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HARBOR STEPS

SEATTLE · WASHINGTON

Keith M. Comes
Thesis II

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THESIS DOCUMENT OUTLINE

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- SITE
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  - URBAN ANALYSIS
    - DOWNTOWN ELEMENTS
    - LAND USE
    - VEHICULAR MOVEMENT
    - PEDESTRIAN MOVEMENT
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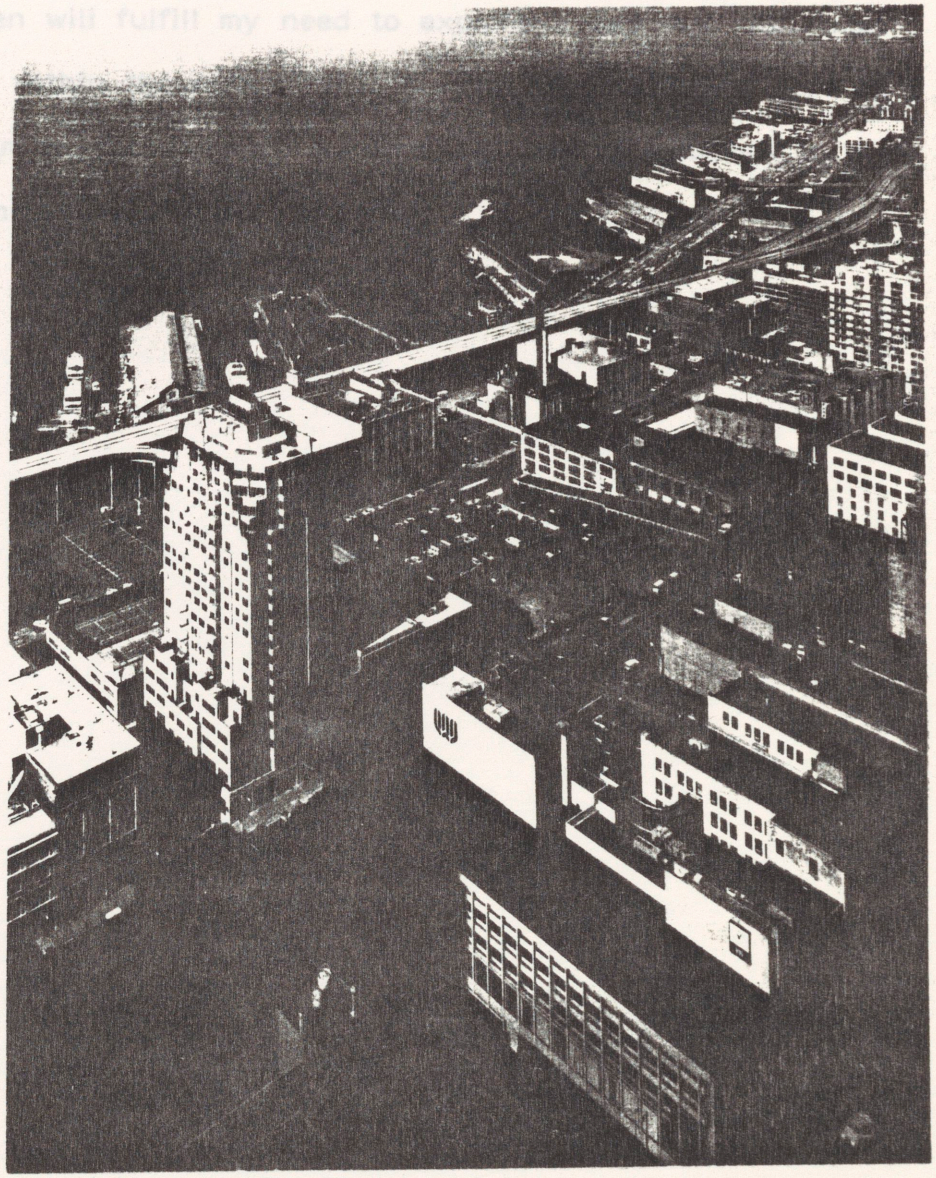
INTRODUCTION

INTRODUCTION

As a native Montanan, I have lived and grown up exclusively in a rural setting. While I still hold a deep appreciation for the mountains, lakes, rivers, and wide open spaces that characterize Montana, it is an environment that is so familiar that it no longer intrigues me. In contrast, my exposure to the urban environment has been quite limited. It has only been a few years since I first visited an area which could be classified as being urban. The apparent intense activity beneath the intimidating height of the surrounding structures, together are part of the unending diversity that I feel creates the city. Maybe it is due to my lack of experience within this urban environment, but I find it is a context that does intrigue me.

Seattle, Washington is probably the closest urban center to Montana and is also the city with which I am most familiar. Its downtown is now undergoing extensive growth and renovation creating an exciting mix of new and historical architecture. The site I have chosen for my thesis is in the heart of downtown Seattle on First Avenue and University Street, located between Pike Place Market and Pioneer Square. Bordered by abandoned warehouses, a steam plant, an elevated freeway off ramp, and both new and renovated architecture, the site context is as diverse and challenging as any in downtown Seattle. It is a steep site and at the present time has little or no connection with the Seattle Aquarium or the waterfront of Puget Sound only a few blocks away. A few parking spaces and an abandoned green space occupy the site now, which from First Avenue appears to be just a hole in the ground.

In order for a project on this site to be financially feasible it is inherent that it be a large scale, high density complex. These are characteristics that I feel would make the project worthy of being undertaken as a thesis. Harbor Properties Incorporated, a Seattle-based investment company, has conducted extensive feasibility studies concerning the First Avenue and University Street site. As a result of their study, Harbor Properties is proposing a large scale multi-use development which they have titled Harbor Steps. Their proposal involves the construction of 110 residential condominiums, a 220 room hotel, 60,000 square feet of retail shops, 80,000 square feet of office space, parking, and public space. In my thesis, Harbor Properties will play the role of the client and I will utilize the information they



have provided me in order to formulate a program.

The site and project which I have chosen will fulfill my need to explore a new and unfamiliar context and to become acquainted with design within the urban environment. My thesis will give me the opportunity to express my interest in urban architecture and to offer my ideas as solutions to the diverse and challenging problems inherent in the urban context.

SITE

SEATTLE

The extensive growth and rehabilitation that downtown Seattle is now experiencing is transforming the area into a commercial, cultural and residential paradise. Many high-rise structures have recently been built in the office and financial district, strengthening the economic health of the city. New restaurants, theatres, retail shops and residential condominiums have opened to accommodate this increased business population. Renovation and new construction on First Avenue just above the waterfront, has nearly completed the link between the historic Pioneer Square District and Pike Place Market. This new activity along First Avenue is creating an improved atmosphere in an area that was once considered dirty, deteriorating and incapable of being reformed.[1]

Development along the waterfront in downtown Seattle began in the 1800's with the railroad. As an incentive to bring transcontinental service to Seattle the land adjacent to the harbor was legally transferred to the railroad. Piers were constructed and tracks snaked all along the waterfront. Eventually warehouses were built and lined the hillside just above the railroad tracks. Further south near Pioneer Square, the city's largest industry, Yesler's Mill, was in full operation.



The commercial district centered around Pioneer Square but the shops along First Avenue serviced the loggers and longshoremen. Taverns, theatres, pool halls, tatoo parlors, and dance halls lined the street and the area near Pioneer Square became a busy red-light district.

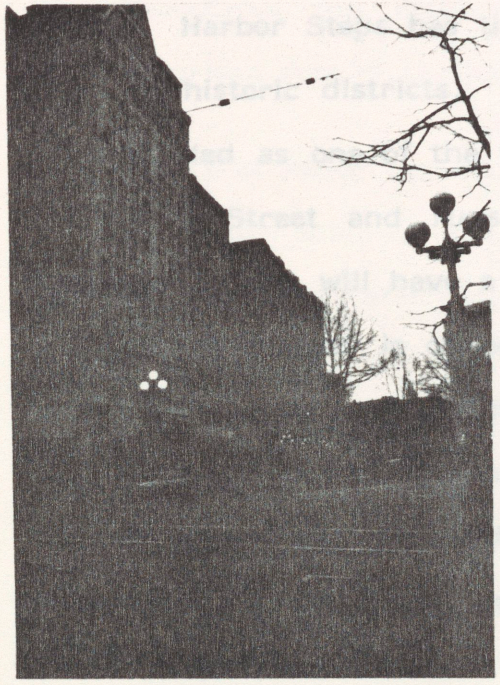
A fire destroyed a majority of the downtown in 1887 and it was hoped that the area would be rebuilt following the guidelines of a formal plan.[2] Unfortunately, rapid construction of supply warehouses took priority over the structured plan that had developed. Retail in the downtown retreated up the hill away from the decadent shops and inhabitants near the waterfront.

In 1907, as a rebellious gesture against the middleman, farmers hauled their goods downtown and set up stalls in order to sell directly to the public. The idea was quite successful and by 1917 buildings to house the market at the end of Pike Street were completed.[3] Pike Place Market continued to thrive for the next ten years but then faced a decline consistent with the rest of the downtown waterfront.

After World War II, shipping activity and train traffic dwindled, causing a chain reaction which affected the rest of the waterfront junctions. Retail shops lost customers, hotels lost travelers, and warehouses were emptied and abandoned. The red-light district expanded and cheap housing attracted undesirables. In addition, the construction of the elevated Alaskan Freeway severed the waterfront from any connection with the downtown or the rest of the city. Pike Place Market suffered also as agricultural land near Seattle was taken over by a growing urban environment.

During the 1960's reduced property values made redevelopment and improvement in the historic districts of Pioneer Square and Pike Place Market feasible.[4] The solution suggested was to destroy both areas and start over. Fortunately, outspoken groups of preservationists battled with the Downtown Association for years and after voter approval, received federal and local funding for revitalizing both areas.

The adult shops, theatres, and strip joints which had continued to prosper along First Avenue are being gradually phased out due to rezoning of the area. This allows the renovation in Pike Place Market and Pioneer Square to continue its spread along First Avenue. Today renovation and new construction extends almost the entire distance between the two districts.





As an additional part of the redevelopment in the downtown waterfront area, Post Alley has been promoted as a European style pedestrian shopping street. Post Alley runs parallel to First Avenue but is one-half block closer to the waterfront. The alley is part of Pike Place Market and leads downhill towards Pioneer Square.

Curiously, the Market and Pioneer Square have become immensely popular with both local residents and tourists. Downtown's western edge, the water front of Puget Sound, has also become an attraction to both groups. However, the Alaskan freeway still inhibits a visual and physical connection between the downtown and the waterfront. In 1978 the Seattle Central Waterfront Beautification Study analyzed this problem and proposed the creation of five major pedestrian corridors which would link Seattle's downtown to the waterfront. Many of these corridor improvements have been started and several are already complete.

The First Avenue and University Street site which I have chosen for my thesis plays a major role in the continuation of development in downtown Seattle. The only conspicuous gap on First Avenue, in the connection between Pioneer Square and Pike Place Market, occurs near University Street. Harbor Steps has the responsibility of nearly completing a pedestrian and retail link between the two historic districts. University Street, a part of which lies on the project site, has been recommended as one of the five major pedestrian corridors to the waterfront. Post Alley intersects University Street and runs directly through the middle of the Harbor Steps site. These two pedestrian paths will have a great impact on the development of my thesis project. The tragedy of the Alaskan freeway is compounded here as the elevated Seneca Street off ramp runs adjacent to the site on the south. And finally, hints of the former industry and warehousing, that at one time dominated the downtown waterfront, are still evident in many of the surrounding structures.

Because I am interested in exploring the urban environment I have conducted an in-depth urban analysis which will further evaluate the patterns, constraints, and opportunities which will influence the development of this site.

DOWNTOWN ELEMENTS

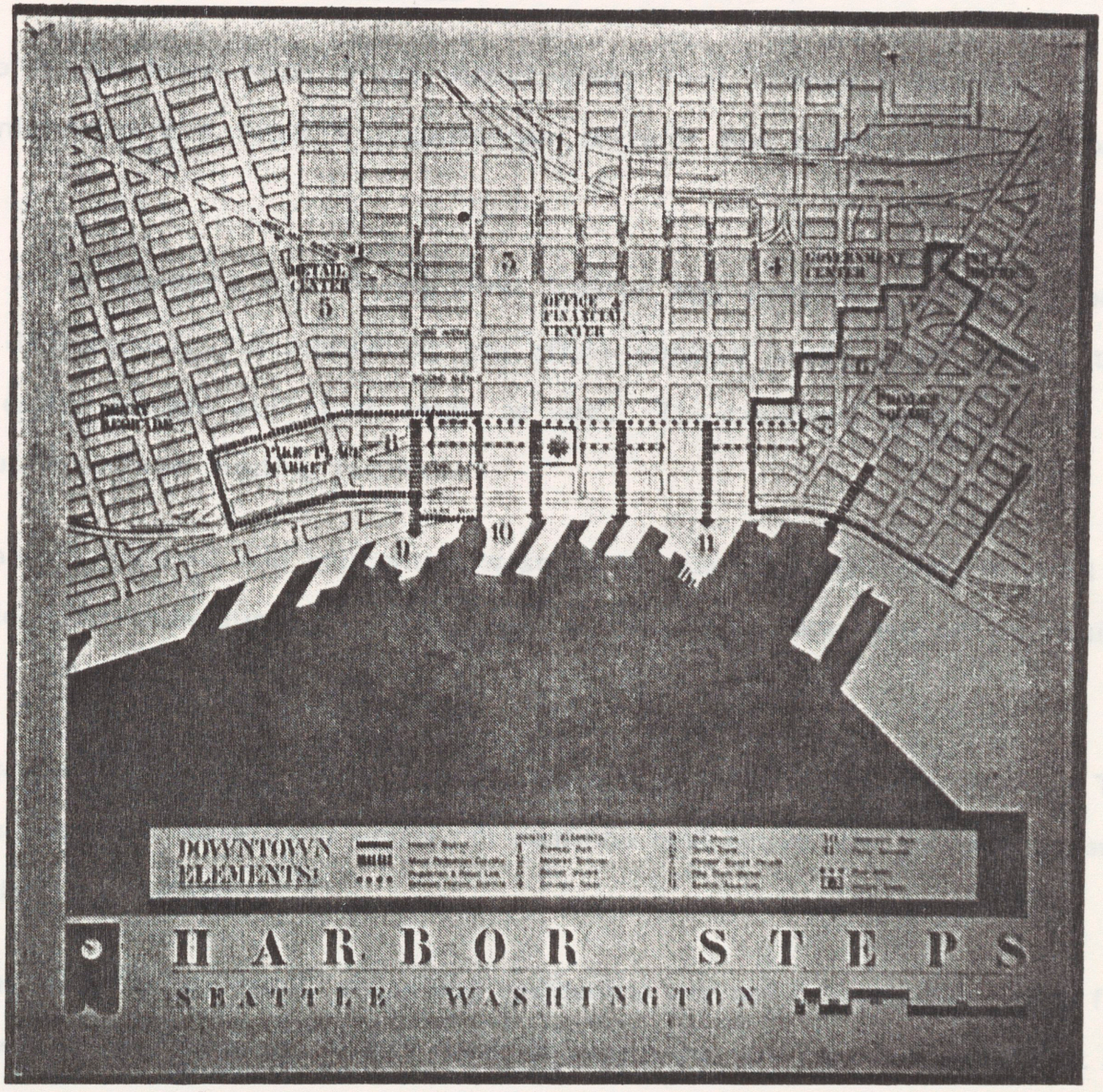
- The primary motive for this map was to illustrate the orientation of the project site in relation to the rest of downtown Seattle and its identifiable elements.

- The project site is surrounded by four very distinct districts: Pike Place Market to the north, Pioneer Square to the south, the Office and Financial District to the east, and the waterfront on the west.

- As described in the history of downtown Seattle, the renovation and new construction in Pike Place Market and Pioneer Square has spread along First Avenue and has nearly completed a pedestrian and retail link between the two historic districts. Harbor Steps will play an important role in continuing this pattern.

- The five major pedestrian corridors proposed by the Seattle Central Waterfront Beautification Study are noted on this map. The construction of the Alaskan freeway is largely responsible for severing the waterfront from the rest of downtown Seattle. These corridors are valid attempts to strengthen the connection between the downtown and the waterfront. Note that University Street, which is part of the project site, is one of the proposed corridors.

- The location of Post Alley is shown here, leading downhill from within Pike Place Market towards the historic Pioneer Square District. Post Alley has been touted as a pedestrian shopping street that has been "restored in the European tradition" and is lined with "charming shops and cafes." Restoration has occurred along some areas of Post Alley, but its success near the Harbor Steps site will be evaluated later in the analysis.


DOWNTOWN ELEMENTS:
HARBOR STEPS
SEATTLE WASHINGTON

LAND USE

- A definite pattern of lower level retail usage occurs along First Avenue. To continue this pattern would not only promote a retail and pedestrian corridor but would conform to zoning requirements.

- The concentration of office functions just beyond First Avenue may be a large consumer source for restaurants and delicatessens. Accomodating the office workers needs would be profitable not only for eating establishments but other retail as well. The business community will also play a major role in utilizing hotel meeting facilities.

- The area north of University Street and adjacent to Western Avenue is utilized for industrial use (steam plant and electrical substation). These uses do not encourage any other positive activities.

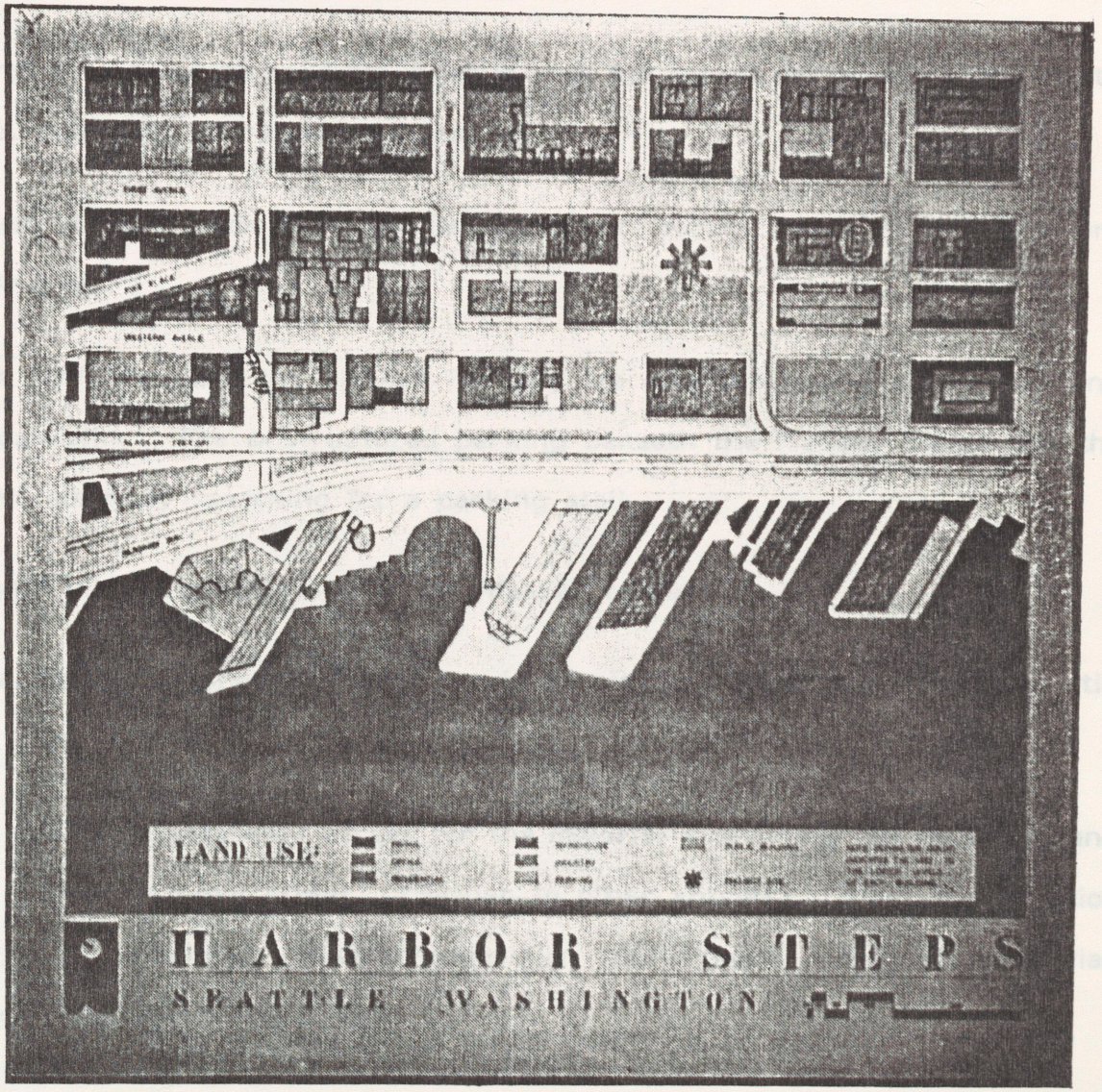
- A retail pattern is also developing along Western Avenue to the south of University Street. This pattern may be encouraged but realistically would not continue past University Street because of the steam plant and electrical substation.

- Structures in this area which house retail, office and residential use are organized as listed from ground level to the top of the building. Retail functions need the ground level to attract and

provide easy access to the pedestrian. Residents place a high value on upper floors primarily due to the superior views from this height. Zoning regulations also encourage this arrangement.

- The retail use within Post Alley is not as strong as one would suspect after reading the propaganda about this pedestrian shopping street. It definitely cannot be depended upon as a source for a retail consumer, especially north of University Street. However, a retail concentration at the Harbor Steps site may be the needed catalyst for improved activity.

- Significant land uses in this area will be discussed later as environmental influences and identity elements.


LAND USE:
HARBOR STEPS
SEATTLE WASHINGTON

VEHICULAR MOVEMENT

- Adjacent to the site, traffic is heaviest on First Avenue and the Seneca Street off-ramp. Both can be a source of noise, pollution, and traffic congestion.

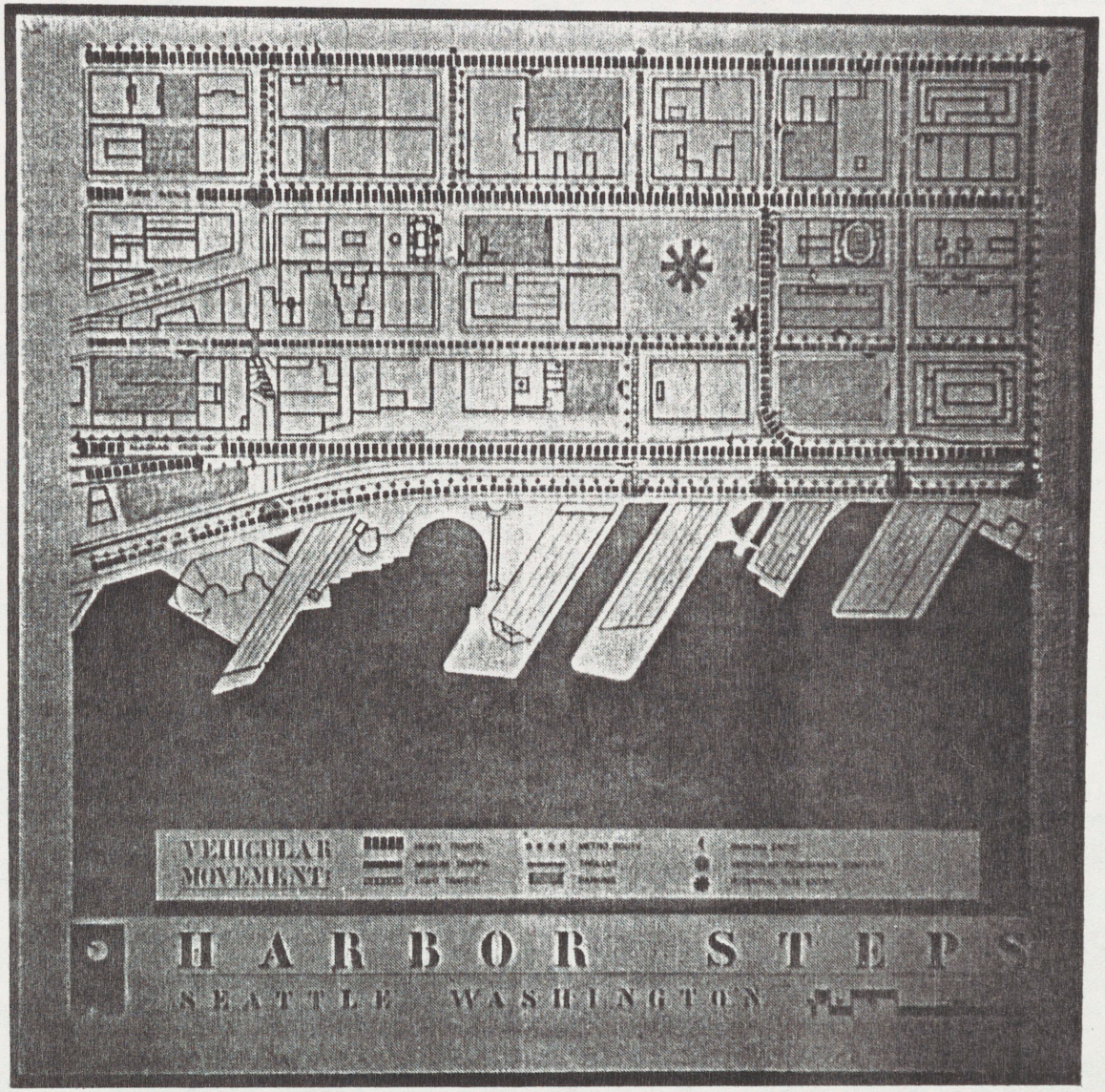
- A majority of parking entries are made from streets with light traffic. None in this area are made directly off First Avenue.

- The pedestrian/vehicular conflicts along the Alaskan Freeway are due to higher speed traffic and undefined pedestrian crosswalks. The unstructured parking beneath the freeway compounds the problem as motorists drive aimlessly searching for a parking stall.

- Harbor Steps will be highly visible to motorists on the Alaskan freeway.

- Although Post Alley is a pedestrian shopping street, evidence indicates that service entries still occur there.

- The potential site entry would provide easy access for the motorist eliminating the difficulty and hazard of entering and exiting a busy street. (Similar to other entries). Also, this location would not become part of an additional vehicular/pedestrian conflict near proposed pedestrian paths and is in compliance with zoning regulations.


VEHICULAR MOVEMENT
HARBOR STEPS
SEATTLE WASHINGTON

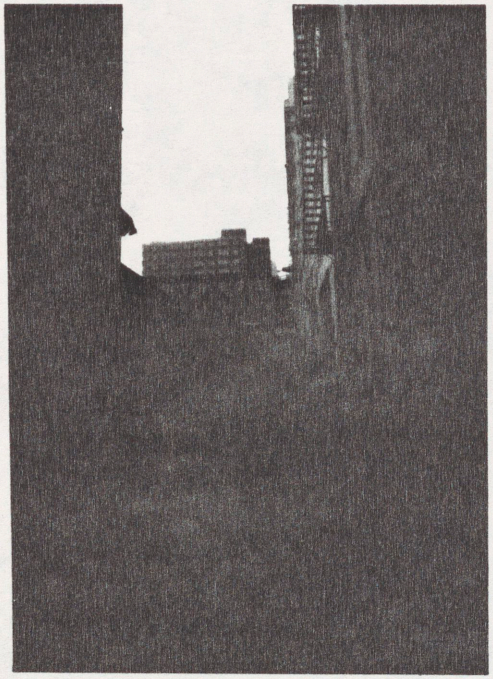
PEDESTRIAN MOVEMENT

- Heavy pedestrian travel presently occurs along both First Avenue and Alaskan Way near the waterfront. However, there are no pedestrian paths which encourage travel from downtown to the waterfront or vice versa. The one exception is the Pike Place Hillclimb. Its heavy use may suggest the need for another pedestrian corridor.

- A pedestrian corridor at University Street would create a loop which would connect the two areas of intense activity at Pike Place Market and Waterfront Park with the pedestrian activity of First Avenue. This in turn could create an area of intense activity at Harbor Steps.

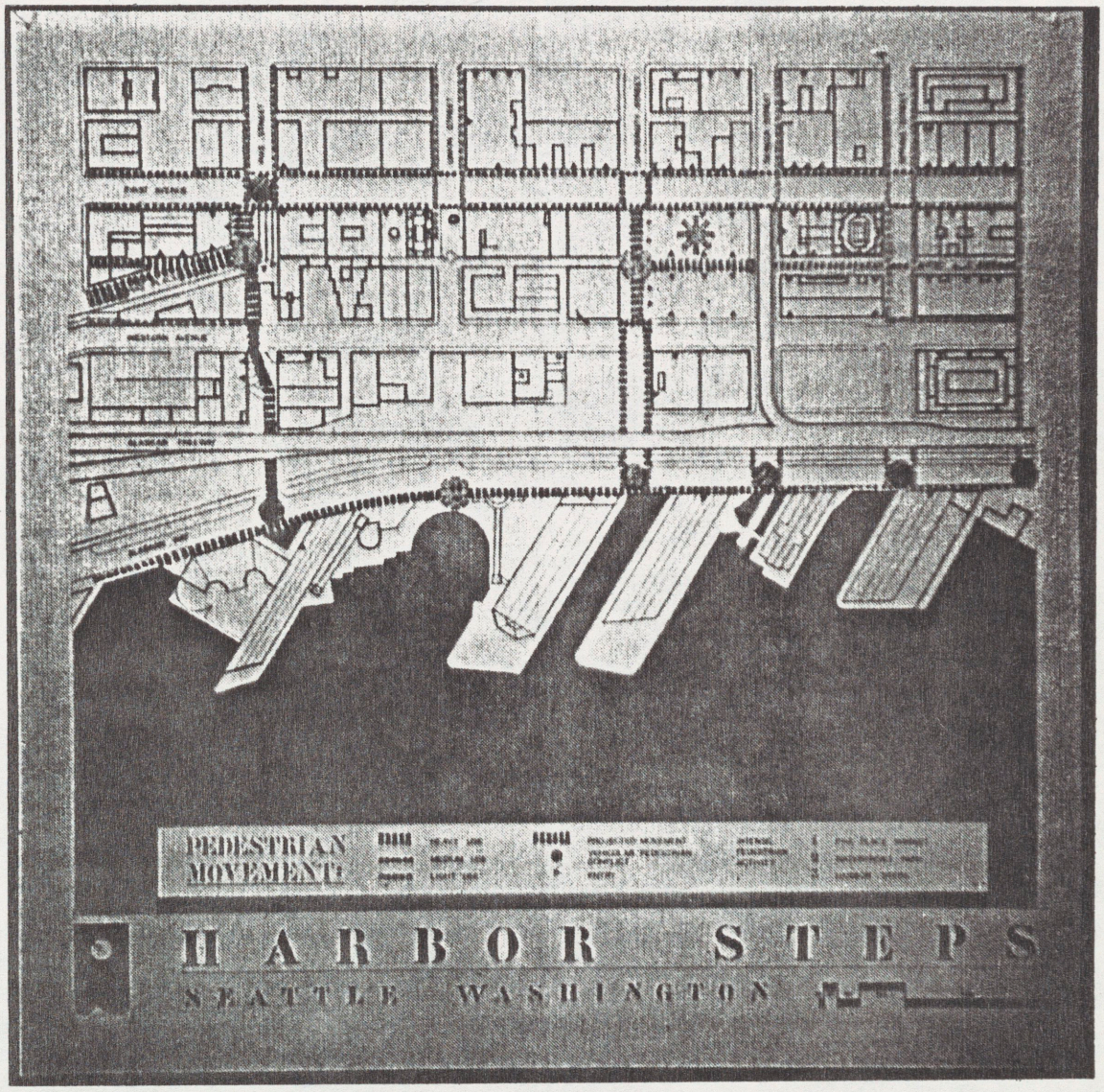
- The section of University Street adjacent to Harbor Steps was built upon a wood structure. It has since been destroyed by the city with the stipulation that it be replaced by a pedestrian street park.

- Post Alley has very light pedestrian traffic in this area of downtown Seattle. A retail concentration at Harbor Steps may begin to create the reality of what Post Alley has been envisioned.



- Pedestrian travel on Post Alley would never progress past University Street while the alley remains in its present condition. The intersection between Post Alley and University Street must be treated as a termination of Post Alley. However, this terminus must be flexible so that it may become a nodal point if Post Alley is developed north of Harbor Steps in the future.

- Retail entries are dominant on First Avenue. Office and residential entries are either internal or on side streets.


PEDESTRIAN
MOVEMENT
HARBOR STEPS
SEATTLE WASHINGTON

VIEWS

- The views were analyzed at height increments where a significant change occurs in the quality of the view. These changes were determined mainly by the heights of the surrounding buildings and the point at which one could see over them.

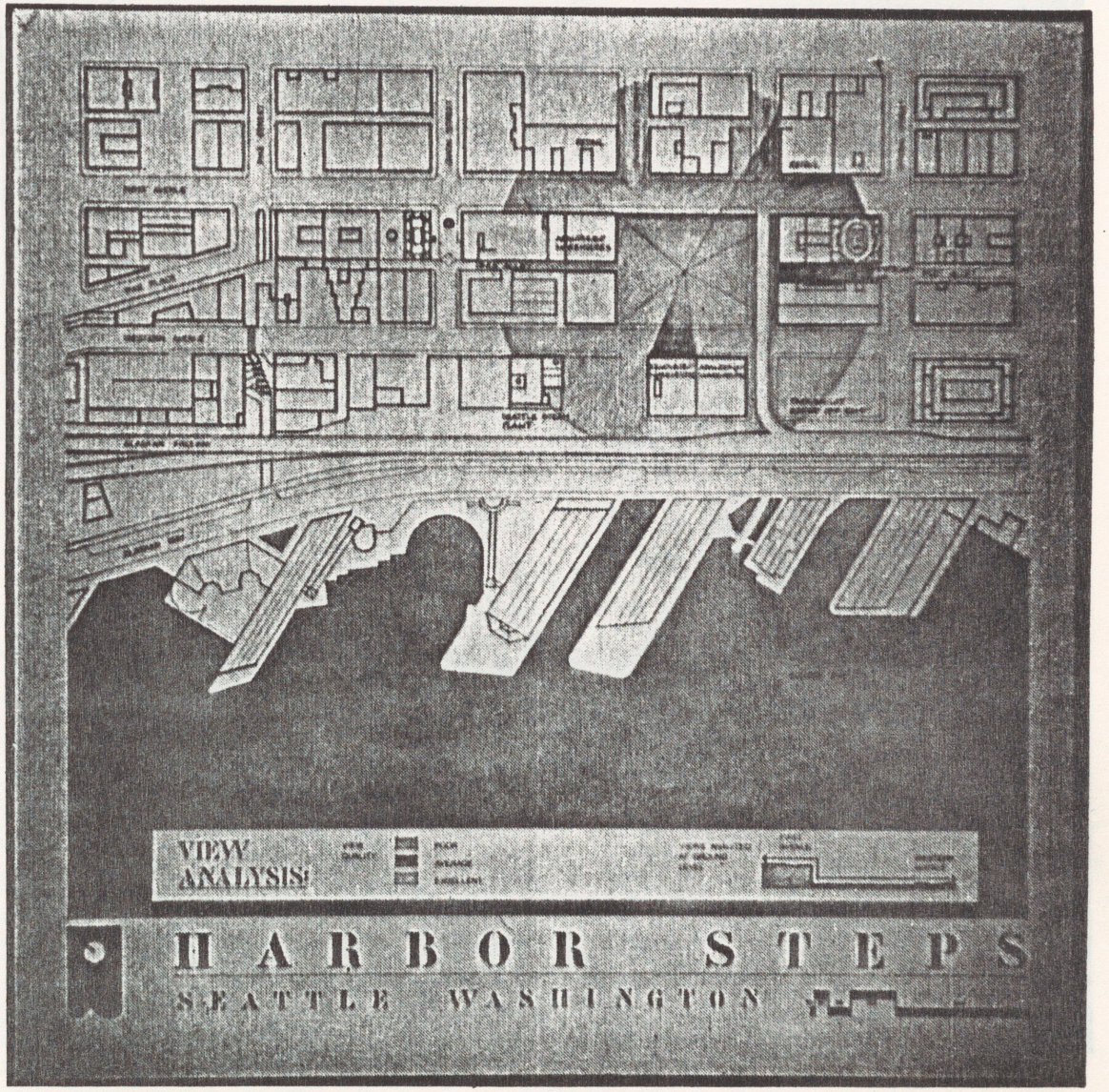
- View quality at the lower levels of the project site are very poor. The causes of these poor views are noted on the map. As expected, the view quality increases dramatically as one rises above the site.

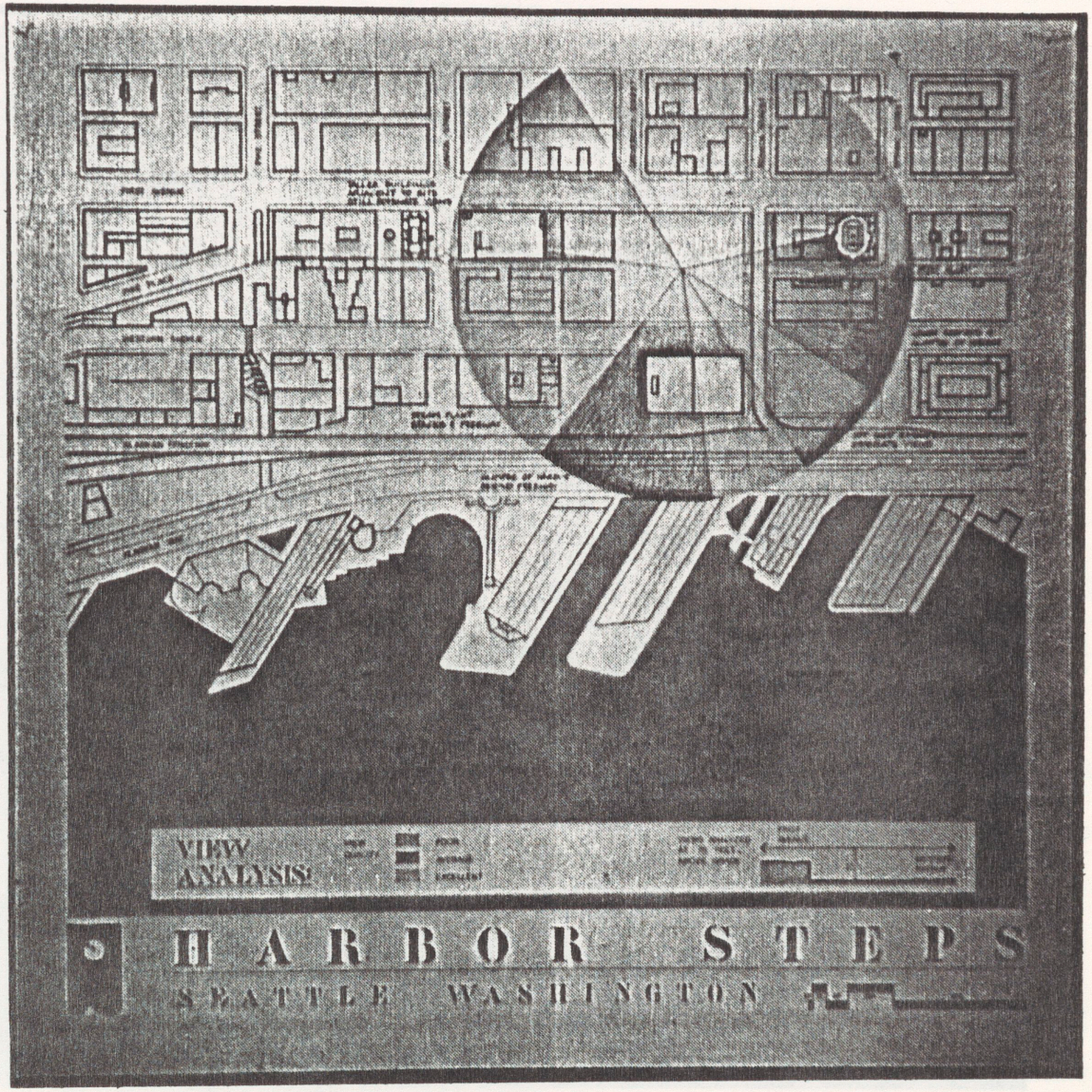
- Because the views are so poor and need to be buffered, focus upon design ideas such as an interior court should be explored. This thought could be a valid justification for the continuation of Post Alley as a pedestrian street.

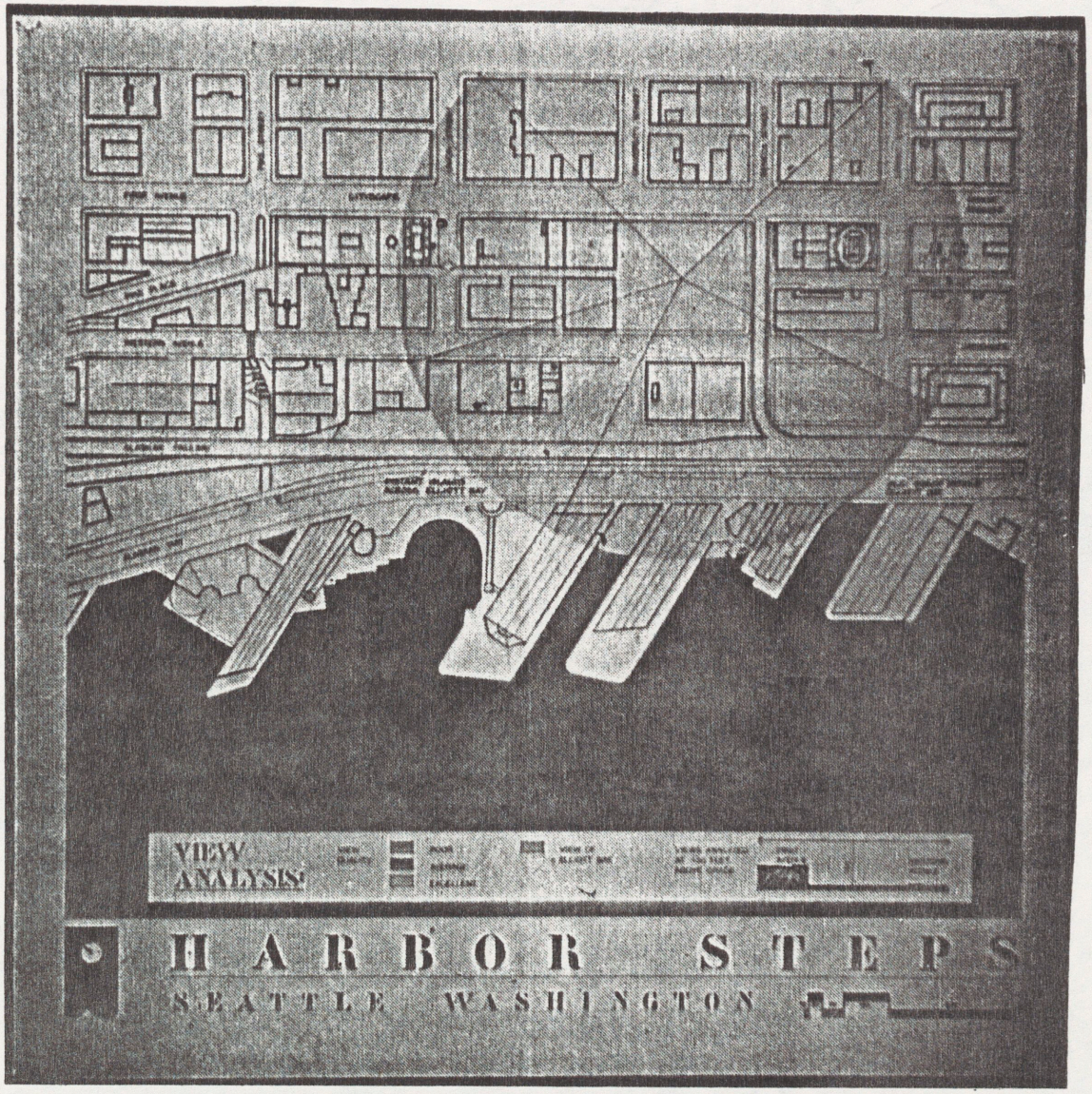
- Views will become an important factor when determining the organization of the various functions within the project. Condominium owners, offices, and hotel guests all place a high priority on views. However, zoning regulations give residential uses a definite advantage in securing the upper level vantage point.

- Unit cost of condominiums, hotel rooms and office space will be greatly affected by the view quality.

- The importance of a view of Elliott Bay needs no explanation.


VIEW
ANALYSIS
HARBOR STEPS
SEATTLE WASHINGTON

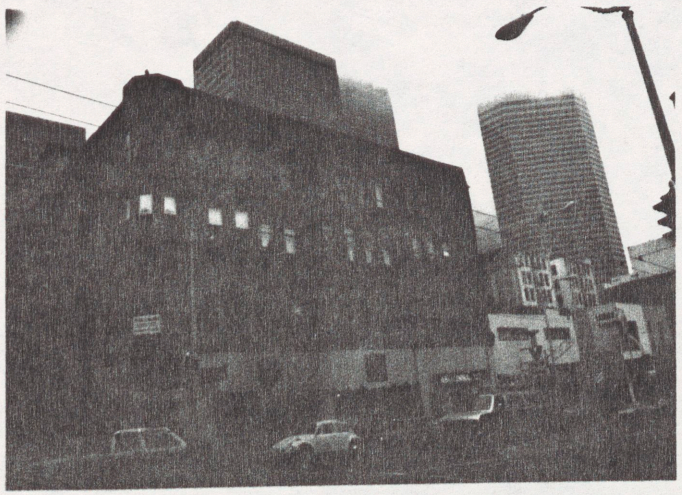

VIEW
ANALYSIS
HARBOR STEPS
SEATTLE WASHINGTON


VIEW
ANALYSIS
HARBOR STEPS
SEATTLE WASHINGTON

ENVIRONMENTAL FACTORS

- The immediate environment surrounding the project site has a great range of diversity.

Negative influences:



Retail Shops Across First Avenue - These shops will have little affect on the design of Harbor Steps. Their uses are a reminder of the decadent past history which once plagued First Avenue. Several of the buildings are abandoned with plans for renovation. At this time there is little danger of these building drawing attention away from Harbor Steps.

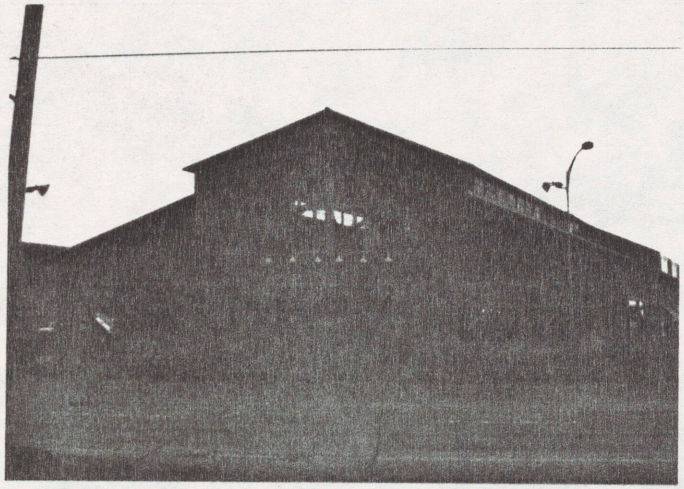
Alaskan Freeway - This is a source of noise and pollution and is a visual eyesore. Because it is between the project site and the water-front, trying to avoid contact with this element does not seem advisable. Making the pedes-trian corridor under the freeway as pleasant as possible will detract from its current promin-ance.



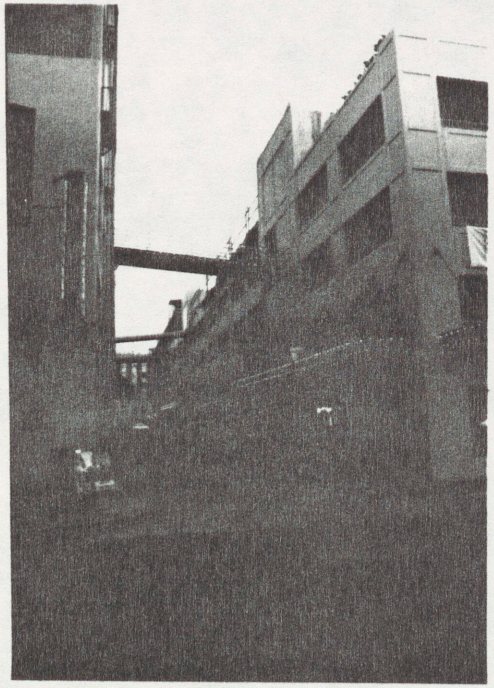
Seattle Steam Plant and City Light Substation - Orientation away from these structures should be encouraged.

Warehouses - The abandoned warehouses near the project site are all planned for renovation. The two on University Street to the north of the site will be evaluated during phase II of Harbor Steps. Although at the present time, these two warehouses are a negative influence. It must be remembered that they will become an integral part of Harbor Steps in the near future. (See Form-Section Studies 1 and 2.)

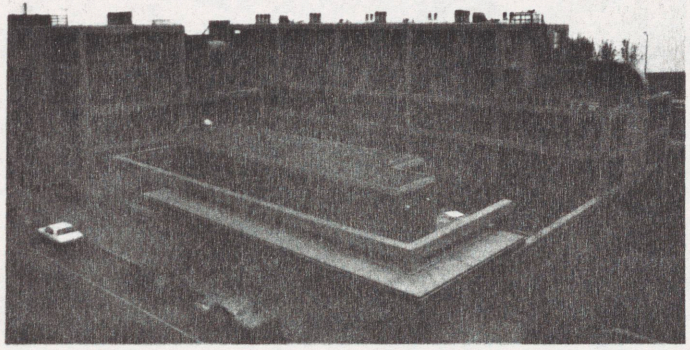
Positive Influences:



Waterfront Structures - These structures are a popular attraction and will provide incentive for pedestrian travel through the project site.



Post Alley - Although Post Alley is not experiencing high usage, its character south of the site is appropriate and will influence its continuation through Harbor Steps.



Hillclimb Court Condominiums - These condominiums are pressed directly against the Alaskan freeway. This problem was solved by focusing the units inward to a central courtyard. Their success may be an important lesson.



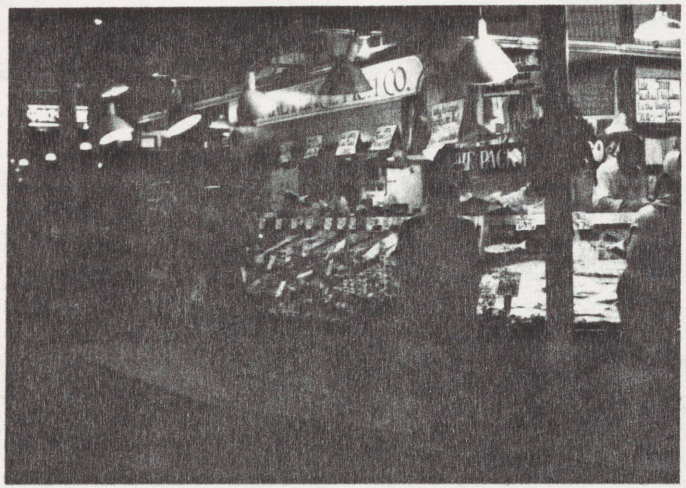
Pike Place Hillclimb - This corridor may play an important role in the paths discussed under Pedestrian Movement. It could become a precedent image.

Renovated structures on First Avenue - Just south of the site on First Avenue are the nearest indications of the rehabilitation that was discussed in the history of downtown Seattle. To continue this pattern of rehabilitation will have a positive effect in downtown Seattle. (See Form - Section Study 3).

Elliott Bay - The waterfront will ultimately be an important driving force behind the design of this project. The desire for a view out to Puget Sound and the value of this amenity can only be described by pictures. The physical link to the bay provided by Harbor Steps also illustrates the significance of this natural element.

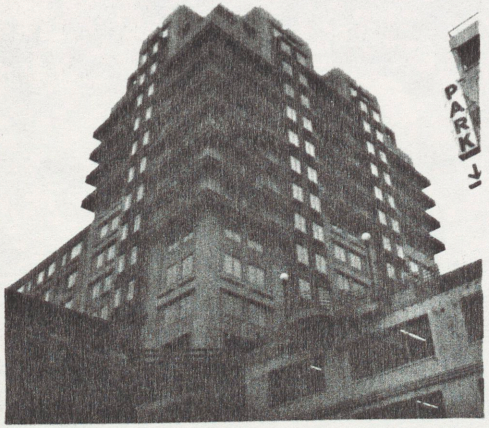
Identity Elements:

These are the most significant elements which I feel identify the area immediately surrounding the Harbor Steps site. I have also listed the characteristics which create the elements' significance.



A. Pike Place Market

- character and historical authenticity
- high pedestrian use
- notoriety and reputation



B. South Arcade 98 Union

- innovativeness
- color, form
- uses similar to Harbor Steps





C. Seneca Street Off Ramp (see Form-Section Study 4)

- dominate feature
- negative impact
- noise, exhaust, visual eyesore

D. Watermark Tower

- color, form
- materials
- uses similar to Harbor Steps
- integration with adjacent historic buildings

E. & F. Seattle Aquarium and Waterfront Park

- high pedestrian activity
- connection with waterfront
- incentive for pedestrian connection with downtown

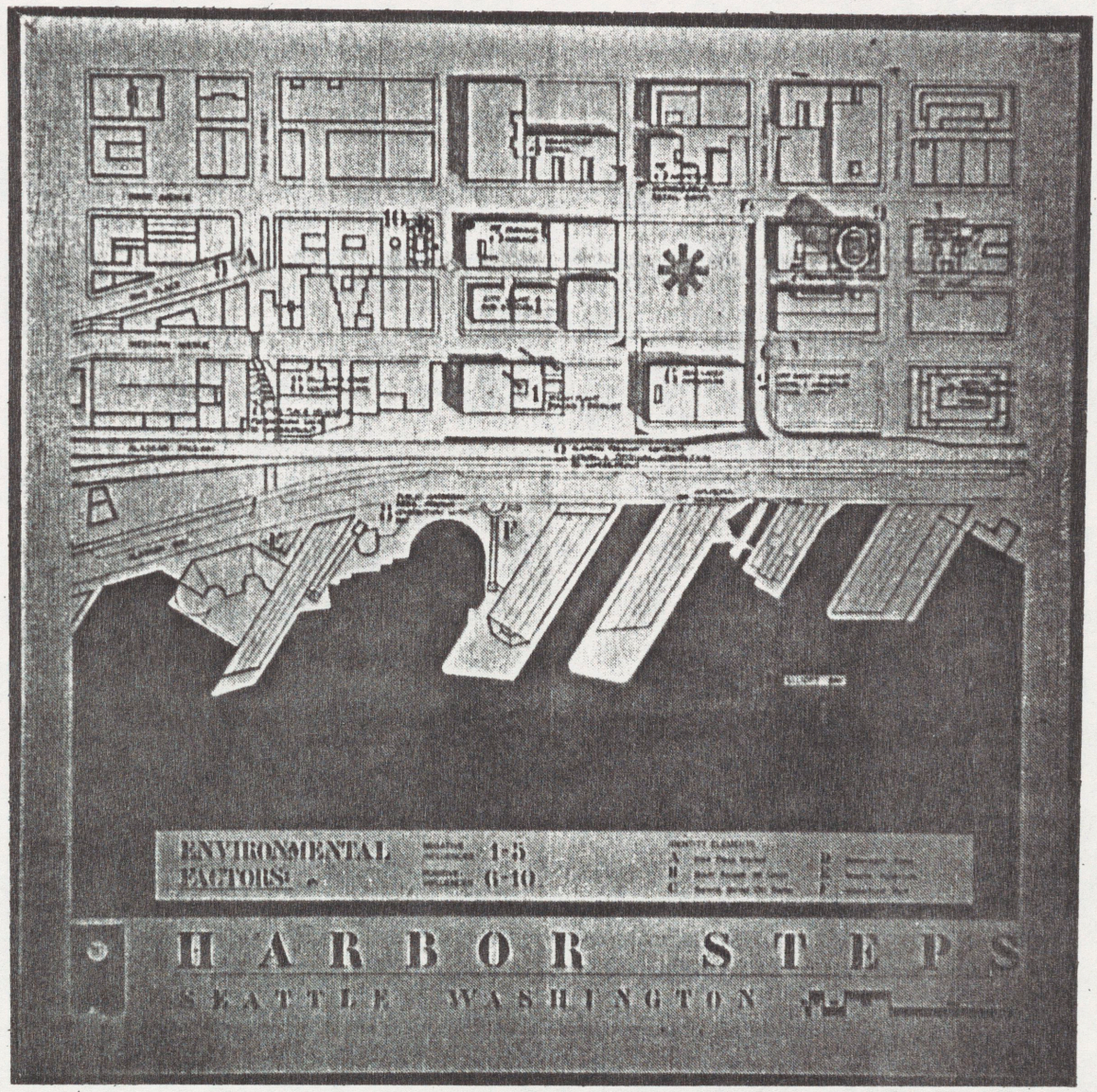
Shadow Study -

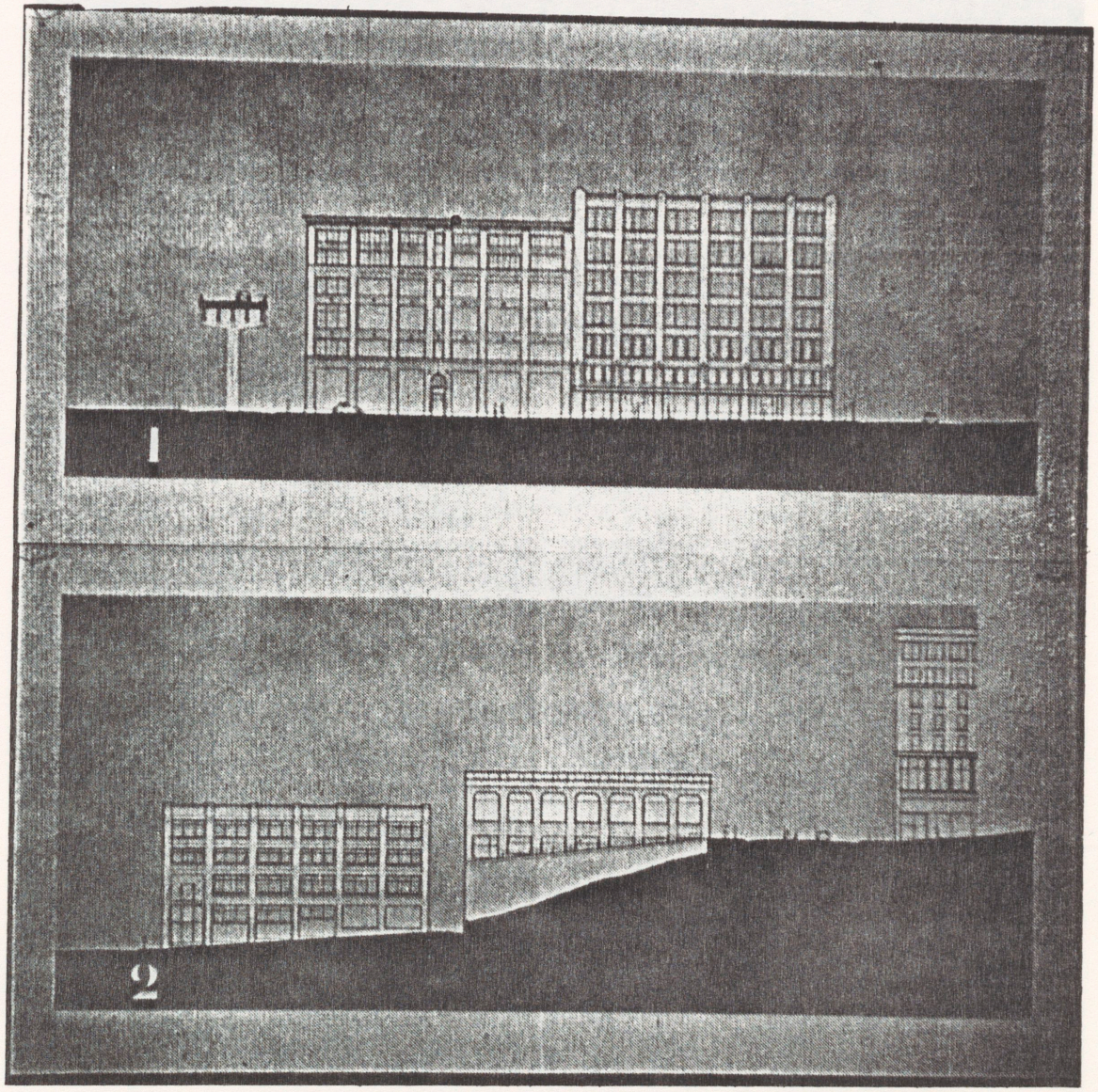
The analysis indicates the approximate shadows cast at 12:00 noon on June 21.

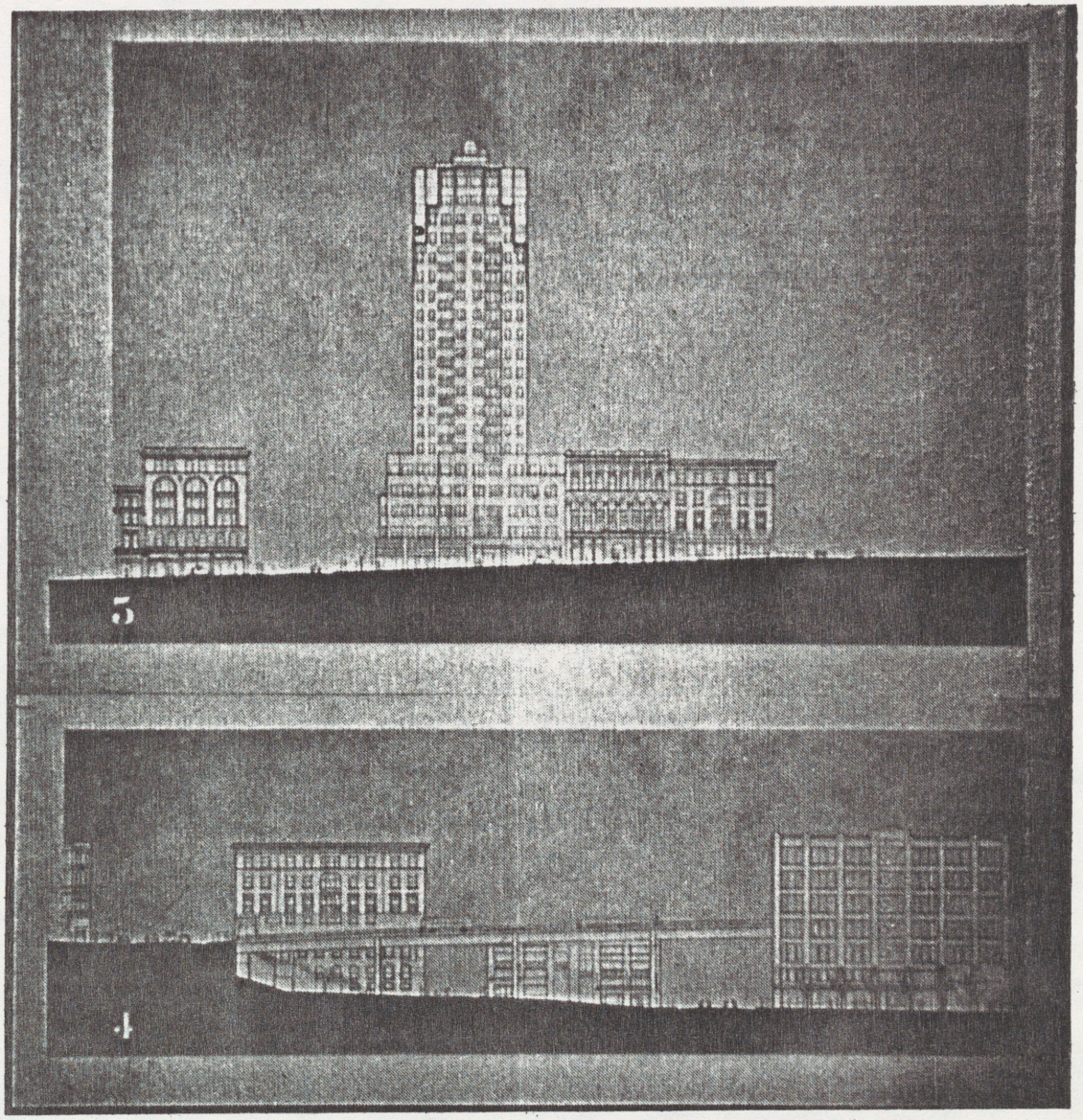
- The shadow effects in Seattle will have the most impact during the summer and then will be similar to those shown. In the winter months, clouds are dominate in the Seattle sky, therefore shadows will have less impact.

- In addition to its other negative features the Seneca Street off ramp also casts a shadow on to the site. The shaded area below the off ramp will increase its unpleasantness.

- The high buildings lining Post Alley keep it constantly shaded. This may be part of the reason for its minimal use. If sunlight could be brought into Post Alley on the Harbor Steps site, it could be a very distinct and drawing feature.

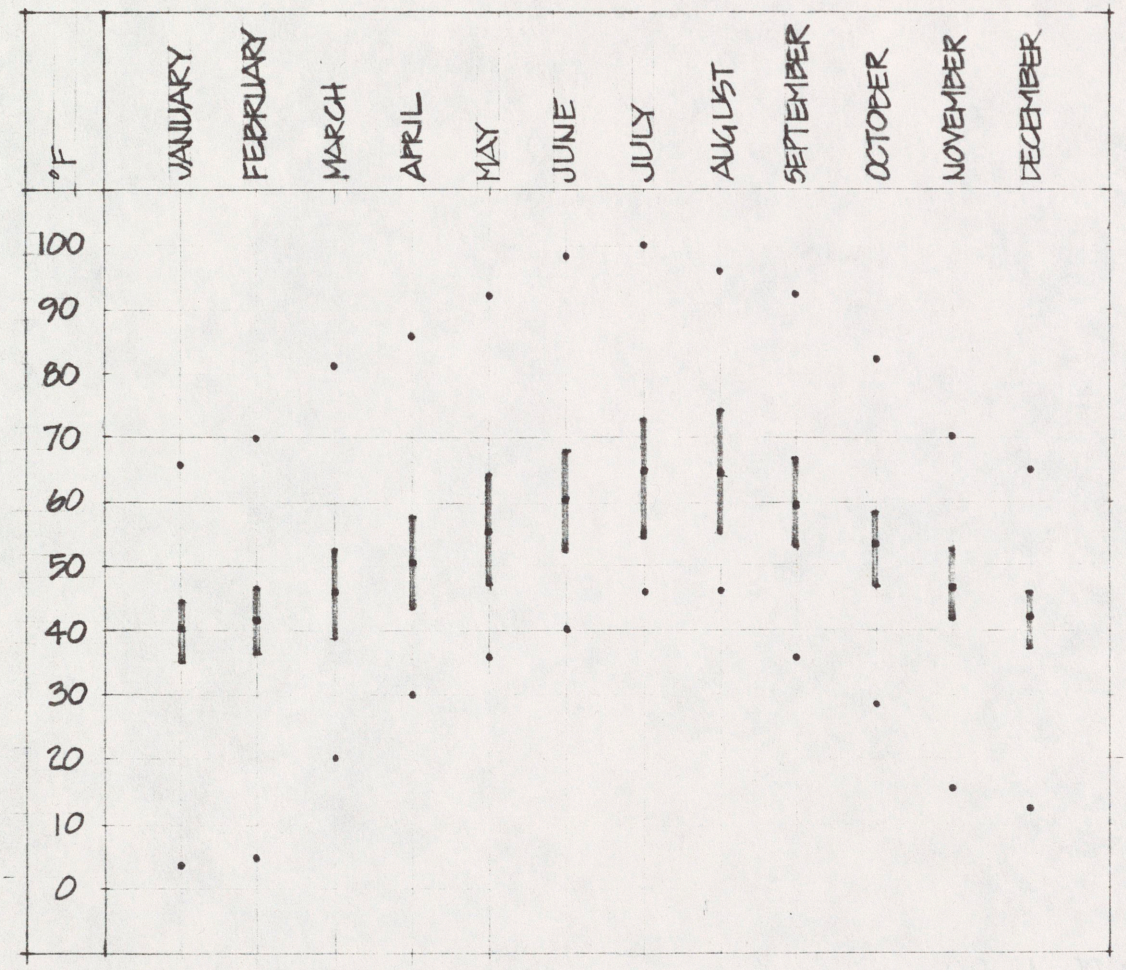

ENVIRONMENTAL FACTORS
1-5
6-10
HARBOR STEPS
SEATTLE WASHINGTON


1
2


5
4

CLIMATOLOGICAL SUMMARY

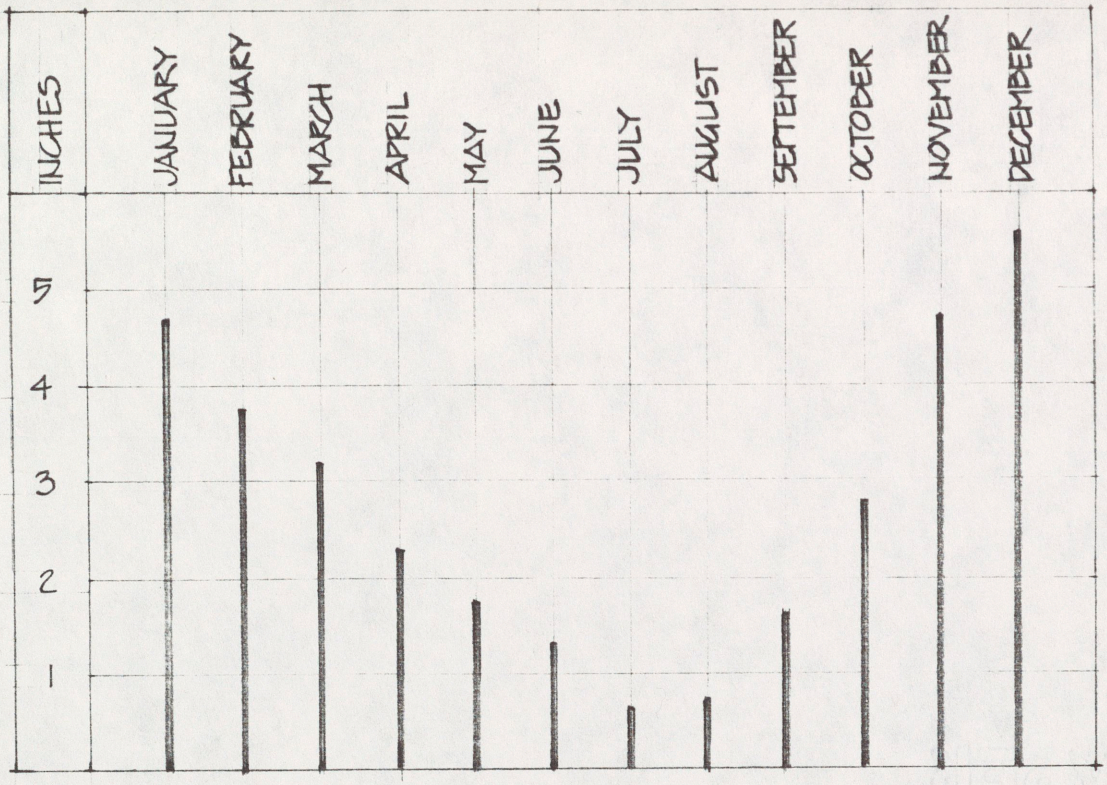
SEATTLE, WASHINGTON



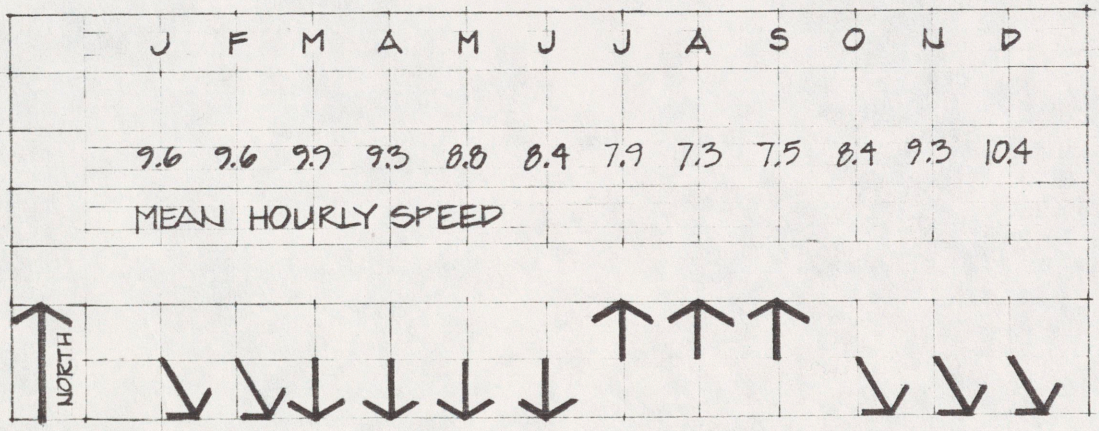
AVERAGE MONTHLY TEMPERATURES

DAILY MAXIMUM
MONTHLY MEAN
DAILY MINIMUM

• RECORD TEMPERATURE



MONTHLY PRECIPITATION (MEAN TOTAL)

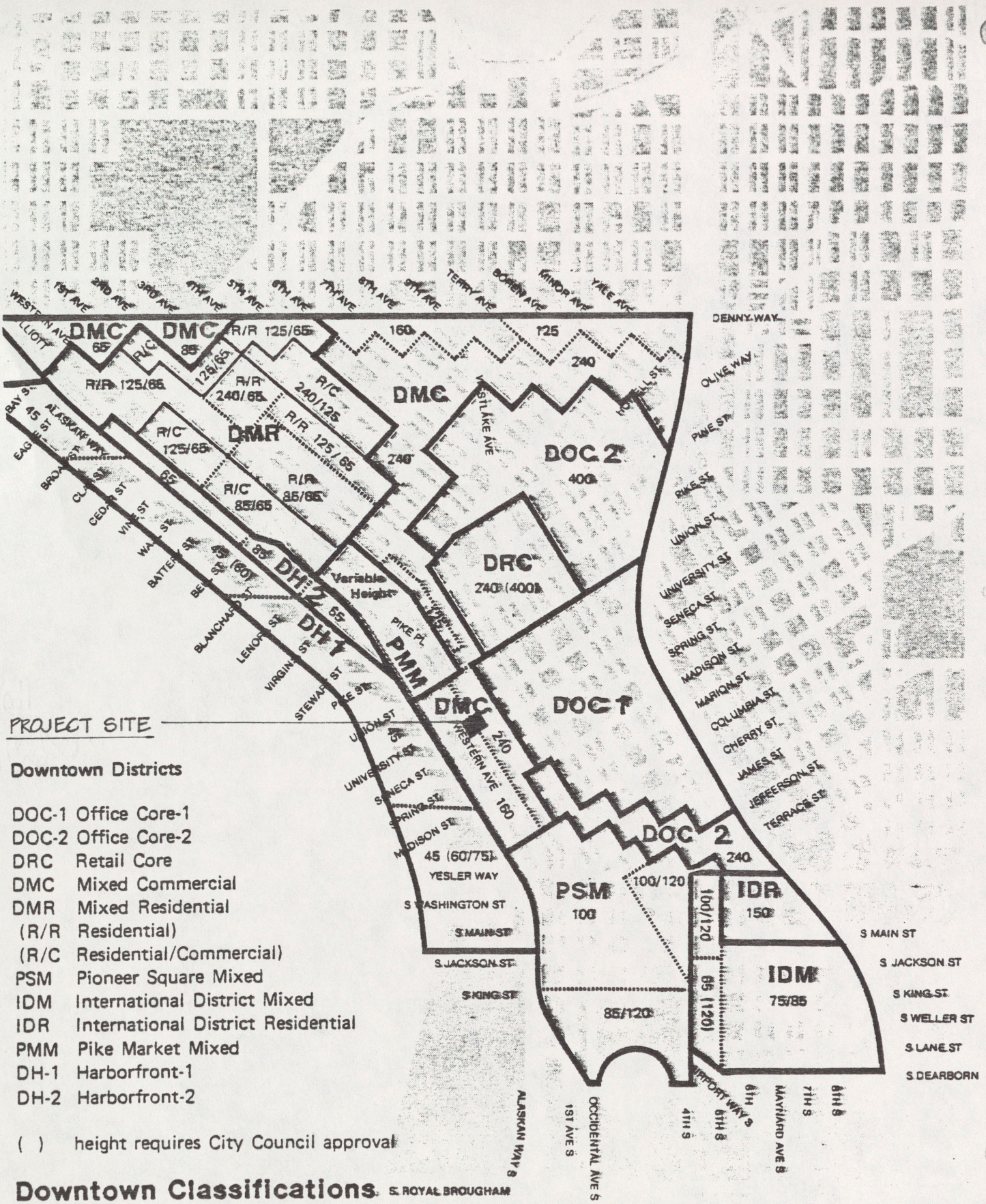


PREVAILING WIND DIRECTION

ZONING SUMMARY

This is a summary of the zoning regulations that were available to me and are currently in effect in downtown Seattle. I have outlined those requirements that I see being applicable to this project. Unless noted, my thesis project will comply with these regulations.

The information was collected from the Land Use and Transportation Plan for Downtown Seattle, adopted June 10, 1985, and a supplement to that document.



Downtown Classifications

July 1985

Downtown Mixed Commercial

- areas surrounding office core
  office expansion
  retail core
- transition in level of activity and scale of development
- lower density office and commercial
- housing and other activities which do not contribute substantially to peak hour traffic
- diversity

Permitted Uses:

- Harbor Steps complies with permitted use standards

Street Level Use Requirements:

- Applicable uses that qualify
  Retail sales and services, except lodging
- A minimum of 75% of each street frontage shall be occupied by uses listed above. The remaining 25% may contain other permitted uses or entries.

- Required street level uses shall be located within 10 feet of the property line or next to a bonused public open space. When sidewalk widening is required the 10 feet shall be to the line established by the new sidewalk.

Notes: The required side walk width on First Avenue is 18 feet. On Western Avenue, 12 feet. University Street park and Post Alley sidewalk widths are variable.

Accessory Parking:

- Accessory parking garages for both long term and short term parking permitted outright.

- Minimum requirements

MINIMUM PARKING REQUIREMENT SCHEDULE
(Spaces per 1,000 Square Feet Gross Floor Area)

USE	LONG TERM PARKING REQUIREMENT						SHORT TERM PARKING REQUIREMENT IN ALL AREAS
	Areas with High Transit Access			Areas with Moderate Transit Access			
	Unrestricted long term	Carpool	Total	Unrestricted long term	Carpool	Total	
Office	.54	.13	.67	.75	.19	.94	.1
Retail	.32	.08	.40	.56	.14	.70	.5
Other non-residential	.16	.04	.20	.16	.04	.20	None
Hotels	1 space per 4 rooms (all areas)						

- Minimum Carpool Requirement
  - 20% of the parking spaces shall be reserved for carpools
- Reduction in Long Term Parking Requirements
  - each carpool space provided in addition to the minimum shall reduce the total required by 1.9 spaces. May meet up to 50% of the total
  - each vanpool space provided shall reduce the total required parking by 6 spaces. May meet up to 10 of the total
  - provision of free transit passes to all employees shall reduce the total required by 15%.
- Exceptions
  - no requirement on residential usage
  - no requirement on the first 30,000 square feet of retail in areas having high transit access
- Maximum Parking Limitations
  - long term accessory parking in excess of one space per 1,000 gross square feet of floor shall only be allowed through review procedures

Floor Area Ratio:

- The floor area ratio (FAR) determines the gross floor area permitted.

- Permitted FAR (Applies to DMC Height Districts above 85')

Base	5
Maximum with bonus for Public Benefit Features	7

Note: The height districts of the project site are 240' and 160'. See the classifications map.

- Exceptions
  - All gross floor area in residential use
  - All gross floor area below grade
  - The gross floor area of public benefit features
  - All gross floor area used for accessory parking

- To allow for mechanical equipment 3½% of the gross floor area of a structure shall not be counted in gross floor area calculations.

- Height measurement are made at the midpoint of each parallel major street frontage. 15' in additional height is allowed for mechanical equipment if it covers less than 25% of roof area and is screened.

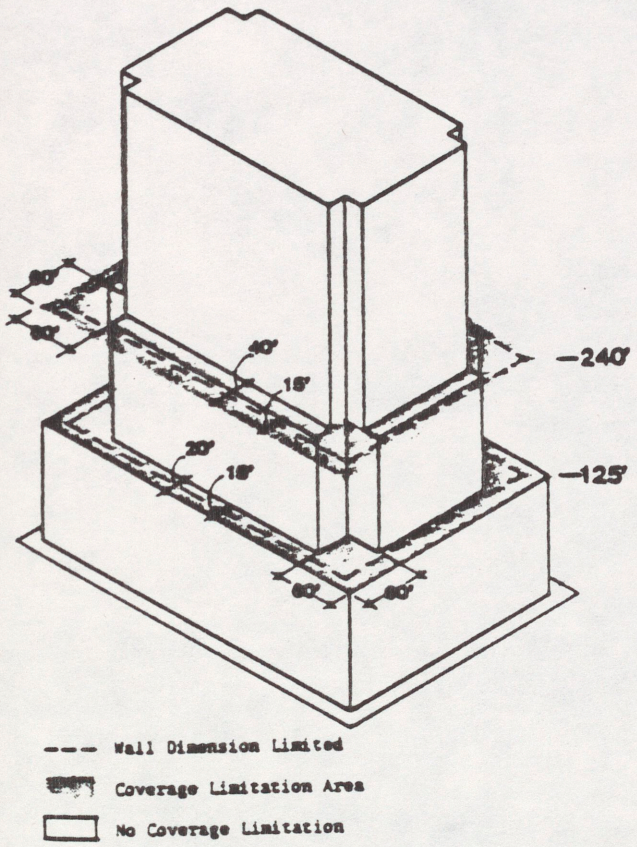
Public Benefit Features:

- Listed below are public benefit features and the corresponding bonus ratios. Only those features which affect Harbor Steps are indicated.

Public Benefit Feature	Bonus Ratio	Maximum area of Public Benefit Feature eligible for bonus
Retail Shopping	2.5	.5 times the area of the lot not to exceed 15,000 square feet
Street Park	4	1 times the area of the lot
Hillclimb Assist	1.0 FAR	
Hillside Terrace	3	6,000 square feet
Sidewalk Widening	3	Area necessary to meet required sidewalk width

- For the purposes of this thesis it will be assumed that the maximum FAR of 7 can be reached.

Upper Level Development Standards:



OFFICE AND COMMERCIAL AREA
UPPER LEVEL DEVELOPMENT REGULATION
(Sites less than 15,000 square feet exempt from regulation)

- applies to all structures in which any floor above an elevation of 125' exceeds 15,000 square feet.
- above 125' set backs are required as shown.
- lots with two or more street frontages that are 40,000 square feet or less in size may cover 40% of the coverage area limit shown above.
- to qualify as uncovered, at least half the area required to be uncovered must be contiguous and shall have a minimum depth of fifteen feet.
- the maximum length of facades above 125 shall be 120 feet. - separate facades must be at least 60 feet apart.

Pedestrian Street Classification

- First Avenue — Class I Pedestrian Street
- Post Alley — Class I Pedestrian Street
- University Street — Street Park
- Western Avenue — Class II Pedestrian Street
- Seneca Street — Class II Pedestrian Street

Street Facade Requirements:

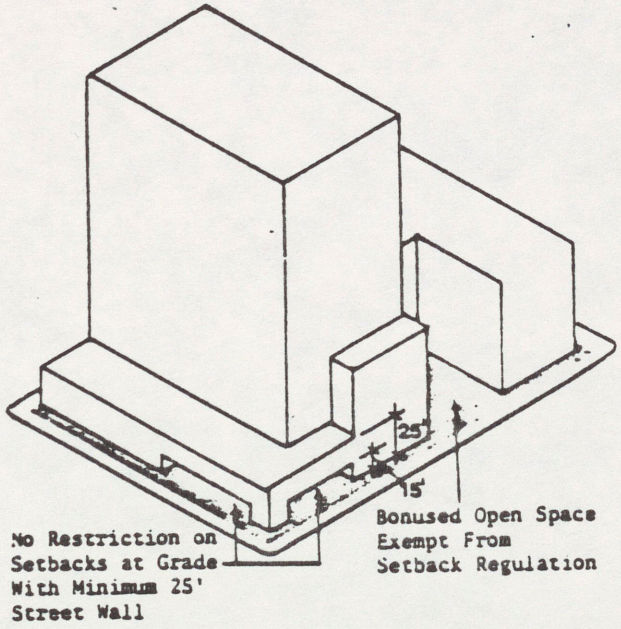
- Minimum facade height
  - Property line facade (First Avenue) — 35 feet
  - Class II Pedestrian Street — 15 feet
  - Street Park and Class I Pedestrian Street — 75 feet

Because of the unusual condition of Seneca Street (freeway off ramp) I will assume the stipulations of its classification do not apply.

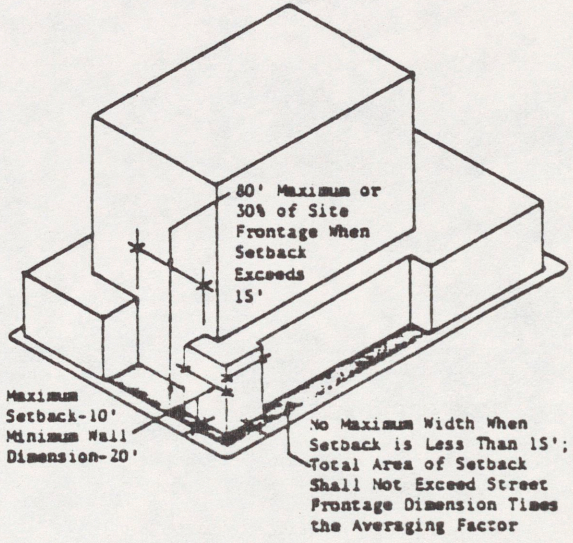
Facade Setback Limits:

- Setbacks are measured from the property line or the line established by widened sidewalk.

- General Setback Limits
  - averaging factor = 5 (Class I Pedestrian)
  - averaging factor = 10 (Class II Pedestrian)
  - bonused open space exempt from set back regulations

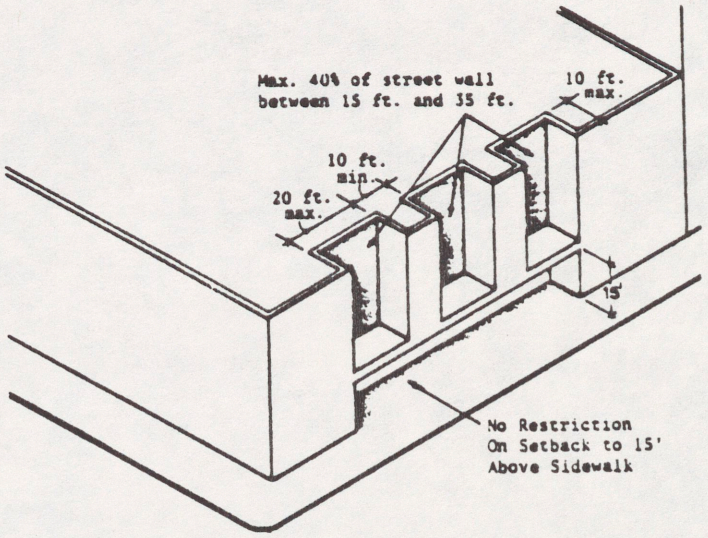


EXCEPTIONS TO SETBACK REQUIREMENTS



SETBACK REQUIREMENTS

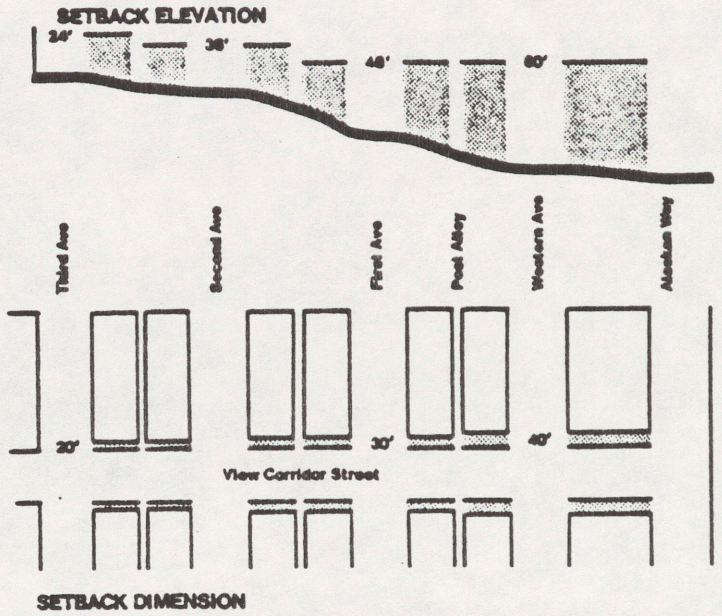
- Property Line Facade (First Avenue)



FACADE MODULATION EXCEPTION

- View Corridor Setbacks

- University Street is a designated view corridor. Set back dimensions and the height at which they occur are shown below.



Schedule A

Facade Transparency Requirements:

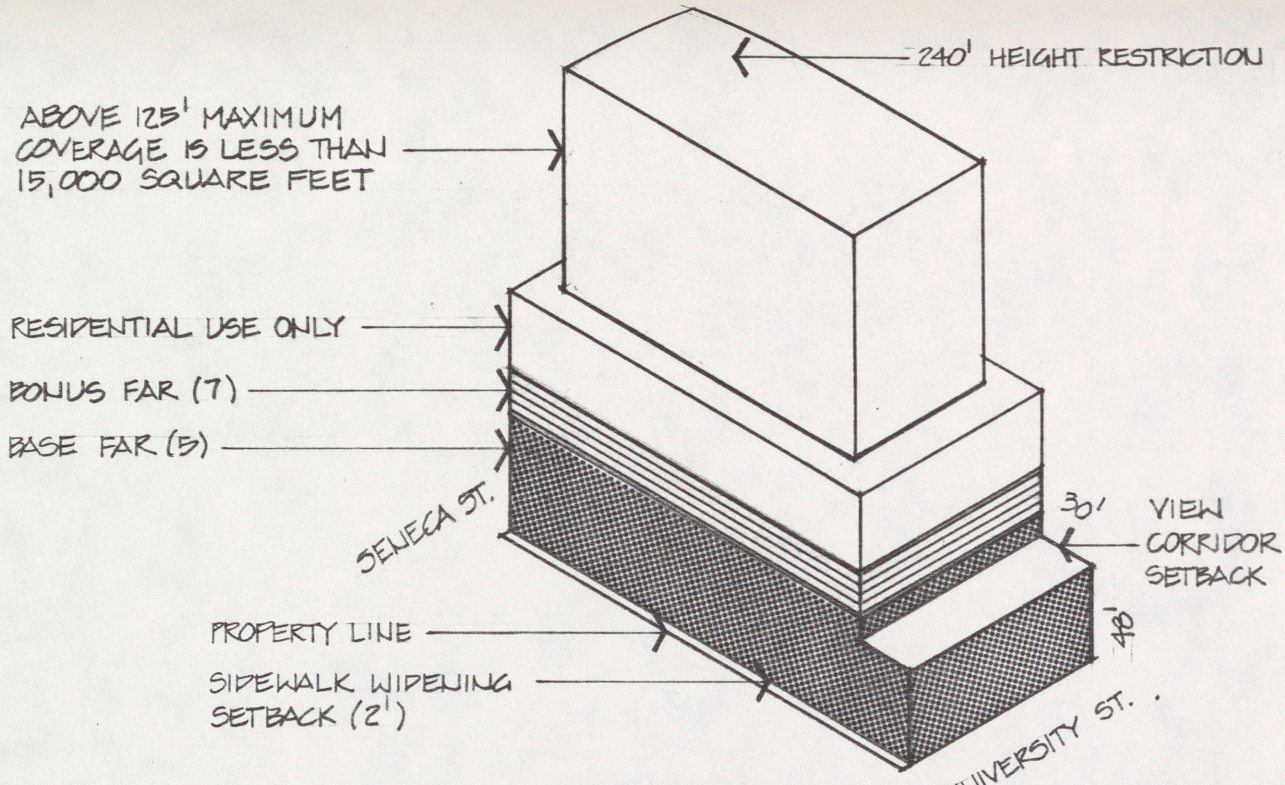
- applies between 2 and 8 feet above sidewalk

- Class I Pedestrian Streets and Street Parks
  - a minimum of 60% of the street level facade shall be transparent
  - when the slope of the street exceeds 7½% required transparency is 45%

- Class II Pedestrian Streets
  - a minimum of 30% of the street level facade shall be transparent

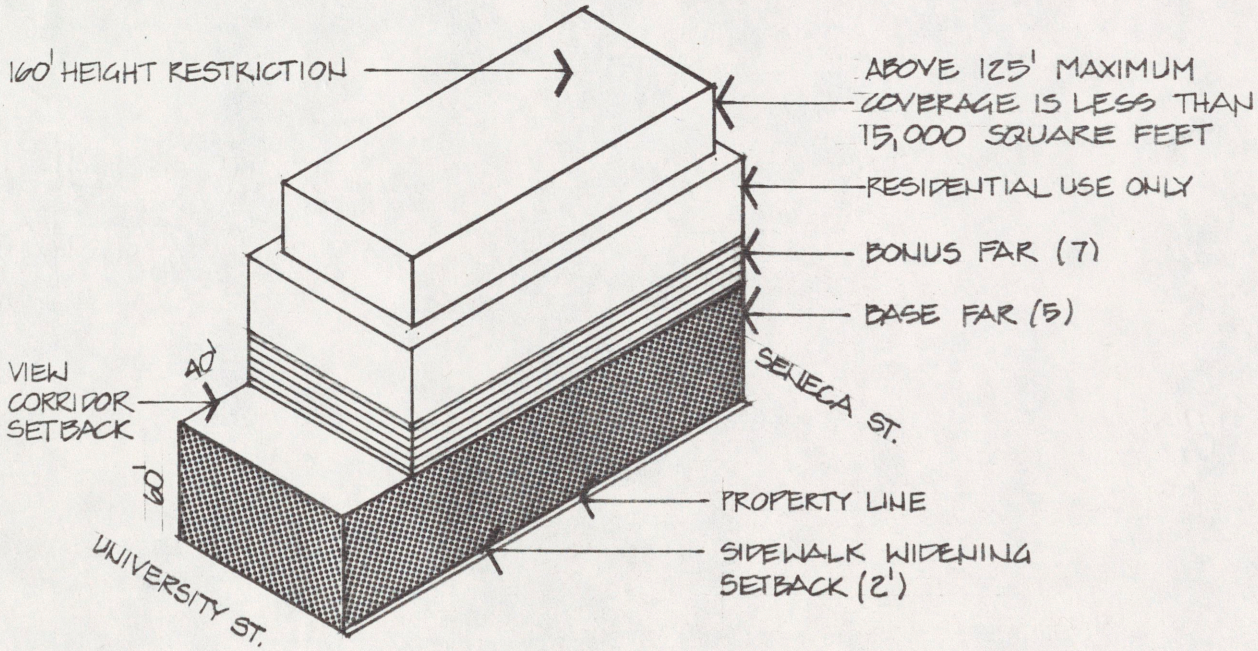
Blank Facade Limits:

- apply between 2 and 8 feet above the sidewalk
- any portion not transparent is considered blank
- blank segments separated by 2 foot wide transparent areas
  - total of blank facade segments shall not exceed 40% of the street facade, 55% if the slope of the street frontage exceeds 7½%
- Class I Pedestrian Streets and Street Parks
  - blank facades limited to 15 feet wide.
  - blank facade may be increased to 30 feet if the facade is enhanced by a feature of visual interest
- Class II Pedestrian Streets
  - blank facades limited to 30 feet wide
  - blank facade may be increased to 60 feet if the facade is enhanced by a feature of visual interest
  - total of blank facade segments shall not exceed 70%



FIRST AVE. FRONTAGE

1" = 100'



WESTERN AVE. FRONTAGE

1" = 100'

MAXIMUM BUILDING ENVELOPE ALLOWED BY ZONING

THE PURPOSE OF THESE DIAGRAMS IS TO ILLUSTRATE BASIC ZONING RESTRICTIONS ON THE MAXIMUM BUILDING MASS. THE POSSIBILITIES FOR OTHER MASSING CONFIGURATIONS WHICH CONFORM TO ZONING REGULATIONS ARE ENDLESS. THE MASSES SHOWN DO NOT NECESSARILY INDICATE A DIRECTION FOR INITIAL DESIGN.

PROJECT

HARBOR STEPS

The development of the Harbor Steps site has been undertaken by Harbor Properties, Incorporated, a Seattle based investment company. The research they have conducted to determine potential site development has been an extensive process that began over two years ago. The results of their comprehensive study will be the basis of the program analysis for my thesis project.

Because Harbor Properties is an investment company, their primary interest in Harbor Steps is profitability. Most major decisions in determining the types of uses and the corresponding square footage totals were based on financial feasibility and current market conditions. As a result of these considerations Harbor Properties has decided on a multi-use facility comprised of a hotel, residential condominiums, retail space, office space, parking, and public space.

The uses determined to be feasible by Harbor Properties seem appropriate and my analysis did not uncover any evidence to indicate otherwise. However, the building proposed by Harbor Properties is over sixty feet taller than other buildings in the area and will no longer comply with current zoning regulations which were adopted less than a year ago. For these reasons, the program I have developed will reduce the total square footage proposed by Harbor Properties. These figures are as follows:

HOTEL (160 units)	180,000
CONDOMINIUMS (85 units)	120,000
RETAIL SPACE	60,000
OFFICE SPACE	80,000
PARKING	122,500
PUBLIC SPACE (variable)	23,000
TOTAL	485,500

The figures for the hotel and condominiums will remain fairly constant while the size of the retail and office space will be flexible and will fluctuate through the design process.

In an additional phase of development at Harbor Steps, the warehouses directly north of the site will be demolished and replaced by new construction. A second residential tower of apartments is planned by Harbor Properties along with an athletic club and more retail space. While this phase is not included as part of my thesis, it will have an impact on the project's development.

HOTEL

Typical Hotel Guests

Hotel will attract guests of upper middle income or greater. Guests have expensive tastes and expect more than comfort and convenience. Below are the types of guests expected to occupy the hotel.

Commercial Traveler - 35%

- 2 - 3 nights
- rate insensitive
- low double occupancy
- values - facilities and amenities
  dining
  entertainment

Tourist/Transient - 25%

- varible length of stay, usually less than a week
- minimal rate consciousness
- double occupancy common
- 2 - 4 people in each party
- values - comfort and atmosphere
  proximity to tourist attractions

Conventions/Group Meetings - 34%

- length of stay determined by convention times
- large groups
- Values - proximity to major activities
  dining
  entertaining
  space for meetings and exhibits

HOTEL COMPONENTS

Lobby Area

Dining Facilities

Meeting Facilities

Support Facilities

Administration

Recreation

Guest Rooms

Circulation

Lobby Area

- The lobby area will give arriving guests their first impression of the hotel.
- Atmosphere should be warm and pleasant, yet with a touch of class and grandness.
- Natural light and an exterior view would be preferred.
- Traffic patterns should be efficient and easily identifiable.
- The lobby will provide access to a majority of hotel functions. (Guest rooms, dining, meetings, bar and banquets)

Lobby	3500 sq. ft.
registration desk	
seating and waiting areas	
telephones	
display areas	
Newstand and concessions	300
Bathrooms	500

Dining Features

- Dining facilities should accommodate not only hotel guests but customers who have come specifically to dine.
- Atmosphere should be quiet and relaxing
- Seating arrangements for intimacy and privacy
- Seating for 2 - 6 people
- Breakfast, lunches, dinner
- Bright and colorful throughout the day, candlelit and romantic in evening
- View and natural light preferred
- Large menu
- Outdoor expansion
- Room service and service to meeting facilities

Restaurant (seats 120)	2500 sq. ft.
Waiting area (may be within hotel lobby)	
Reception/Cashier	
Coat room	
Outdoor seating	
Private dining room	500

Bathrooms	350
Kitchen	3000 sq. ft.
Food Storage/pantries	
Freezer Room (meat/other)	
Refrigeration Room (meat/other)	
Food Preparation	
Cooking Area	
Baking Area	
Dishwashing	
Dish Storage	
Waitress/Waiter station	
Food Pick-Up	
Service Access	
Access to Banquet Room	
Cocktail Lounge/Bar	2000 sq. ft.
easy access from lobby, restaurant, and meeting rooms	
secure liquor storeroom	

Meeting Facilities

- Meeting facilities should accommodate a variety of formal and informal functions ranging from business group lunch meetings, convention workshops and small group meetings to banquets and large group meetings
- Seating and tables should be flexible in arrangement and number of people
- Accoustics and Strong lighting
- Professional stimulating atmosphere/not static
- Audio/visual aides capabilities
- Some guest rooms may be utilized for small private meetings

Pre-function area	2000 sq. ft.
(size may vary depending on proximity of lobby)	
Banquet Room	2400 sq. ft.
for use as large meeting room as well as a banquet room	
access to kitchen important	
include serving pantry	
Meeting Rooms	1600 sq. ft.
	800 (2 required)
Storage (chairs, tables)	350
Coatroom	150
Bathrooms	500

Support Facilities

- Effective support facilities are mandatory in a successful hotel operation
- Major priorities are functional efficiency, control, and a pleasant working environment
- These operations should not be visible to hotel guests
- Access to kitchen is important
- Service to the guests
- Employee entrance

Receiving Area (control of hotel inventory)	200 sq. ft.
Garbage Room	80
Loading/Unloading	100
Staff Lockers/Washrooms	1000
	1000
Staff Coffee Shop and Lounge	1000
Laundry, Uniforms and Valet	1800
Laundry Collection	100

Administration

- Involves all administrative management and financial functions which keep the hotel operating smoothly.
- Should present appropriate hotel image, professional and organized
- Buffered from guests
- Stimulating working environment
- These areas should be in close proximity to each other

Front Office (near main lobby)	1000 sq. ft.
Administration office	950
Manager	600
Business Center	550
Accounting Area (involves open office plan)	1500
Bathrooms	500

Recreational Facility

The recreation facilities will not be included in the scope of this project but are planned for a future addition. The roof top of the hotel's west wing has been designed to accommodate this facility in the future.

- The recreational facilities that a hotel offers are an important promotional feature
- The facilities should be safe, durable and easily maintained
- Fun and active environment
- Areas for relaxation and observation
- Outdoor (roof top) sun, breezes, view

Swimming Pool	5000 sq. ft.
2500 sq. ft. pool plus pool deck	
Jacuzzi	
100 sq. ft. pool plus pool deck	800
Exercise Room	600
	600
Saunas	100
	100
Patio	variable
Garden	variable

Guest Rooms

- The guest room should be a home away from home
- Clean, quiet, comfortable, intimate
- Contemporary decor
- Views and natural light preferred
- Outdoor decks possible

Approximate number of rooms 220

Square footage per unit

Economy - Luxury 350 - 420 sq. ft.

Suites (number to be determined) 700

Room Requirements

Sleeping area

Sitting area

Bathroom

Closet space

Vanity space

Room sleeping arrangements should vary to accommodate the needs of different guests

- one queen size bed
- two queen size beds
- two twin size beds

Each floor of guest rooms should have a vending area and a maid service room

Circulation

Verticle circulation within the hotel needs to be organized to accommodate the various separate functions. Verticle circulation for uses other than hotel needs also needs to be separate. These circulation patterns should be easily identified by the users.

Hotel guest elevators	3 minimum required
Hotel service elevators	2
Parking shuttle	2

service and guest elevators may service the parking garage and eliminate this area

Stairway exits

number varies depending on the size of the floor

The square footage for circulation within each floor will vary as the design develops. A reasonable estimate of the amount required has been included in the total square footage figure.

Mechanical

Space should be allocated for mechanical function. The square footage for this space has also been included in the total figure.

RESIDENTIAL CONDOMINIUM

Typical Condominium Household

Middle-aged or older couple

Single person

income: $70,000/year or less

motives: city and cultural amenities

less maintenance

proximity to work

criteria: location

views

building appearance

unit layout

Condominium Lobby

- This will be the main entry to the condominiums and must be identified by the condominium owners as part of their home.
- Intimate yet impressive atmosphere
- Contemporary decor
- Residential scale
- Security features

Lobby	800 sq. ft.
Doorman	80 sq. ft.

Condominium Units

- Open comfortable, cozy atmosphere - must feel like home, not another hotel room
- Views and natural light important
- Orient units to insure individual privacy
- Outdoor Extension

Approximate number of units 110

Unit Variations	Approximate %	Sizes
Penthouses	5%	3300 sq. ft.
3 bedroom	9%	1400
2 bedroom	35%	1100
1 bedroom	35%	800 - 1000
Studios	16%	650
	100%	

Price Range - $138,000 (studios) - 850,000 (penthouses)

Unit Requirements (penthouses will have additional amenities)

Bedrooms

Kitchen

Bathroom

Living Area

Deck

Storage

Laundry

Circulation distance from elevators should be kept to a minimum. Unit entries should provide some transition from public to private. Verticle circulation should be secure from access by non-residents.

RETAIL

Typical Retail Customer

On Site	
Hotel Guests	10%
Residents	2%
Office Workers	17%
Office Workers	
Primary Trade Area	15%
Secondary Trade Area	4%
Regional Benefits	
Primary Trade Area	7%
Secondary Trade Area	11%
Regional Trade Area	8%
Tourists/Visitors	26%

Retail

- The users listed above indicate the need for a high percentage of eating establishments and specialty shops.
- Also the character of the retail pedestrian corridors established by the contextural analysis seem to support this conclusion.
- Smaller shops and restaurants should be concentrated along the University Street Park and in Post Alley.
- Larger shops may be located on First and Western Avenues.
- The number of shops will be determined in the design process.
- Interior design of the retail space will be the responsibility of the retail tenant.

Potential Shops - Sizes range from 40 to 3000 square feet

Herbs and Spices	Popcorn
Flowers and vases	Toys
Rainwear	Women's Equipment
Chocolates	Apartment Furnishings
Cookies	Cheeses
Coins and Stamps	Posters and Framing
Cards and gifts	Puzzles
Woolen Sweaters	Ice Cream
Handbags	Convenience Grocery Store

Potential Eating Establishments

Cafe - cafeteria arrangement - breakfast, lunch, dinner

Delicatessen - lunches, snacks

Table cloth restaurant - lunches, dinners

Diner - all meals, snacks

Sizes range from 1000 - 4000 square feet

Total Estimated Square Footage 60,000

OFFICE SPACE

The office space will be designed for offices with smaller square footage requirements. It will not be planned to accommodate a major tenant.

Potential Users

Lawyers	Architects
Accountants	Graphic Designers
Opticians	Employment Agencies
Travel Agencies	Realtors
Development Companies	Financial Consultants

- Spaces should be planned for flexibility
- Open, stimulating environment, not institutional
- Natural light and task lighting
- Decks

Space Sizes range	1000 - 5000 sq. ft.
Main Entry lobbies (may vary)	3000
Bathrooms (each floor)	250
Verticle circulation (each floor)	1300 max.

includes 2 elevators, elevator lobbies, exit stairways (varies depending total floor area)

Total Estimated Square Footage 80,000

PARKING

Minimum Parking Requirements		
Office	long term	43
	carpool	10
	short term	8
Retail	long term	10
	carpool	3
	short term	15
Hotel	1 space/4 rooms	40
		129
Additional Parking		
Residential	1 space/unit	185
Hotel	guests	30
	employees	20
Additional		46
Total		310
Total Estimated Square Footage		122,500
@ 395 sq.ft./space		

GOALS

Post Alley will be developed to create a retail pedestrian corridor that is not only an internal focus but a link between the east and west areas of the site.

- The small amount of retail activity in Post Alley adjacent to the site will not support this development. However, a retail concentration at Harbor Steps may be a needed catalyst for improved activity.
- Interaction and access to Post Alley from a variety of areas will enhance activity in Post Alley and will strengthen the building's relationship to the alley.

University Street will be a major pedestrian corridor linking the downtown and the waterfront.

- This corridor will be developed as a street park with a variety of terraces, stairways and shops.

The intersection of Post Alley and University Street is a major focal point.

- This intersection must be treated as a termination of Post Alley that can become a nodal point if Post Alley is developed north of the site in the future.

A high degree of interaction between the various users of the project would create a stimulating and vital atmosphere. However the interaction should not go so far as to create confusion or a loss of identity for the building's functions.

It is very important for both the hotel and the office to have the image of a location on First Avenue.

- Hotel and office entries are from First Avenue.
- Condominium entry is not on First Avenue. The preferred address is University Street and should provide a transition from public to private space.
- Retail functions should be predominant at street level all around the building's perimeter.

The identity of each function should be expressed with an appropriate scale and character at specific points within the building and on the buildings exterior.

Respect the context of the surrounding architecture yet express a unique individuality.


IMAGE

IMAGE

The Image Board is a college of projects which I felt were successful and would be influential in my design process. The following list identifies the characteristics of those images that I saw as the reason for the project's success.

- surface articulation
- sculptured top
- historical reference
- tower plan shape
- color
- Seattle influence

FOOTNOTES

1. Mike Sion, "Ex-porno Area Now A Showplace," Seattle Times, 12 July 1985, p. 61.
2. Alf Collins, "The Setting," Arts and Architecture 4 (May 1985): 42-3.
3. D.C. "A Revived Market Maintains Its Identity," Architecture 74 (May 1985): 277.
4. Alf Collins, "The Setting," p. 43.

PHOTO CREDITS

Photography by Keith M. Comes, except those noted below.

Pg. 2, Harbor Steps site by Robert Pisano

Pg. 22, Water Mark Tower by Robert Pisano

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De Chiara, Joseph and Callender, John Hancock, ed.; Time Saver Standards for Building Types. New York: McGraw-Hill Book Company, 1973.

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