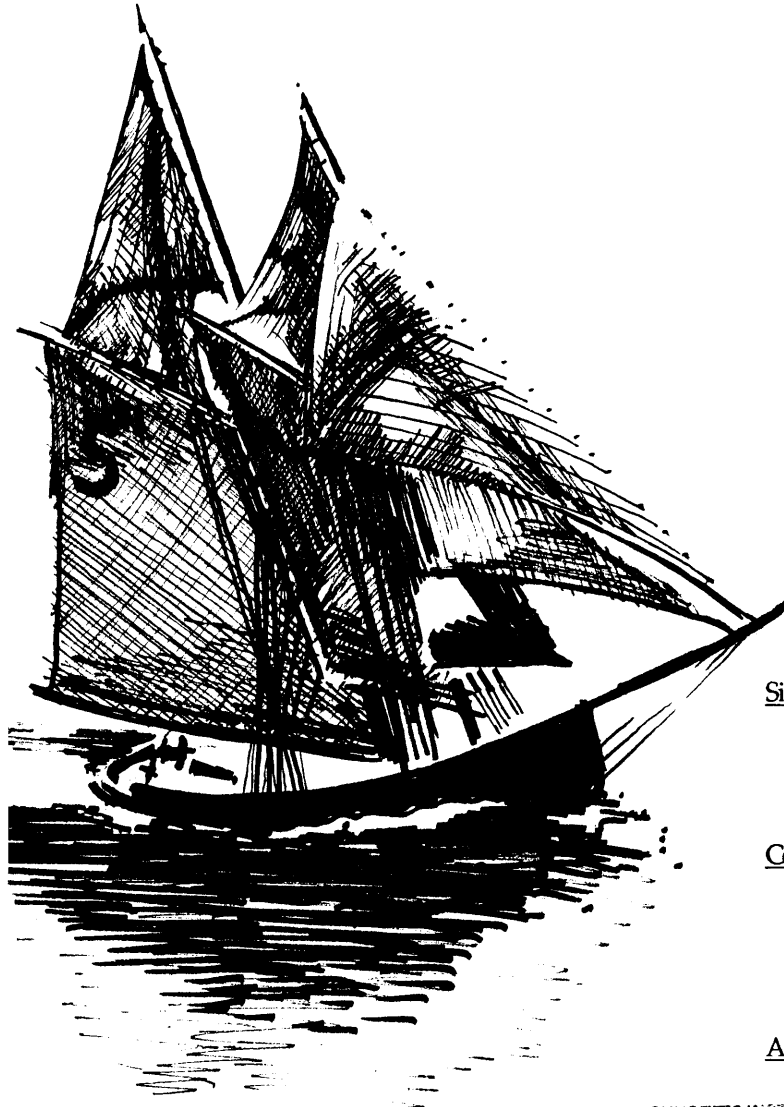


THE IMAGE OF A CITY: A Place for the People



by
Loren Wolstein Stein
B.A. Design, University of Florida 1988

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE
DEGREE
MASTER OF ARCHITECTURE AT THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
JUNE, 1991

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Loren Wolstein Stein, Department of Architecture
10 May 1991

Certified by _____

John R. Myer
Professor, Department of Architecture
Thesis Advisor

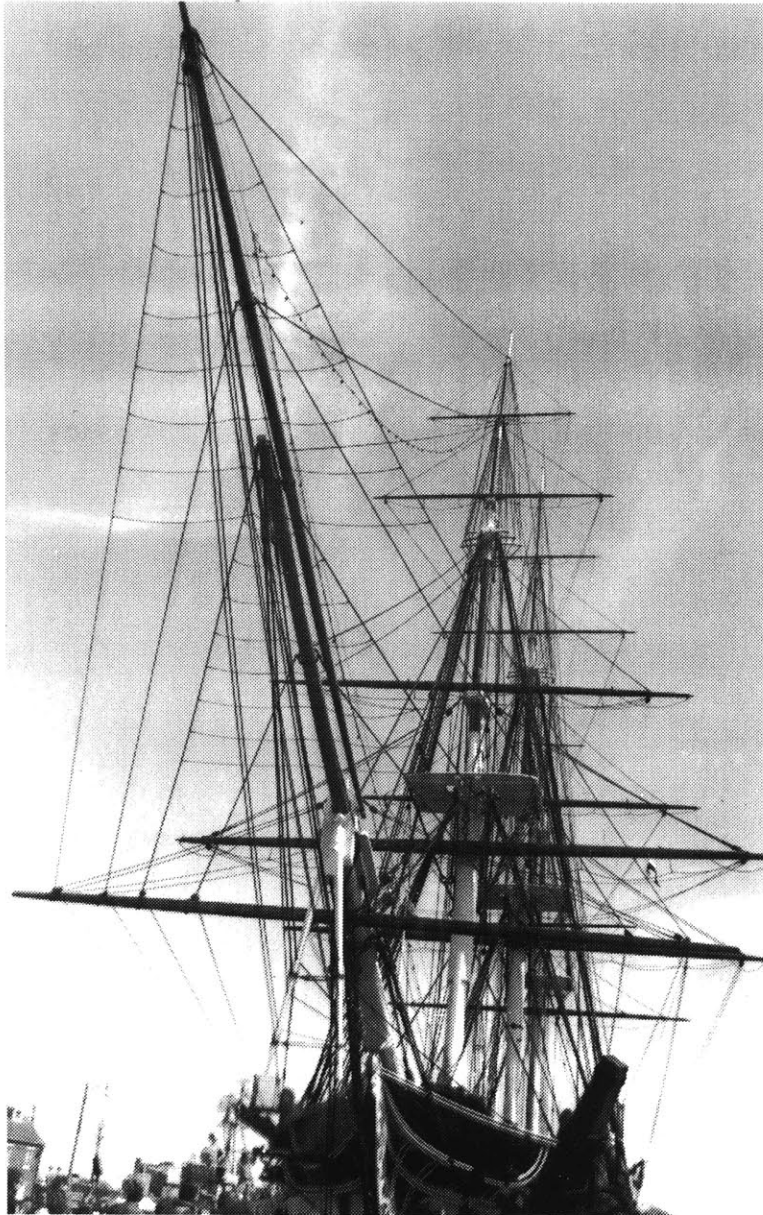
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THE IMAGE OF A CITY: A Place for the People

by Loren Wolstein Stein

Submitted to the Department of Architecture on 10 May 1991 in partial fulfillment of the requirements for the Degree of Master of Architecture.

ABSTRACT

This thesis is a proposal to create "The Image of a City: A Place for the People." The study begins by exploring the notion of an image, studying the various images that may already exist, and creating a place from the chosen image or images that becomes a recognizable symbol of the city.

Images of a place are the impressions of specific objects left with the individuals who visit it, live in it, or see it in pictures. I asked people about their images of different cities and most of the answers were built structures; therefore, architectural features play an important role in defining the image of a place. If the images of places are structures, what is the built image of Boston? It became evident that Boston does not have one clear specific built image. This thesis will develop a built form for the city of Boston. The site for the development of the image of Boston is Central Wharf, located on the waterfront.

Images are open to personal interpretation and the success of this design is in one's ability to associate the design to the intended image. The design is successful if it is suited to the location and one can comfortably associate the image. Because the built image of the city is an image for the people, the built image must also be a place for the people. It is people that make a place and the formal design decisions of a place can create the impressions and images of a city.

Thesis Supervisor: John R. Myer
Title: Professor of Architecture

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May, for sticking with me and "Lucas", planning my schedule, pushing me, wake-up calls, and calling during commercials.

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My parents, for all of your support and love, your better than the best.

My Honey, Eric, for making what could have been a tough year, the best year of my life.

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Introduction

What is an Image?

"Imageability looks for physical qualities which relates to the attributes of identity and structure in the mental image." It is that quality in a physical object which gives it a high probability of evoking a strong image in any given observer. The object may not clearly be seen, but are presented sharply and intensely to the senses. (Lynch, p.9,10)

Mental images help us to recognize similarities in other places and things. The obelisk originated in Egypt; however, for some, the Bunker Hill memorial obelisk may recall the Washington Monument or the obelisks of Rome, (at the Piazza de Popolo). We recognize similarities in places and things through many

features of form, function, structure, and design.

The Importance of an Image

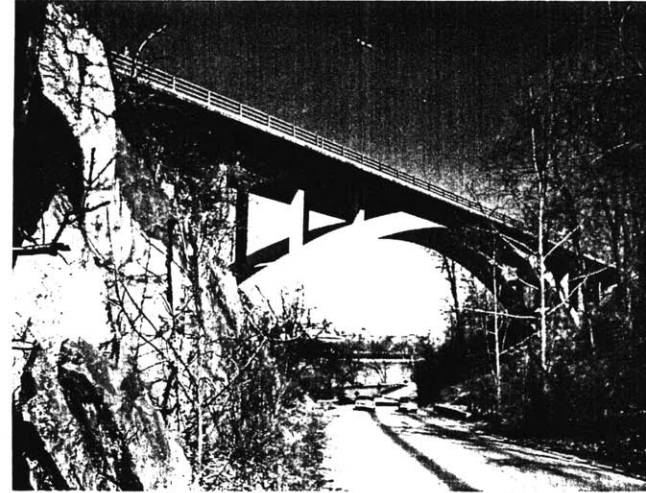
We need images for identification and familiarity. Identity and structure in our lives allow us to exist with minimal discomfort. Lack of familiarity and ability to identify may cause us to feel displaced. For example, a daily walk home becomes routine, even if we are not actually paying close attention to the route we are taking.

Chapter 1

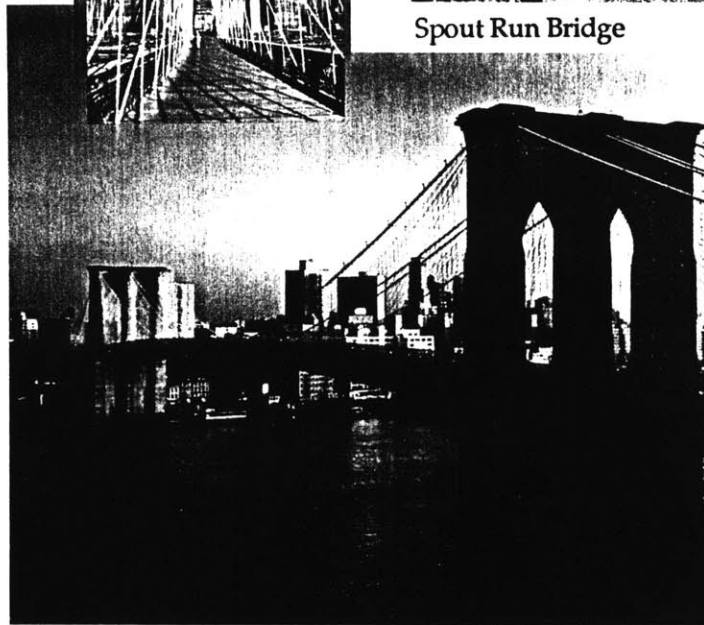
1.1 The Origin of an Image

Images come from forms, the visible quality of a design; creative design qualities, the design appearance of a building; and recognition, the qualities of a project that one equates with something else.

There are various types of images created from specific forms. These forms are created through three basic means: structure, physical need, and design. First, structure can define the limitations of a building, such as height and cantilever. Although the appearance of bridges may differ, they are similar in form because of their performance. Second, physical needs can change a form to make it adaptable to its purpose. For example, the form of a sail is based on its need to collect wind in order to move.



Spout Run Bridge



Brooklyn Bridge

Images



A sail form is now a recognizable image for a boat. Third, creativity in design, even with structural, physical and programmatic limitations, can create new forms and images. In proof, the Sydney Opera House is beautiful and unique in form, specialized in a program that contains various activities, and a special image of Australia.

Design qualities enable something to be the image of something else. Color, texture, physical features and form can be passed on through mental imagery in structures.

An image can also come from recognition of a previous event, place or object. We can pick out an image in a cloud, or mentally finish the form of a partially completed drawing by relating it to a stored mental image. 11

1.2 The Identity of an Image

We identify images through familiarity with a similar place or recognition of a known place. A workable image requires first the identification of an object, which implies its distinction from other things and its recognition as a separable entity. (Lynch, p.10)

Through familiarity we identify both with the objects themselves and with the originator of the form we recognize. We are comfortable with something we are familiar with or recognize, even if the particular circumstance is new. Imagine not having the ability to recognize previous experiences or places. Although train stations vary, we are usually not uncomfortable every time we enter one.



Penn Station, N.Y.C.



Grand Central Station

Images



Grand Central Station

Hopping trains through Europe, or commuting through Grand Central Station could be a traumatic experience if we could not relate the experience to previous ones. The gift of memory helps us get along in everyday life.

Recognition of place is an important aspect of life. Visiting a place of our childhood can stir up images of previous events that occurred there. Even with many changes to the place our ability to recognize its basic form can recreate mental images from a time past.

1.3 Creating an Image

Images may be created by us through experiences or by other means related to us.

We can create mental images of things or events from our past. A memory can conjure images of a place that may no longer exist. In this case, a mental image may be all we have left. After a new experience, such as visiting a place, our minds create a snapshot image of what we have seen. Without a camera, we may not remember specific details, but we do remember some sense of the place. Fortunately, we have cameras to document our lives; without them we would have to depend on our impressions and memories.

Images

Photographs and communication media also enable us to associate places with images. Others' experiences told to us also relay their impressions and images. In reality, one need not have seen a place to have established a preconceived image of it. For example, many people who have never visited Paris would still associate the Eiffel Tower with the City of Paris. In this case they have not yet formulated their own image of the city; rather, they have "bought into" someone else's image and associations.

1.4 The Image of a City

The image of a city as a whole is the composite of its activities, movement, and objects. (Lynch, p.10) Time and place make a city what it is. It is seen on all levels, from the city in its entirety to details in design. If New York's Fifth Avenue was located elsewhere, or the pedestrian and vehicular traffic did not exist, its image would change drastically. On a large scale, a city is distinctive by its large moves and gestures. A figure-ground image of a city skyline is symbolic of New York City, even if the outline does not specifically mimic that of New York. On a smaller scale, the row houses of the Back Bay are easily distinguished from row houses in Brooklyn. The styles come from another place,



Fifth Avenue, New York City

Images



Fifth Avenue, NYC without movement



Fifth Avenue, NYC as it is

but the details of the store fronts and the window frames are distinct characteristics of Boston's Back Bay. The image of a city is personal and our impressions evolve over time. We have a different image of a place depending on our length of stay. For instance, the intimidation of a big city eases as we become familiar with it.

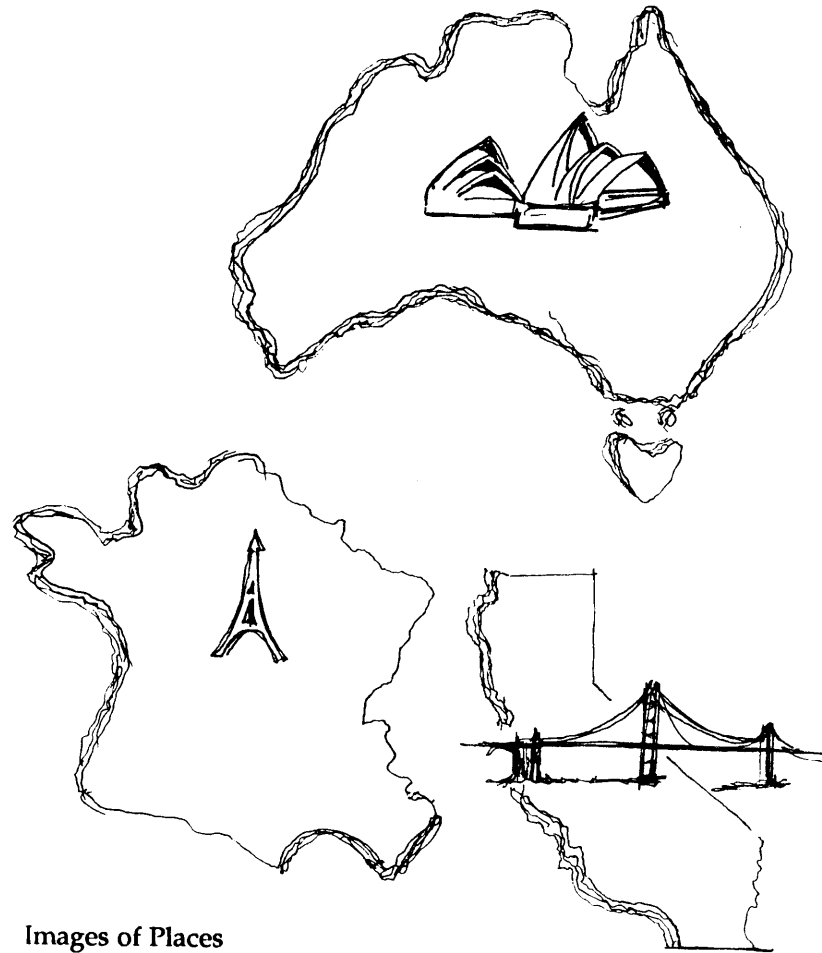
An image of a city can not only be seen, but must be felt. As Kevin Lynch states, "We are not simply observers of this spectacle, but are ourselves a part of it, on stage with other participants. Most often, our perception of the city is not sustained but rather partial, fragmentary, mixed with other concerns. Nearly every sense is in operation, and the image is a composite of them all." (Lynch, p.10)

Chapter 2

2.1 The Image of a Place

The final form of image, and the main point of this thesis, is the built object that becomes the image of the city. These buildings and structures are symbolic references as they become more popular and more easily recognized and associated with the city.

I began the design process by asking people about their images and impressions of places such as Paris, Washington, D.C., St. Louis, Australia, and San Francisco. The answers were usually the same: the Eiffel Tower, the memorials and government buildings, the Arch, the Sydney Opera House, and the Golden Gate Bridge, respectively.



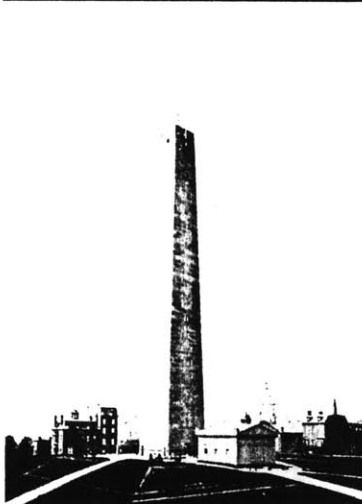
Images of Places

Images of Boston

2.2 The Image of Boston

Then I focused on my topic of design: What is the image of Boston? The answers regarding Boston's image varied depending on the individuals age and the amount of time they had spent in Boston.

More specifically the answers fell into three main categories. For those who have either never been to Boston, or may have come only as a tourist, the image of the city is based on its historical aspects. Images of the "Boston Tea Party", the "Freedom Trail" were popular answers.



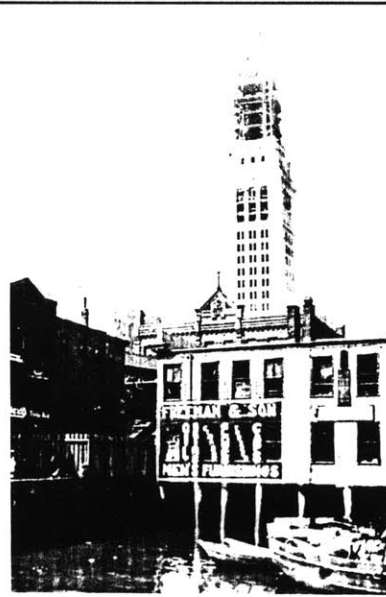
Bunker Hill

Re-enactment of the Battle of Bunker Hill

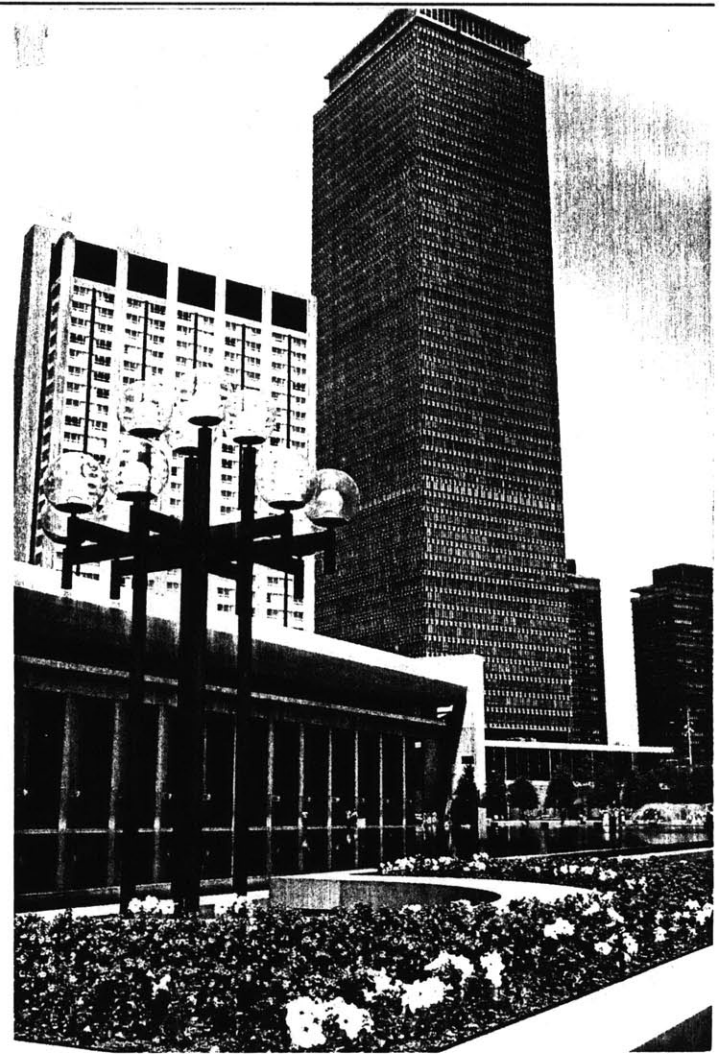


For the younger generation, college students, and people living in Boston for less than 30 years, the image is of technology, education, and specific ethnic areas, such as the North End and Chinatown.

The waterfront during its active maritime use is the image for those over fifty, and longtime residents of Boston. They spoke of tall ships with huge sails filling the harbor. They also mentioned the Boston Public Garden and the Common, Beacon Hill, the Custom House and Back Bay.

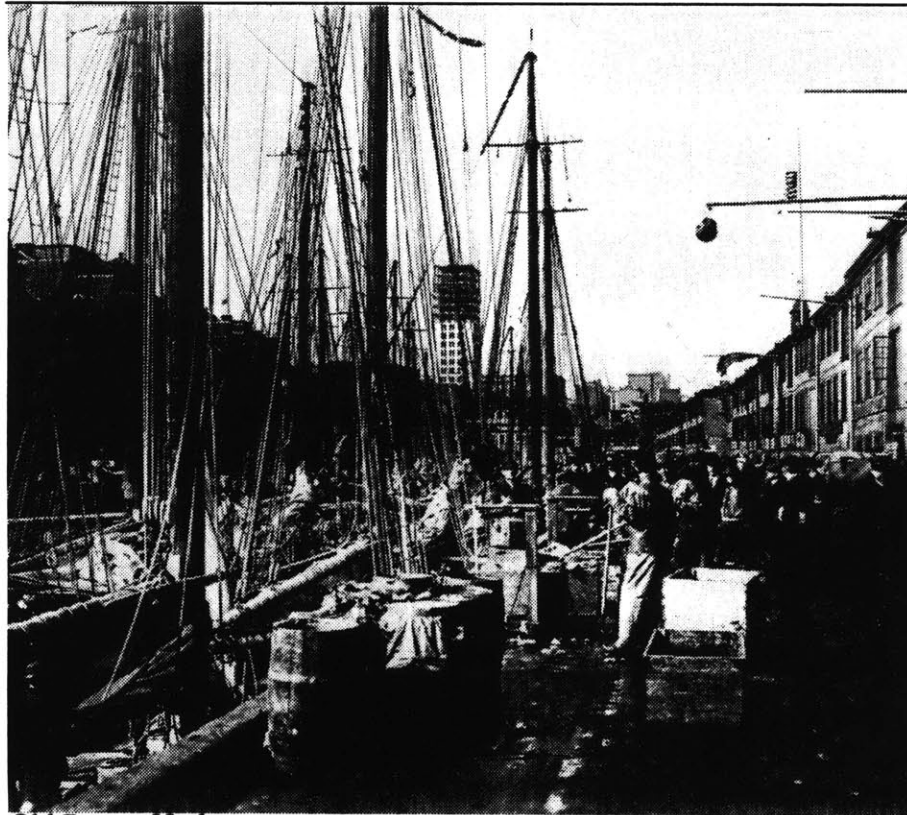


The Custom House



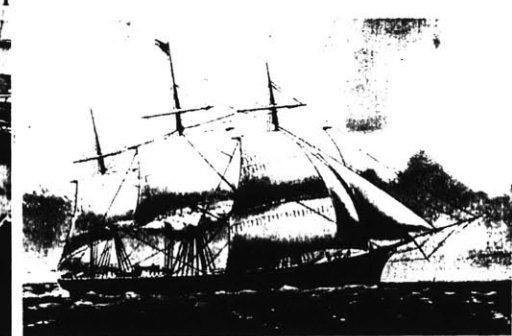
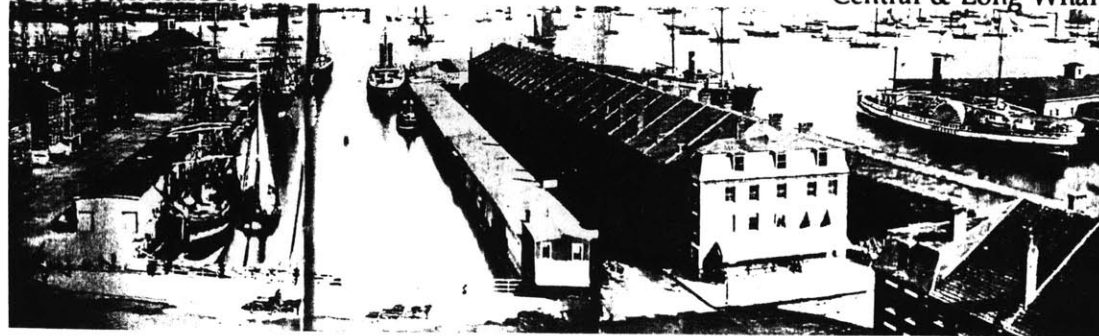
The Prudential Building

Images of Boston

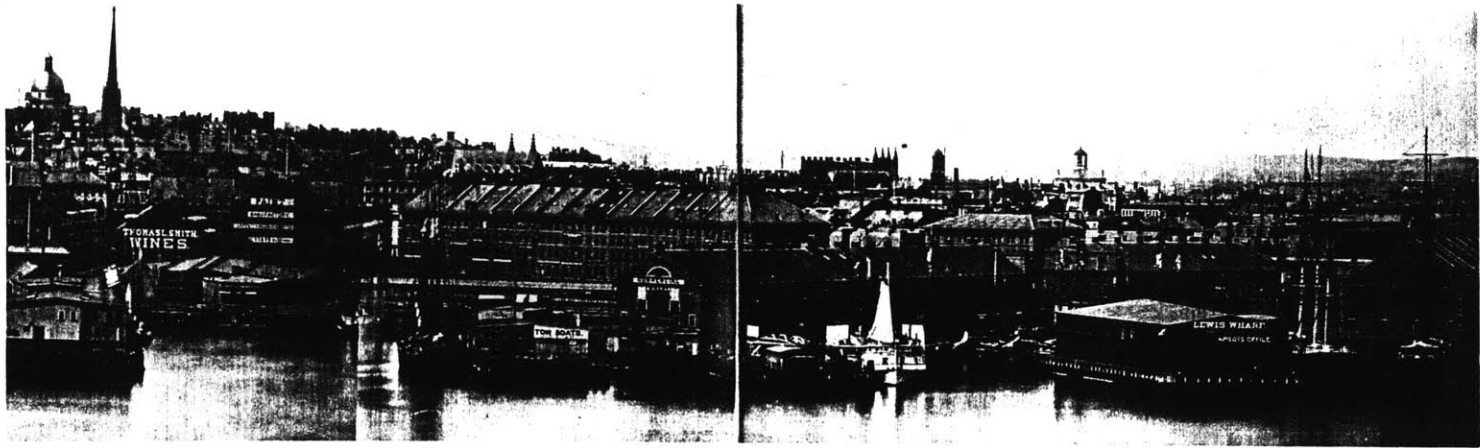


Old Boston Harbor

Central & Long Wharf



It quickly became apparent that Boston, unlike the other cities in question, did not have a single, pervasive image, but rather had several possible images to choose from. In particular, the vivid images of the waterfront with its fishermen, huge boats, pubs, and an active harbor piqued my interest. I decided to develop a structural image for Boston which combined the technological aspects of the present with the old waterfront image of the past.

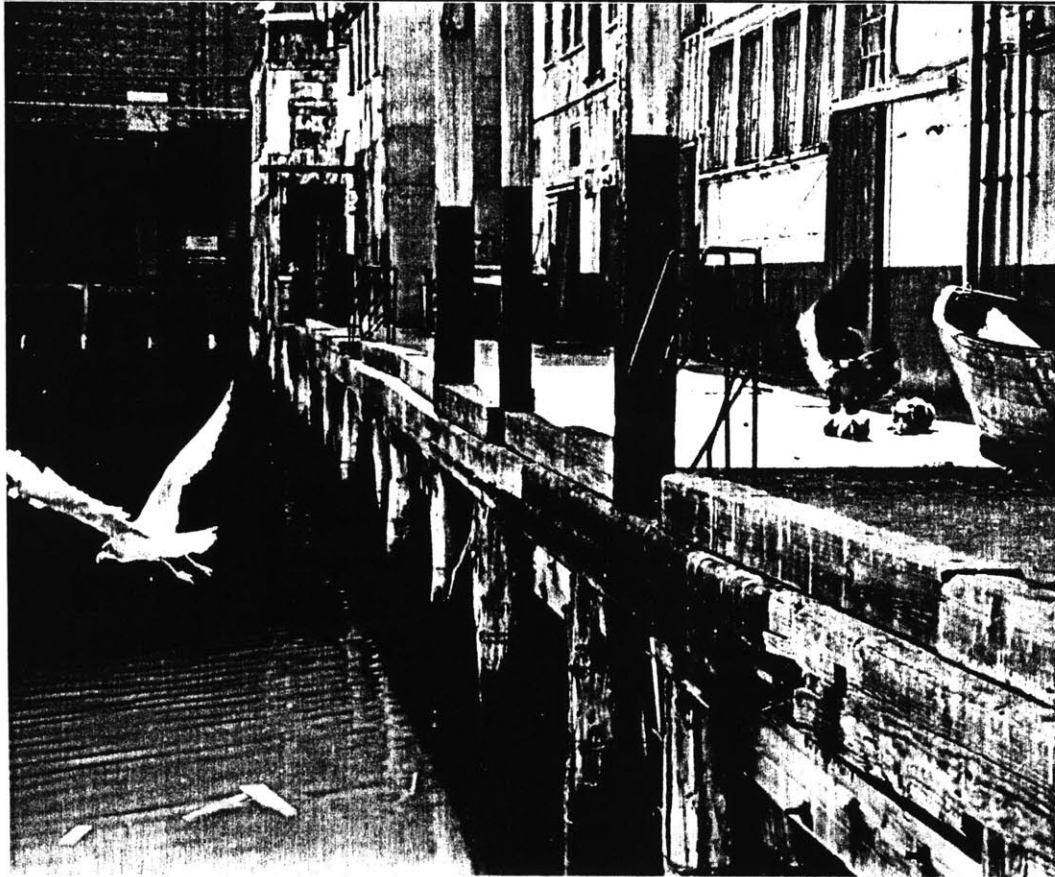




Chapter 3

3.1 Place to Solve the Image

The next step was to determine what would be the best place to create an image which reflects the historical Boston Harbor and technology of the present. The place would have to be clearly visible from both the water and the shore. It would have to be a place that could hold large crowds of people for public gatherings. In creating an image, a jewel of the city, the site should stand out but not detract from its surroundings.

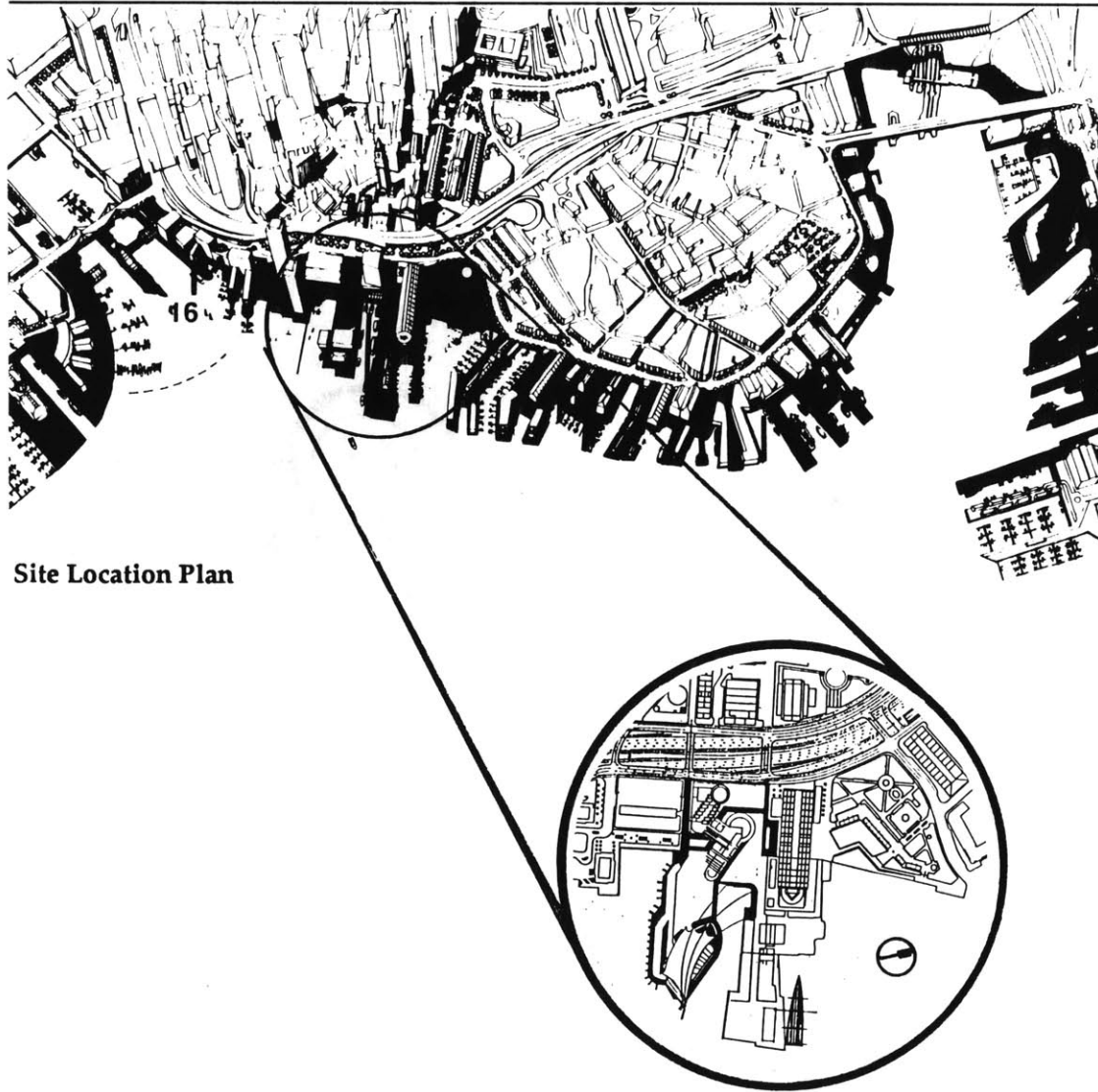


Long Wharf

Programmatic Issues

3.2 Site to Solve the Image

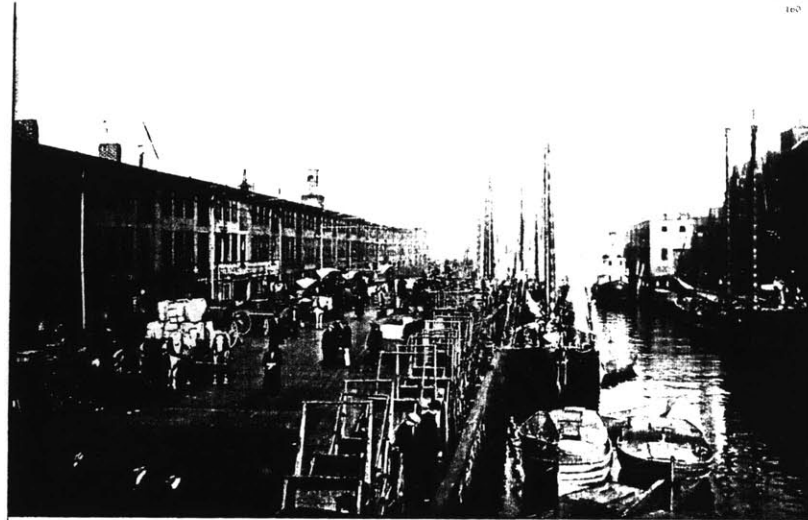
The choice of site was obvious due to many factors. The New England Aquarium on Central Wharf will be moved to Charlestown. Central Wharf is the last remaining waterfront property on the harbor. The site is centrally located, with a view to Fort Point Channel, Logan Airport and the sea. Access to and from the site is essential, and the neighboring Long Wharf on the north side has access to the Blue Line of the MBTA. Rows Wharf, on the south side, has access to the airport, Charlestown, and other waterfront sites via water shuttles. Furthermore, with the depression of the Central Artery, a project now under way, pedestrian access to Faneuil Hall and Government Center will be open.



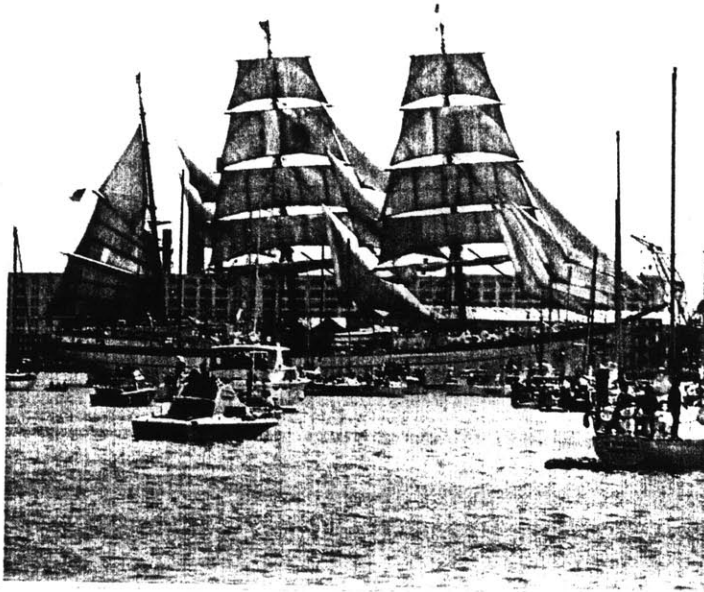
Site Location Plan

3.3 Program to Solve the Image

Choosing the program proved to be a more difficult task. There are two main reasons this place had to be a useful public place for everyone. First, the only major public draw to the water, the aquarium, is being relocated to Charlestown. Revitalizing the waterfront requires a suitable attraction. Second, because this is the image of the City of Boston, and the image is created by the people, it had to be a place for the people. Therefore, a major portion of the site must be open public space. I was told by the planning department at the Boston Redevelopment Authority that the new development of Central Wharf would probably include a hotel, office space, and small-scale retail space.



Programmatic Issues



The Central Wharf site is approximately 250,000 SF and the built space for future development would probably reach 1,000,000 SF. I took all of these factors into consideration in choosing the proper program for the site of the Image of the City and the use of this valuable space on the waterfront.

Programmatic Issues

3.4 Design Program

The program includes a music hall which will hold approximately 2000 people. The New England Telephone building will be replaced by a hotel with space allotted for shops and restaurants. A building adjoining the hotel includes an indoor street of public shops with private and music hall support offices on the upper levels. To complete the image, the U.S.S. Constitution will be docked on the south side of Long Wharf during winter months to be used as a museum. During the summer, a temporary amphitheater, of sail form design, will be erected at the base of the dock that joins Long Wharf and Central Wharf.

The indoor street acts as an ambulatory to the music hall and the

water's edge. One enters through a columned rotunda onto a street lined with shops. During mild seasons cafe dining will be available on the south side of the plaza.

The hotel and street of shops connect on the third floor creating an overhand for guest drop off. The first two levels of the hotel contain small scale specialty shops, two restaurants, and hotel check-in. The banquet/convention hall is on the third floor. The hotel lobby, gym, and administration offices are on the fourth floor. The 220 guest rooms extend from the fifth to the eighteenth floor. Above the rooms sits the "Lighthouse Restaurant/ Watchtower" which can be seen throughout the city. Guests can view all of Boston while dining in the revolving restaurant.

Programmatic Issues

Square footage

Music Hall

Hall	20000
Stage	2200
<u>Lobby</u>	<u>10000</u>
Total	32200
Building Height	160' (200' at mast)

Hotel

Lobby/Gym	20000
Lighthouse Restaurant	8800
Lower level dining	12000
Offices	10000
Hotel Rooms(220@300sf)	66000
<u>Hotel Shops(2 floors)</u>	<u>8000</u>
Total	124800
Building Height	250'

Indoor Street

Shops	10000
Restaurants	17000
<u>Office Space</u>	<u>6000</u>
Total	33000

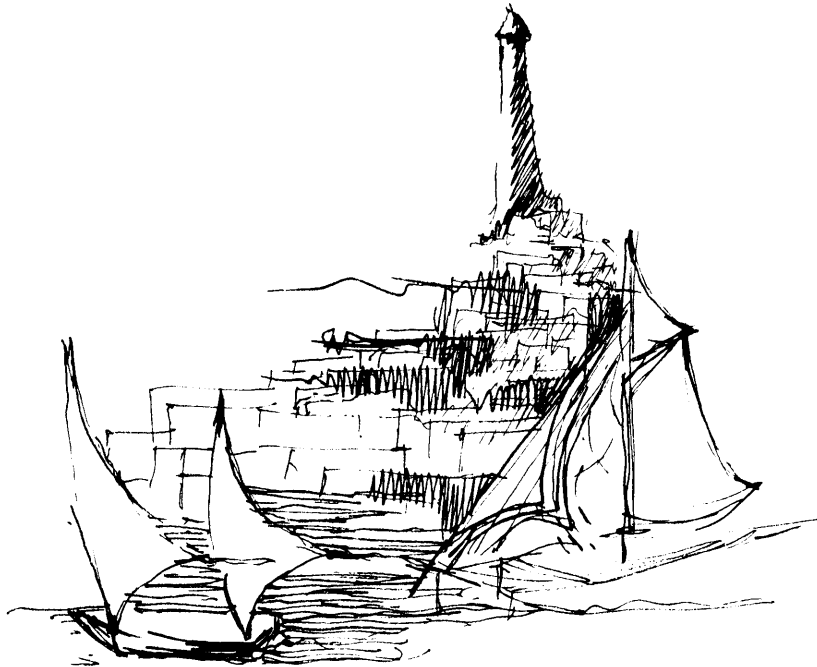
Total Built Space	190000
Total Open Space	250000
Built Ground Space	24%

3.5 Organization of the Site

The organization and accessibility of the built space is important. It is crucial that the site can be seen from different points in the city, and that the exterior space is usable during mild seasons. Furthermore, the site must be directly accessible from the city, as well as open to pedestrian movement around the wharf.

The hotel, with its "Lighthouse Restaurant/Watchtower", will be located on the western portion of the site. The music hall support offices and indoor street of shops will be located east of the hotel. The sail image of the music hall is located on the end of the wharf, clearly visible and standing on its own, as a jewel on the waterfront.

Programmatic Issues

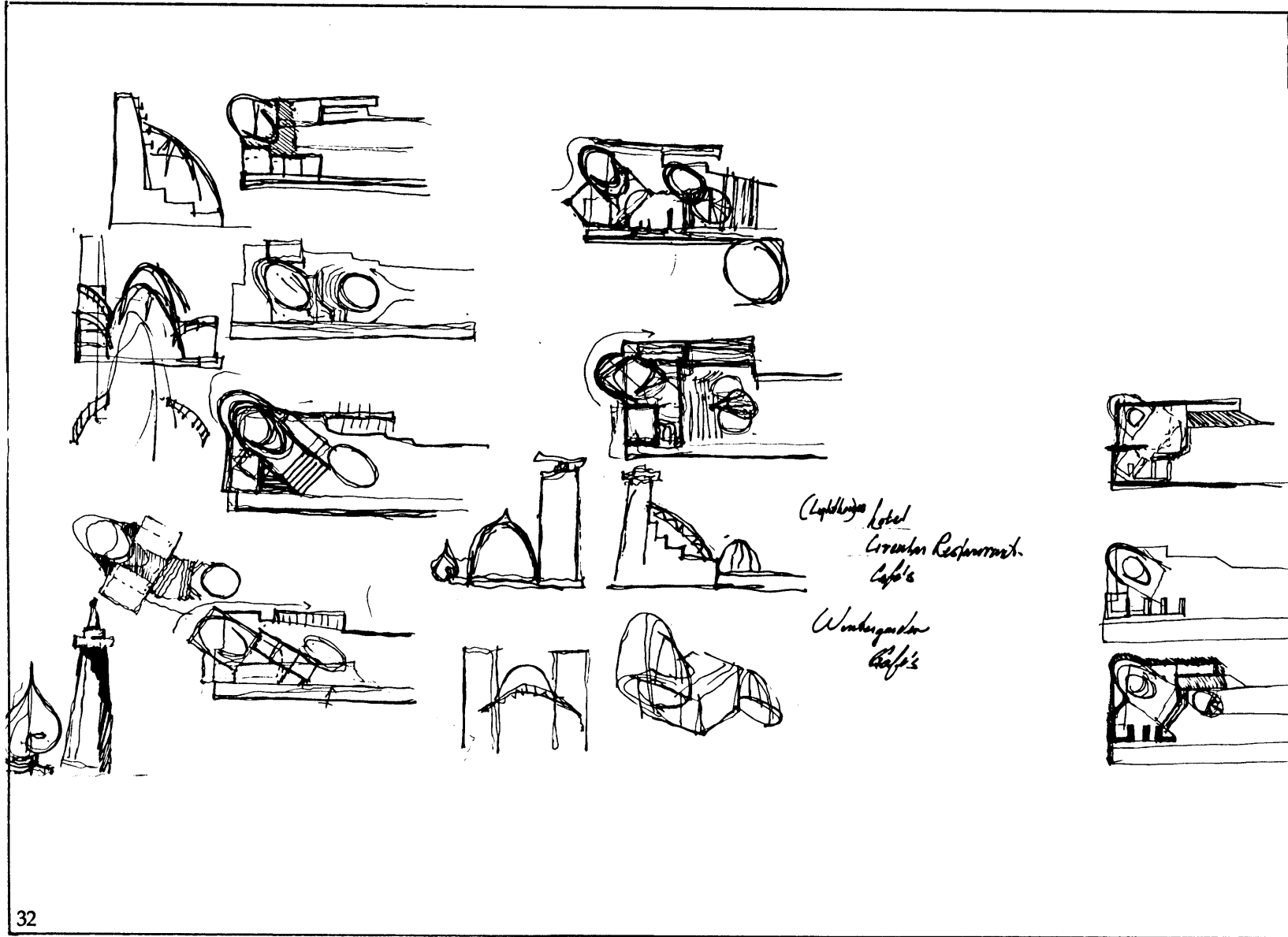


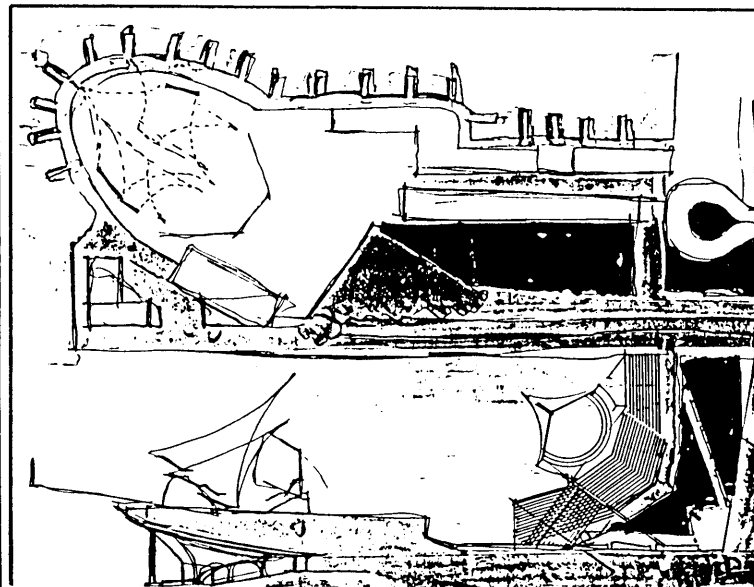
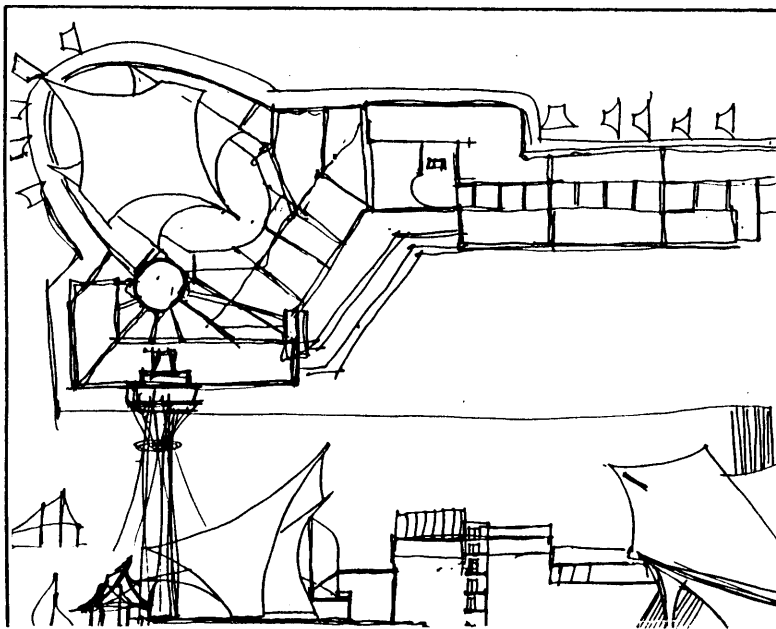
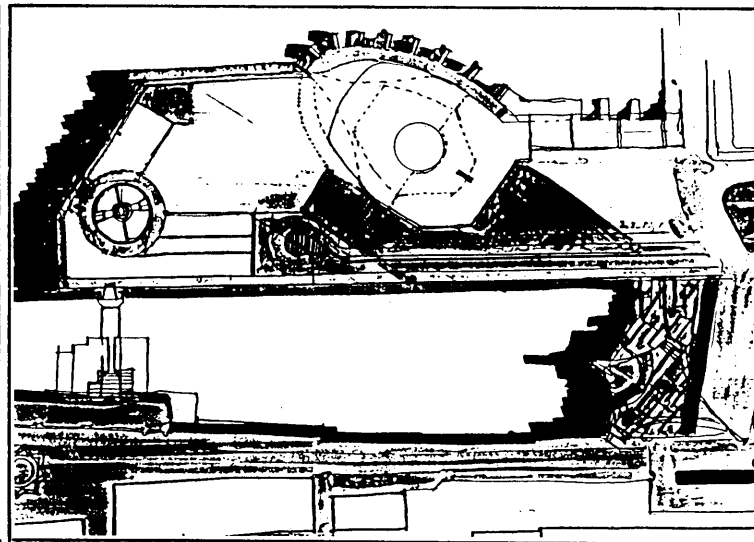
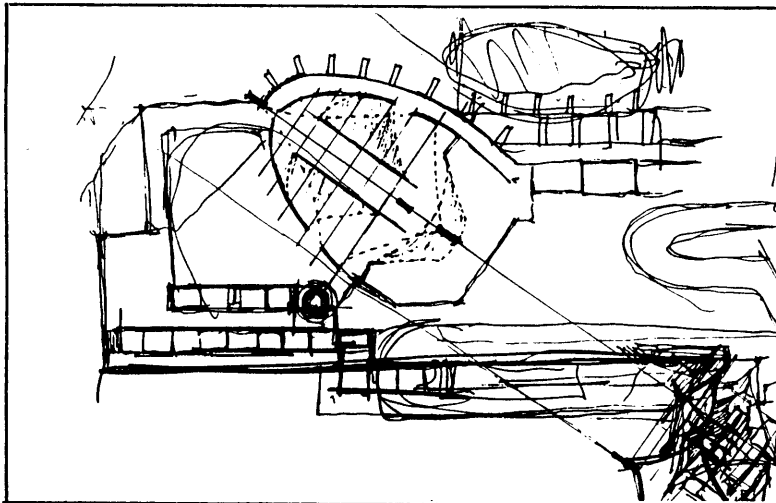
The winter climate was a factor in establishing the location of the indoor street of shops and music hall. Both buildings are located on the northern edge of the wharf, leaving an open plaza on the sun-exposed south side for gatherings, exhibits, craft shows, and outdoor restaurants.

There are numerous ways to access the site. One can walk via Government Center or along the water's edge, take the Blue Transit Line to the site, or park in the garage south of the site.

To attend a performance, there is car access to the entrance of the hall. One enters through the sail form into the lobby. Intermission space is in the entrance lobby and the secondary lobby which extends into the harbor on the east side.

Diagrammatic Organization of Pieces on the Site

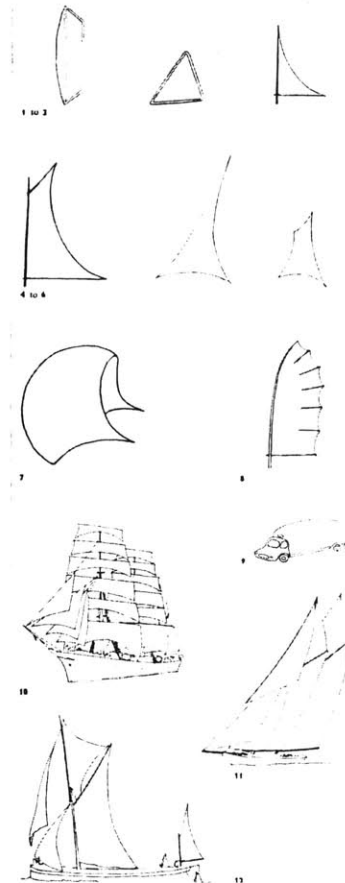
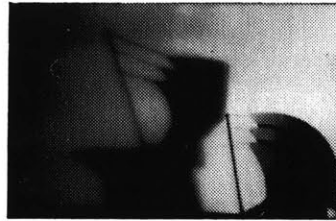


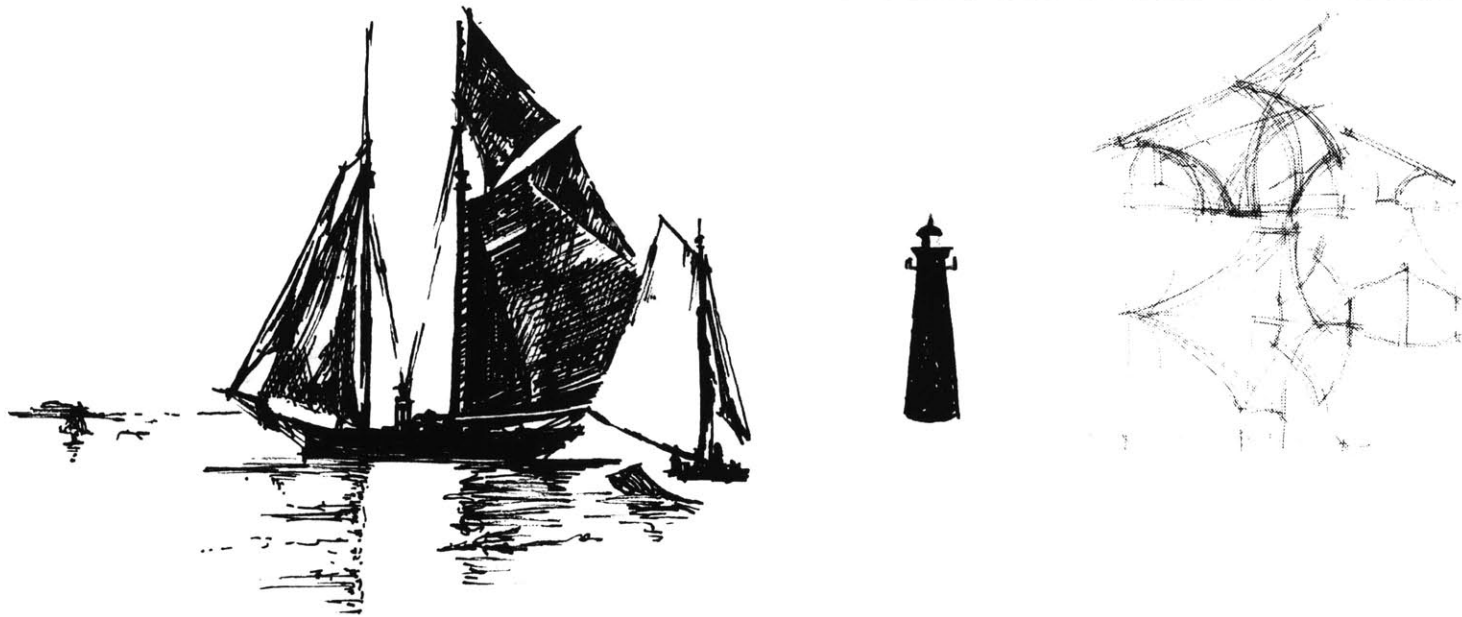


Chapter 4

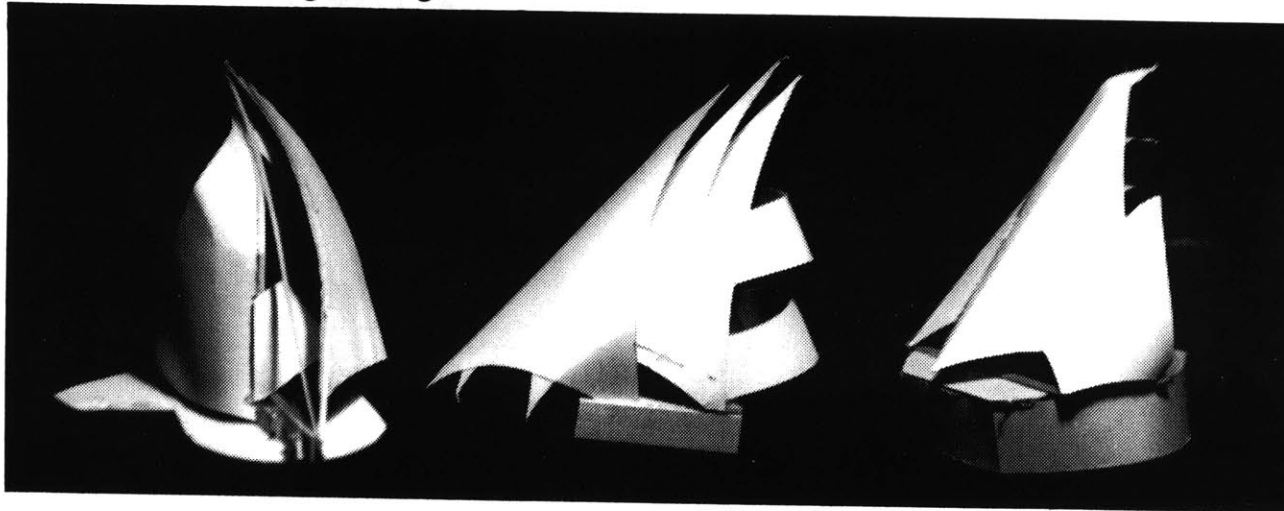
4.1 Sail and Lighthouse Forms

Adapting the Sail & Lighthouse Image to the Design

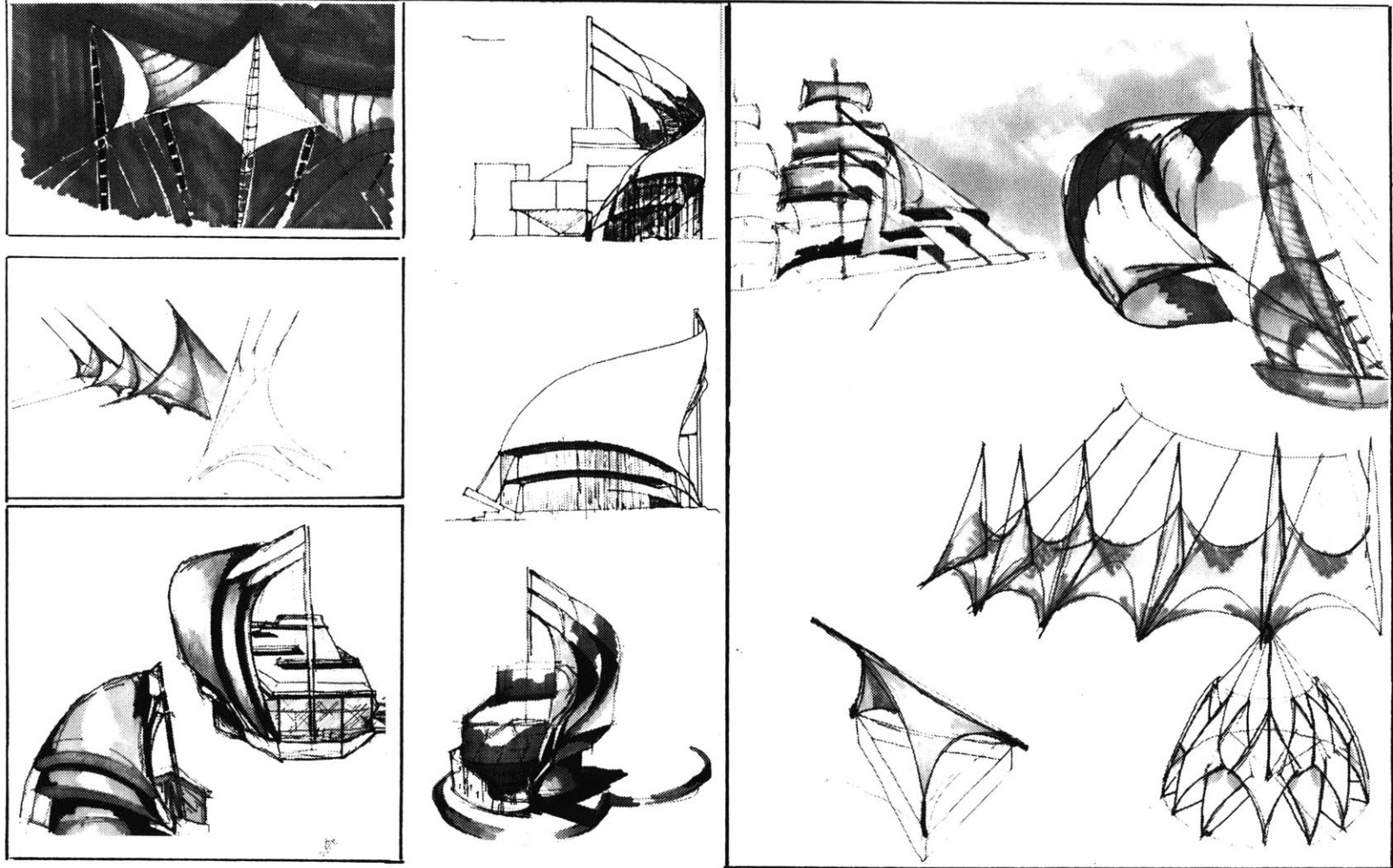




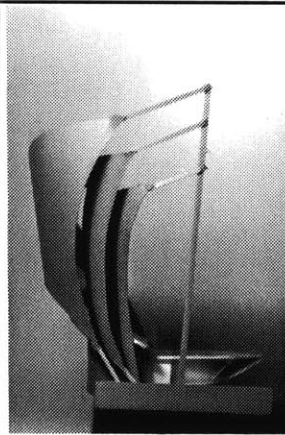
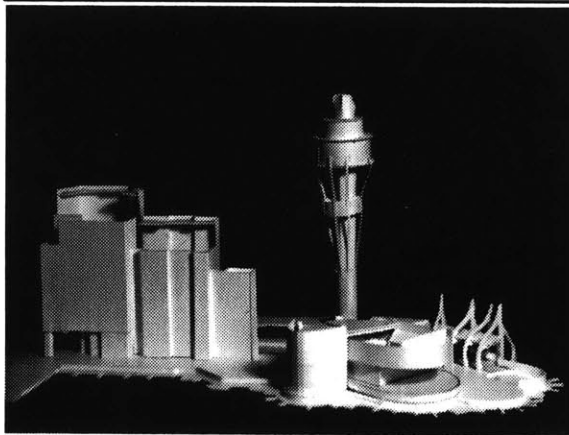
Process Models, Creating the Image



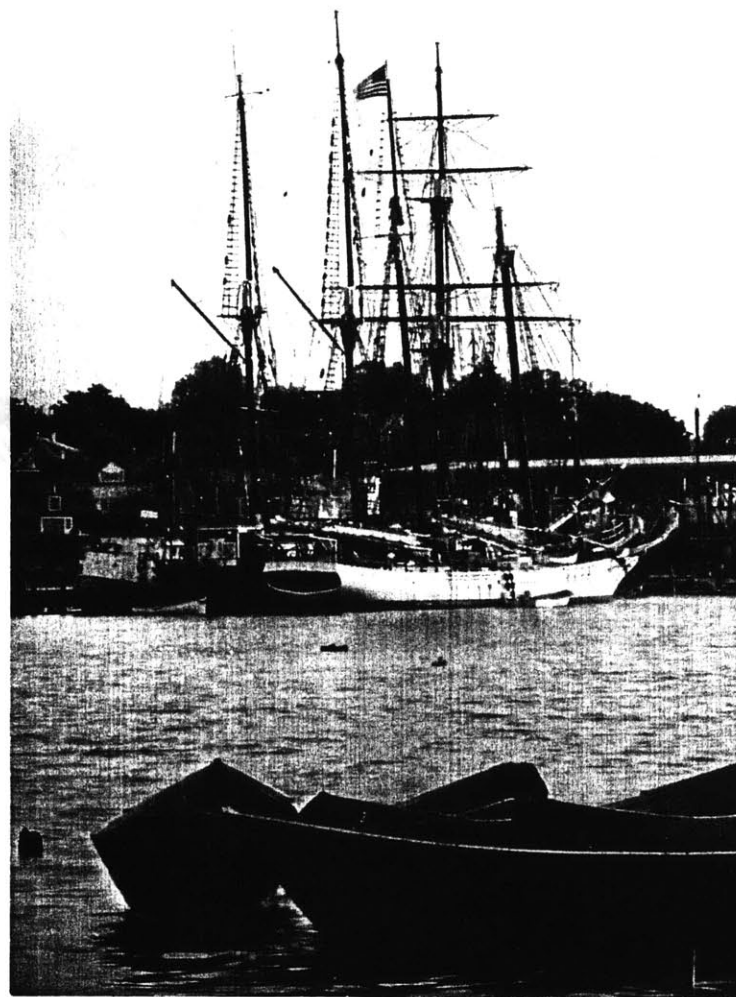
Adapting the Sail & Lighthouse Image to the Design

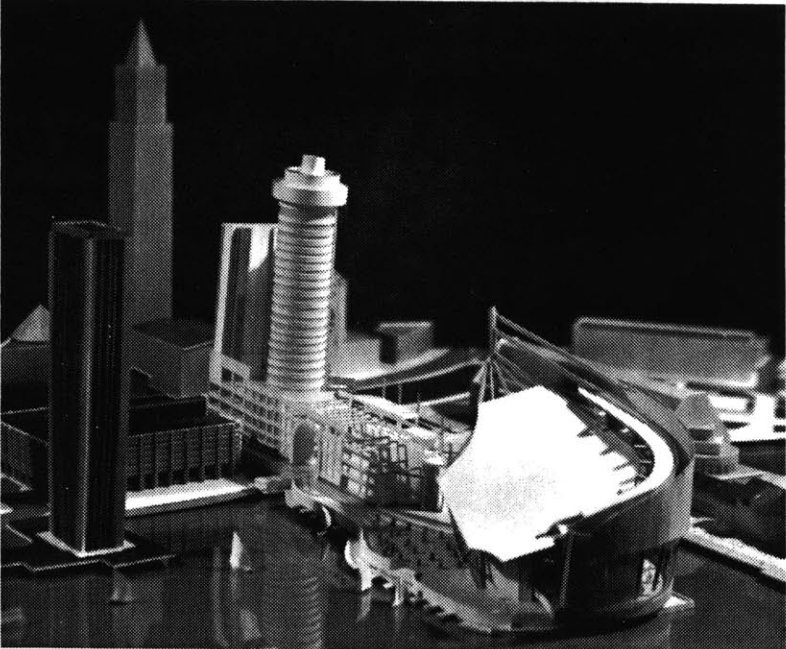
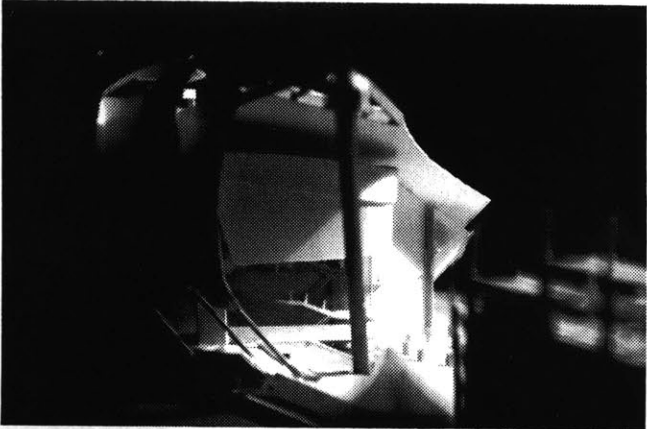
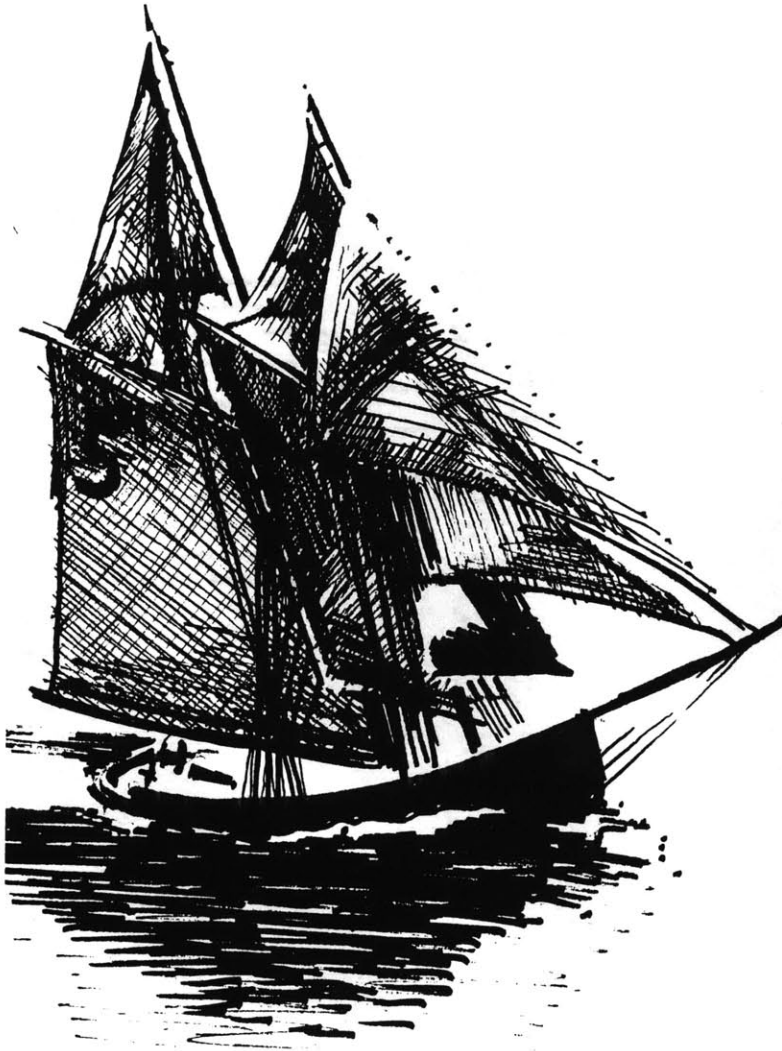


Integration of the Design to the Image

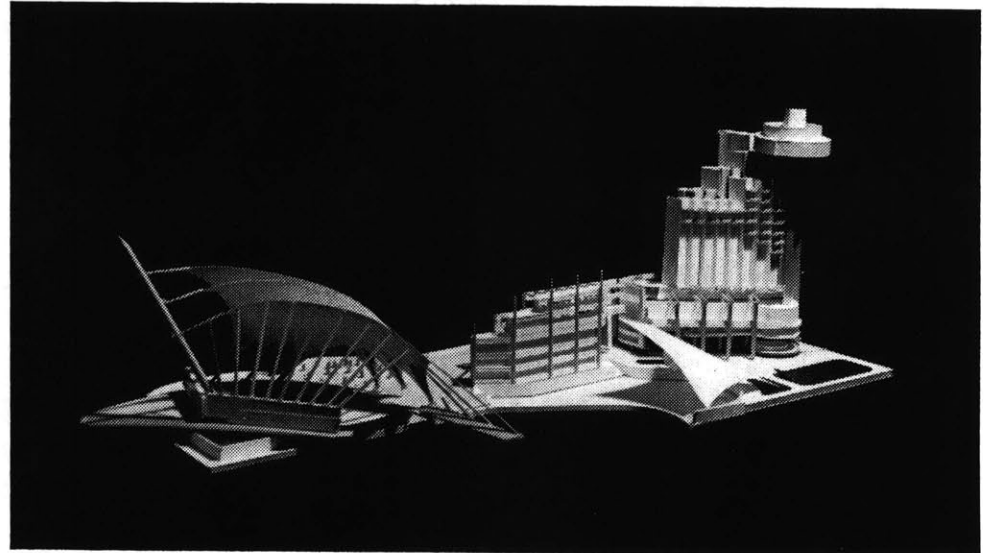
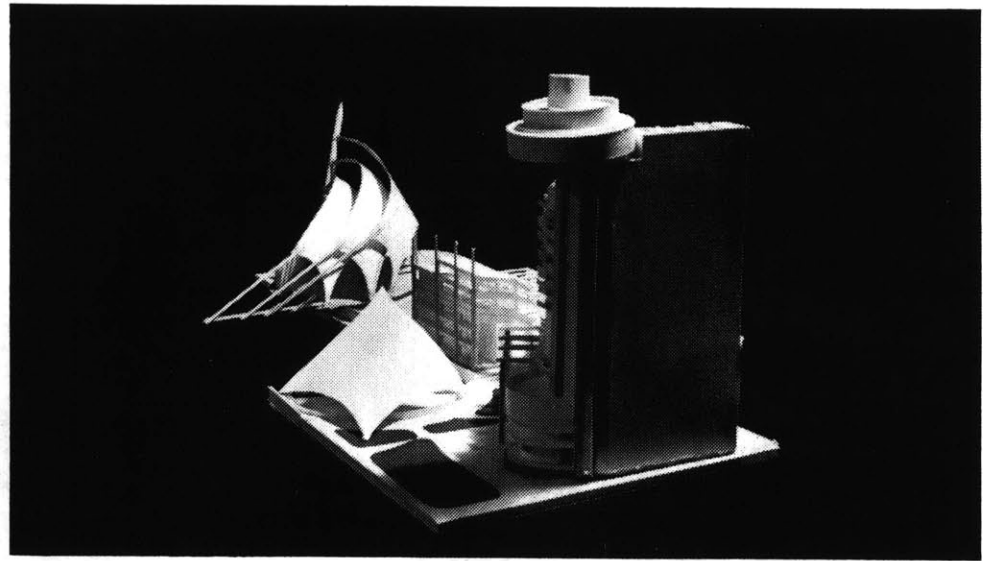
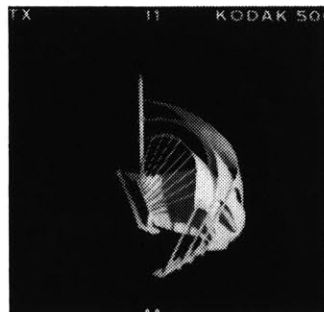
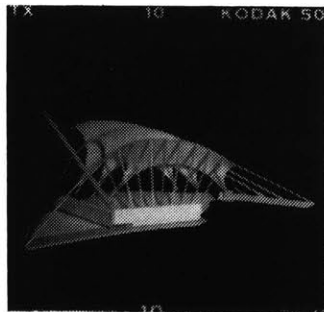
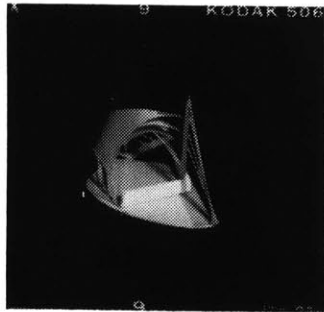


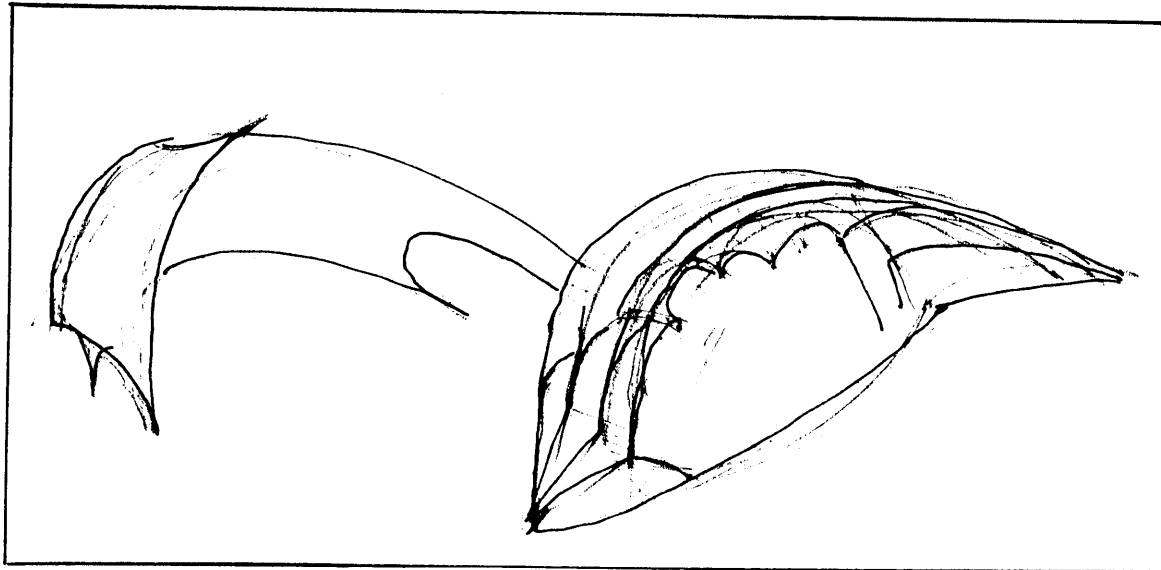
4.2 Schematic Integration





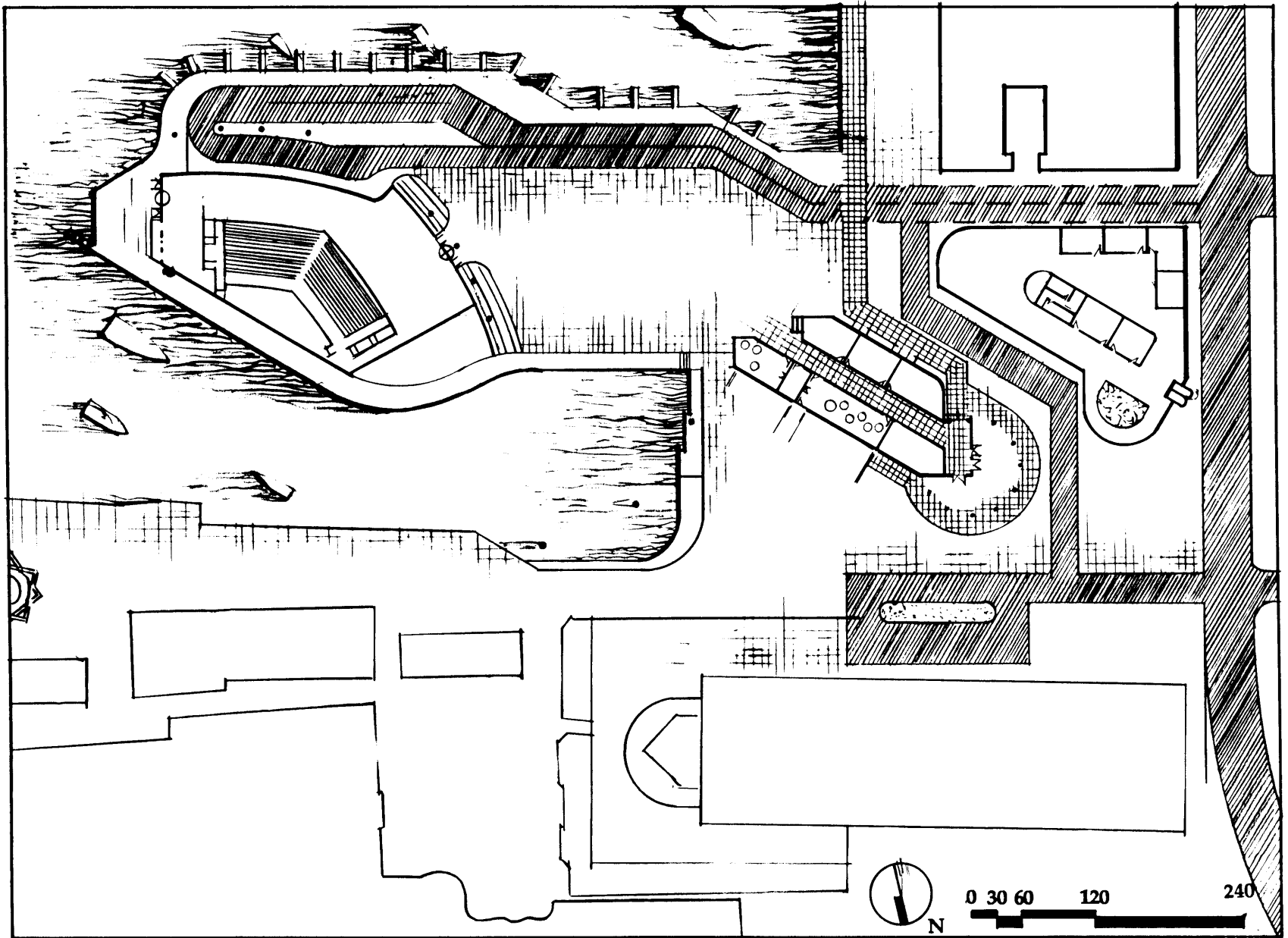
4.3 The Image-Final Form



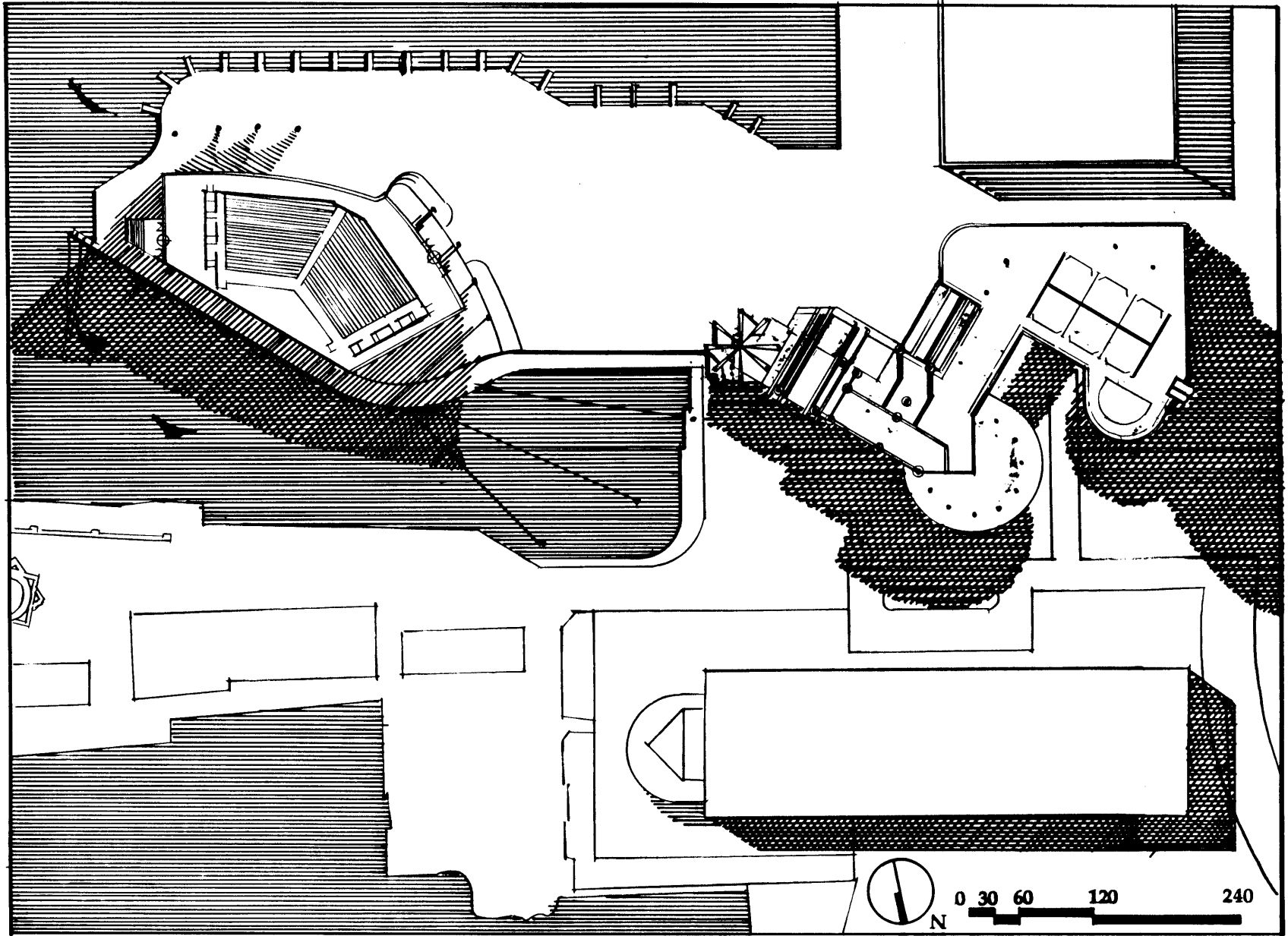




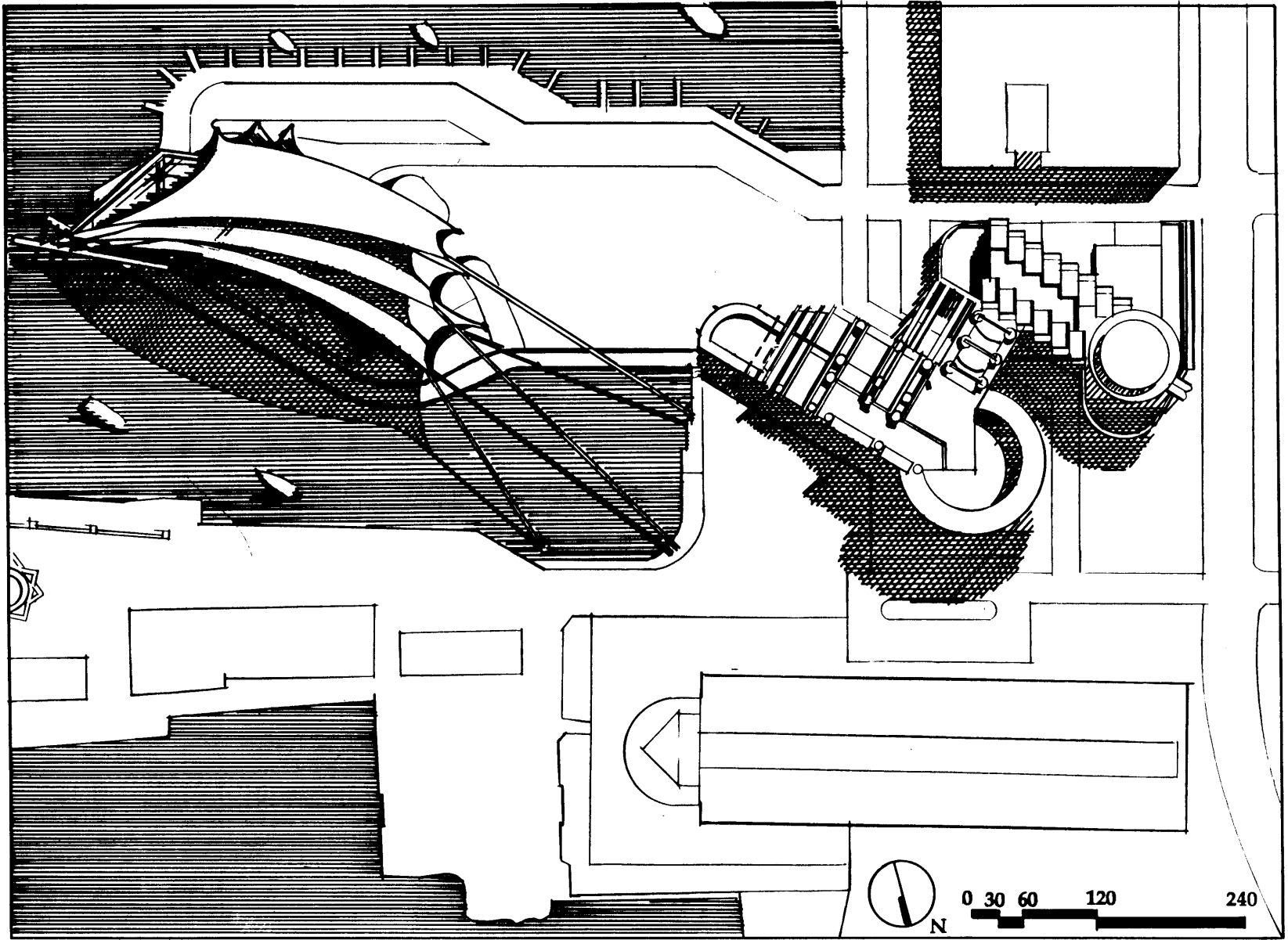
First Floor Plan

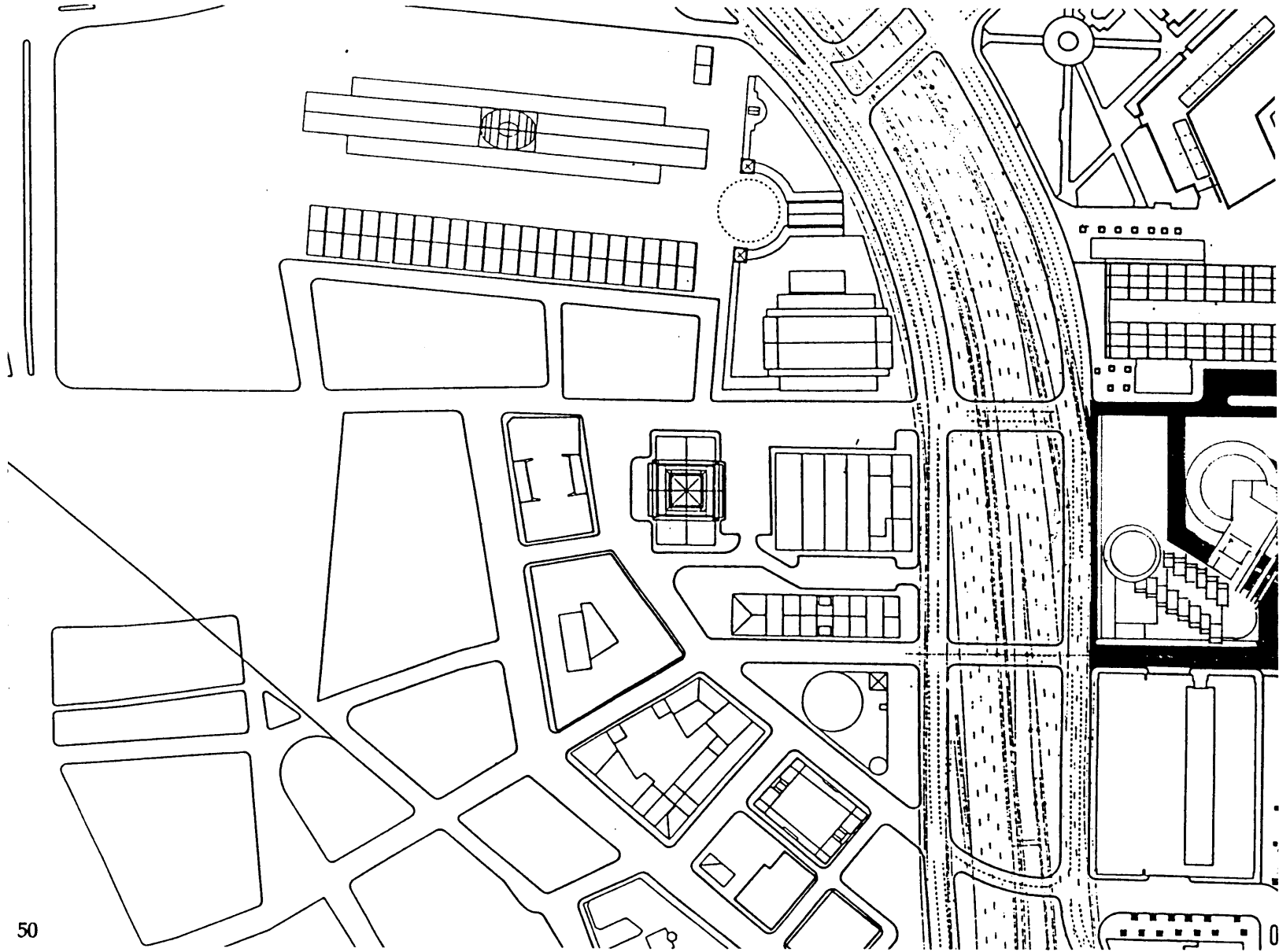


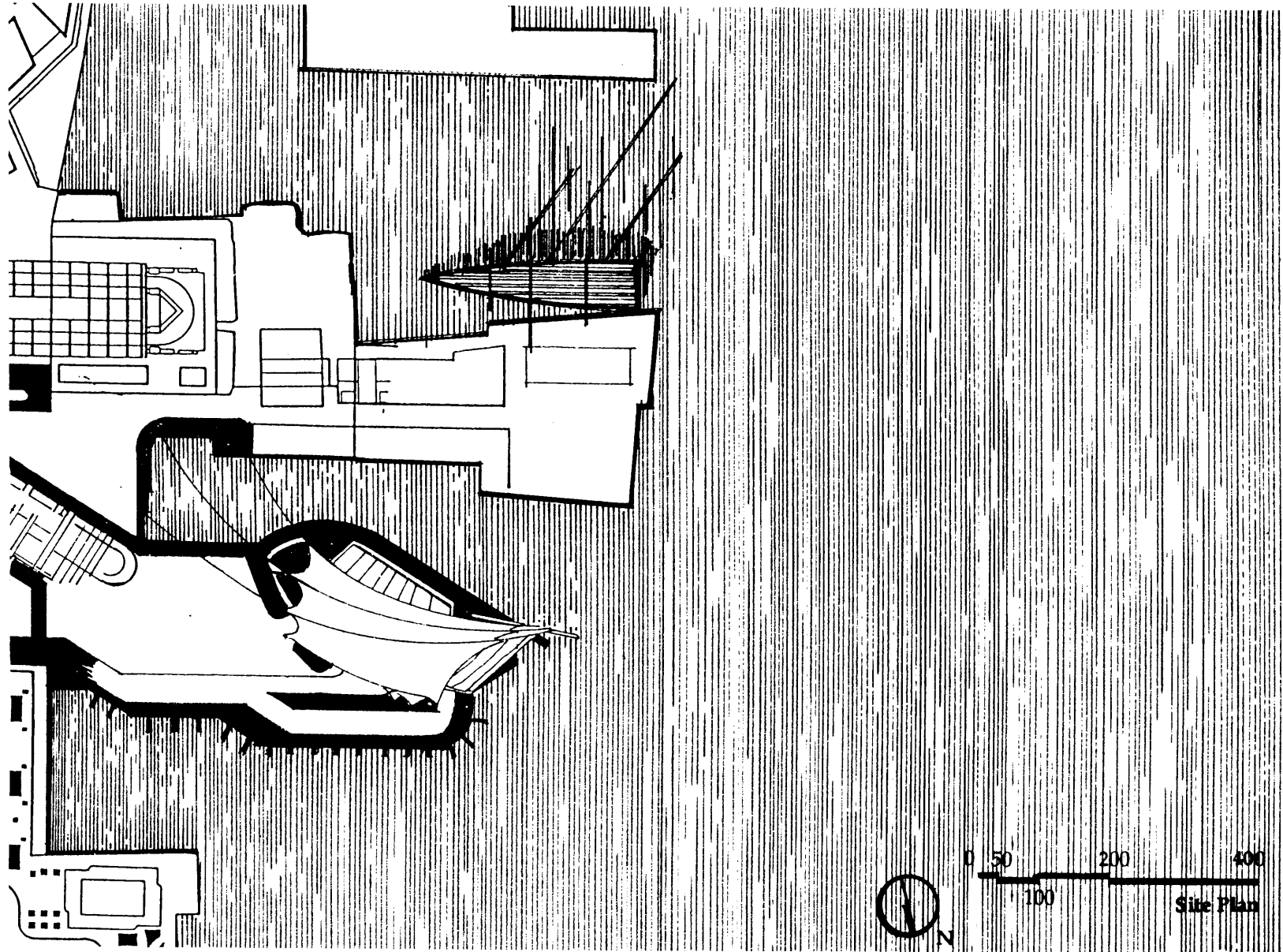
Second Floor Plan



Roof Plan

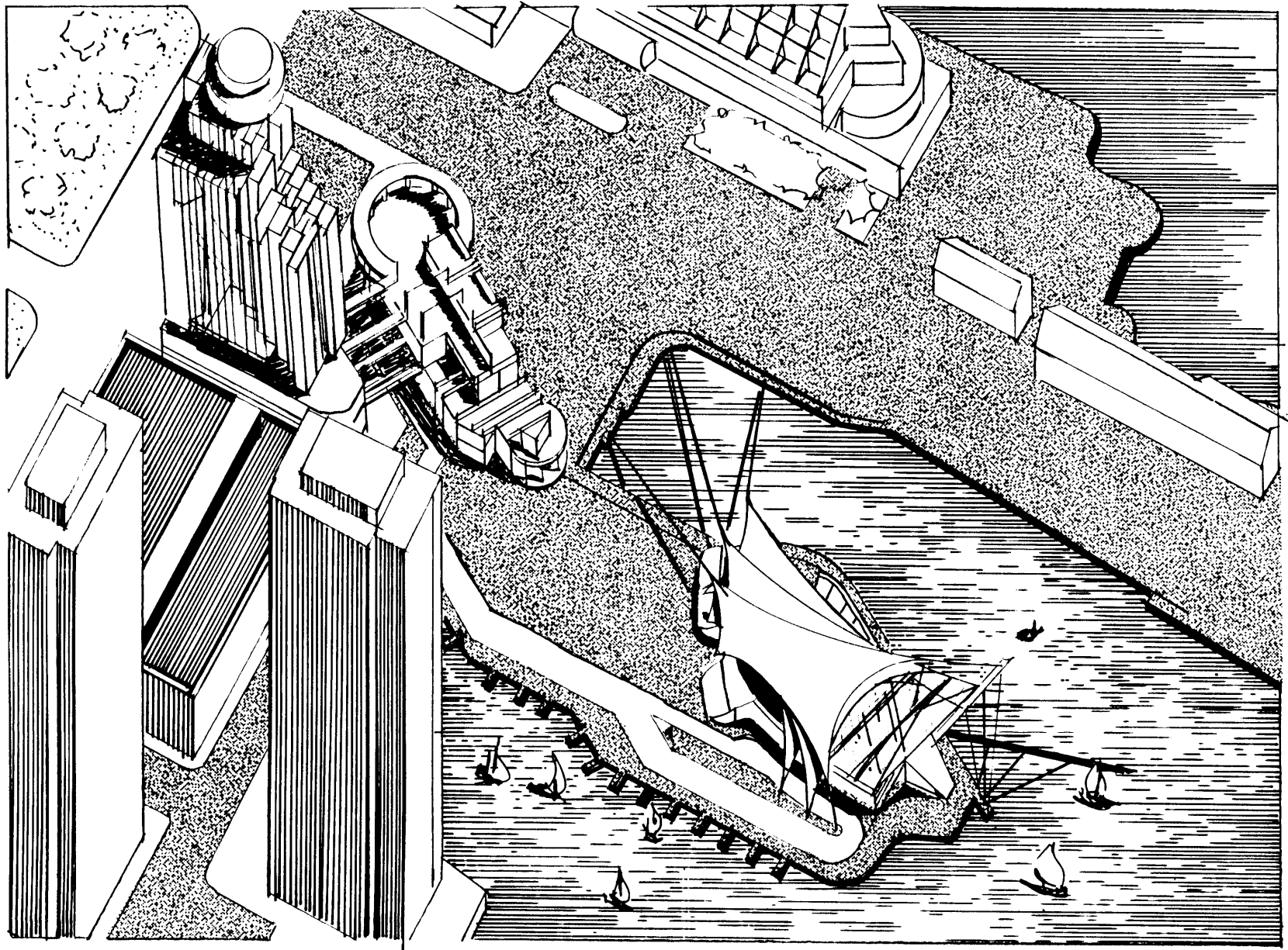




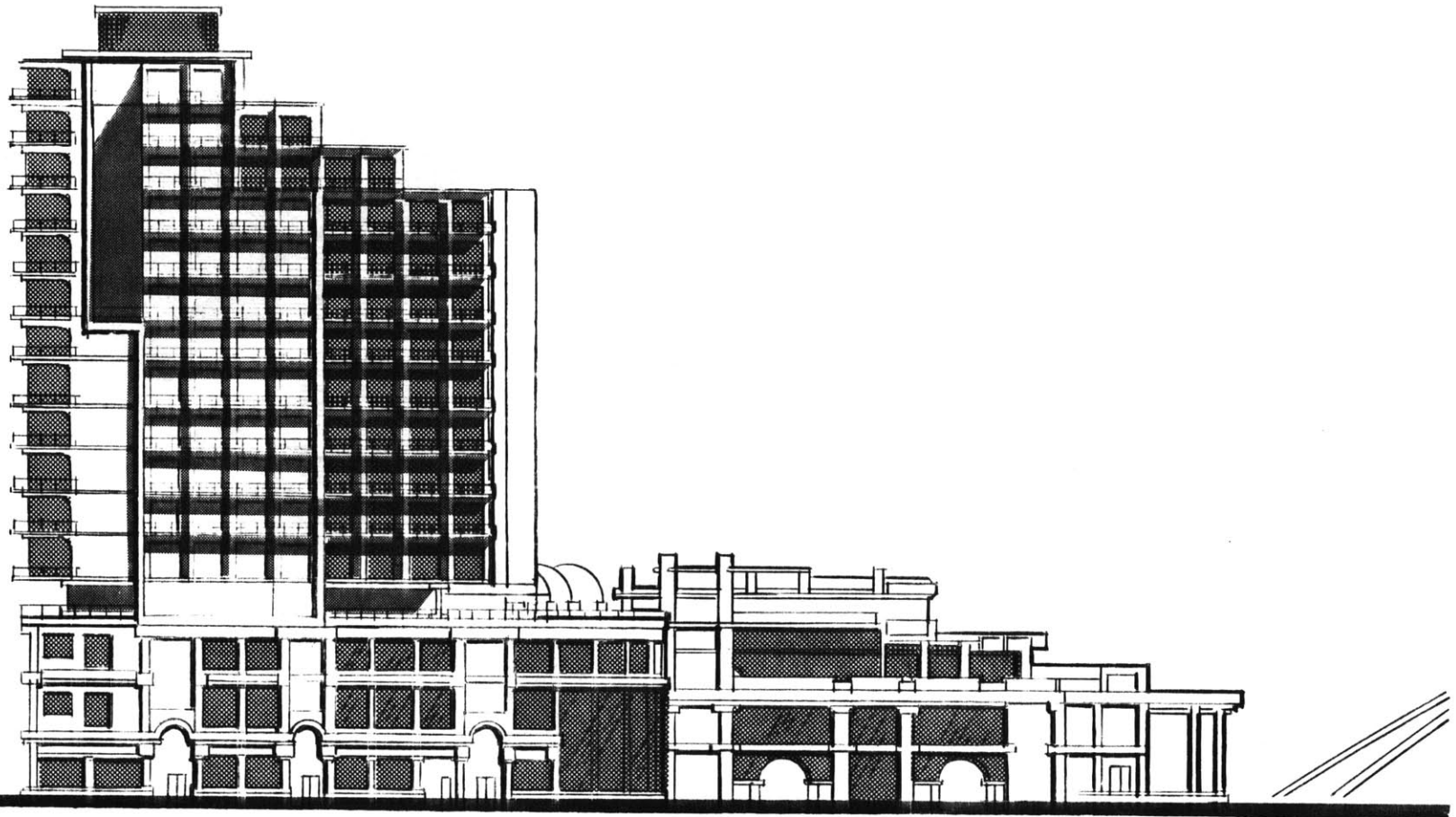


View of Site Model

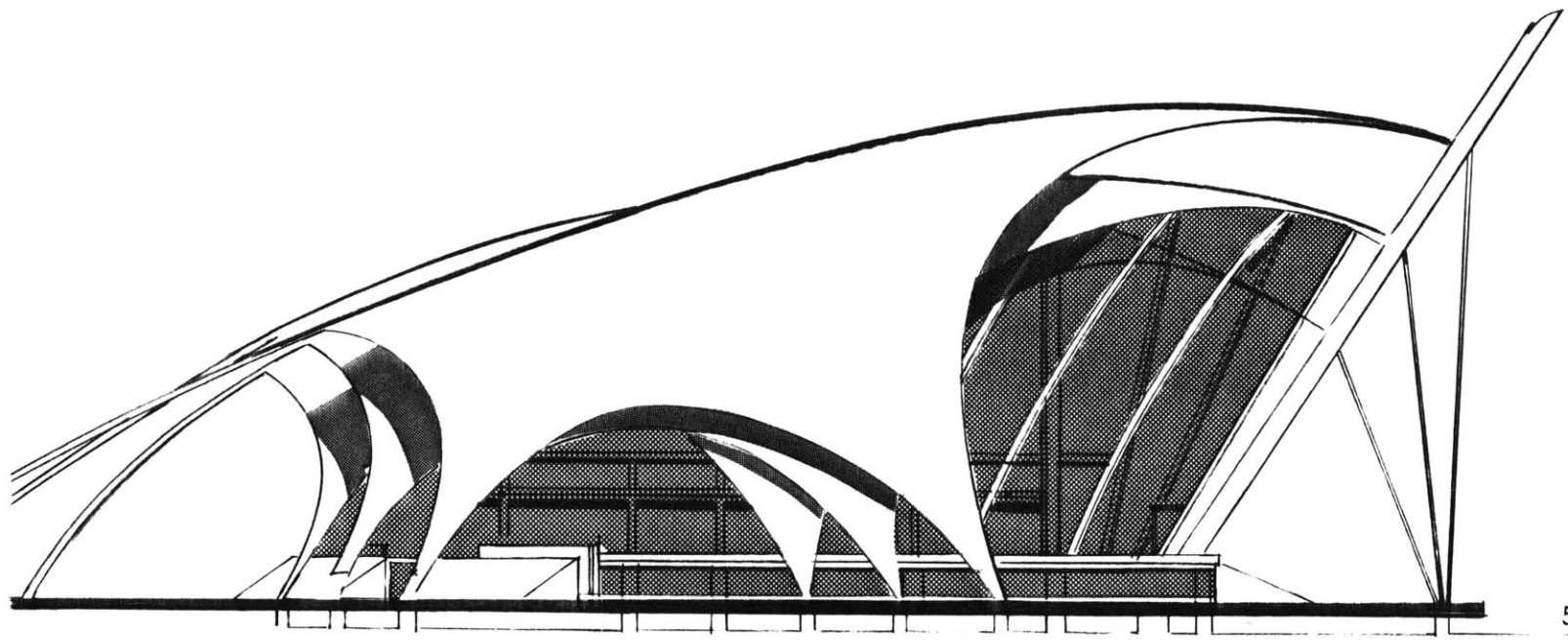


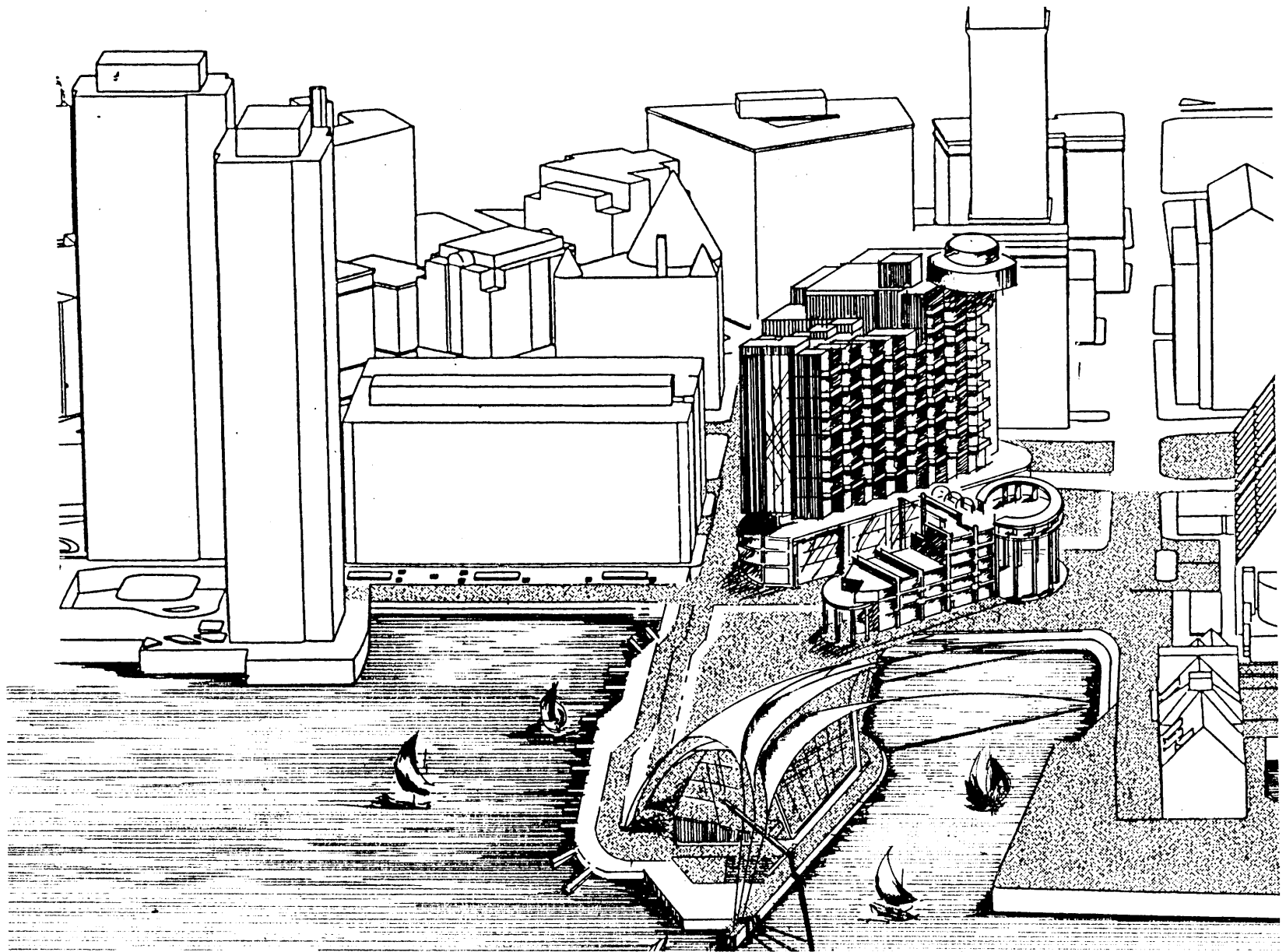


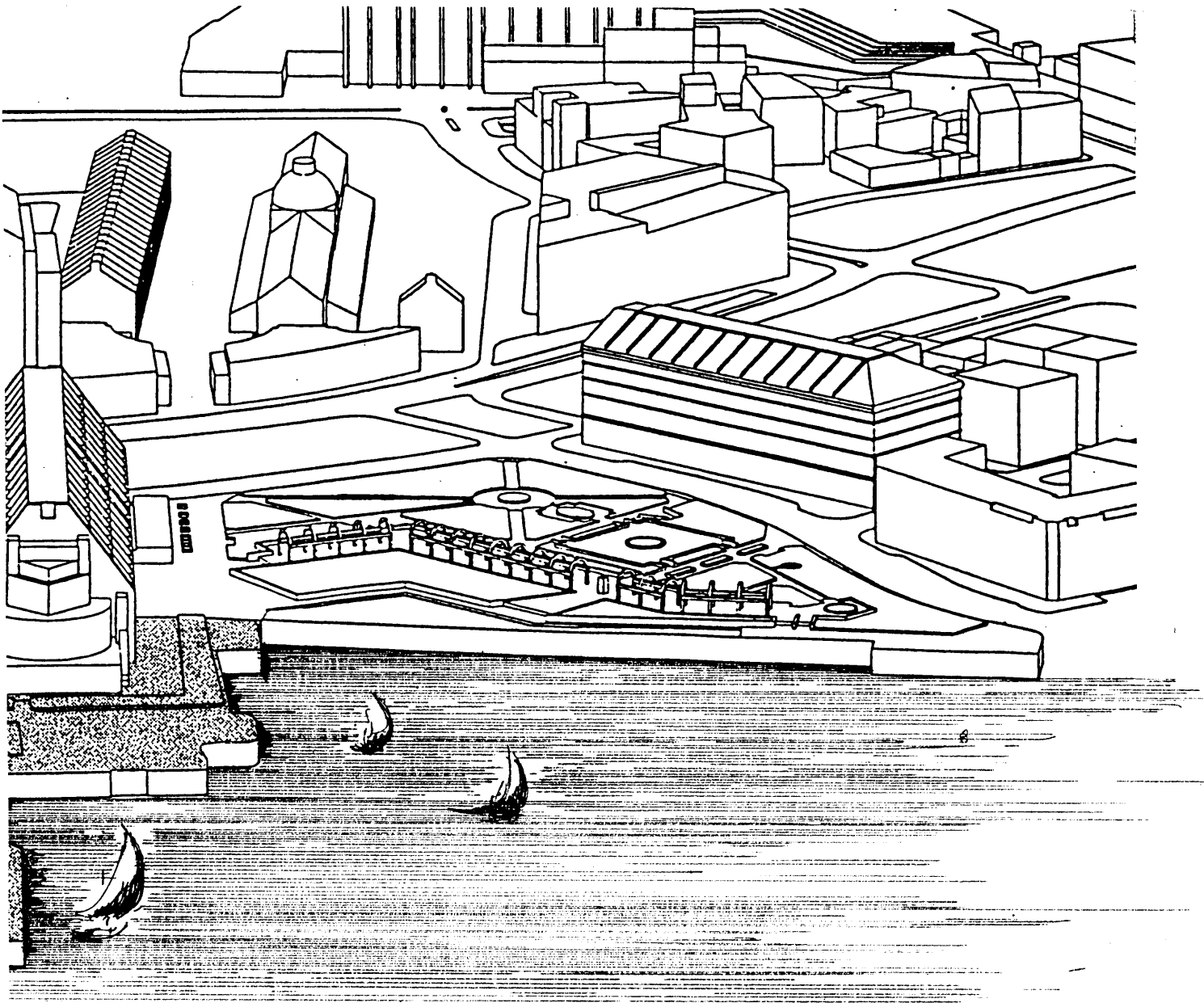
South Elevation



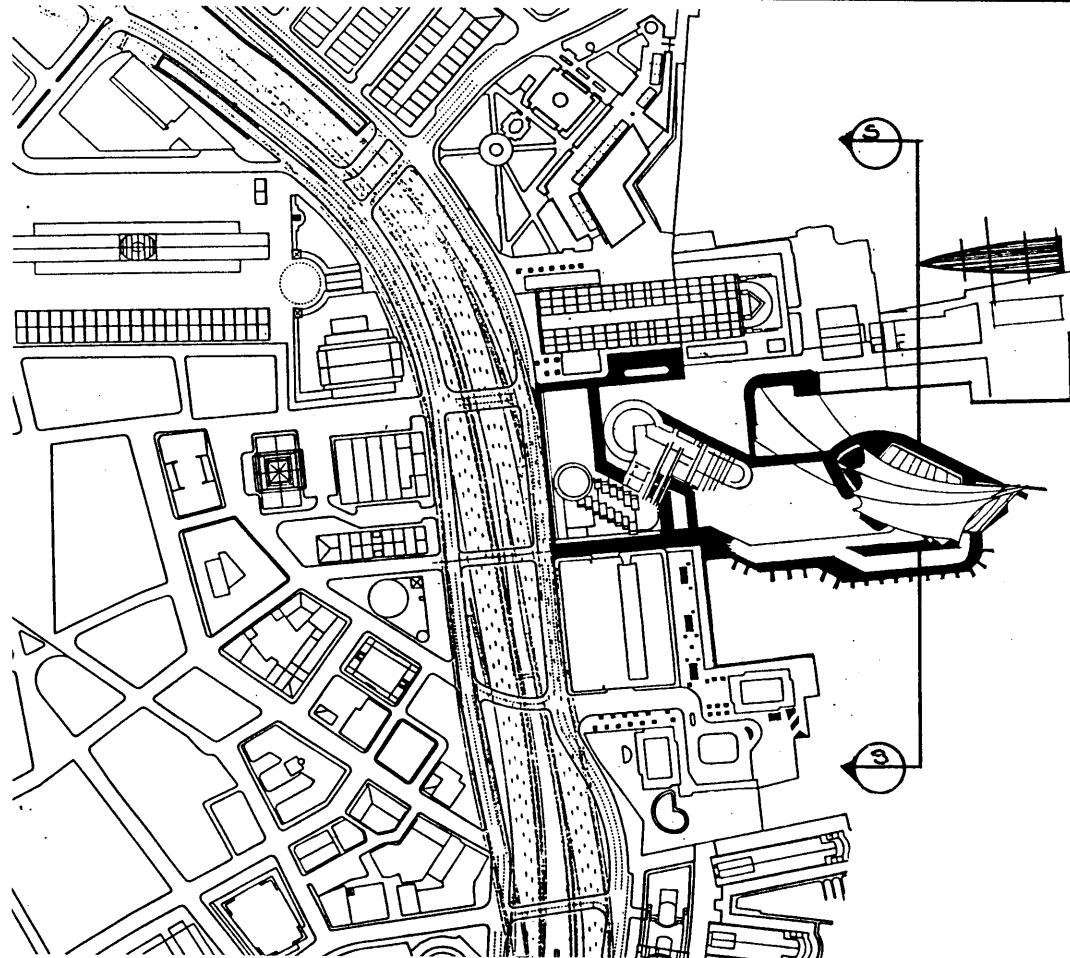
0 20 40 60 120

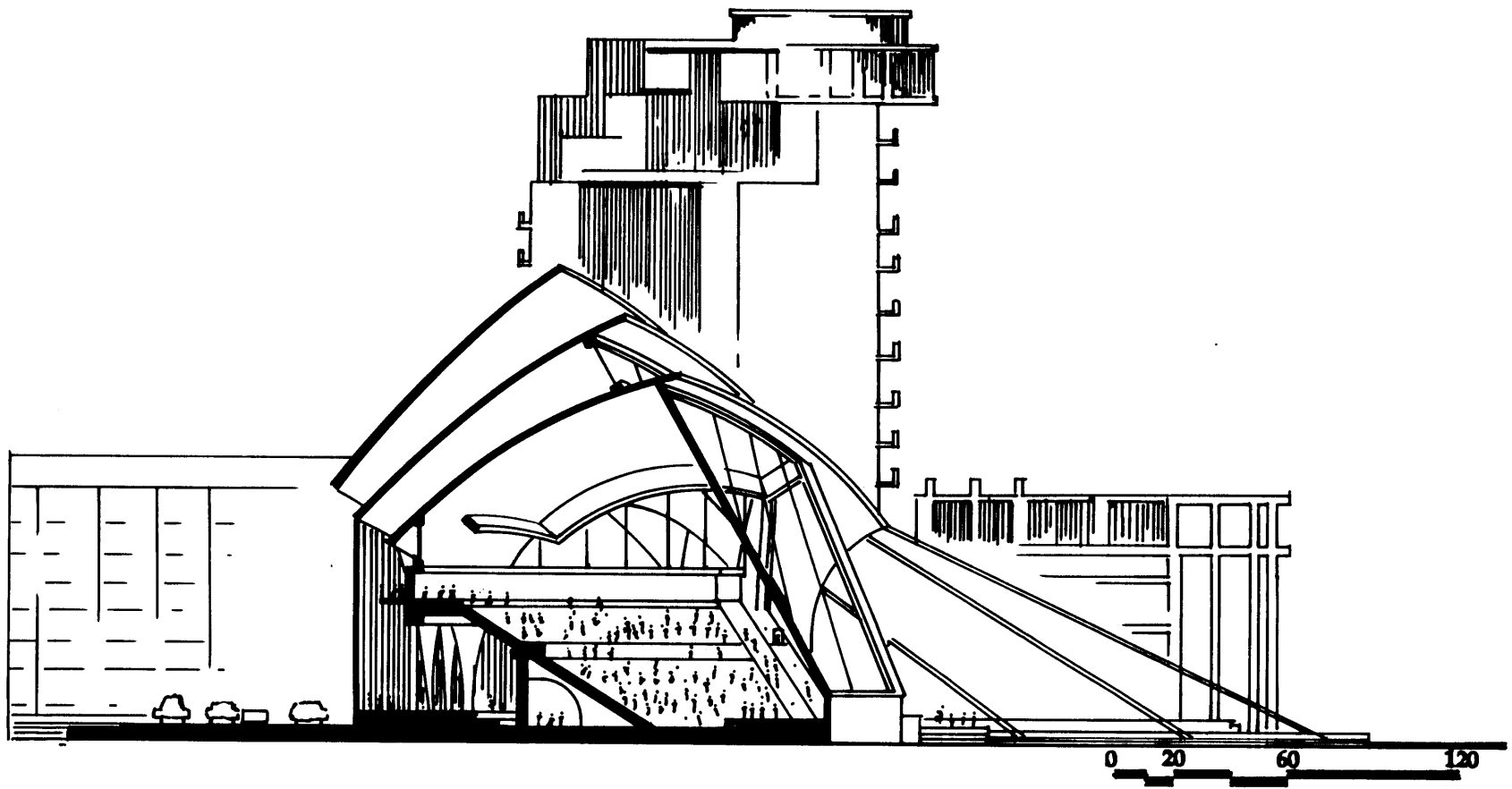




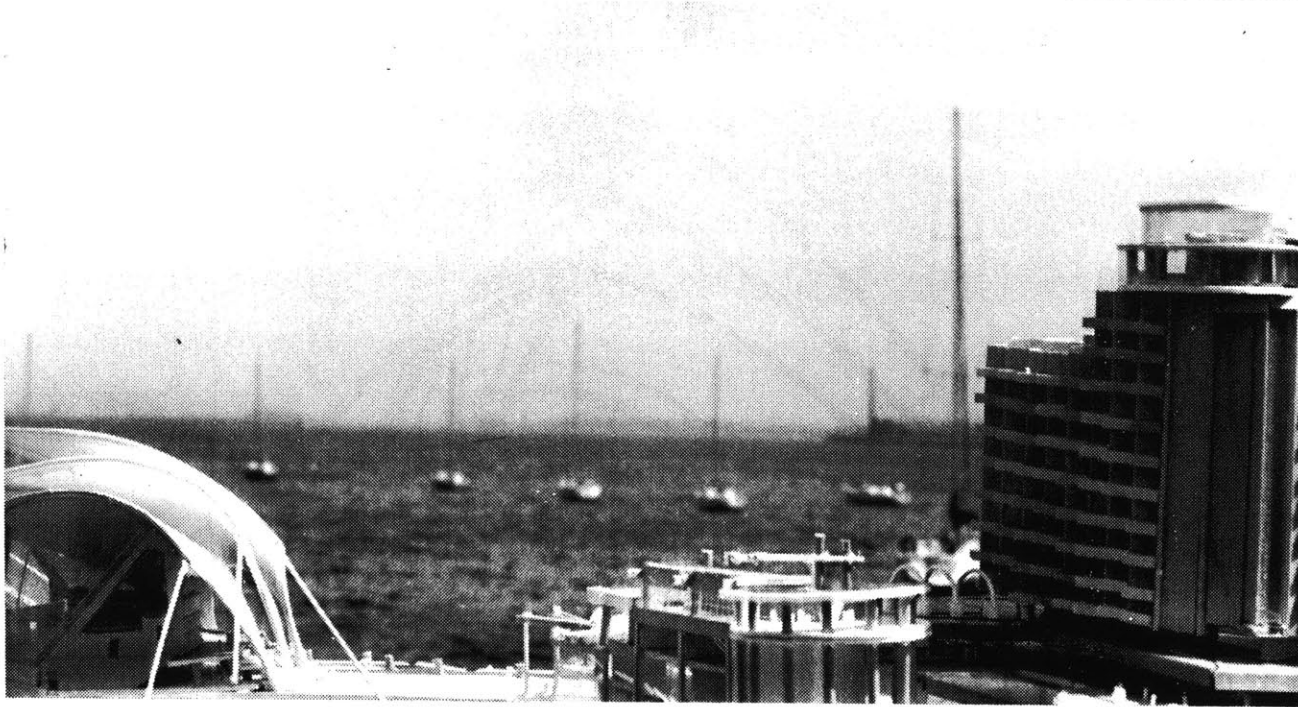
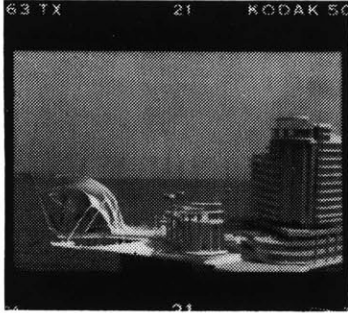


Section



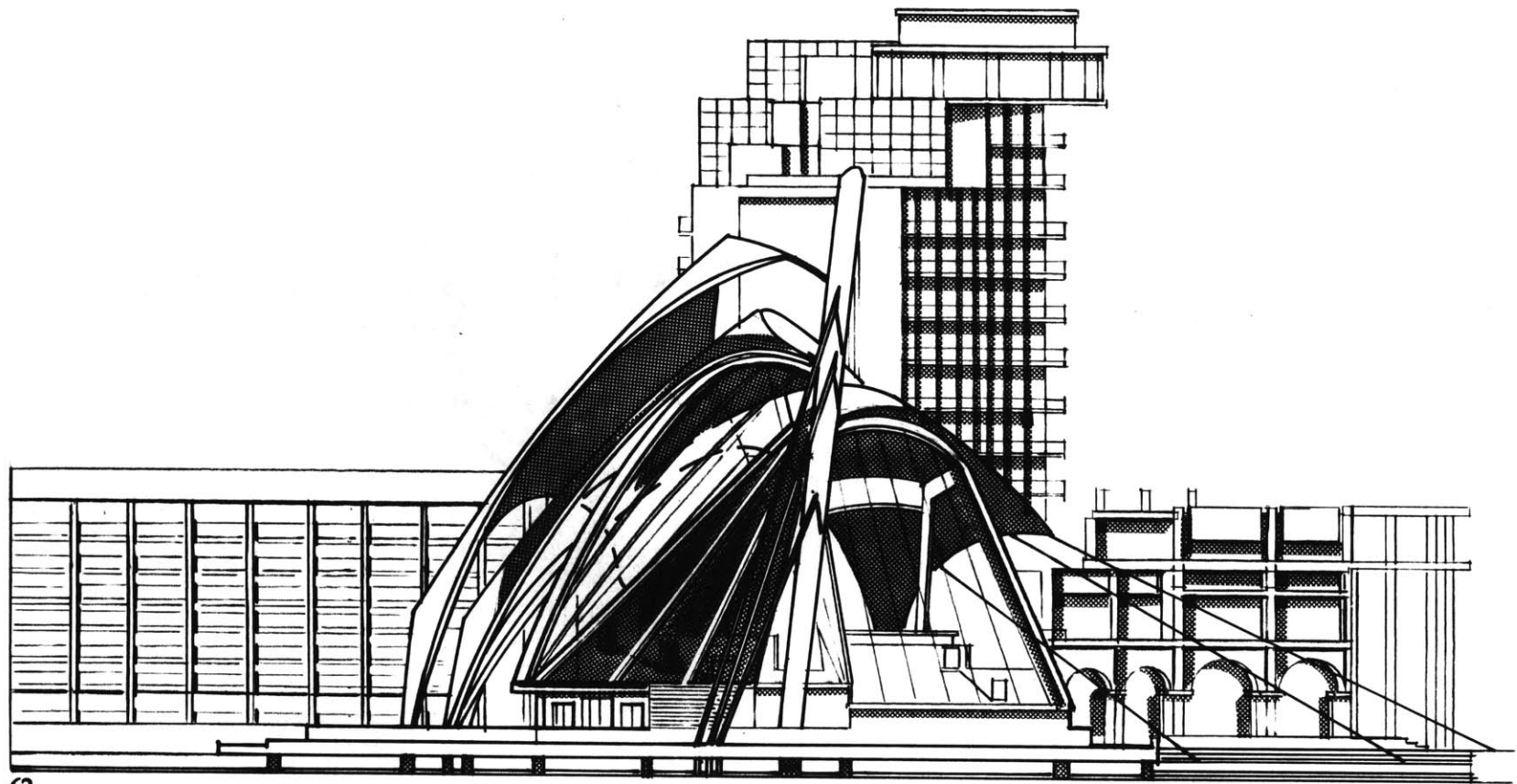


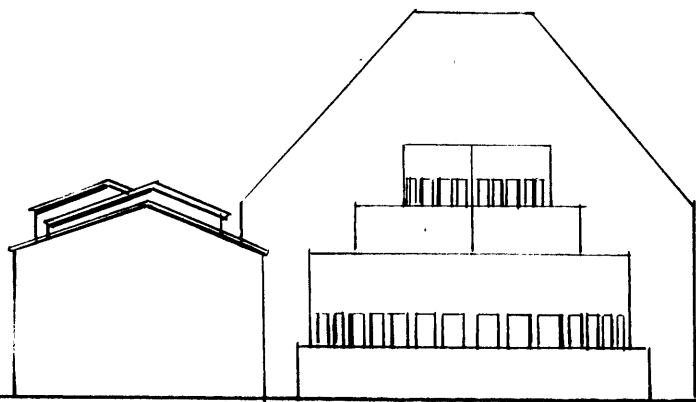
Final Design, At Location



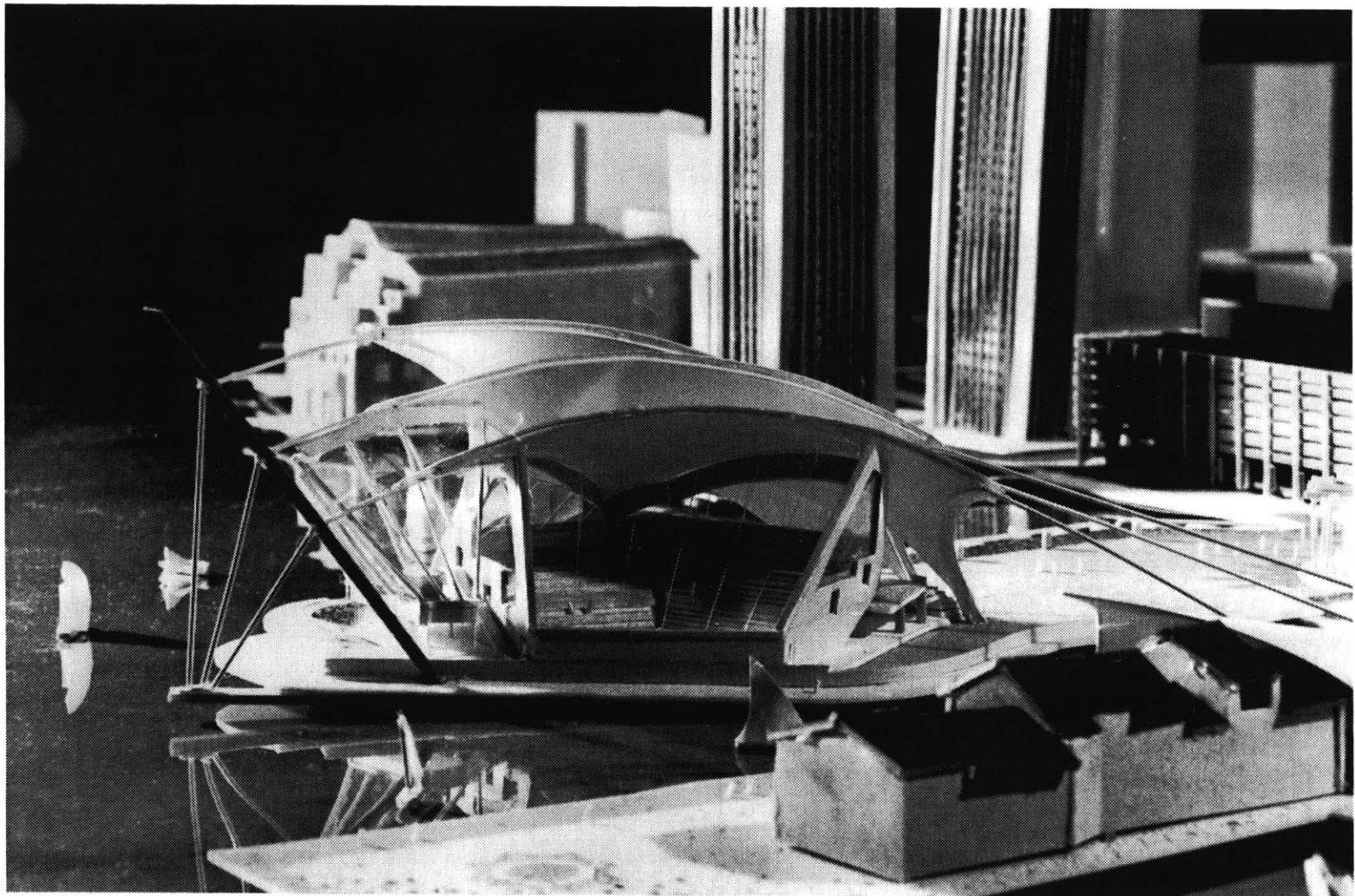


East Elevation

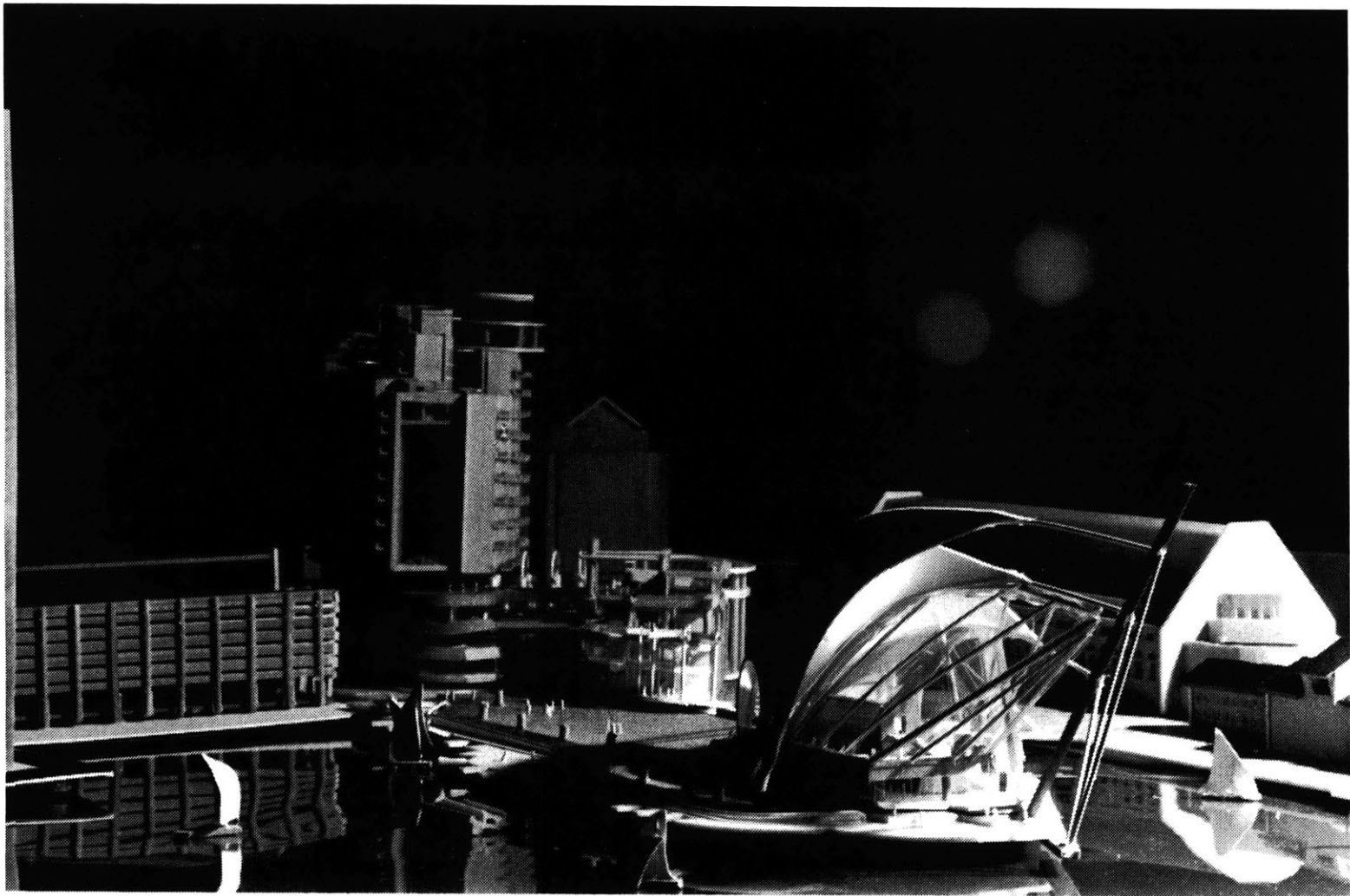




NE View



SE View



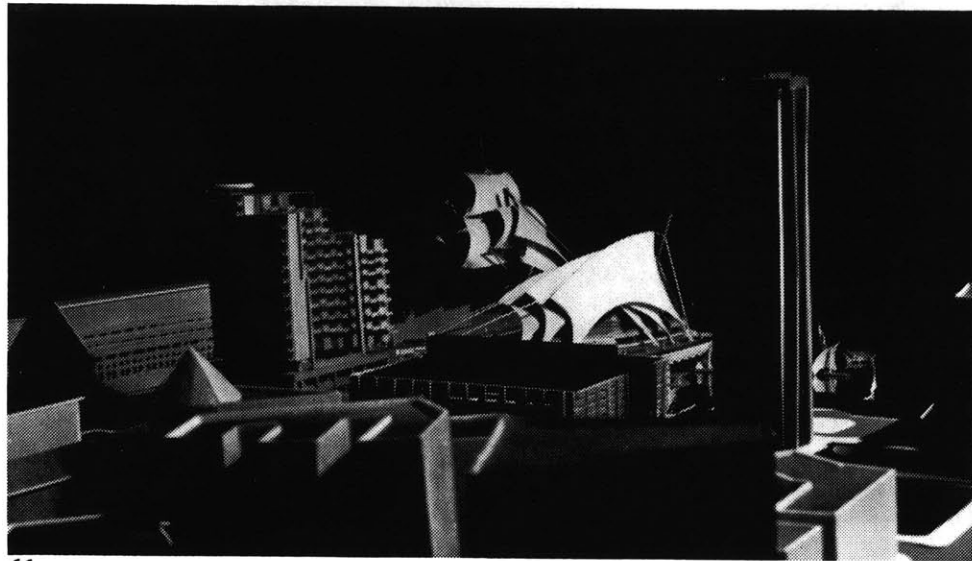
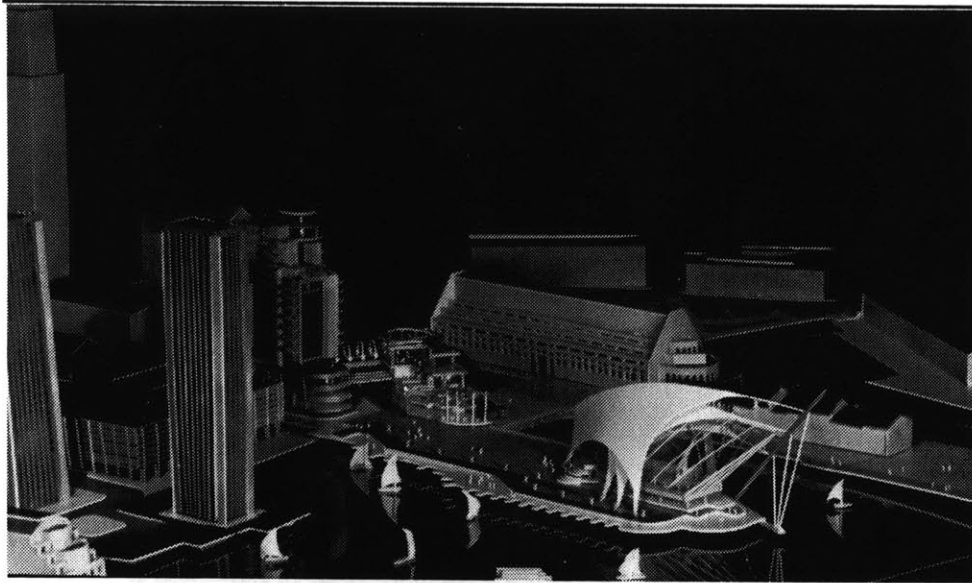




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All photos and drawings not labeled were done by the author of this thesis, Loren Wolstein Stein.

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one last question...

Loren and May, you've just finished your master's thesis, what are you going to do now?

Loren: "I'm goin' to Disney World!"

May: "I'm goin' to Austin, Texas to meet Eric Johnson!"

