

URBAN HOUSING FOR HARTFORD, CONNECTICUT

by

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Submitted in partial fulfillment
of the requirements
for the degree of

MASTER IN ARCHITECTURE

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Dear Dean Belluschi:

In partial fulfillment of the requirements for the degree of Master in Architecture, I submit herewith my thesis, URBAN HOUSING FOR HARTFORD, CONNECTICUT.

Respectfully,

^U
Morton M. Gruber

ACKNOWLEDGEMENTS

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ABSTRACT

At the head of Hartford's Bushnell Park, with a dramatic view of Connecticut's State Capital Building, lies the five-acre site proposed for the Bushnell Plaza Project. The site, as suggested in Hartford's Renewal Program prepared by architects Rogers, Taliaferro and Lamb, has a 500-foot frontage on Main Street opposite Hartford's Public Library, Municipal Building and Wadsworth Atheneum. This central location is less than 1000 feet from Hartford's Old State House and within easy walking distance of Hartford's major stores, shops, restaurants, theaters and civic center.

The scope of this thesis is to satisfy the tentative program outlined by the Commission on the City Plan by providing the economic densities, necessary services, conveniences and amenities essential to an urban residential environment.

Because the site is surrounded by heavily-traveled roads with a major expressway access to the south, Main Street to the east and heavy local traffic on the west and north, and because adjacent land uses include a major expressway, civic functions, and a church with a large cemetery, site unity in the creation of a totally self-contained residential environment becomes a challenging problem.

Since Bushnell Park is at the foot of the pronounced slope of the site and because it is the only favorable adjacent land use, the Park becomes the only logical focus for the Bushnell Plaza housing. The connection from Main Street into Bushnell Park is desirable at the city scale too. Therefore, Bushnell Plaza should also serve as the downtown link to the Park.

The written portion of this thesis shall attempt to formulate the program elements and enumerate the design determinants necessary to the successful solution of this particular and real design problem.

STATEMENT OF THE PROBLEM

From an analysis of the statistics presented in Hartford's "Renewal Program for Downtown"¹ it becomes apparent that there is need for a permanent residential community to act as a stabilizer of Downtown economic values and to serve as a consumer, not only for merchandise but also for the amenities in culture and entertainment which Downtown Hartford offers.

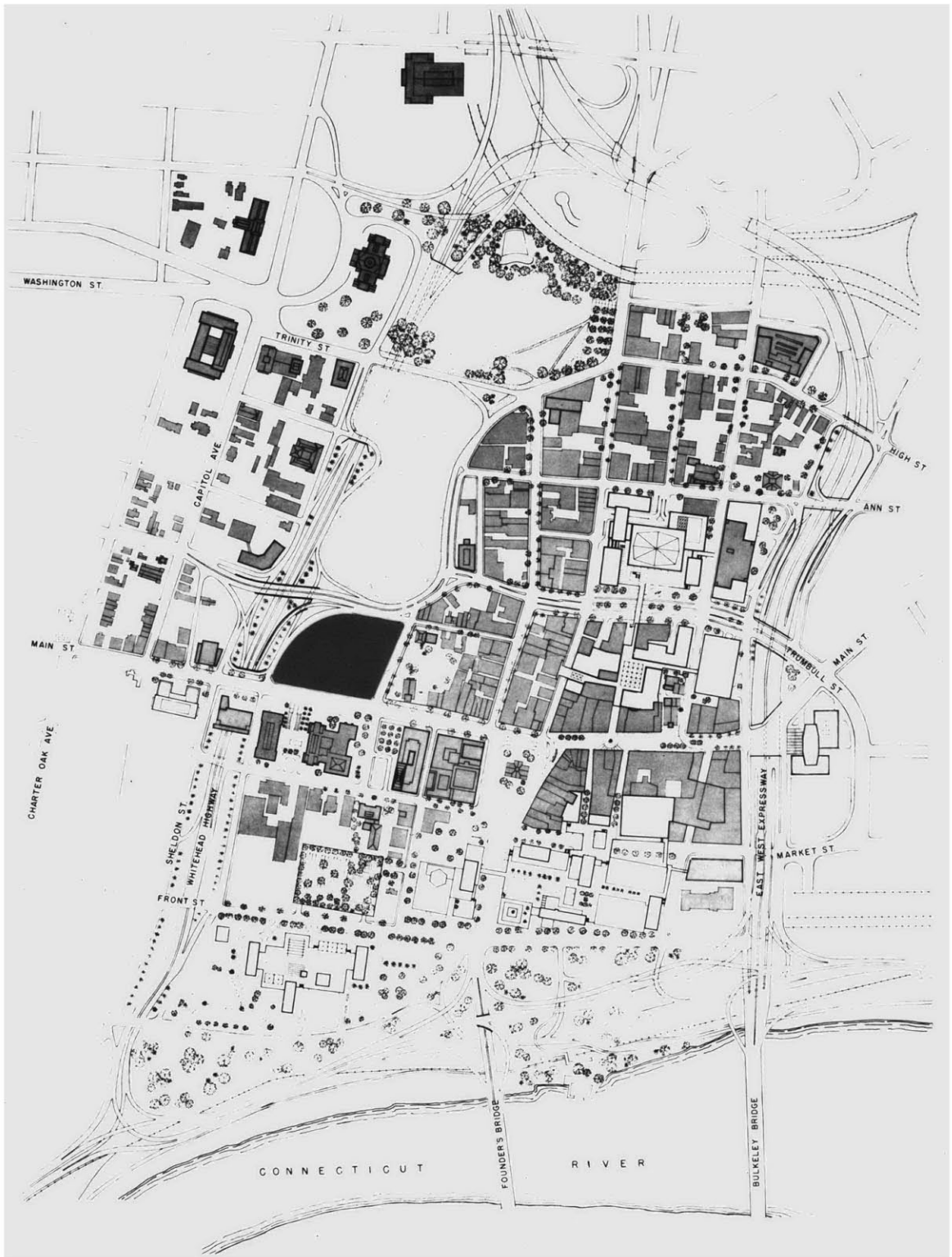
There is need, too, to reconstruct the blighted, and fire-damaged, blocks on the west side of Main Street that now effectively separate Bushnell Park from the cultural and civic center of Hartford (the Atheneum, Municipal Building, Library and Prospect Street).

Market

We are assured in the Downtown Housing Market report² that there exists a "considerable potential market for luxury housing in the Downtown area". This is in excess of the 1,800 moderate income units forecast as the demand by 1970 in this same report. Interviews also bear out this judgement. While a quantitative estimate of this market is not made (and indeed probably cannot be made

1. Rogers, Taliaferro and Lamb, Renewal Program for Downtown Hartford, Connecticut, 1960

2. Ibid, Section II, Page II-3.



in advance of development), the Commission on the City Plan believes that there is sufficient evidence to state that this market constitutes an opportunity for a redevelopment project.

There is also a market, on the site in question, for office and retail tenants made up of tenants that are presently occupying the site, of tenants immediately to the South of the site who will be displaced by the Pulaski Interchange and the new Federal Building, and from the needs of the residential community who will occupy the site. This on site market will be in addition to that of Main Street and to that created by the new Federal Building to the South.

Present Environment

The fact that the proposed project site is contained within a fitting environment for a luxury apartment project also represents an opportunity. Surrounded as it is by the park and civic center, there is no need to wait on the over-all Downtown Renewal Program to effect the major change in environment that would normally constitute the psychological condition precedent for such a project.

Fire Damage

Another factor is the coincidence of the proposed redevelopment project with the recent fire which gutted a

substantial portion of the Main Street frontage in this block which provides the opportunity for acquiring the necessary property for project development.

Pulaski Circle Interchange

Finally there is the coincidence of this proposed project with the enforced sale of a portion of Bushnell Park to the State in order to permit the construction of the new Pulaski Circle Interchange. This sale of Park Land will provide the City with funds and it would be a desirable and proper policy to reinvest same in such a way as to add land to Bushnell Park in exchange for that disposed of. The site in question affords the obvious opportunity for this type of reinvestment. A portion of the site dedicated to such park use can link Bushnell Park itself to the Atheneum and Municipal Building-- a desirable civic objective.

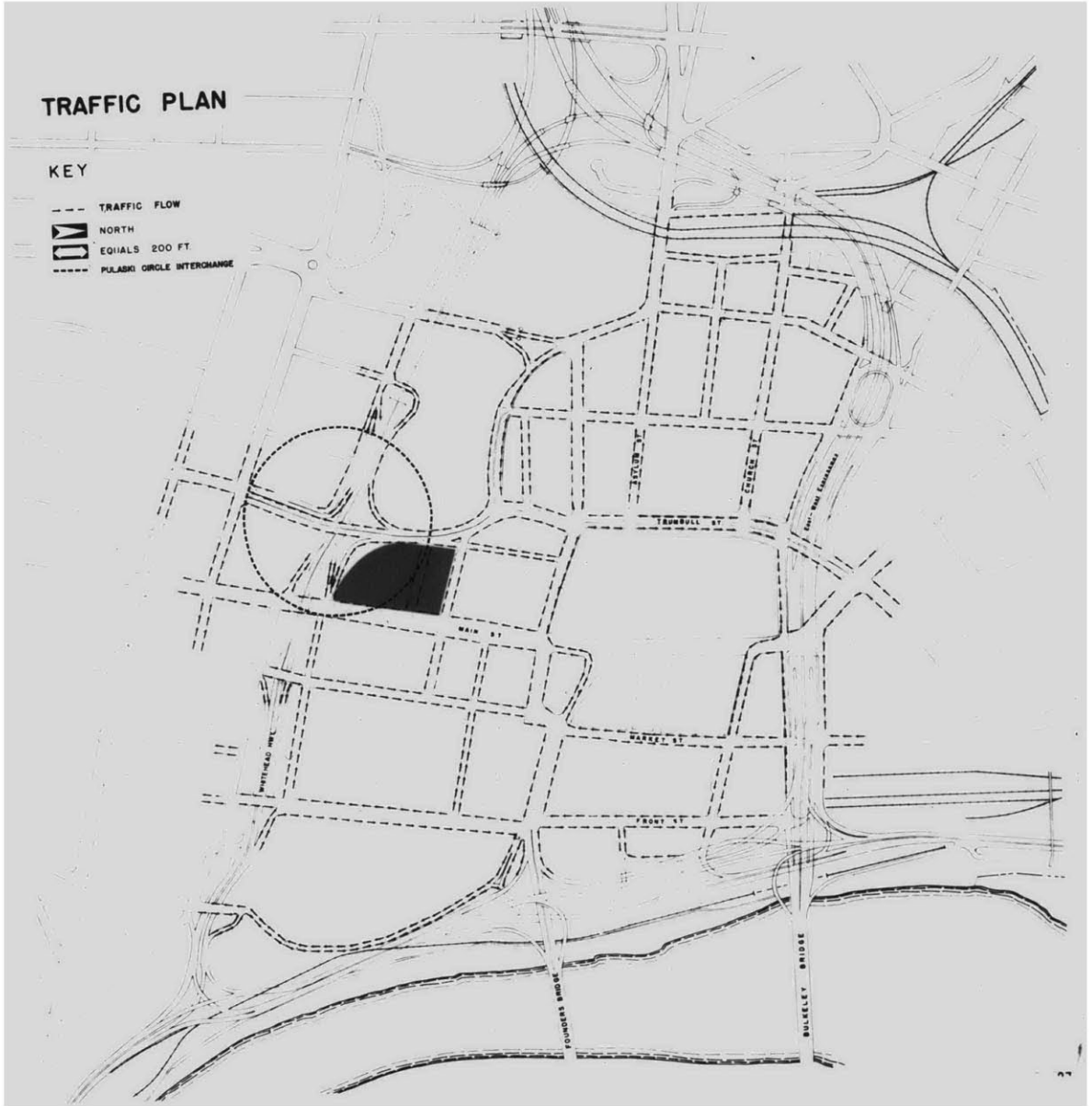
The Bushnell Plaza Project is a feasible Redevelopment Project. There is a need for such a project at the site proposed and there is an opportunity matching this need. The proposed project will show substantial direct benefits to the City. The net annual income to the City will ultimately be much higher than the taxes currently received from this site. There are substantial indirect benefits.

From the point of view of the private developer, the project is an attractive one. The scope of equity required

TRAFFIC PLAN

KEY

- TRAFFIC FLOW
- ▭ NORTH
- ▭ EQUALS 200 FT.
- PULASKI CIRCLE INTERCHANGE



will most probably be within the ranges that are manageable by most entrepreneurs in the housing field. Financing, with the possibility of F.H.A. mortgage insurance, should present no problem and there should be adequate returns on investment. This is a physically and financially feasible project that promises substantial rewards.

BACKGROUND

The Hartford Metropolitan Region will provide the environmental setting for the Bushnell Plaza project. All the influences of the region's geographic, climatic, economic, social and cultural environment will to some degree effect the over-all design concept of the development. Temperature ranges, amounts of precipitation, orientation, sunlight and prevailing breezes are also important. But it is the magnetism and activity of the urban environment of Hartford itself that must be preserved and emphasized. The maintenance of "the urban life" is the most important design determinant.

Growth of the Hartford Region

The Hartford Interim Plan proposes a new re-use pattern for the downtown by 1980. But this re-use will depend on demand-- and this demand in turn will depend to a large extent on the new users occasioned by the growth of the Hartford Metropolitan Region. Whether a proportionate number of these new users will in fact be drawn to the city of Hartford depends upon Hartford's ability to revitalize its Downtown Area.

Located midway between Boston and New York, and a part of the comparatively stable New England economy, Connecticut has managed to post consistently better economic records than its sister states.¹

1. Seymour Harris, The Economics of New England, Cambridge, Mass: Harvard University Press, 1952, Chapter 6

Much less dependent than they upon the shoe and textile industries, Connecticut has emerged as an important center of electronics, aircraft and other fast growing durable goods industries. As a result, Hartford's economy has been very responsive to the national market.

The Hartford Metropolitan Area, (the City of Hartford and a ring of nine contiguous towns) now contains a population of approximately 400,000, about 17% of the State's total. The original population projections for this area have now become obsolete. It is now the judgement of Architects and Planners, Rogers, Taliaferro and Lamb that the Hartford Metropolitan Area population may reach approximately 600,000 by 1980.¹

The Downtown Area Growth

The national phenomenon of decentralization and suburbanization has not skipped Hartford. Here as elsewhere, young middle income families have abandoned the City for the lures of suburbia; obsolete multi-story industrial structures have been vacated by manufacturing enterprises; insurance company offices have moved "uptown" and in one case, (The Connecticut General Life Insurance Company) relocated beyond the city limits; Downtown commercial and savings institutions have established branches in new

1. Rogers, Taliaferro and Lamb, Interim Plan for Downtown Hartford, Connecticut, 1958, p.6

residential communities; new suburban shopping centers with branches of national chains have been constructed or are proposed for future construction. In other words, the Downtown Hartford Area, plagued with obsolete structures and inadequate and outmoded traffic and parking facilities, has not participated in the regional growth. Rather its property values have been declining in the perilous spiraling grip of deterioration and decentralization.

The Function of Downtown Hartford

The key to the role of Downtown is the function performed in its buildings. Though Hartford's Downtown Area is located on the eastern fringe of the City, the growth of the eastern towns of East Hartford, Manchester and Glastonbury, combined with the construction of additional bridges across the Connecticut River, has enabled Downtown to retain its geographic centrality.

A radial network of highways extends from Downtown, reinforced by mass transit lines which all converge at the Old State House in the very core of Hartford's center. Here is the dominant regional shopping center, perhaps the only center in all of Connecticut which is truly "regional". Here also is the seat of State and City government, combined with a variety of cultural, educational, social and recreational facilities. Perhaps of most

importance in Downtown are the varied business offices in finance, insurance and real estate and offices for professional, business and personal services as well as a variety of other activities.

Downtown Housing

At the present time there is little housing in the Downtown area-- and such housing as there is, in most instances, is of an obsolete and uneconomic nature. Yet the experience of the Metropolitan areas indicates that, granted the condition of a renewed and attractive physical environment, Downtown presents an appropriate setting for new housing projects-- particularly housing developments designed for the age group preceding the formation of families and for those families whose children have left home and for whom the convenience of downtown facilities and the opportunities afforded by urban amenities to counteract loneliness, present real attractions.

The nature and extent of this market is not now known, but a study has been commissioned by the City of Hartford from the Real Estate Research Corporation which will gauge this market. Based upon the experience in other cities, however, and upon the opinions repeatedly expressed during the leadership interviews¹, it seems probable that a

1. Ibid, see appendix

housing use would be feasible for Downtown Hartford in two categories-- one: efficiency apartment units to serve the large numbers of single persons and couples of modest circumstances employed Downtown; and the other: a luxury apartment project to accommodate the active or retired executive and his family, who may prefer a Downtown environment. The cross-section of the inhabitants will govern the distribution of the apartments and the scale of rents.

ENVIRONMENT

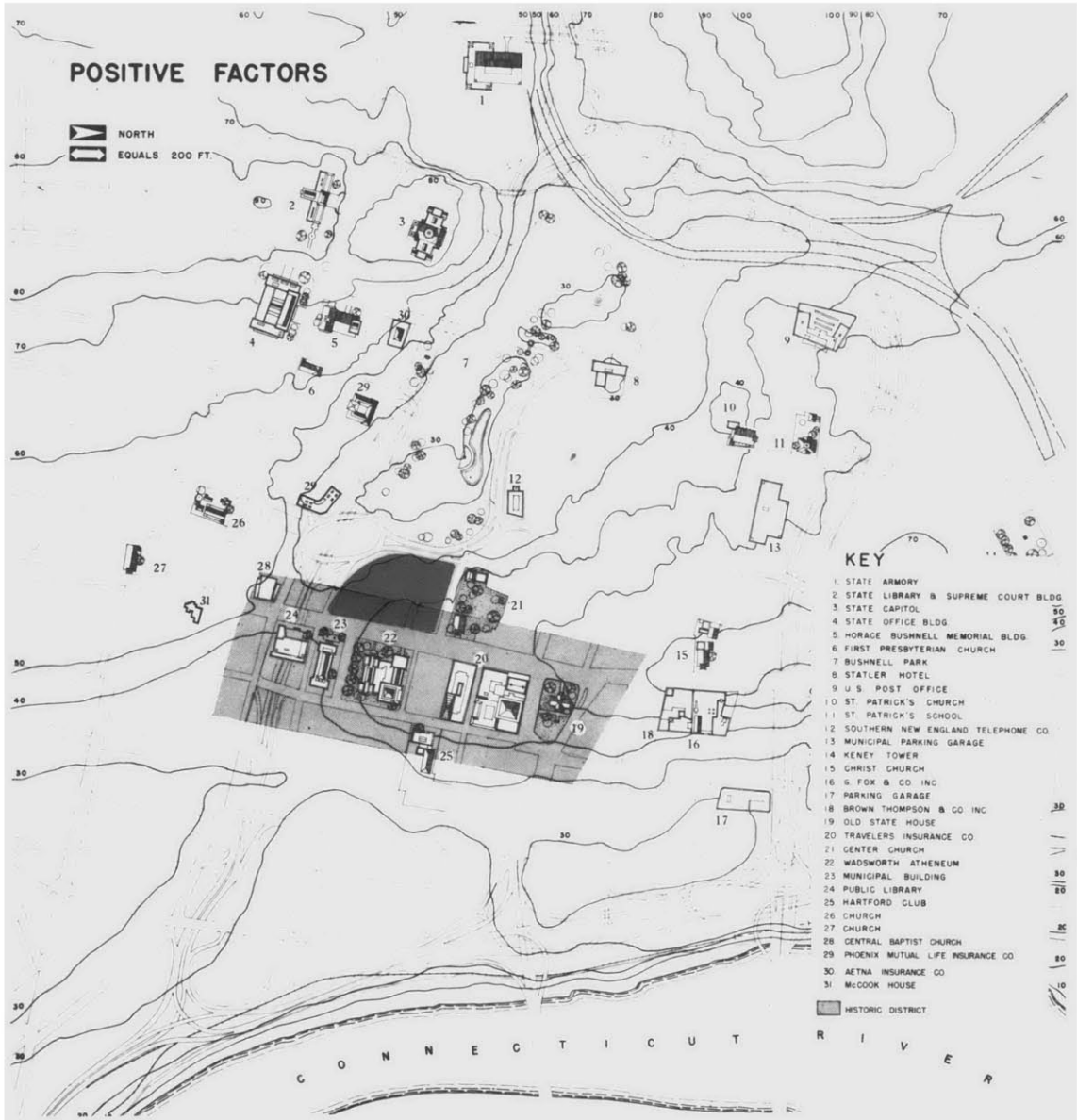
Since its founding in 1623, Hartford has been fortunate to have built a number of important buildings. Over the years its families, such as the McCook's, Bushnell's, Morgan's, and Avery's have contributed their energy, their imagination and their financial resources to make of Hartford a more beautiful city. The result is that there is in Hartford today an unusual number of unique urban features-- parks, museums, and institutions.

In order to identify the "positive factors", as well as other less obvious examples of good urban design, a complete photographic reconnaissance and field survey was made.¹ On the basis of this survey, the conclusion was reached that Downtown Hartford contained a number of important features which, needing protection and emphasis, should be made part of the future urban landscape. Some of the most important are indicated on the map following.

Bushnell Park

The Bushnell Plaza housing site lies amidst the majority of Hartford's "positive factors". Bushnell Park, itself, is the largest single land use within Downtown. Hartford can consider itself fortunate to have such an

1. Ibid, Pp.20-22



asset. It not only provides a setting for the State Capital, but it is interesting to note that it also was the choice location of the new multi-story Statler Hotel. Bushnell Park provides the major vista from a large number of Hartford's office buildings, among them Hartford's Telephone Company building. In the future, the park will probably become the focus for many more important buildings downtown.

Religious Facilities

Christ Church Cathedral, located across from the major department store concentration, adds a richness to the retail area and reminds one of the siting of St. Patrick's Cathedral on New York's Fifth Avenue. The Cathedral imparts a special quality to the busy commercial life of Downtown.

Center Church, organized in 1632, with its present church building dating from 1820, is another focal point of Hartford's Main Street. The beautiful churchyard with its quiet atmosphere, splendid trees, and tombstones, forms an important link to the past. This feature is reminiscent of Trinity Church in the heart of New York's financial center. A forecourt was recently added to the Center Church which allows entrance to the churchyard from Main Street.

Less than 1000 feet from the Bushnell Plaza site stands what is perhaps the oldest and most famous building in Hartford-- the Old State House. Designed by Bullfinch,

the no longer used Capital is located on a hilltop overlooking the Connecticut Valley. It is a tribute to Hartford's sensitivity that this building has been allowed to remain and is preserved in the very heart of the Downtown office core. Its importance should be recognized and it made a part of the scheme for revitalization of the central core.

The Civic Center

On the south edge of the Downtown Area across the street from the Bushnell Plaza site, the Municipal Building, the Wadsworth Atheneum and the new Public Library have been gathered together as part of an impressive municipal group of buildings. The Hartford plan by Rogers, Taliaferro and Lamb proposes to strengthen this grouping by unifying the buildings about a plaza, and by providing in Bushnell Plaza a strong connection to Bushnell Park through a western extension of the civic center. The plan also proposes the closing of the street separating the Municipal Building from the Wadsworth Atheneum and the creation of the Burr-McManus Plaza in its stead. This plaza will have at its head the Hartford Times building creating a rather formal, axial vista from Main Street.

There is also proposed on Main Street just south of the Public Library a new Federal Office Building. The activity in this area will then become concentrated with a clear system of circulation from Main Street.

SITE CHARACTERISTICS

The project site containing approximately 250,000 square feet (see site plan), is bounded by Main Street (east side), re-aligned Gold Street (north side), and Wells Street (west and south sides).

Approximately 12,000 square feet of the site area would be devoted to the extension of the City maintained Cemetery on the north side of relocated Gold Street (adjacent to Center Church), and approximately 20,000 square feet to relocated Gold Street itself.

It is also proposed¹ to deduct from the site land for one additional traffic lane on Wells Street. After these adjacent land requirements are met, a site remains consisting of slightly more than four acres with an imposing curved shape as the southeast border.

Existing Conditions

All roads bordering the site are heavily traveled. There is a major expressway access road to the south, Main Street to the east and heavy local traffic on the west and north. The site is in effect an island isolated by traffic.

Adjacent land uses include a major expressway, the civic functions of the Public Library, the Municipal

1. Rogers, Taliaferro and Lamb, Renewal Program for Downtown Hartford, Connecticut, 1960

BUSHNELL PARK

WELLS STREET

RETAIL

CLUB

CEMETERY

CHURCH

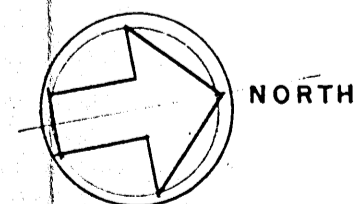
BUSHNELL PLAZA SITE
(5 ACRES)

MAIN STREET

PLOT PLAN

SCALE: 1" = 40'

TRAVELERS INSURANCE



MUNICIPAL BUILDING

LIBRARY

WADSWORTH ATHENEUM

BUSHNELL PLAZA PROJECT
HARTFORD, CONNECTICUT
M.I.T. JUNE 1961 MORTON GRUBER

WHITEHEAD HIGHWAY

WELLS STREET

GOLD STREET

30

35

40

45

50

Building and the Wadsworth Atheneum, the religious uses of the Center Church with its large city maintained cemetery, and the recreational facilities of Bushnell Park.

Approaches

Since the site is seen and approached by vehicular traffic from nearly all directions, there can be no best vehicular approach except that it is probably better to keep most of the service and parking traffic off Main Street. Main Street does present to the site, however, a major pedestrian approach and city connection. From Main Street, the pedestrian becomes aware that the Bushnell Plaza site is the stepping stone to Bushnell Park.

The site dominates vehicular and pedestrian vistas east from both the expressway and the park. It serves as a foreground for the dominant vertical in the Hartford cityscape, the 500-foot Traveler's Life Insurance Company tower, and becomes the visual termination of the building mass of Hartford's entire Central Business District.

From the site's 5% slope, there is a fine view of Bushnell Park to the west with the State Capitol Building in the distance. The green of the park becomes the focus from the site although any structure on the site more than six stories in height would have an excellent view of the Connecticut River and Connecticut Valley to the east.

All major utilities are available at the site. In addition, the Hartford Gas Company's new central plant and distribution system will supply the area with both heating and cooling as a public utility.¹ The air conditioning service will be sold in much the same way that utilities presently distribute gas and electricity, with meters to determine the amount of steam and chilled water used by each building's mechanical system.

1. "Air Conditioning 'On Tap' Downtown", Architectural Record, March 1961, p.221

THE HARTFORD REDEVELOPMENT AGENCY'S SUGGESTED ARCHTECTURAL PROGRAM

At the suggestion of Hartford's planning consultants, Rogers, Taliaferro and Lamb, the Hartford Redevelopment Agency has followed through with a tentative program of preliminary criteria. These criteria were established under the direction of Robert J. Bliss, Executive Director of Hartford Redevelopment. The include the program uses permitted in the project area, sizes and intensities of buildings, elevation limitations, set-back and coverage restrictions, and the aesthetic controls to be achieved through the agency's approval of proposed plans and specifications.

The tentative program is rather specific in nature, and is subject to question as to the appropriateness of certain functions on the proposed site, relative density of residential development, the relationship of Bushnell Plaza to Bushnell Park, etc.

The Preliminary Bushnell Plaza Criteria is as follows:

I. Permitted uses allowed in the Project area:

- A. The Project shall consist of structures and other facilities designed for the following uses of others which in the opinion of the Agency are similar to them.
 1. An apartment house;
 2. One of more retail facilities intended for the following uses: drug store, restaurant, specialty shops, a small moving picture theater, etc.:
 3. Underground tenant parking facility.

B. The unbuilt-upon land in the Project area shall be designed and organized to complement the buildings and shall consist of landscaped and paved areas of individuality and quality including a major urban square or plaza.

II. Size and intensities of buildings allowed in the Project area:

A. The apartment house to be constructed on the site shall contain approximately 300 apartment units divided as follows:

- 150 efficiency units (50%)
- 90 one bedroom units (30%)
- 45 two bedroom units (15%)
- 15 three bedroom penthouse suites (5%)

B. The permitted retail facilities shall occupy 10,000 - 15,000 square feet of land area exclusive of a theatre and restaurant.

C. A restaurant may occupy 5,000 - 10,000 square feet of floor area.

D. A motion picture theatre may not exceed 500 seats in capacity.

E. The underground parking facility shall have a capacity of approximately 400 vehicles-- Minimum Parking Ratio to be 0.8 car space per apartment.

III. Elevation limitations for all structures:

A. The existing elevation at Main and Mulberry Streets is 51'; that at Wells and Mulberry Streets is 36'.

B. The maximum elevation of the apartment house tower shall not exceed 252' and for base plan structures 75'.

C. The maximum elevation for retail structures including the theatre shall not exceed 75'.

D. The maximum elevation for the underground parking facility shall not exceed 55'.

IV. Set-Back and coverage restrictions

- A. Minimum set-back of apartment structure from the park shall be 30'; retail structures shall be 60'.
 - B. Minimum set-back from Wells Street shall be 60' for the apartment structure; 30' for all others.
 - C. Minimum set-back from Main Street shall be 200' for the apartment structure and none for the retail structures.
 - D. The maximum site coverage for all buildings shall be 35% not including, however, the parking facility.
 - E. The maximum floor area ratio for all structures shall be 3.0, not including the parking facility and portions of structures below elevation 50'.
 - F. Limited surface parking and loading facilities may be permitted at the discretion of the Agency and must be designed to avoid these uses occurring on the adjacent streets.
- V. Aesthetic control and approval of Plans and Specifications.
- A. In order to establish and to maintain values and to insure aesthetic and functional coordination essential to the carrying-out of the objectives of the Project and the Downtown Renewal Program as well as the continued maintenance of the Project, developers shall agree to controls through such means as are deemed appropriate by the Agency. Such controls will be concerned solely with aesthetic and functional considerations and will not relieve developers of their responsibility to comply with all ordinances and regulations of the City.
 - B. The Agency specifically reserves the right to review and approve developer's detailed plans, final working drawings and specifications. Review and approval will be specifically concerned with, but not limited to, site planning, architectural design and layout, materials of construction, landscaping, access, advertising and identification signs, and walkways.

- C. Preliminary sketch drawings of site plans and building elevations in sufficient detail to show access, layout, landscaping, and building construction shall be submitted to the Agency for review and approval before working drawings are made.

The Bushnell Plaza Proposal

Architects and Planners, Rogers, Taliaferro and Lamb actually took their renewal plan for Hartford one step farther by suggesting specific architectural solutions to each of the proposed projects. The main features of their Bushnell Plaza project are:

- "1. The realignment of Gold St. to match a realigned Atheneum square north. This will provide additional green around Center Church and permit traffic to move across Main Street to Prospect.
2. Park funds derived from the sale of land for the Pulaski Circle Interchange to be reinvested in a park along Gold Street. This will complement and extend the open plaza resulting from the demolition of the Aetna Buildings between the Travelers Tower and the Atheneum. There would thus be provided a green link between the Atheneum and Bushnell Park, carrying pedestrians over Wells Street (the widened Trumbull Street Extension) by way of a generous and graceful overpass. An easterly extension of this greenway across Prospect Street will eventually connect Bushnell Park to the Riverview Housing Project.

3. The site is planned so that the residential portion overlooks the park at the west side of the site, while the back of the apartment building forms a plaza on the east side contained by the office building at the south and the retail space at the north. The placement of the retail and office space on the Main Street side of the site related these to the pedestrian movement along Main Street.
4. The plaza thus developed should be a gem and it intended to act as a visual extension of the Burr-McManus Plaza which we suggest for development between the Municipal Building and the Atheneum (closing of Atheneum Square South). The concept of using buildings as "Walls" to define urban space it here well-illustrated. The space so defined will be stopped at the east by the colonade of the Times Building and on the west by the Apartment Tower.
5. The apartment building is conceived as a single and dominant unit, although if market conditions dictate it may be constructed in three sections of one hundred units each to permit a phasing of construction. This decision was arrived at basically in order to fit the increased units better to a rather small site. Other considerations are the appropriateness of a building scaled to the

Statler and the Telephone Building and the need for a strong mass, on a site fronting on the openness of Bushnell Park, and aura of prestige which is necessary in a luxury project and which more easily surrounds a large and dominant building. The orientation of the tower is east-west and is based upon the view of the Park on the west and across the roof tops to the River on the east.

6. The retail structure will be quite low and considerable attention should be given the design of its "roofscape" which will be very much in the view of the apartment dwellers. If a restaurant is proven feasible, it might very well go on the roof of this building.

Financial Feasibility of Solution

1. Acquisition Cost is assumed at 125% of present assessed value of land and improvements, the project site being somewhat farther from the core than in the case of the Trumbull Center and Centinal Mall Projects and, therefore, having a ratio somewhat above that in these project areas due to the probability that the original value of the Bushnell Plaza site (and therefore, its assessment) was lower than in the core blocks.
2. Re-use value of the cleared land is estimated at \$4.45 per square foot for private use.

3. Construction costs are estimated at:
 - a. For the Apartment Tower-\$15,000 per apartment.
 - b. For the Parking Garages - \$2,200 per space (these being below grade.)
 - c. For Retail Space - \$20.00 per square foot, in recognition of the fact that the project plan provides for retail space to be used by small specialty shops which may be more costly to build than the larger space provided in other projects.
 - d. For Office Tower Space - \$22.00 per square foot.
 - e. Site Improvements, demolitions, etc. are lump sum estimates based upon the analysis of the scope of the work required.

4. Operating Income from facilities proposed:
 - a. The rent structure assumes maximum desirability for the penthouse apartments and lowest for those nearest ground level. Rentals per room may range from a high of \$75.00 per month to a low of \$45.00 for the least desirable units. These figures, in the upper range, would approach the rentals suggested, in The Downtown Housing Market Analysis, for luxury units of \$150 to \$300 per month, depending upon the size of the apartment.
 - b. The Garage can produce net income to its private operator sufficient to cover costs.

- c. The private income potential for the office tower and the strategically located retail space should be ample to cover the private developers costs for purchase of the cleared land and for financing construction.
5. Assessments are assumed at 2/3 of full value of new construction and land, and the tax rate at \$4.67 per \$100 of assessment.
6. Contingencies are allowed for at 10% of gross project costs.

Financial Analysis of Initial Phase (1960 - 65)

| | | |
|---|--------------------|--------------------|
| 1. <u>Cost of Project Site Acquisition</u> | | <u>\$3,590,000</u> |
| a. Assessed value of site | \$2,870,960 | |
| b. Acquisition Factor | | 125% |
| c. Estimated Acquisition Cost | <u>\$3,590,000</u> | |
| 2. <u>Street Improvements in Project</u> | | <u>\$ 40,000</u> |
| (Realignment of Gold St. and Wells St. improvements.) | | |
| 3. <u>Other Project Costs</u> | | <u>\$ 900,000</u> |
| a. Demolitions | \$ 75,000 | |
| b. Park Development | 400,000 | |
| c. Administration Costs | 25,000 | |
| d. Contingency at 10% | <u>400,000</u> | |
| Total | \$ 900,000 | |

| | | |
|--|----|--------------------|
| PHASE I GROSS PROJECT COST | | \$4,530,000 |
| 4. <u>Re-use Value of Land</u> | | \$ 800,000 |
| For private development 157,000 | | |
| square feet @ \$4.45 | \$ | 700,000 |
| For Public Park 50,000 | | |
| square feet @ \$2.00 | \$ | <u>100,000</u> |
| | | <u>800,000</u> |
| NET PROJECT COST | | \$3,730,000 |
| 5. <u>Net Project Subsidies</u> (with Title I Federal Aid) | | |
| a. Federal share of Net Project | | |
| Cost - (75%) | \$ | 2,797,500 |
| b. City share of Net Project | | |
| Cost - (25%) | \$ | 932,500* |
| 6. <u>Cost of Public Investment</u> | | <u>\$ 932,500</u> |
| 7. <u>Private Investment</u> | | <u>\$8,150,000</u> |
| <u>Site Acquisition</u> | \$ | 700,000 |
| <u>Site Improvements</u> | \$ | 150,000 |
| <u>Construction Costs</u> | | |
| a. Housing - 300 units @ | | |
| \$15,000 | \$ | 4,500,000 |
| b. Retail - 12,000 sq. feet | | |
| @ \$20/sq. feet. | \$ | 240,000 |
| c. Office Space - 50,000 | | |
| sq. feet. @ \$22/sq. ft. | \$ | 1,100,000 |

* Includes reinvestment in park of \$500,000 revenue anticipated from park sale.

| | |
|-------------------------------|-------------|
| d. 240 Parking Spaces @ | |
| \$2,200 (\$528,000) plus | |
| service areas | \$ 808,000 |
| | <hr/> |
| | \$7,498,000 |
| Interest during construction, | |
| Fees, Contingency | \$ 652,000 |
| | <hr/> |
| Total Private Investment | \$8,150,000 |

8. Direct Benefits (As Annual Tax Increment)

| | | |
|---|-------------|-------------------|
| a. Present taxes from property acquired (\$2,879,960 assessment @ \$4.67 per \$100) | | <u>\$ 137,000</u> |
| b. Estimated taxes from new private uses in project | \$ 253,500 | |
| -Full Value | \$8,150,000 | |
| -Assessment @ 2/3 | \$5,430,000 | |
| -Taxes @ \$4.67/\$100 | \$ 253,500 | |
| ANNUAL INCREMENT | | <u>\$ 116,500</u> |

9. Indirect Benefits - In addition to the substantial direct benefits from increased tax returns there are these indirect benefits:

- a. The establishment of a permanent Downtown Residential Community.

- b. The clearance of the blighted blocks between Civic Center and Bushnell Park.
- c. The complimenting and enhancement of the plazas being created by the demolition of the Aetna Buildings and by the suggested development of the Burr-McManus Court between the Atheneum and the Municipal Building.

Physical Feasibility

A. Demolitions Required

It is proposed that the entire site be cleared and the financing program above takes cognizance of this. The two movie theatres and the Heublein Hotel are the principal structures on the site. These are relatively old and, while undoubtedly capable of rehabilitation, the constriction of the site is such that proper project planning dictates the complete clearance of the project area.

B. Relocations Required

| | |
|--------------------------------------|------------|
| 1. Retail Shops | -35 |
| 2. Hotel | -1 |
| 3. Theatres | -2 |
| 4. Drive-in Bank | -1 |
| 5. Gas Stations | -2 |
| 6. Total Commercial | <u>41</u> |
| 7. Residential Apartments | <u>-32</u> |
| 8. Total Commercial and Residential" | 73 |

TOWARD THE SOLUTION OF AN URBAN RESIDENTIAL ENVIRONMENT

It is often most rewarding and fruitful to arrive at a program for a particular project only after much study and analysis of the latent potential of the site, the environment, the statistically proven need and the ultimate possibilities of many solutions. By analyzing other proposals for the site (such as the aforementioned scheme by Rogers, Taliaferro and Lamb), and by attempting various extreme approaches to the problem, one may come to the conclusion that there exists a "best" or a "most appropriate" solution achieving the basic aims for the particular situation and still meeting the specific conditions.

With the Bushnell Plaza project, the conditions to be met and the worthwhile aims to be achieved are many and are complex in their diversity, ambiguity and contradiction. Thus the program itself becomes radically different with varying types of solutions.

For this thesis, therefore, the program can only be stated in relatively general terms. This allows the design freedom necessary to produce the proper environment so essential to the site and to Hartford. Statistics and surveys help to establish the existence of a need or trend, but to follow them blindly is to overlook the more important fundamentals which underlie our cities' being, and to perhaps overlook the possibility of creating a more

desirable environment.

Certainly, if the environment created is undesirable and amenities are few, location alone could never suffice as "a good place to live". So it is the surroundings, the atmosphere, the feeling of a unified environment, plus the creation of the necessary "life" in a development that makes it either desirable or not.

In an urban development, density ranges must be high in order to achieve that "life" so necessary to the urban environment. Any four-acre urban project which dilutes its residential "neighborhood" with emphasis on diverse functions such as a public shopping mall, or public offices, is watering down the very strength in its identity and its reason for being. Granted that these functions can and should be combined in an urban environment, the proper intensity and the manner of expression becomes the major problem.

Number of units

Can the ideal number and size of apartment units for a particular site be established by a survey or by statistics?

The proper number of units lies somewhere in the range between too few where the high urban land cost is not economically justifiable, and too many where the density

disallows proper light and air and the human scale relationship is lost. But even with the supposedly "correct" number of units, there is an infinite variety of combination solutions.

It is therefore, fundamentally the inter-relationship and quality of the spaces defined by the units that determines the success or failure of a development. The number of units is merely relative.

Expansion, Flexibility and Variety

The housing at Bushnell Plaza should possess a definite systematization from the site plan to the unit plan. Subdividing the large mass of construction with a system allows the opportunity for grouping and categorizing of units. These systematized units, or modules, make possible: 1) more light and air circulation, 2) cross ventilation to a maximum number of units, 3) construction to be in stages as necessary, 4) more flexibility in site arrangement, 5) the opportunity to expand, 6) a sense of smaller and more human scale to the building units and 7) the chance to begin to enclose spaces between the buildings.

The ideal in flexibility is to develop a basic structure adaptable within to various apartment sizes and types. This flexible structure immediately lends a unity to any site arrangement.

Variety can be achieved in many ways, but any attempt

to gain variety through architectural tricks soon becomes dated and loses its appeal. Variety should only be achieved within the organizing architectural frame of construction.

Circulation

In order to prevent congestion and confusion, and to maximize convenience for the urban apartment dweller, automobile circulation should be clear, direct and simple. There should be direct access from the car to the unit as a convenience in unloading. Furthermore, there should be if possible, a taxi drop-off under cover at each apartment building. After it lets pedestrians off under cover, it is desirable for the automobile to have an adjacent or convenient garage entrance. Driveways should be planned so that the lights of cars at night do not rake across bedroom windows.

Pedestrian circulation should if possible be completely separated from vehicular circulation. It too, should be straight-forward, logical and above all, strongly related to the major pedestrian movement along Main Street. It is desirable to have the possibility of pedestrian movement under cover through the site and over a pedestrian bridge to Bushnell Park. Though the bridge need not be covered, it should be of sufficient dimension to allow ease of movement over Wells Street.

Landscaping

Although the predominant texture underfoot should be pavement very urban in character, trees, shrubs, flowers, lawns and every natural feature should be exploited for its beauty. Landscaping, here a very important design element, should be made economical to maintain.

Landscaping elements may be used to cut off undesirable views, afford windbreaks, shade, background and some degree of noise screening. Since there are no existing trees, most landscaping elements must be imported. The sloping site lends itself well to various terraced levels.

Bushnell Park Connection

The relationship between Main Street, Bushnell Plaza and Bushnell Park is by no means a triviality. There are at least two approaches to the solution of this problem. One is to set aside a portion of the site along Gold Street's south side thus allowing an ease of movement on what is in effect a widened sidewalk by-passing Bushnell Plaza completely. This approach has two disadvantages: 1) the already small site is further reduced thereby limiting the possible size and range of spaces within Bushnell Plaza, and 2) the opportunity of creating the strongest possible connection and relationship between plaza and park is missed.

The other approach then suggested is the direct linkage of the plaza's main space to the park. This approach is no doubt the more logical. Not only does the site retain its larger dimension (an additional 53,000 square feet), but the approach downtown is all the more dramatic, landing at Main Street through the main space of Bushnell Plaza.

On-Site Amenities

In addition to ample parking (probably one car per apartment is most appropriate), there should be at least the following minimum shopping facilities: A drug store, a restaurant, a laundry pick-up or valet service, several specialty shops, a small food store and adequate temporary parking adjacent to the shops.

In any type of luxury housing development, these functions are most necessary and they should be readily accessible from the apartments. However, it should not be the objective to emphasize these functions so as to mar or negate the serenity and nobility of the residential environment. The public may be aware that these functions do exist on the site, and perhaps the restaurant should be noticeably the most inviting of the group. Thus the general atmosphere of the main plaza space should not be an invitation to buy, but rather an invitation to enter, to relax, and to dwell.

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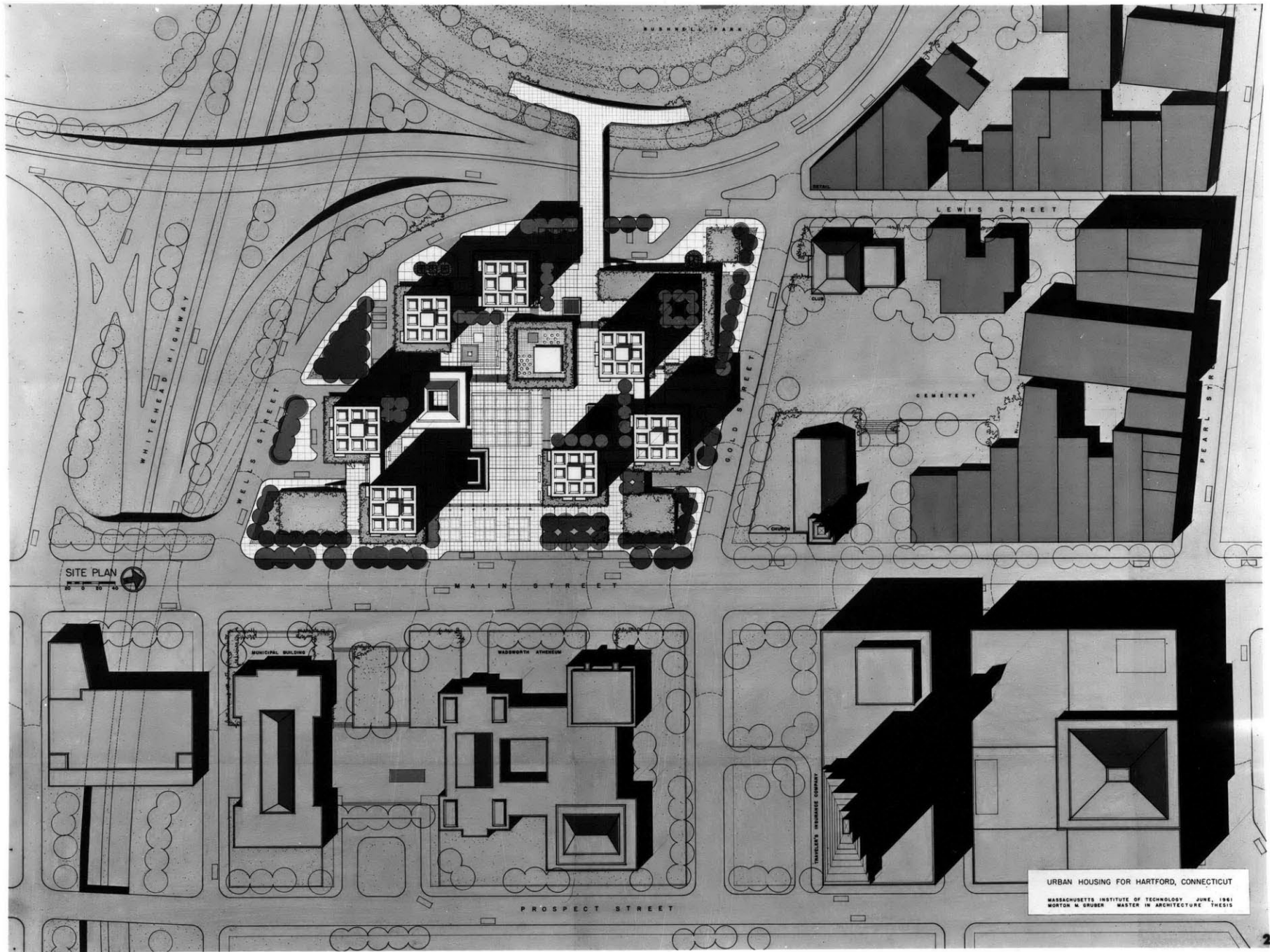
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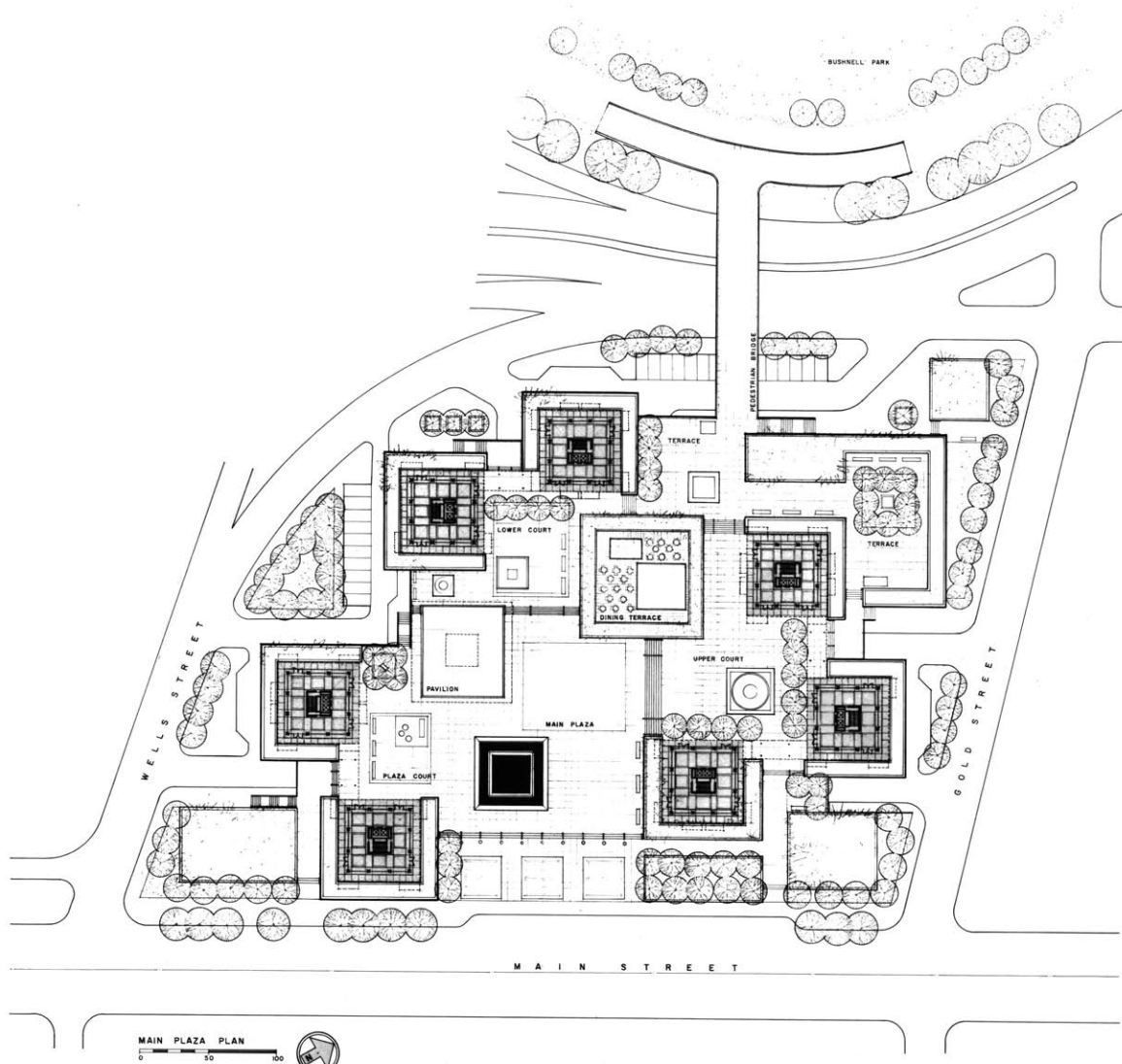


SITE LOCATION PLAN DOWNTOWN HARTFORD, CONNECTICUT

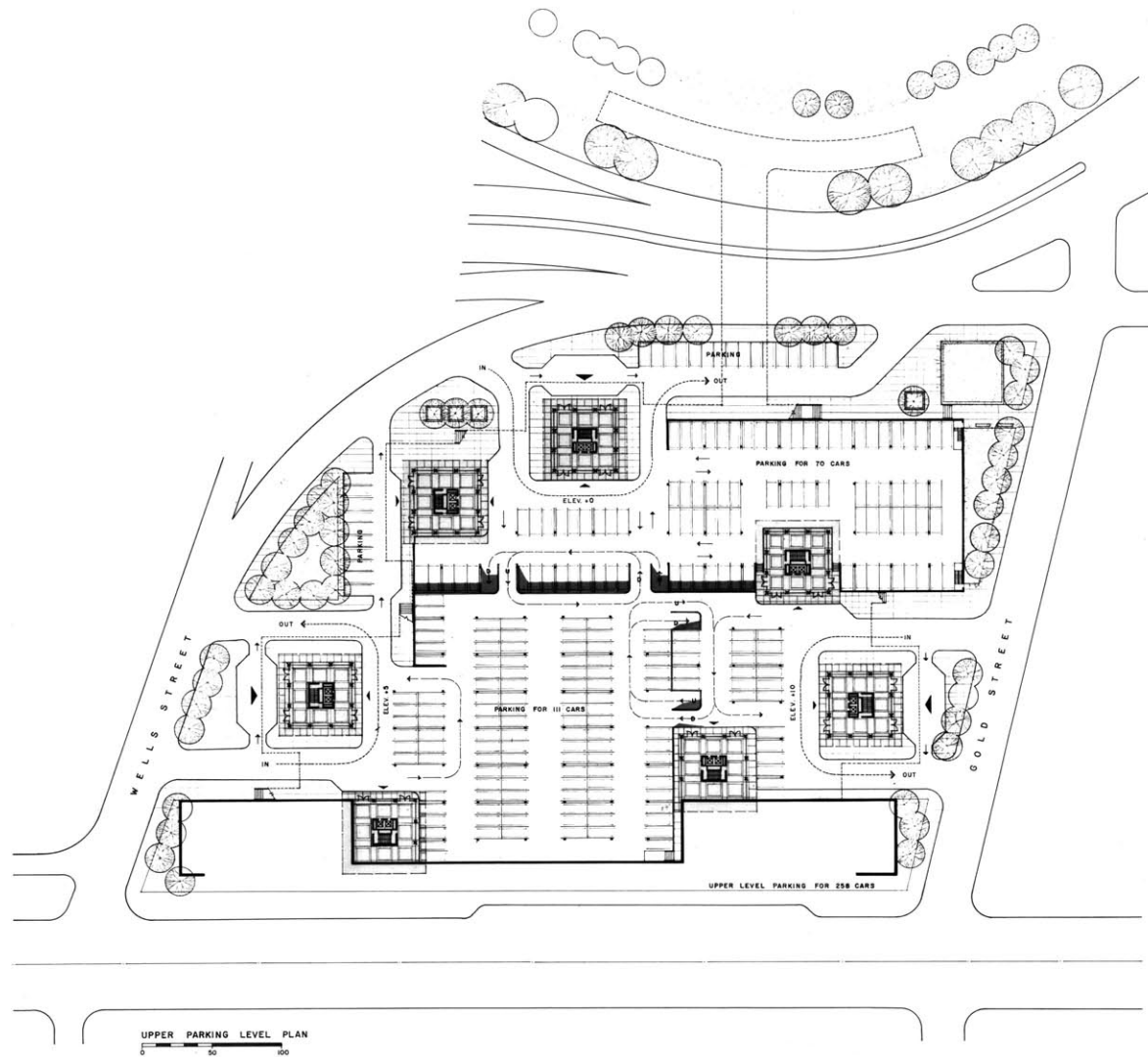
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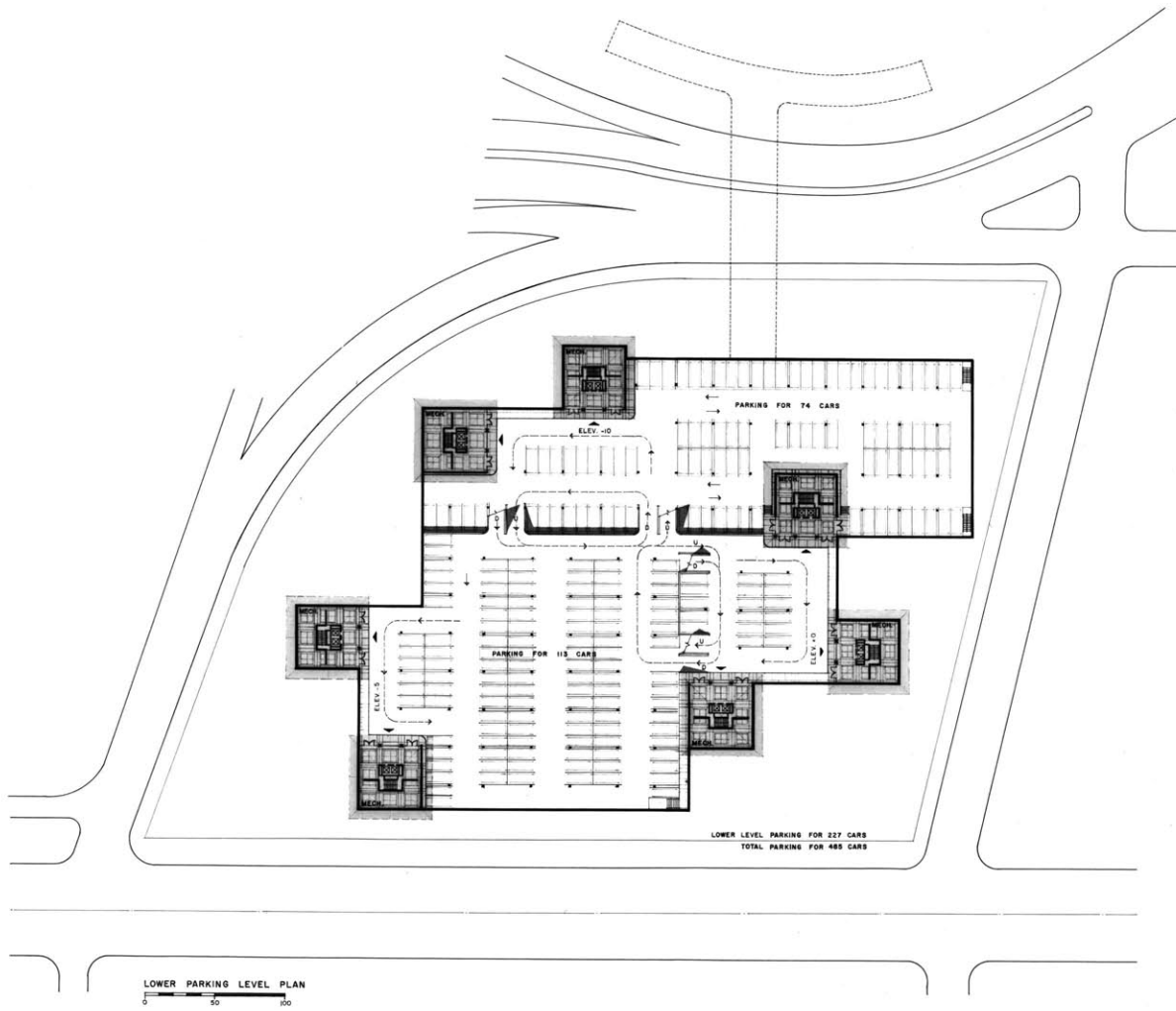


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UPPER PARKING LEVEL PLAN
 0 50 100

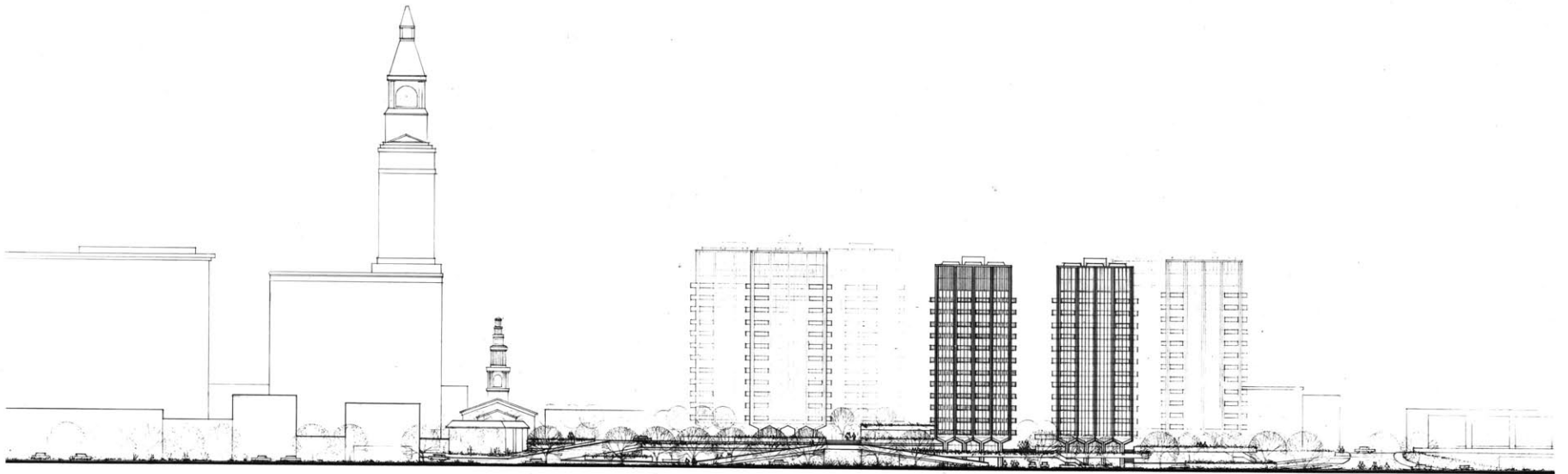
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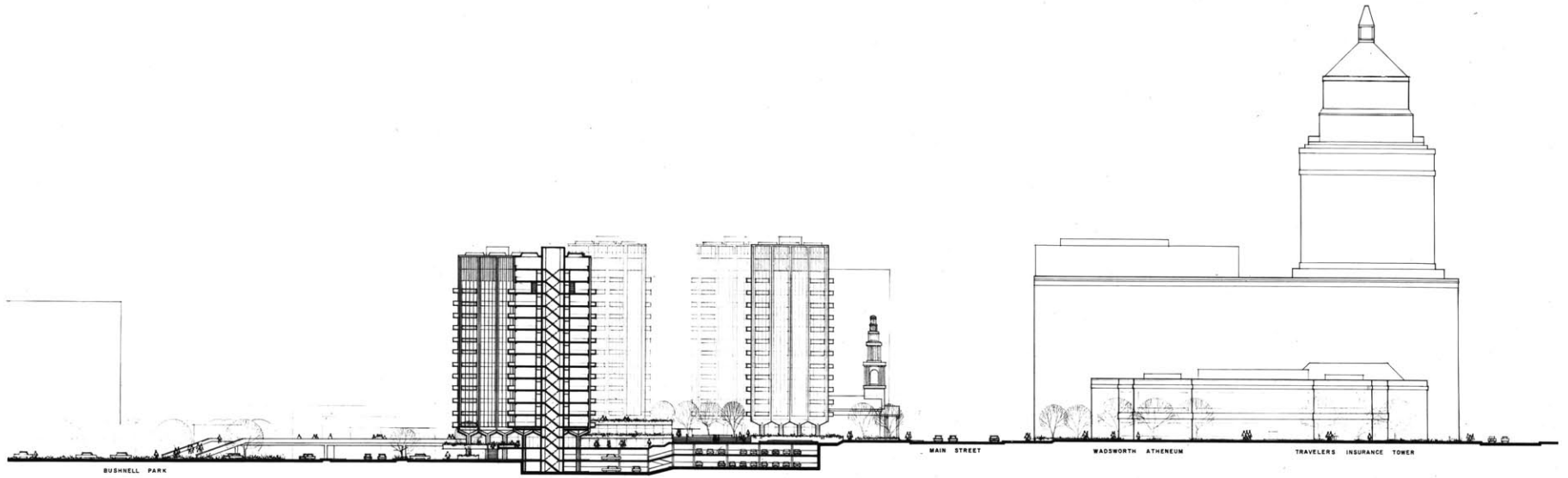
LOWER LEVEL PARKING FOR 227 CARS
TOTAL PARKING FOR 485 CARS

LOWER PARKING LEVEL PLAN
0 50 100

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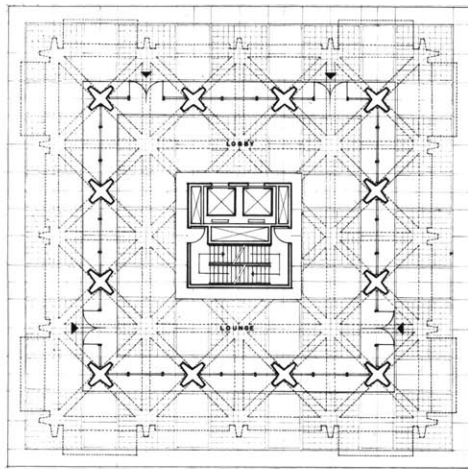


ELEVATION FROM BUSHNELL PARK
 0 50 100

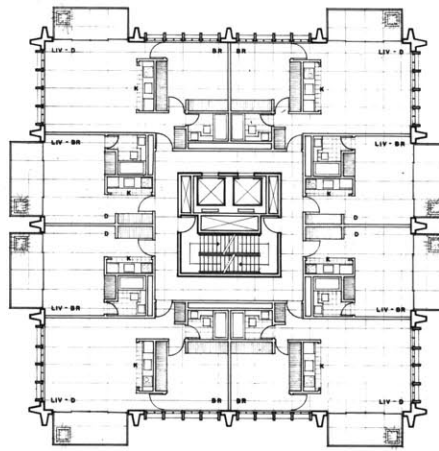


BUSHNELL PARK
 SECTION - LOOKING NORTH
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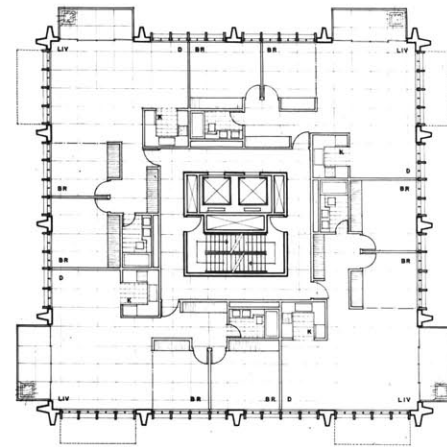
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PLAZA LOBBY LEVEL

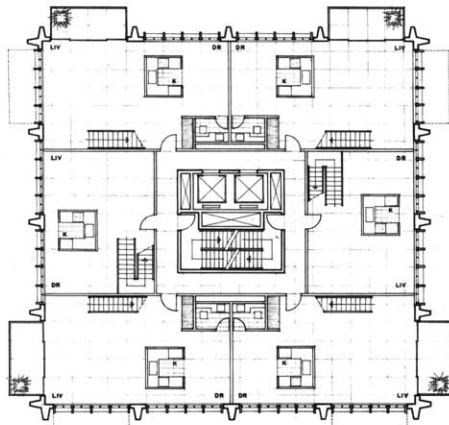


2ND-13TH FLOORS (TYPICAL ONE-BEDROOM AND EFFICIENCY)

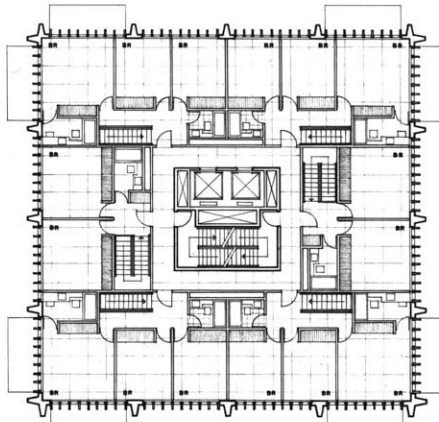


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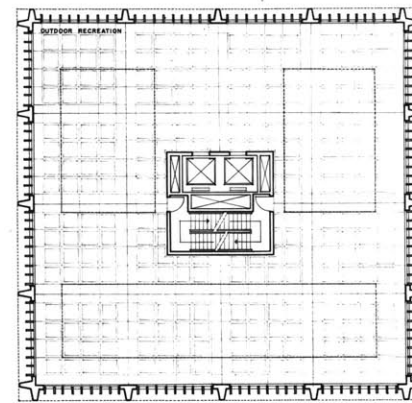
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14TH FLOOR (FIRST LEVEL - TWO LEVEL APARTMENTS)



15TH FLOOR (SECOND LEVEL - TWO LEVEL APARTMENTS)



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