

# The PORTALS: a master plan proposal

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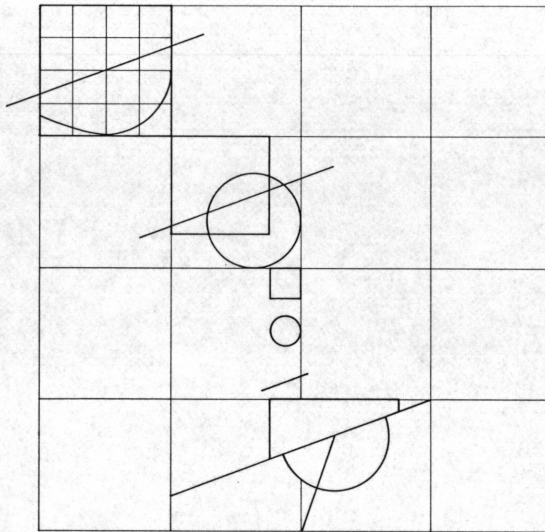
June 1988

Approved:

Jaan Holt, Chairman

William W. Brown

Milka Bliznakov



**Abstract**

The Portals proposal,  
"the restructuring of an isolated site into an existing urban fabric."

This weaving of the site back into the urban environment is accomplished by extending the project beyond the limits or boundaries of the site to try to increase pedestrian activity through the site and allow new access to the waterfront.

The project is a microcosm of the city in the sense that it provides a place to live, work, and play. Incorporating these elements into the program assures a rich variety of social relationships which is the key to the vigor and richness of life in the city.

*Every site is to some degree unique, a web of things and activities. The web must be understood; it imposes limitations; it contains new possibilities.*

Kevin Lynch

### Acknowledgements

In appreciation for the many hours of instruction and encouragement that my committee members have given me throughout this past year.

Thanks to my parents for their understanding and endless support. Special thanks to my father for devoting many long hours to assist me with his expertise and experience.

To my fiancée, . Without her love, spiritual support, and patience, I would never have been able to complete this thesis and attain my degree.



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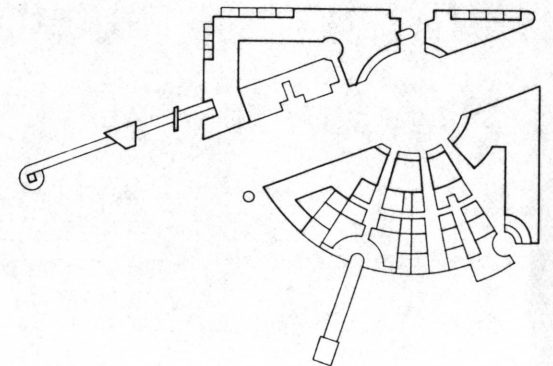
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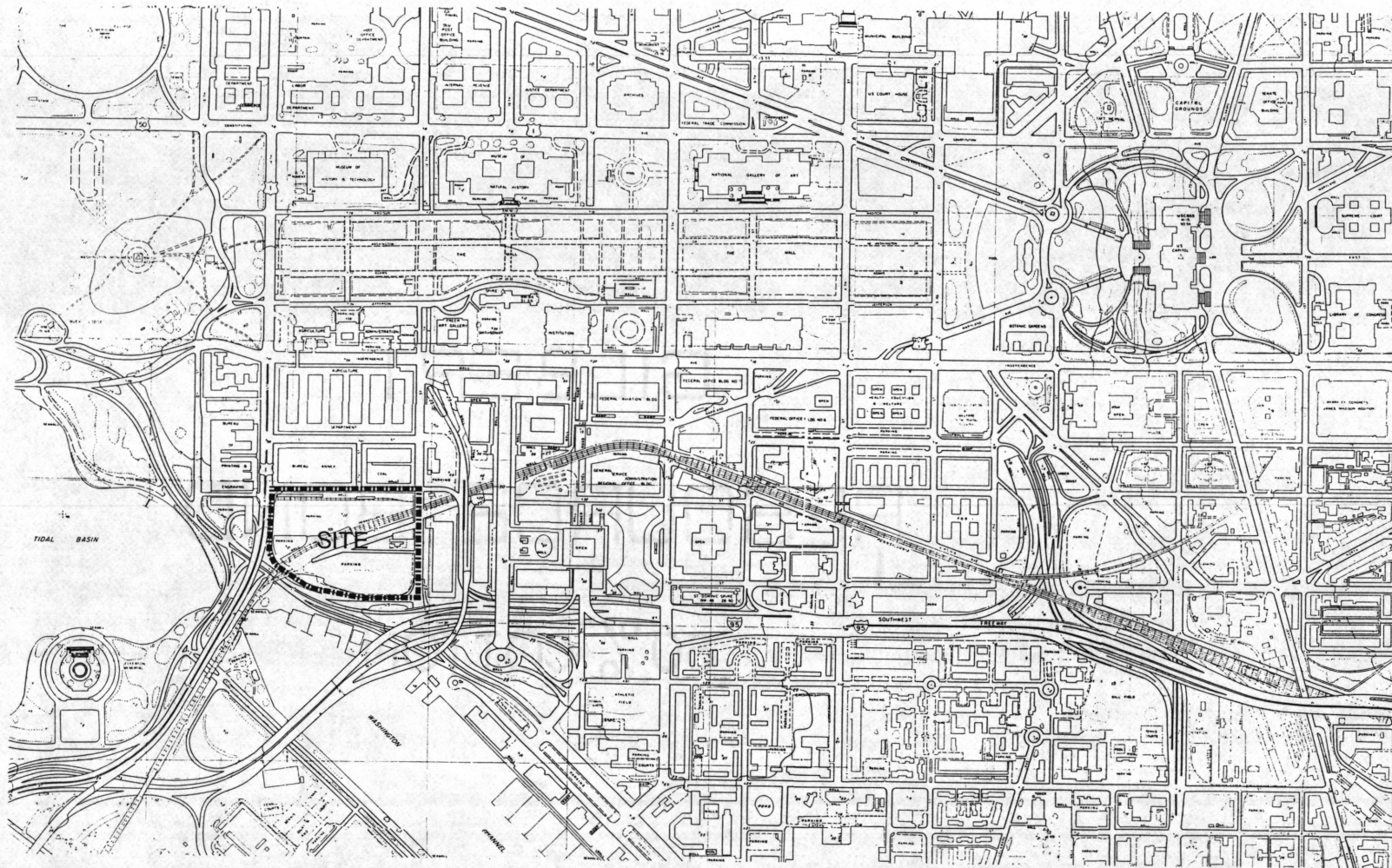
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### Site Conditions

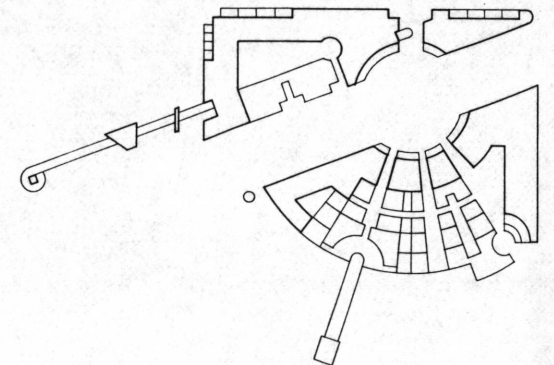
The site is located between 12th and 14th Streets, S.W., between Maine Avenue and D Street in the Southwest Redevelopment Area. The parcel of land is identified as Square 299 according to the Washington, D.C. Redevelopment Agency (R.L.A.) Urban Renewal Plan but it is more commonly known as the Portal Site. The site is aptly named since it is located at the head of the Fourteenth Street Bridge, one of the most important and heavily travelled entrances into Washington, D.C.. In addition, the site is located at the western edge of the Southwest Commercial Area and occupies the last area of land capable of physically defining and visually strengthening the U.S. Capitol-Jefferson Memorial axis along Maryland Avenue.

The Portal Site is one of the last large parcels of undeveloped land in the District. It is approximately 10 acres in size and is divided into north and south parcels of roughly equal areas by the Conrail railroad tracks running diagonally through the site along the Maryland Avenue axis. Unbelievably, the site is presently used simply as a parking lot for private vehicles.

The northeast corner of the south parcel is occupied by a project recently completed by Arthur Cotton Moore and Associates, but for the purposes of this thesis the site is considered to be clear of any built structures.

Grade changes in elevation are considerable within the site and are made evident by the massive 2 story retaining wall at the north end of the site, the railroad tracks which enter above grade at the west edge and exit below grade at the eastern edge, and the sloping hill leading down to Maine Avenue.

The Portal Site occupies a key location within Washington, D.C.. It offers a prime location to admire the vista between the U.S. Capitol and the Jefferson Memorial. It is in close proximity to the Mall, Tidal Basin, and Metro, which is beneficial to future site activity. In addition to this, the site commands a beautiful view of the Washington Channel and East Potomac Park beyond. These site amenities create an environment which is rich in experience and ideal for living and conducting business in.

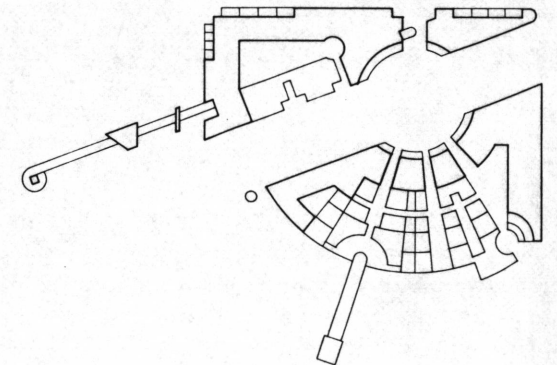
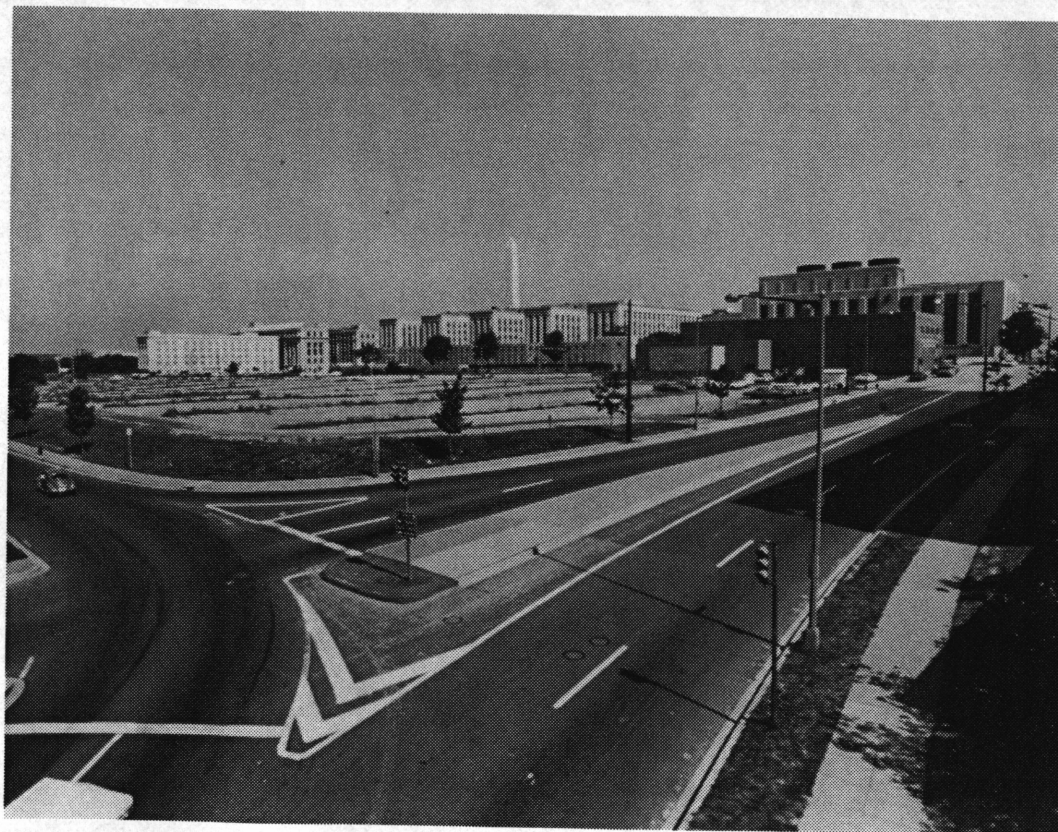


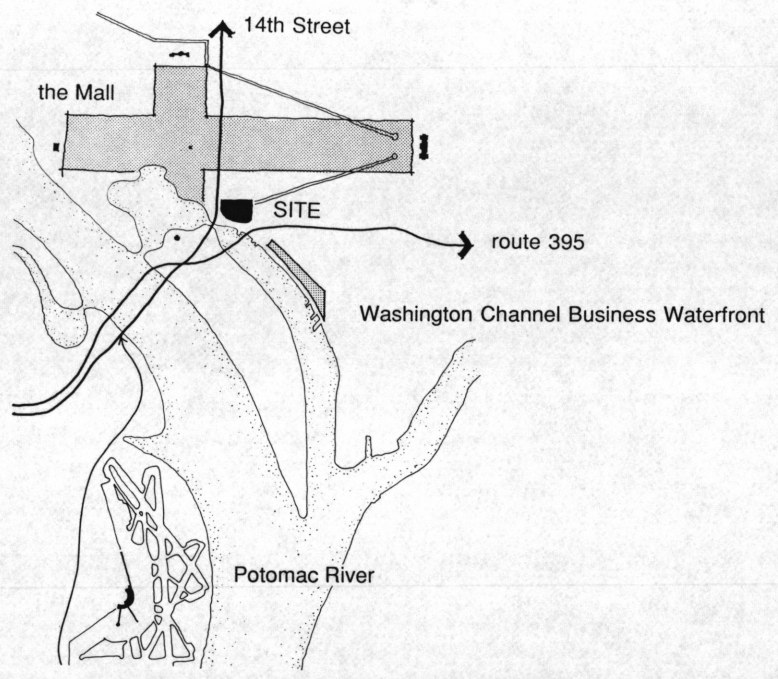


### Site History

The Portal Site is significant not only because of its location in relationship to the Fourteenth Street Bridge but also for the key role it plays in completing the Maryland Avenue axis. L'Enfant planned four major vistas in his plan for Washington, D.C. The U.S. Capitol-Washington Monument axis, i.e., the Mall, the U.S. Capitol-White House/Georgetown axis, i.e., Pennsylvania Avenue, the White House-Jefferson Memorial axis, and the U.S. Capitol-Jefferson Memorial axis i.e., Maryland Avenue. Of the four major vistas, only the Maryland Avenue axis remains incomplete. The terminal site along this axis before reaching the Jefferson Memorial, the Portal Site, remains undeveloped. Presently, this crucial point of land does nothing to physically define or visually reinforce Maryland Avenue.

This area of land is the last to be developed under the guidelines set by the Southwest Urban Renewal Plan. The plan, developed in 1956, called for almost total demolition of existing buildings. Other developments in this area include new residential townhouses and apartments, schools, churches, theaters, restaurants, boat clubs and L'Enfant Plaza (commercial office/retail space and hotel). In 1984 the R.L.A. held a competition to solicit development proposals for the Portal Site. Arthur Cotton Moore and Associates won the competition and their proposal has become a hotly debated issue in the Washington, D.C. area. Developers intend on breaking ground within a year, with final project completion by 1997. Arthur Cotton Moore's proposal is significant in that it was used as a point of departure for this thesis.





**Site Analysis**

The Portal Site is a semi-waterfront parcel of land approximately 453,977 square feet, or just over 10 acres in size. The site is bound on three sides by existing buildings and open to the waterfront on the remaining edge. To the west and north are the Federal Bureau of Printing and Engraving building, the Federal Bureau of Printing and Engraving Annex, and the General Services Administration (G.S.A.) Central Heating Plant. To the east stands the Blue Cross/Blue Shield building with L'Enfant Plaza beyond. The southern edge is open towards Maine Avenue, the Washington Channel, and East Potomac Park beyond. In terms of context there are two primary architectural styles present in the immediate vicinity. First, the government buildings to the west and north are typical examples of Washington D.C.'s Neo-classic/Federal style. The buildings to the east are in the 1950's-1960's Modern style typified by L'Enfant Plaza. All of these buildings are very large and monumental in scale and not at all inviting to the pedestrian at street level. None of the buildings immediately surrounding the site have any redeeming qualities which warrant any attempts at emulation. The more important contextual issue in respect to the existing buildings is the proportion to the street which they begin to establish in their massing. They all follow the much criticized, low building height, wide boulevard scheme set forth by L'Enfant.

Three primary views exist on the site. Presently the most noticeable is the view towards the Washington Channel, which is very quiet and charming, if one could disregard Maine Avenue. This is most definitely the best amenity the site has to offer. Two other views are presently hard to perceive due to the dramatic changes in elevation between 12th Street and the site. First, is the view towards the Jefferson Memorial which, at the site's present elevation is partially hidden behind a screen of trees. Second, is the vista towards the U.S. Capitol which is almost impossible to perceive from the site's lower elevation.

Pedestrian activity is quite high in this locale due to the close proximity of the Mall, the Tidal Basin, and the Smithsonian and L'Enfant Plaza metro stations. The highest concentrations of activity are about 12th and 14th Streets. This lack of accessibility is almost entirely due to the presence of Maine Avenue. It seems clear that in order to encourage pedestrian flow thru the site, obstacles such as roadways, guardrails, and fences must somehow be removed to allow people access to the waterfront. Another point which becomes apparent after further study is the lack of continuity along the waterfront between the Tidal Basin and the Washington Channel Business Waterfront. Under present conditions it is almost

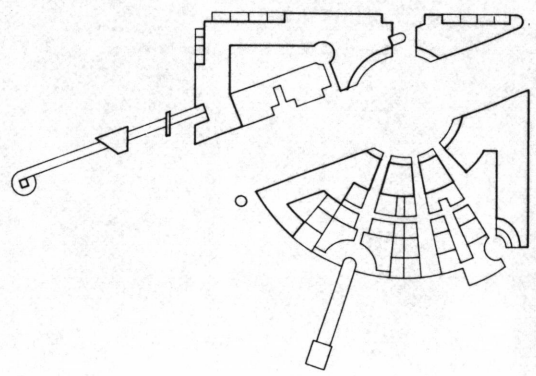
impossible for pedestrians at the Tidal Basin to perceive this connection, making the link very weak, visually and physically. The Portal Site seems to have an opportunity to somehow bridge this gap and try to encourage pedestrian flow from the very busy Tidal Basin down towards the Washington Channel Business Waterfront area.

As previously mentioned, vehicular traffic flow is very heavy along the 14th Street Bridge and route 395, which feeds into 12th Street. To add to the difficulty of heavy traffic flow is the fact that access to the site is severely limited. There is no access directly off of "D" Street due to G.S.A. operations. The only access to the northern parcel currently is the "G" ramp off of Main Avenue. The southern parcel is accessible by way of this ramp or 12th Street. The most logical point of entry appears to be somewhere in the vicinity of the 12th and "D" Street intersection. It also seems reasonable to expect the local government to expect the lost parking area to be somehow replaced or augmented by the new development proposal. The last point in question, in relation to vehicular traffic patterns, is how the Portal Site can somehow reinforce the sense of entry into the city since it is located at the head of the 14th Street Bridge, ie. how can it act as a "Portal" to Washington D.C. for incoming vehicular traffic?

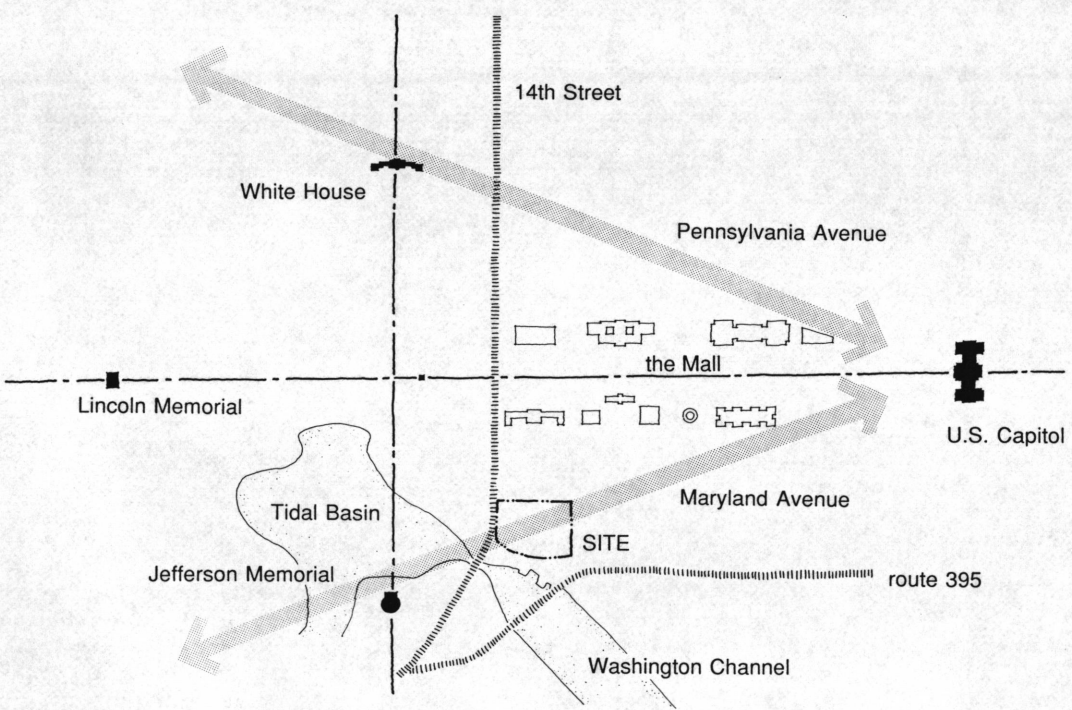
The Conrail railroad must remain in operation but air rights to build over the tracks are a distinct possibility. While actual use of the tracks is infrequent at best, noise problems may become a concern. General city background noises such as automobile and air traffic from National Airport are to be expected but are no greater in intensity than in any of the adjacent areas of the city and thus are considered to be negligible. The size of the development proposal should be of sufficient magnitude that vibrations and airborne noise from the railroad tracks should be sufficiently screened and dampened from the main public areas of the site by building massing.

Test borings prepared in 1955-56 indicated that favorable soil bearing conditions exist to support multi-story buildings with proper foundation design. A structure approximately 90 feet in height above grade is possible provided the structure rests on driven piles. The maximum flood stage in this area based on 50/100 year flood is elevation 12 feet. This elevation is only a concern along Main Avenue where entrances to structured parking may occur.

Control of the development of the Portal Site is currently administered by the R.L.A.. Development of the site conform to the Southwest Urban Renewal Plan, which designates the Portal Site as limited second commercial. This zoning allows commercial



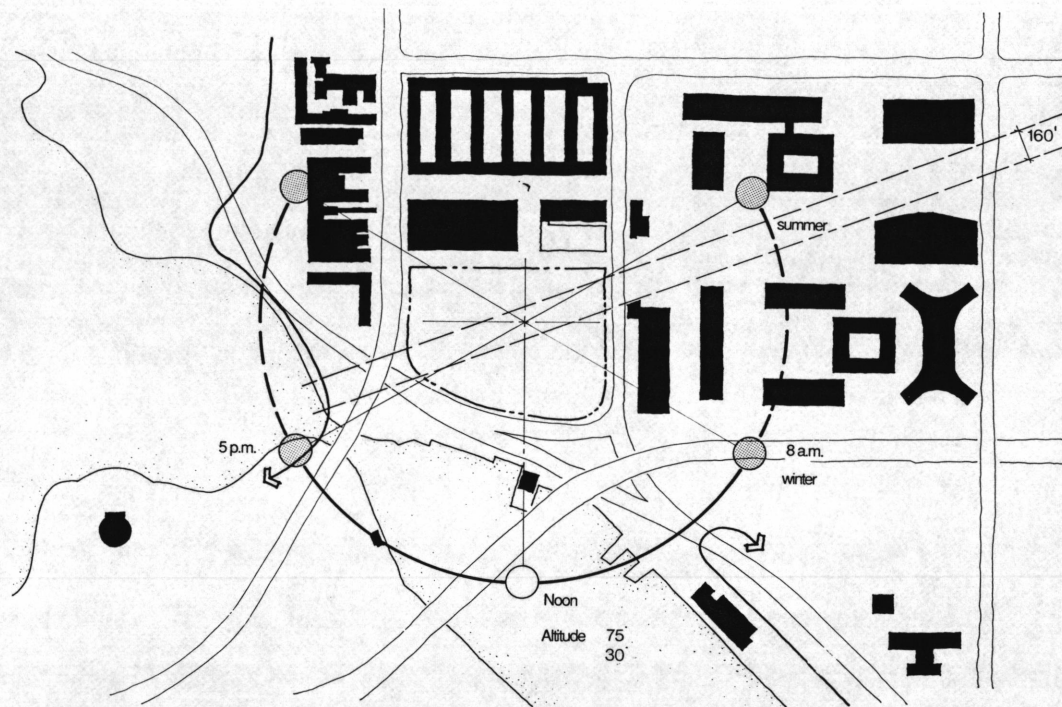
**TRAFFIC GENERATORS**



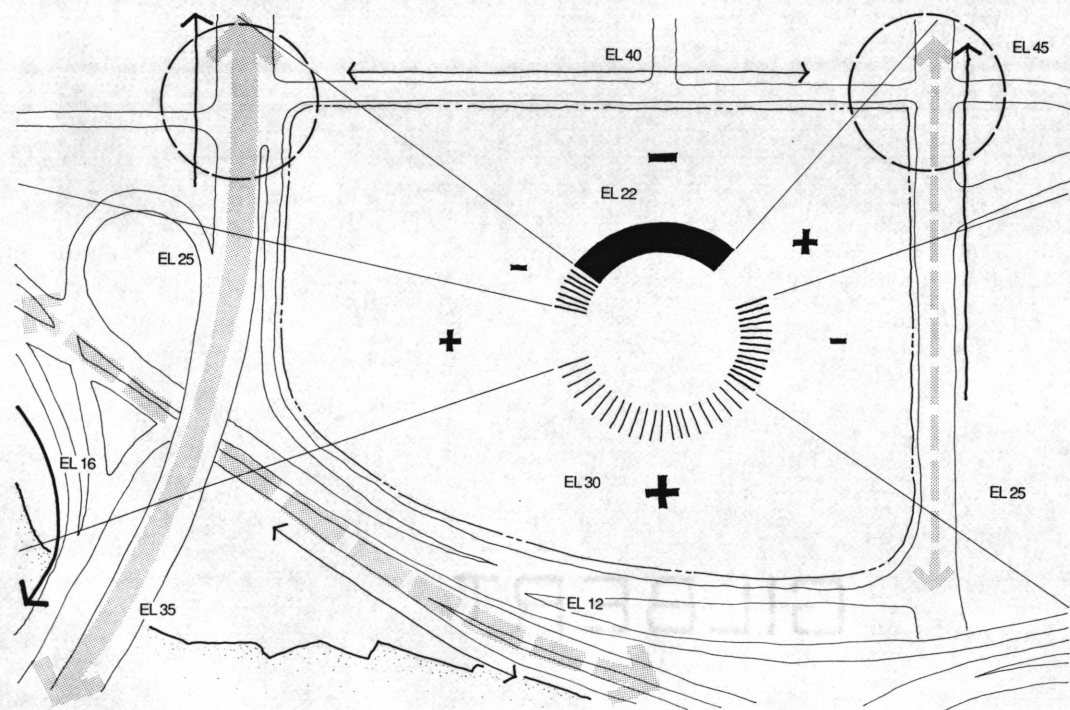
**AXES & VISTAS**

*In Order is creative force.  
In Design is the means.  
Design is form making in Order.<sup>2</sup>*

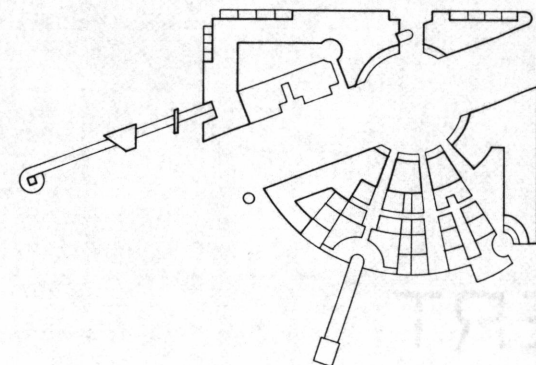
L. Kahn



FIGURE/GROUND, SUNPATH



VIEWS, PEDESTRIAN & VEHICULAR CIRCULATION



...with architects constrained by their programmes to site boundaries and planners reluctant to engage in a serious debate on matters of detailed physical form this has been the primary reason for the emergence of urban design.<sup>3</sup>

office and retail space, but does not allow residential dwellings except hotels or motels. The most notable restriction is the 160 foot right-of-way for Maryland Avenue in which nothing can be built which would obstruct the vista between the U.S. Capitol and the Jefferson Memorial. Maximum land coverage is 75 percent with an increased building height of 5 feet allowed for each 4 percent decrease in land coverage. The maximum building height allowed is 60 feet with an absolute maximum height at 80 feet allowing for the reduced coverage incentive. The off-street parking requirement for this zoning is 1 space per 2400 square feet. The last zoning requirement applicable here stipulates that the G.S.A. has to be allowed to maintain their coal plant along "D" Street which services their Central Heating Plant.

From this brief analysis it is possible to draw several conclusions. The Portal Site has the potential to increase the "legibility" of this urban area in three ways. First, as a key point of entry to Washington D.C. from Virginia via the 14th Street Bridge. Second, it could reinforce the Maryland Avenue axis by visually strengthening the definition of the 160 foot right-of-way. Lastly, the site offers an opportunity to clarify the District's edge/waterfront condition.



**Master Plan: Program**

The master plan should address 3 key issues as previously mentioned in the site analysis. First, it should take advantage of the site's edge/waterfront condition. Second, it should reinforce the Maryland Avenue axis. Third, it should make a gesture towards creating some sort of gateway or "portal" condition at the head of the 14th Street Bridge. In order to develop a master plan that will be a viable solution economically for such a large parcel of land in such a key location, it seems logical that a multi-use proposal should be considered. In recent years architects, planners, and developers have begun to realize that single-use zoning is not effective in tight urban settings. In order to create new interest and revitalize downtown areas, more and more projects are designed as multi-use proposals which allow the integration of private development with public amenities. This seems to be a reasonable approach towards site development for the Portal Site. Private development is a catalyst for growth and should be interested in investing in such a choice site. This development will also make the waterfront and dramatic civil vistas more accessible to the general public.

Arthur Cotton Moore's competition winning proposal calls for such a multi-use project and was therefore adopted and used as a point of departure for the master plan program. His proposal calls for approximately 2.2 million square feet of commercial office and retail space, hotel, theater, and community center (this figure excludes the proposed structured parking). It seems reasonable to use Arthur Cotton Moore's proposal, which is actually to be developed, as a basis for comparison to see how realistic, economically, this proposal will be. I believe that an innovative design which makes a strong gesture towards the waterfront can command a high price and thus justify a slightly lower density. In order to make this project a true asset to the city and local community is must incorporate a more permanent residential element than just a hotel, or risk falling prey to a lack of evening weekend activity like neighboring L'Enfant Plaza. To avoid this problem, condominiums have been introduced which, when combined with shops and restaurants, will give life to the project during evenings and weekends as well as weekdays. With this addition to the program the Portals will be a true "multi-use" project that will offer city residents and visitors a place to "live, work, and play."

The master plan proposal will deal with simple forms and indicate overall order, theme, or criteria for growth. It shall indicate building height, massing, density, circulation patterns, focal points, and service systems. The master plan shall create the crucial link which will connect the Federal City of the Mall to the vitality of the residential and business life of the Washington Channel Waterfront area.

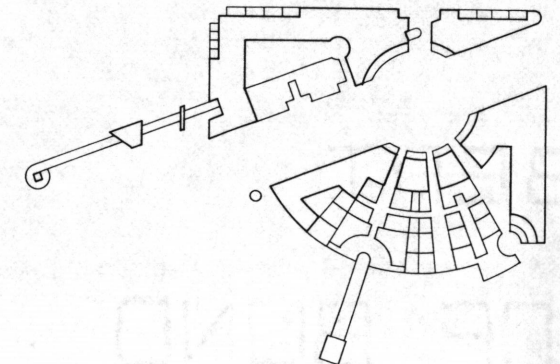
The following square footage figures are provided to give an indication of project scope and density.

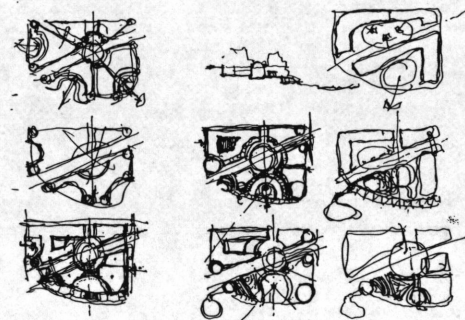
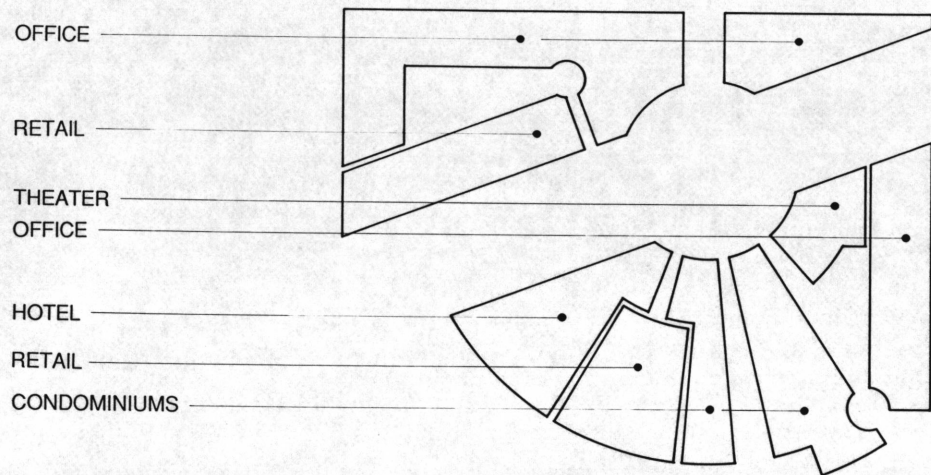
7 story maximum building height @ 80 feet.

Parking required by code	540 spaces
Parking provided	865 spaces
Commercial office	750,000 sq. ft.
Commercial retail	130,000 sq. ft.
Hotel	120,000 sq. ft.
Theater	20,000 sq. ft.
Condominiums	250,000 sq. ft.
Total (excluding parking)	1,270,000 sq. ft.

Approximately 60% site coverage.

Project density 60% of actual proposal.





**Master Plan: Concept**

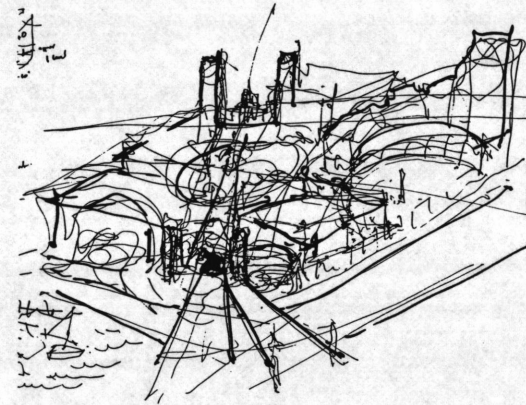
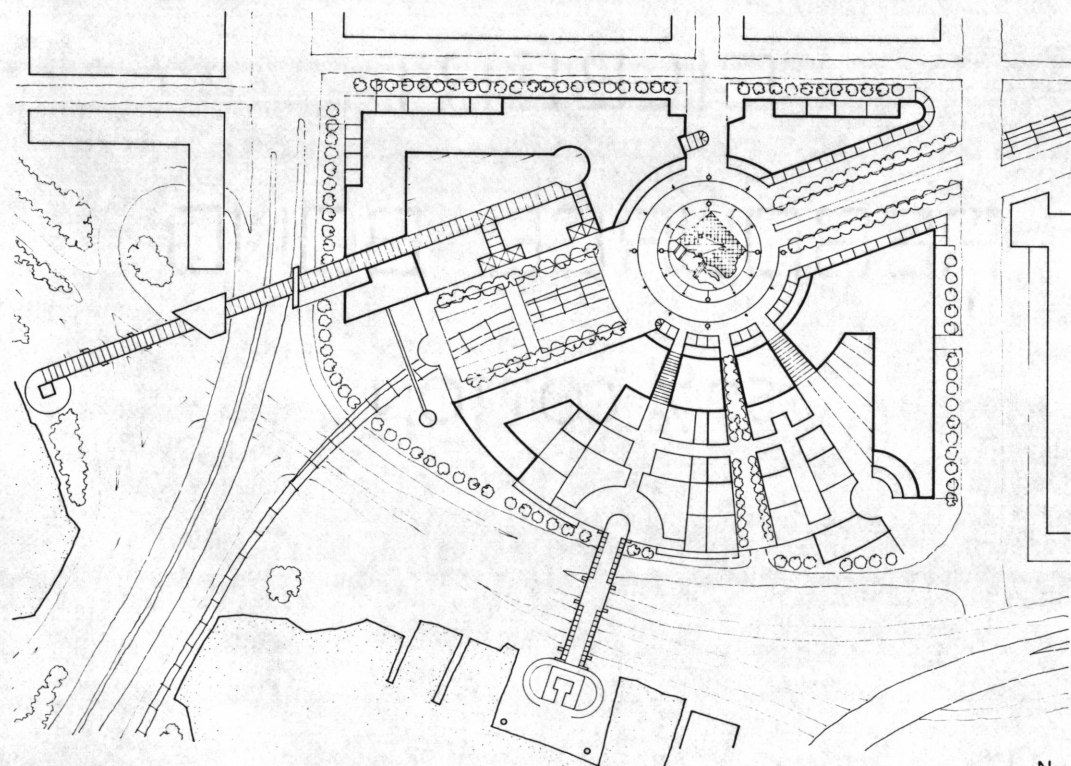
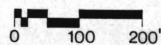
One of the goals of this thesis is to not only derive a general master plan solution but to also give architectural reality to a portion of it. This is done to demonstrate an ability to deal with large and small scale problems ranging from overall land-use strategy to a detailed study of architectural elements.

The Portals master plan is a multi-use proposal which restructures an isolated site into an existing urban fabric. Key features include; two pedestrian bridges leading from the site to the Tidal Basin and to the Washington Channel Waterfront, an envelope of commercial office blocks arranged about a central auto court, hotel, community theater, shops, restaurants, and condominiums, all enjoying a dramatic view of the waterfront. All functions rest on a podium level elevated above Maine Avenue with structured parking and service entries below. Major structure is flat-slab and reinforced concrete construction on a 26' x 26' grid. Basic materials are concrete, limestone, and brick. Maximum building height is 7 stories with a maximum of 2 levels of subsurface parking. Office blocks are arranged about outdoor courtyards. The hotel and theater enjoy access directly off of the central circle. Commercial retail occurs at podium level underneath office, hotel, and condominium spaces. The hotel is organized about a central enclosed atrium which enjoys a spectacular view of the waterfront. The main pedestrian street leading to the waterfront is lined with shops and restaurants, and steps down towards the waterfront. The condominiums are terraced in order to maximize the number of units with views towards the river.

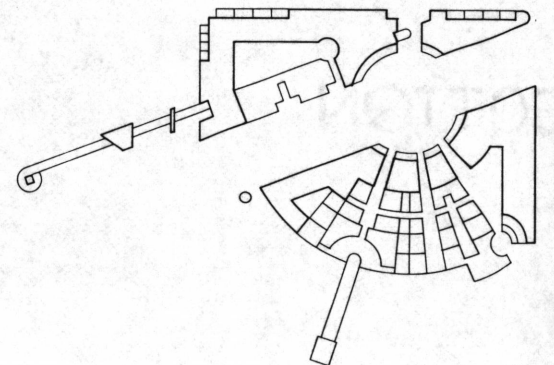
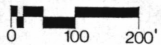
One of the major issues is the site's relationship to the waterfront and the fact that it does not take advantage of its edge condition or reinforce the existing city fabric. L'Enfant's basic concept for the capital city was the meeting of the city and the river, a merging of the city with natural forces of the region. The master plan maximizes views towards the waterfront by setting all functions on an elevated podium level. Heaviest massing occurs at the site perimeter enclosing the site and insulating the interior from external noise pollution. The office blocks respond to the city grid and respect existing street scale and proportions. Enclosing the site with this strong edge or backdrop allows the site's interior to break away from the restraining grid pattern and respond to the sensuous curve of the water's edge.

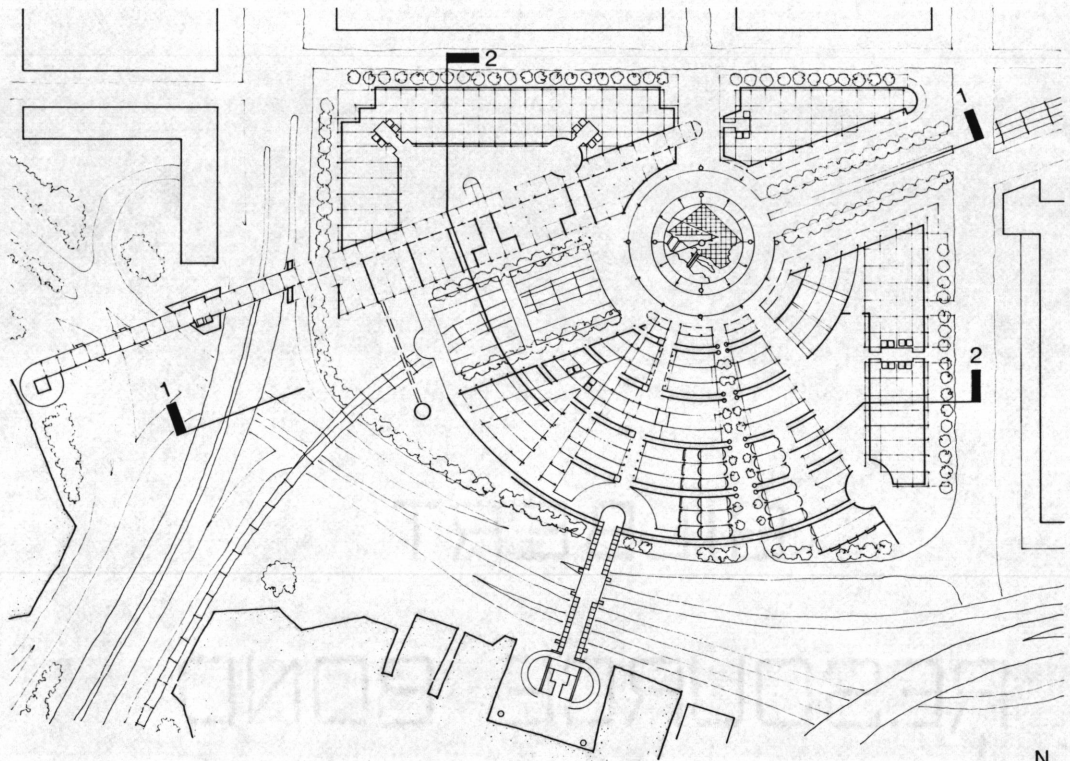
The solution contrasts geometries and orders. Three sides of the site respond to the order of the grid of the surrounding city, while the fourth side responds to the curve of the waterfront. For commercial office space, the grid allows free space planning and

**PROGRAM DISTRIBUTION**

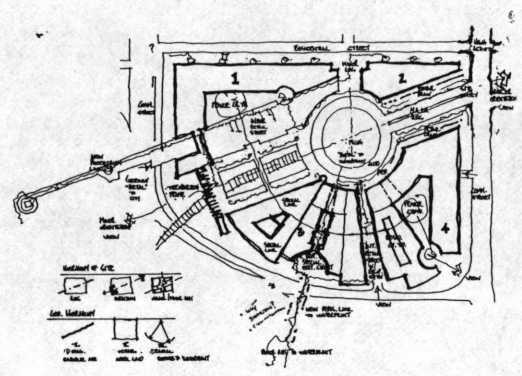


**ROOF PLAN**



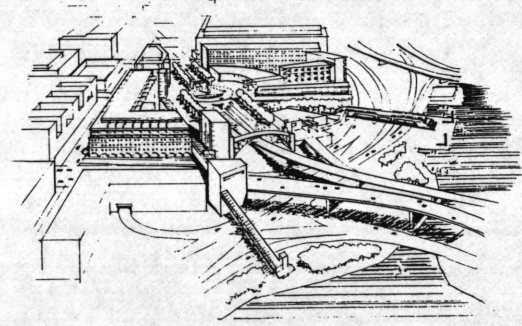


PLAZA PLAN

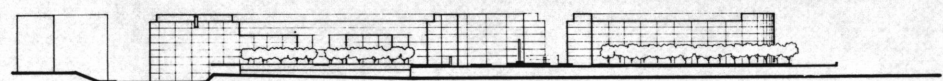


flexibility. A series of radiating spaces and circumferential walls generated from the interior focus organize interior project elements. The circumferential walls maximize waterfront exposure and also indicate service cores, points of vertical circulation, storage areas, major structure, and living zones.

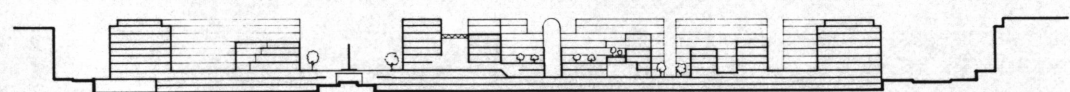
Site entry occurs at the "D" and 12th Street intersection along the Maryland Avenue axis. Entry points to subsurface parking occur along 12th Street, Maine Avenue, and the "G" ramp from Maine Avenue. Building massing creates a clearly defined edge visually strengthening the Maryland Avenue axis. The focus of the project uses a point in space as an organizing force. The focal point occurs at the intersection of Maryland Avenue and 13th Street and generates a circular vehicular drop-off court. The circle is a symbolic space and a focus for diverging avenues. An obelisk identifies the focal point and in conjunction with the circle, acts as a sundial marking the passage of time. Surrounding the obelisk is an inlaid map of area identifying the site and showing observers the site's relationship to the city, river, and the Virginia riverfront.



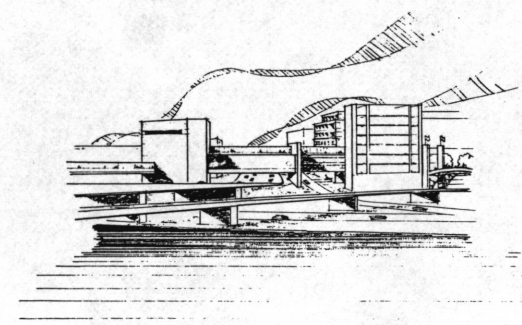
Streets are the arteries or lifelines of the city but today they are mainly for the automobile, we have forgotten about the pedestrian. In order to solve the problem of lack of pedestrian access to the waterfront a new linkage is established. This new link becomes a pedestrian "street" which dramatizes the extension of the project beyond the boundaries of the site towards the river. Two major pedestrian paths are created. First, an open air bridge spanning over Maine Avenue radiating from the focal point and terminating at the water's edge. Second, an enclosed pedestrian walkway bridging our 14th Street and Maine Avenue connecting the site to the Tidal Basin. This bridge also acts as a gateway or "portal" to the city by creating a mass that vehicular traffic must pass under thus giving a sense of passage and transition. The new accessibility to this section of waterfront should encourage pedestrian flow through the project and new life and vitality to the small marina, thus creating the crucial link between city and river, and between the Tidal Basin and Washington Channel Business Waterfront area.



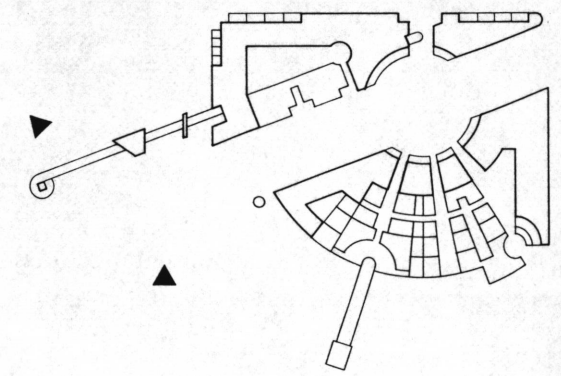
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2-2



Architect: [unreadable]



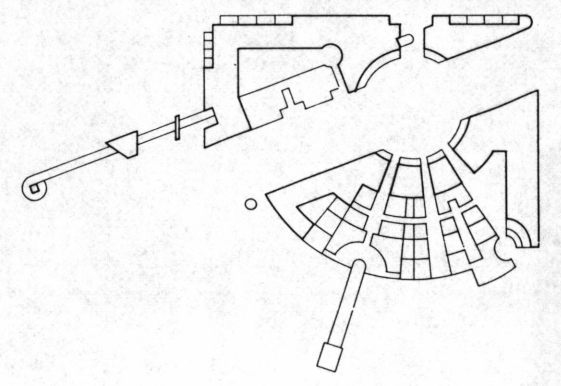
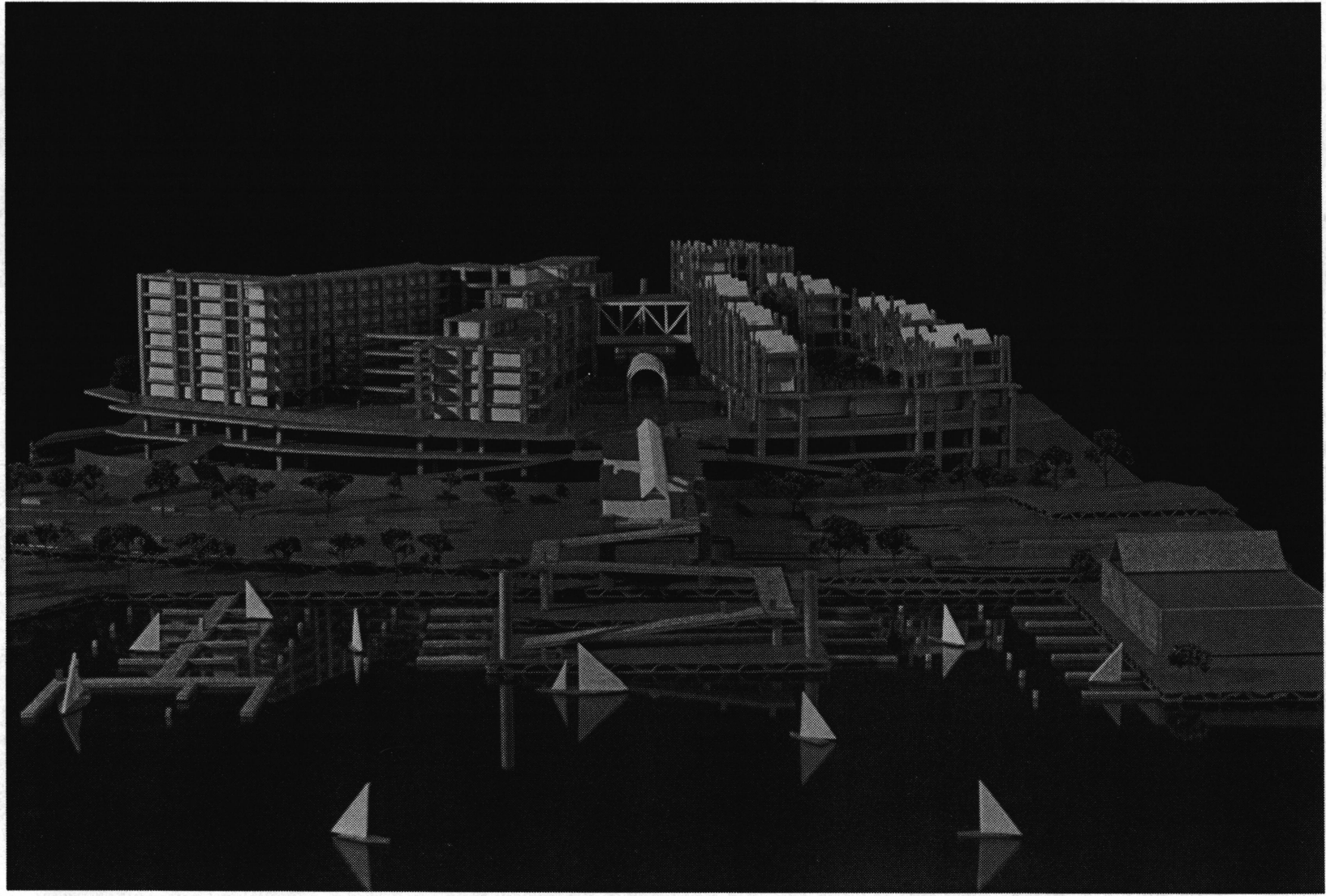
SITE SECTIONS



GILBERT

URBE BOMB

OX COTTON



### Hotel/Condominium: Program

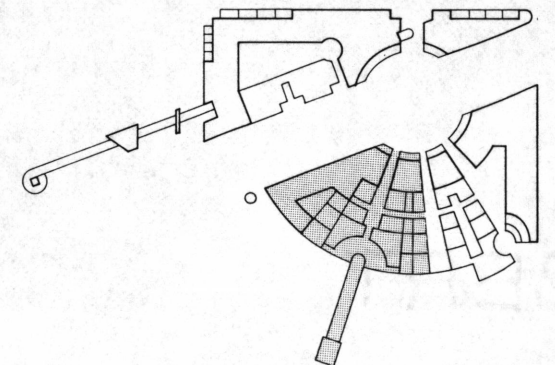
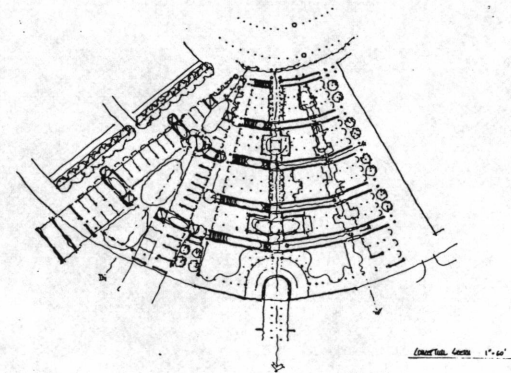
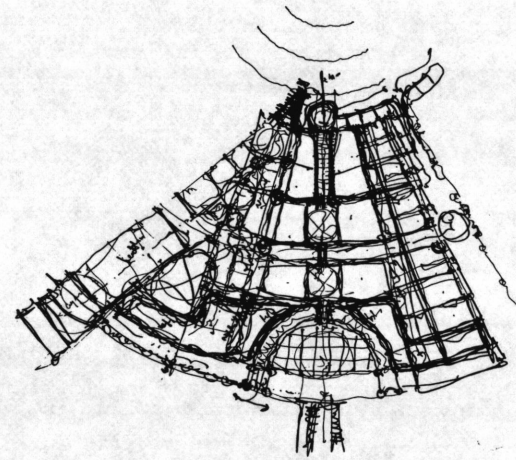
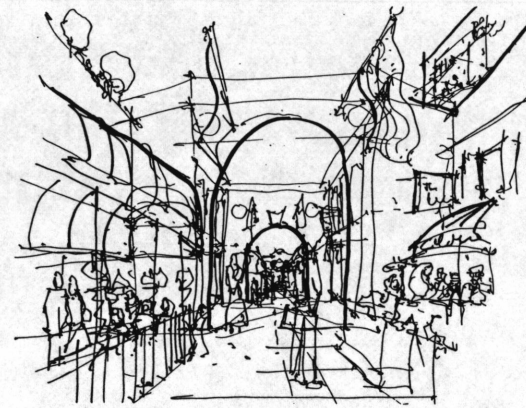
It is the intention of this thesis to go beyond the standard master plan proposal of general land-use strategy, building height limitations, and building footprints. This basic criteria has already been established in the previous pages. The following pages elaborate upon the initial master plan concept by looking at one area of the master plan in more detail so that architectural elements and criteria at a more human scale (versus the master plan/city scale) can be investigated and established. In order to give the three dimensional diagram of the master plan reality through architecture a portion of it must be refined by looking at more specific criteria.

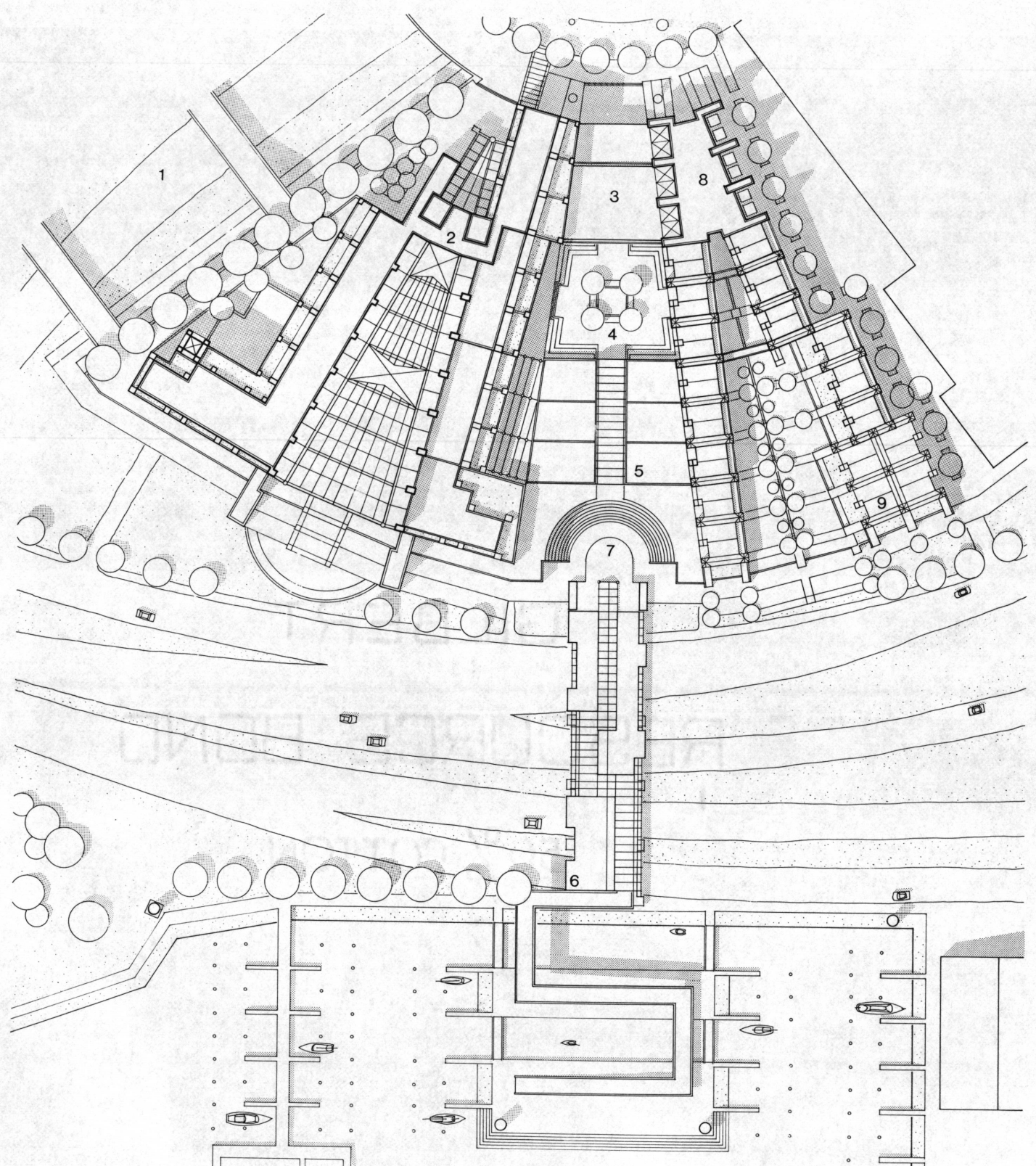
The area of the master plan chosen for further study includes a hotel, condominiums, and commercial retail at the podium level with structured parking below. This portion of the master plan was chosen because it establishes the crucial link between the site and the waterfront. Residential units are mixed with commercial retail space, following master plan guidelines, in the hopes of enlivening the major spaces. The radial and circumferential orders established by the master plan are maintained in this detailed development study.

Ideally the more residential units the better, but realistically, at least 20 to 25 percent of the total square footage of the master plan proposal should be residential in order for the residents to have an effective contribution to the life of the development. A residential element is essential to maximize the activity and life about the major pedestrian/commercial corridors.

The specific clients this proposal targets for residential occupancy are the middle/upper class tourist and the short-term/out of town businessmen. For either client this is an ideal location. The Portals occupies a prominent location in Downtown Washington, D.C. in close proximity to the Mall, and is within walking distance of the Metro subway system. Condominiums are targeted for the middle/upper-class buyer. Specifically, young, single adults or new families without children. These units are designed to be attractive to people who are moving up quickly in the business world and are seeking a prestigious location to live, in close proximity to the downtown business district. The commercial retail element is intended to attract all types of users, from the suburban visitor, to the city dweller seeking to enjoy Washington D.C.'s waterfront.

It is assumed here that there will be one principal owner/developer for both hotel and condominiums. With a single owner a central mechanical area is feasible. Hotel room units will utilize fan coil units while condos will use central hot and chilled water with





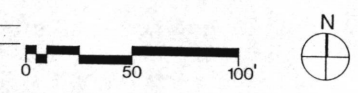
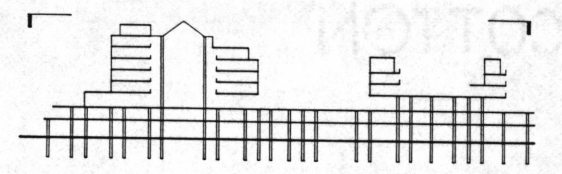
ROOF PLAN

individual air handler units with individual thermostats and meters. One level of structured parking will service the hotel and condominiums. The remaining level of parking will service the general public.

The following figures are provided to give some idea of project density.

Total master plan proposal	1,270,000 sq. ft.
Residential element (25%)	300,000 sq. ft.
Hotel, approximately 200 rooms	250,000 sq. ft.
Condominiums, approximately 40 units	55,000 sq. ft.
Commercial retail	80,000 sq. ft.
Mechanical	15,000 sq. ft.
Total (excluding parking)	400,000 sq. ft.
Parking required by code	170 spaces
Parking provided	400 spaces

- Key**
- 1. Maryland Avenue
  - 2. Hotel
  - 3. Ballroom
  - 4. Main Pedestrian Path
  - 5. Restaurants/Retail
  - 6. Main Avenue Pedestrian Bridge
  - 7. Amphitheater
  - 8. Health Club
  - 9. Condominiums



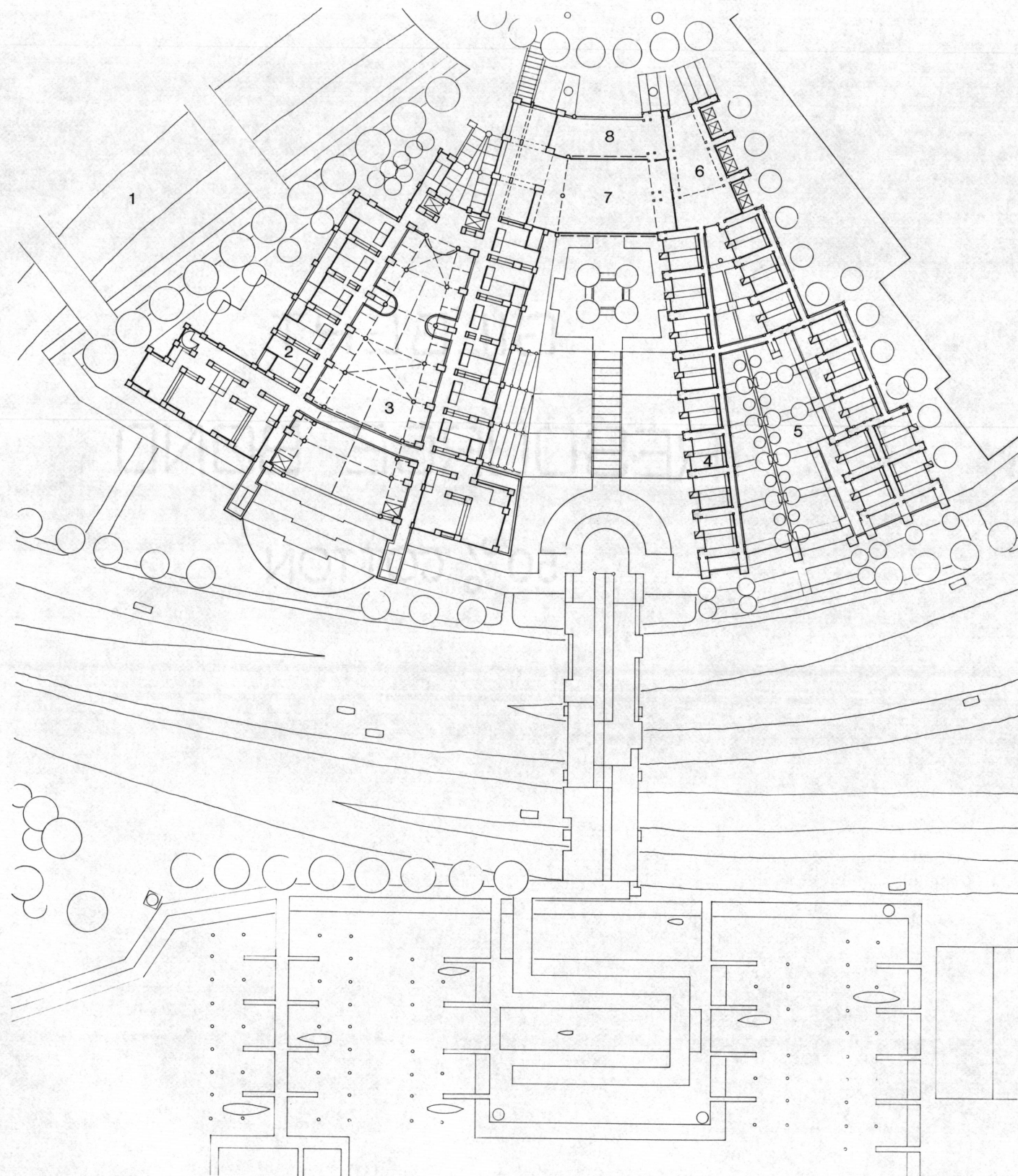
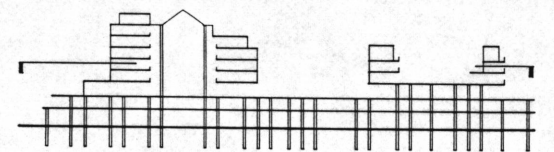
### Hotel/Condominium: Concept

The main concept for the Hotel/Condominium development is essentially the same as the master plan's; to reestablish a pedestrian link to the river. This connection is a physical extension from a central square to an outward point where the project clamps onto an expression of the natural forces of the region. A major pedestrian corridor is created which links the center of the project to the waterfront. Public activities are concentrated about this new pedestrian "street" which bridges the existing gap between the Portal Site and the Washington Channel.

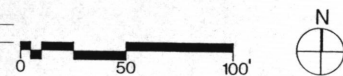
Building massing is sympathetic to a radial order while the primary building structures relate to a circumferential order. Taking advantage of the site's natural amenities is the main goal of the proposal. The Maine Avenue Bridge establishes a physical link to the waterfront but views are also crucial to the project's success. The Hotel and Condominiums are arranged on opposite sides of the main pedestrian street. The Hotel explores the relationship of rooms about an enclosed central atrium. The Condominiums explore individual unit relationships to the waterfront in a high density situation. Issues of security, degree of privacy, and views are addressed differently for each type of residence.

### Key

1. Maryland Avenue
2. Hotel Rooms
3. Atrium
4. Condominiums
5. Plaza
6. Elevator Lobby
7. Ballroom
8. Ballroom Terrace

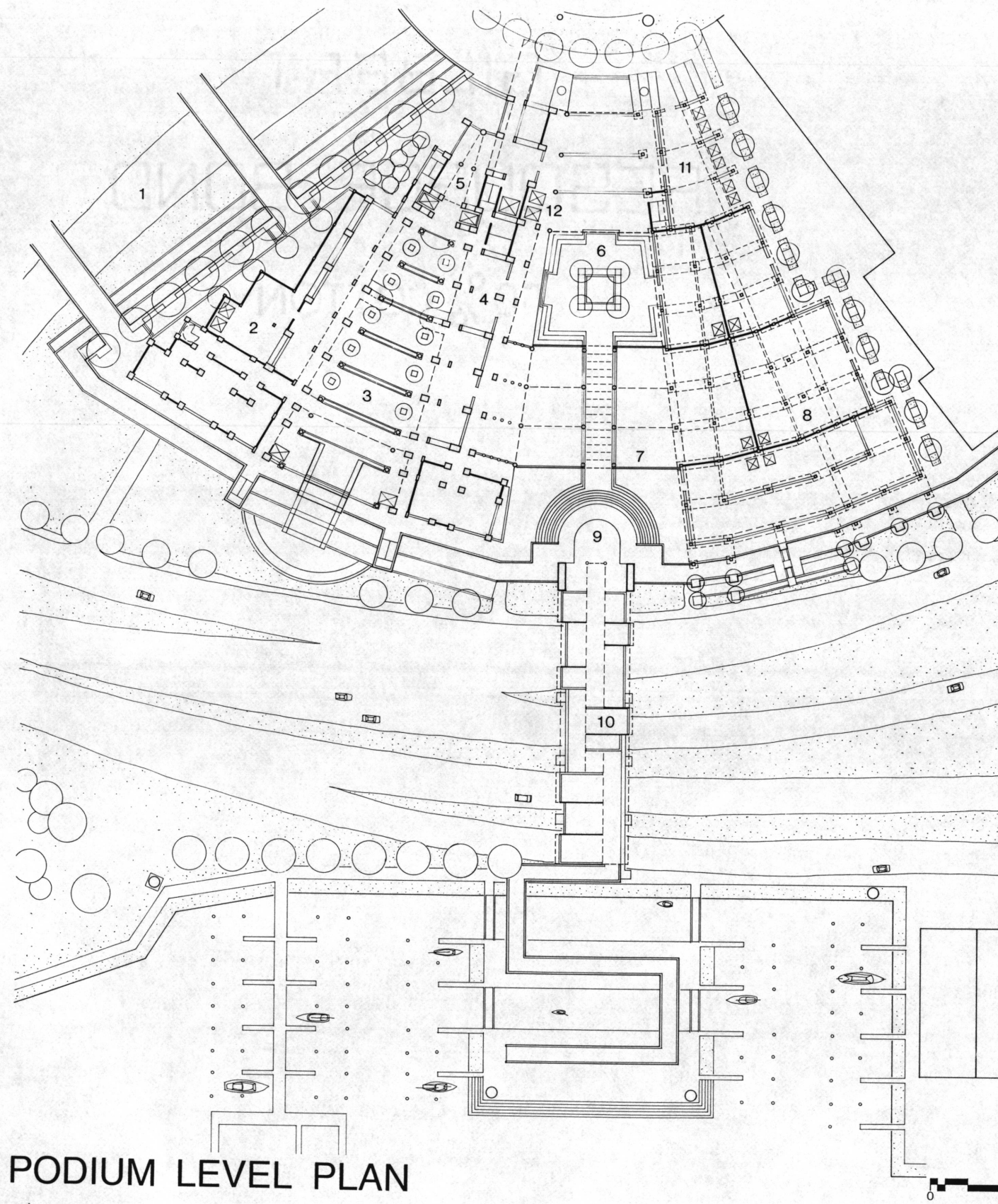
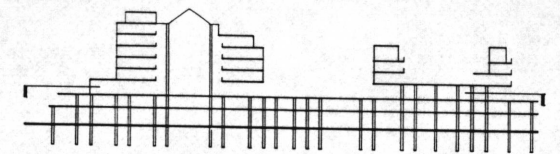


UPPER LEVEL PLAN



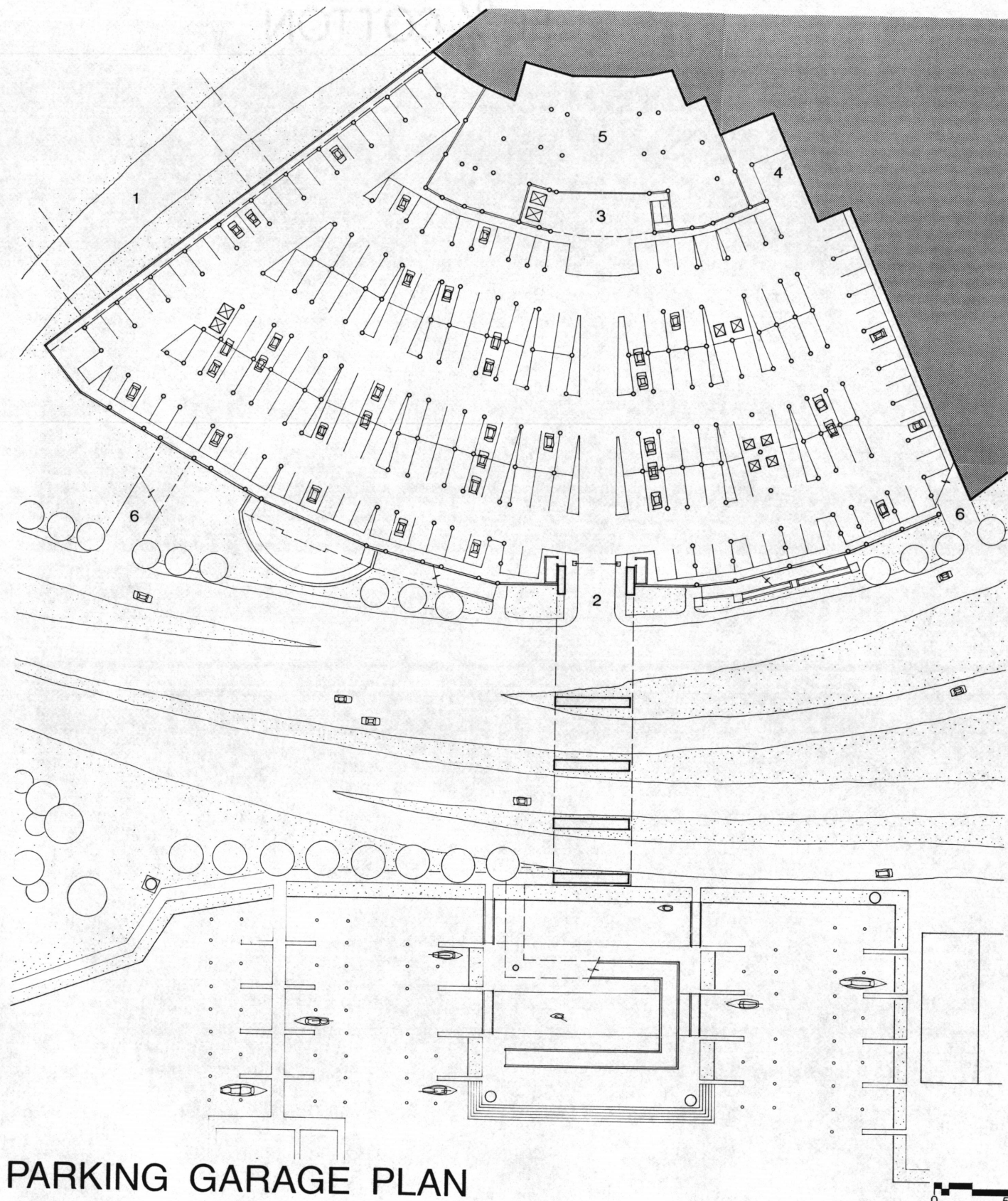
The Condominiums and Hotel represent a study of the individual versus the collective. Both types of residences are high density and require varying degrees of privacy, which must be achieved without losing a sense of community. The condominium units are organized about a central open-air plaza which is oriented on a radial axis towards the waterfront. To maintain a maximum degree of privacy, units do not face directly towards each other. Each unit has an oblique view of the river with end units enjoying a more direct vista. By organizing the units about a private plaza intended solely for condominium residents and their guests, a sense of community is maintained. The plaza offers a dramatic view of the waterfront and affords residents a charming area in which to socialize with their neighbors. The Hotel also utilizes a central gathering space, but instead of an open air plaza it is an enclosed atrium. Hotel rooms are organized about the atrium. This layout allows corridors to almost become balconies by affording views into this dramatic multi-story space. Rooms have differing orientations and offer vistas to the waterfront, to the 14th Street Bridge, and towards Maryland Avenue. Since hotel guests are more transient than condominium residents it is important to give a clear sense of the overall order of the whole. The atrium serves this purpose by acting as a central

- Key**
1. Maryland Avenue
  2. Hotel Restaurant/Kitchen
  3. Atrium/Restaurant Dining
  4. Hotel Bar/Cafe
  5. Check-in/Lounge
  6. Main Pedestrian Path
  7. Restaurants
  8. Retail
  9. Amphitheater
  10. Maine Avenue Pedestrian Bridge
  11. Condo/Health Club Elevator Lobby
  12. Parking Garage Elevators/Stairs



**PODIUM LEVEL PLAN**



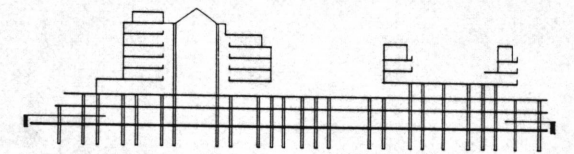


gathering space or collector which is also aligned on a radial axis and affords an exciting view of the Washington Channel.

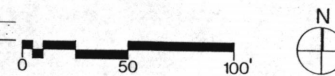
All commercial retail and restaurants are located at the podium level. The main goal of the pedestrian spine is to maintain a maximum level of activity by locating all public amenities at "street" level. Retail elements on the hotel-side of the street are intended to draw the public into the atrium to give life to that space. Commercial retail below the condominiums are meant to act as support for the residential community above as well as strengthen the main shopping promenade. A festival market is located at the head of the amphitheater which serves as a transition element between podium and bridge. The Maine Avenue Bridge is actually a small shopping arcade in the tradition of Pont du Vecchio. The end of the path is an undulating ramp which leads down to the waterfront and the renovated Washington Marina. The small park area located between Maine Avenue and the Channel is fashioned after Piazza San Marco, with its multitude of gondolas at the water's edge eagerly awaiting new passengers to venture out upon the waters.

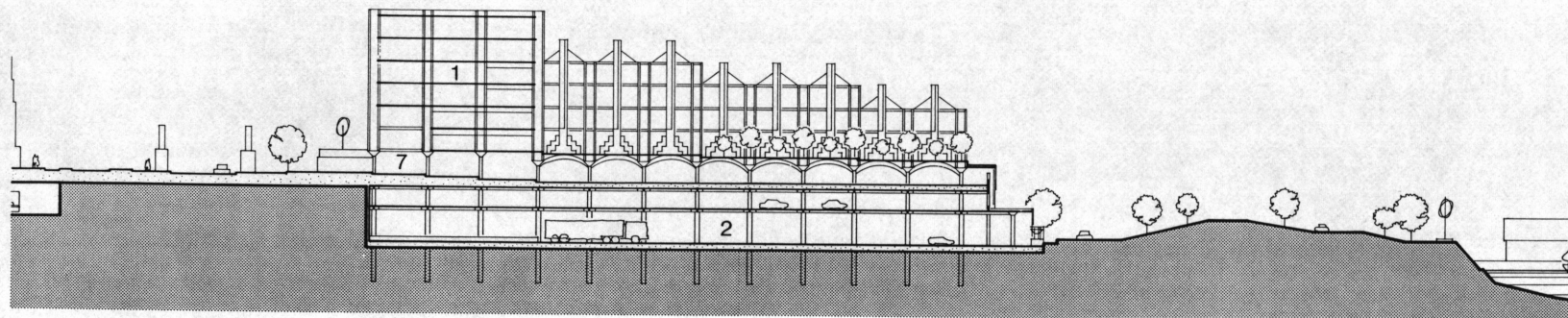
**Key**

- 1. Maryland Avenue
- 2. Garage Entry/Exit
- 3. Elevators/Stairs
- 4. Loading Area
- 5. Mechanical Room
- 6. Ramp to Upper Parking Deck



**PARKING GARAGE PLAN**

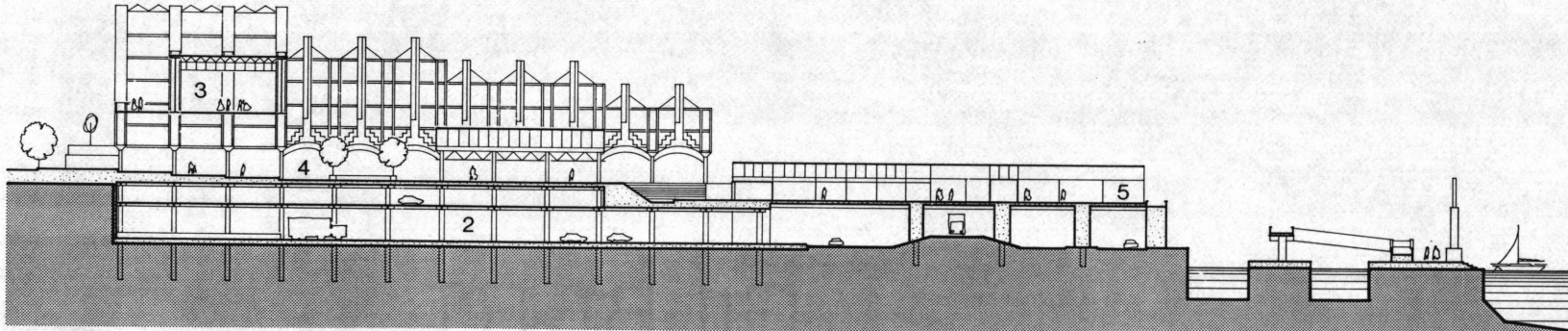
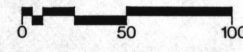




SECTION 1-1

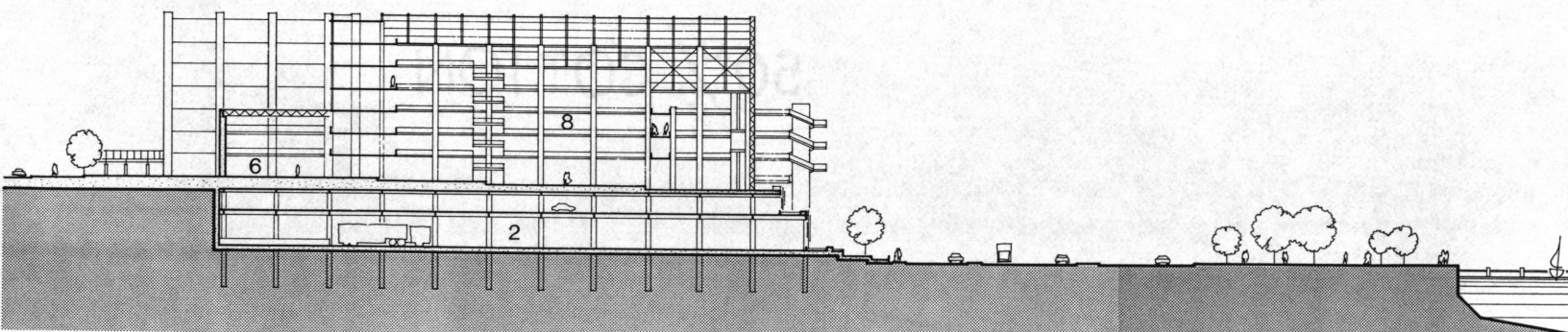
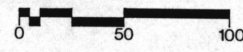
Garage parking entry occurs at the Maine Avenue on-ramp from 12th Street. The lower level deck serves the general public and will be attendant parking. The system increases efficiency by allowing three cars to park in one bay length rather than two. Service access to loading docks and the mechanical area also occur at this level. The upper level deck is intended to serve hotel guests and condominiums residents. The structured parking decks are terraced outwards from the main podium level and are open along the perimeter for light and natural ventilation.

In section, The Hotel/Condominium design follows master plan guidelines. The entire complex is built on a podium level which sits above two levels of structured parking. This gives the project a higher average elevation for views over Maine Avenue. The main idea of the master plan is to take advantage of site amenities which are currently inaccessible to the general public. Besides creating a physical link to the waterfront, the project also maximizes vistas by being organized in a fan shape and by stepping down in massing to create more end units with direct views of the Washington Channel.

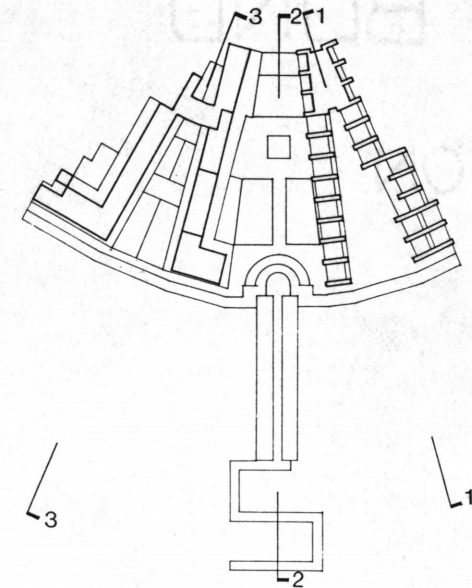


SECTION 2-2

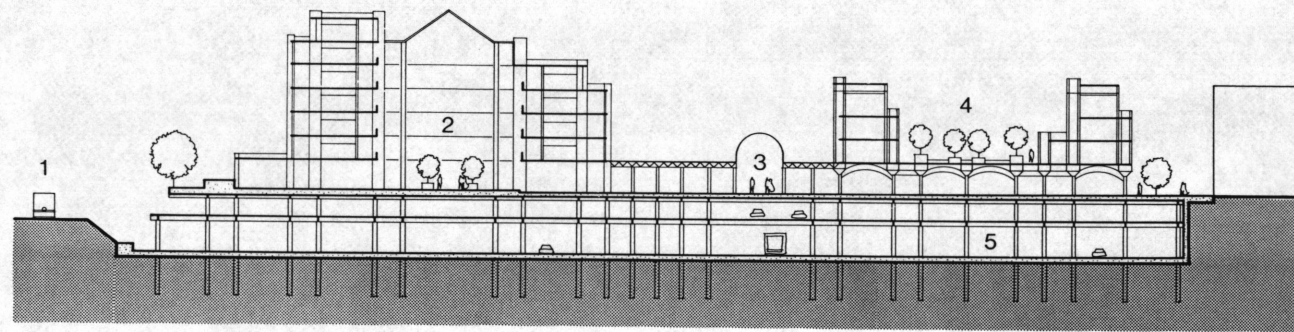
- Key**
- 1. Health Club
  - 2. Parking Garage
  - 3. Ballroom
  - 4. Main Pedestrian Path
  - 5. Maine Avenue Bridge
  - 6. Lounge
  - 7. Elevator Lobby
  - 8. Atrium



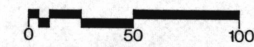
SECTION 3-3



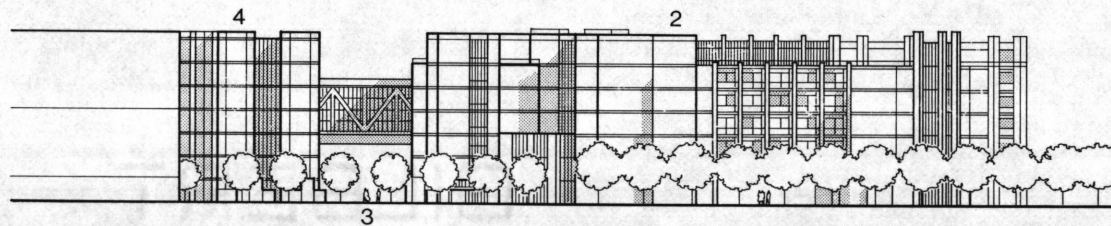
The elevation facing the Washington Channel and the Potomac River should be as open and interesting as possible. By placing the large mass of the Hotel next to the terraced massing of the Condominiums, the southern elevation of the project has the potential to create a maximum amount of visual interest. This elevation is crucial since the main presentation of the project as a whole will be as viewed by the public, from the Virginia side of the Potomac, from on the Potomac itself, and from vehicular traffic crossing over the 14th Street Bridge into Washington, D.C.



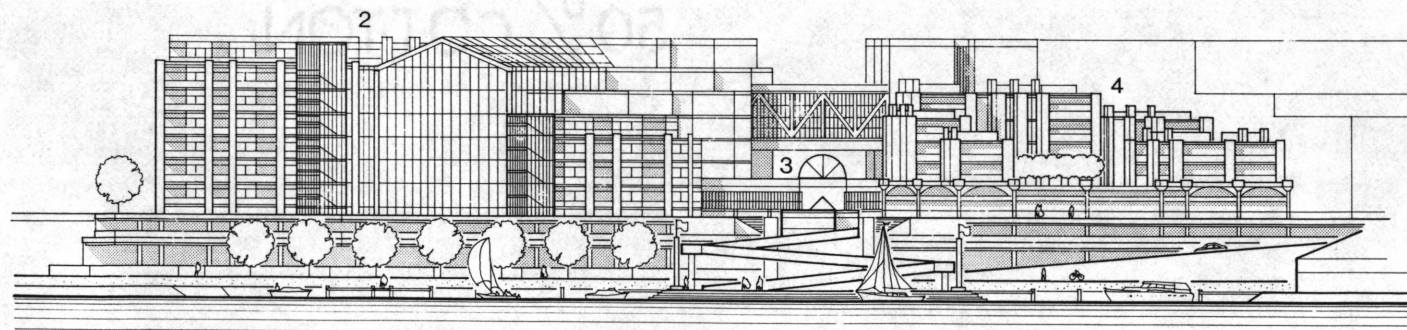
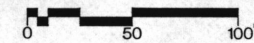
SECTION 4-4



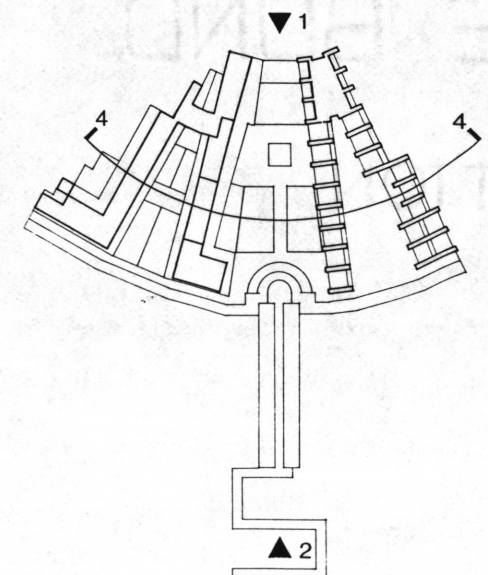
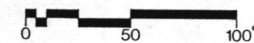
- Key**
- 1. Maryland Avenue
  - 2. Hotel
  - 3. Main Pedestrian Path
  - 4. Condominiums
  - 5. Parking Garage

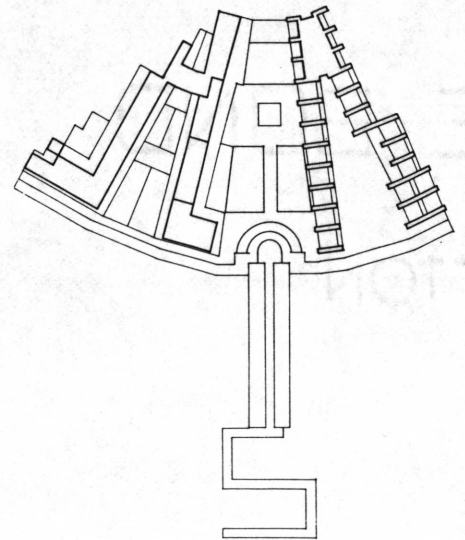
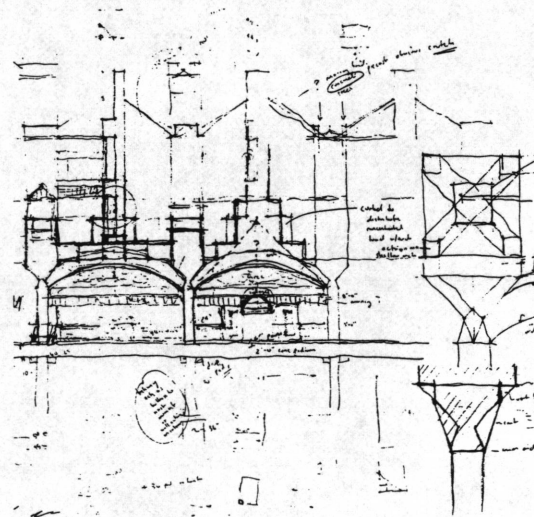
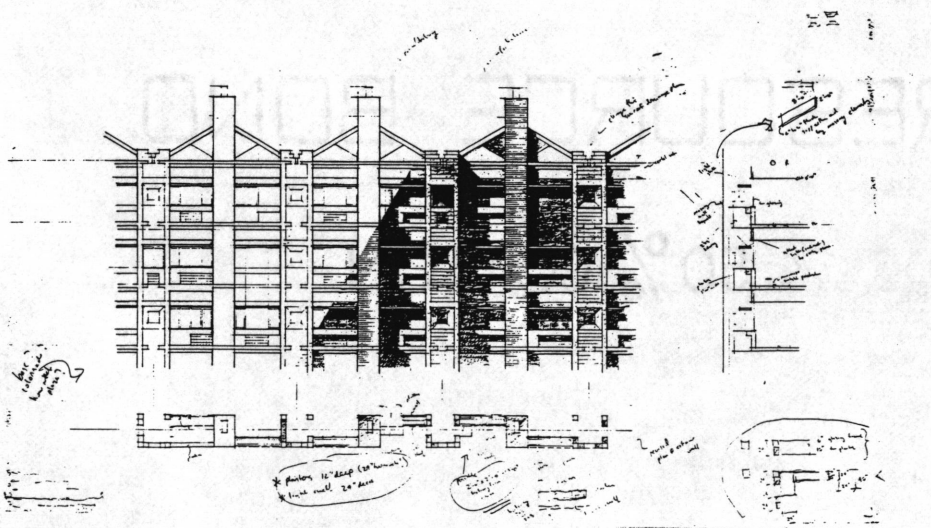
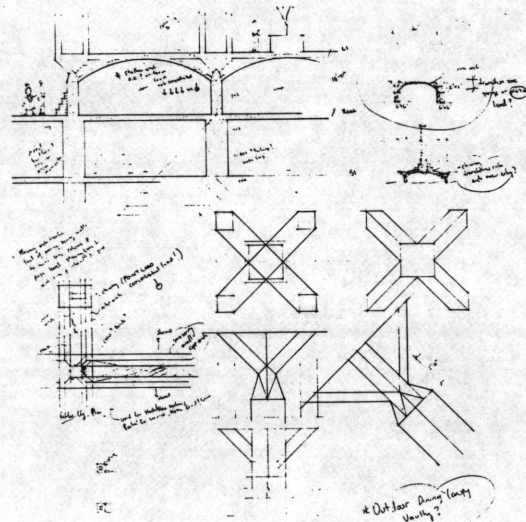
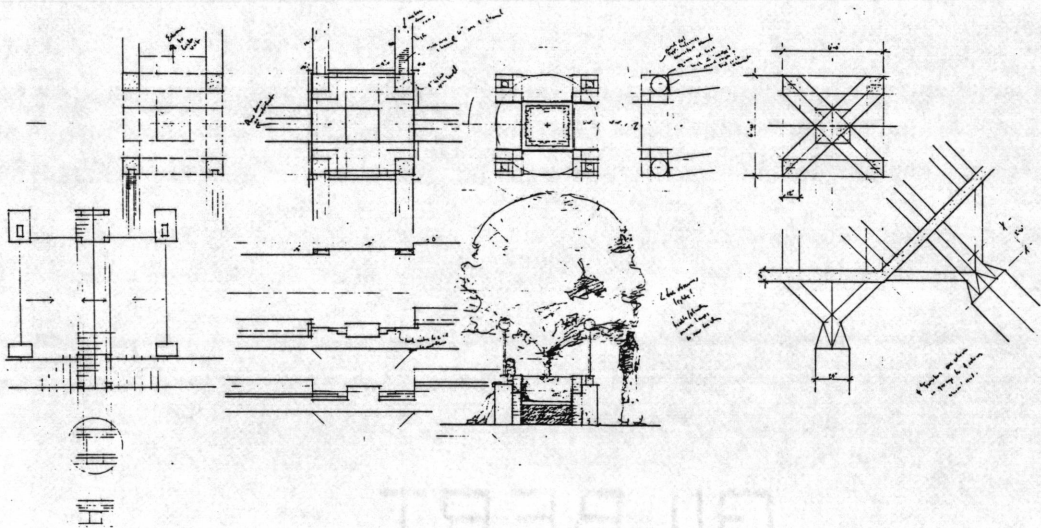
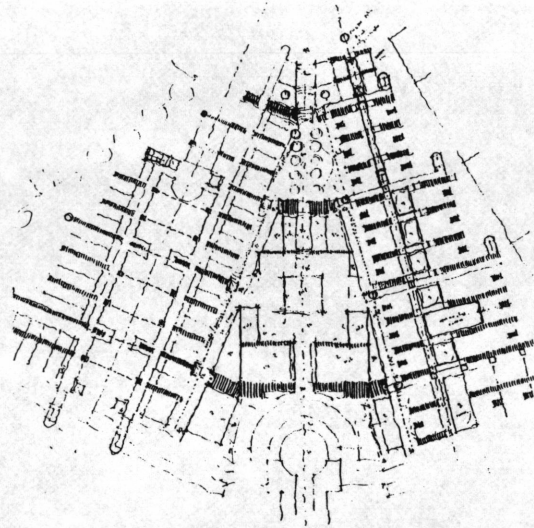
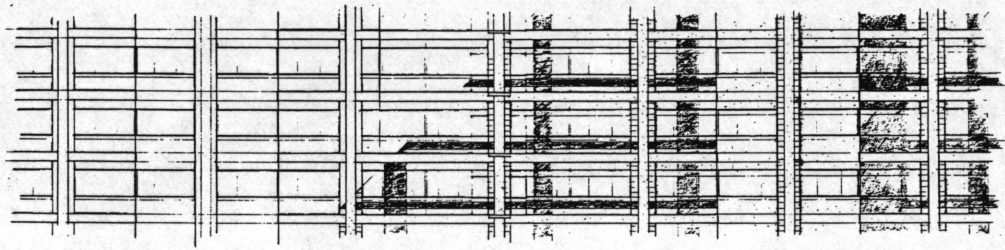


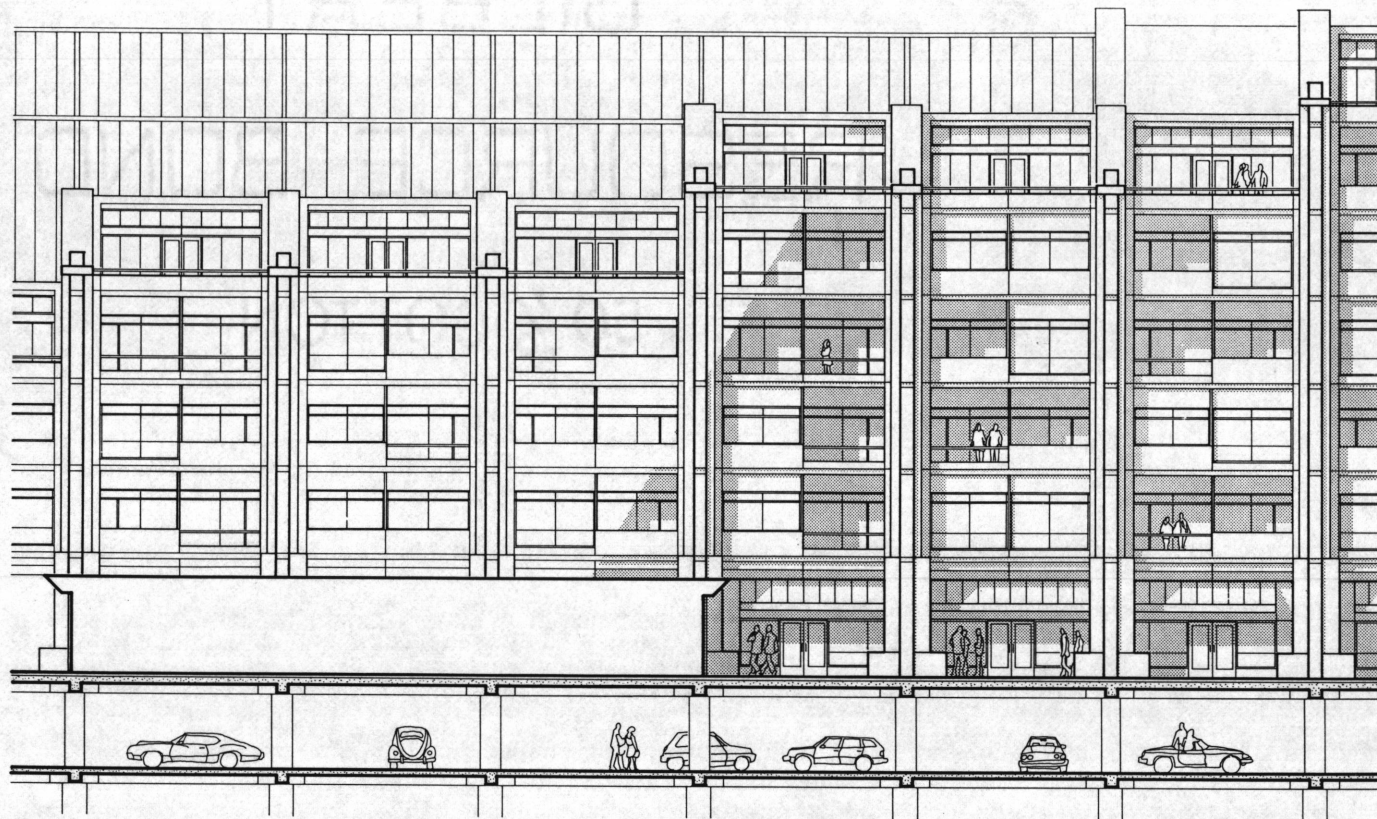
ELEVATION 1



ELEVATION 2



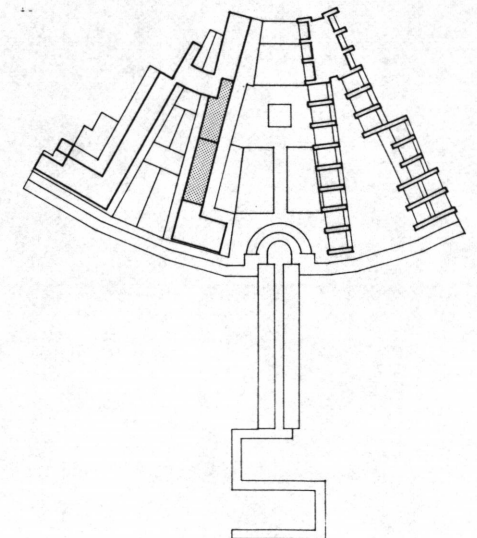
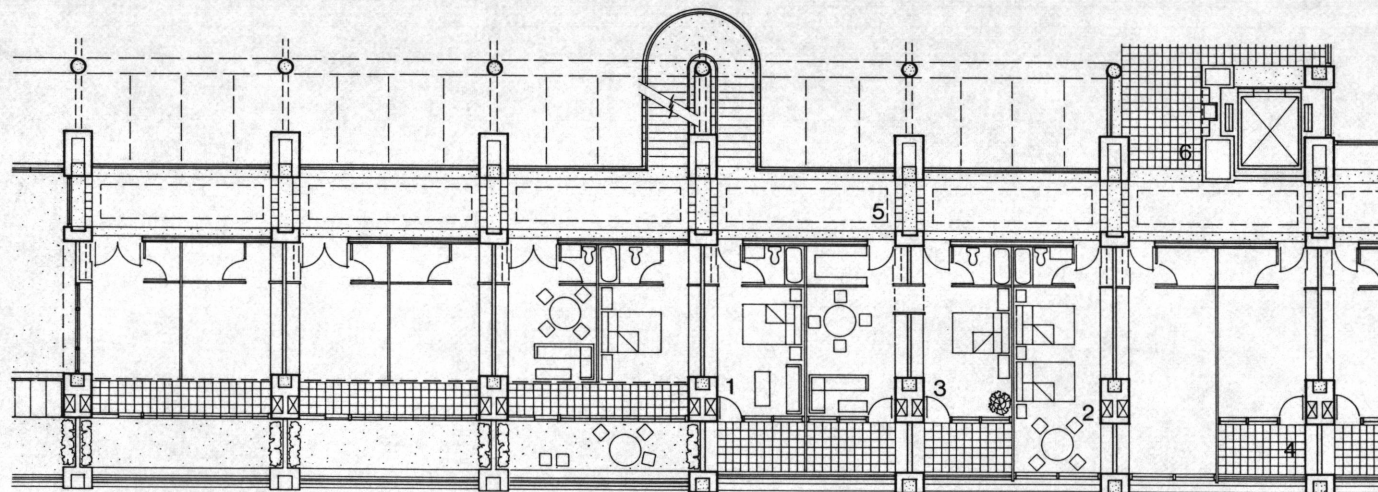




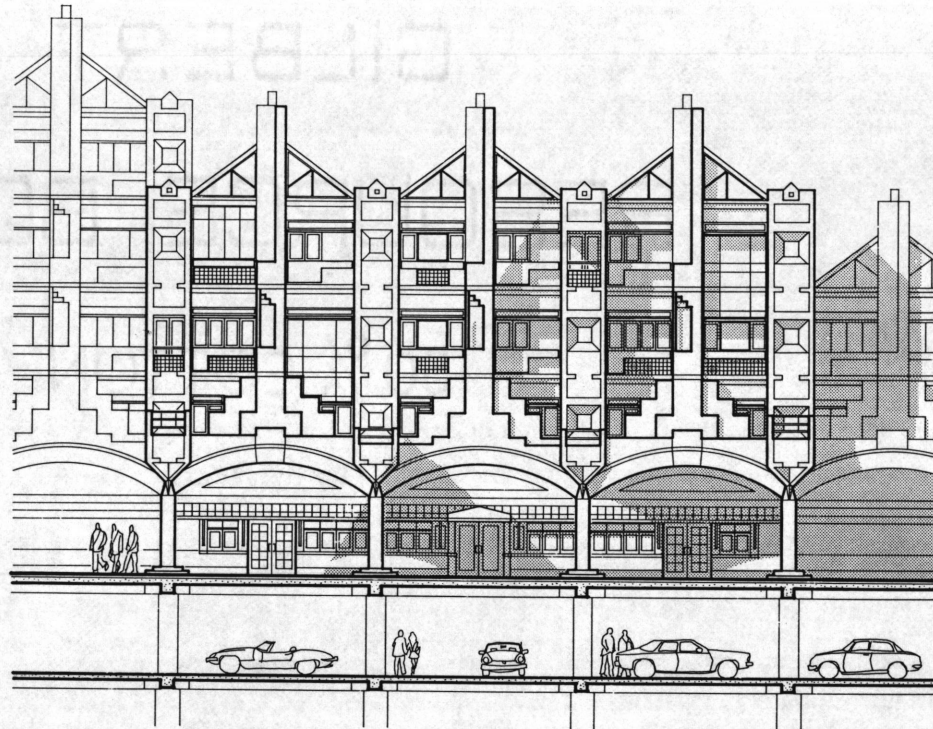
The Hotel unit plan/elevation study considers hotel guests as temporary or transient residents. This element of transience is expressed through the structure, materials, character, and forms of the building. The flat slab construction of the Hotel is clearly expressed so that the infill elements of the facade can reflect the temporary nature of the building's occupants. The elevation study tries to use regularity of bays and repetition of infill elements to keep the design cost-effective and yet maintain quality of variation for visual complexity and interest. The Hotel is mainly intended for use by out of town businessmen, so the major emphasis is upon the central atrium as the main gathering space for hotel guests to meet clients. With this use-pattern in mind the hotel rooms can be modest and straightforward, and so only three basic room types are proposed.

- Key**
- 1. Single
  - 2. Double
  - 3. Suite
  - 4. Balcony
  - 5. Corridor
  - 6. Elevator Lobby

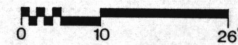
ELEVATION



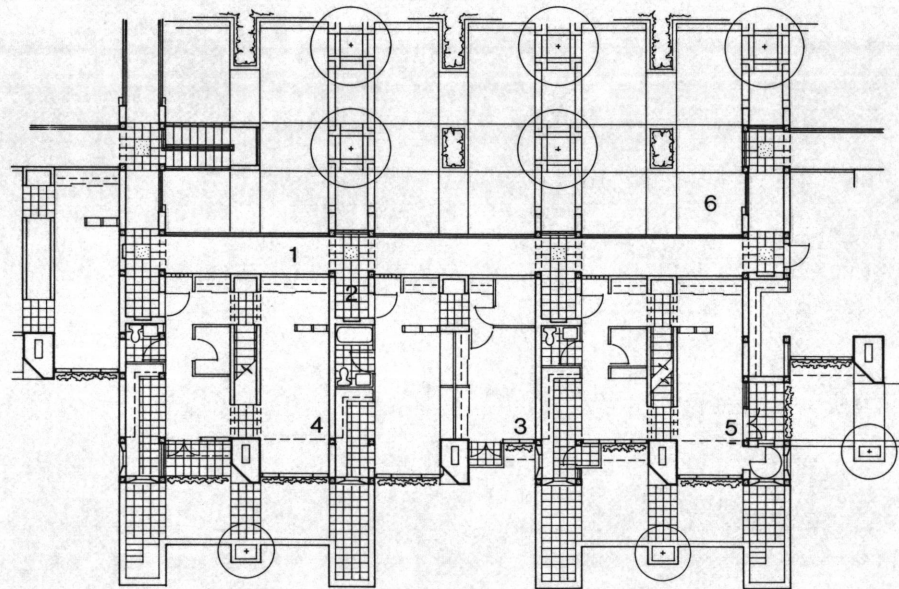
PLAN



ELEVATION

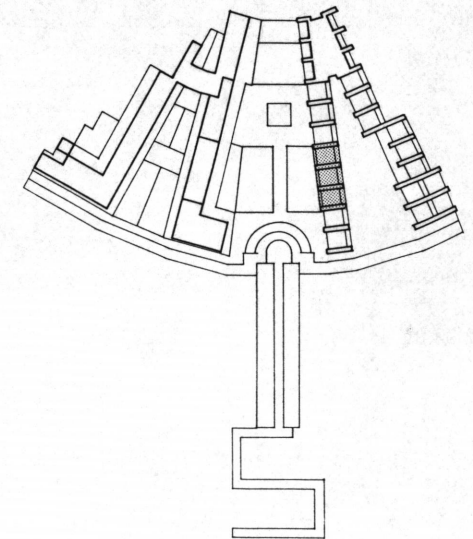


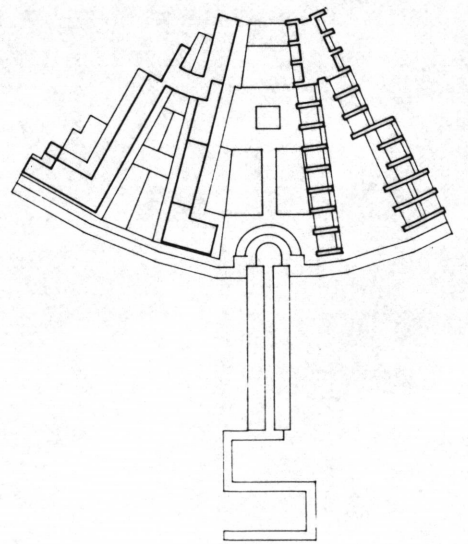
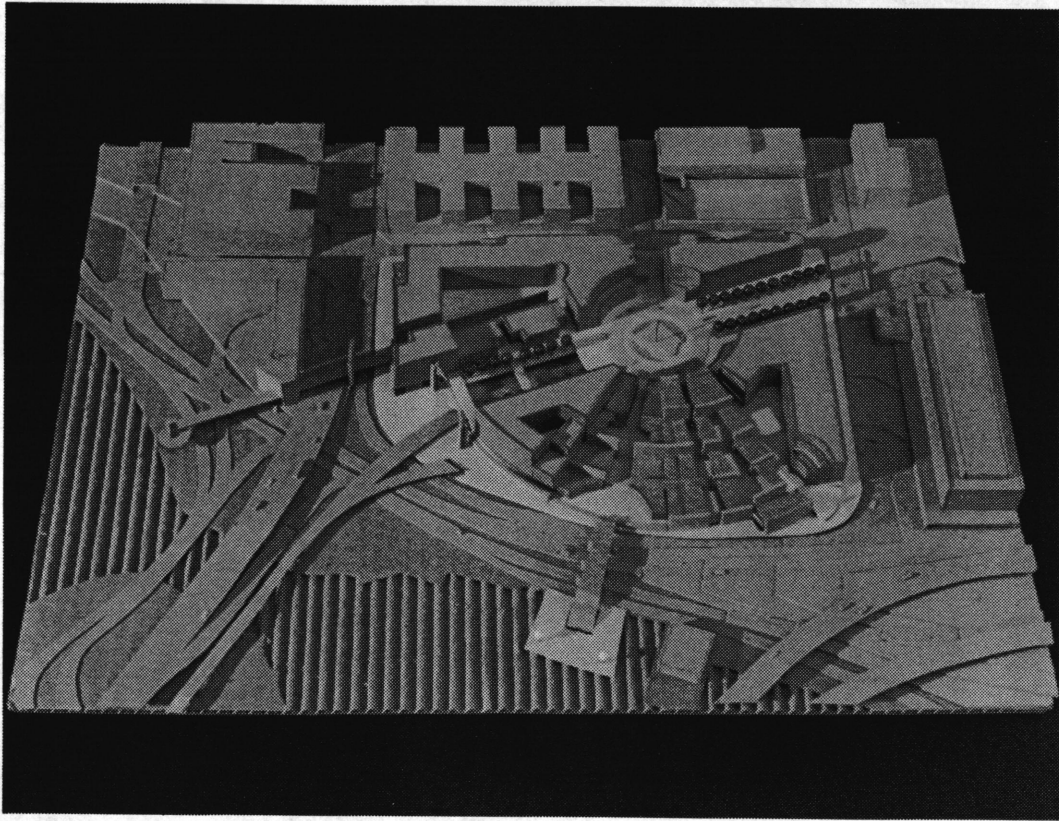
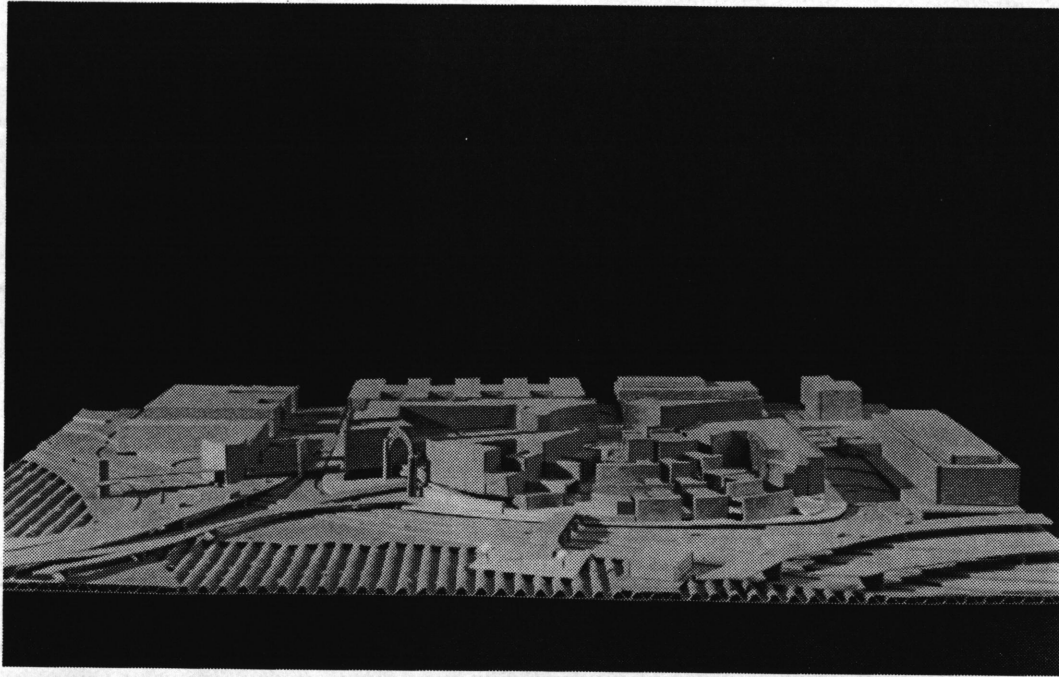
The Condominium unit plan/elevation study attempts to exude an air of permanence in direct contrast to the transient image of the Hotel. Rather than flat slab construction, the condominiums utilize a masonry bearing wall structural system. The masonry construction material and bearing wall structural system combine to form a more solid massing of residential units than would be achieved through a flat slab concrete approach. The transfer of loads from a bearing wall system to a reinforced concrete system below, is explored and taken advantage of, to enrich the architectural vocabulary of the design at the podium level (see sketches pg. 16) "Service" areas are located within the poché of the bearing walls. This gives living spaces the freedom to move in and out (since the exterior walls have no load bearing responsibilities) to create rich and varied elevations. Forms such as pitched roofs and chimneys are added to give the condominiums a more residential character. There are three basic unit types proposed for the condominiums. End units command the best and most direct view of the waterfront, and occupy three levels totaling approximately 1800 sq. ft. each. Middle units are one level efficiencies enjoying oblique views of the Channel and are approximately 600 sq. ft. each. The inner units are two story/two bedroom condos totaling approximately 1,200 sq. ft. The Condominiums are designed for young professionals without children and it is assumed that spectacular views and a prestigious location close to downtown Washington, D.C., are qualities that make this proposal for more permanent dwellings feasible.

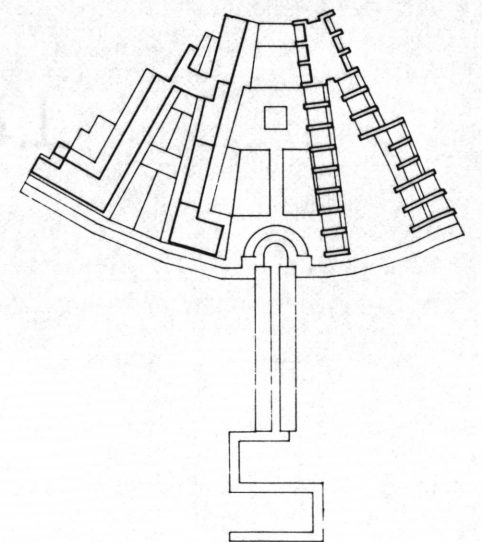
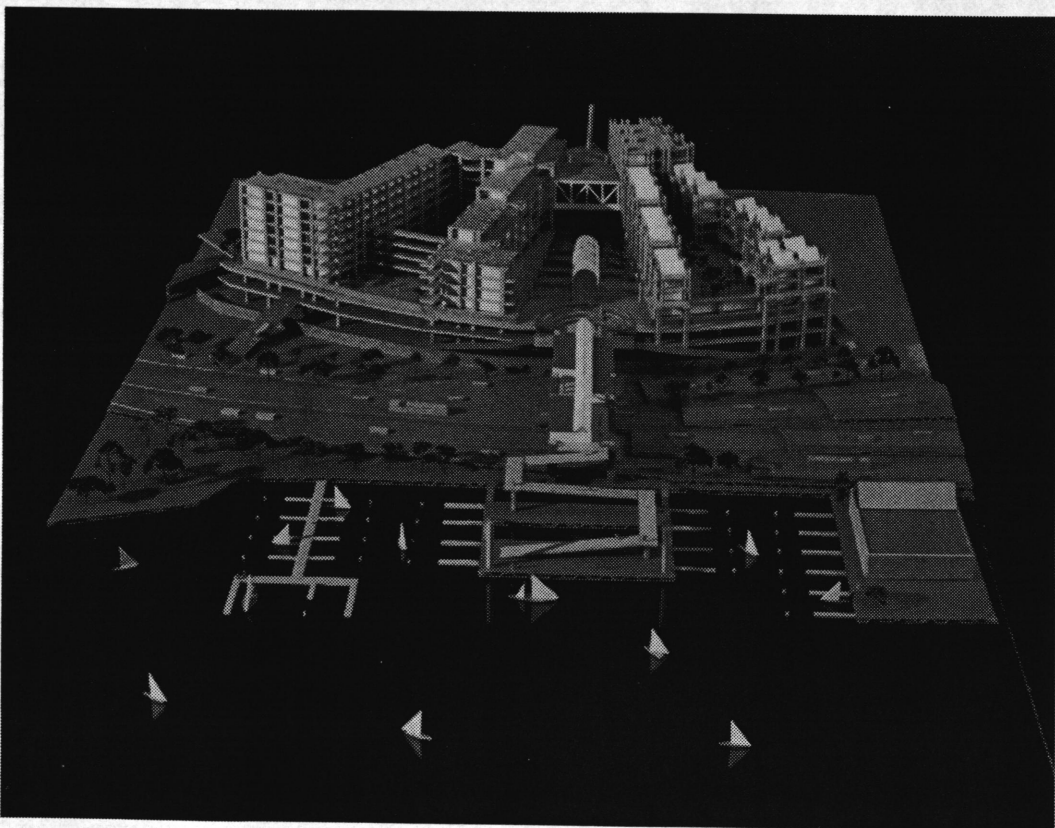
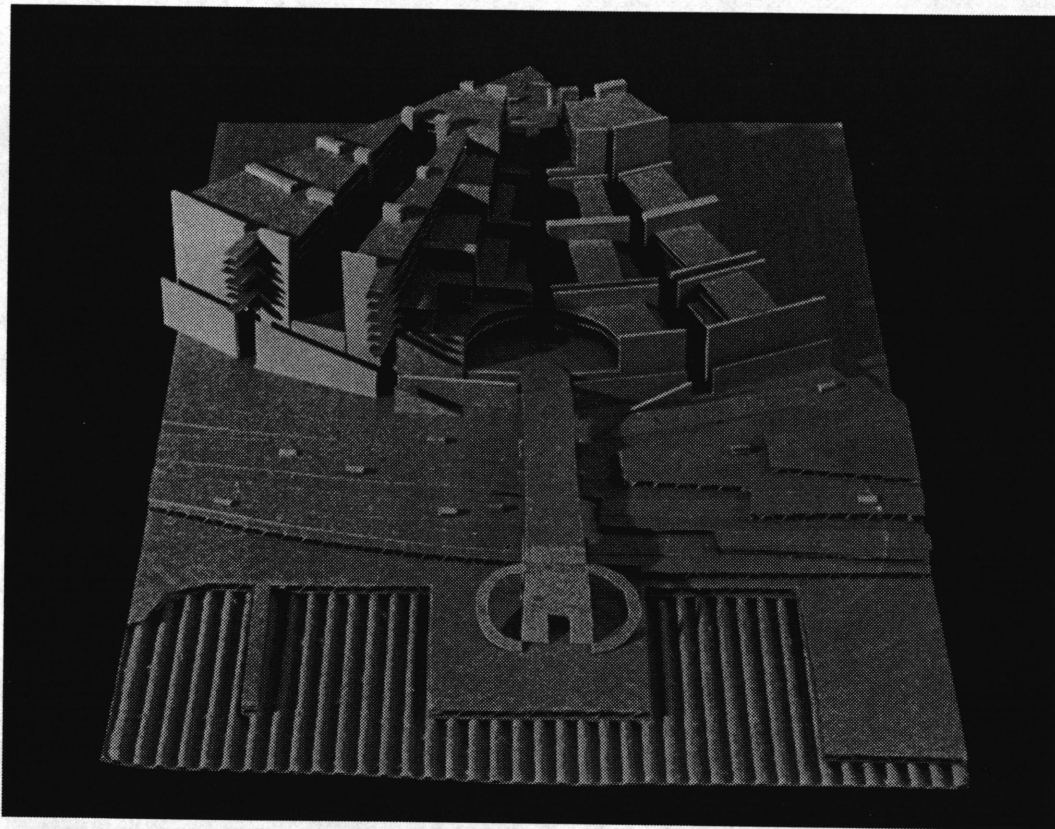


- Key
- 1. Open-air Walkway
  - 2. Entry
  - 3. 1 Bedroom Efficiency Unit
  - 4. 2 Bedroom/2 Level Unit
  - 5. 3 Bedroom/3 Level Unit
  - 6. Plaza Below

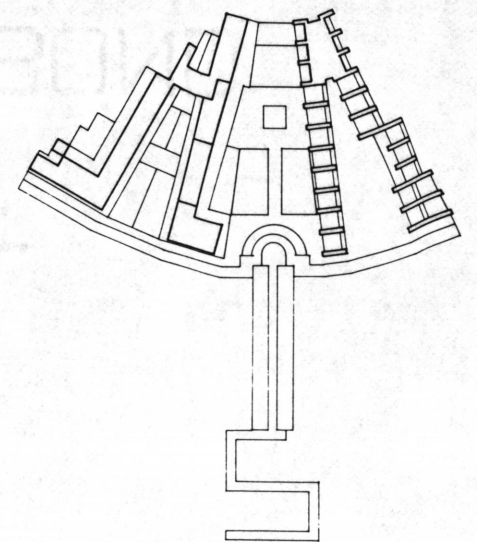
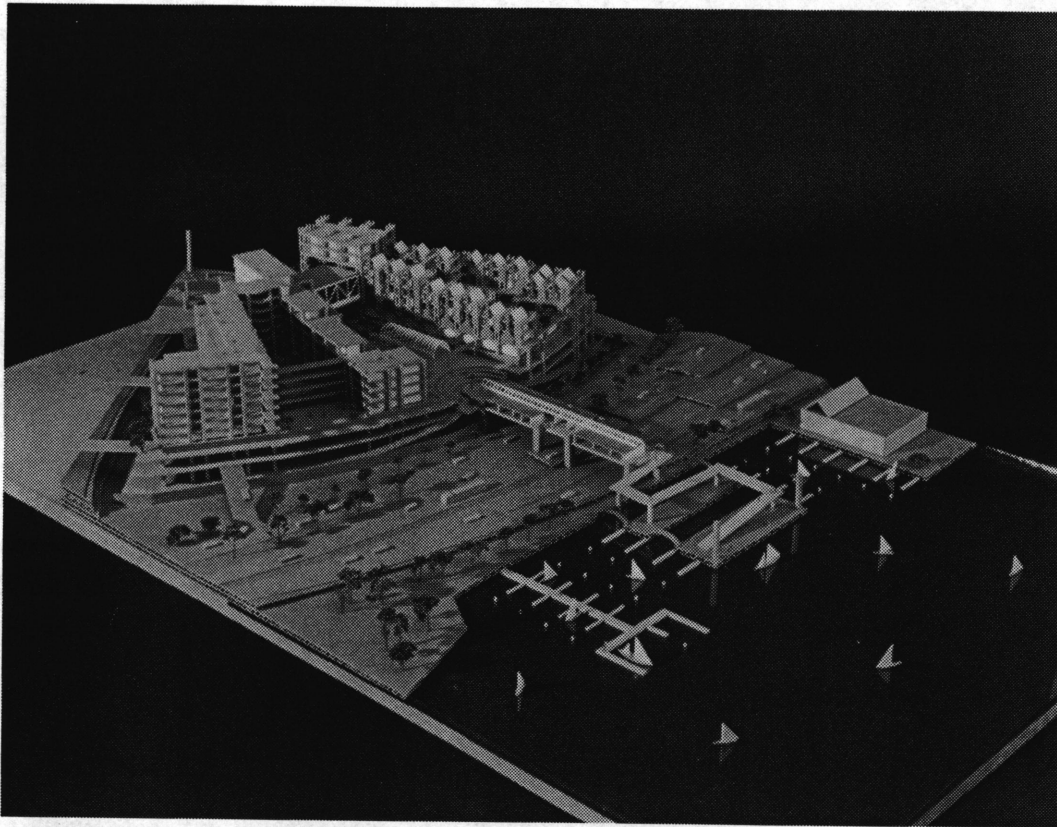
PLAN

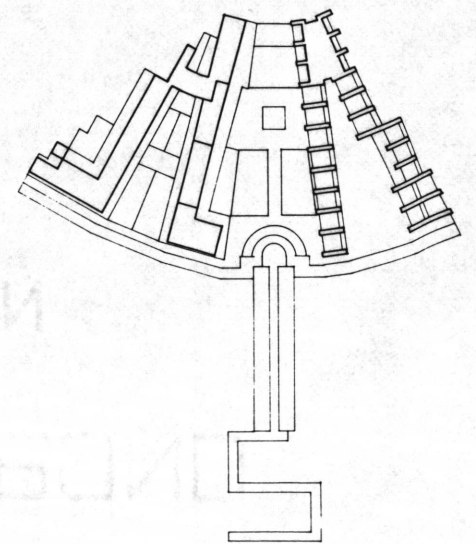












### Conclusion

The reason I decided to go to the Graduate School of Architecture at the Virginia Polytechnic Institute was to become more design oriented. During my undergraduate studies I frequently ran out of criteria to make architectural decisions which resulted in projects or designs without in-depth studies of human needs. The graduate thesis is an investigation into a "method of design," and not just another project dealing with geometric exercises. The thesis should get to the essence of the problem, i.e., deal with key issues specific to the site and respond to human needs and experience.

Through my two years of graduate study and using the graduate thesis as a vehicle for learning, I have reached three important conclusions. First, I've learned that generalities in architectural form without an examination of human needs is a dead end path. Second, I've found that the design process isn't simply a linear one, instead, it's actually cyclical, jumping back and forth between the general/overall design scheme and the specific/details. The third and final lesson I've learned through this thesis is that architecture deals with human experience and must address issues at a human scale regardless of the size of a project. One must think very specifically of the user in order to make architectural decisions and choices for details which will enrich the generalities/overall design scheme and give the design true substance and reality through architecture.

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"Harboring Tradition", Architectural Record. (March, 1988), p.87.

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\_\_\_\_\_. "Towards a U.D.G. Manifesto", Urban Design Group, April, 1986.

### Footnotes

<sup>1</sup>Kevin Lynch, Site Planning: Second Edition, p. 5.

<sup>2</sup>Louis I. Kahn, "Order Is", Programs and Manifestos on 20th-Century Architecture, Ulrich Conrads, p. 169.

<sup>3</sup>Urban Design Group, Towards a U.D.G. Manifesto, April, 1986, p. 1.

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