove, allowing visitors a moment to reflect on their experiences at Atlantic Gateways, Gateway Cruises, The Fisherman's Coop and Atlantic Pier and Market.

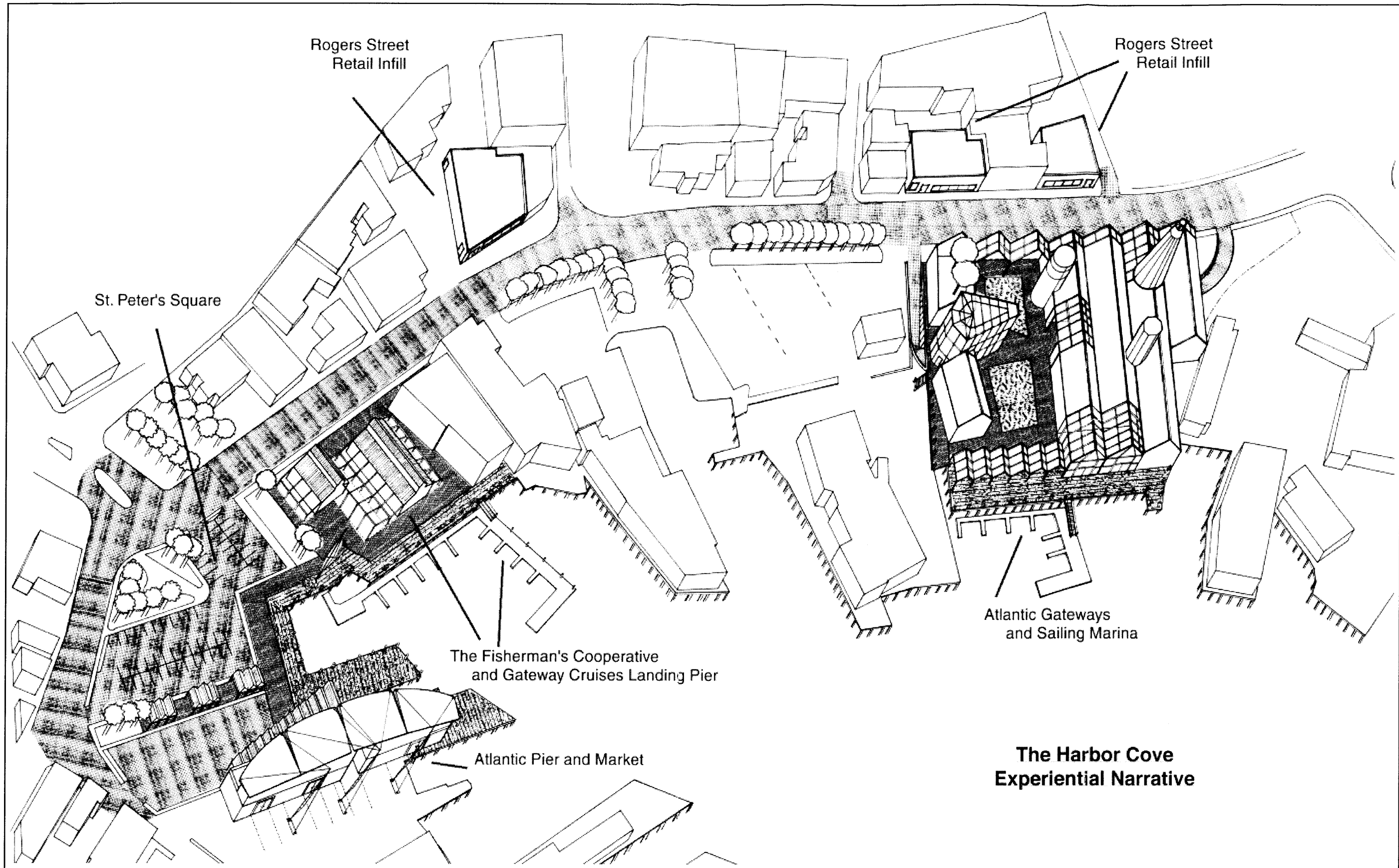
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Wrecked trawler in Harbor Cove. Such icons are important for fostering the image of a working waterfront environment.



The Design

Now that the issues facing the Harbor have been presented, and a discussion of the program proposed for the sites within Harbor Cove has been made, the design for Atlantic Pier and Market will now be explained and arguments made for why it solves several of the problems that were brought up earlier. As Water's Edge is a proposal for what could be done in Harbor Cove, a fairly large area spatially in terms of design, it was decided that an overall proposal and program for the Cove would be made, while site specific design work would be done for two areas. The areas that are to be the focus for most design work is St. Peter's Square, which includes both Atlantic Pier and Market and The Fisherman's Coop, and I4C2 with Atlantic Gateways. The Square was looked at from an urbanistic viewpoint that attempted to address how it could be designed to function as a better nodal point for the town of Gloucester, and in particular for Harbor Cove. As will be shown below, the structures for Atlantic Pier and Market and The Fisherman's Coop were designed at a basic architectural level and then placed within the Harbor Cove context in order to illustrate how they function as part of the urban system that forms the Cove and its relationship to the urban fabric that surrounds it. Similarly, The Atlantic Gateways facility was also designed to a basic architectural level and placed on the I4C2 site in order to



Rogers Street
Retail Infill

Rogers Street
Retail Infill

St. Peter's Square

The Fisherman's Cooperative
and Gateway Cruises Landing Pier

Atlantic Pier and Market

Atlantic Gateways
and Sailing Marina

**The Harbor Cove
Experiential Narrative**

create context and continuity for the system, although it should be noted that Atlantic Gateways and I4C2 was treated as secondary to St. Peter's Square in terms of design simply for reasons of constraint. Before presenting the designs, a basic analysis of St. Peter's Square and I4C2 must be made to aid in understanding why the design process developed as it did. That analysis will be presented below.

Site Description and Issues

In its current state, St. Peter's Square is essentially a large, open parking lot. The site is bounded on the west by Commercial Street, to the northwest by the junction of Commercial Street, Rogers Street and Main Street, to the south by a landing and processing facility, and to the east by the Harbor's edge. As the Square sits at the head of Harbor Cove and at the bottom of a hill, up which stretches the urban fabric of Gloucester, it is intended to function as a focal point for movement and activity. Originally, the area served as a transfer point for fish and cargo coming off the Harbor, but today it is primarily used as a parking area. A floating finger pier is located in the water just in front of the Square and serve as a public landing for vessels wishing to dock. The area touching the water is built up with pilings and a wooden deck that provides space for lobstermen storing their traps.

As much of Gloucester is built on a hill that runs down to the Harbor's edge, including Harbor Cove, St. Peter's Square can be viewed from many points in the town. For this reason it is important that the Square be aesthetically pleasing to look at, and that it function well as a focal point for activity. Motorists entering the Harbor area from Washington Street or Western Avenue also drive directly past the Square and are routed through the intersection in front of the Square. The intersection operates reasonably well for the traffic levels that move through it currently. However, it would be a problematic nexus if the amount of traffic were to increase even moderately. The Square itself is on essentially a flat grade and the only major construction difficulties are presented by the need for improving the pilings on the water's edge, as well as improve-

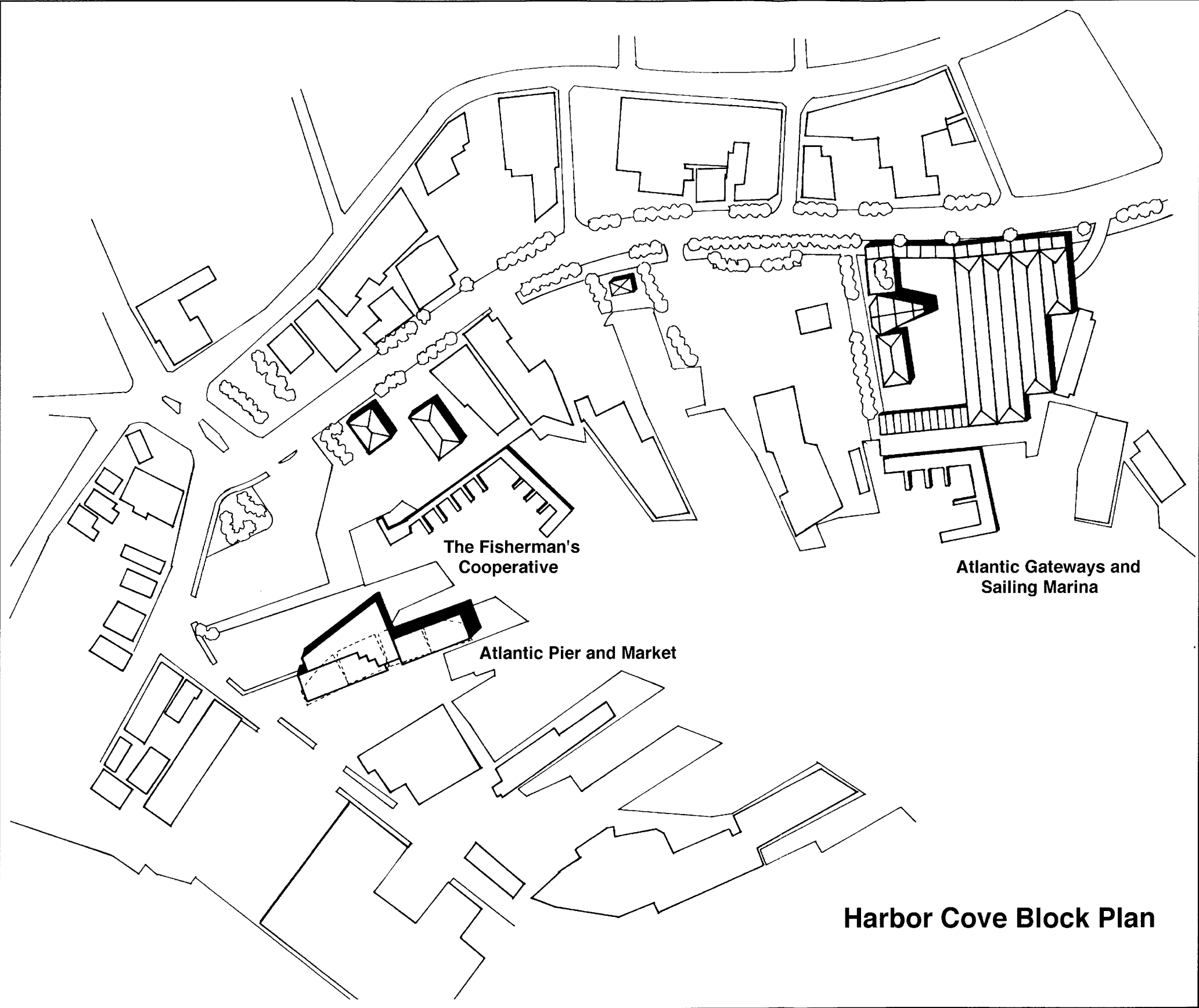
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Landing facility currently located on proposed Atlantic Pier and Market site. Structure illustrates the temporary quality of much architecture in Harbor Cove.



ments to the finger piers that border its southern edge and which will support a portion of Atlantic Pier and Market. A number of businesses are located on the other side of Commercial and Rogers Street from the Square, including a gas station, several shops, fish companies and the local Chamber of Commerce. Directly across Rogers Street from the Square is an ATM machine and an informal parking area that serves several business near it. The diffuse nature of this parcel adds to the undefined character of St. Peter's Square and should be addressed in any additional planning for the area.

Compared to St. Peter's Square, I4C2 is a somewhat simpler parcel to address. The site is just over two acres located 200 yards east on Rogers Street from The Square. Bordered on the south by the water, to the north by Rogers Street, on the east by a lumberyard and to the west by the Gloucester House, the parcel slopes gently towards the water. The parcel is basically a rectangle with one arm coming extending eastward that presents some design difficulties. Due to the dispute surrounding the site, it is in a totally undeveloped state, save for a finger pier and deck that has been constructed along the harbor. As part of the ongoing legal wrangling, the waterfront portion of the site was taken some time back and developed into a public dock and landing area. While basic in character, the landing does provide some infrastructure that can be utilized in the Atlantic Gateways facility. The sloping nature of the site does create some drainage problems, although since the area will not be used for industrial pur-



**The Fisherman's
Cooperative**

**Atlantic Gateways and
Sailing Marina**

Atlantic Pier and Market

Harbor Cove Block Plan

poses, contaminated runoff will be limited and should be confinable with proper collection systems.

The portion of Rogers Street that borders I4C2 is not well built out. Several open lots are scattered directly across from the site. The structures that are located on the street are, for the most part, the backsides of buildings that front onto Main Street, one block to the east. In between this rearage are the empty lots just mentioned. Because of this scattered and rather boring streetscape, it is important that a strong street front be built that enlivens the area and defines it spatially. Atlantic Gateways is designed to do so.

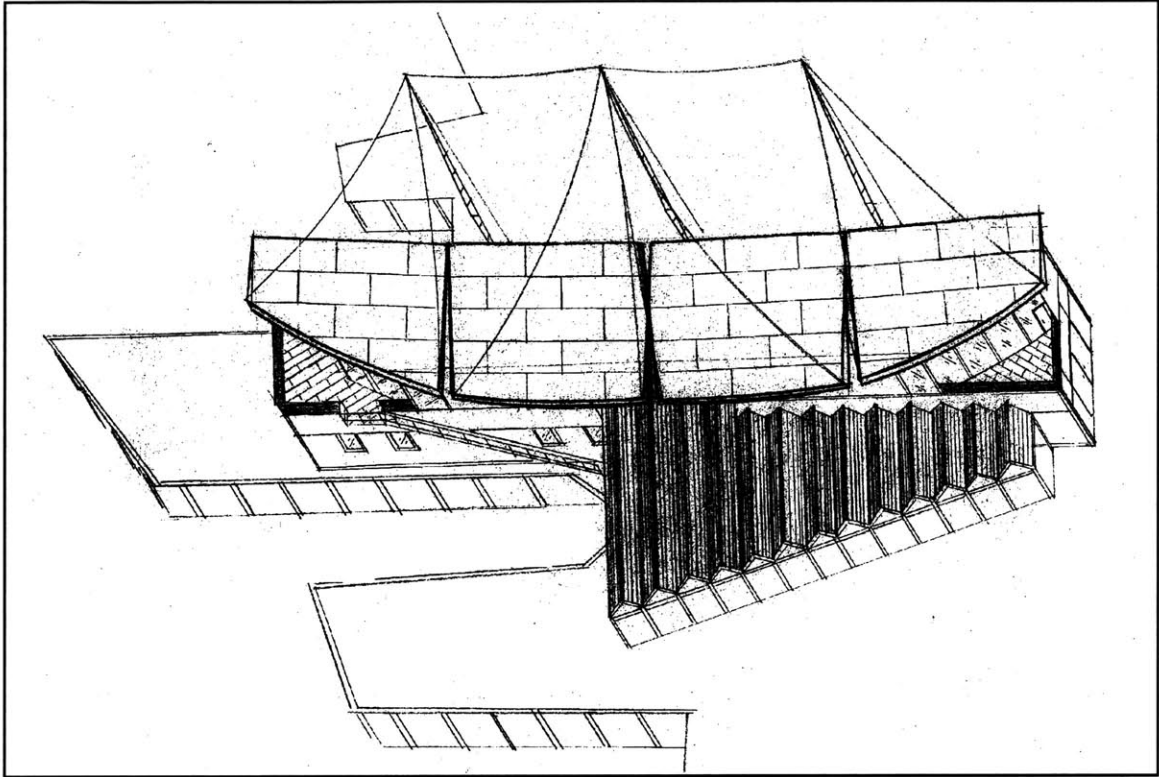
Now that an image of the two primary sites has been created, the designs themselves will be discussed. Their styles, functions and methods for alleviating some of the problems in Gloucester will be explained and detailed. Following this section on the designs themselves, several historical precedents and typologies will be shown and analyzed that will illustrate the how the shapes used in designing the facilities are drawn from past architectural styles. The design process that lead to the final products will then be outlined, followed by concluding remarks.

Design for Atlantic Pier and Market

The basic design character of Atlantic Pier and Market builds on the existing shape grammar of the area, and expands on it with the addition of contemporary elements. The intention of the design is to create a place and structure that accomplishes the following tasks:

- 1) Functions as an efficient landing and processing facility for the fishing vessels using it.
- 2) Allows for a mix of uses and activities.
- 3) Combines retail, wholesale and industrial activities within one structure and in overlapping use zones.

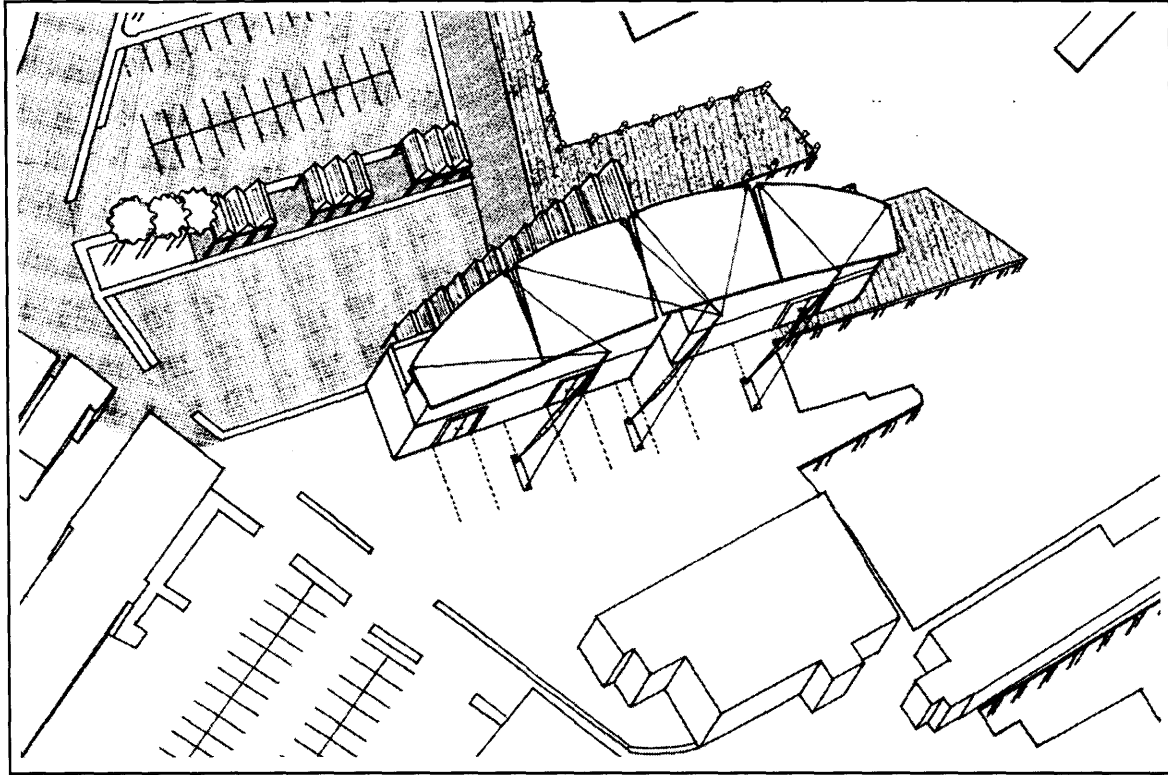
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Axonometric 1, Atlantic Pier and Market

- 4) Creates an environment that meets both DPA and MI regulatory requirements.
- 5) Creates, for users and viewers, the awareness of the history of Harbor Cove, the current needs of the community, and a physical vision of the future.
- 6) Works to spatially define St. Peter's Square as a central node in the Gloucester community.
- 7) Allows for the easy movement of product and people throughout the structure and into the urban areas surrounding it.

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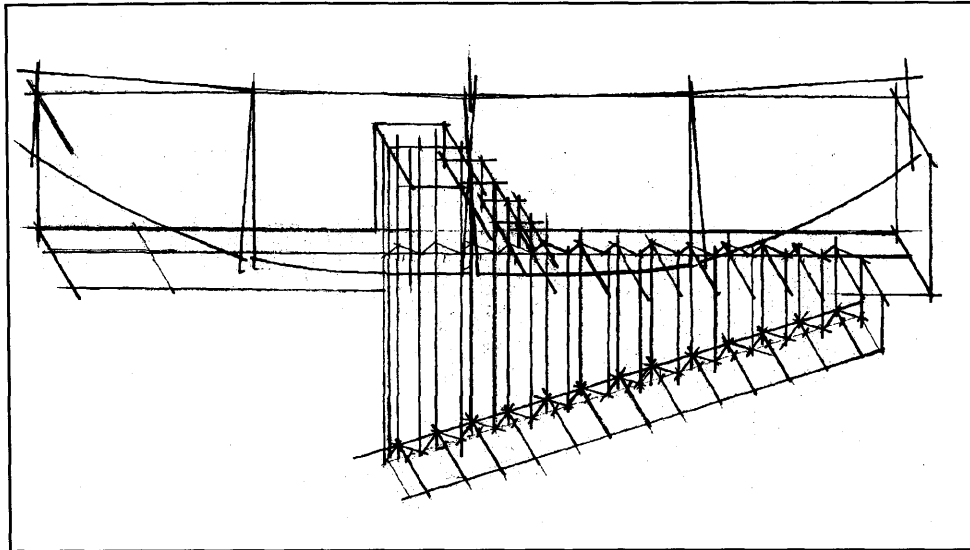


Axonometric 2, Atlantic Pier and Market

The structure for Atlantic Pier and Market consists of two rectangular buildings oriented in-line within one another and running out onto the second finger pier to the south of St. Peter's Square. Both structures are two stories and 30' in height. A single segmented roof covers both buildings as well as a passage space between. The first building (Building A), located partially on the finger pier, is 100' in length, 40' wide and 30' in height. The previously mentioned restaurant is located on the second floor of this structure and is covered by an overhanging portion of the segmented roof. As Atlantic Pier and Market is designed to function largely as a maritime industrial facility, the first story of both structures is 17' floor-to-floor with a 12' height for the second story. These proportions allow for trucks and other industrial vehicles to drive inside the facility for loading and unloading. It also provides adequate height for a second story restaurant.

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Structural relationships and framework. Note how market canopy is integrated with both primary structures.

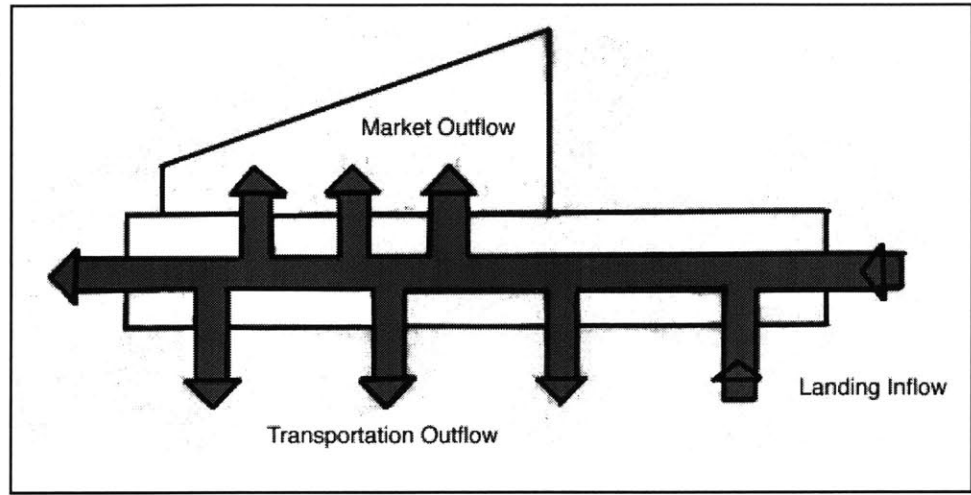


The second structure (Building B) of the complex has identical dimensions to the first except that it is 120' long, rather than 100'. The second story of this structure is dedicated to office and administrative space for use by the market and landing businesses that will occupy the space below it. Both buildings are on a central axis that runs straight down the finger pier. Fish can be landed on the pier, brought into the facility for processing, channeled down the central axis where it will either be shunted off to the market facilities located on the north side of the building, or moved onto waiting trucks on the south side. Since the two buildings are vertically oriented, doors at the ends of each will face one another across the passageway, allowing for the movement of products between the two buildings and essentially creating a singular industrial facility that is architecturally divided into two segments. The roof covering above the passageway will allow people and products to pass between the two buildings without being exposed to rain or the elements.

Extending out from the north side of both buildings is a peaked-roof canopy under which will be located the retail and whole sale fish market. The canopy extends outward, in a triangular shape to a maximum distance of 60' from the two buildings. The canopy, in fact, is attached to both structures with por-

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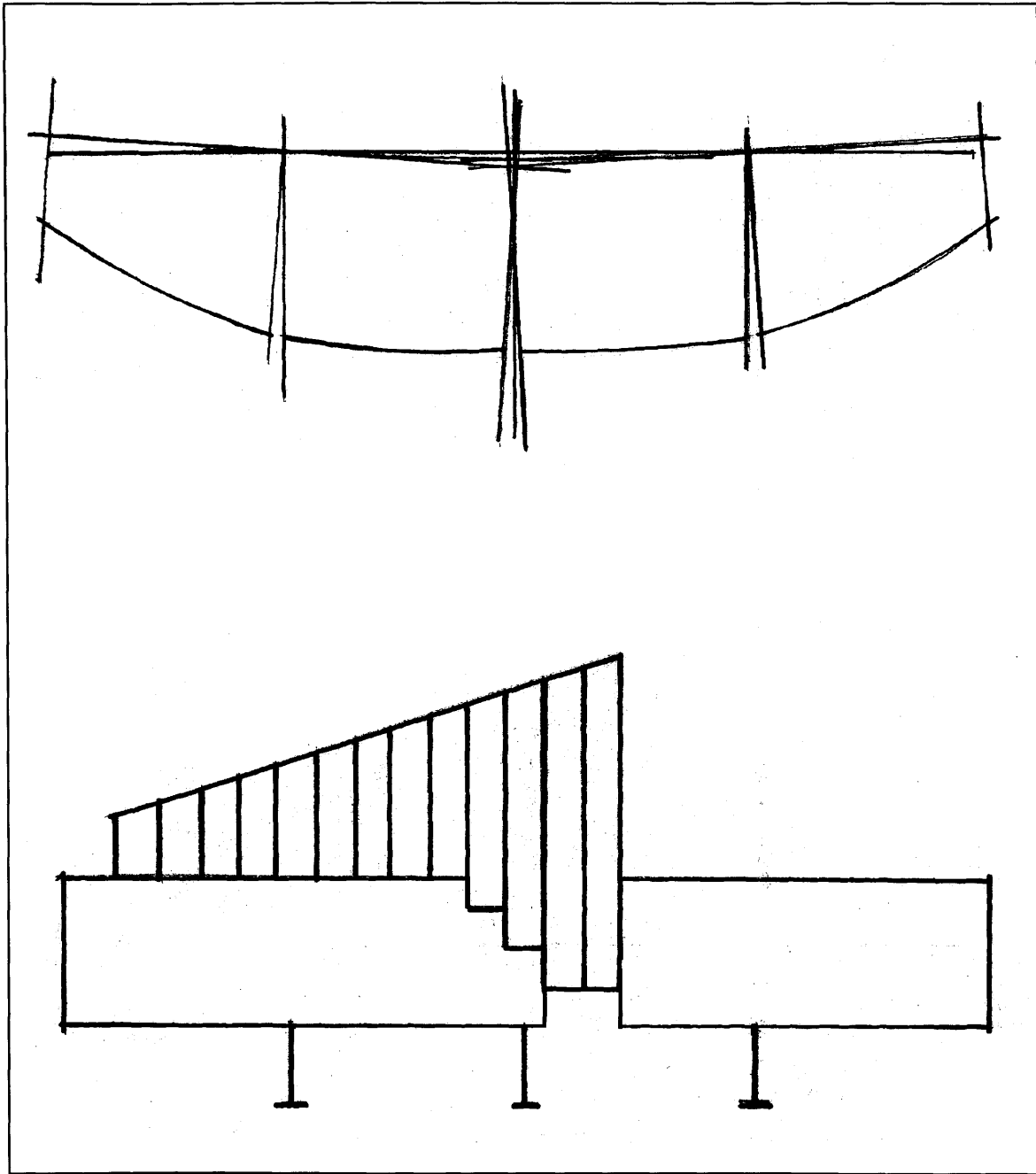
Product flow through Atlantic Pier and Market facility. Industrial movement and retail/wholesale flow are easily separated.



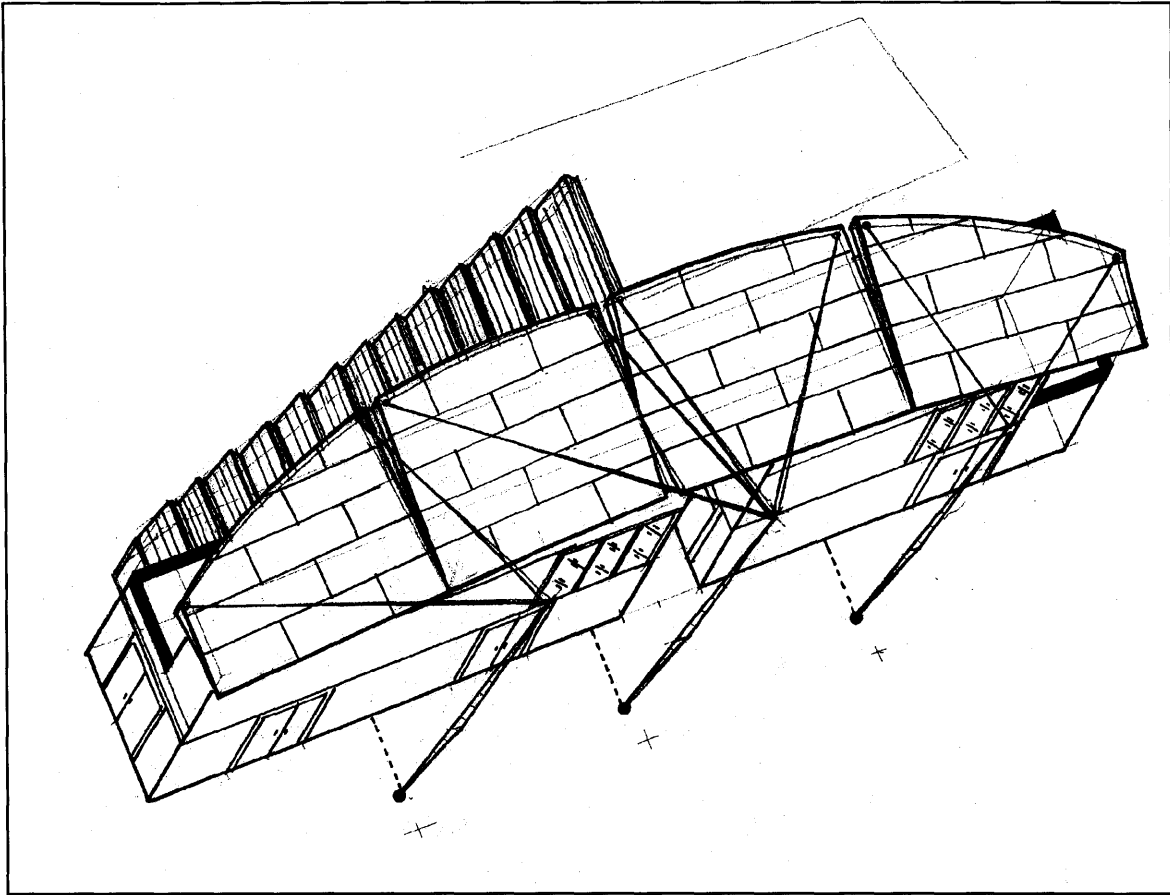
tions of it protruding into the buildings in a stepped fashion that connects both structures at the passageway (note illustration). The canopy is designed to be open on all sides so that people, product and even vehicles when required can move easily beneath it. Stalls for the retail fish market will be set up as will a staging area for the wholesale fish auction. The spatial area defined by the canopy is intended to be flexible in nature so that if at some points the retail fish market needs more space, it will be able to expand and reconfigure itself. The wholesale market be able to do the same. Access to both Building A and Building B can be gained through doors in the sides of each that exit under the canopy area. The passageway between Buildings A and B provides access to the market area near the widest area of the triangular roof. It will be possible for visitors and workers at Atlantic Pier and Market to move throughout the entire complex and always be under a protective roof.

The facility is designed to be open and accessible from many points, and to maintain a light and airy feel. There are several reasons for this. One, as the facility is primarily industrial in nature, it must be practical. It must be easy to clean up, wash down and move fish and other products through quickly and efficiently. The large interior spaces allow for these needed activities to take place. Secondly, Atlantic Pier and Market is a mixed use facility. While it is first and foremost an maritime industrial site, it is also composed of a significant

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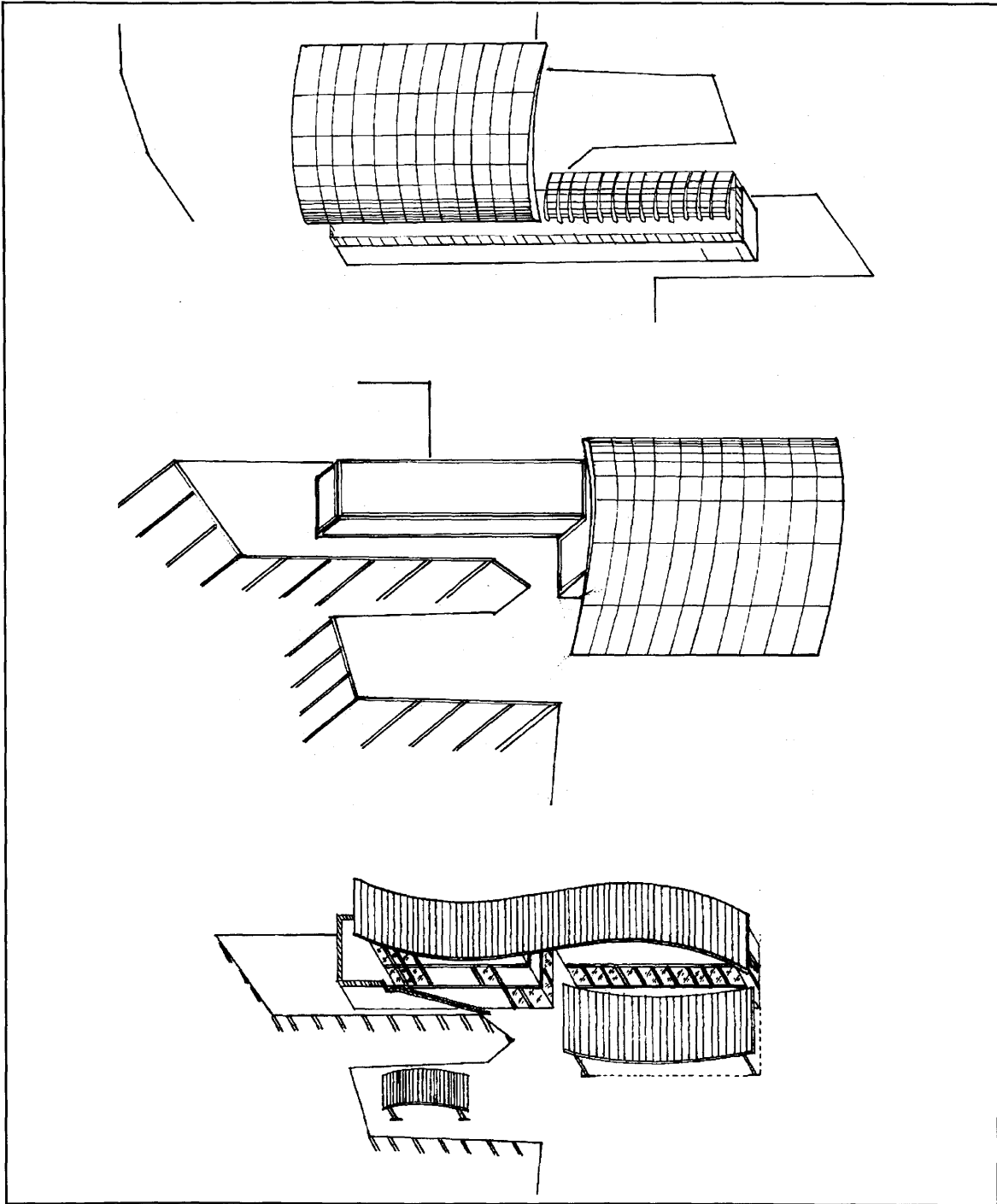
Roof plan and relationship of market canopy to Buildings A and B



Axonometric 3, Atlantic Pier and Market

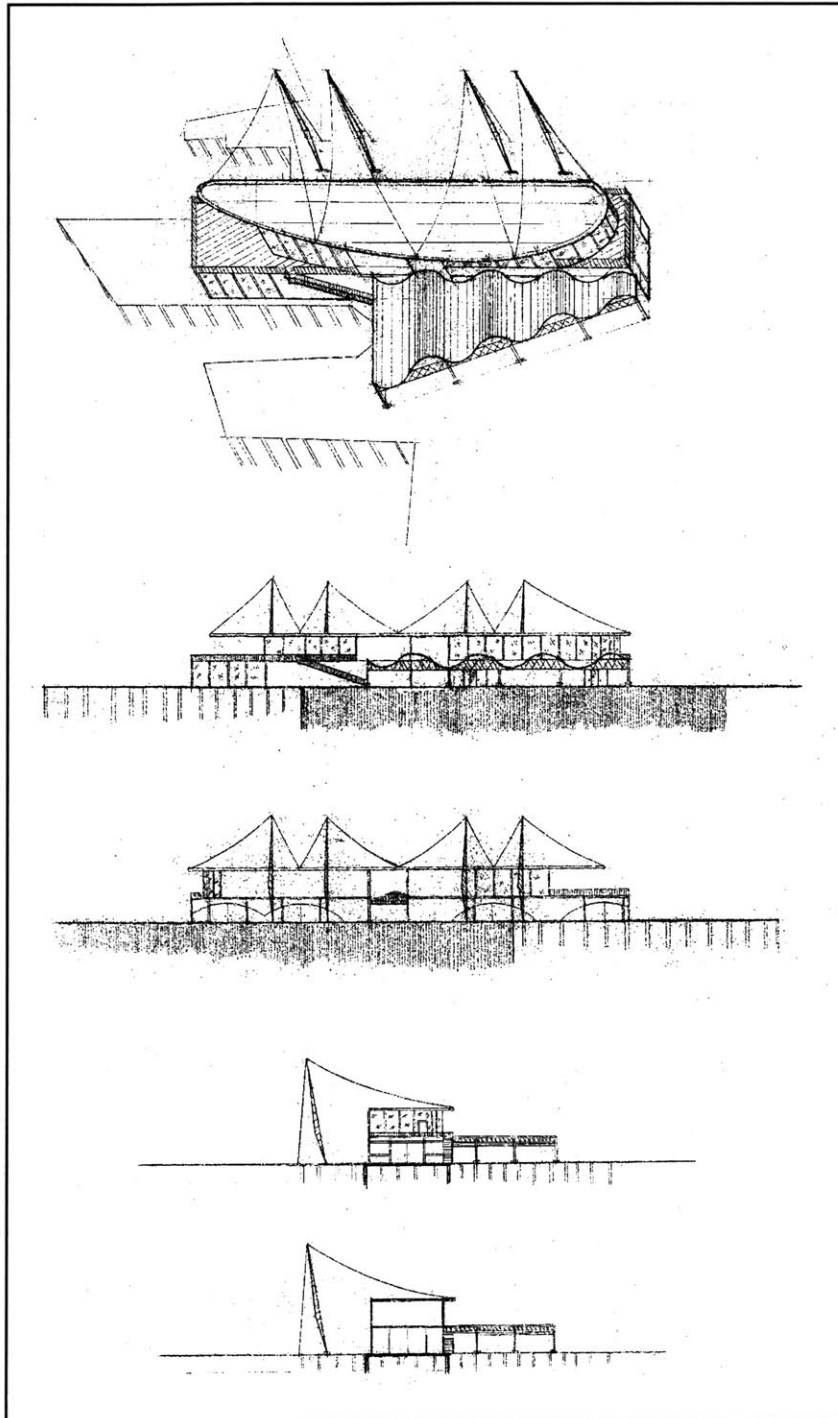
retail/wholesale element. A major portion of the draw for visitors coming to The Pier is that they want the experience of a working waterfront. This is possible due to the open nature of the facility. It allows visitors to look at and watch the maritime industrial activities, the fish being unloaded, the boats being prepped, the ice trucks coming and going, while not being an interference to those activities. Visitors will be able to see inside of the facility where the processing is taking place. They will be able to go the second floor restaurant of Building A to dine on its patio and look out into the Harbor and down onto the finger pier and industrial area. Similarly, activities underneath the market canopy will mix and mingle. While clearly delineated spaces between wholesale and retail market

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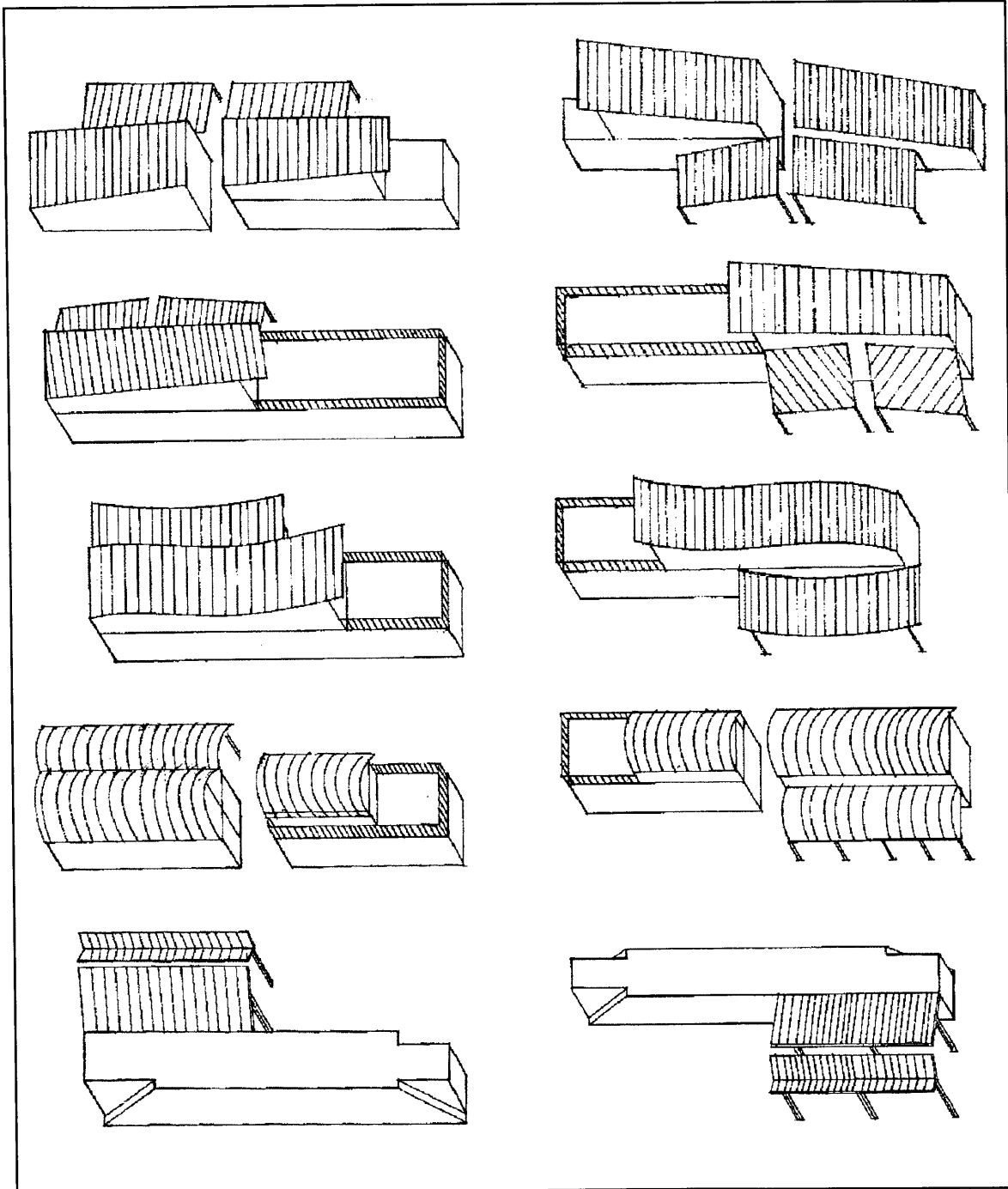
First iterations, Atlantic Pier and Market

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Second iterations; axonometric, section and elevation

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Shape experimentations

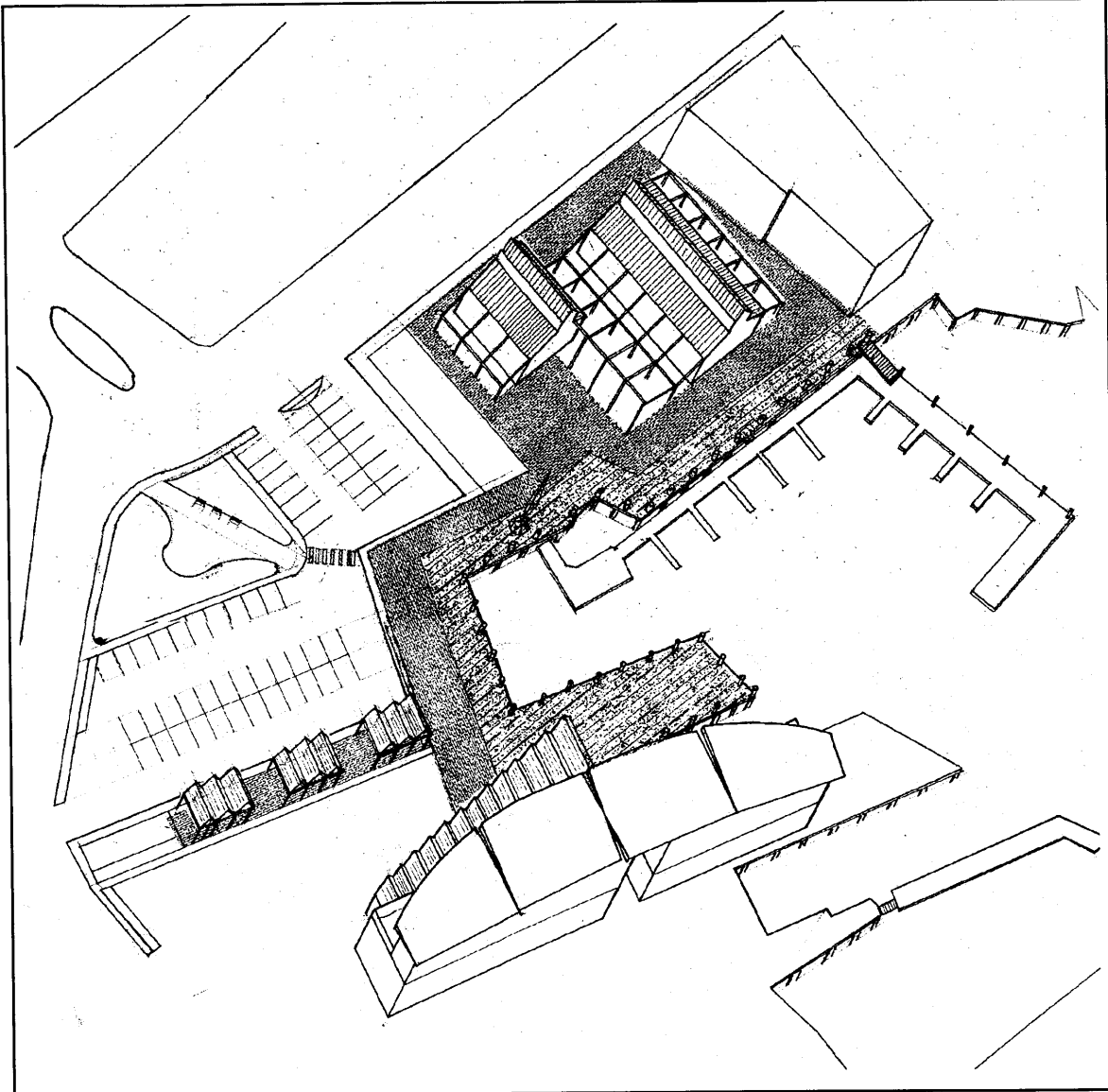
areas will exist, buyers and tourists will be able to move throughout, looking at the various fishes and products offered in each area. Construction materials for the market canopy will be a simple concrete foundation with a steel framework and roofing material. Different paving patterns will be used to help in distinguishing various use areas and to create a better sense of place and movement corridors.

Access to the restaurant will be gained from a processional staircase that runs up the outside of Building A, and in fact, hangs out over the water. The staircase terminates on the patio with a small landing. Patrons can then either dine inside the restaurant or eat outdoors under the overhanging roof. The front (north) wall of the restaurant that faces the Harbor will be made entirely of large glass windows, as will areas of the side walls, in order to give patrons views of the Harbor and activities around them. To enter the restaurant one will have to pass beneath the canopy and then proceed up the staircase.

The roof that covers both facilities is a rather unique structure. The southern edge of the roof (on the industrial side of the facility) is connected to the body of the two buildings with a pin-joint system. The northern edge of the roof then overhangs the edge of the building and is supported by a cables that run back to three towers standing on the southern side of the building. The cable and tower structure supports half the weight of the roof while the pin-joint connector sits on I-beam columns that are part of the steel framework of both buildings. This roofing system is intended to be both functional and decorative, projecting a symbolic image that reminds viewers of ship masts and boat riggings.

Materially, the structure will be supported by an internal I-beam framework on which will be hung sheet-walls of various patterned metal. As mentioned previously, glass wall portions will be used on the second floor of both buildings, in Building A for the restaurant and in Building B for the office area. The market canopy will be built with a steel framework and sheet metal roof. Contrast with the brick paving patterned used on much of St. Peter's Square will be created by texturing the concrete floor of the market. In further juxtaposition will be the wooden decking materials that are used on both the public finger pier and Atlantic Pier. These contrasting elements will create a unique, attractive and functional environment.

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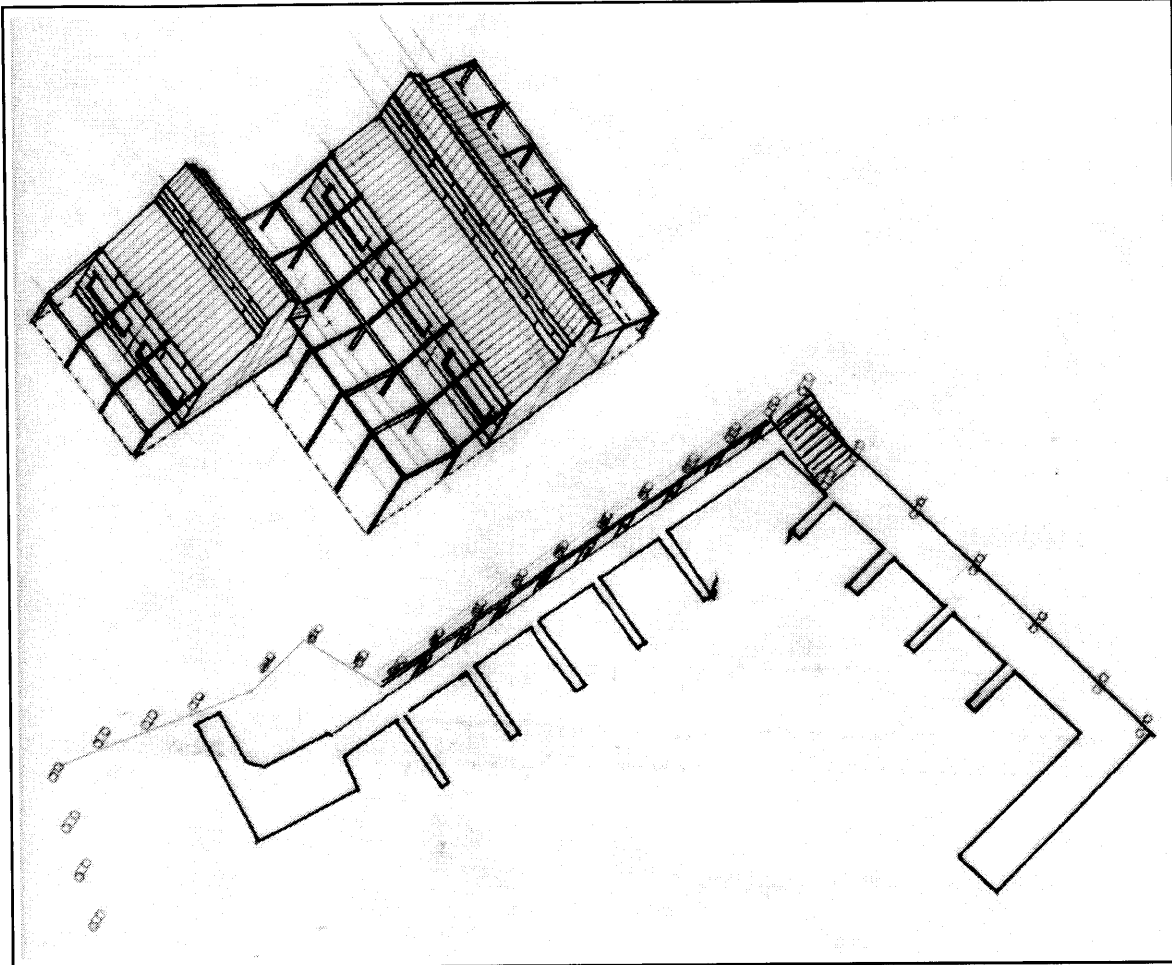


St. Peter's Square axonometric; The Fisherman's Cooperative and Atlantic Pier and Market. Structures are designed to define the open space of St. Peter's Square and to create a dialogue that encourages flow between both entities.

Relationship to St. Peter's Square and The Fisherman's Coop

Atlantic Pier and Market is meant to be one element of the Gloucester Waterfront Experience, and in particular, one piece of St. Peter's Square as an urban node. Its relationship to the other elements of St. Peter's Square is critical to its success, and to the success of Water's Edge. As can be seen in the accompanying images, Atlantic Pier and Market forms the southern boundary of St. Peter's Square. The structure has been designed, to a large extent, so that it dialogues with the Square as a physical space, and with The Fisherman's Coop. The market canopy extends out into part of the Square, creating a porous, diagonal edge that draws people into and under it. On the far side of the Square is the Fisherman's Coop, two structures designed to evoke memories of the 19th century warehouse, and is typologically based on the Amsterdam style warehouse.

The Coop consists of two parallel buildings that are set perpendicular to Rogers Street and run towards the water's edge. In section, the structures are identical, but in placement they are staggered, with the smaller structure being sited closer to the street and the longer closer to the water. The larger of the two is 90' in length and the smaller 50'. Both are 40' wide and 30' high. The effect of staggering the two structures is to capture pedestrian flow on Rogers Street from Atlantic Gateways and channel it down between the two buildings and eventually into The Square. This occurs because, as pedestrians move down the sidewalk, they pass several of the existing buildings now located on Rogers Street. When they reach The Coop, they are presented spatially with two options. They can, if they choose, walk past The Coop and continue in a straight-line on the sidewalk. Or, as the two buildings are staggered, creating an open set back from the street, they can move off of the sidewalk into the setback space. At this point they will either continue to move down in-between the two buildings towards the inviting Harbor edge that can be seen from the street, or walk back up to sidewalk and go around the smaller Coop building. This layout is important because the Coop itself is comprised of a number of individual food stalls,



Axonometric; The Fisherman's Cooperative and Gateway Cruises arrival pier

all operated collectively but relying heavily on walk-by traffic that is diverted to it by the above mentioned layout. Moving people between the two buildings will expose them to the stalls that open onto the corridor and stimulate them to buy the food products being sold there.

The two structure are connected by a wooden framework that can be covered with either canvas/mylar, or vines in the summer time, to create a more intimate and shaded space. When seen from Rogers Street, the Coop will give the impression of a casual, waterfront dining area, easily accessible and inviting. The wooden framework creates a better defined place for The Coop by delineating stronger edges that would be less obvious on the open plane of St. Peter's Square.

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The relationship between Atlantic Pier and Market and The Fisherman's Coop becomes clearer at this point. While designing both The Coop and The Pier to be specific, individual places unto themselves, they are both sited and designed so that the edges of each that faces the other is porous and open. That is, visitors to The Coop will feel as though are in a specific, well defined area, but will sense no obstacles separating themselves from The Pier. In fact, a visitor to The Fisherman's Coop will quite naturally be drawn to The Pier by the hustle and bustle that can be seen happening under the market canopy, and by the varying paving and deck patterns that clearly mark where walking areas are and how direction flows should move.

The two facilities are interrelated tightly, as the Harbor Cove narrative creates a continuous experience that pushes and pulls visitors into and around the various elements. A tourist who arrives first at the Atlantic Pier and Market will enjoy the market and auction experience first, and then will be drawn across St. Peter's Square to The Fisherman's Coop for a noontime meal or snack. The open edges of both structures makes it apparent to visitors that they are invited to move freely around all of the structures and to experience the multiple environments offered by Harbor Cove.

For passengers on the Gateway Cruises, a floating finger pier is located directly in front of The Fisherman's Coop that will be the arrival point for the cruises. Passengers will exit the boats, walk up a small ramp and find themselves standing immediately in front of The Coop. They will then have the choice of walking into the Coop area, or walking along the deck area that is built along the water's edge. This deck follows the contour of the harbor edge and carries over to the Atlantic Pier and Market area. A smaller fixed finger pier is located just next to the market canopy and provides interim public space for people moving between the two facilities. It creates a sub-node within the St. Peter's Square system.

St. Peter's Square, combined with Atlantic Pier and Market and The Fisherman's Coop, becomes a place where a variety of uses and activities take place. The design of the facilities and the Square will allow several primary uses to occur. The need for maritime industrial activities are satisfied by the landing

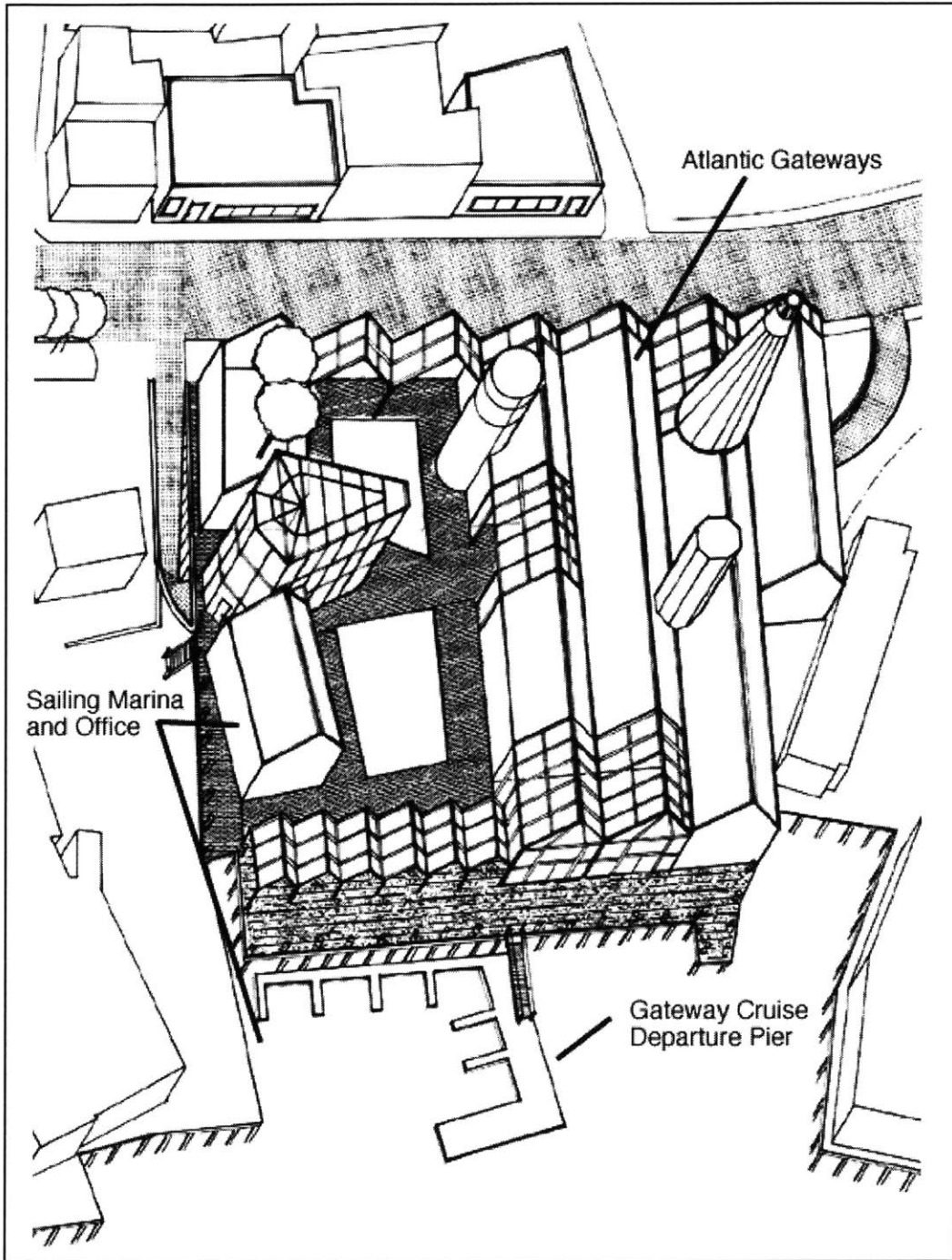
and processing facilities that are housed in Atlantic Pier and Market. Related to this activity, and equally maritime dependent, is the wholesale auction and retail fish market that provides an outlet for the fish being brought in. Moving a step away from the industrial nature of these two activities, however still with maritime dependency, is The Fisherman's Coop that creates a direct, value added retail outlet for marine products. Similar to the Coop is the full service restaurant housed on the second floor of Atlantic Pier and Market. The redesign of the Square also provides enhanced public space that can be used for annual festivals as well as seasonal programming. The multiple layers that exist in the Water's Edge proposal significantly enhances the amount of activity, and the variety of uses, that can take place in the St. Peter's Square area.

Design of Atlantic Gateways and Sailing Marina

Turning away from St. Peter's Square for a moment, the Atlantic Gateways design will now be presented. The basic structure of Atlantic Gateways is similar to a series of harbor warehouses typically found throughout New England during the 18th and 19th centuries. A historical precedent for the design will be shown in the next section. The main structure in the complex consists of four segments that run perpendicular to Rogers Street and the harbor edge. Each segment is identical in section being 40' wide by 35' high. Three of the segments are 240' long and one is 130' in length, being shortened due to the shape of the site. The four segments are all attached and create a large, interior space. The intention is to create a structure that looks like series of buildings from the outside but is actually one continuous space on the inside. Each segment has a peaked roof that is joined to the adjacent roof on the support columns that run throughout the building.

At several points in the structure, various towers are used to break up the low horizontal shape. Placed strategically at different points in the main complex, the towers are designed to evoke memories of coastal light houses. While some of the towers are accessible with stairs that allow visitors to go up inside them, they also serve as light wells bringing natural light into the interior

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The Atlantic Gateways Complex

portions of the building.

Along with the light house towers, the repetitive system of Atlantic Gateways is also modified by the use of steel and glass at several points in the structure. Maintaining the same sectional dimension, a steel and glass framework is inserted, twice at the waterfront side, once on Rogers Street and once on the eastern side of the building where the entrance is located. The waterside framework is designed to serve as waiting area for passengers about to disembark on a Gateway cruise. very much like a greenhouse or glass pavilion, visitors will sit inside of the glassed in areas where an informal cafe is located. From inside, the entire harbor can be viewed, along with waterside activities taking place throughout Harbor Cove and the sailing marina located next door.

On the street-side, the glass is intended to allow pedestrians to see inside of Atlantic Gateways, perhaps with a major display placed strategically in this area. The framework is part of a continuous facade and portico also made of steel and glass that serves as a pedestrian conduit along the edge of Rogers Street. Pedestrians on Rogers Street will pass inside of the sheltering portico and be given a glimpse of what is taking place inside of the structure, gaining a piece of information via the educational display.

As mentioned previously, the interior of the Atlantic Gateways facility is one large common area. While divided to create specific spaces for individual display needs, the overall creates an open space with a relatively high roof. The Gateway displays, as described in the program, will be setup throughout the building, and although clear delineations will be made between differing Gateways, few fixed dividers will set in place. This, in many ways, differentiates Atlantic Gateways from a typical museum that has a very rigid flow system. The flow system in Atlantic Gateways will be clearly marked, creating a single narrative and path for visitors, but the spatial dimensions of the facility will give the sensory experience of being in a less fixed environment.

One reason for designing the facility in this manner is to create a lively and active atmosphere. As the Gateways are intended to be interactive, stimulating experiences, it would be far less effective to place each one in a separate room, removed from the other activities around it. With an open setup, a visitor

at the Trawler 27 gateway will be learning about traditional fishing techniques, while in the background they may over hear part of presentation on ship building, further drawing them through the multiple gateways. Also, a working waterfront is a bustling active place, and to create a facility meant to teach people about that environment in a solemn, constrained atmosphere would be far less effective and inappropriate for the message being conveyed. The design of Atlantic Gateways attempts to, in part, emulate the activity of the waterfront.

As can be seen in the image of Atlantic Gateways, three additional structures are sited on the southern portion of the parcel. Two of these structure maintain the warehouse typologies seen in Atlantic Gateways. The third, located between the two, uses the steel and glass materials that punctuate the row structures except this time in a pentagonal atrium, severely juxtaposing the surrounding environment.

The warehouse structure that fronts on Rogers Street is, in fact, a false structure, using the warehouse shape to invoke historical memory, but proving to be simply an outline of the building itself. Four walls create the warehouse shape used in Atlantic Gateways, however the walls merely surround a small courtyard within which are several trees that sprout up and out of where the roof would be expected. The intention of this design is to playfully deceive visitors, who, upon first glance, expect to see a building similar to the those housing the adjacent Gateways, but instead find a purely aesthetic gesture.

Attached to the false warehouse is a large glass atrium that serves several purposes. Spatially, the atrium slides between the false warehouse and the smaller structure that sits closer to the harbors edge, jutting into the plaza in front of Atlantic Gateways. Operating in two capacities, the atrium functions first as an entry way for visitors coming up and out of the below grade parking structure that sits beneath Atlantic Gateways. A staircase and elevator will move visitors from the parking area, and rather than deposit them immediately at the entrance, places them in a transition space from which they can cross the plaza and enter the main facility. Along with acting as a reception point, the atrium will also house an introductory gateway. This gateway will serve as a primer for peaking interest and encouraging people to visit the main facility. As with all gateways,

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this one will be maritime in theme, and will operate as rotating exhibition that changes with the different fishing seasons.

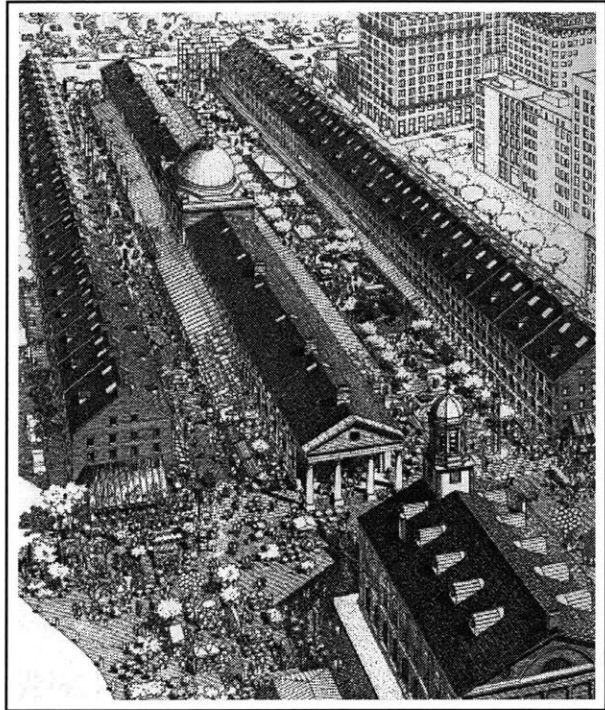
Attached to the atrium is the third structure that runs perpendicular to the water. This structure is essentially a shorter and singular version of the warehouse shape used in the Gateways complex. Acting as the terminal for the sailing marina, the structure will house the services required to operate the marina. An office and reception desk for collecting docking fees, a small shop for boat supplies and minimal groceries, showers and a telecommunications center will be housed in the marina structure. Being sited next to the dock and floating pier, sailors using the marina will have easy access to their boats and to the marina facilities via a small ramp leading down to the vessel berths.

The waterfront area between Atlantic Gateways and The Sailing Marina will be a wooden deck supported by marine pilings. A jointed ramp leads to the floating pier where Gateway Cruise vessels will dock on the western side and end portion, with sail boats using the eastern and land side. For security purposes a gate will be put on the floating pier separating the marina side where vessels may be tied overnight from the Gateway Cruises area.

Physically connecting the marina facility with the main Atlantic Gateways facility is a small protective pavilion that runs the length of the waterfront deck. The pavilion is designed using the same shape and proportions as Atlantic Gateways, although it is only 10' in height and is intended to serve as informal public space for the sailing marina, Atlantic Gateways and Gateway Cruises.

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Quincy Market, Boston. The quintessential New England harbor structure.

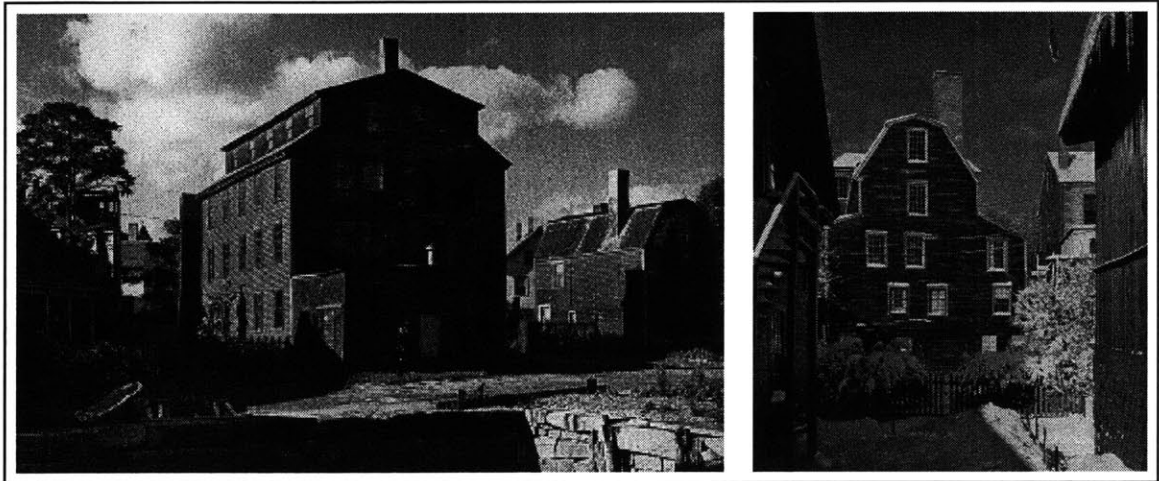


Design Precedents

Design precedents for Atlantic Pier and Market, The Fisherman's Coop and Atlantic Pier and Market can be found in a variety of harbor contexts. As mentioned previously, the design of each facility is intended to convey a particular message related to the function of that structure. The shape grammar used for each relates to either a typology that was historically used in harbor environments, or it breaks from this connection and attempted to create a new dialogue that was directed more intentionally at the future rather than the past.

The Fisherman's Coop, for example, uses a massing shape commonly found throughout New England in the 19th century. The elongated structure with a peaked roof and a secondary roof structure on top can be seen in the extremely well know example of Quincy Market in Boston. While far smaller than Quincy Market, The Coop has a similar layout and function pattern. Although now far

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*Residential structures in Gloucester and Rockport, MA.
Both illustrate common 19th century area architecture.*

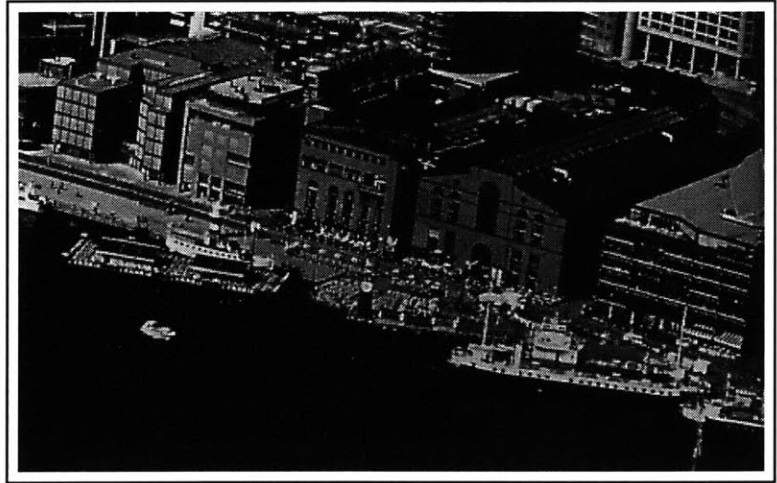
removed from the waters edge due to continuous landfill, Quincy Market originally abutted Boston Harbor. Products were loaded and unloaded from ships docked at the piers, moving vertically between the extremely long warehouse structures. Doors in the warehouse walls allowed the various businesses operating there to trade and move their particular goods.

The Fisherman's Coop follows a similar pattern in that it is perpendicularly oriented to the harbor edge. Passengers from Gateways Cruises are unloaded directly in front of the Coop and proceed up a small ramp where they then have easy access to the food stalls operating at The Coop. From the other direction, pedestrians moving on Rogers Street are directed down between the two structures towards the harbors edge. Like Quincy Market, The Fisherman's Coop businesses operate through breaks in the structure walls where the counter windows are placed. Food is passed through the openings and patrons eat it under the protective covering. The protective covering also has a historical precedent in Quincy Market's modern incarnation as a shopping area. The redevelopment of Quincy Market resulted in a low glass atrium being added to the exterior of the building that provides dining and shopping space. The Fisherman's Coop uses a similar, but less intricate system that simply provides spatial definition and minimal protection for users.

Along with Quincy Market as a precedent, The Coop also develops it

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Waterfront structures, Oslo, Norway. Image exemplifies modern uses of historical shapes and structures.



form from a number of other sources. As can be seen in the accompanying images, the sectional outline can be found in 19th century residential structures located in Gloucester and other New England communities. While internal layouts for these structures clearly differ, they do create a similar dialogue with their surrounding environment. A newer interpretation of this shape is illustrated in the image from the waterfront in Oslo, Norway. Serving contemporary needs, the structure has a similar section and elongated layout that helps to create a continuous facade on the waterfront side.

Turning to historical precedents for the Atlantic Gateways complex, 19th century harbor structures are again used for examples. This time, however, the precedents are found farther from Gloucester. The following image of Sydney, Australia, quite clearly illustrates the street-scape that is created using a row house typology. Individual warehouses with common walls run perpendicular to the waterfront, allowing access only from the front and rear. In the case of Sydney, each warehouse essentially functions separately, although internal connections between the different sections clearly exist. A similar typology is again found in Amsterdam. Long rows of peaked roof warehouses are connected with common walls that create a solid mass and continuous street-scape.

Atlantic Gateways uses this basic shape and volume while modifying it to create a large internal space. Common walls are removed and traffic flow is

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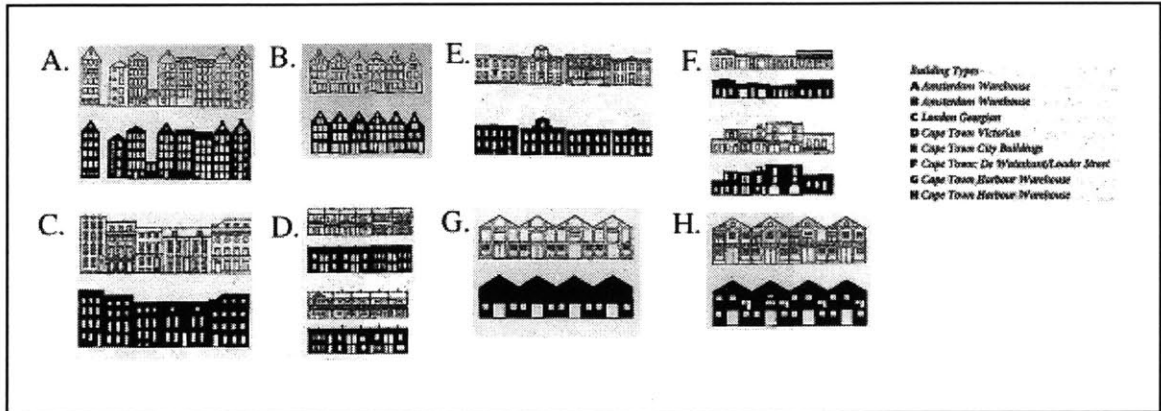
Row warehouse typology, Sydney, Australia. The low massing and peaked roofs creates a continuous and well formed street facade.



routed throughout the structure with support columns holding up the roof. With Atlantic Gateways being built on an open site that is bordered by relatively low density tissue, it was necessary to break up the heavy, low massing that is created by using this typology. To do this, towers were added that create a vertical element useful for interrupting the repetition of the structure. As well, the glass and steel segments help to loosen up the overall environment and bring natural light to the interior spaces. Wanting to maintain the street-scape aesthetic created by this typology, but needing to avoid an shape, one warehouse segment is broken off and placed on the far side of the site with a framework that maintains the section continuing along the street between the two. The framework helps to define the plaza space and to carry the movement created by the series of peaked roofs across the length of the site. Similarly, the smaller waterfront pavilion has an identical function with the addition of providing shelter and gathering space.

Of the three primary elements in Water's Edge; Atlantic Pier and Market, The Fisherman's Coop and Atlantic Gateways, two rely heavily on historic typologies in their design. One rationale for using such typologies on Atlantic Gateways is that the fundamental aspect of the facility is to convey information about the maritime industries in Gloucester and their history. Doing this in a facility that physically reminds users of that history is important because it creates a more complete experience. Although some structural elements of the

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Harbor and port building typologies



Seattle waterfront structures used as precedent for The Fisherman's Coop.

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One of the last historic warehouses in Gloucester Harbor. Note the use of wood rather than corrugated metal walls.

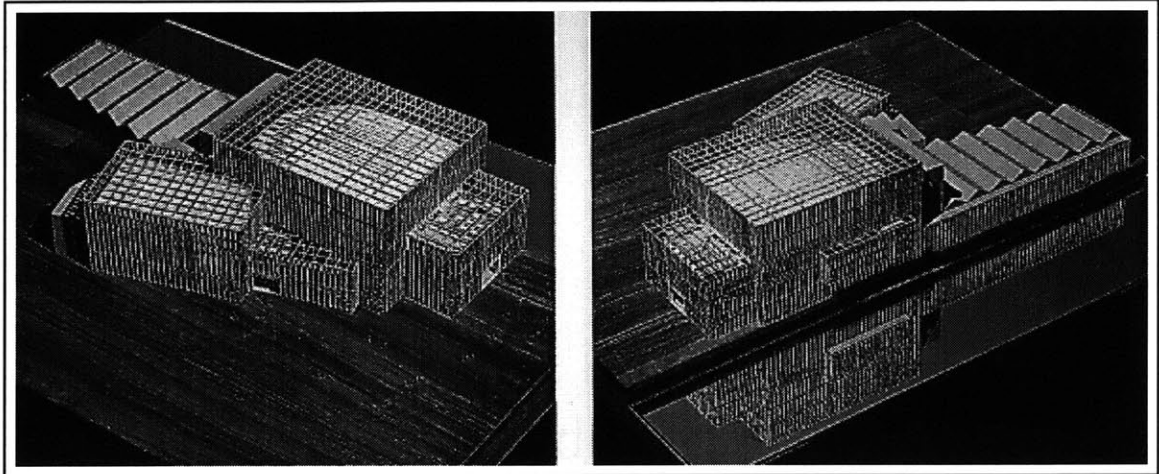


facility vary considerable from what has been built in the past, and rightly should do so, housing the Gateways themselves in warehouse type structure is appropriate in that the structure itself becomes one more vehicle for the transfer of information. The learning experience is not, therefore, limited only to the Gateways but also extends into the physical environment that contains the Gateways.

A similar rationale also applies to The Fisherman's Coop. Placing The Coop in two buildings that are very clearly related to the structures that have existed in the region for many years fosters a closer relationship between the product being bought, and the maritime dependence of the community. Visitors from outside of Gloucester, in particular, who patronize The Coop will better understand the direct link between the fishing industry and The Coop if they are standing inside a structure that immediately brings to mind the history of Gloucester. Also, Gateway Cruise passengers will be more enthused about their experience on the water if they have the opportunity to conclude the cruise at a physical place that has such a direct link to maritime activities. Functionally, the warehouse typology also works well in serving the needs of its users.

Breaking from the idea of using structure to physically embody the

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Waterfront performing arts center in Bristol, England. Structure uses similar roof system as market canopy on Atlantic Pier and Market

history and present activities of Harbor Cove, the Atlantic Pier and Market facility uses a contemporary design to purposefully create a forward looking representation of the fishing industry. Taking into consideration the current problems facing Gloucester's maritime industries, a design theme was chosen that is intended to project an image of the future of the fishing industry. In form and function, Atlantic Pier and Market is not radically different than current and historic waterfront structures. Just as the long-wharf typology channels products and people up and down vertical axis that are perpendicular to the water's edge, so to does this facility. What differentiates Atlantic Pier and Market from earlier waterfront facilities, however, is that it combines a variety of uses into one structural system. The facility not only moves fish along a central axis from the landing area of the pier to transport and processing areas, it also uses a horizontal axis system that creates a more porous structure. Product moves along the interior and is shunted at various points out to the market area, a portion of the structure that pushes outward to St. Peter's Square along horizontal axis. This in turn creates a tighter relationship with the surrounding environment as the market canopy is, in one sense, a gesture to The Coop and The Square.

Although the fishing industry in Gloucester is currently in a state of depression, it will rebound at some point in the future. Based on this assumption, a design decision was made to create a facility that is intended to be a break from

the historical context of Gloucester. Rather than house Atlantic Pier and Market in a typology that would representationally be tied it to the past, a contemporary structure that experiments with shape and volume was used to express the idea of looking beyond the current problems of the Harbor. The rational being, if Gloucester intends to grow and prosper as community, it must have structures that project that image; that project an image of change and flexibility. To do otherwise is to risk becoming a community filled with relics and icons of the past.

The building attempts to distance itself from historic harbor typologies, but not from the maritime industries. A visual link between the structure and the fishing industry is created through the mechanist nature of the building. Just as fishing vessels are equipped with a variety of tackle and rigging that operate the nets, Atlantic Pier and Market is housed in a facility that projects a mechanical image through the support masts and pin-joint roof. Although the roof does not move, one might imagine that it could be cranked up and down, allowing the building to be opened and closed from the top. Also, similar to a fishing vessel that has several layers with different activities taking place on each deck, two distinct layers are designed into the building that house separate functions. The ground level is broken up into four specific areas; the landing and processing zones, located both inside and outside, the wholesale auction, and the retail market space. The second floor of the structure houses the restaurant and the office areas, the restaurant particularly being placed above the activity around it, just as a captains deck is often located above the working deck on a fishing vessel.

As has been illustrated above, clear historical precedents for the structural shaped used for Atlantic Gateways and The Fisherman's Coop exist. The typologies employed not only tie the facilities, with a direct physical image, to the maritime history of Gloucester and the New England area, but also to a larger maritime context. Metaphorically speaking, just as the sea and ocean flow continuously around the earth, so to does maritime culture. By using shapes that have been employed in distant maritime regions, a relationship is created that brings Gloucester closer to those distant communities. An Amsterdam style

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warehouse in Gloucester is not only appropriate, it is significant because it indicates that Gloucester is still looking outward, across the water to other parts of the globe and has not become an inward looking place that sees little beyond its immediate maritime neighborhood. Similarly, the attempt to move away from historical examples and create a contemporary structure and shape, as with Atlantic Pier and Market, shows an interest in the future, in developing into a new form of maritime community and not simply being a place where the best days were in the past.

Conclusion

Gloucester viewed from the east shore of the Outer Harbor.



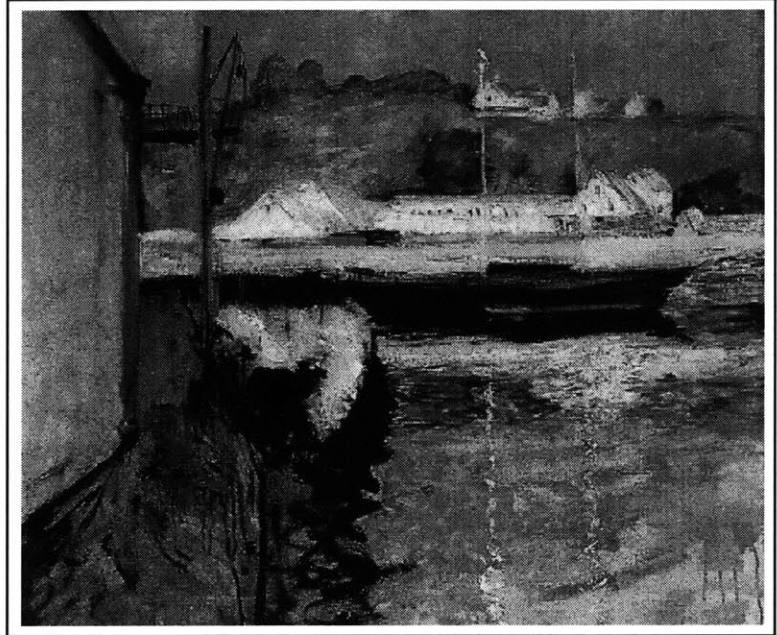
Conclusion

A straightforward problem, the decline in the stocks that Gloucester's fisherman have always relied upon, has led to a complex situation. The economic downturn in the fishing industry has caused a ripple effect to permeate many of the directly and indirectly related maritime industries and businesses in the Harbor and the community. Water's Edge has attempted to use the medium of design to explore several possible strategies for redeveloping Harbor Cove into an area that is economically prosperous and still maritime dependent.

Taking into consideration the desires of the community, and the constraints, both physical and regulatory, that exist in the area, Water' Edge has formulated a viable overall vision that can implemented in pieces, or as part of a broader strategy. The idea of creating an "experiential narrative" that runs throughout the Cove is critical in that it assists in holding the Cove together as a single, coherent place, rather than having it broken up into isolated places with little connection to one another. Each piece of the narrative, however, has been designed to solve a particular problem, or set of problems that exist, and to

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*A schooner in Harbor Cove.
Painted by Twachtman.*



function successfully as a unique environment.

With a major contributing factor to the economic crisis in the Harbor being a decrease in the resources (fish) that the Harbor depends on, conveying information about those resources, and using that information as a tangible commodity to be exploited, is a logical strategy to pursue. Atlantic Gateways is designed to trade on this transfer of information, and to benefit the community on several levels. The obvious benefit to the community is Atlantic Gateways as a viable business entity, providing jobs and taxes to the community. The ancillary economic activity (the benefit to other businesses from visitors to Atlantic Gateways) is also significant and is one of the most important aspects of creating a narrative that runs throughout the Cove. The more interconnected Harbor Cove is, the farther these benefits can be spread. A less tangible, but equally important gain from Atlantic Gateways is the permeation of knowledge about maritime industries into a broader regional area. By using the Gateway concept, an information transfer activity, visitors to Gloucester who go to Atlantic Gateways will take home a “knowledge portfolio” about maritime industries. This portfolio will then enable them to make connections between maritime activities and

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related issues that they will encounter long after visiting Gloucester. A simple example of this is the connection between industrial waste and fisheries contamination. Individuals who have visited Atlantic Gateways will be equipped to better understand the processes of contamination and its effects on communities similar to Gloucester after they have visited the Marine Ecology Gateway. Acting in this capacity, Atlantic Gateways uniquely meets the desire of the Gloucester community to see an educational facility built in the Harbor. It also addresses the regulatory requirements that are placed on land within the DPA and MI.

Combined with the importance of information dissemination from Atlantic Gateways, Atlantic Pier and Market functions as a direct outlet for maritime products and adds a critical element to the Harbor Cove narrative. Atlantic Pier and Market is the most direct link between the maritime industries of the Harbor and the community of Gloucester and visitors to that community. The Pier and Market takes a traditional maritime industry, the landing and processing fish, and expands it into a value added activity. The exact same functions still take place on the site as did before redevelopment. However, in the Atlantic Pier and Market facility those activities capture a greater share of the resource's value, and are able to exploit an additional, previously untapped resource; the waterfront as an attraction. In their present condition, the facilities of the Harbor are able to benefit only from the industrial activity they generate. By using that industrial activity as an attraction, the fishing industry increases its return by using itself a method for attracting customers who will consume its retail and wholesale products. The most important aspect of the facility is that it is able to combine three activities, and capture the revenues from each, on a site where previously only activity existed. None of the maritime industrial capacity is lost with the new facility, and is in fact increased by the flexible nature of the facility. Accompanying the industrial component, a wholesale/retail outlet and full service restaurant add significant revenues to increase the value of the product being landed at the pier. The integrity of the working waterfront is maintained, as well as the traditions that go with it, while a new, alternative use is interjected that in no way diminishes the maritime industrial status of the Harbor.

Conclusion

Gloucester Fishermen



The Fisherman's Cooperative functions in a similar manner, adding value to the product that is already moving through Harbor Cove and providing an outlet that is more directly beneficial to the fishing community.

By exploring, through the design process, how the various elements of the Harbor Cove Program can fit together and be housed, Water's Edge has begun to create a vision for the future of Harbor Cove. The structures that have been designed, and the urban plan for the placement of them, should be taken and used as tool for building the Gloucester Harbor of tomorrow. The designs illustrate how a mix of uses can be synthesized into a single complex or plan that can create an environment where each activity is enhanced by the other. By using the design process, Water's Edge has shown that when an obstacle is presented, as with Gloucester, that obstacle can, in fact, be turned into an opportunity that can ultimately benefit a broader constituency of groups, industries and people.

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