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"When you analyze something objectively, you can't help being satirical."

"Architecture is a metaphor representing the consciousness of an era."

CHAPTER I

ROOSEVELT ISLAND HOUSING PROJECT

"ARCHITECTURE IS A METAPHOR REPRESENTING

THE CONSCIOUSNESS OF AN ERA."

It can be used to set forth the consciousness of an era by transferring words from one field to another. When I speak of media, I mean different forms of communication such as speaking, writing, radio, television, etc., acting, architecture, etc. All of these are parts of the culture, and a mastering of one will aid in the understanding of the other. Metaphorical analysis is a method of understanding architecture and the intention of the architect of it.

The idea of metaphor could be used for the character or personality, but the other elements of the whole are subordinate to this idea.

When designing a building, I arranged the process of thought behind the building. The architectural is allowed for and arranged in plan and elevation. The building

"When you analyze something objectively, you can't help being satirical." R. Buckminster Fuller

"Architecture is a metaphor representing the consciousness of an era." To understand this concept and its usefulness as a linguistic design tool, I will try to explain what a metaphor is. It is a figure of speech in which a term is transferred from the object it ordinarily designates to an object it may designate only by implicit comparison or analogy. It is a figure of language, an allegory or parable. It can be used to set forth a truth. So then metaphors are represented by transferring ideas from one media into another. When I speak of media, I mean different means of communication such as speaking, writing, radio, television, art, acting, architecture, etc. All of them contain parts of the others, and a mastering of one will aid in the transference to the other. Metaphorical analysis is a useful tool in understanding architecture and the intentions of the designers of it.

The idea of metaphor could be called theme, character or personality, but the other media that make up the whole are subordinate to this idea.

When designing a building, a straight line process of thought begins the building. After the circumstantial is allowed for and arranged in plan and elevation, the building grounds. Man, in his immaturity, decorated himself with objects that had meaning which if worn would transfer that meaning to himself.

starts to take form. After that mixing occurs, there is a process of whole to parts to whole design procedure. At this point, the linear process changes to a lateral process. As this process is taking place and the circumstantial is being accommodated, the designer starts to impose his will on it which starts to show his consciousness. His previous training and attitude start to become apparent through the design.

Through this process of articulating the circumstantial and imposing a will on the building, the idea or metaphor of the building becomes apparent. The final building is a concretization of the process and the will of the designer.

After long years of education and practice with the process of design and understanding the tools of design, the designer becomes an intuitive designer. This intuition is unconscious because the information is ingrained and the designer can perform acrobatics with the process and the building. He can start at any point and work out or in, but only because he knows what will happen. He is in control and the idea or metaphor will be known from the start.

"Man," according to Jung, "has imposed meaning on inate objects since the beginning of history." Certain trees and rocks were sacred. Areas of the land were taboo or holy grounds. Man, in his immaturity, decorated himself with objects that had meaning which if worn would transfer that meaning to himself.

Indians decorated themselves with eagle feathers and bear claws. They painted themselves and took the name of the predator that they identified with.

A man dressed up in cowboy clothes shows through his clothes and the objects he chooses to surround himself with, which are visual and technical metaphors, the organization of his mind. The dress relates to the circumstance of his work and also shows the fantasies he is dealing with. How he relates to those objects and how the objects are made also represent theatrical metaphors of his mind. This same thinking can be carried into architectural analysis, and a designer's intentions can be analyzed by recognizing the metaphors he chooses.

In today's world, the transference of an idea to a person still occurs. It is not the transference of animal metaphors. It is a transference of more recent ideas of efficiency. The business man accepts metaphors which express the business he is in. He expresses himself by transferring efficiency, logic and rationale to his clothes and his buildings.

Different styles, new and old, throughout history still affect us today. They are established styles and institutions which at one time were the progressive idea, but through use they became the status quo. These styles are readily accepted because through history they have been used and the people have

established a dialogue with these styles and have established a common act which they associate with these architectural settings.

Because of these established traditions and defined ways of acting, there is a relaxed feeling when people use these objects. These definable architectural styles then get repeated in a variety of ways with other styles that people accept. When a person chooses to accept a style, the style, then, is a metaphor showing his consciousness. This consciousness is of a larger scale than his immediate clothes or personal space but they can be analyzed as metaphors that represent his consciousness.

When analyzing architecture metaphorically, a person must know history, the process of design and object meaning in order to be able to understand the thinking that established a new style. You must also be educated to understand the metaphorical association of object to the idea that it implies.

Metaphors have been used in the past by architects. Architects have had to transfer ideas such as nature, regality, holyness and heavenliness, sensuality, function, efficiency, speed, order, common, futuristic and a list of other ideas. They had to transfer it into architecture by understanding a list of disciplines and through their understanding, transfer the idea into an architectural statement.

In today's movements such as pop art and the new architecture a study of history will show how architects have crossed architecture with the metaphors of other disciplines to achieve a new arrangement which gave a boost to architecture. Architects of the past have transferred ideas of the organic and the curves of women into an art and architectural statement to produce what they called Art Nouveau. Wright also transferred the organic analogy and crossed it with geometry to produce what he called prairie architecture. Wright took the idea of democracy and transferred it into a horizontal, ambling architecture that represented the freedom of the continent and its people.

The Bauhaus transferred the ideas of the machine and mass production, speed, efficiency and universal space into an architectural statement that represented the ideas and consciousness of their times.

Art Deco was an architectural comment of speed, sensuality and modern which borrowed from its predecessors, the Bauhaus and Art Nouveau.

The international style was a formalistic expression of Bauhaus and was used by bureaucratic power structure as a monument of our times. It also borrowed images from the classic past and was used as a modern classic.

In today's movements such as pop art and the new architecture of Venturi, the theme of their work is the common materials and social symbols of pop culture crossed with the sophisticated tools of the designer which gives new life to those statements.

All of the movements had a common point which was that they used architecture and participated in a form of eclecticism by borrowing metaphors of another media and imposed it on architecture. That is, they took the metaphors that represented the other media and imposed those ideas on architecture.

Since metaphors are figures of speech, we then must impose the art of language and communication on architecture. Just as architects of the past borrowed the language of another discipline and crossed it with architecture, we must now cross the tools of language itself with the tools of architecture. You will then get an architecture of rhetorics, semantics, didactics, poetics, satire, parody and allegory.

Metaphors of architecture are made up of intermediary objects, of a variety of scales which form a coherent relativistic totality. It is done by blending objects close, into and after each other. It expresses a scheme which gives form and organization to a social phenomena and the intentions of the designer and his consciousness can be seen and analyzed.

and problems of overcrowding, lack of horizontal space require us to try high-rise and high-density living. In order to take care of the humanity, new systems have been developed to take care of the masses. These new systems will change our society, and historically the era will be known as the technological, economic, political, social, etc., era that will lead to survival.

The mass culture will change the way we produce products, new social and cultural values will be created. New systems are seldom introduced without a change in the way of thinking and living that go along with them.

CHAPTER II

THE IDEA OF MEGASTRUCTURE

Since the industrial revolution we have been creating items for the mass production of goods. We are able to produce things in large quantities and in a very line and repetitive way. The assembly line is the factory's paint brush or technical tool that makes the product.

The assembly line has been used in many industries, including housing where it has been used for walls, panels, frames, new techniques, and many other things and performance specs.

The assembly line has been used in many industries have long been influencing the way we live. It has been felt in architecture and the way we build our houses. Building

New problems of overpopulation, economics and lack of horizontal space require us to go to high-rise and high-density living. Because of this great amount of humanity, new systems have been invented to take care of the masses. These new systems represent this mass society, and historically the era will be marked by the technical, economic, political, social, etc., way that mass culture reacts to survival.

The mass culture will invent new technological products, new social activities and new building types. New systems are seldom instantaneous, but the need will inevitably bring them on.

Since the industrial revolution began, new ways of creating items for use have progressed until today we are able to produce endless amounts of items via the assembly line and repetition. The assembly line is mass culture's paint brush or technique that will change the environment.

The assembly line and repetition have spawned industrialized housing which is about repetition of boxes, panels, frames, new techniques, components, mechanical units and performance specs.

The assembly line and assembly line products have long been influencing modern life. Its effect has been felt in architecture and can easily be seen at all levels. Building

products such as wood studs and joist, plywood sheets and wood siding, brick, cinder block and prestressed concrete beams, window glass, window frame and metal window wall units have been made by an assembly line process which has the idea of repetition of like items.

The assembly line idea has extended to larger scale items such as precast panels and boxes that when put together make up repetitive housing units. This larger scale repetition occurs in high-rise, high-density housing. Industrialized, prefabricated components occur with the load bearing structure, the infilling cellular components and detail elements.

These large scale, highly identifiable pieces are independent systems which make up the structural frame, closure elements, details, embellishments and mechanical system.

They make up the cage which is the network of access, internal traffic and structure. The box which is represented by the units is also made up of standardized parts.

In a large project, this sustained replication of a housing package is dangerous, but they are done for the expediency of the design and building process. Although dangerous, there are possibilities for standardized parts. These standardized components should be subordinate to contextual problems and to a larger scale identity. The chain of

identity goes from the details to the dwelling to the group of dwellings, the neighborhood to the group of neighborhood to the city. Although the repetition occurs at the high-density building, identity can occur at the neighborhood or at the city scale, and the repetition of the complex need not be a problem. The total city has enough complexity to render the repetitious complex unnoticeable.

In spite of the expediency of repetition for the builder, designers and users, the problems with it are many. A large scale project that uses repetitious pieces can begin to invite disorientation, loss of identity, and a collapse of the senses. Endless repetition of look-alike apartments begin to submerge the individual. A maddening anonymity occurs. Anonymous entrances and endless corridors kill the individual.

This uniformity and repetition has several images. The ribbon of single dwellings is part of western society. Uniformity of housing is a stigma of deprived groups. Couple this repetition with cheap materials and unconscious meaning occurs.

Anonymity of post World War II housing and American suburbia iconograph can be recognized in new megastructures put up by bureaucratic housing corporations. These second rate environments blunt sensitivities of the people living in them. The institutionalized, repetitious housing has been

called perfect barracks where all ambiguity and choice is removed from design. Each need is satisfied by the bureaucracy and no privacy of lifestyle remains.

The ideal has always been the individual detached house built by hand and its intrinsic lifestyle. Now there is bureaucracy building with machine-made products. This bureaucratic system is building large scale megastructures the design of which renders the architect uncertain of how to shape this housing type.

So then the problem becomes how to give low income families a feeling of dignity, social status, pride, position, self-esteem and worth. The building must be able to provide comfort, familiar functions and visual excitement. Also this must be done while using industrialized products which are repetitious.

As we can see, then, not only are the means to build different than the single dwelling but also the amount and kind of people involved are also different. Just as the technique of making the parts reflect the ideas of mass society, the bureaucratic system and the amount of people involved also reflect mass society.

This bureaucracy is concerned with more housing, better housing and community facilities, less crowding and better outdoor facilities. Quality housing also depends on sound policy decisions regarding location, financing unit density and access to community amenities.

These topics are the issues for this bureaucracy to solve but the city is indifferent to quality and hostile to all efforts to improve. A building then gets formed because of a series of ideas, constraints and variables. It reflects in its form the prejudices of that society. It is a cultural and political product. Architecture then is derived from politics, social dynamics, economics and technology.

The freedom to move in the horizontal direction and to be able to view great and distant vistas is one of America's most cherished gifts to a free people. This horizontal freedom has been exploited by us in our present housing schemes for America to the point that it has become excessive, and we now have to go vertically. Verticality also has been exploited by the corporate, secular, sector of our culture via the skyscraper to the point where verticality has received a dirty image, and this image has been compared to corporate vanity and associated with a phallic metaphor.

Wright exploited horizontal free-flowing generous space and transferred the idea of democracy into this free-flowing horizontally expanded space.

These virtues of horizontality have been carried into the present and shown themselves in the program. They are asking for a how-rise high-density housing.

The idea of low can be seen as a quest to keep the American tradition and all of the goodness it brings.

The question now is can we change the image of verticality and high density to mean the same goodness that horizontality does. Can we give each and every man the amenities that his forefathers had in a megastructure. Can we use our new technology in new viable ways and not turn to superficial eyewash and tacked-on symbols.

The answer is yes. We can give each and every person sun and view and all the amenities that the people associate with a homey feeling in a low-rise, high-density megastructure by lifting the street off the ground and putting it into the air. With the street goes the other cherished amenities such as the front lawn, the garden safety of the children and social interaction that go with it.

These great views and natural sunlight can be achieved with the idea of transparency.

The idea of housing has a structure apart from an industrial complex, a downtown shopping area or other types of architecture. It requires an understanding of the activities that will go on there and an architecture that caters to those activities.

They asked me to produce a homey feeling for people living in a high-rise megastructure. By using the idea of metaphor, this can be done and by thinking what homey means to people and transferring the objects that are found in a home to a megastructure

OPENING STATEMENT BY EDWARD J. LOCUE,
HON. A. J. C. and PRESIDENT OF U. D. C.

He and his staff feel that they have been successful at creating low-rise, high-density housing for a mixed income and elderly group of people in New York and at the same time created new jobs. He also is of the opinion his commission has gained an insight into the housing problem and has shed the stigma of the word "slum" on the housing problem.

CHAPTER III

A SUMMARY OF THE PROGRAM AS WRITTEN BY

NEW YORK URBAN DEVELOPMENT CORPORATION

FOR NORTHTOWN HOUSING PHASE II COMPETITION,

ROOSEVELT ISLAND, NEW YORK CITY

with innovations in design, livability and buildability. He believes this will be shown in the selection of the winner of the competition.

The problem

The problem, then is to create housing for mixed income families with children, other family types, individuals and the elderly that gives a sense of identity and a home-like feeling in a high-density structure that depends on elevators with twice the density (117 per acre) of previous U. D. C. projects. This will be shown in the final design chosen.

Roosevelt Island has a unique situation which will allow this. It is open to create a new community without overcoming

OPENING STATEMENT BY EDWARD J. LOGUE,
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He and his staff feel that they have been successful at creating low-rise, high-density housing for a mixed income and elderly group of people in New York and at the same time created new jobs. He also is of the opinion his commission has gained an image of progressiveness and has shed the stigma of being an insensitive bureaucratic organization. President Logue wants to promote further public and private efforts in order to create a viable new community on Roosevelt Island. His desire is to go beyond conventional housing with innovations in design, livability and buildability. He believes this will be shown in the selection of the winner of the competition.

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The problem, then, is to create housing for mixed income families with children, other family types, individuals and the elderly that gives a sense of identity and a home-like feeling in a high-density structure that depends on elevators with twice the density (117 per acre) of previous U. D. C. projects. This will be shown in the final design chosen.

Roosevelt Island has a unique situation which will allow this. It is open to create a new community without overcoming

existing residential stock in fixed configuration. It also has the chance to create new housing at a human scale without historic restraints. Along with existing new housing and community facilities, the island offers excellent views and the dimension of water.

History of the Island

The island was originally called Blackwell Island, named after the first owners.

The first building on the island was the Blackwell farmhouse. It was built in 1789 and is one of the last remaining farm houses in New York City. It was built at the center of the island and designers of the current master plan chose to restore the building and use it as a focus point and as a symbol for American housing. It is a nostalgia item, a link to the past, and a piece of rural America in a sea of megastructures.

New York City bought the island and used it for charitable and corrective organizations. Because of this new use, they renamed the island Welfare Island.

The institutions on the island and other existing buildings with architectural merit and historic value are:

1. The Octagonal Stair Tower of the Lunatic Asylum.
2. Unnamed metropolitan hospital.
3. Smallpox Hospital by James Renick (1854).
4. Strecker Laboratory--Neo-Renaissance structure of brick and stone (1892).

Education

5. Chapel of Good Shepherd--restored.

6. Lighthouse at North Tip.

7. Goldwater Hospital.

8. Coler Hospital.

9. Fire Department Training School.

Objectives of the Development Plan

Roosevelt Island is earmarked for housing that will accommodate a mixed income community and will support public and private facilities that will provide a full range of services. There will be a K-12 day care center, health centers, public library, retail facilities, parks, waterfront promenades, parking garage, town center, conference center, historic landmarks, a marina, a mini bus, aerial tram and a subway station. The island has several in-use institutions for the ill and handicapped.

It is pedestrian oriented with open space and easy access to the river. There will be 70 per cent open space on the island. The plan subdivides the long, narrow island into alternating zones of built-up areas and park land. It is also divided up into North and Southtown housing.

The spatial organizing element in Northtown is the arched Main Street along which are ranged the retail and community services. There is a 21-story height limit along Main Street. The buildings step down from the Main Street to a 4-story height at the river's edge.

Education

There will be 13 school units on the island--7 in Northtown, 4 in Southtown, and 2 on the competition site. Each will house from 175 to 275 students with gross square feet of 13,300. The buildings will be one or two stories on the street level of the residential building, along the promenades, in the court yards or adjacent to the parks. They will also be open-plan classroom complexes with maximum flexibility. The competition site will contain 2 units and a 55 child day care center with 100 square feet per child, or a total of 5,500 square feet, and 3,500 square foot outside area. The schools should be remote from each other, on ground level with one close to Octagon Park.

Community Center

Northtown will contain a neighborhood health center, retail facilities with 50,000 square feet of floor space. A supermarket, post office and commercial bank are also included. The competition site will contain 15,000 square feet of retail space with storage in the basement.

Parks and Recreation

There are 40 acres of parks on the island. Blackwell Park is the first to be developed with sitting areas and sports facilities. It also contains an historic monument in the Blackwell House.

Other parks are the F. D. R. Memorial which is a place for contemplation and faces the U. N. It was designed by Louis Kahn. There is also Octagon Park at the north tip of the island, a landmark and park at the south tip, and a pedestrian promenade runs the full length of the west bank and goes through the site.

Competition Site Description

The competition site extends along the western shoreline of the island from Parcel 3 housing site northward to the beginning of Octagon Park.

Edge Requirements for Site

Southern Edge:

It allows light, air and view to Parcel 3 housing on the southern end of the site.

Western Edge:

Design for views of panoramic skyline of Manhattan across the East River. Views up and down the river are also attractive.

a. Design the promenade for bicycle riders, emergency vehicles and service vehicles.

b. Buildings projected over promenade must allow a 15 foot wide by 14 foot high passage for service and emergency vehicles.

Northern Edge:

Octagon Park borders north edge of site, and there are no buildings planned to go on this site.

Eastern Edge:

Motorgate Parking Garage, Main Street, Motorgate Arrival Deck and Avac sewage system. The site and the architecture put there should cater to the supermarket, post office and recharging station for electric mini buses.

It is mandatory to permit a visual easement across the competition site opposite 72nd Street in Manhattan to maintain the visual sense of the space inherent in this major east-west Manhattan street. The visual easement need not begin until second story. (+34 feet above sea level)

Interisland and Site Circulation

It is a pedestrian environment that depends on mini-buses, bicycles and walking. There will be regular use of ramps and curbless crosswalks for the handicapped. Main Street is a highly public route, and the promenade is a highly public route.

The Northtown development provides residential development, variety of activities and visual interest. The competition site should contain in order to continue Main Street as a lively pedestrian street. Consider arcades, tree-lined sidewalks, benches and other amenities. The commercial should be extended into the competition site.

Subsurface Consideration

Subsurface of the island is reef of hard gneiss rock which splits the East River into two channels of equal width. The river is underlined by strata of limestone. The island is regular with no abrupt surface elevations. Borings show the rock is mica gneiss from 5 to 52 feet. The soil is a heterogeneous mass of gravel, sand, silts and clays.

There are utility lines that run across the site:

1. 36 inch diameter storm sewer outfall,
2. 12 inch water line,
3. Avac system trunk line.

The site drainage should be directed to the existing man-hole.

There is a 17 foot below grade limit for habitable rooms.

Topography

The edge of the site should hold the elevations shown on the site map. Main Street slopes slightly to the north from 19.5 feet to 14 feet. The promenade road should meet the existing promenade at 12.9 feet.

Trees

Existing trees can be placed in tree wells.

Climate

Weather approaches from westerly direction. The island is affected by the continental weather but also it receives local sea breezes. Relative humidity averages 66 per cent which is a relatively damp climate.

Design Objectives

The objectives are divided into two parts. One is housing issues, the other is design program. The housing issue must be shown in the housing solution, while the design program can be solved by the adhering to the given program and criteria of apartment size, mix and related uses.

Some of the housing problems deal with relating the different space functions in relation to scale, interaction among people, livability, maintenance, security, child supervision and definitions of space. These problems must be addressed while the author supplements the program with his research.

The complex should be able to promote social interaction. This can be done by delineating a range of public and private spaces which should be obvious in the design. It should be delineated so that users and use are clearly defined. This will give the people a sense of community and neighborhoods within the community.

Child Supervision

Visual and aural contact, access between play areas and dwelling units, adult sitting areas and circulation routes are essential for young children. Clear definition of these play areas for age groups must be adhered to.

Security

Avoid unseen and inactive areas and unseen access points which should promote the feeling of security in a housing development.

A maximum overview of common exterior spaces and circulation routes provide constant opportunity for surveillance by the residents.

Maintenance

Organize units to minimize undesigned interior space and divide up the exterior space to minimize undesigned interior space.

Apply attractive, sensible, resilient and durable surfaces for common space to promote a higher degree of care and concern.

Livability

The unit should allow for individual privacy, alternating living spaces, sunlight, interesting views and cross ventilation. Add private exterior spaces. Bulk storage areas should be secure.

Overall Design Objective

Acknowledgment and respect to the surrounding scale, light and views, and existing architectural forms should be adhered to. The design must also adhere to existing circulation and transit modes found on the island.

There are several general requirements. There is a 21-story height requirement or a height limit of 200 feet. Mechanical space may project above the height limit. The buildings must adhere to New York State Building Codes.

Other Requirements

1. Three medium sized community rooms (approximately 1,000 square feet each) containing kitchenettes, toilets and storage; and one large sized community room (approximately 2,000 square feet) that is subdividable and contains a kitchen, toilet and storage.

2. Entry/lobby/elevator spaces that are visible from a public way.

3. Three management offices of approximately 500 square feet each and two maintenance stations at 500 square feet each. The management offices should be located so they can overview building entrances.

4. A defined entry space for all dwelling units.

5. Private terraces or balconies for each dwelling unit wherever possible.

6. Windows in kitchens wherever possible.

7. Tenant storage space in addition to typical closet space for the storage of bulky items, a portion of which can be outside the dwelling unit.

8. Laundry rooms in convenient and safe locations near major areas of tenant circulation and/or children play areas, with windows and access to the out of doors. One washer per 20 dwelling units, one single load dryer per 40 dwelling units with adjacent sitting area or bunge. While a noise producing facility, it should not occur in a remote basement area. Many small laundry rooms are difficult to maintain.

9. Mail rooms designed in accordance with U. S. Postal Service recommendations for rear loading horizontal type apartment mail receptacles.

10. Refuse collection by the AVAC system.

There is a three stage requirement or three separable portions so that if a cost cut occurs, a stage at a time can be built.

Budget

The per room budget figures below are based upon December, 1974, prices. Room counts in the Housing Program Chart for all apartment types can be used to determine apartment unit costs.

Low/Moderate and Elderly	\$ 8,000/room
Middle Income	\$ 9,000/room
Upper income	\$11,000/room

These figures include ancillary community, management, maintenance and commercial space within the buildings but do not include schools and day care space. The Middle income and Upper income budget include dishwashers in each apartment and an indoor swimming pool facility; the Upper income budget also includes central air conditioning.

Analysis of the island and the intentions of previous and current designers both functionally and metaphorically are readily perceivable through observation of the photos, plans and elevations provided by the competition committee.

Even though the intentions of the designers of the island's architecture are of a progressive nature, they are still kept from having a visible place that doesn't project the image of government housing because of the budget imposed by the political entity which doesn't allow the infill which pulls the image off.

CHAPTER IV

CRITIQUE OF ISLAND

MY ANALYSIS OF THE ISLAND

In beginning the analysis of the island, I noticed that the grid pattern of the streets on Manhattan and Queens seem to have been pounding at the shores of the island, but the extension of the grid which was dissolved by the waters of the river wasn't needed on the island, and the designer chose to design the site in a combination of metaphors which reflect the ideas that to the designers meant progressive ideas and which reflect the architectural cliches of our times.

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*See xerox photograph No. 1

**See xerox photograph No. 2

ISLAND

Long, linear, organic shape created by natural flow of water.*

Besides the island and some natural vegetation growing where men have not disturbed it, the island is entirely manmade.

PLAN OF ISLAND

Philip Johnson's intentions and the intentions of people that came before him are readily seen in the symmetry of the plan.

LINEAR SYMMETRY

Starting with the center then going out to both ends and working in.

CENTER

Blackwell House**Complimented with parks marks center of the island.

Both ends have landmarks:

- A. North tip--Lighthouse both functional and historical qualities with park complimenting it. Form of memorial.
- B. South tip--F. D. R. Memorial on south tip facing U. N. has historical and contemplative qualities--complimented with park.

COMING IN FROM BOTH ENDS, the symmetry holds with institutional buildings:

- A. North end--An institutional hospital, Bird S. Color Hospital, adjacent to

*See xerox photograph No. 1

**See xerox photograph No. 9

historical octagon tower complimented with parks, followed by municipal sewage disposal and fire station.

- B. South end--has an institutional building, the Small Pox Hospital, with a park sandwiched between it and Strecker Laboratory, then City Hospital followed with more parks and Goldwater Memorial Hospital.

THE SYMMETRY continues with access facilities

and the start of the housing projects:

- A. North--there is Roosevelt Island Bridge* which provides access to cars accompanied by Motorgates 1 and 2 parking garage,** an electric bus stop, a recreational sports park and the competition site*** for housing and commercial entities and Northtown Phase One**** with commercial areas and an historic church.
- B. South--Reflects similar ordering of entities starting with a sports park under Queensboro Bridge.***** Adjacent to it is a future aerial

*see xerox photograph No. 6

**see xerox photographs Nos. 5 and 6

***see xerox photograph No. 2

****see xerox photograph No. 14

*****see xerox photograph No. 8

tram station (Access) with a square and then a business district with hotel conference center and office building. Symmetry is shown even more with a subway access (Existing) coming into Southtown Square then Southtown housing and commercial district with a marina on east shore.

THE SYMMETRY leads back to the center which is Blackwell House and Park.

CAPSULIZATION of the linear symmetry:

- A. Blackwell House and park in center.
- B. South tip working toward center-- memorial followed by institution and parks, sports facilities, access terminals, business areas, Southtown housing and commercial mix with marina on east shore and back to Blackwell House and Park.
- C. North tip working toward center-- functional lighthouse which is also landmark followed by institutions and parks with more historic landmarks and public facilities. A motor access adjacent to housing, commercial and a small sports facility.

*see xerox photographs Nos. 15, 16 and 17

Northtown housing and commercial area with historic church plaza on west side of Main Street, then back to the center with Blackwell House and Park.

WIDTH

SYMMETRY

The institutional buildings, access terminal, memorials and historic sites have width symmetry in plan. This symmetry seems to work on a diagonal through the center. For instance, the motor access comes in to the east shore in the north half of the island, and the pedestrian tram and subway access come in to the west shore in the south half. The historic church plaza and theater are on the northwest side of Main Street, while the Blackwell House and marina are on the southeast side of Main Street.

MAIN

STREET*

Has been designed to break up the straight shot down the island by meandering which is a connotation of a picturesque European town, but it still holds the symmetry of the island by dividing up the architectural entities so that there are equal interest spots on both sides of it.

*see xerox photographs Nos. 15, 16 and 17

Main Street has a combination of metaphorical images which can be understood by knowing how and what events are placed along it. For instance, this Main Street has the typical business and commercial entities that an American town readily accepts. It also is trying to keep the building scale low so that you have the feeling you are in a small town and not in New York. When you are in the downtown area, the view has been confined to the downtown area. You can't see the giant structures across the river so you feel as if you were somewhere else. At the Blackwell Park, there is a reversal of this confinement. It seems that they wanted to contrast the historic rural atmosphere with the urban skyscraper atmosphere across the river by not breaking the views or confining them with other buildings on the island. Blackwell House restoration is a gesture toward contrasting of the world's past and the world's future.

Besides having the all-American Main Street and its commercial entities, it also has the European picturesque plaza and parks. They stayed away from the typical grid and used the buildings to define the off-shaped parks and plazas.

The combination of entities that create the image of the plan again has a metaphorical connotation. The designers have decided to keep a nostalgia historical image of rural America in the Blackwell House juxtaposed alongside the

*see xerox photograph No. 14

**see xerox photograph No. 16

***see xerox photographs Nos. 3, 7 and 8

extreme scale of megalopolis and megastructures juxtaposed with European picturesqueness. The rural image helps to humanize. The international style which is prevalent in the buildings is a reflection of the once avant-garde in the architectural world of the past.

In elevation, the buildings are high on Main Street and step down to the river's edge.* They are 21 stories high at the street and 4 stories high at the river. The step is approximately 3 apartments long. In plan and in elevation, there seems to be stepping and zig-zagging which from what I can guess, this gesture is done to give everyone a view and natural light. In plan, there are also U-shaped complexes which surround tree-lined parks. The parks** are designed with perimeter sidewalks and with sidewalks cutting across the plan diagonally.

The views***, then, are oriented away and up and down the island. The views from the island have a variety of images starting with the water, the sun, the sky, the stars and clouds which say earth and nature mixed with the views of the work boats and the industry along the shores which are mixed in with old and new skyscrapers and the perspective lines formed by the avenues which represent manmade ideas of the world.

*see xerox photograph No. 14

**see xerox photograph No. 10

***see xerox photographs Nos. 3, 7 and 8

***see xerox photograph No. 5

Northtown housing has some other peculiarities such as the texture produced by extending and receding the Main Street facade of the buildings.* There also seem to be two-story apartments with an open colonnade or deck between every second floor that creates a void in the texture. At street level, the building turns into colonnades. The columns have the quality of state highway bridges, which aren't a very desirable quality for a main street. To add to the texture of Main Street, the designer chose concrete block, brick, and windows that have the image through association of a tract home, which adds humor.

The Motorgate Garage has a variety of images.** The first is the image that the off ramp has which is exactly that of a superhighway image with its bare, round, concrete columns and its spiraling incline. Metaphorically, it is brutal, it has the image of speed, and it reflects the functionalist logical attitudes.** Functionalism is also a metaphor representing the ideas of a logical, ordered mind.

The parking garage also has some of the above qualities but also has an added image of Italian Romanesque. The repetition of columns and reducing the size of the columns as you go up give it an organized feeling and definable feeling which a person can relate to easier than the off ramp and elevator end of the building.

*see xerox photographs Nos. 16 and 17

**see xerox photograph No. 5

***see xerox photograph No. 6

Because of its location, height and its use as a parking garage, it will cause problems for the people who will live in the competition project across Main Street.

The whole island's architecture is a juxtaposition of metaphors to create what Venturi calls contradiction and complexities. This juxtaposition of metaphors is done in order to create what the designer thinks is a viable place for people to live.

The hybrid architecture on the island is made by the crossing of international style, European picturesque, American megastructure, neo-historic churches, early rural America farmhouse, tract home windows imposed on a megastructure, colonnaded main street with bridge abutment columns and a pedestrian-oriented island which creates an island of humor and viciousness that after all the effort barely leaves the realm of governmental, bureaucratically built housing with its brick veneer, unarticulated surfaces.

The Idea of Housing

A correct statement of the problem leads directly to a design solution, and the recognizing of the problems of high-density living is the first step. The idea of housing is somewhere between the problem of the individual dwelling and the requirement of its larger context.

The problems of scale, repetition, physical organization, the neighborhood, a sense of territoriality, the relation of child to family, and the environment are major considerations. Nurturing of children in anonymous spaces, security and maintenance of public spaces, high-density complexes are others. Among CHAPTER V THE IDEA OF HOUSING are the units and their relation to circulation AND A SOLUTION and the neighborhood.

Public Spaces and Neighborhood areas

My approach to solving these problems is to first design a neighborhood area which is shared by a small number of apartments and would be accessible to other apartment tenants. The neighborhood area would not allow any unseen or unused areas. This would allow informal surveillance of children, strangers and apartment entrances. These neighborhood spaces also serve as apartment access floors. They provide an area for recreation, relaxation, and they form a nucleus to strengthen identity. These neighborhood spaces will occur every third floor and are formed by the adjacent buildings. They are

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The problems of scale, repetition, physical organization, the neighborhood, a sense of territoriality, the relation of child to family, and the environment are major considerations. Nurturing of children in anonymous spaces, security and maintenance of public spaces in high-rise, high-density complexes are others. Along with these problems are the units and their relation to circulation, sun, views and the neighborhood.

Public Spaces and Neighborhood areas

My approach to solving these problems is to first design a neighborhood area which is shared by a small number of apartments and would be accessible to other apartment tenants. The neighborhood area would not allow any unseen or unused areas. This would allow informal surveillance of children, strangers and apartment entrances. These neighborhood spaces also serve as apartment access floors. They provide an area for recreation, relaxation, and they form a nucleus to strengthen identity. These neighborhood spaces will occur every third floor and are formed by the adjacent buildings. They are

webs that connect the towers. They are the walkways in front of the units. There are three stories of clear space between neighborhood floors and three stories of apartments surveying the space. The neighborhood spaces have access to elevators and fire stairs at either end. It also is designed for sun exposure in the winter and shade in the summer. Besides being an elevator stop and an apartment access floor, the neighborhood floors interconnect throughout the complex as well as alternate from one side of the complex to the other which allows a variety of views, sun and shade and interior events. There are three different shapes with a variety of sizes as well as a lessening of floor surface as you go down the structure and approach the ground. There are curved as well as straight railings. The laundry rooms are also located on these floors so that the housewife watching children can let them play close to the laundry.

The floors are smaller as you approach the ground because of a sun requirement. In the summer the floors are so arranged that they are shaded by the floor above with the angle of set back so arranged that in the winter they receive sun readily. There are sufficient openings between the buildings to allow natural light to enter.

Security

There is a security hall in front of the apartment entrances on the neighborhood floors. They are glass

enclosed. In order to get to the entrance, a person must ring the tenants who in turn release the security hall door. This is similar to the system used in other apartment buildings in New York.

Although my project ended up being a megastructure and the neighborhood spaces were in the air, the same principles that formed them could be applied to low-rise, high-density housing.

Ground Floor

The ground floor has a combination of events. First my building has diagonal leads which allow people to get through from Main Street to the river. It also has leads which are perpendicular to Main Street and the river. This gives the building a transparency which gives accessibility for those who do not live there. This open passage aspect is for the public's benefit. They also have the ability to go up into the structure without undermining the security of the building.

There are apartments that empty into the ground floor, but on the ground floor there are a series of other events. First, there is the commercial area which is opposite the bus stop and super market in the parking garage. The commercial area is in the center of the complex and is used as a rally point. It is easily accessible to the pedestrians' promenade along the river.

There are mail boxes located in a mail room which is adjacent to the elevator, lobbies and the managers' office. The managers' office is adjacent to the lobbies so that the managers can have surveillance of the elevators.

There are community rooms and maintenance shops on the ground floor along with two schools located at opposite ends of the complex.

There are no dark corners in the complex.

At ground level there are also neighborhood spaces.

The paving radiates out from the openings in the building at a 45 degree angle from the axis of the building. The paving on the river side starts at the building line and blends into an organic shape where it meets the grass. The rest of the site to the river is a part which has a natural ground theme. At the river a pedestrian walk way with three waterside socializing areas occurs. They are evenly spaced along the length of the site and lined with trees on one side and the river on the other.

Unit Design

When you talk about designing a high-rise unit, you talk about qualities of accessibility, flexibility, safety, comfort, security, aesthetics, minimum usable dimensions, adequate storage space, internal zoning, privacy of indoor and outdoor spaces, unit type and size and access conditions.

The emphasis has been on privacy and individuality of units by variations of shape, pattern and form which deal with a unique and identifiable internal volume.

Accommodation of individual interest and belongings are virtually impossible, but at the same time an avoidance of stereotyping of the occupants into a repetitious apartment layout can be achieved through ambiguity of the interior space. Emphasis on choice, flexibility or multi-use is an answer.

Besides the above problem, there is the problem of adjusting plumbing and mechanical in order that they may share a single system without imposing on the structure or other apartments, also fitting an apartment form into a structural and mechanical system.

One answer is to relegate service areas, utility functions, non-habitable areas and circulation to the middle of the apartment which would leave light and ventilation for the rest of the rooms on the perimeter.

Once you have designed an apartment system and have solved the problem of mating one to another, you then repeat it in series. This series has the advantage of linear procession instead of point access through ventilation, standardization

of building elements, lack of extraneous detail conditions, minimum exterior exposure per unit and back-to-back plumbing.

Split Level Skip Floor Elevator System

After achieving an arrangement that satisfies some of those needs and in order to make the elevator skip floor system work, I went to a split level apartment arrangement. This system called for a series of floors that could be repeated and worked into the overall complex. I then saw that the elevators should stop at the neighborhood floor which also would be the access floor to the apartments. The access area would be separated from the neighborhood area by a security hall which is glass enclosed.

The access points are indented and duplexed. If you go in one door, you go up half a level. If you go into the other, you go down half a level. The access floors are on every neighborhood floor.

Because of the different sized apartments and different income groups, the structural bay will vary from 15 feet by 15 feet to 20 feet by 20 feet, and the number of split levels per apartment will vary. A large apartment will extend one bay in width and three split level bays in height. The apartment if large also runs more bays in width.

UNIT CONCEPT

When one apartment goes up from an access floor and reaches its top split level, another apartment starts and continues up until it reaches the higher access floor.

So then you have two apartments which are split level, one on top the other with their entries at the access floors.

This is repeated for 18 stories. See the drawings for further understanding.

Master Bedroom	20 x 20 = 400 square feet
Two Children's Bedrooms	15 x 15 = 450 square feet
One Guest Bedroom	15 x 10 = 150 square feet
Master Bath	10 x 10 = 100 square feet
Children's Bath	8 x 6 = 48 square feet
Guest Bath	8 x 6 = 48 square feet
Living Room	20 x 20 = 400 square feet
Dining Room	12 x 12 = 144 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = 100 square feet
Study Library	10 x 10 = 100 square feet
TOTAL	2,040 square feet

2. 63 Three-Bedroom Units

6 rooms per unit

\$11,000 per room

\$66,000 per unit or \$40.00 per square foot

1,650 square feet per unit = 40 x 40 approximately

Master Bedroom	20 x 20 = 400 square feet
Two Children's Bedrooms	15 x 15 = 225 square feet
Master Bath	8 x 8 = 64 square feet
Children's Bath	8 x 8 = 64 square feet
Living room	20 x 20 = 400 square feet
Dining room	12 x 12 = 144 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = 100 square feet
Study and Library	12 x 12 = 144 square feet
TOTAL	1,641 square feet

UNIT CRITERIA

(Interior traffic, balconies and closet space included in room sizes.)

A. UPPER INCOME UNITS

1. 12 Four Bedroom Units

7 rooms per unit
 \$11,000 per room
 \$77,000 per unit or \$37.50 per square foot
 2,050 square feet per unit = 40 x 50 approximately

Master Bedroom	20 x 20 = 400 square feet
Two Children's Bedrooms	15 x 15 = 450 square feet
One Guest Bedroom	15 x 10 = 150 square feet

Master Bath	10 x 10 = 100 square feet
Children's Bath	8 x 6 = 48 square feet
Guest Bath	8 x 6 = 48 square feet

Living Room	20 x 20 = 400 square feet
Dining Room	12 x 12 = 144 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = 100 square feet
Study Library	10 x 10 = 100 square feet

TOTAL 2,040 square feet

2. 63 Three Bedroom Units

6 rooms per unit
 \$11,000 per room
 \$66,000 per unit or \$40.00 per square foot
 1,650 square feet per unit = 40 x 40 approximately

Master Bedroom	20 x 20 = 400 square feet
Two Children's Bedrooms	15 x 15 = 225 square feet

Master Bath	8 x 8 = 64 square feet
Children's Bath	8 x 8 = 64 square feet

Living room	20 x 20 = 400 square feet
Dining room	12 x 12 = 144 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = 100 square feet
Study and Library	12 x 12 = 144 square feet

TOTAL 1,641 square feet

3. 100 Two Bedroom Units

4 1/2 rooms per unit

\$11,000 per room

\$49,500 per unit or \$37.00 per square foot

1,350 square feet per unit = 30 x 40 approximately

Master Bedroom	20 x 20 = 400 square feet
One Child's Bedroom	15 x 15 = 225 square feet
Master Bath	8 x 8 = 64 square feet
Living Room	20 x 20 = 400 square feet
Dining Room	10 x 10 = 100 square feet
Kitchen	10 x 10 = 100 square feet
Entry	8 x 8 = 64 square feet

TOTAL 1,353 square feet

4. 75 One Bedroom Units

3 1/2 rooms per unit

\$11,000 per room

\$38,500 per unit or \$37.50 per square foot

1,050 square feet per unit = 30 x 35 approximately

Master Bedroom	20 x 20 = 400 square feet
Master Bath	10 x 10 = 100 square feet
Living Room	15 x 15 = 225 square feet
Dining Room	10 x 10 = 100 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = 100 square feet

TOTAL 1,025 square feet

TOTAL 1,448 square feet

B. MIDDLE INCOME UNITS

5. 10 Four Bedroom Units

7 rooms per unit

\$9,500 per room

\$66,500 per unit or \$41.00 per square foot

1,625 square feet per unit = 40 x 40 approximately

Master Bedroom	15 x 15 = 225 square feet
Two Children's Bedrooms	15 x 10 = 300 square feet
One Guest Bedroom	15 x 10 = 150 square feet

Master Bathroom	10 x 10 = 100 square feet
Children's Bathroom	8 x 6 = 48 square feet
Guest Bathroom	8 x 6 = 48 square feet

Living Room	20 x 15 = 300 square feet
Dining Room	10 x 10 = 100 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = 100 square feet
Study and Library	12 x 12 = <u>144 square feet</u>

TOTAL	1,615 square feet
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6. 50 Three Bedroom Units

6 rooms per unit

\$9,500 per room

\$57,000 per unit or \$39.00 per square foot

1,450 square feet per unit = 40 x 35 approximately

Master Bedroom	20 x 20 = 400 square feet
One Child's Bedroom	15 x 10 = 150 square feet
One Guest Bedroom	15 x 10 = 150 square feet

Master Bathroom	10 x 10 = 100 square feet
Guest Bathroom	8 x 6 = 48 square feet

Living Room	20 x 15 = 300 square feet
Dining Room	10 x 10 = 100 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = <u>100 square feet</u>

TOTAL	1,448 square feet
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7. 70 Two Bedroom Units

4 1/2 rooms per unit

\$9,500 per room

\$42,750.00 per unit or \$38.80 per square foot

1,100 square feet per unit = 30 x 35 approximately

Master Bedroom 15 x 15 = 225 square feet

One Child's Bedroom 15 x 10 = 150 square feet

Master Bathroom 10 x 10 = 100 square feet

Bathet 5 x 6 = 30 square feet

Living Room 15 x 15 = 225 square feet

Dining Room 12 x 12 = 144 square feet

Kitchen 10 x 10 = 100 square feet

Entry 10 x 10 = 100 square feet

TOTAL 1,074 square feet

8. 60 One Bedroom Units

3 1/2 rooms per unit

\$9,500 per room

\$33,250 per unit or \$39.20 per square foot

850 square feet per unit = 30 x 30 approximately

Master Bedroom 15 x 15 = 225 square feet

Bathroom 10 x 10 = 100 square feet

Living room 15 x 15 = 225 square feet

Dining Room 10 x 10 = 100 square feet

Kitchen 10 x 10 = 100 square feet

Entry 10 x 10 = 100 square feet

TOTAL 850 square feet

9. 10 No Bedroom Units

2 1/2 rooms per unit

\$9,500 per room

\$23,750 per unit or \$39.50 per square foot

600 square feet per unit = 20 x 30 approximately

No Bedrooms

One Bath 10 x 10 = 100 square feet

Living Room 15 x 15 = 225 square feet

Dining Room 10 x 10 = 100 square feet

Kitchen 10 x 10 = 100 square feet

Entry 8 x 8 = 64 square feet

TOTAL 589 square feet

C. LOW AND MODERATE INCOME UNITS

10. 22 Four Bedroom Units

7 rooms per unit
 \$8,000 per room
 \$56,000 per unit or \$43.00 per square foot
 1,270 square feet per unit = 35 x 35 approximately

Master Bedroom	15 x 15 = 225 square feet
Two Children's Bedrooms	10 x 10 = 200 square feet
One Guest Bedroom	10 x 10 = 100 square feet
Master Bathroom	10 x 10 = 100 square feet
Guest Bathroom	8 x 6 = 48 square feet
Living Room	15 x 15 = 225 square feet
Dining Room	12 x 12 = 144 square feet
Kitchen	10 x 10 = 100 square feet
Entry	10 x 10 = 100 square feet

TOTAL 1,242 square feet

11. 90 Three Bedroom Units

6 rooms per unit
 \$8,000 per unit
 \$48,000 per unit or \$45.00 per square foot
 1,050 square feet per unit = 30 x 35 approximately

Master Bedroom	15 x 15 = 225 square feet
Two Children's Bedrooms	10 x 10 = 200 square feet
One Bathroom	10 x 10 = 100 square feet
Living Room	15 x 15 = 225 square feet
Dining Room	12 x 12 = 144 square feet
Kitchen	10 x 10 = 100 square feet
Entry	8 x 8 = 64 square feet

1,058 square feet

12. 180 Two Bedroom Units

4 1/2 rooms per unit

\$8,000 per room

\$36,000 per unit or \$41.00 per square foot

875 square feet per unit = 30 x 30 approximately

Master Bedroom 15 x 15 = 225 square feet

Child's Bedroom 12 x 10 = 120 square feet

Bathroom 8 x 8 = 64 square feet

Living Room 15 x 15 = 225 square feet

Dining Room 10 x 10 = 100 square feet

Kitchen 10 x 10 = 100 square feet

Entry 8 x 8 = 64 square feet

TOTAL 898 square feet

13. 158 One Bedroom Units

3 1/2 rooms per unit

\$8,000 per room

\$28,000 per unit or \$40.00 per square foot

700 square feet per unit = 30 x 25 approximately

Bedroom 15 x 10 = 150 square feet

Bathroom 8 x 8 = 64 square feet

Living Room 15 x 15 = 225 square feet

Dining Room 10 x 10 = 100 square feet

Kitchen 10 x 10 = 100 square feet

Entry 8 x 8 = 64 square feet

TOTAL 703 square feet

D. ELDERLY UNITS

14. 50 One Bedroom Units

3 1/2 rooms per unit

\$8,000 per room

\$28,000 per unit or \$40.00 per square foot

700 square feet per unit = 30 x 25 approximately

Bedroom	15 x 10 =	150 square feet
Bathroom	8 x 8 =	64 square feet
Living Room	15 x 15 =	225 square feet
Dining Room	10 x 10 =	100 square feet
Kitchen	10 x 10 =	100 square feet
Entry	8 x 8 =	<u>64 square feet</u>

TOTAL 703 square feet

15. 50 No Bedroom Units

2 1/2 rooms per unit

\$8,000 per room

\$20,000 per unit or \$42.10 per square foot

475 square feet per unit = 20 x 25 approximately

Living room	15 x 15 =	225 square feet
Bathroom	7 x 6 =	42 square feet
Dining Room	10 x 10 =	100 square feet
Kitchen	10 x 10 =	100 square feet
Entry	3 x 3 =	<u>9 square feet</u>

TOTAL 476 square feet

UNIT SQUARE FOOT REQUIREMENTS

<u>UPPER</u>	1.	12	Four Bedroom	2,040 square feet per unit =	24,480 square feet
	2.	63	Three Bedroom	1,641 square feet per unit =	103,383 square feet
	3.	100	Two Bedroom	1,353 square feet per unit =	135,300 square feet
<u>MIDDLE</u>	4.	75	One Bedroom	1,025 square feet per unit =	76,875 square feet
	5.	10	Four Bedroom	1,615 square feet per unit =	16,150 square feet
	6.	50	Three Bedroom	1,448 square feet per unit =	72,400 square feet
<u>LOW & MIDDLE</u>	7.	70	Two Bedroom	1,074 square feet per unit =	75,180 square feet
	8.	60	One Bedroom	850 square feet per unit =	51,000 square feet
	9.	10	No Bedroom	589 square feet per unit =	5,890 square feet
<u>ELDERLY</u>	10.	22	Four Bedroom	1,242 square feet per unit =	27,324 square feet
	11.	90	Three Bedroom	1,058 square feet per unit =	95,220 square feet
	12.	180	Two Bedroom	898 square feet per unit =	161,640 square feet
	13.	158	One Bedroom	703 square feet per unit =	111,074 square feet
	14.	50	One Bedroom	703 square feet per unit =	35,150 square feet
	15.	50	No Bedroom	476 square feet per unit =	23,800 square feet

TOTAL SQUARE FEET FOR HOUSING UNIT = 1,014,866

ADDITIONAL SPACE REQUIREMENTS

1,000	Units with 3 x 20 Hallway Per Unit	60,000 square feet
2	175 to 275 Child Schools with 100 square feet per child	55,000 square feet
2	Outdoor Areas for Schools	12,500 square feet
1	55 Child Childcare Center	9,000 square feet
3	Community Rooms (3 1,000 square foot rooms)	3,000 square feet
6	Post office box rooms (30 x 30)	5,400 square feet
2	Health Centers (30 x 30)	1,800 square feet
1	Retail Store	15,000 square feet
6	Manager's Offices (20 x 25)	3,000 square feet
6	Maintenance Stations (25 x 25)	3,750 square feet
	TOTAL	168,450 square feet

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UNIT SQUARE FOOT REQUIREMENTS

ADDITIONAL SPACE REQUIREMENTS

1,014,866 square feet
<u>168,450 square feet</u>
1,183,316 square feet
368,187 square feet

TOTAL SQUARE FEET OF SITE (Approximately)

According to the Housing and Urban Development criteria, each of the units should contain a living space, dining space, sleeping spaces, closets, storage, bathroom and kitchen space.

1. Living Space

Couch	3'0" x 6'9"
Lounge chair	2'6" x 3'0"
(one for one person unit; two for all others)	
Desk	2'0" x 3'4"
(Not in efficiency units)	
Television	1'4" x 2'8"

2. Dining Space

Table	
1 or 2 persons	2'6" x 2'6"
4 persons	2'6" x 3'2"
6 persons	3'4" x 4'0"
8 persons	3'4" x 6'0" or 4' x 4'

3. Sleeping Spaces

Twin Beds	3'6" x 6'
Double Bed	4'6" x 6'9"
(single bed for efficiency units)	
Dresser	1'10" x 3'6"
(one for efficiency unit)	
Chair	1'6" x 1'6"
Crib	2'4" x 4'5"
(for first bedroom of family unit)	

4. Closets and Storage

Clothes closets	One per bedroom
Coat closets	One per unit
Linen closets	One per floor containing bedrooms
General storage	Adjacent to kitchen

5. Baths

Water Closet, Lavatory and tub
 (with or without shower)
 Half bath added for unit with over six persons
 Full bath added with tub or shower for more than
 eight persons

Living 6. Kitchen Space

Function: Combination sink (single may be used in efficiency unit)
 Counters

Base cabinets and shelves

Equipment: Refrigerator

Stove

Optional: Broom closet

equipment: Space for washing machine unless provided elsewhere

lamps

Finish: Very good and durable, warm, relaxing colors,

possibly a carpet

Study and Library

Function: For use as study area for student and storage of
 his books and supplies.

Equipment: Desk, Desk chair, bookshelves

Finish: Good and durable

Dining--Kitchen

Function: Eating, cooking and storage of food.

Equipment: Dining table, four dining chairs for dining room.

Stove, refrigerator, sink and storage for kitchen.

Also the washer-dryer may be placed in the kitchen.

Finish: Kitchen: Very durable and easily cleaned.

Dining: Durable, warm color.

Living room

Function: For use of leisure indoor hours, such as visiting
relaxing, watching television, etc.

Equipment: Sofa, one or two easy chairs and an end table

Optional
equipment: Another end table, coffee table, television, desk,
lamps

Finish: Very good and durable, warm, relaxing colors,
possibly a carpet

Study and Library

Function: For use as study area for student and storage of
his books and supplies.

Equipment: Desk, desk chair, bookshelves

Finish: Good and durable

Dining--Kitchen

Function: Eating, cooking and storage of food.

Equipment: Dining table, four dining chairs for dining room.

Stove, refrigerator, sink and storage for kitchen.

Also the washer-dryer may be placed in the kitchen.

Finish: Kitchen: Very durable and easily cleaned.

Dining: Durable, warm color.

Rental Manager's OfficeMaster Bedroom

Function: Sleeping area

Equipment: Bed, either a double or two twin beds

(6'6" x 4'6"; 6'6" x 3'3"); dresser;

vanity

Optional

Equipment: Chest of drawers, night tables, one or two chairs

Finish: Good and durable

Bathroom

Function: Personal hygiene

Equipment: Bathtub, water closet, lavatory, storage

Finish: Very durable and easily cleaned

Mechanical room

Function: House heating unit and hot water heater

Equipment: Unit heater and hot water tank

Finish: Rough

Storage

Linen closet

Broom closet

Coat closet

Clothes closets

Elderly

Rental Manager's Office

Function: House the manager and his secretary, dispersal of furniture, rentals, and complaints

Equipment: Two desks, two desk chairs, and two or three reception chairs, conference table, permanent and temporary paper storage

Finish: Very durable and easily cleaned

Relation: Adjacent to the manager's apartment

Warehouse-Maintenance Shop

Function: Storage of unused furniture, area for equipment repair, and garage for a tractor and truck

Equipment: Work bench, storage shelves, closet space, and hanging facilities

Finish: Rough and durable, resistant to oils, punctures, and abrasions.

Means of Construction

The use of flat plate and double pan systems with 15 foot and 20 foot bay systems has been found to be the most inexpensive, and the labor force has become very good at it in New York City. The use of brick has been shown to be an advantage even over precast panels. Interior walls are non-bearing built in place metal stud with a variety of coverings.

Elderly

Since the program called for a mix of income groups, I chose to continue that mix throughout the complex so that there would not be a social hierarchy.

The elderly are a different story and I chose to keep them closer to the ground for safety; in case they have to evacuate they can make it to the ground with ease.

The elderly have a tendency to feel confined, depressed and irritable because of the influence of environmental conditions upon them. Therefore, the elderly unit should be more open and less rigidly subdivided so that there are opportunities to use different spaces for different needs.

The elderly also have a tendency to withdraw so that it is important that there is socialization to counter these tendencies. Shared balconies are one answer.

Means of Construction

The use of flat plate and double pan systems with 15 foot and 20 foot bay systems has been found to be the most inexpensive, and the labor force has become very good at it in New York City. The use of brick has been shown to be an advantage even over precast panels. Interior walls are non-bearing built in place metal stud with a variety of coverings.

Mechanical

I chose to go with a hot water/cold water heating and cooling forced air radiator system. It is combined into one unit within each apartment. Each apartment has a mechanical room. Each unit is supplied with hot and cold water from water mains which are located at the ground floor and every sixth neighborhood floor after that. The mains run under the neighborhood floor and feed to the apartments.

Plumbing runs through plumbing walls. These walls are common walls between apartments. The plumbing is also a prefabricated plumbing solvent system that does not need any solvents. This system is used throughout the island. Each apartment has a garbage disposal in the sink.

The vacuum solid waste system being used on the island has a large pipe emanating from a building located behind the parking garage. It feeds into the complex underground and branches off and up. It has receptacles on every floor at the elevators.

Manhattan

E 47th (DAG HAMMERSOLD PLAZA)

E 57th

E 60th

E 63rd

West Channel

East Channel

QUEENS

Queensborough Bridge

Aerial Tramway

Hotel

Conference Center

Office Building

Town Square

Subway

Blackwell House

Blackwell Park

Marina

Southtown

Tramway Square

Sports Park

Goldwater Memorial Hospital

City Hospital

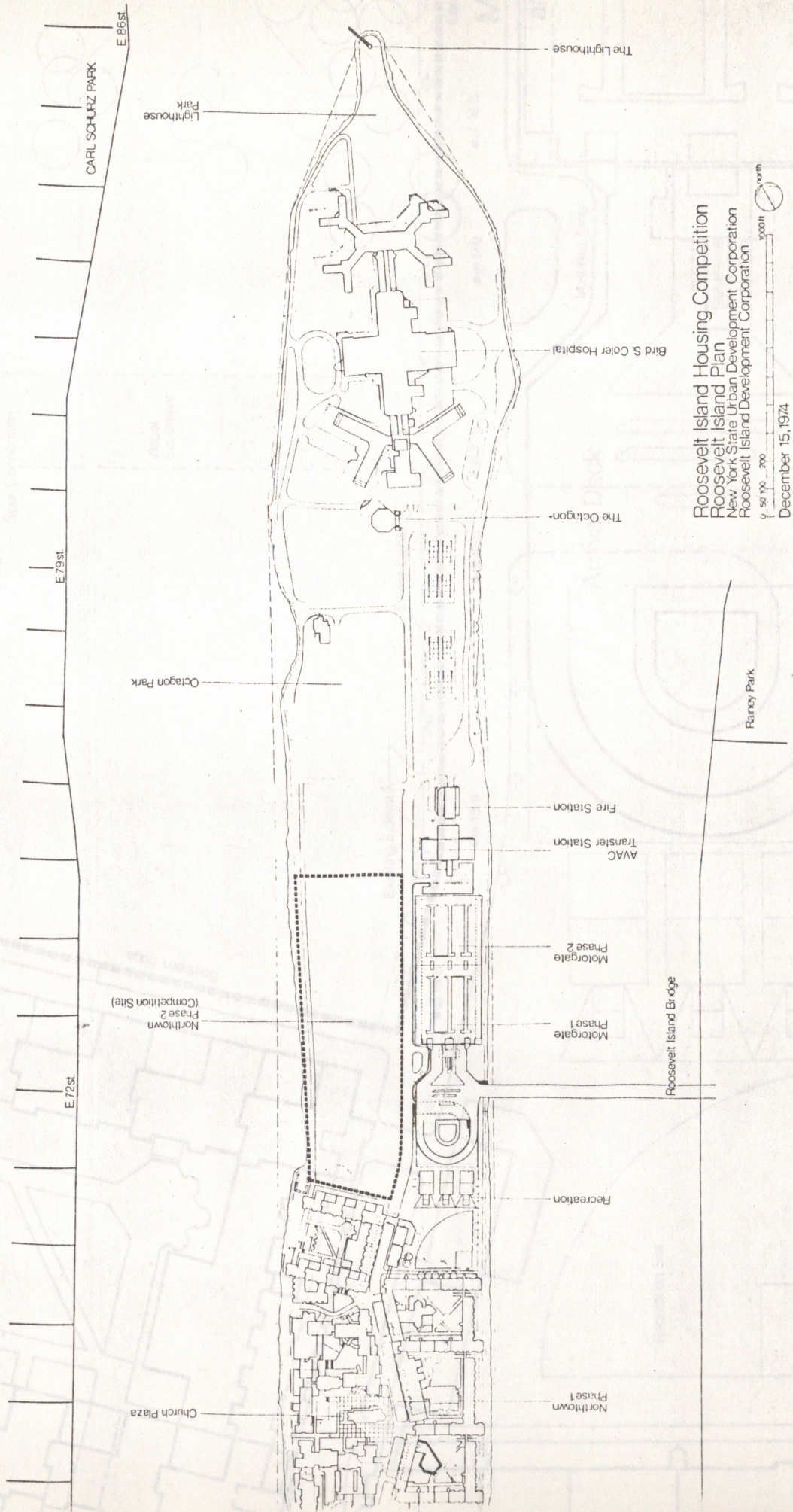
Strecker Laboratory

Small-pox Hospital

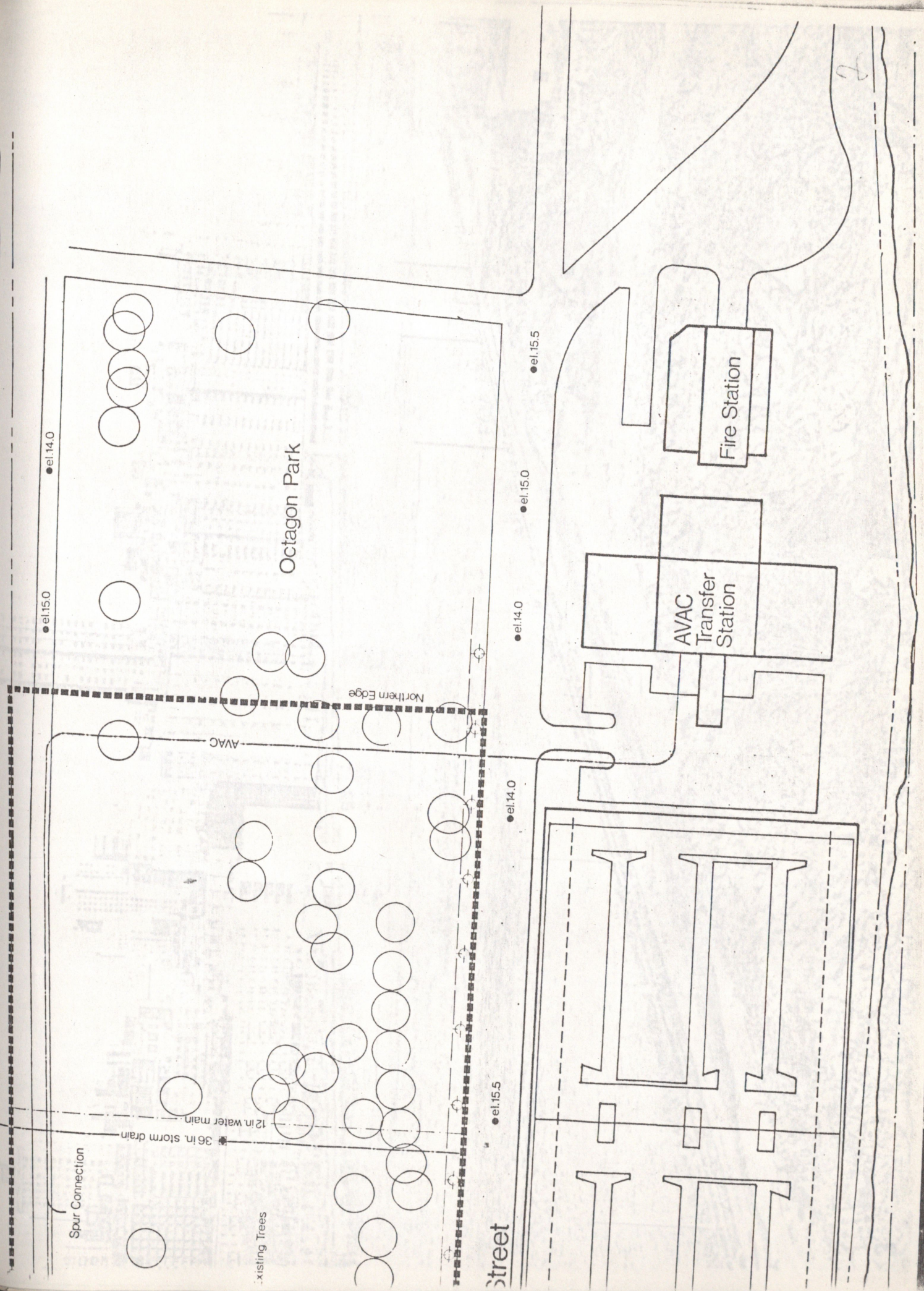
Roosevelt Memorial

Landmarks Park

QUEENS BRIDGE PARK



Roosevelt Island Housing Competition
 Roosevelt Island Plan
 Roosevelt Island
 New York State Urban Development Corporation
 Roosevelt Island Development Corporation



Octagon Park

Fire Station

AVAC
Transfer
Station

Street

Spur Connection

Existing Trees

36 in. storm drain

12 in. water main

AVAC

Northern Edge

•el.14.0

•el.15.0

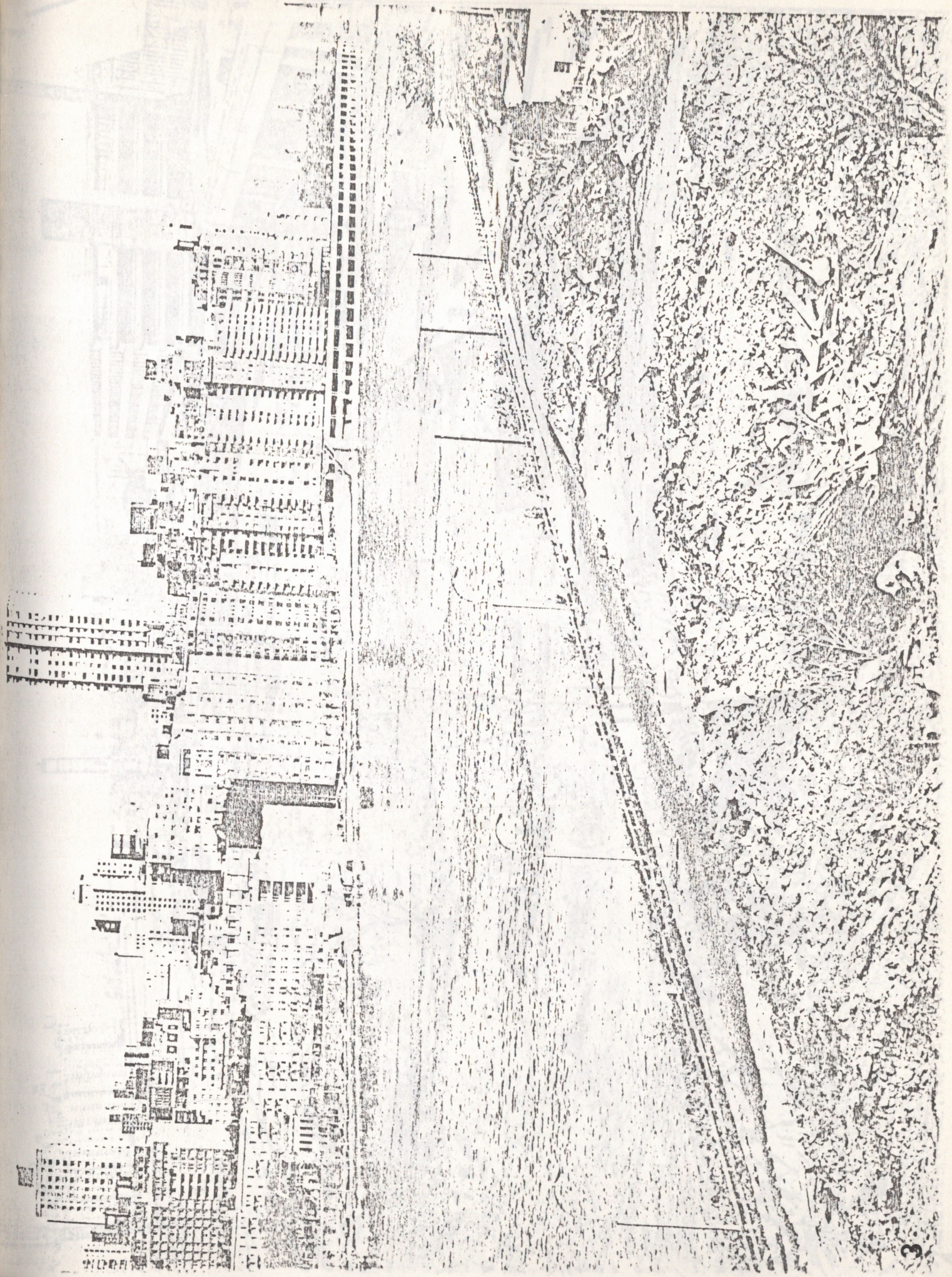
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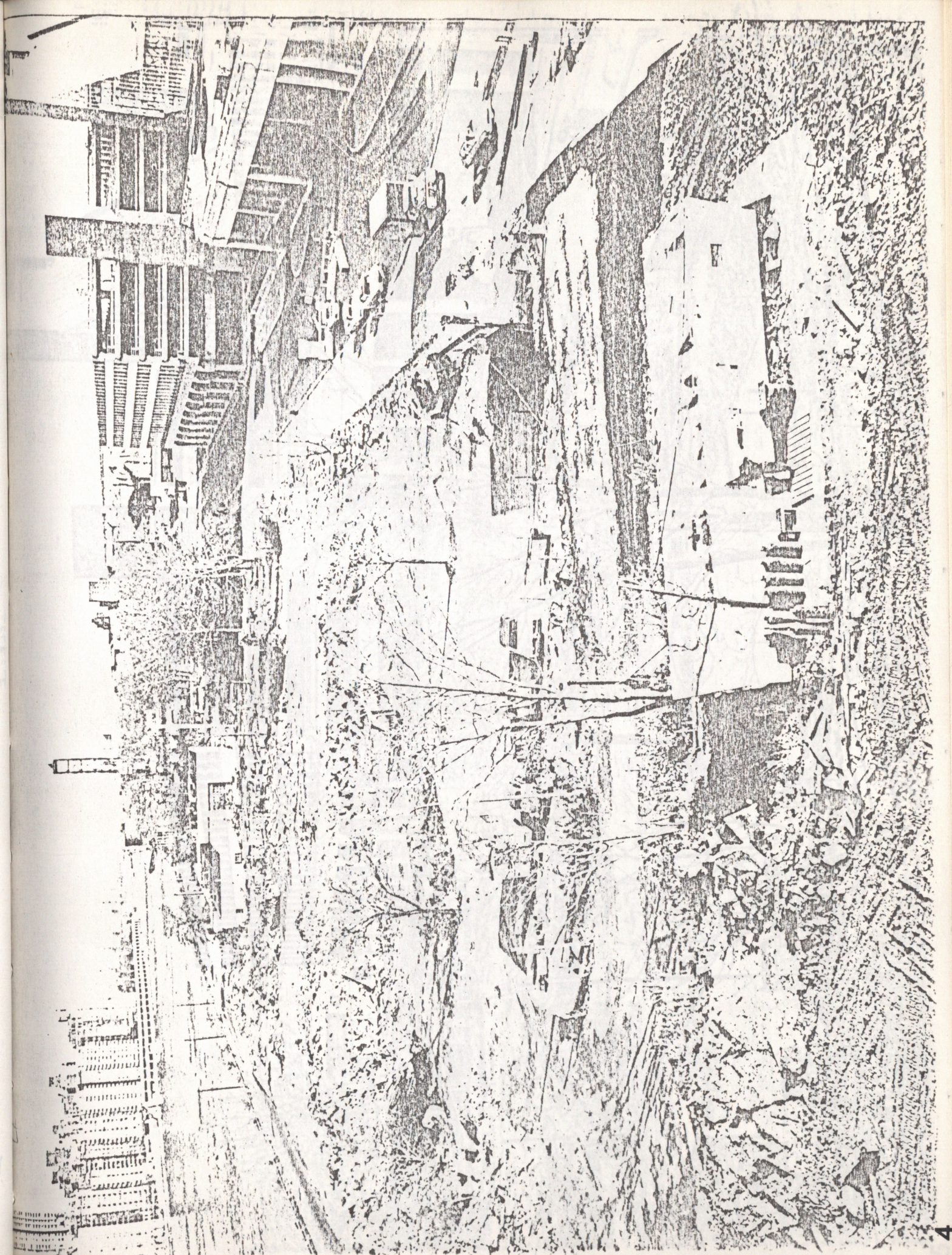
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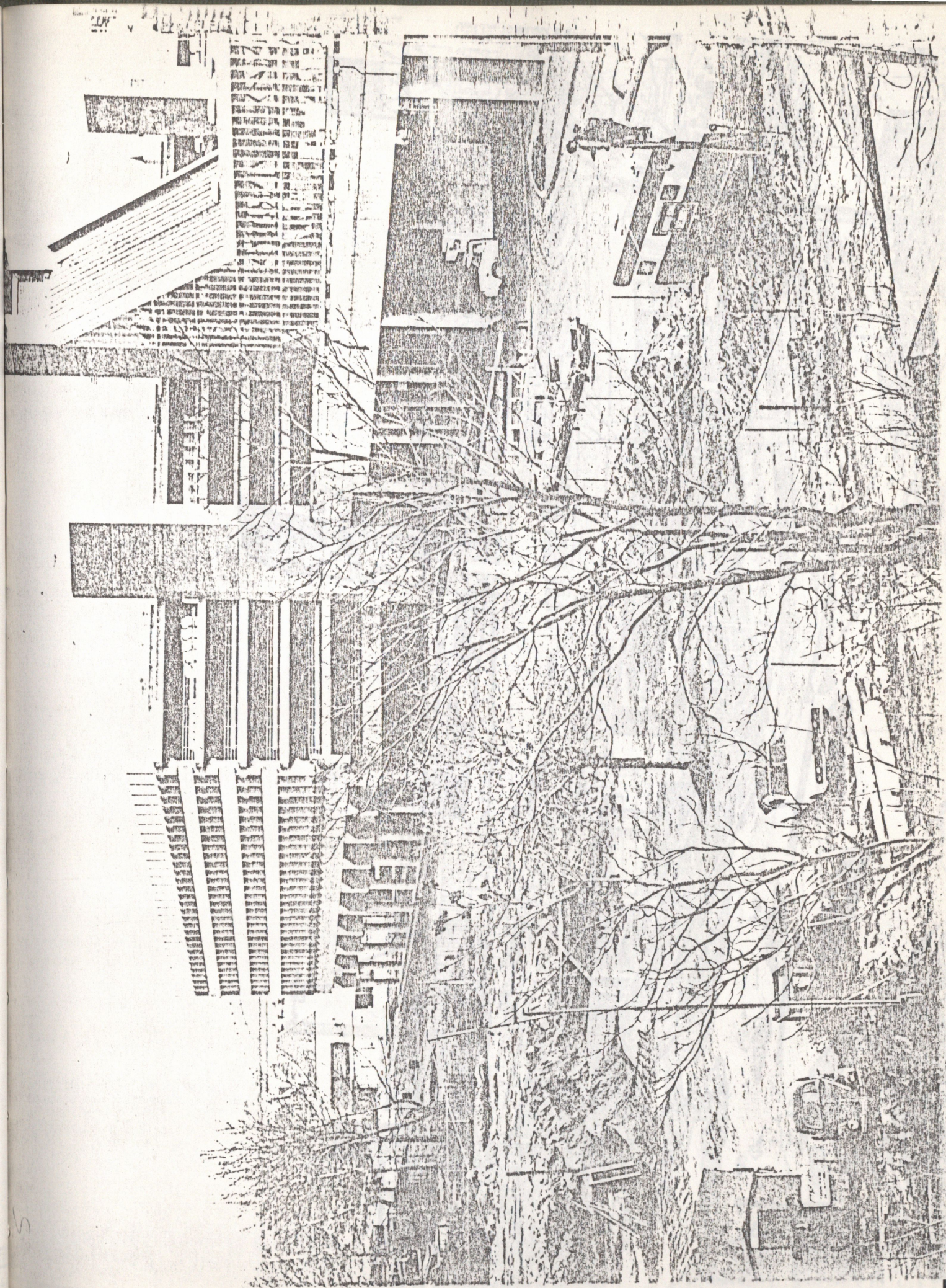
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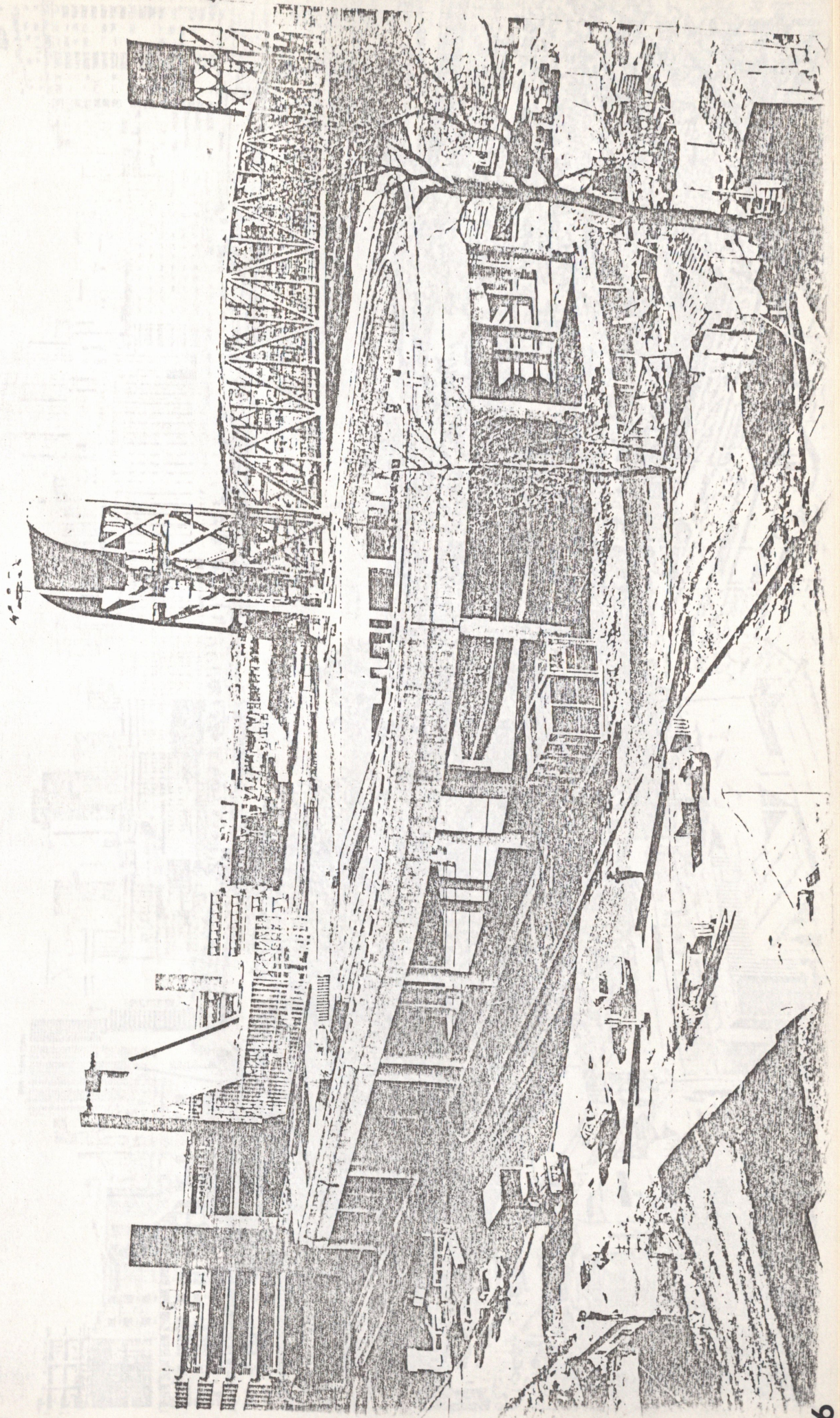
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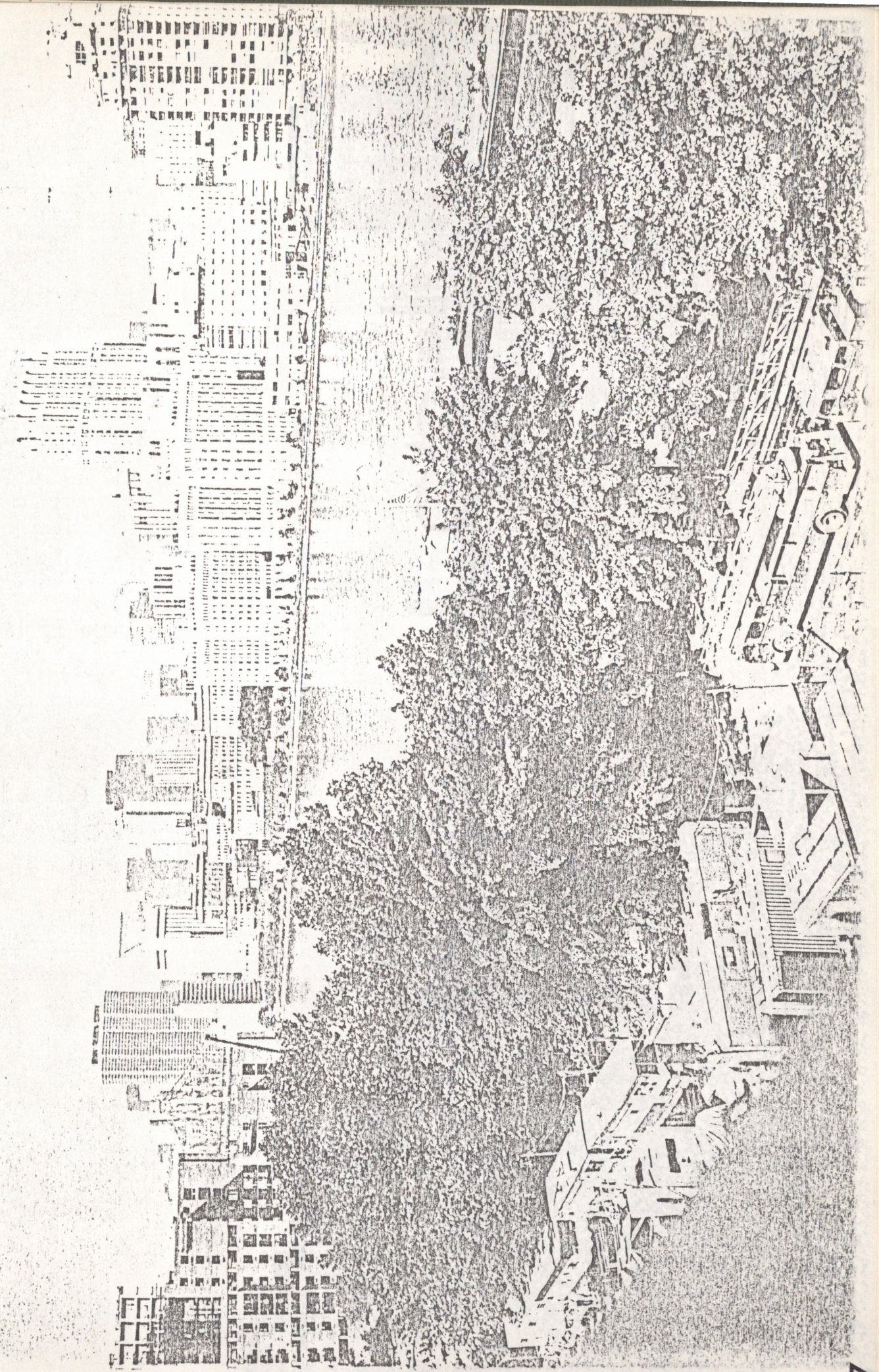
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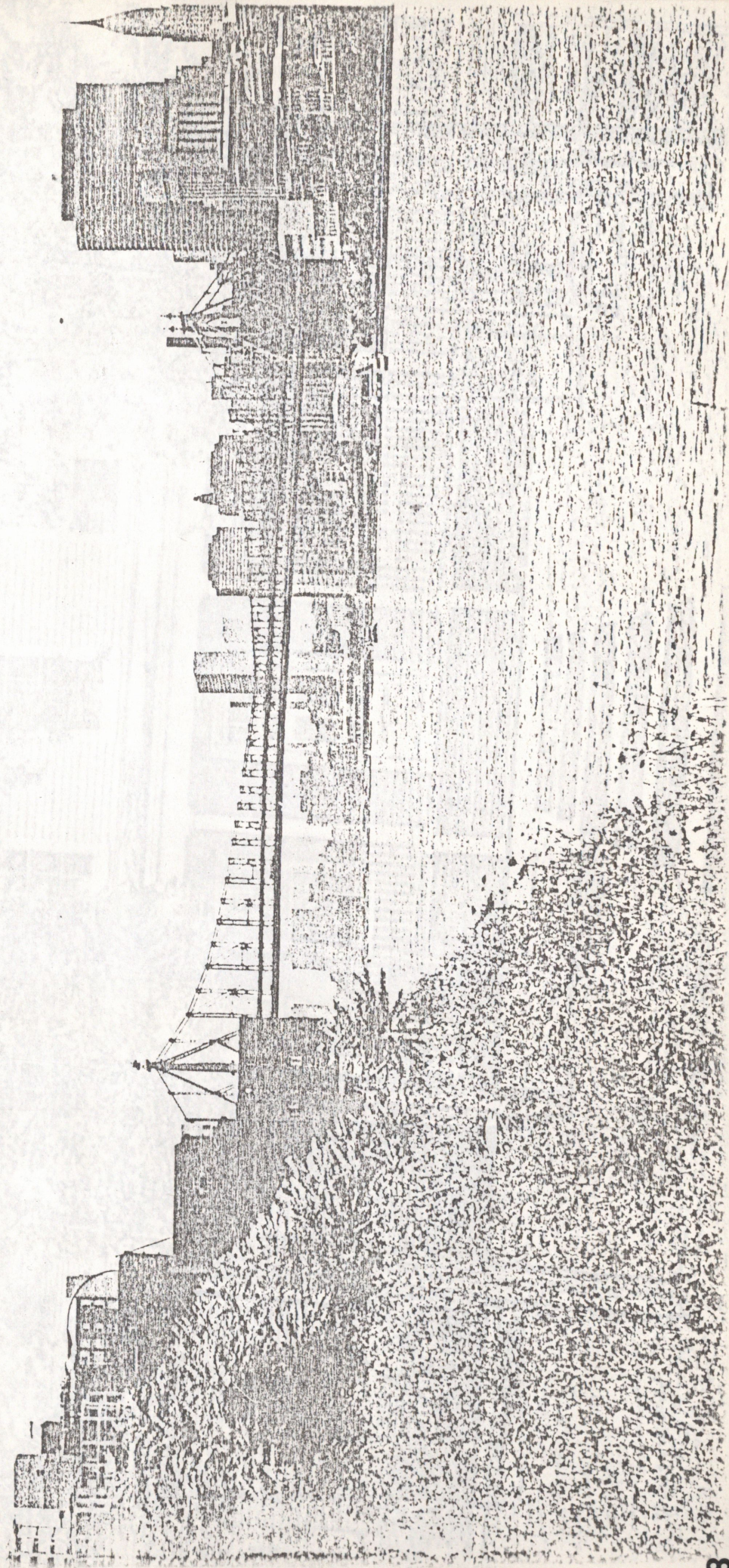


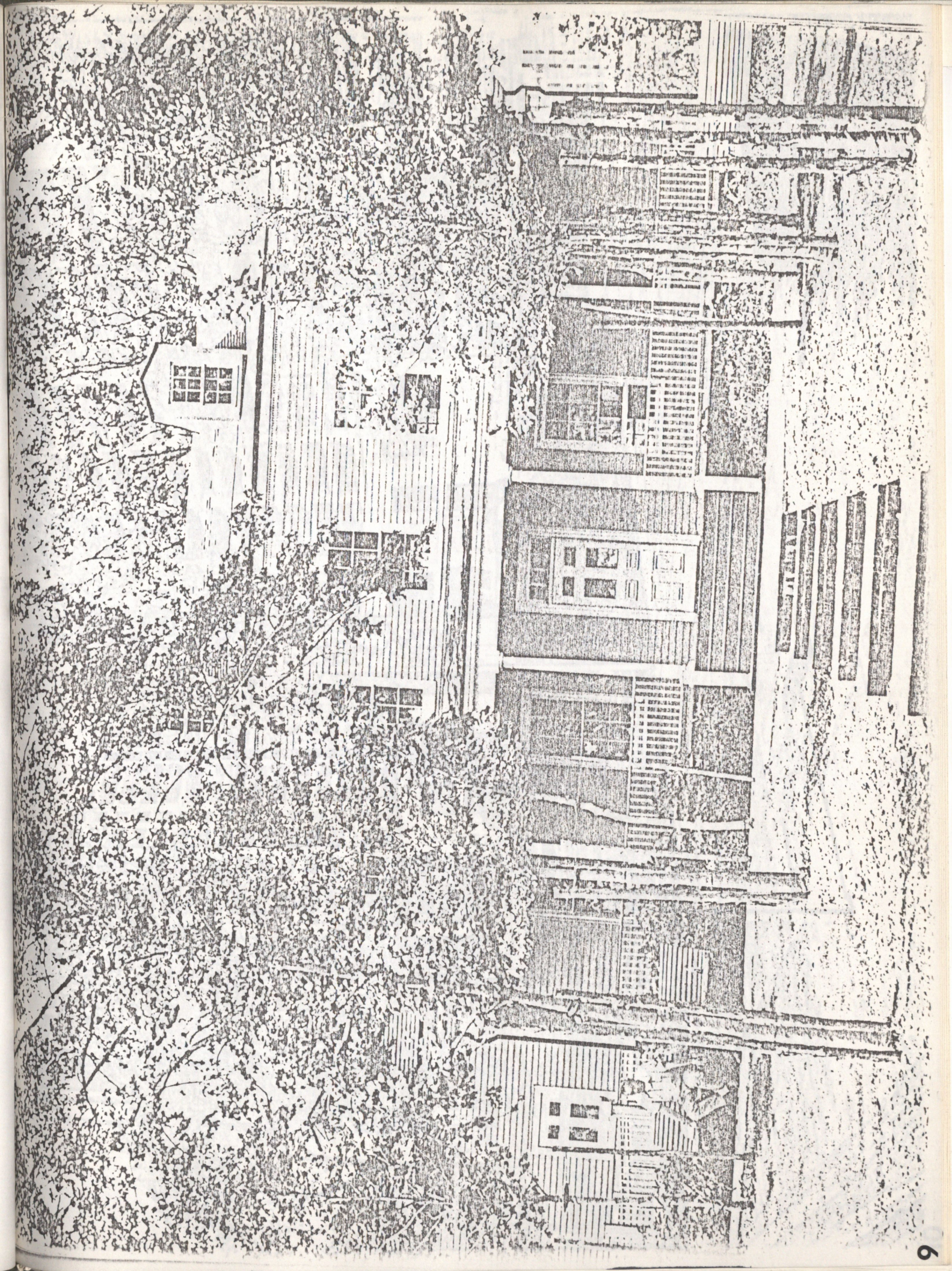


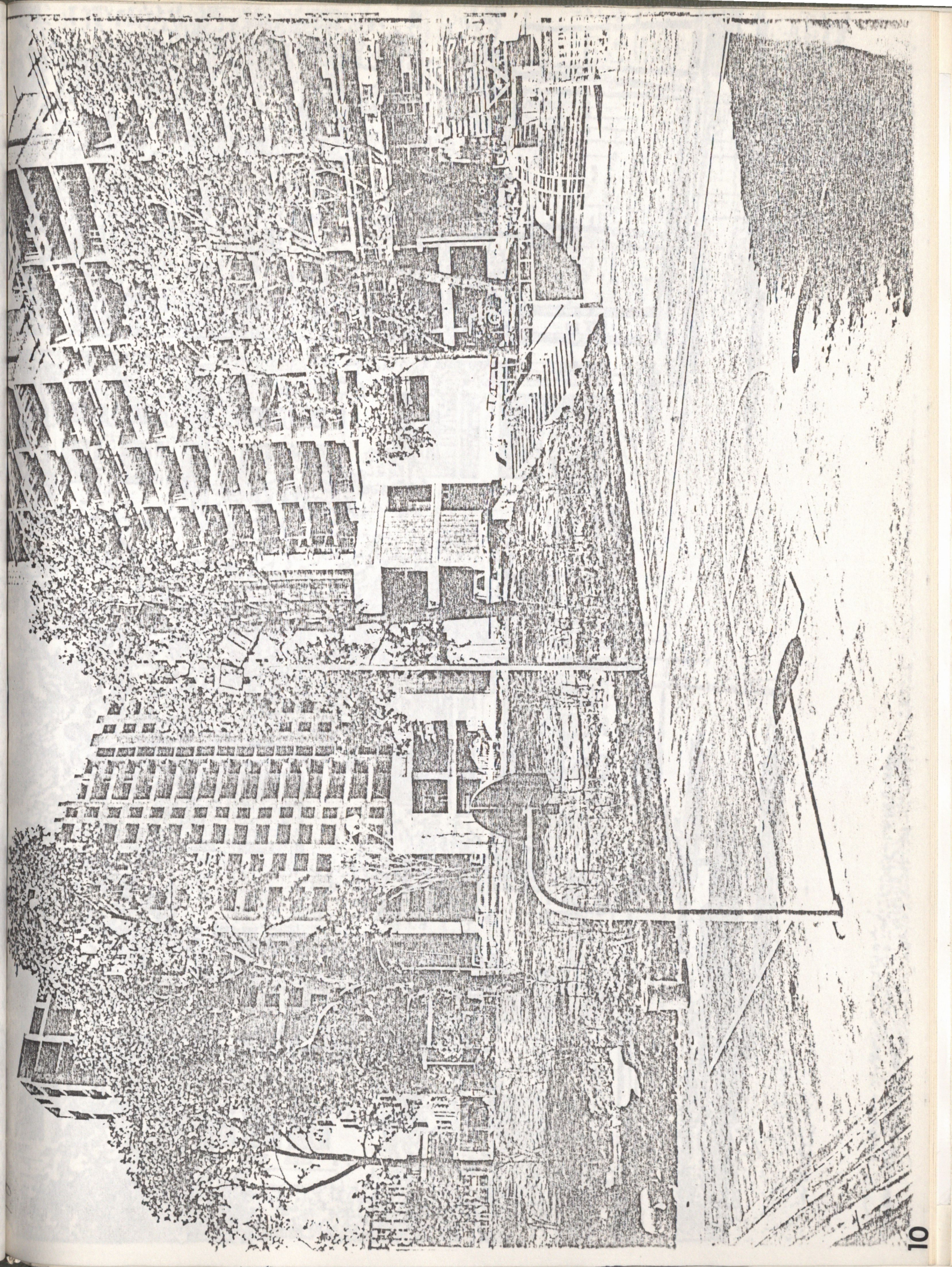


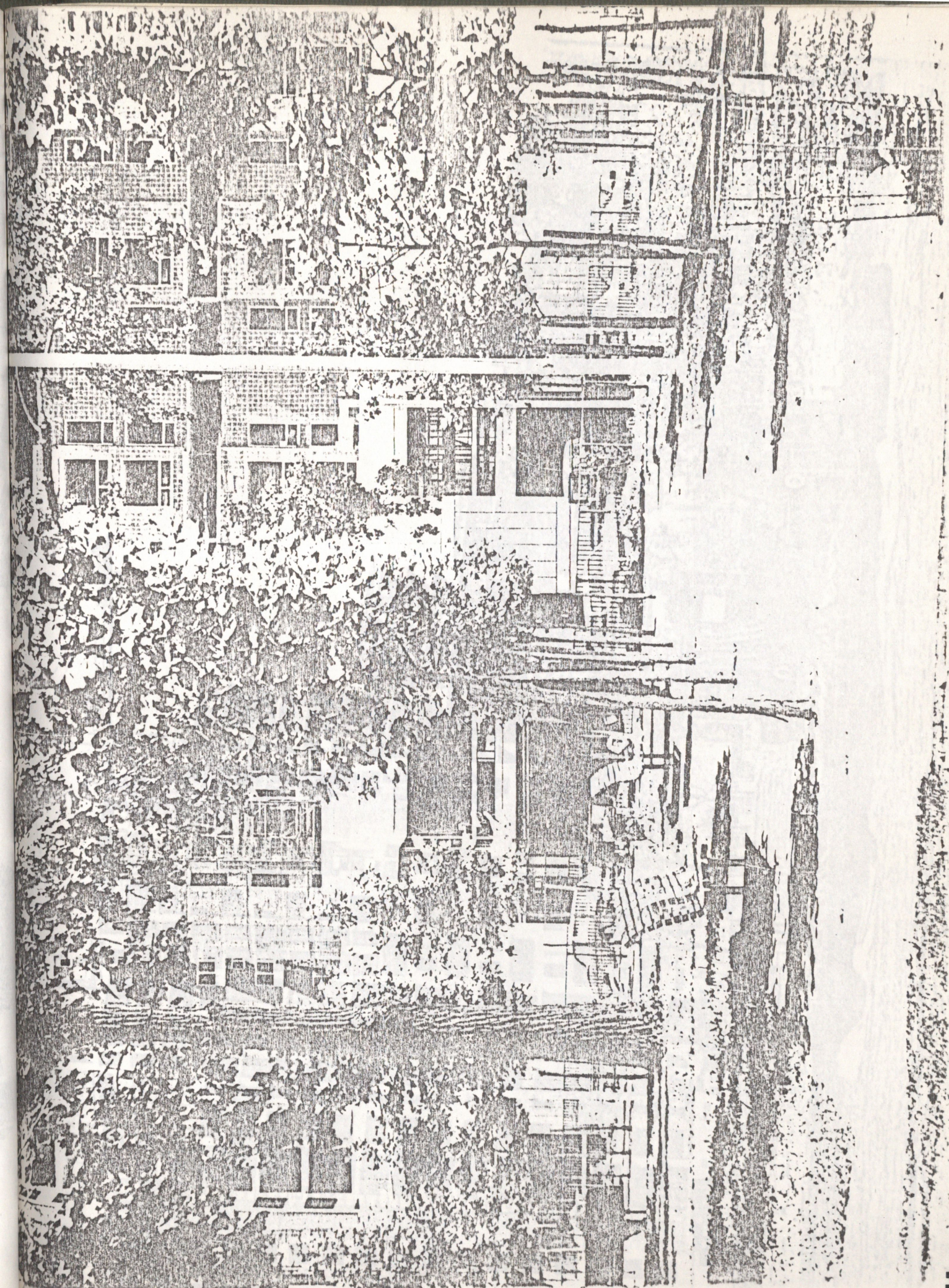


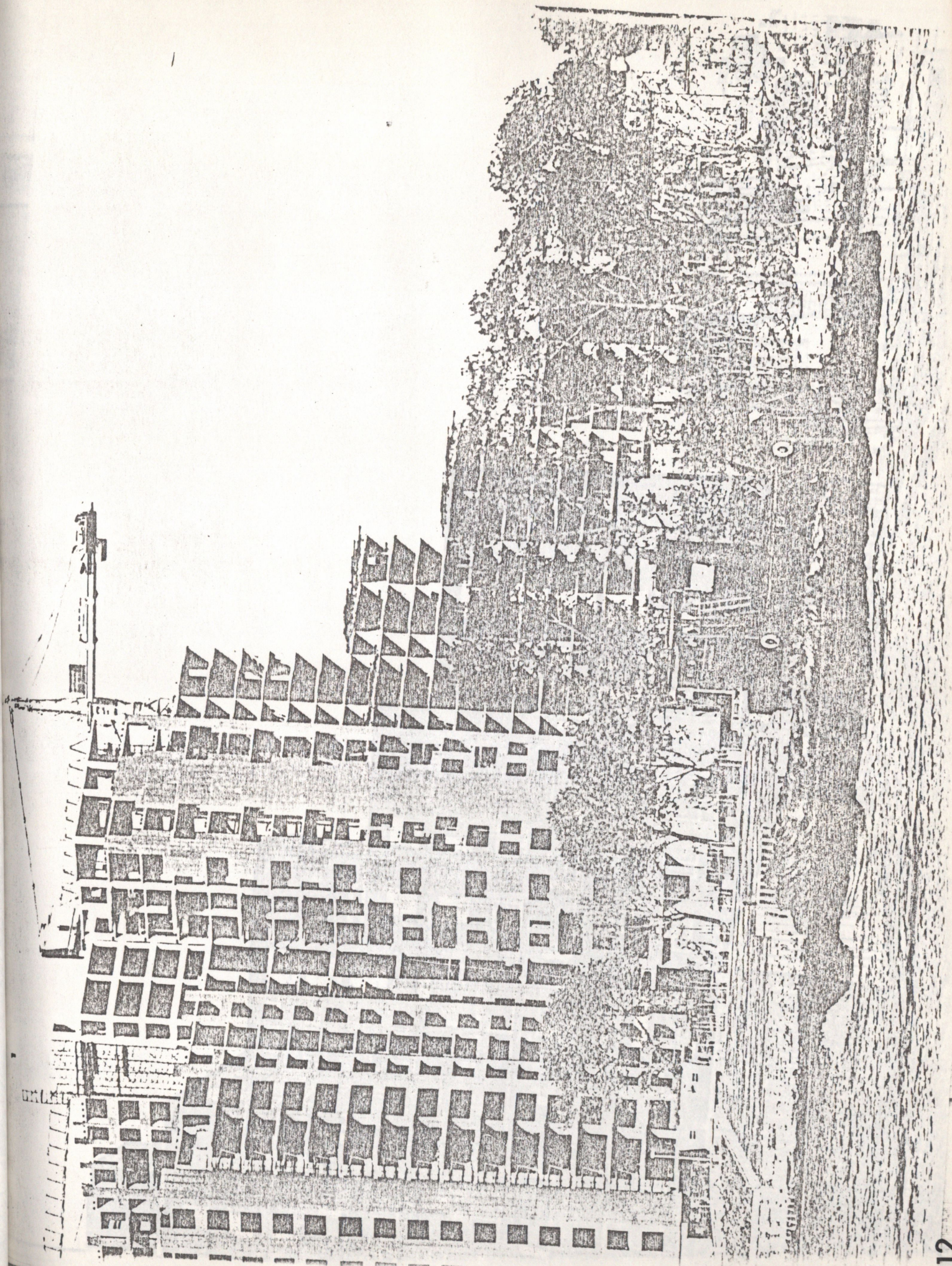


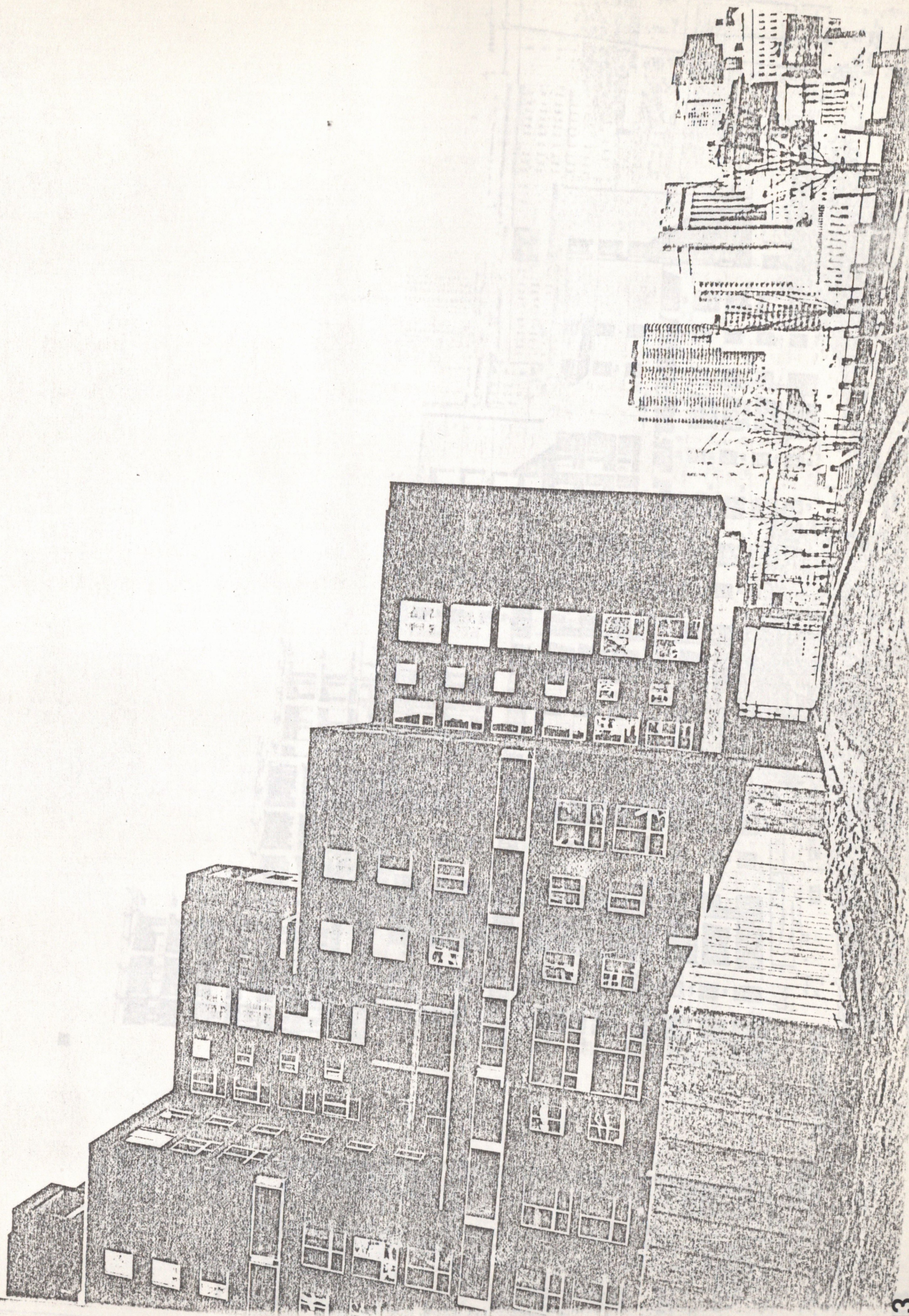


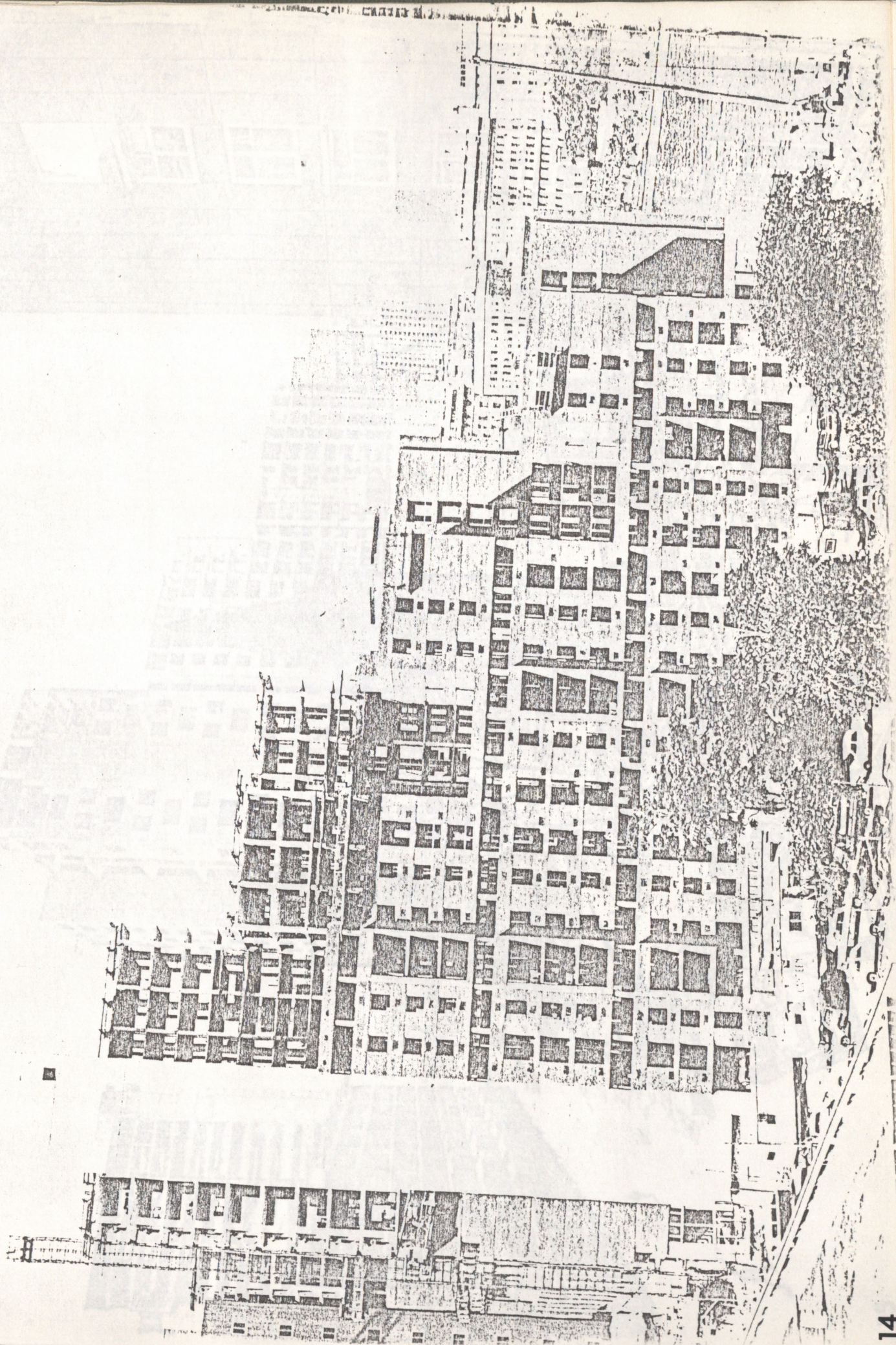


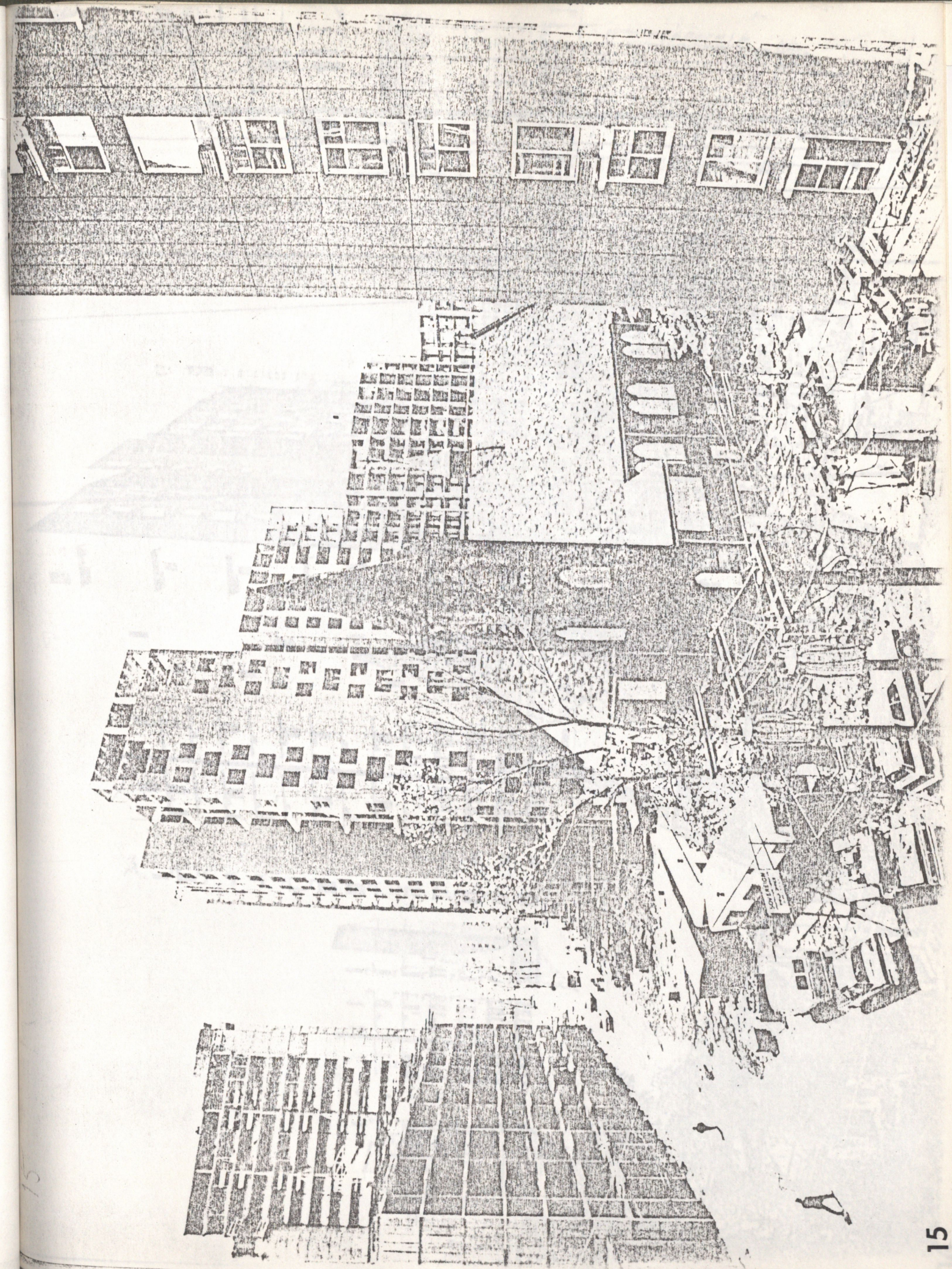


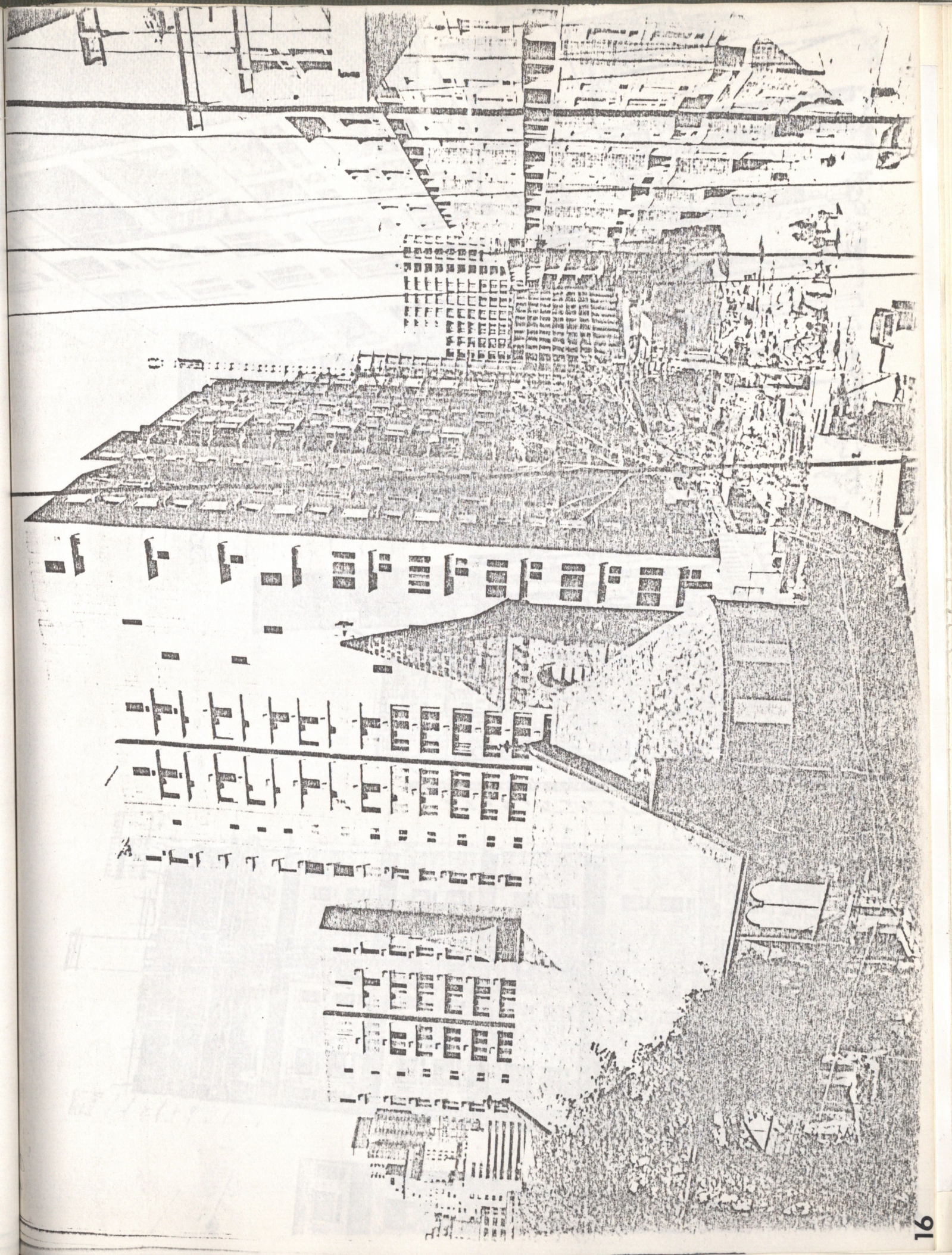


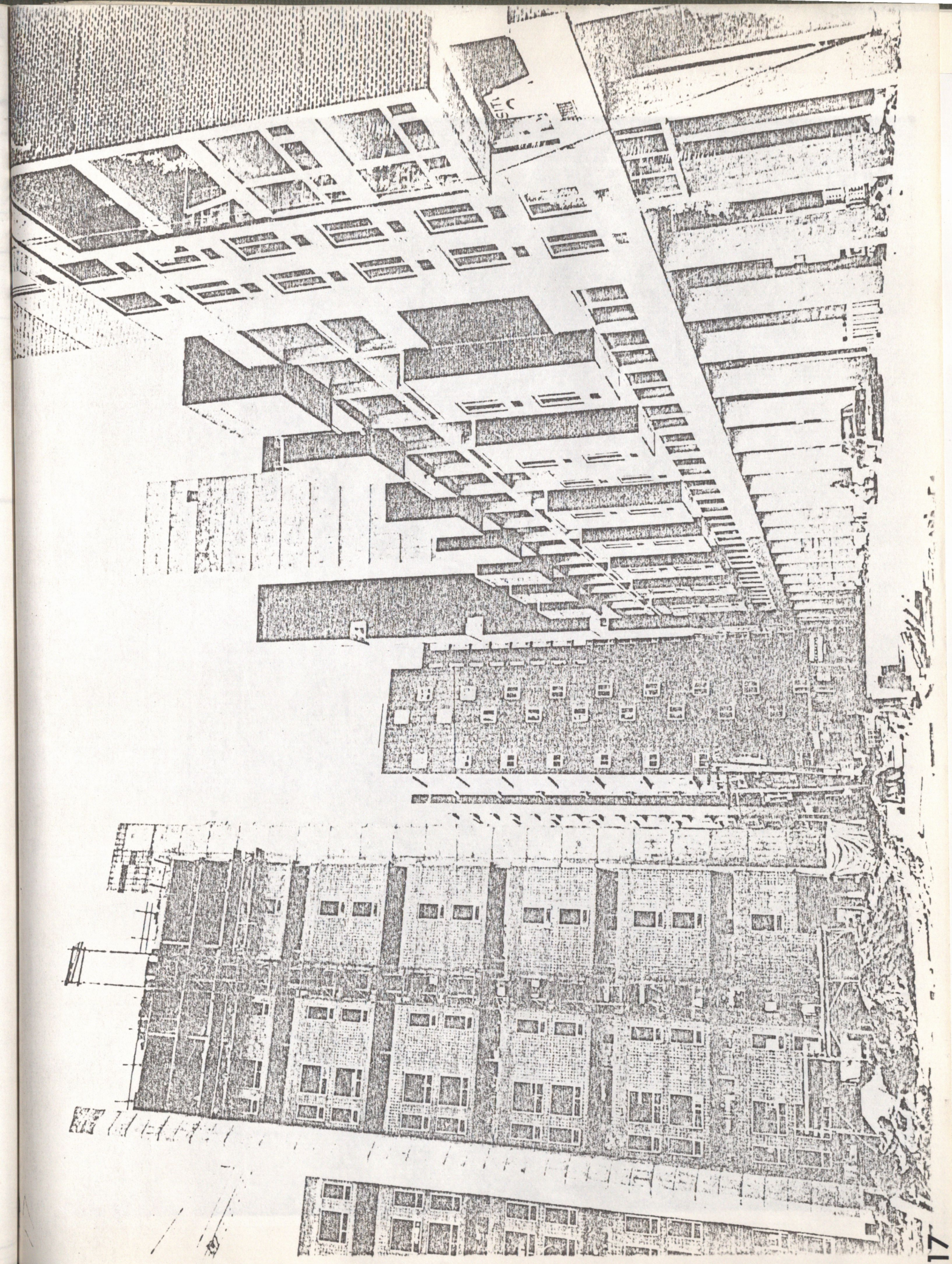


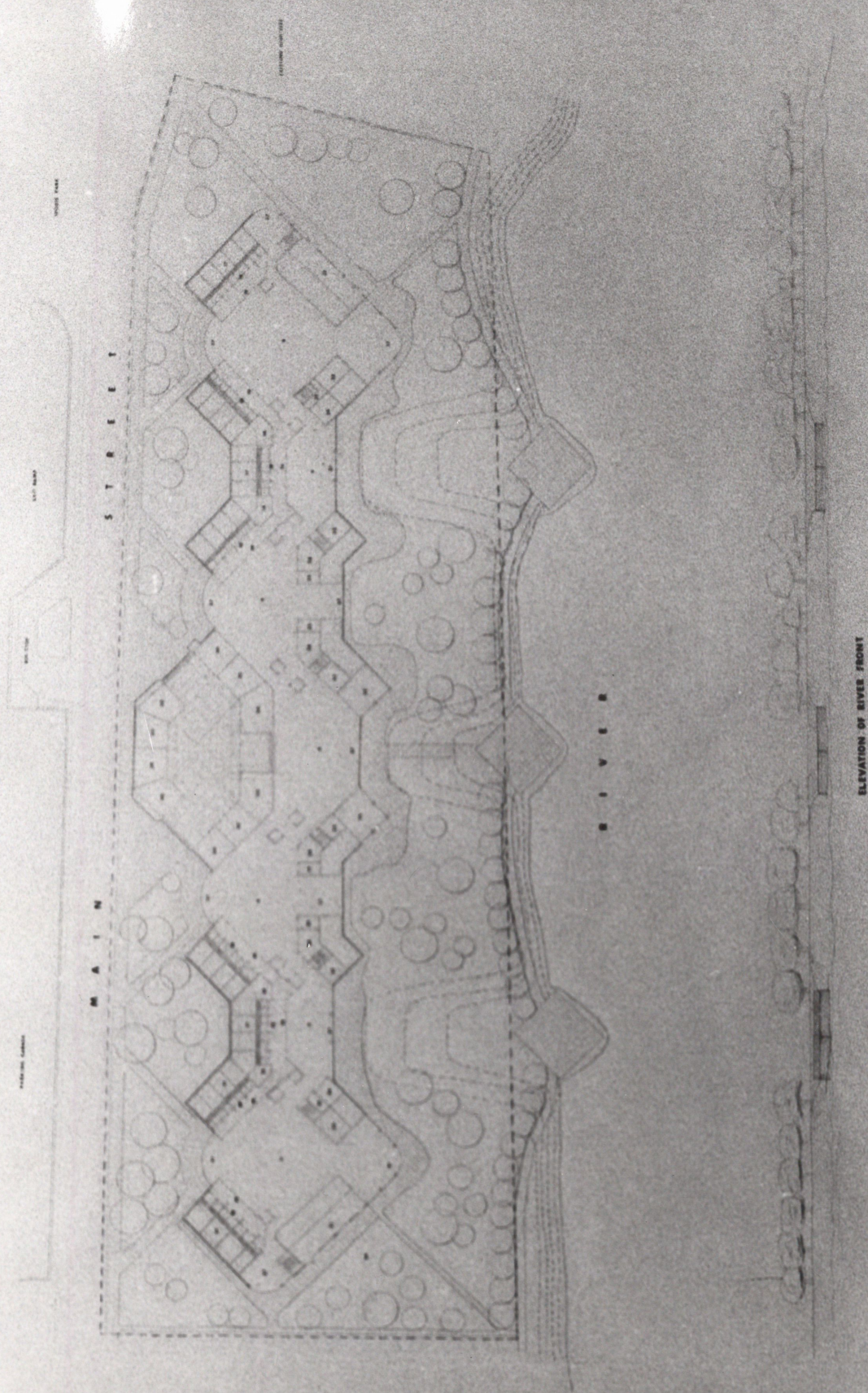






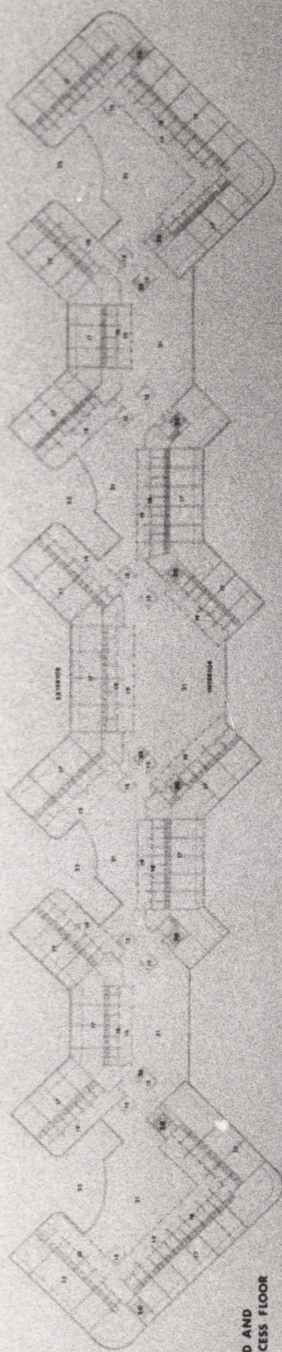




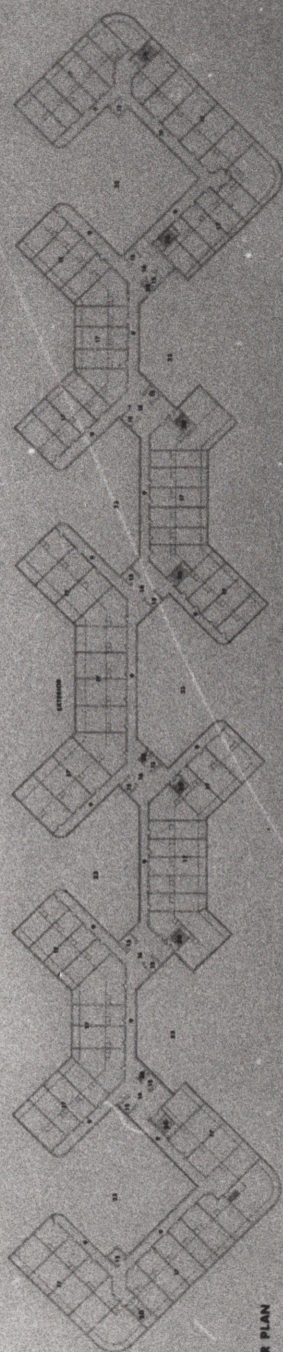


- LEGEND**
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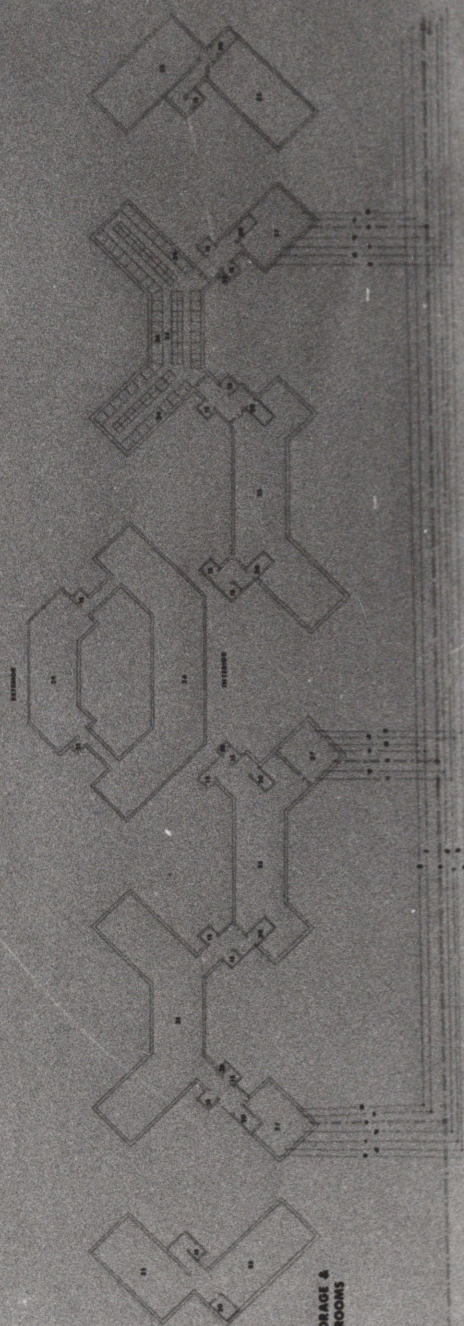
GROUND LEVEL & SITE PLAN



NEIGHBORHOOD AND
APARTMENT ACCESS FLOOR



TYPICAL FLOOR PLAN



BASMENT STORAGE &
MECHANICAL ROOMS

LEGEND

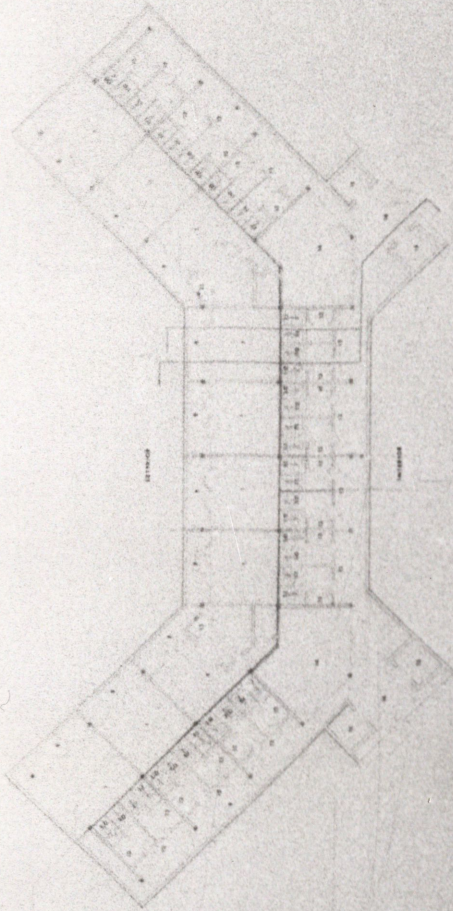
1	APARTMENT
2	COURTYARD
3	STAIRWELL
4	ELEVATOR
5	MECHANICAL ROOM
6	STORAGE ROOM
7	ENTRY
8	LOBBY
9	REAR PORCH
10	FRONT PORCH
11	BATH
12	KITCHEN
13	LIVING ROOM
14	DINING ROOM
15	SLEEPING PORCH
16	CL. (CLOSET)
17	W.C. (WATER CLOSET)
18	HALL
19	STAIR
20	ELEVATOR
21	MECHANICAL ROOM
22	STORAGE ROOM
23	ENTRY
24	LOBBY
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97	W.C. (WATER CLOSET)
98	HALL
99	STAIR
100	ELEVATOR

OVERALL COMPLEX PLANS

Page 1 of 1

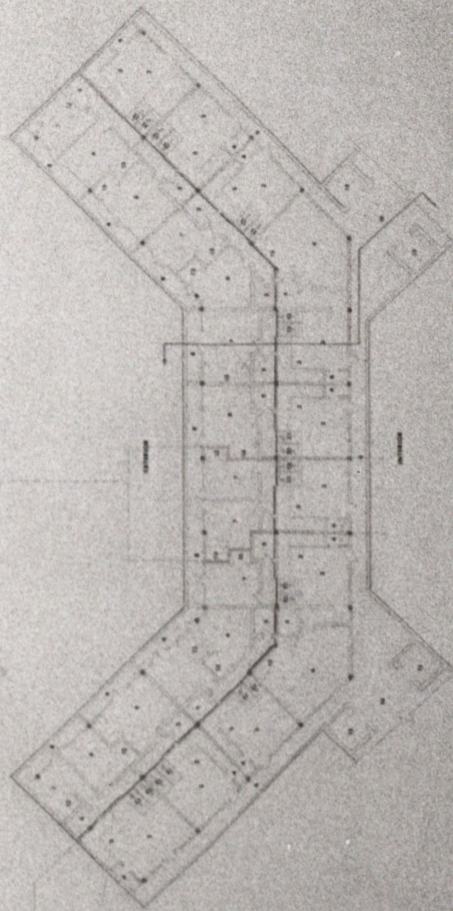
SPLIT-LEVEL LINE

FIRST LAYER
APARTMENT ACCESS &
NEIGHBORHOOD FLOOR



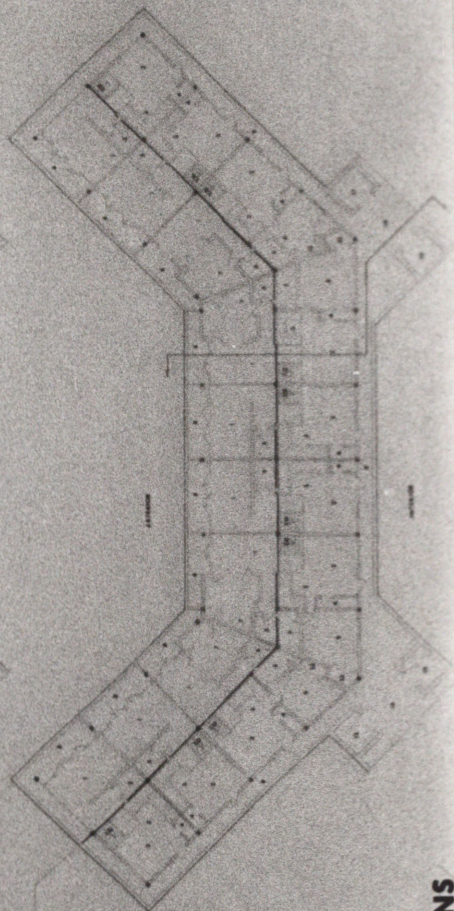
SPLIT-LEVEL LINE

SECOND LAYER



SPLIT-LEVEL LINE

THIRD LAYER



LEGEND

- 1. APARTMENT ACCESS
- 2. NEIGHBORHOOD FLOOR
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SPLIT-LEVEL APARTMENT PLANS

NEIGHBORHOOD AND
APARTMENT ACCESS
FLOOR

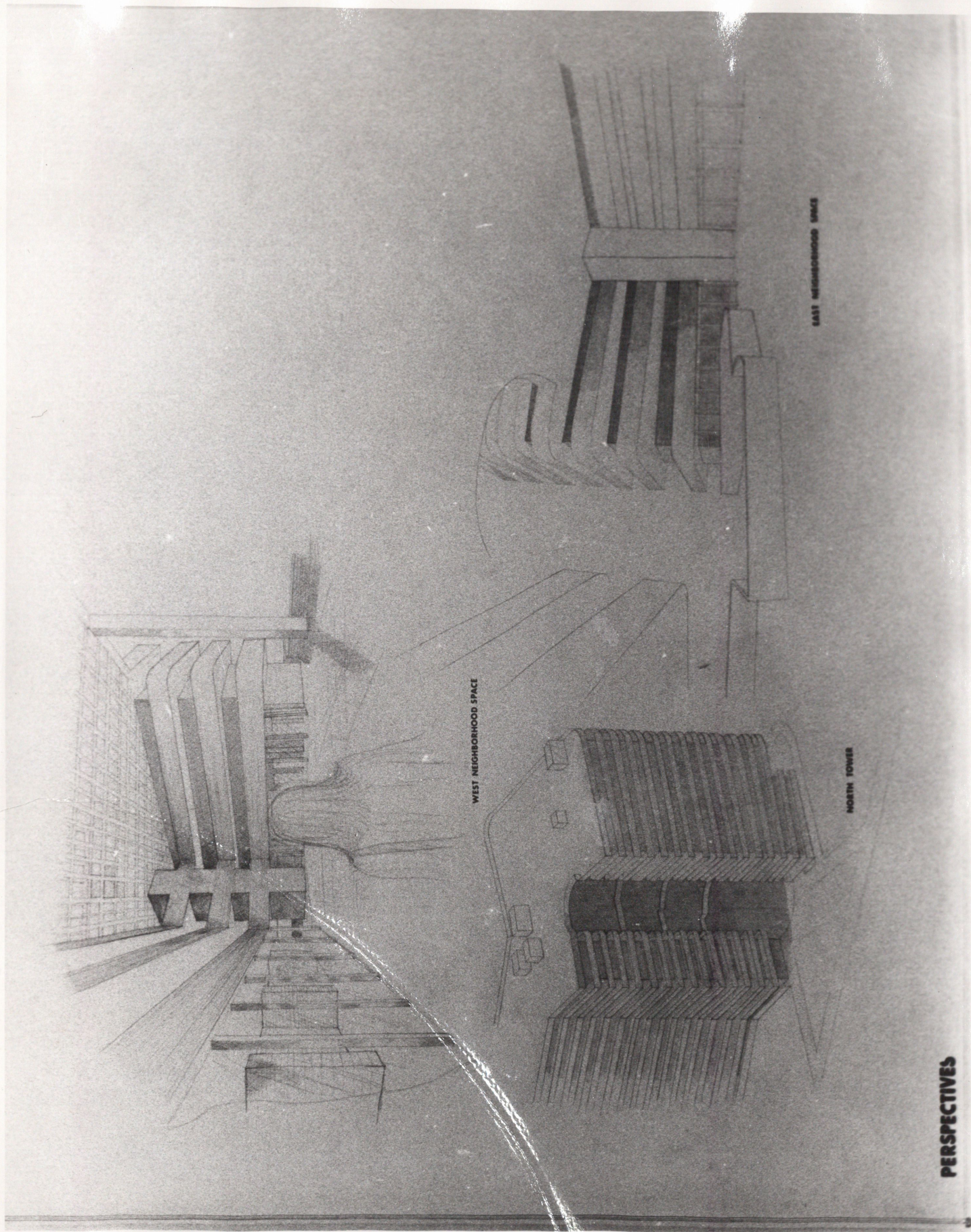
TYPICAL FLOOR

TYPICAL FLOOR

NEIGHBORHOOD AND
APARTMENT ACCESS
FLOOR

APARTMENT
DIVISION
LINE

SPLIT-LEVEL APARTMENT SECTION

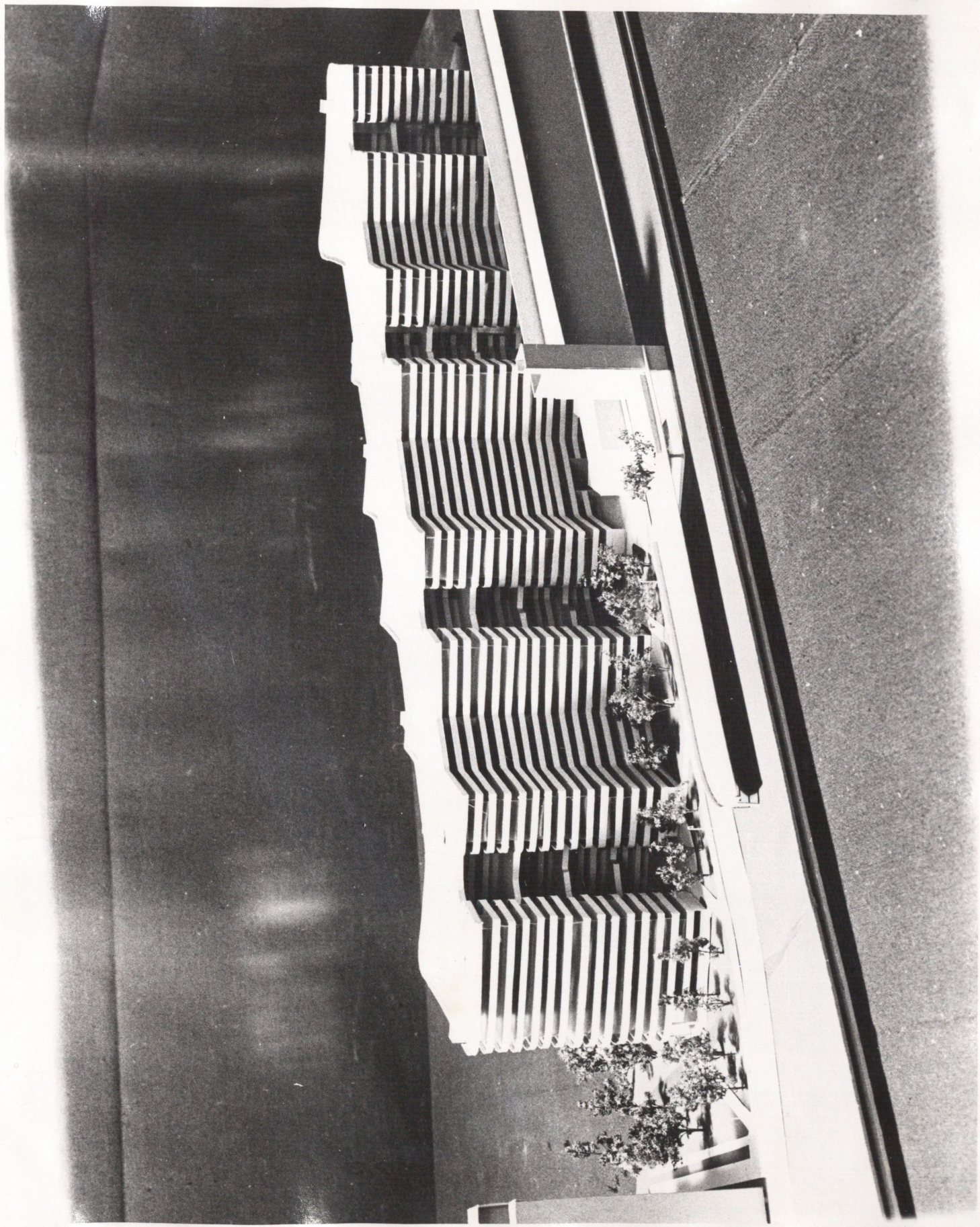


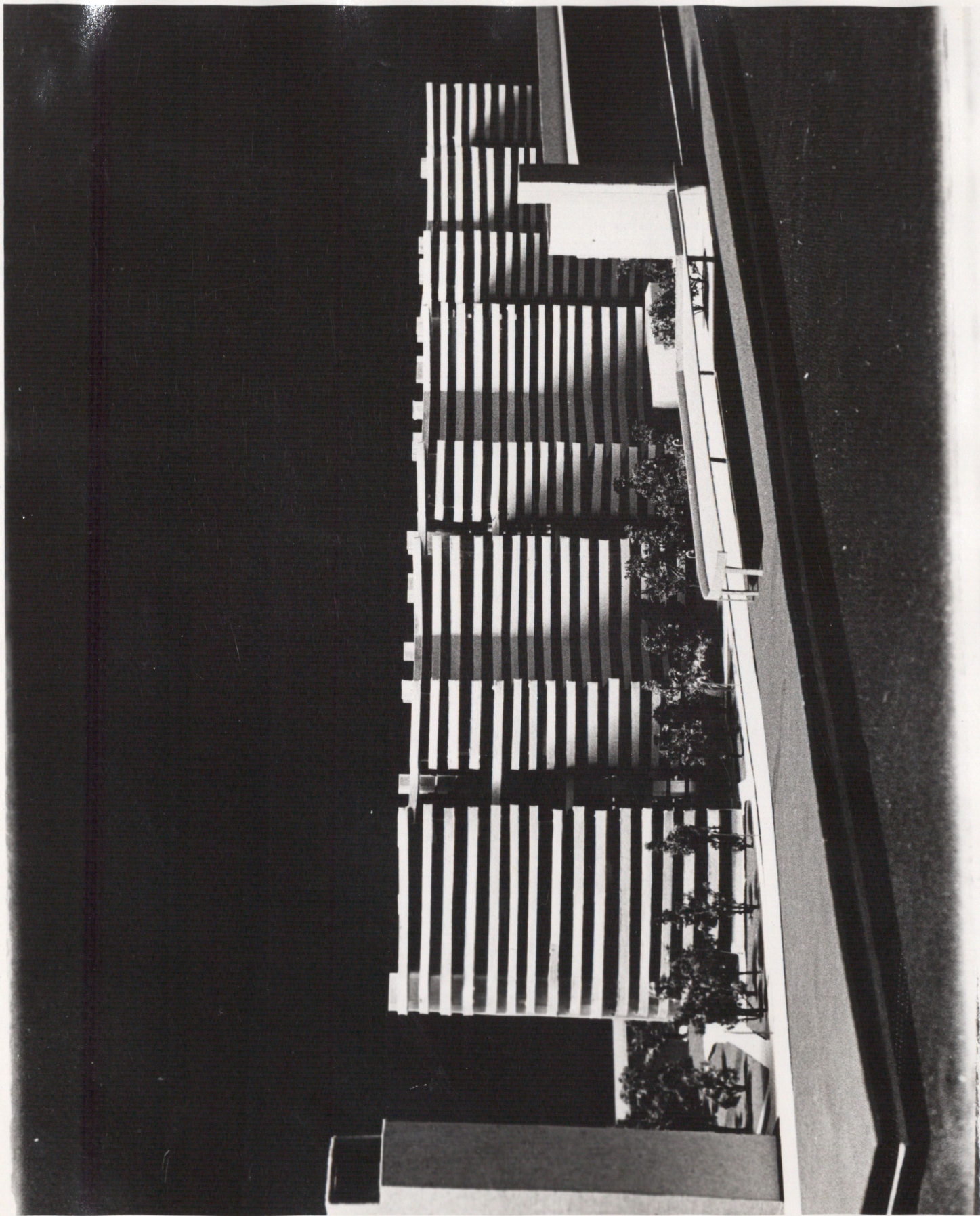
EAST NEIGHBORHOOD IMAGE

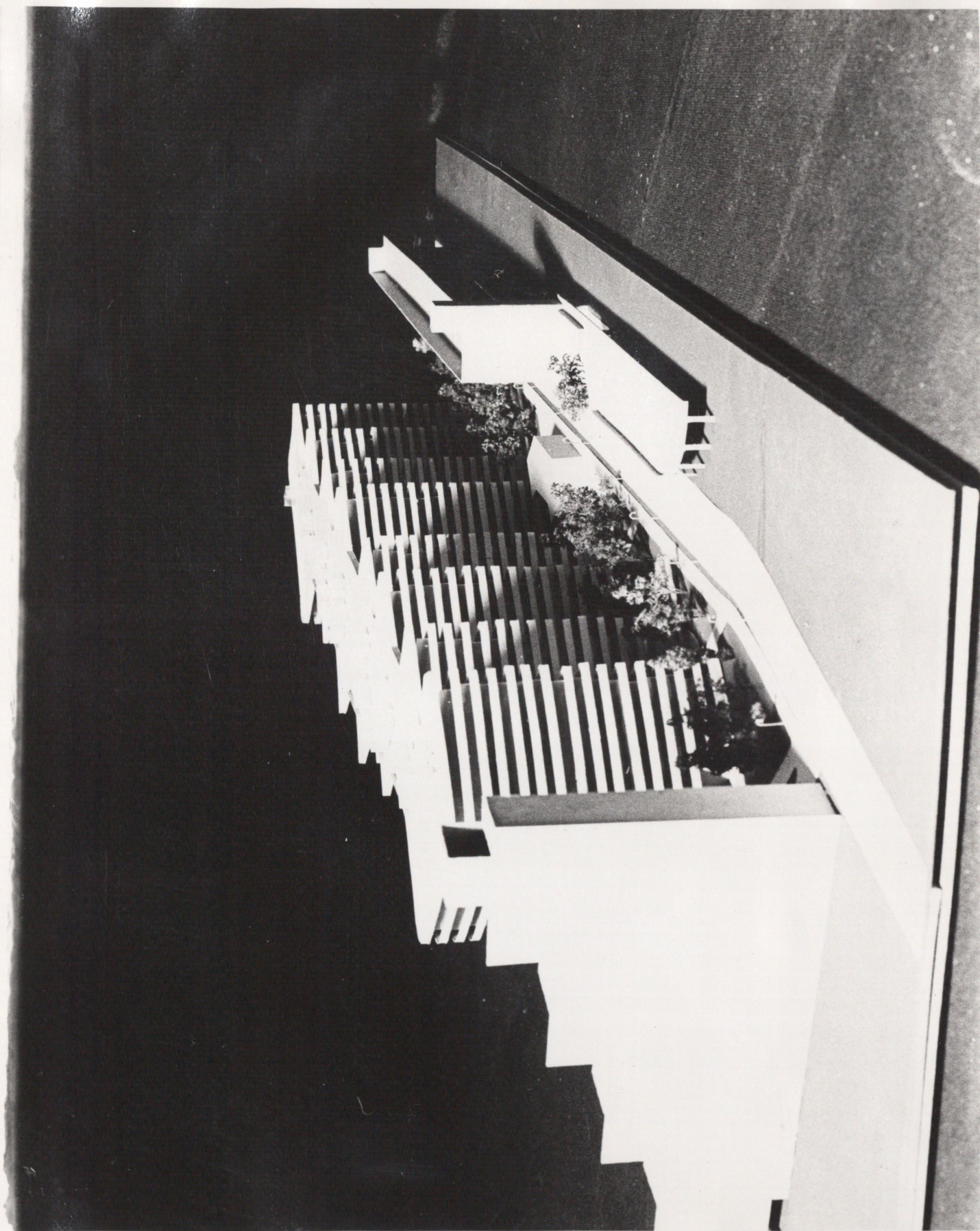
WEST NEIGHBORHOOD SPACE

NORTH TOWER

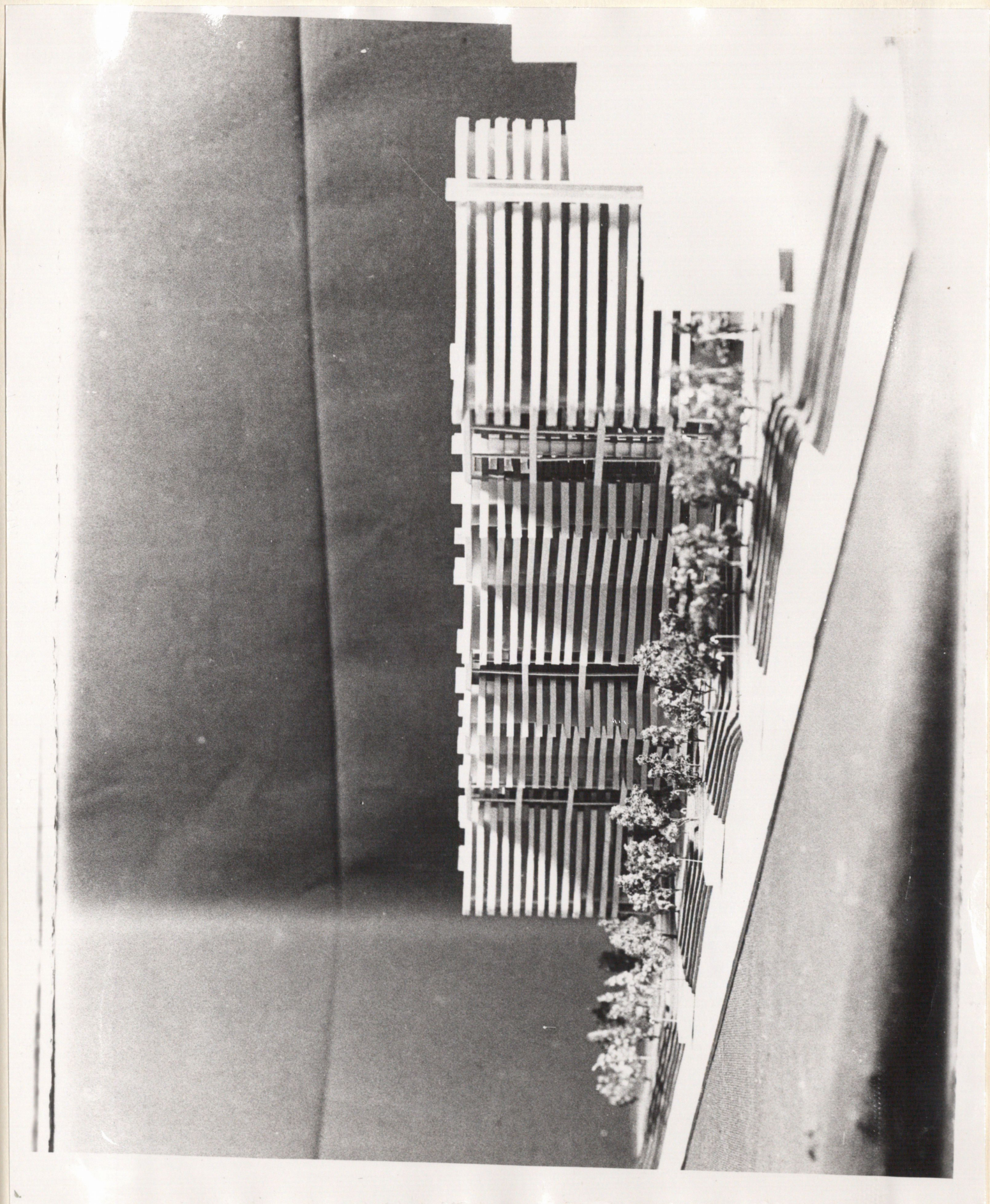
PERSPECTIVES











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