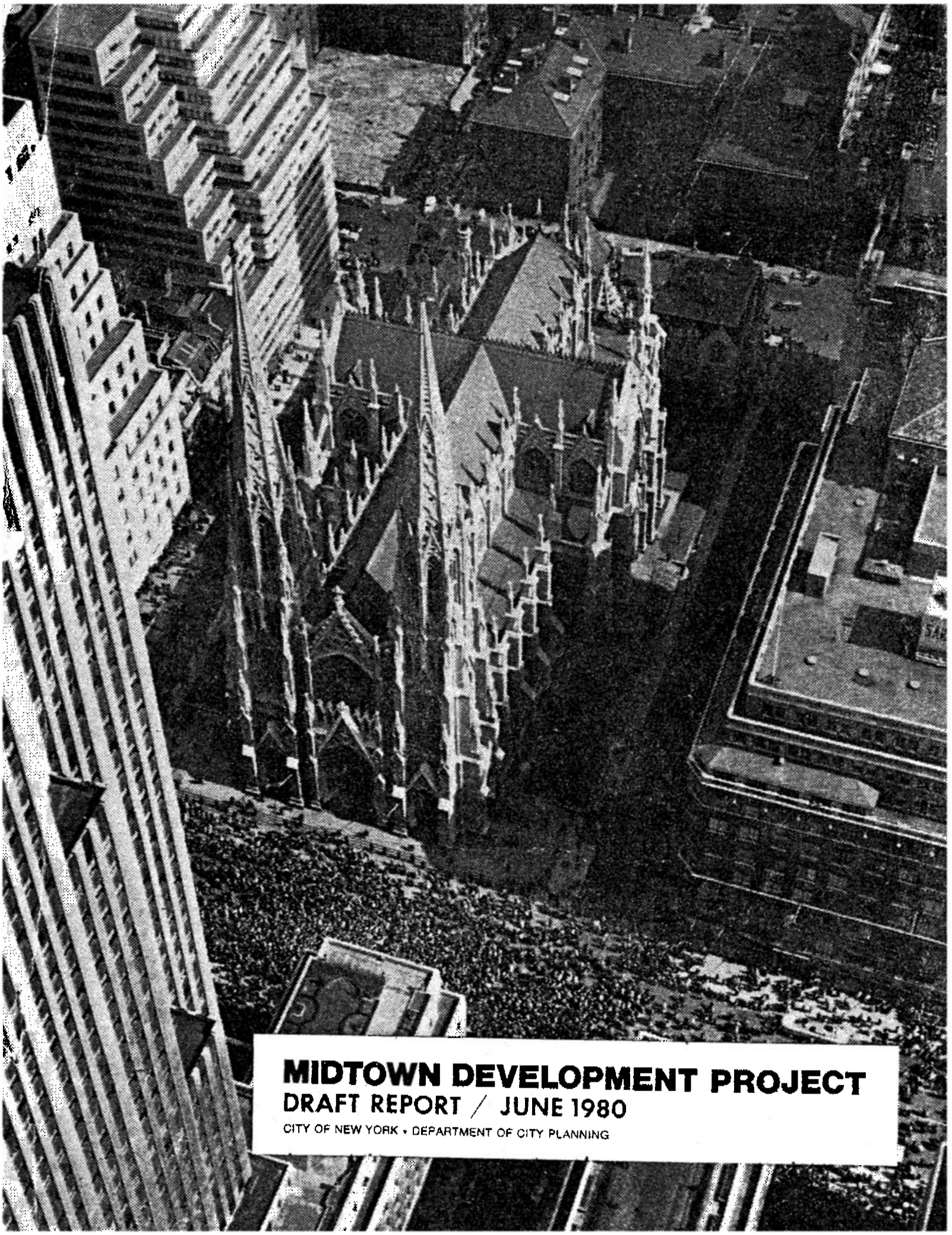


MIDTOWN DEVELOPMENT PROJECT

DRAFT REPORT / JUNE 1980

CITY OF NEW YORK • DEPARTMENT OF CITY PLANNING

M I D T O W N

D E V E L O P M E N T

P R O J E C T

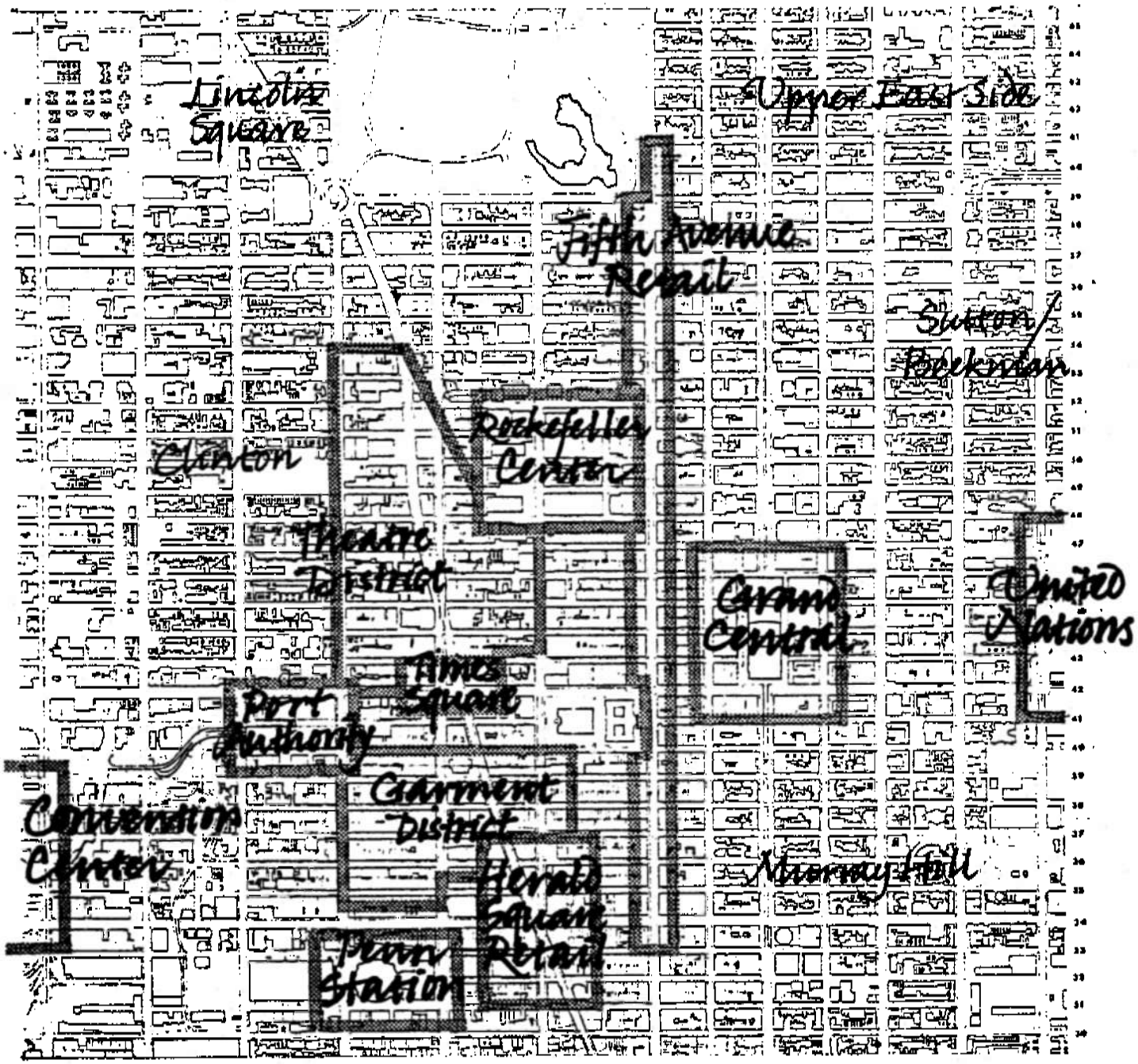
DRAFT REPORT

JUNE 1980

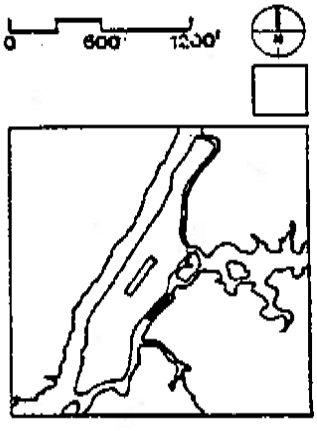
CITY OF NEW YORK

DEPARTMENT OF CITY PLANNING

HERBERT STURZ, CHAIRMAN



MIDTOWN COMPONENTS



CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

MANHATTAN OFFICE · DEPARTMENT OF CITY PLANNING · CITY OF NEW YORK

City of New York
City Planning Commission
2 Lafayette Street, New York, N.Y. 10007

A MESSAGE FROM THE CHAIRMAN

When I joined City Planning in January of this year, I recognized the importance of the Midtown Development Project which my predecessor, Bob Wagner, Jr., initiated last summer. Under Dick Bernstein's able direction, the project has been a major undertaking of the Department of City Planning. It deals with public policy issues affecting a part of New York that not only symbolizes us to the outside world, but is of importance to every New Yorker. Midtown is the heart of the City's central business district, an essential component of our economy.

The recommendations in this draft report represent the product of a comprehensive review of City policies and programs that directly affect the development and functioning of midtown. They include proposals for a major revision of the zoning regulations governing midtown development and changes in tax incentive policy, public investment and the delivery of City services. We believe that these proposals strike a fair balance, weighing both the growth potential of the west side and the economic imperatives of the east side.

CITY PLANNING COMMISSION
Chairman: HERBERT STURZ / *Vice Chairman:* MARTIN GALLENT
Commissioners: MAX BOND / SYLVIA DEUTSCH / JOHN P. GULINO / HOWARD B. HORNSTEIN / THEODORE E. TEAH
Executive Director: WILLIAM DONOHOE

These recommendations are the product of an intensive staff effort which has drawn heavily on the Department's resources, and which has been supplemented by the work of the James Felt Realty Services, Inc., as real estate and economic consultant; Davis, Brody Associates with Kwartler/Jones as consultants on zoning bulk regulations; and William H. Whyte as a consultant on public spaces.

The recommendations in this report are for public discussion and thus do not represent the Department's final position nor, of course, do they represent an official position of the Planning Commission. I believe that in this critical planning matter, it is important to allow sufficient time for public review and comment. Based on our own further analysis as well as concerns raised by others in discussions over the summer and early fall, a final report laying out an agenda for implementation will be published by the end of the year.

In the City's present budget straits, this project would not have been possible without the generous support of a number of civic minded foundations. On behalf of the Commission and of the people of this City I would like to thank publicly the Robert Sterling Clark Foundation, Inc.; Fund for the City of New York; The J. M. Kaplan Fund, Inc.; the Lucy Worthham James Memorial and the Frederick J. Whiton Fund of the New York Community Trust; and the Rockefeller Brothers Fund.

Herbert Sturz

June 1980

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The Basic Premise

Midtown Manhattan is the economic heart of New York City. How well midtown works is a critical City-wide issue. Its importance has grown as New York City's economy has continued to shift from production and manufacturing to finance, management, business services and tourism -- components of the City's national and international headquarters' function.

This shift from an economy and labor force dominated by production and "blue collar" jobs to one dominated by management, services and "white collar" jobs is common to all urban areas. New York is more fortunate than most in that it has great strength to build on. Its status as a world city is attested to by the growth of international finance and management; the City's growing attraction for visitors, tourists, and conventions; and its dominant influence in the arts, culture and entertainment.

These are forces of long-term growth and strength. While they cannot by themselves solve all of the City's pressing problems or eliminate all of the pains of an urban economy in transition, they can provide the economic foundation and job base to help see New York through the eighties and into the turn of the century. That is why the entire City has a stake in making sure midtown works.

The Nature of the Problem

The emerging problems of midtown development have been dramatized and brought into focus by the recent resumption of development after the hiatus of the mid-seventies.

There are many problems: over congestion in particular streets and places; the impact of new buildings on the streets and avenues they front, their size in relation to their actual site, and their compatability with their surroundings; public incentives which need to be adjusted to current conditions; and regulations which too often fail to regulate what they should while at the same time making the development process lengthier, less certain and more costly.

These are problems related to growth. However pressing and urgent, they are preferable to the problems of economic stagnation and decline, to the virtual cessation of construction, to the net loss of 600,000 jobs and the narrow escape from municipal bankruptcy that marked much of the seventies.

But the roots of the problems of growth are to be found in that period of recession and construction drought, in development trends that immediately preceded it, and in some of the measures the City took to deal with it.

At the tail end of the post-war office building boom that culminated in 1969-72 when almost one-quarter of Manhattan's total current supply of office space came on the market, midtown office development appeared to be starting a move to the west. Half of the midtown output in those four years was built on or west of the Avenue of the Americas.

With available east side building sites becoming scarcer and more expensive, the expansion of the office district to the western and southern edges was a logical move by developers who saw no end to the growth in demand. The west side was less crowded. Sites were available, or could be assembled, and cost less. Mass transportation was better. More subway lines served the west side than the east side and they were less crowded. Penn Station unlike Grand Central provided direct access to Long Island and New Jersey, although not to Westchester and Connecticut where top management was more apt to live.

However logical the westward trend, it was interrupted when the construction boom crashed in 1973. Office space became a glut on the market and the new west side buildings were the hardest hit. One new office building that opened in the Times Square area in 1972, for instance, was still 65 percent vacant in 1975 despite rock bottom rents. For several years there was virtually no new construction, east side or west side.

Faced with the steady drain of jobs, lack of construction, its own threatened bankruptcy and a general crisis of confidence, the City moved to stimulate construction. It developed new tax incentives and liberalized the application of zoning incentives.

When midtown development started up again, in the last years of the decade, the market was tilted more to the east side. As available space was gradually absorbed, east side locations became more and more scarce. Accelerating inflation drove rents to new heights to which the market adjusted.

Meanwhile, the west side situation deteriorated, particularly in the Broadway-Times Square district. The growth of the "porno" industry as well as other complex and severe social problems gave the area a menacing cast and made it less desirable for office buildings. There has been recent improvement in the area through vigorous enforcement programs by the City and the cooperative efforts of the theatre, restaurant and hotel industries. Most of the space in the buildings that came on the market in the early seventies has now been rented. But the relatively low west side rents and the high cost of building and operating new buildings are obstacles to development.

On the east side, continuing strong demand and a low vacancy rate has created a "landlord's market" with high rents, few concessions and pressure to develop available sites. The fact that these sites are

comparatively few and tend to be small, leads to ingenious efforts to maximize their potential through zoning lot mergers and the transfer of development rights from landmarks, both legal devices for squeezing more bulk on an actual site. These devices and the additional floor area granted for providing various amenities have put great pressure on the zoning resolution and led to concern about "shoehorning", "piggybacking" and so-called "block buster" buildings.

A Development Strategy

Our general development strategy for midtown is to facilitate and encourage the resumption of its natural expansion westward and southward. This is desirable for two reasons:

> It will help accommodate the reasonable growth of midtown functions anticipated for the next ten to twenty years, growth which is in the broad interest of the entire City.
>
> It will relieve the pressure on the eastside midtown core and help protect the character of this strong, well-functioning area.

More specifically, the development strategy we propose divides midtown into three types of areas -- growth areas, stabilization areas and preservation areas -- to meet these basic public objectives.

Growth Areas

In the expansion of midtown development to the west and south, the major areas that can accommodate growth are: Broadway -- Times Square; Avenue of the Americas south to 34th Street; Fifth Avenue between 34th and 40th Streets; the 34th Street corridor including Herald Square; the Convention Center area; and Eighth Avenue between 42nd and 57th Streets though probably for hotel, residential and mixed development.

The logic of this expansion in terms of access, proximity, space and supporting infrastructure is clear. But the obstacles are formidable. The major goal of public policy must be to help break down the barriers that are damming the natural flow of midtown growth. However, if the market rents now achievable are so low that a builder cannot even meet "break-even" costs, we won't have new development from the private sector in targeted growth areas.

If public subsidies or incentives are to be given in midtown, they should be targeted toward the west and south. And that is what we recommend as policy for this City's tax incentive programs. In fact, this is now policy for the program administered by the Industrial & Commercial Incentive Board (ICIB).

At present, however, the gap between west side market rents and the break-even costs of new development is too wide to be bridged by

tax exemption alone. There are other ways to induce development -- federal urban development action grants (UDAG) to reduce financing costs or site assemblage using the powers of eminent domain where legal and appropriate are examples. But for the gap to be closed, not only must development costs be reduced, market rents must be raised.

To raise the sights of the market place, both the image and reality of midtown's west side must be changed. The events of the seventies tarnished rather than improved this part of town. The private sector gambled on west side development and has unpleasant memories. It will take more than words to alter those memories.

As a matter of fact, although it is not generally recognized, the public sector is investing in excess of half-a-billion dollars in improvements that are already started, are programmed or are planned for west midtown.

Central to the public capital investment program is the new Convention Center, for which ground has just been broken, and which will be completed in 1984. With the special features I. M. Pei designed to draw the general public and make it part of the City fabric, the Center should help transform this part of town. Together with L.I.R.R. and subway station improvements, it should be a positive influence on development in the Penn Station - Herald Square area.

Other significant west side improvements include the Port Authority Bus Terminal expansion, Broadway Plaza and the proposed Portman Hotel and Broadway theatre that will front it, the subway station improvement at 42nd Street and Eighth Avenue, the commerical revitalization program for Eighth Avenue between 46th and 49th Streets, and the "restaurant row" beautification and sidewalk widening on 46th Street west of Eighth Avenue.

Mayor Koch's recent announcement of a renewal district for 42nd Street between Seventh and Eighth Avenues will greatly reinforce the upgrading of the west side already going on and provide a link between the theatre district and the improvements on west 42nd Street resulting from Manhattan Plaza and the work of the 42nd Street Development Corporation.

The City, in partnership with the State's Urban Development Corporation, will seek redevelopment proposals for the area centered on 42nd Street between Times Square and Eighth Avenue. The plan, which contemplates the use of urban renewal powers, is a major commitment to the entire theatre district and Times Square area. It recongizes that the tawdriness and disreputable uses of this 42nd Street strip require a large-scale effort backed by public condemnation powers, to attract and safeguard the massive private investment needed to redevelop the area.

We believe that these efforts will be an incentive for the movement of midtown development westward. The west side should be an area of development vitality in the coming decade.

Stabilization Area

The stabilization area we propose is the prime east side core, the relatively small area from 40th Street to 60th Street between Third Avenue and the Avenue of the Americas.

It is the location of the great office towers that house the headquarters of the national and multinational corporations and of the satellites, banks, law firms, advertising agencies and other business services that they attract and support. It is the location of renowned hotels, elegant department stores and shops; of expensive restaurants; prestigious clubs and institutions; expensive apartment buildings and town houses.

It is an area of vitality and diversity. The goal of "stabilization" is not to prevent change or growth, but to protect this diversity, to insure that where change and growth occur -- as they surely must and will -- it will be guided in a way that respects the character and ambience of existing development, that builds on the legacy of the past, not ignores it, and that supports and strengthens the way midtown functions.

The intent of the zoning regulations that govern development is not to stifle the creativity of the architect or ignore the realities of building economics and the marketplace. It is to protect the public places -- the avenues and streets, parks and open places. In the close knit fabric of midtown, development must recognize and enhance the role of individual structures as part of an ensemble.

Much of the criticism of the newest crop of east side buildings reflects the concern that, however distinguished each may be individually, they do not respect their context and threaten the quality of ensemble that helps make their location so valuable in the first place.

There has been an adverse reaction to the bulk and size of these buildings. But they are not the largest or bulkiest buildings in the City. The problem is their size relative to their actual site, the distribution of their mass and its impact on the surrounding streets.

We believe that the zoning regulations governing midtown development are not working properly or as intended. Not only is their impact and perceived bulk unsatisfactory, virtually every one of the new buildings has required a special permit, variance, or amendment of the zoning resolution. This puts a burden on the Planning Commission and its staff, creates uncertainty for builder and public alike, and by lengthening the development process drives up costs in a period of soaring inflation.

A combination of factors has brought about this state of affairs.

The regulations in the 1961 Zoning Resolution governing big buildings was based on one idealized building form: the tower in the plaza.

Large office buildings were permitted to increase their floor area from a maximum of 15 times the area of their site (FAR 15) to 18 times (FAR 18), the first incentive zoning. The bonus was not discretionary. It was as of right, based only on the size of the plaza.

Zoning incentives began to be added for other than the openness of a plaza. In 1967, when it appeared that the Broadway theatres were threatened by the march of office towers west, a special theatre district was created with an additional 20 percent bonus to FAR 21.6 for buildings that would include a new theatre. Shortly thereafter a special Fifth Avenue district was created with the compounded 20 percent bonus, to FAR 21.6, for mixed commercial residential buildings.

When plaza buildings started to become the predominant form of the new office buildings in the sixties, a strong reaction set in against them for breaking the continuity that gave the avenues of midtown their character and activity. Even if the new buildings worked on Sixth Avenue -- and some critics claimed they did not -- they would destroy Fifth and Madison.

New incentives were developed -- galleria, covered pedestrian spaces, through block arcades -- and the plaza regulations were revamped to make the plazas more useful to pedestrians, more active, less sterile.

In the emphasis on the quality of space at ground level, and the shift to indoor bonuses, there was a loss of protection from what was happening at the top of the building. The function of the street was better guarded than its light and openness, the very cornerstone of zoning since New York's trailblazing 1916 Resolution.

These problems were exacerbated by the growing difficulty of assembling large sites in the area, which has led to an increasing use of the zoning lot merger, a legal device for acquiring the unused air rights of adjoining property.

These factors, together with the need of developers to have economic floor sizes, and the rigidity of some of the 1961 bulk regulations combined to break down the regulations. Our architectural consultants have a perceptive analysis of this history in the Appendix.

It was clear that a comprehensive revision of the zoning regulations governing midtown was needed, with careful attention to the relationship between incentives and bulk regulations in an effort to avoid the pitfalls of piecemeal amendments.

The essential elements of the revised regulations are the following:

- Basic FAR 15 bulk limit could increase to maximum FAR 18 for specified and targeted amenities

- Regulations that will effectively guarantee an acceptable standard of openness to the sky and daylight on the street for

as-of-right buildings in the FAR 15-18 range on the vast majority of sites.

- Maximum flexibility in disposition of building mass to meet the needs of the developer, which allows for creativity of the architect, and recognizes the practical limitation of small sites.

- Amount of extra floor area that can be transferred in a zoning lot merger to be limited (on either a sliding scale or fixed amount), and disposition of bulk on buildable portion of site required to meet bulk standards based on acceptable standards of openness and daylight.

- Mandatory street wall and retail requirements where appropriate, without bonus, to maintain continuity of the avenue or street and relate to neighboring development.

- The bonus system that would permit many--but not all--buildings to go to a maximum of FAR 18 would be more circumscribed than at present.

- Bonusable amenities would be targeted to specific locations where manifestly needed. Priority amenities would be for: subway station improvements; easing sidewalk congestion; continuing a through-block pedestrian circulation system; and providing needed open space.

- The amount of bonus would depend on how well an amenity solved a given need--its quality not just its quantity.

The Department is reviewing with its consultants, Davis, Brody and Associates with Kwartler/Jones, a two-tier system of bulk regulations.

The standards and criteria for the proposed regulations go back to the roots of New York City zoning--the concern with daylight on the street, with the amount of sky that a building cuts off from the view of a pedestrian. The standards proposed are based on actual conditions in midtown, not on idealized criteria, with typical midtown blocks developed under the 1916 Resolution as a yardstick.

In the base tier, some fairly direct prescriptive standards are proposed that in conjunction with the street wall requirements let a developer and architect know what can be done as of right. These are calculated to work in the FAR 15-18 range for regularly-shaped sites.

If the developer/architect feels too restricted by the prescriptive standards, or for irregular sites or zoning lot mergers where the FAR on the buildable portion of the site might exceed FAR 18, a performance system is proposed. It gives the architect the opportunity to demonstrate that he can equal or surpass acceptable standards of daylight, relationship to nearby buildings and, if appropriate, allow sunlight on neighboring public open spaces through trade-offs that best meet his program.

The two-tier system is described in the Davis, Brody, Kwartler/Jones report in the appendix. The system has not yet been fully developed or tested, and while it appears to offer considerable flexibility, there is some concern as to whether it will be too complex or unwieldy to be practicable. Our consultants and staff will continue to work on it over the summer, and we are particularly interested to get the reactions of the professional community. One of our prime goals is to make the regulations simple and direct, and we are anxious to have the views of those who will use them. We shall also ask our real estate consultant to do a careful cost analysis of the proposed changes.

These bulk regulations are intended not only to protect the fabric of the east side stabilization area, but also to help guide the development of the growth areas.

Preservation Areas

There are a few areas in midtown which, in the unique contribution they make not only to the area but to the City, are so special that our goal is to preserve them essentially as they are. They are found in both east side and west side.

- Landmarks. As a matter of course all officially designated landmarks are included in this category. The Department is supportive of the efforts of the Landmarks Commission to designate buildings or groups of buildings in midtown that are of irreplaceable historic or architectural merit.

- Theatre district midblocks. Particularly in view of our goal to encourage development in the Times Square area on the avenue frontages, it is important that we develop a specific program to protect the old theatres. The Planning Department is studying various techniques to protect them (e.g., development rights transfers, tax incentives, downzoning, landmark designation) and expects to make specific recommendations in the final report.

- We recommend that selected midblocks such as those north of the Museum of Modern Art which combine use, quality and scale in a way that can no longer be duplicated by new development be considered for downzoning.

Energy Conservation

Both department staff and our architectural consultants considered the possibility of including specific energy conservation measures in the zoning regulations. The proposed bulk regulations, with their emphasis on improved daylight, will affect neighboring buildings positively as well as the street. In that respect they are indirectly an energy

conservation measure. But after cataloging adopted or proposed energy conservation legislation which affects construction, including the N.Y. State Energy Code, we concluded that in the current state of the art nothing we could do in zoning would add to these measures, or the developer's self-interest in saving money. In the coming decade, however, it is likely that there will be an explosion in the knowledge and technology of energy conservation and we shall keep a close eye on the field.

Pedestrian Space

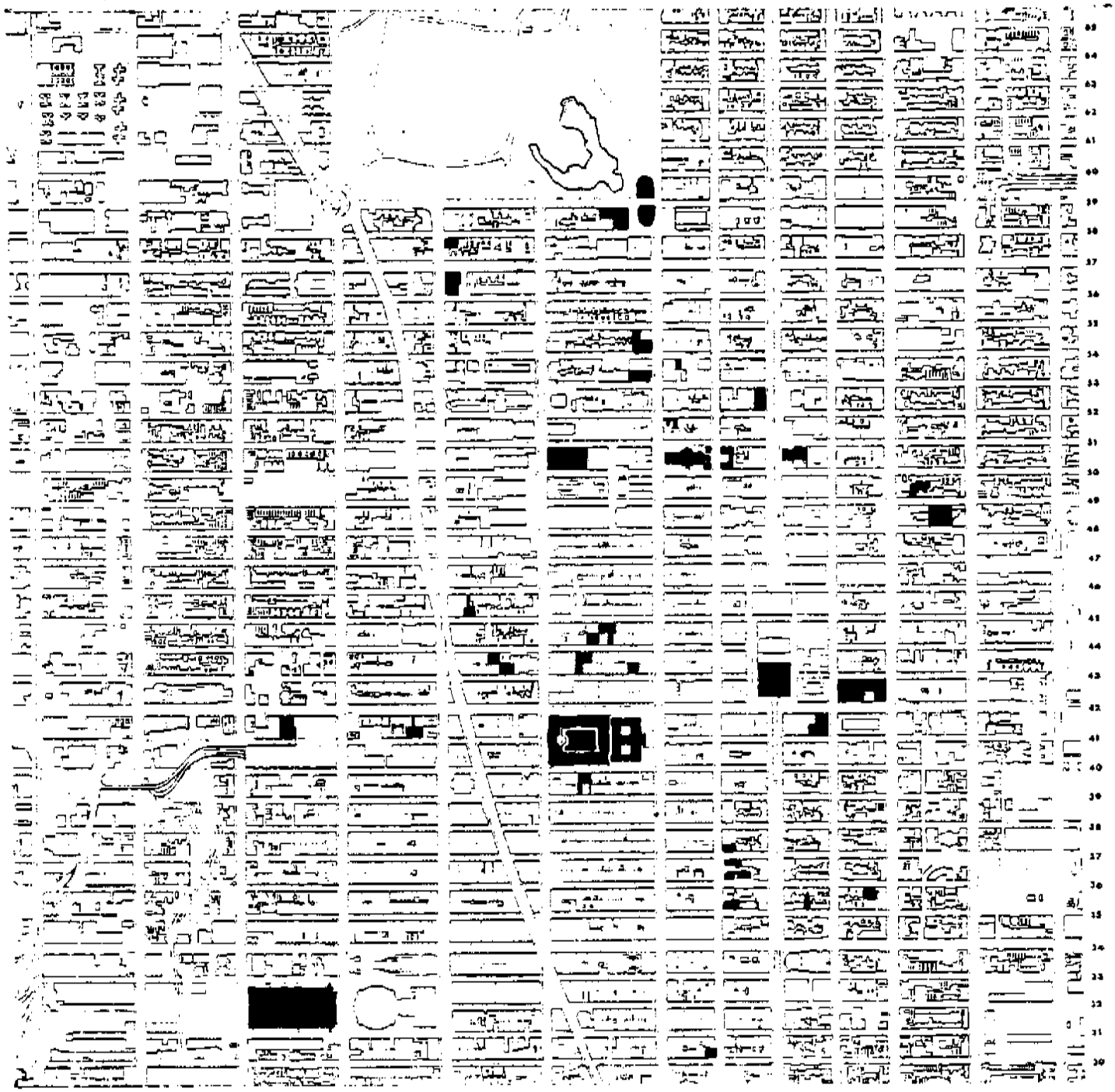
Several studies are underway to improve the functioning and environmental qualities of the midtown street system. Among these, the midtown pedestrian study is examining means of alleviating sidewalk congestion within the public right-of-way. As these are put into effect, the types of pedestrian amenities that are encouraged as parts of private developments should be adjusted accordingly.

Schedule

The release of this draft report marks the start of a period of intensive review and consultation of the detailed proposals with the interested public. We will also continue to refine and test the proposals. In October we hope to consolidate the comments, criticism and suggestions together with additional work of our staff and consultants with the goal of publishing a final report by the end of the year.

All proposed zoning changes which the Commission initiates will be referred to the appropriate Community Boards for review and recommendations whether they come under the uniform land use review procedures (ULURP) or not. Because of the advance consultation and review, however, it may be possible and desirable to initiate changes for which there is a consensus before publication of the final report. Adoption of any changes will, of course, require public hearings and formal action by both the City Planning Commission and the Board of Estimate.

Timing of any major and extensive changes in zoning is always a difficult and sensitive matter. The Midtown Development Project has been extended so that the specific recommendations it makes will be as solid and complete as possible and will merit broad support for their adoption and implementation. Meanwhile, the Department and Commission will review proposals submitted under existing regulations on their merits. The intention will be to minimize, to the extent possible, special permits, variances and exceptions. We do not believe, however, that a rigid moratorium on new buildings in midtown -- which in itself would require formal action -- could be adopted or would be wise.



LANDMARKS

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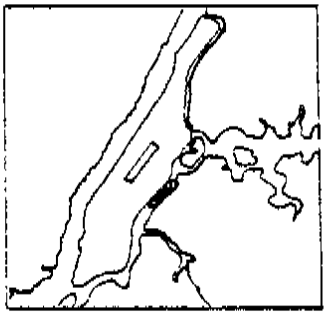

CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

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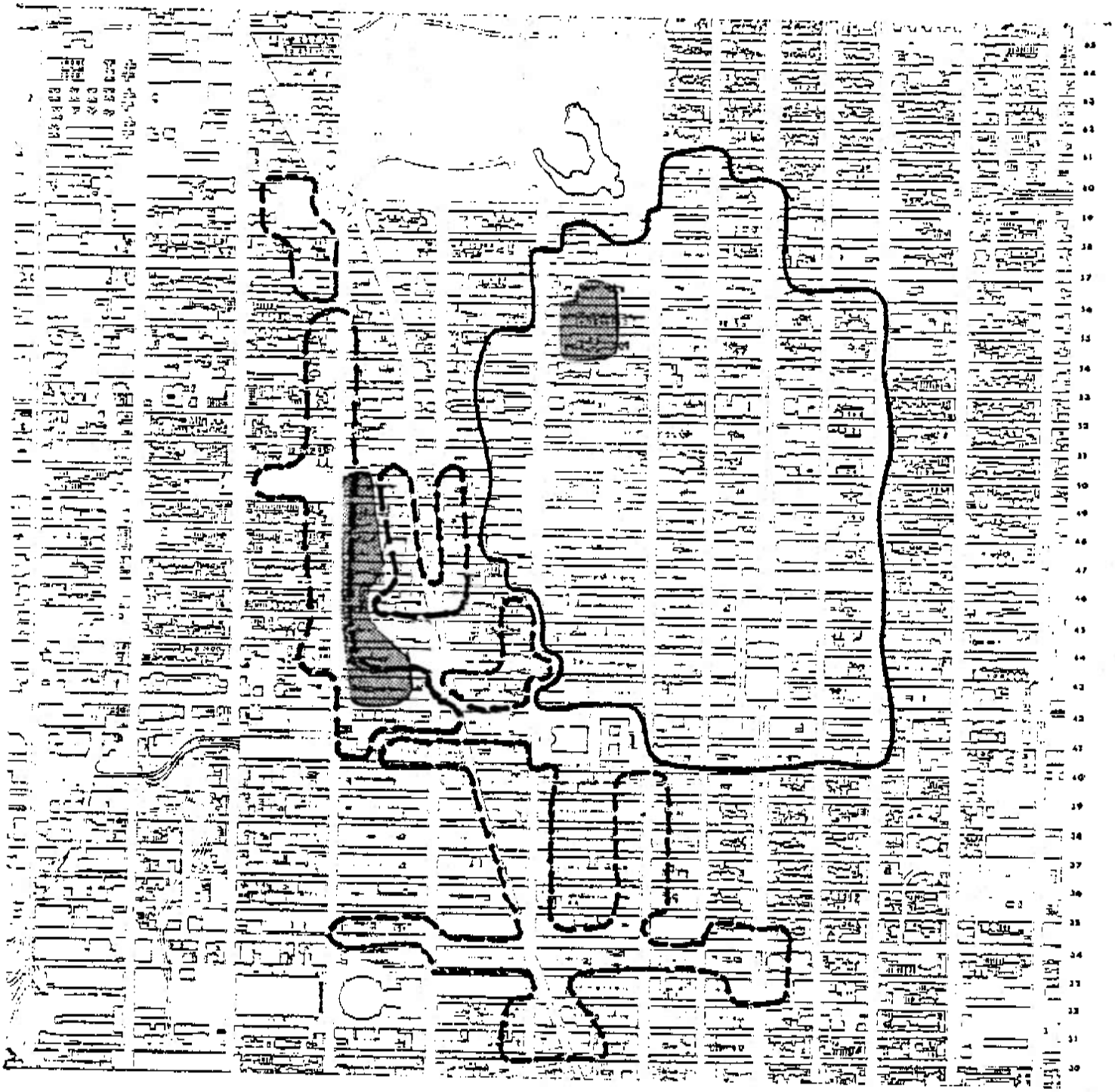


COMPOSITE MAP

Growth Stratagy Area

Preservation Strategy Area

Stabilization Area

0 600 1200'

CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

MANHATTAN OFFICE · DEPARTMENT OF CITY PLANNING · CITY OF NEW YORK

I. THE SETTING

Purpose

Midtown Manhattan is the engine that drives our economy -- increasingly so as we move into the "post-industrial" era and New York strengthens its status as a world city. Every New Yorker has a stake in midtown's economic health and strength.

That does not mean that a strong, well-functioning midtown can by itself solve the social, economic and physical problems that New York must address. But when midtown functions poorly, when the economic engine sputters and gasps as it did in the mid-seventies, then the City's other problems are magnified. A healthy, strong and prosperous midtown is a prerequisite to the well-being of the entire City.

The development and functioning of midtown are primarily dependent upon private initiative and private investment. The role of municipal government is essentially to provide the framework of policy, ground rules and regulations that help guide development in the public interest; and to provide and maintain the basic public infrastructure and services.

New York has historically been innovative and aggressive in its approach to the role of municipal government. It pioneered zoning in 1916; it used tax incentives to help stimulate the biggest housing boom the City has known in the 1920's; it stimulated and encouraged advances in mass transportation and ultimately helped build and weld together the greatest mass transportation system ever developed in terms of number of people moved regularly, swiftly and safely; it creatively broadened the use of the "police power" for regulation and development in the public interest.

In the mid-seventies, the City faced a crisis. The great, unprecendented and astonishingly sustained post-World War II office building boom came to a crashing halt. Under the weight of the deepest and broadest post-war national recession, exacerbated by the sharp increase in energy costs brought on by the Arab oil embargo and the first energy crisis, new construction virtually stopped. The City government teetered on the edge of municipal bankruptcy.

Its resources and options severely limited, the City took what steps it could to restart and accelerate the development engine at the heart of its economy. Tax incentives were formulated and applied to midtown. Zoning incentives were broadened, modified and granted with the goal of

stimulating construction, a key and often decisive goal.

Development of major commercial buildings did resume, essentially in the past two-and-a-half to three years. Resumption of building brought with it new problems and concerns -- and revived some old ones. They were brought about by a combination of causes: operation of the private market place, astonishing increases in costs and rents, and, in many cases, unforeseen and unintended consequences of the public incentives.

There was growing concern with the problems and consequences of the concentration of development in a limited area, excessive bulk on building sites, threats to the character and scale of well-developed and valuable areas and of mid-blocks, destruction of good and serviceable buildings, congestion of sidewalks and subway platforms.

Critics complained that the City was giving away too much in the way of floor area bonuses and bulk modifications for ill-conceived, poorly designed and inadequately executed amenities which returned too little to the public. Developers complained of endless rounds of negotiations with planners and community boards, and of the high costs of long delays. Both complained of the uncertainty and changing rules of the game.

These problems of development and growth are of a different order than the earlier problems of stagnation. In a way they are problems of success. The danger is that they could lead to failure. They could impair the proper functioning of midtown; they could make it a less desirable place to locate and do business in or to visit; they could create opposition to and discourage new development.

It is not in the City's interest to halt or even slow new midtown development. It is in the City's interest to help guide and direct it, within the constraints of the market place, to where it can best be absorbed and will be of maximum benefit. The midtown development issue is <u>how</u> <u>and</u> <u>where</u> development should take place.

It is to this issue that the Midtown Project is aimed. Its purpose is to lay out a planning framework and strategy for midtown Manhattan in the 1980's and to make specific proposals in tax incentive policy, zoning, capital investment strategy and public services to best carry it out.

Area of Project

The basic area of the project is from 34th to 60th Streets, Third Avenue to Eighth Avenue. This includes the approximately half-square mile East Side core area (40th to 60th Streets, Third Avenue to Avenue of the Americas) with the world's greatest concentration of office space and most expensive real estate.

It includes Times Square, the Theatre District, Herald Square, and the

34th, 42nd and 57th Street corridors, each with a different character and function.

The project does not deal with the special problems of the Clinton residential area to its west or the United Nations and residential areas to its east. Neither does it deal with the special problems of the garment district which penetrates its southern flank.

It does, however, deal with the edges, and with the special problems that result from the friction between fundamentally different uses.

Functional Requisites of Midtown

The focus of this project is development: where and how it should take place. But development is not an end in itself. It is a measure. It is a measure of demand for space which in turn is a reflection of how well the area and the market are functioning. Like the shadows in Plato's cave it needs cautious interpretation; it can present a distorted view of the real world outside.

By meeting the demand for space, new development can aid the functioning of the area. The quality and impact of a new building, its relationship to its surroundings, the features and special characteristics it provides -- these can all enhance the area's functioning.

So too can new buildings impair or threaten the proper functioning of midtown -- by themselves or in their cumulative impact.

If the proper concern of city planning for midtown is its successful functioning as the heart of the City's economy, then we have to examine the conditions that enable it to function well. What are these conditions or attributes, midtown's functional requisites as it were?

There are a half-dozen that are worth examining:

Accessibility: Above all, as the nation's and the world's preeminent "downtown", midtown must be accessible. It must be accessible to its workers, managers and executives. It must be accessible to its customers; to its visitors -- whether business travelers coming from the airports, tourists from abroad or other parts of the country, shoppers drawn by the elegance of Fifth Avenue or the variety of Herald Square, or New Yorkers "on the town."

Ease of Face-to-Face Communication: At one time it was thought that revolutionary developments in communications technology -- from jet planes and television to the growing ability of computers to digest, analyze and exchange information, and of satellite systems to transmit it world-wide -- would radically diminish the need for face-to-face communication. There is little evidence that this has happened -- at least at the sophisticated and high level of decision making that characterizes so much business activity in midtown Manhattan. Indeed,

the explosion of information and its increased complexity appear to have made face-to-face meetings more desirable and necessary -- whether around the conference table or over the lunch table.

Relative Compactness: This attribute is related to the two preceding ones and is self-evident; yet it contains some of the built-in contradictions that frequently characterize the midtown function. Obviously if development is too spread out or off good lines of travel (time is as important as distance and they are not always closely correlated) face-to-face contact is discouraged. But if development is too compact and crowded, the congestion of sidewalks and subway platforms and the competition for space in restaurants and public facilities can also be discouraging.

Rich Mix and Variety of Uses: The dominance of the midtown skyline by its agglomeration of tall office towers mirrors its dominant function: national and international business management and finance. New York's preeminence as a national and international center of business and finance in turn is supported by -- and helps support -- a wide variety of other functions: professional and business services of all kinds; a market place of ideas; an international center of arts and culture; home of renowned educational, medical and religious institutions; a shopping bazaar with an unsurpassed variety of goods and services; an entertainment "smorgasbord" offering everything from Broadway theatre to honky-tonk; a popular and growing center of tourism, hotels and restaurants. All these and more exist in a symbiotic whole. Its mass and motion produce an urban field of gravity which attracts more of the same and by general consensus makes New York the most exciting city in the world.

Accommodation of differences: This mix of uses requires that the frictions and differences be accommodated in the interest of the area's overall functioning. Protecting smaller or economically weaker uses, which nevertheless enrich the whole, from being swallowed up by the stronger uses is a major and sensitive role of government.

Style and Ambience: The quality of midtown that defines it as a place, its unique and urbane character, is more than the sum and variety of its parts. It flows from the style and ambience of its avenues, streets and places: Fifth Avenue with its stately limestone buildings, elegant department stores and shops, great churches; Rockefeller Center; the Broadway Theatre District, particularly just before curtain time; the sculpture garden of the Museum of Modern Art and the quality and scale of the midblocks to the immediate north of it; restaurant row; the sweep of Park Avenue -- these are a few of the parts whose special qualities and differences contribute so much to the exciting whole.

This combination of attributes helps keep midtown Manhattan functioning as the economic heart of New York City. It is workplace for more than 600,000 people, almost one out of every four jobs in the entire City, the greatest concentration of jobs and productive wealth on earth.

II. A DEVELOPMENT STRATEGY

Planning Framework for Development

A "development strategy" is nothing more than a planning framework relating land use objectives for geographical areas to current and anticipated development trends. It provides a means to promulgate and test public development policies, programs, laws and regulations for consistency and effectiveness in helping to achieve agreed upon goals. The fundamental goal of the Midtown Development Project is to protect and enhance the function of midtown by easing problems that stem from the high concentration of buildings in a limited part of the area, and to encourage a shift in new construction to the west and south. A development strategy cannot in the context of midtown achieve this goal by itself. It cannot foster private development in the absence of basic market forces; it cannot force private development to move against the logic of those market forces.

But it can help to break the log jams that artificially dam the flow of market forces; it can facilitate and accelerate development; and it can help to make sure development contributes rather than does violence to the broader public interest.

Westward and Southward

The expansion of midtown development westward and southward is more than planners' logic. As building sites become scarcer and more expensive in the prime east side core area, developers seek sites at the edges. With expansion to the north and east blocked for the most part by strong residential areas, it is to the west and south that the areas most available for expansion are found. This movement is -- or should be -- further encouraged because the west side is better served by mass transportation than the east side.

In fact, this was the direction midtown development was moving when the long sustained post-World War II office boom crashed early in the last decade. Not only had developers assembled sites for future development on the west side, they had already started to build there.

The four years 1969 - 1972 witnessed the greatest burst of office construction in the history of this or any other city (Table II-1). Almost one-quarter of all of Manhattan's present office space was built in those four years, two-thirds in midtown. Half of the midtown output, almost 18.8 million square feet, was built on or west of the Avenue of the Americas (Sixth Avenue).

For the better part of two decades -- the 1950's and 1960's -- new office construction had remained strong and on a remarkably even keel. Except for 1951, '52 and '53, the three years after the start of the Korean War, and the year 1966, annual output never dipped below two million square feet in the fifties or four million square feet in the sixties.

This was a period of seemingly strong economic expansion for the City. Although industrial blue collar jobs were declining, there was a net growth in total jobs. The City's job mix seemed particularly resilient. In the post-war economic recessions, New York City went in last and came out first.

The shift taking place to a white collar, service economy helped to rapidly absorb the new office space. By 1966 the vacancy rate dipped below two percent and then in 1967 and 1968 to an incredibly tight one-half percent. The development community responded to this space shortage and the general feeling that demand for office space would continue to grow with the burst of activity that produced 14.6 million square feet in 1969, 9.2 million in 1970, 13.6 million in 1971, and 19.4 million in 1972.

Meanwhile, although not then generally recognized, the City's economy went into decline. New York slipped into the 1969-70 recession ahead of the rest of the country and never fully emerged. The severe 1973-74 recession and the "stagflation" that followed exposed the structural weaknesses not only in the City's economy, but in that of the metropolitan region and the entire Northeast.

The City suffered a net loss of more than 600,000 jobs in the first seven years of the decade. The office vacancy rate which had started to climb in 1970 when it reached six percent soared to 14.2 percent in 1971 and to almost 15 percent (14.8) in 1972. By the middle of the decade the severe financial weakness of our City government became fully exposed and it came perilously close to bankruptcy as the normal credit markets were closed to it.

Little wonder that development virtually came to a halt. There was a severe crisis of confidence in the City; in the perception of many, business was fleeing -- not just manufacturing now but national companies, white-collar business. In the last five years of the decade, 1975-79, only 5.654 million square feet were built in total, 30 percent less than the annual average for the preceding ten years.

But these figures can be misleading -- the paucity of new office space coming on the market as we entered the eighties reflected the need to digest the huge bulge produced at the beginning of the seventies and the lag-time of new development cycles more than it reflected office market conditions. Office space has, in fact, been absorbed at a relatively high rate for the past several years. (See Figures II-1 and II-2); according to industry surveys, the midtown vacancy rate at the end of 1979 was down to 2.05 percent. (Table II-2 is a revealing abstract of the office market in the '60's and '70's).

SUMMARY OF OFFICE BUILDING COMPLETION 1960 - 1979

YEAR	DOWNTOWN		MIDTOWN		MANHATTAN TOTAL	
	No. of Bldgs.	rentable s.f.	No. of Bldgs.	rentable s.f.	No. of Bldgs.	rentable s.f.
1960	1	900,000	7	3,659,000	8	4,559,000
1961	3	2,595,000	13	5,108,000	16	7,703,000
1962	3	1,227,000	8	3,546,000	11	4,773,000
1963	3	912,000	15	6,708,000	18	7,620,000
1964	2	131,000	13	5,148,000	15	5,279,000
1965	3	1,616,000	12	2,432,000	15	4,048,000
1966	1	1,000,000	3	927,000	4	1,927,000
1967	3	604,000	6	3,526,000	9	4,130,000
1968	4	3,329,000	2	1,778,000	6	5,107,000
1969	3	3,211,000	14	11,375,000	17	14,586,000
1970	8	4,405,000	9	4,753,000	17	9,158,000
1971	5	5,434,000	13	8,142,000	18	13,576,000
1972	5	7,132,000	12	12,260,000	17	19,392,000
1973	1	2,550,000	5	2,583,000	6	5,133,000
1974	1	2,700,000	3	1,665,000	4	4,365,000
1975	1	1,400,000	3	1,460,000	4	2,860,000
1976	1	170,000	1	350,000	2	520,000
1977	1	430,000	1	1,300,000	2	1,730,000
1978	1	49,000	2	385,000	3	434,000
1979	---	----	2	110,000	2	110,000
1960-1979	50	39,795,000	144	77,215,000	194	117,010,000

TABLE II-1

DEPARTMENT OF CITY PLANNING

MANHATTAN OFFICE MARKET - 1960-1979

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
NEW CONSTRUCTION	4.559	7.703	4.771	7.620	5.279	4.408	1.927	4.130	5.107	14.586
DEMOLITION	.865	.770	1.014	.406	.283	.143	.049	.752	.483	1.710
TOTAL OFFICE SPACE	123.861	130.794	134.553	141.767	146.763	150.668	152.546	155.924	160.548	173.424
VACANCY RATE	2.4	2.8	2.9	4.4	3.5	4.8	1.8	.5	.5	1.0
VACANT SPACE	2.973	3.642	3.902	6.230	5.137	7.232	2.746	.779	.803	1.734
OCCUPIED SPACE	120.888	127.132	130.651	135.529	141.626	143.436	149.800	155.145	159.745	171.690
ABSORPTION	3.888	6.244	3.519	4.878	6.097	1.810	6.364	5.345	4.600	11.945

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
NEW CONSTRUCTION	9.158	13.576	19.392	5.133	4.365	2.860	.520	1.730	.434	.110
DEMOLITION	.280	.214	.112	.175	.554	.082				
TOTAL OFFICE SPACE	182.302	195.664	214.944	219.902	223.713	226.491	227.011	228.741	229.175	229.285
VACANCY RATE	6.0	14.2	14.8	13.7	12.8	11.6	10.3	7.7	4.4	
VACANT SPACE	10.977	27.784	31.790	30.120	28.610	26.261	23.304	17.525	10.084	
OCCUPIED SPACE	171.325	167.880	183.154	189.782	195.103	200.230	203.707	211.216	219.091	
ABSORPTION	-.385	-3.445	15.274	6.628	5.321	5.127	3.477	7.509	7.875	6.4

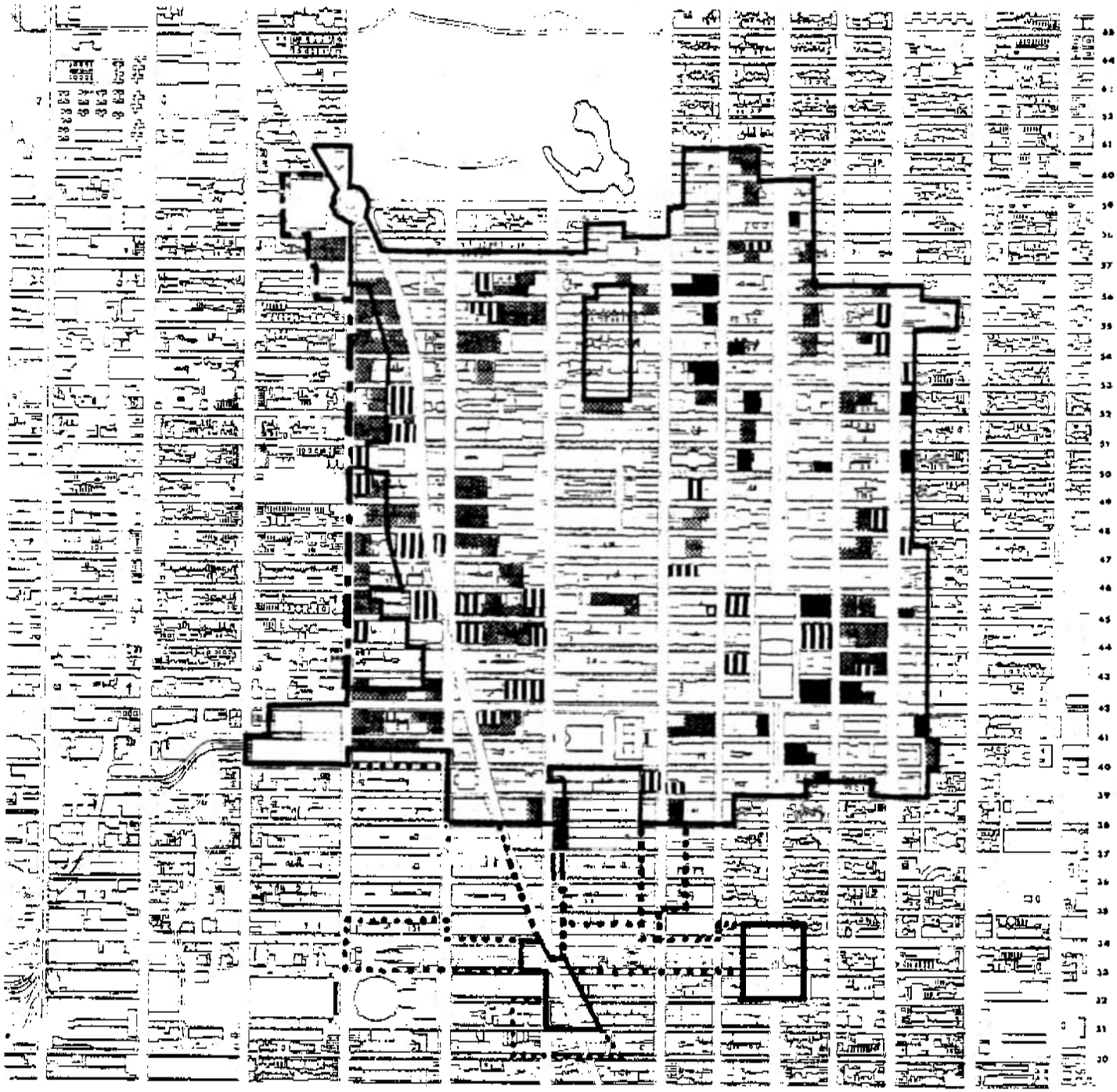
All figures in million sq. ft.

TABLE II-2

DEPARTMENT OF CITY PLANNING

Virtually all of the new office space scheduled to come on the market in the next two years (1.8 million square feet in 1980 and 5.7 million in 1981) will be on the east side. This results from a combination of factors: the corporate nature of a number of the new buildings; the conservatism of developers and lenders at the start of a new development cycle; and the rapidly rising trend in rents. These trends are also clearly reflected in the report, "Status of the Midtown Office Market 1980," submitted by our real estate consultant, James Felt Realty Services, Inc. (See Appendix.)

Growing scarcity of development sites, astronomical land costs and increasing opposition to the grant of liberal bonuses and exceptions for bulky buildings will impede east side office development. If office building construction is to continue on a substantial scale, builders will have to look to the West Side again. There are already indications that they are doing so. A well founded and implemented development strategy can encourage and speed this westward movement.



MIDTOWN DEVELOPMENT

Under construction

Major Assemblage

Prospective Soft Properties

0 600 1200'

N

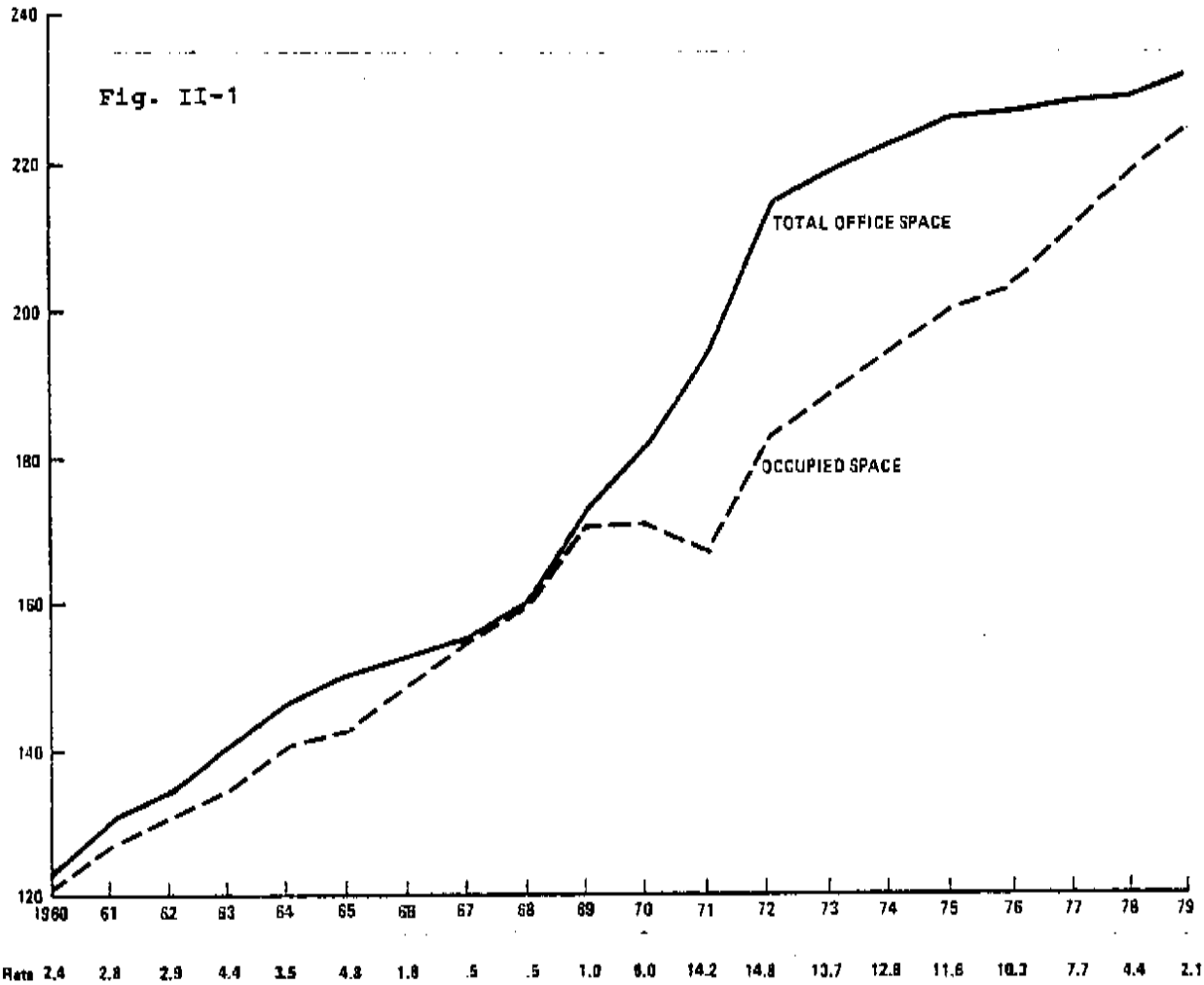
CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

MANHATTAN OFFICE · DEPARTMENT OF CITY PLANNING · CITY OF NEW YORK

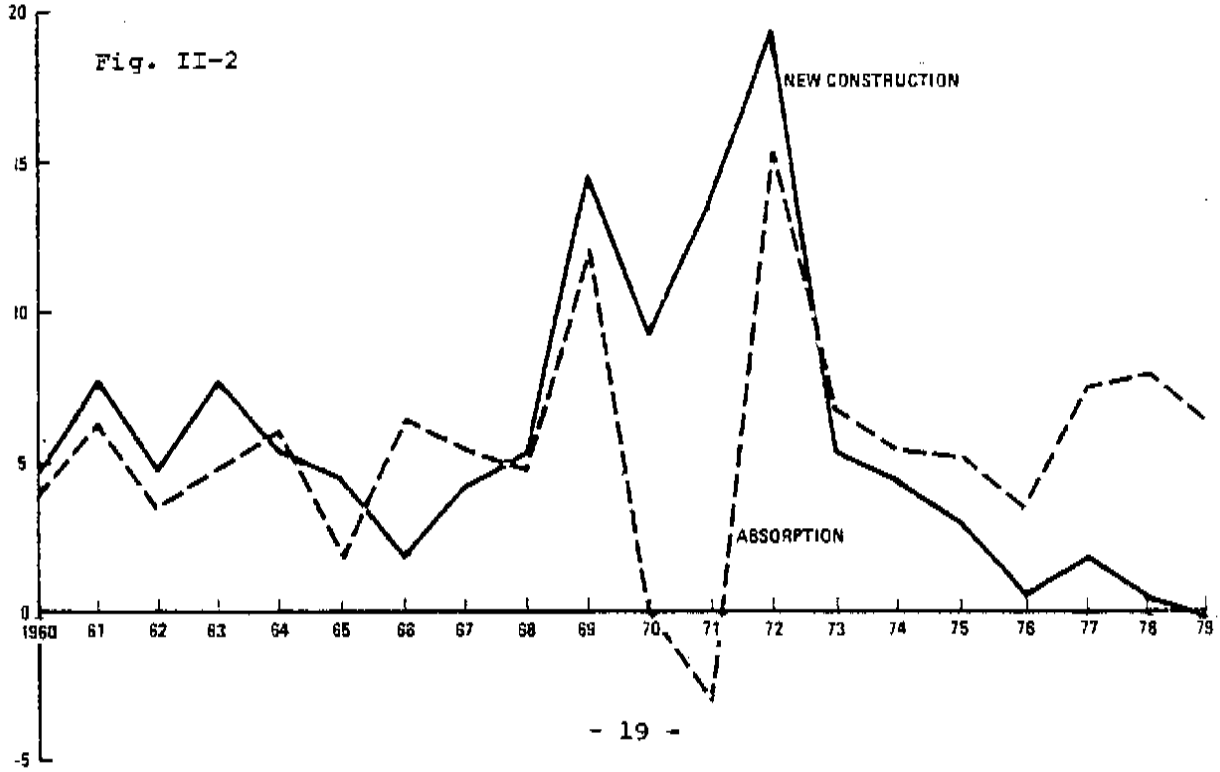
TOTAL AND OCCUPIED OFFICE SPACE 1960-1978

Fig. II-1



ANNUAL CONSTRUCTION AND ABSORPTION OF OFFICE SPACE

Fig. II-2



Basic Forces

New York's painful economic problems and severe recession in the seventies magnified and accelerated some long-term trends of decline and temporarily interrupted and disguised some long-term growth trends. The decline in manufacturing and production jobs which had been taking place for some three decades sharply accelerated in the early seventies before levelling off, at least temporarily, in 1977-79.

The loss of white-collar office jobs appears to have represented a shake-out of a strong long-term up-trend: the shift of the City's economy from producing goods to producing paper, or more formally to managing knowledge, information and finance. This trend is part of a world-wide shift in the function of urban areas, and it is one for which New York has special strengths.

Perhaps most important is New York's growing role as an international headquarters city; or what has been characterized in this era of increasing global interdependence and the multi-national corporation as a world city.

Both the Twentieth Century Fund and the Regional Plan Association emphasize this role in recent reports.

> "The Task Force believes that (the City's) assets present New York with the opportunity to become a true world capital. One major reason the city is currently thriving is because it is a magnet for foreigners and foreign investment. Looking ahead to the next decade, we are convinced that the city by building on its present strengths as a great international metropolis, can become the global marketplace for business, finance, communications, the professions, and the arts."
>
> Report of the Twentieth Century Fund Task Force on the Future of New York September, 1979

In similar vein, RPA's report on "The Future of Manhattan" issued in February 1980, states "....it is unlikely that the primacy of Manhattan as a World City will be fundamentally challenged in the foreseeable future." In pointing out that another source of recent growth in the Central Business District (CBD) is foreign investment, the report cites the following:

> "In 1978, there were 144 foreign banks in Manhattan with assets over $60 billion, up from 47 banks with assets of $10 billion (current dollars) in 1970. Some 35 percent of the world's 500 largest foreign firms had subsidiaries located in Manhattan ...Manhattan also remains the locus of the international operations of corporations that have left the City or were never headquartered here."

It is consistent with these statistics that the report states:

> "Business management and finance at the national and international level is the CBD's major function, accounting for some 45 percent of its employment, and for a still larger share of its economic output," and elsewhere, "....that the Manhattan CBD is far advanced into the post-industrial economy."

After the bi-centennial in July 1976 the City emerged once more as a great tourist attraction from its temporary depression, media bad-mouthing, and exaggeration of urban problems.

Tourism has boomed. Its rapidly increasing foreign component is related both to New York's role as an international center, and the favorable rates of exchange which make it a good buy for foreigners. In 1979, a record number of tourists, 17.5 million, visited the City. They spent $2.25 billion and generated $180 million in direct tax revenues for the City government. Hotel occupancy reached an all time high rate of 83 percent. Half-a-dozen major hotels were being built or expanded. (See Table II-3)

The national and international function of the City generates business services -- legal, accounting, advertising among the most important. Tourism and the hotel and restaurant industries that it helps to support in turn generate blue collar services and help to fill the gap in the job market left by the decline of manufacturing. The symbiotic relationship of the arts, culture and entertainment to both the City's business and finance headquarters function and to tourism need not be belabored. Neither should it be underestimated. The arts-culture-entertainment function is an important industry in its own right. It contributes, according to a study by Professor Dick Netzer, some three percent of the City's gross domestic product -- as much as the securities industry. It also helps bind together and reinforce the vast constellation of disparate activities that make up New York's CBD. For the eighties, then, we can expect at least a continued moderate increase in demand for office and hotel space, fueled by the City's growth industries. This CBD growth can be expected even if the City's population and manufacturing continue to decline.

The Problems of Growth

If demand for Manhattan office space is strong and growing, if the vacancy rate has shrunk to the point where space is again at a premium, and if developers are already looking at the west side, why then the need for a development strategy and incentives and programs to make it work? Why won't it work by itself?

"Location, location, location" was the formula a prominent developer once gave for success in real estate. The East Side is the prime area in part because that is where the key office buildings and activities are already clustered; in part it is a matter of fashion and reputation --

MAJOR HOTEL PROJECTS - MIDTOWN

	# Rooms	Cost Est.
1. Grand Hyatt New York 42nd Street and Lexington Avenue	1,400	$100,000,000
2. Palace Hotel Madison between 50th-51st Streets	1,050	78,000,000
3. Harley Hotel 42nd Street between Second and Third Avenues	793	41,000,000
4. Parker Meridien Hotel 56th Street and Sixth Avenue	600	60,000,000
5. New York Hilton Hotel Addition 1335 Sixth Avenue	834	70,000,000
6. Milford Plaza (formerly Royal Manhattan) 401 Seventh Avenue	1,310	14,000,000
Proposed		
7. Portman Hotel Broadway between 54th-46th Streets	2,020	250,000,000

Major Renovations

Hotels that have undergone or are undergoing major renovations include: The Barclay, Berkshire Place, Biltmore, Drake, Mayfair Regent, New York Statler, Plaza, Roosevelt, Sheraton Centre (formerly The Americana), Sheraton City Squire Inn (formerly The City Squire), St. Regis-Sheraton, Summit, Taft, and the Warwick.

TABLE II-3

DEPARTMENT OF CITY PLANNING

Park Avenue and Fifth Avenue having great prestige; in part it is more convenient for corporate executives who live on the Upper East Side -- or in Westchester or Connecticut and use Grand Central Station.

In any case, the disparity between the East and West Sides as desirable locations has probably increased in the past ten years rather than diminished. When the move of office development to Broadway and the Times Square area was aborted by the economic slump at the beginning of the last decade it left a real estate vacuum.

"Massage parlors," "adult book-stores," peep shows, X-rated movie houses, live sex shows and topless bars dominated the image of the entire area. Old established restaurants and retail stores closed and were replaced by fast-food stores, penny arcades, fly-by-night souvenir shops and other varieties of "shlock" stores. There were deep rooted problems of welfare hotels, releases from mental institutions, alcholism and drug abuse, and the parole center. Street crime rose -- as indeed it did in both cities and suburbia in the last decade. The atmosphere in either its reality or perception was not conducive to new office construction.

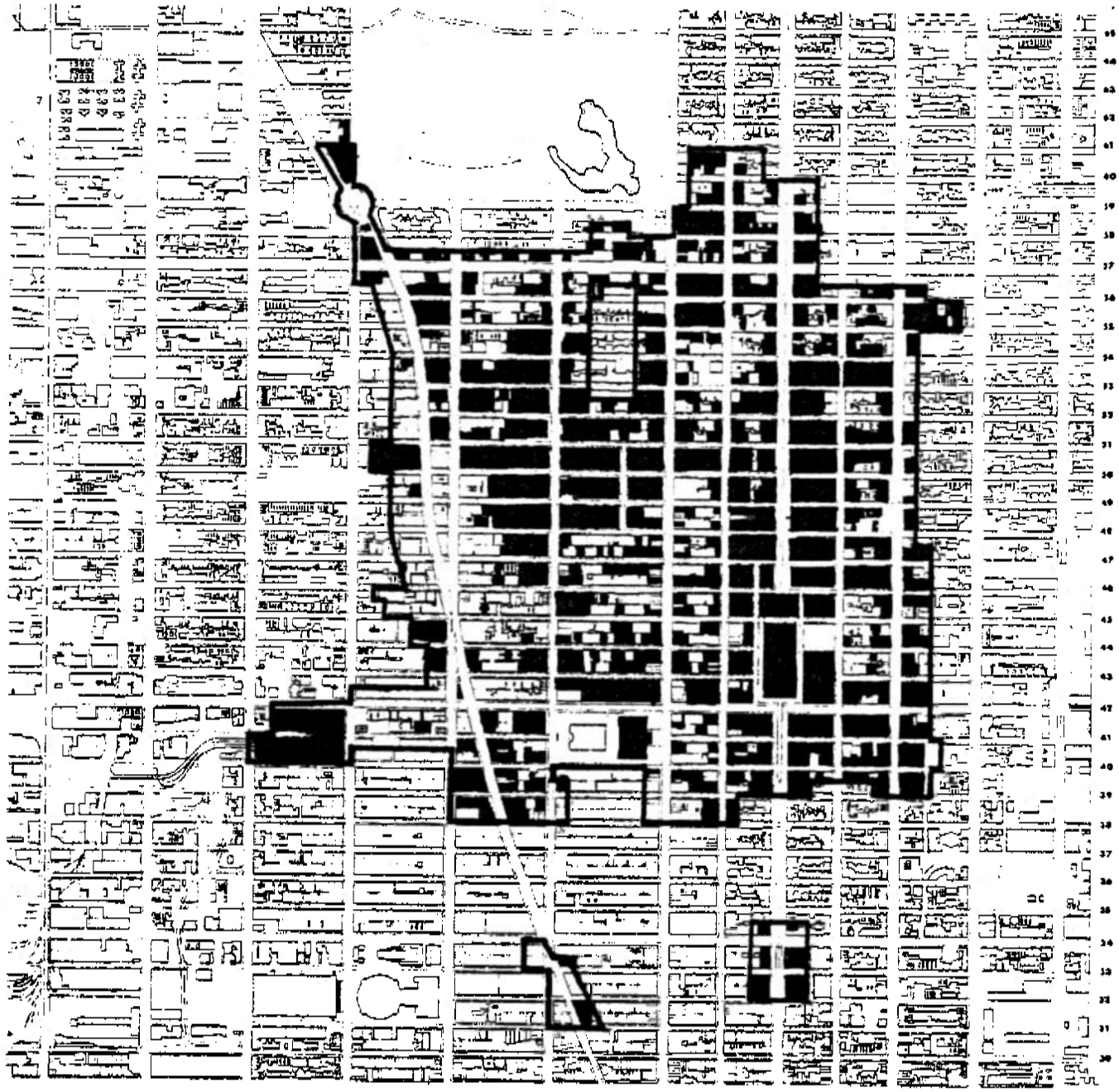
Recently there has been evidence of improvement. A strong Broadway theatre industry, aided by the upsurge in tourism and by effective improvements in management and marketing, has now had a succession of good seasons. Public programs responsive to the Mayor's Times Square Action Plan are demonstrating that the worst uses can be shut down. There has been a visible decrease in the most offensive adult uses; there has been a sustained effort to keep the streets cleaner.

All of this helps. It is a step in the right direction. But is it enough? Probably not. The perception lingers that the area is still not safe enough or clean enough to command rents sufficient to support new office construction. There is a chicken and egg proposition. Which comes first -- major new development to bring about a dramatic change in the area, or a dramatic change to induce new development? It seems likely that a clear cut development strategy backed by supportable incentives and programs is necessary to change the nature of the question and help break the impasse.

Our basic strategy is to divide midtown into three kinds of areas: growth areas, stabilization areas and preservation areas. The purpose of these areas is to provide a planning framework in which broad goals can be established and development policies evaluated. It is not to lay out a detailed prescription of treatment. Even within the three types of areas actual conditions vary considerably. The specific mix of measures and programs has to be formulated and prescribed accordingly.

Growth Areas

Growth areas are those in which it is in the public interest to encourage and assist development. They are the areas where public incentives are justified and in general required to stimulate or support

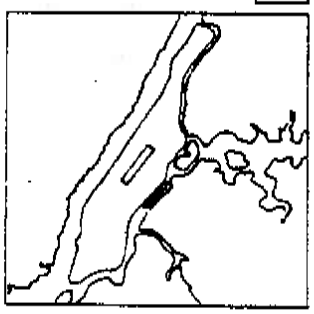


MIDTOWN SITES

Sites Not Developable

0 600' 1200'

5



CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

MANHATTAN OFFICE · DEPARTMENT OF CITY PLANNING · CITY OF NEW YORK

the private market. They are well served by mass transportation; their subway lines and stations have available capacity. Their basic infrastructure is in place and represents an enormous public investment.

Some of the uses in these areas contribute in an important way to the midtown function. But some uses are marginal or obsolete, a drag on the area, an obstacle to the way it functions. We want to remove the obstacle and take advantage of the opportunity. The major areas capable of accommodating the moderate midtown growth are listed below:

Broadway-Times Square: The Broadway-Seventh Avenue area, focusing on Times Square, not only offers a number of sites suitable for office buildings and hotels, it has an openness that can accommodate and provide a dramatic setting for large and imposing buildings. In encouraging development in this area, care has to be taken not to destroy its traditional entertainment character and function. This means more than protecting the Broadway legitimate theatre; it means respecting the area's role as one that caters to the taste of a large cross-section of the population. The objective is to clean up the area, not sanitize it; to encourage new development without removing the brashness and glitter.

Avenue of the Americas: There are three major assemblages on the Avenue of the Americas north of 42nd Street which can be expected to virtually complete the redevelopment between 42nd and Central Park. Over the next decade it seems likely that advantage will be taken of development opportunities south toward 34th Street. The subway arcade that stretches underground from 42nd to 34th Streets presents the kind of unique opportunity for improved access and circulation between new buildings and the subway that warrants special incentives. Development in this sector or in the Broadway-Times Square area is likely to be aimed, initially at least, at the secondary office services market: advertising agencies, accounting firms, lawyers, architects and other professional services and back-office space that need to be convenient to the core but cannot or need not pay premium rents.

Fifth Avenue: Between 34th and 40th Streets, Fifth Avenue can be strengthened and improved as a premier shopping street by appropriate development that provides quality retail uses along the street. Office buildings, mixed office and residential buildings and hotels are examples of such development. The incentives would be designed and administered, to the extent possible, with the objective of encouraging development that would help to reinforce the fine department stores that still anchor this portion of the Avenue.

34th Street Corridor: The 34th Street corridor both between Fifth Avenue and Herald Square, and west of Seventh Avenue, is an area suitable for mixed development. The easterly section could help support and strengthen the lower Fifth Avenue department stores. The section west of Seventh would connect with the Convention Center area and take advantage of the superb Penn Station transportation hub.

Convention Center Area: The Convention Center, stretching from 33rd to 39th Streets west of Eleventh Avenue and scheduled to be opened in 1984, is a special case. Convention centers, or exposition and trade show halls as this more properly will be, are not necessarily good neighbors; being "dark" a good deal of the time, they normally do not attract good development near them. But this Convention Center represents a very large public investment. It will have special design features to attract the public, other than for its trade shows, and to make it a vital part of the City. To avoid or minimize problems of access or of incompatible neighboring development, and to insure that the public gets maximum return from the investment it has in the Center, special care is being taken in the planning of its surroundings. A special Convention Center district is one possibility being explored.

The existing predominantly manufacturing zoning should be retained, however, until the detailed transportation, economic, marketing and land-use studies necessary to recommend the special requirements and features of such a district or other desirable policies and actions are completed. A major City study is being undertaken by the City Planning Department and the Department of Transportation. It is being coordinated by a special Convention Center Steering Committee whose membership, in addition to City Planning and Transportation, includes the Department of Buildings, the Urban Development Corporation under whose auspices the Convention Center is being built, and Community Board No. 4.

Eighth Avenue: Hotel, residential and mixed development (rather than office buildings, although there is nothing wrong with them here) is how Eighth Avenue between 42nd and 57th Streets is apt to develop. This is already underway in the upper portion. The old Madison Square Garden site between 49th and 50th Streets, now a parking lot, presents an exceptional opportunity. Obviously any development of this site will have to be planned with care and sensitivity because of its size and penetration into Clinton. At the same time its size offers an opportunity for an important enough set of uses to help change the character and spur development of the avenue south of 49th Street -- probably the only effective way to get rid of blighting uses that now characterize this section of the avenue and that spill over into Clinton.

57th Street: The 57th Street corridor west of Ninth Avenue is suitable for high-rise apartment houses.

Lower Manhattan: A word is appropriate here about Lower Manhattan. It is functionally related to midtown even though geographically separated. Lower Manhattan development complements rather than competes with midtown development. In addition to its increasing residential component, Lower Manhattan development will primarily continue to serve the specialized needs of the financial community and large space users. The incentives and assistance proposed for the commercial area of Battery Park City, including the Amex project, should help to meet lower Manhattan growth needs at competitive rents. The development, growth and sound functioning of lower Manhattan is, like that of midtown, in

the economic interest of the entire City.

Stabilization Area

The prime East Side core area -- 40th to 60th Streets, Third Avenue to Avenue of the Americas, is the stabilization area. Its special character, excellent development and sound functioning that make it the most valuable and desirable real estate in the world and the economic heart of the City. This does not mean preventing development or discouraging change.

But the development and change that take place should respect the quality and character of existing development. It should enhance the area's urbanity and style, it should improve its functioning. Change should be evolutionary, not revolutionary. The core area's economic health and development does not appear to warrant continuation of special economic incentives. Private market forces are more than adequate. The East Side will continue to be the area that great national and international companies seek for prestigious headquarters. It is in their interest as well as the City's that the quality, character and scale of what they build be in keeping with what attracts them in the first place.

Preservation Areas

The preservation areas are relatively small areas found within both the growth and stabilization areas. They are the areas whose special quality, scale, function or combination of characteristics are such that it is in the public interest to preserve them essentially as they are. It is necessary to be careful in designating such areas since the avoidance of change is not to be taken lightly.

Landmarks: As a matter of course all officially designated landmarks are included in this category. The Department is supportive of the efforts of the Landmarks Commission to designate buildings or groups of buildings in midtown that are of irreplaceable historic architectural merit.

The Theatre Midblocks: It makes sense to preserve the existing theatres. When the original special theatre district was created in the late sixties -- the first of the special zoning districts -- the older theatres did not seem to be economical or functional. It appeared that the only way to protect the legitimate Broadway theatre from being wiped out by the then westward march of office towers was to provide a bonus for putting new theatres in the towers. Since then the theatre industry has revived; the old houses, modernized, have proved their value. There

is general agreement that they should be saved. Trade-offs with growth sites on the avenue are an obvious possibility that is being explored in a revised special theatre district. The New York Landmarks Conservancy has also proposed a detailed study of the theatre district to identify individual theatres that merit landmark designation and to develop strategies to protect the district.

Selected Midblocks: There are selected midblocks in the East Side core area whose tree lined streets retain the combination of well-kept houses, low and medium rise residential hotels, shops, restaurants and occasional institutions. This low scale on narrow streets in contrast with the large, tall buildings on the broad avenues is an architectural hallmark of New York. These streets serve a valuable function. Among the most notable are the midblocks between Third and Sixth Avenues north of the Museum of Modern Art, from the north side of 54th Street facing the museum's sculpture garden to the north side of 56th Street. This of course includes the 56th Street "restaurant row." In addition, there may be other selected midblock groupings east of Fifth Avenue which retain a similar combination of quality, function and scale that warrant preservation.

The area will be further studied over the summer and it would be helpful if a survey of landmark-quality buildings by the Landmarks Preservation Commission were expedited.

Implementing the Strategy

The three-area development strategy, is intended to provide a planning framework in which broad goals can be established and development policies evaluated. Implementation of the strategy includes the use of tax incentives, zoning, capital investment strategy and city services. In the following chapters these areas are examined and specific recommendations made.

III. TAX INCENTIVES

The Major Tax Incentive Programs

The major tax incentive programs that affect midtown development are known as the J-51, 421-a and the ICIB programs.

J-51: Section J-51 of the Administrative Code was originally enacted, in the 1950's, to aid owners in meeting the requirement to put heating systems in cold-water tenements. The program exempts 100 percent of any increase in taxes resulting from the improvement for 12 years. In addition, it abates taxes (i.e., permits a property owner to reduce his actual taxes) by up to 90 percent of the certified cost of the improvement at a rate not to exceed 8 1/3 percent a year. Taxes can be reduced to zero (if less than 8 1/3 percent of the eligible cost) and the abatement continued up to 20 years if required to pay off the cost. As broadened in 1976, the J-51 program has five components. Three of them provide for the improvement or rehabilitation of existing housing. Our interest is in the two programs which provide for the conversion to housing of hotels and rooming houses in one instance, and of lofts, factories or office buildings in the other. A recent amendment reduced the amount eligible for abatement of non-residential conversions to 50 percent of certified cost. A unique aspect of J-51 is that it is as of right and does not require advance approval. The benefits are granted after completion of the work upon presenting the City's Department of Housing Preservation and Development (HPD) evidence that all requirements have been met.

421-a: Section 421-a of the Real Property Tax Law, which was devised as an incentive for housing production, permits partial tax exemption over a 10-year period for any newly built or rehabilitated class A Multiple Dwelling including cooperatives and condominiums. (Section 421-b applies to one-and two-family units.) It is administered by the City's Housing Preservation and Development Department which must approve the selling price for condominiums and cooperatives, and the initial monthly rent for rental properties which must also be rent stabilized. The only other requirement is that the building site must have been vacant,

predominantly vacant or underutilized as of October 1, 1971. The program exempts the increased value on the following basis:

Year	Exemption
Construction	100%
1	100%
2	100%
3	80%
4	80%
5	60%
6	60%
7	40%
8	40%
9	20%
10	20%
11	0%

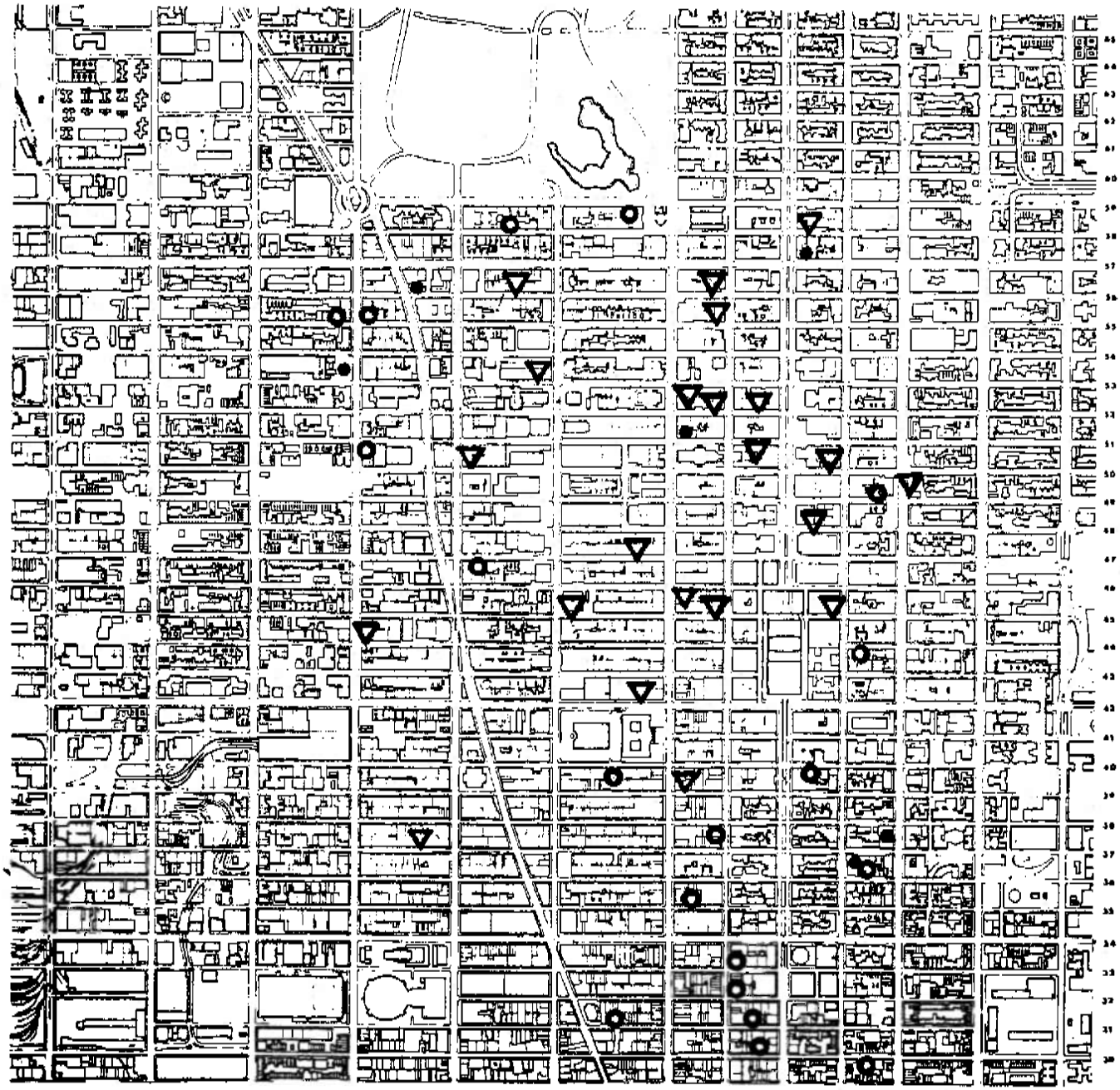
ICIB: The City's Industrial and Commercial Incentive Board administers the so-called Steingut-Padovan tax exemption program. The program authorizes the tax exemption of the added value resulting from new construction or reconstruction of industrial and commercial buildings. As recently amended there are three exemption formulae: a 19-year exemption that starts at 95 percent of the added value and is reduced by five percent a year so that full taxes are paid in the 20th year; a ten-year exemption that starts at 50 percent and also reduces by five percent a year with full taxes being paid in the 11th year; and a five-year exemption that starts at 50 percent but is reduced ten percent annually with full taxes in the 6th year. All industrial projects are eligible for the 19-year exemption. Commercial projects involving reconstruction may receive the 19-year exemption if designated "specially needed", by the Board; otherwise they receive the 10-year exemption. New commercial buildings can receive the 10-year exemption if designated "specially needed," otherwise the 5-year exemption. The Board is chaired by the Deputy Mayor for Economic Development and has three additional ex-officio members including the Chairman of the City Planning Commission and three public members. It must satisfy itself that any project it approves requires the tax exemption to go ahead, and it has broad discretion in establishing the criteria for commercial buildings.

I C I B TAX EXEMPTION PROGRAMS

	95% Tax Exemption Reduced by 5%/Year Over 19 Years	50% Tax Exemption Reduced by 5%/Year Over 10 Years	30% Tax Exemption Reduced by 10%/Year Over 5 Years
All Industrial Projects	✓		
Commercial Reconstruction Projects Deemed "Specially Needed"	✓		
Commercial Reconstruction Projects Other Than Those "Specially Needed"		✓	
New Commercial Projects Deemed "Specially Needed"		✓	
New Commercial Projects Other Than Those "Specially Needed"			✓

Location and Value of Tax Benefits

The Tax Incentive map on the following page shows the location of the buildings receiving tax benefits in midtown between Third and Eighth Avenues. Not surprisingly, the ICIB program accounts for the greatest concentration of buildings receiving benefits in the east side office core. Except for the special Mayor's Business Incentive Program under which the Board of Estimate approved tax benefits for conversion of the Commodore Hotel under an Urban Development Corporation umbrella, the ICIB program is the only tax incentive program designed to stimulate the economy by aiding commercial construction. The 13 office buildings and nine hotels approved for tax exemption since the ICIB program became effective in 1977, will receive a total exemption over their life of $130,131,000. This is not an inconsiderable sum for the City to forego. However, during the same period they will pay taxes of $392,814,000. And they were approved, for the most part, when construction was in the doldrums.

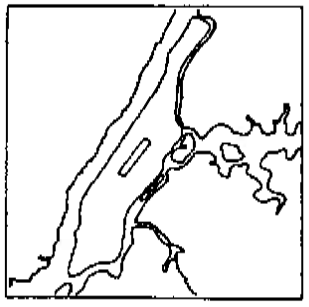


TAX INCENTIVE BENEFITS

- Buildings Receiving J-51 Benefits
- Buildings Receiving 421 Benefits
- Buildings Receiving ICIB Benefits

0 600 1200'

N



CBD DEVELOPMENT STUDY

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The 421-a program has had much less impact on development in midtown but will result in a greater tax loss by the City -- $174,474,000. This is more than half of the total taxes the City is foregoing in midtown for all three programs. Two projects alone, Olympic Tower and Galleria, receive more than $103,000,000 in benefits. The need for the City to grant and the value it gets from such tax exemption is dubious.

J-51 is a different case. While the number of conversions under J-51 in midtown is about equal to the number of ICIB projects, they are considerably smaller projects and the total tax forgiveness -- approximately $25,585,000 -- is much less. There is one caution: because advance approval is not required, and the advance notification to the Department of Finance called for by legislation enacted by the City Council late last year has not yet been put into effect, we cannot be sure how much may be coming along in the pipeline. However, this is not the major problem with J-51 conversions.

The major problem is that, as it is structured, J-51 encourages conversion to housing of obsolete office buildings, lofts, and hotels which might better be improved for commercial use. It provides much greater tax benefits than ICIB, and it does not require advance approval. In midtown, the City may well be giving tax benefits to get what it does not want.

A Tax Incentive Policy

Except in extraordinary circumstances the City should stop giving tax incentives in the east side midtown core. Not only are they no longer needed and thus wasteful of public revenue, their continuance would be counter-productive to the goal of shifting development westward.

Tax incentives should be targeted to the "growth" areas -- as soon as possible, as precisely as possible, and to the maximum possible extent. They can be a major factor, more important than floor area bonuses, in encouraging development in marginal areas.

The reason is simple economics. Builders will not build, nor will bankers advance them mortgage loans, if there is no market for their building -- if they cannot rent it at a profit. A building in a less desirable area will have to offer a bargain to attract tenants. To induce office construction on the west side -- in the Times Square area, for example -- rents must come in substantially below east side rents at present.

But a builder cannot build any more cheaply on the west side than on the east side. Construction costs are just as high. The cost of money -- financing costs -- is just as high, perhaps even a bit higher because of the greater risk involved. The only substantial differential is the cost of land. Even this is surprisingly little when spread over an FAR 18 building and financed as part of the mortgage loan.

Operating costs are likewise the same, except for taxes. But the tax differential resulting from the lower assessed values on major west side buildings compared to east side buildings is not nearly enough to make up the difference in market rents at the present time. It is clear that maximum tax benefits are needed to help stimulate a shift in development to the west side.

Target by Exclusion

Because of the varying nature of the tax incentive programs, the best and most direct way to target the incentives to the west side of Midtown where they are needed is to exclude them from the east side where they are not.

In the ICIB program this can be done as a matter of policy by the ICIB Board -- and, as a matter of fact, this is now the Board's basic policy. The 421-a and J-51 programs would need to be formally amended by state and local legislation to authorize their exclusion from certain geographical areas. According to the Planning Department's counsel, there is no constitutional or legal impediment to such legislation, but it can take several forms and the preferred way has not yet been determined. Consideration should be given to excluding J-51 conversions or 421-a projects from the entire midtown commercial area unless approved in advance by the ICIB. ICIB would not process such applications, but simply certify whether the grant of residential tax benefits in the City's prime commercial area was consistent with the City's policy and goals for the area.

Mandating Periodic Review

A sound basic policy for tax incentives is to grant only as much as needed for as long as needed. It should be a means to help overcome the obstacles of a weak area, an incentive to those who are willing to risk being a pioneer. It should not be a continuing prop to the private market.

At the same time, developers need time to put a project together. They have to be able to depend on consistent ground rules.

To meet these dual requirements we propose, therefore, that there be a mandatory periodic review of these tax incentives to exclude them from areas where they are no longer needed. Considering the lead time for midtown buildings, this review should take place at regular intervals -- probably between two and five years.

IV. Z O N I N G

The Nature of the Problem

Zoning is the basic and most direct public control over the size, shape and use of buildings. More and more in recent years there has been a sense that the zoning regulations have not been working as intended in controlling midtown development.

Almost every new building has required or been the recipient of a special permit, variance, or modification of the zoning regulations. Concern has been expressed that either despite or because of this special treatment, there is growing congestion, excessive density, overwhelming bulk, and the diminution of light and air. The quality of the best part of midtown and of fine, valuable buildings is seen threatened by "shoehorning" buildings into sites too small for them, "piggybacking" new buildings on old or the uncontrolled utilization of air rights; the value of amenities and the bonuses given for them is questioned. Builders are concerned about high costs in a period of continuing inflation, the long delays that result from the review process and the extended negotiations it is apt to involve. Everyone is concerned about the sense of uncertainty, the sense that the ground rules are built on quicksand.

The reasons for all of this are basically two-fold, to be found both in objective conditions and in the use of zoning.

The post-war office-building boom that culminated at the beginning of the seventies utilized most of the readily available or assembled large sites in the midtown office core. The remaining sites are apt to be smaller or to present unique conditions.

Due to economic circumstances since construction has revived, developers have tended to focus on the prime area. The combination of increasing construction costs, very high interest rates and the fresh memory of the mid-seventies recession, has left developers and mortgage lenders ultra-cautious. They prefer to build where they are certain of the market, and where premium rents can be obtained.

At the same time, the trend in the City Planning Commission has been to convert zoning from essentially a land-use regulatory device -- albeit a very important one -- into a constructive and positive planning tool. Starting with the plaza bonus of the 1961 Zoning Resolution, incentives were built into zoning -- to induce private builders to provide public amenities and desirable design features or even to build at all.

This kind of constructive use of zoning has produced many desirable results. But on occasion it has backfired. Changes made piecemeal under the gun of strong economic pressures have at times been inconsistent and contradictory. Some features have already been fine-tuned and greatly improved. The need, however, is to examine the entire system as it affects the development of midtown; to make sure that all the parts -- bulk controls, design controls, mapping, administration and enforcement -- mesh together and reinforce each other; and to minimize the need for discretionary reviews to the greatest extent possible.

BULK REGULATIONS

Issues and Goals

The failure of the bulk regulations to adequately meet current needs and conditions of midtown development is the greatest single reason why virtually every recent building has required special treatment.

Bulk regulations for high-rise buildings in the 1961 zoning resolution were based on two concepts: the control of density (i.e., number of people) by relating the size of a building to a multiple of the size of the lot it is built on, the measure being the floor area ratio (FAR); and the Le Corbusier architectural concept of the tower-in-a-plaza with the highly acclaimed Seagram Building as the model.

The basic FAR in the highest density commercial district was FAR 15; the initial use of incentives to encourage the provision of plazas for openness, air and light permitted the building to be increased up to 20 percent in size, to FAR 18, for providing a plaza. The direct controls that affected the form of a building and its placement on the building lot -- setbacks imposed by the "sky exposure plane", the maximum tower size and tower encroachment controls -- were based on these concepts and measures.

When FAR bonuses were provided for provision of <u>interior</u> amenities rather than outside plazas -- for theatres, covered arcades, gallerias -- the original direct controls did not work as intended. The problem was magnified by providing an additional 20 percent bonus, to FAR 21.6, in the Special Theatre and Fifth Avenue Districts.

In addition, the difficulty of assembling sites large enough to permit optimum floor sizes encouraged the increased use of air rights, that is the theoretical unused FAR of existing buildings. This takes two forms: a transfer of development rights from designated landmark buildings under a special permit procedure; and the use of the air rights of adjacent properties under a so-called zoning lot merger which requires no special permit, permission or even advance notice.

The major problem that results from this combination of factors is the distortion of scale and bulk by buildings that are outsized on their actual site. An analysis of recent buildings reveals that not only do most of them exceed FAR 18 on their actual site or "footprint", but that a substantial number are over FAR 21.6; the highest are over FAR 30.

The development of bulk regulations that meet the needs and conditions of midtown high-density development in the eighties is a prime goal of the Midtown Development Project.The major assignment of our architectural consultants, Davis, Brody & Associates with Kwartler/Jones was to help develop bulk regulations that will provide a workable and acceptable as-of-right building in the FAR 15-18 range, taking into consideration both the needs of the individual building and the context in which it is built.

The Recommended Approach

After an extensive analysis of the nature of the bulk controls in both the 1916 and 1961 Zoning Resolutions and of their impact on midtown development, the consultants have proposed a dual approach, or "two tier" system, for a new bulk control system. (See Appendix for a full description.)

The two approaches share a common assumption: The need for zoning bulk controls to be primarily concerned with the impact of a building on the street and its relationship to its surroundings, not on any preconceived notion of building form. They likewise share the assumption that the standards must be based on the realities of midtown and can be measured objectively.

One approach is based on a performance system. Using a version of the Waldram diagram (a device developed in the twenties to evaluate daylight as a direct outgrowth of the pioneering work done for New York City's 1916 Resolution), an architect would be free to design a building that best met his needs with trade-offs among several elements. It would have to achieve a satisfactory overall level of performance and satisfy a threshold standard for each element. The three required elements are daylight (as determined by the Waldram) and street wall length and height which are determined in relationship to the street wall of neighboring and near-by buildings in a defined "street district". An optional element would be the extent that a building in an appropriate location could be designed to allow sunlight on a nearby park or open space.

The second approach blends the desirable qualities of the first into the more familiar controls of the existing Zoning Resolution. It is based on the daylighting standards of the performance system, but defines permissible height and setback of towers within a vocabulary already familiar to developers and architects. This revised set of tower regulations will require that taller towers be set back farther from the lot lines, according to a series of "sky exposure planes" related to the width of the street. Design flexibility would be achieved by allowing the tower to come closer to the lot lines in one area as it is pulled back in another.

The two approaches are being further refined and tested before a final decision is reached as to which one, or what combination of the two, will work best. The practical views of the development community will be an important ingredient in our conclusions.

The performance system appears more flexible, but may be more complex to use and difficult to administer. The more traditional approach -- based on existing methods of computing bulk -- should be easier to use and administer, but less fine-tuned to meet varying site configurations.

Zoning Lot Mergers/Transfers of Development Rights

The zoning provisions allowing development rights transfers were designed to meet valid needs: in the landmarks case, to provide the tools necessary to preserve the City's architectural heritage; and for zoning lot mergers, to set forth the legal rules for assembling property for development purposes.

The landmarks transfer has a respected and perceivable public purpose. The zoning lot merger provision, however, has had numerous side-effects which are disturbing to some people. One effect is that the resultant bulk of the actual new construction appears oversized and out-of-scale because the actual built portion is only a part of the lot, and one or more additional existing buildings of a smaller size, which should be viewed as part of the site, are visually discounted. Olympic Towers and the proposed 725 Fifth Avenue (Trump Building) are such buildings. There is no doubt that the zoning lot merger eases the assemblage process, thereby allowing sites of all sizes, but particularly small sites, to proceed earlier. This can be beneficial, but in areas where over building is an issue, as it is on Fifth Avenue, it makes sense to examine the effect of unrestricted zoning lot mergers. While proposed revised bulk regulations would diminish the need for zoning lot mergers, because the improved as-of-right bulk regulations would allow more buildable parcels on smaller sites (the primary users of mergers), it is advisable to limit the way transferred floor area is used.

Revised standards for bulk would, therefore, concern themselves with measurements and criteria for developments with merged zoning lots. One recommendation is to control the bulk of the development by basing the new building's bulk regulations, including any setback or tower coverage (if any) regulations, only upon its "footprint" -- that is, the part of the site upon which the new construction sits -- and discount any existing buildings remaining on the zoning lot for that purpose. Floor area gained from bonused amenities will be generated only as a multiple of the "foot print." This procedure would make the bulk of the new building less massive.

Another recommendation, is to place a limit on the previously unrestricted amount of floor area that could be transferred from adjacent parcels. The amount of floor area transferred could be

controlled by a fixed percentage limit or by a sliding scale. In a sliding scale, the amount of floor area transferred from an existing building could be directly proportional to the size of the footprint in its relationship to the whole zoning lot. As the relationship of the lot size of the new building to the total merged lot size decreases, the amount of the available floor area that may be transferred decreases. The chart below indicates one of several ways in which this sliding scale could work. (See illustration 1.)

Zoning Lot Merger Sliding Scale

Lot area of new construction (footprint) as percentage of total (merged) lot area	Percent of available floor area that may be transferred from above existing buildings
90% or above	100%
90 - 80% " "	90%
80 - 70% " "	80%
70 - 60% " "	70%
60 - 50% " "	60%
50 - 40% " "	50%
40 - 30% " "	40%
Below 30%	30%

The floor area that may not be used in the development, can not be used elsewhere and "evaporates."

The effect of the restrictions on the way zoning lot mergers may transfer floor area will be to set a cost/benefit limit -- a ratio of diminishing returns -- beyond which it will no longer benefit the developer to seek additional properties with which to merge for extra floor area to add to the building. From the public's standpoint there will be safeguards against out-of-scale "blockbusters" and assurances of adequate light and air standards.

One potentially negative impact of such a proposal might be the encouragement of demolition of the older building to increase the "foot print" size, and thus enlarge the development's FAR potential.

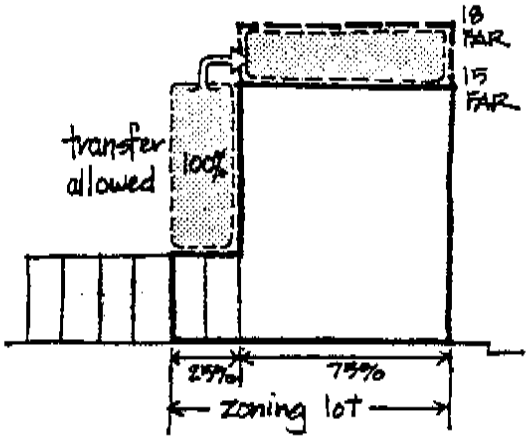
Bulk Controls in Special Purpose Districts

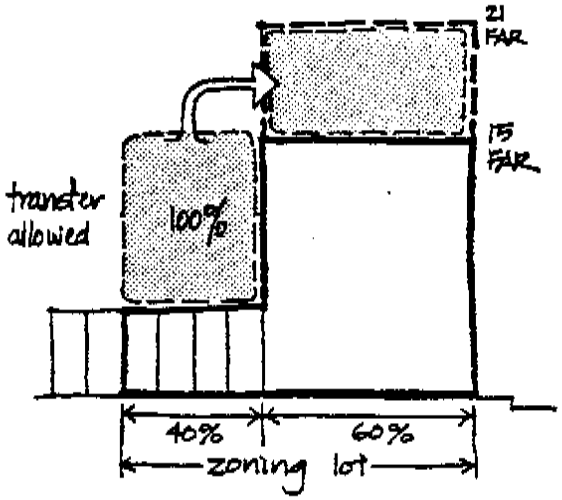
The revised bulk controls that are developed for Midtown will be applicable to the special districts -- The Fifth Avenue District and the Theatre District. The Fifth Avenue Special District now has its own separate bulk controls, but with these proposed bulk provisions could be regulated by the same bulk controls as the rest of midtown.

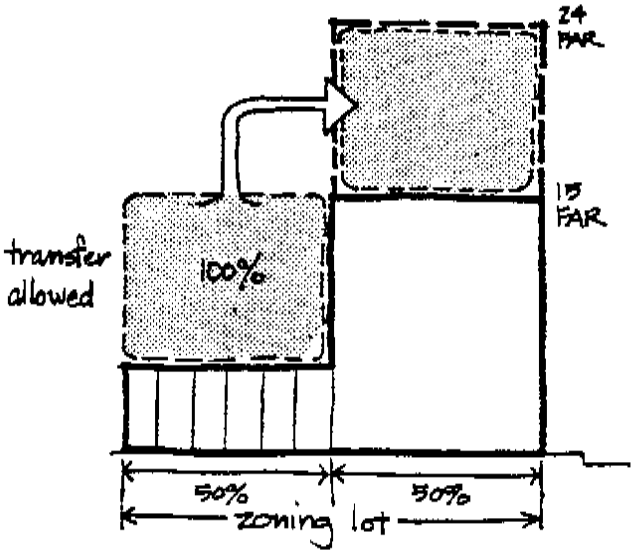
ZONING LOT MERGER

in elevation

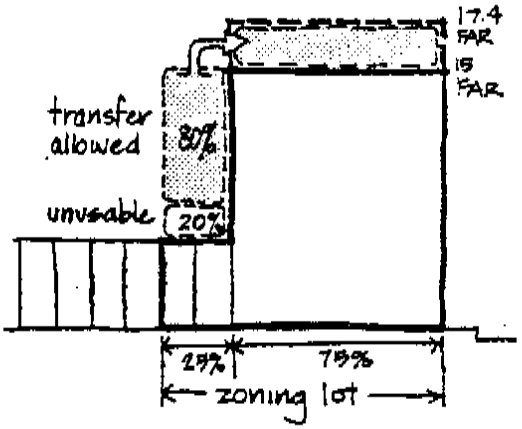
Current Practice

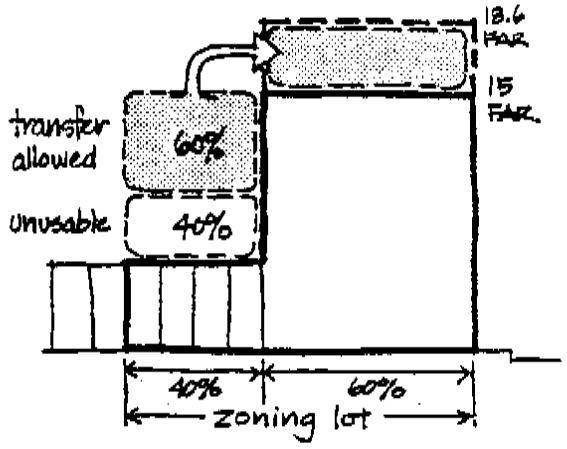






Sliding Scale





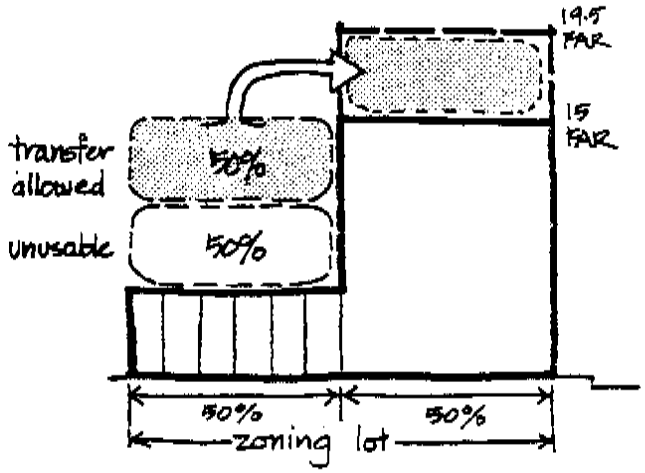


illustration 1

The Theatre District does not now have separate, specific bulk controls (other than an ability by the Planning Commission to waive any or all height and setback provisions), but should have, consonant with new objectives of preservation of existing theatres and construction of new ones. This is the subject of a special study, which will be incorporated in the final draft of the Midtown Development Study.

URBAN DESIGN CONTROLS

The Overall Approach

The urban design controls and incentive zoning for the midtown area which this City pioneered now need to be completely revamped. The various incentives and controls, while individually designed to meet specific needs, are at times unrelated or at odds with one another.

To replace them we propose a rational system aimed at the specific needs of midtown and its various parts -- the avenues and streets each of whose distinctive character contribute so greatly to the quality of the larger area and to the City as a whole.

The basic features of the urban design controls are the following:

- They are integrated with the bulk controls. Bonuses of additional floor area are heavily weighted toward amenities that ameliorate density and ease congestion. They will not permit a basic FAR 15 building to exceed FAR 18, nor will they induce waiving the regulations that govern the impact of the building on the street.

- Four design features of particular significance to the character and function of midtown have been targeted and mapped and will be required for new buildings in the targeted areas. Three will not be bonusable -- maintaining retail continuity of significant retail streets; maintaining existing strong street walls which give a sense of place and help define the midtown grid; avoidance of conflict between pedestrian and vehicles by prohibiting curb cuts, parking and loading bays on the avenues and certain streets. The fourth, improvements of pedestrian access to and circulation in subway stations will be bonusable.

- Zoning incentives are based on providing amenities that address specific targeted needs by priority. In addition to subway station improvements (the first priority need where targeted), the other priority needs in order are: alleviating sidewalk congestion; continuing through-block circulation as part of a pedestrian system; and providing needed open space.

- The specific requirements for each development are to be set out clearly in a series of maps covering each street in midtown. The maps would be consulted by developers, their architects, or anyone interested, to determine the zoning program for any site. In this way, the criteria for each development site can be said to be "targeted."

- Where priority needs have not been mapped, or where they have been met without earning the maximum 20 percent bonus, additional bonusable amenities may be provided. These additional amenities are: arcades, circulation spaces, urban plazas, urban parks, and activity spaces.

- Only urban parks and activity spaces will require design review and a special permit procedure. Other bonusable amenities -- whether those meeting priority needs or the additional group -- need only be certified that they comply with pre-designated specifications. These specifications will allow bonuses to increase as additional designated features are added which improve the quality of the amenity.

- The criteria for all bonusable amenities have been thoroughly reviewed and standards have been tightened. New bonusable amenities are transit connections, additional pedestrian circulation spaces, and urban parks. Elevated and sunken plazas and public galleria are being dropped. All other bonusable amenities have been revised in greater or lesser degree.

Mandated Urban Design Features

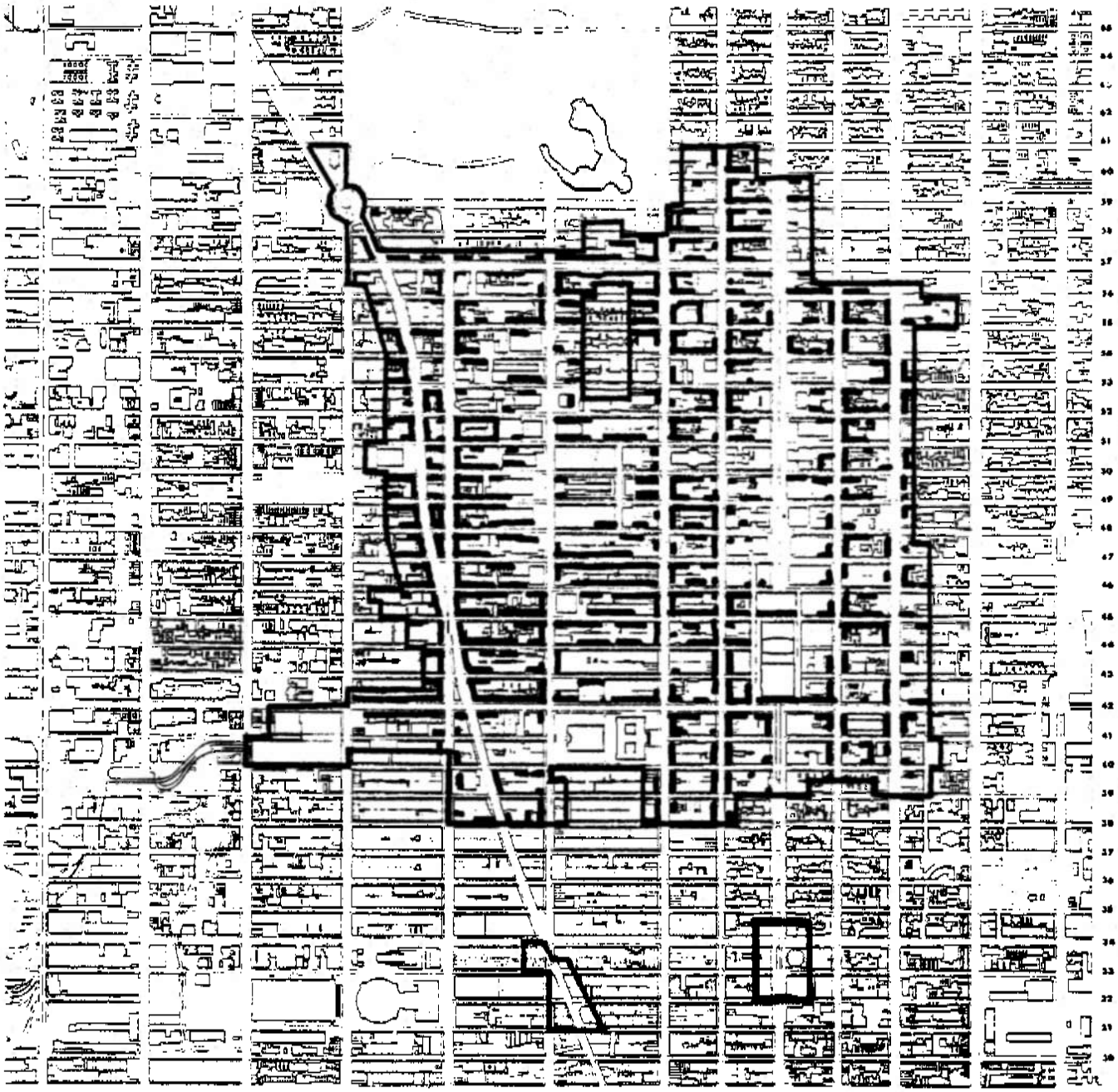
Several of the features and amenities that are specified across Midtown are mandatory for any development site which fronts upon designated, mapped streets. Of the four mandatory provisions, three will not generate any bonus and are to be within the development of 15 FAR buildings. These three are Maintenance of significant retail streets, Maintenance of existing strong street walls, and Reducing pedestrian vehicular conflict. These provisions derive from analyses of the spatial properties of streets, the location of retail uses that currently exist in midtown, the pedestrian orientation of certain streets and the objective of preserving these features where they are strong. (See maps 1 and 2.)

Under the fourth of the mandatory features, Transit station improvements, the developer provides transit-related facilities which will generate bonus floor area.

(1) Maintenance of significant retail streets: Several midtown streets are recognized and celebrated as outstanding retail locations. The inherent character of these streets is derived largely from their retail orientation at street level.

Therefore, to strengthen the level and continuity of retail activity, retail uses are required to front along these streets in all new developments:

- Fifth Avenue - 34th Street to 59th Street
- Madison Avenue - 34th to 59th Street
- Lexington Avenue - 40th to 59th Street
- Broadway - from 40th to 57th Street
- 7th Avenue - from 42nd to 57th Street
- 59th Street - from 5th Avenue to 2nd Avenue



RETAIL FRONTAGE (1978 Survey)

0 600 1200'

1

CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

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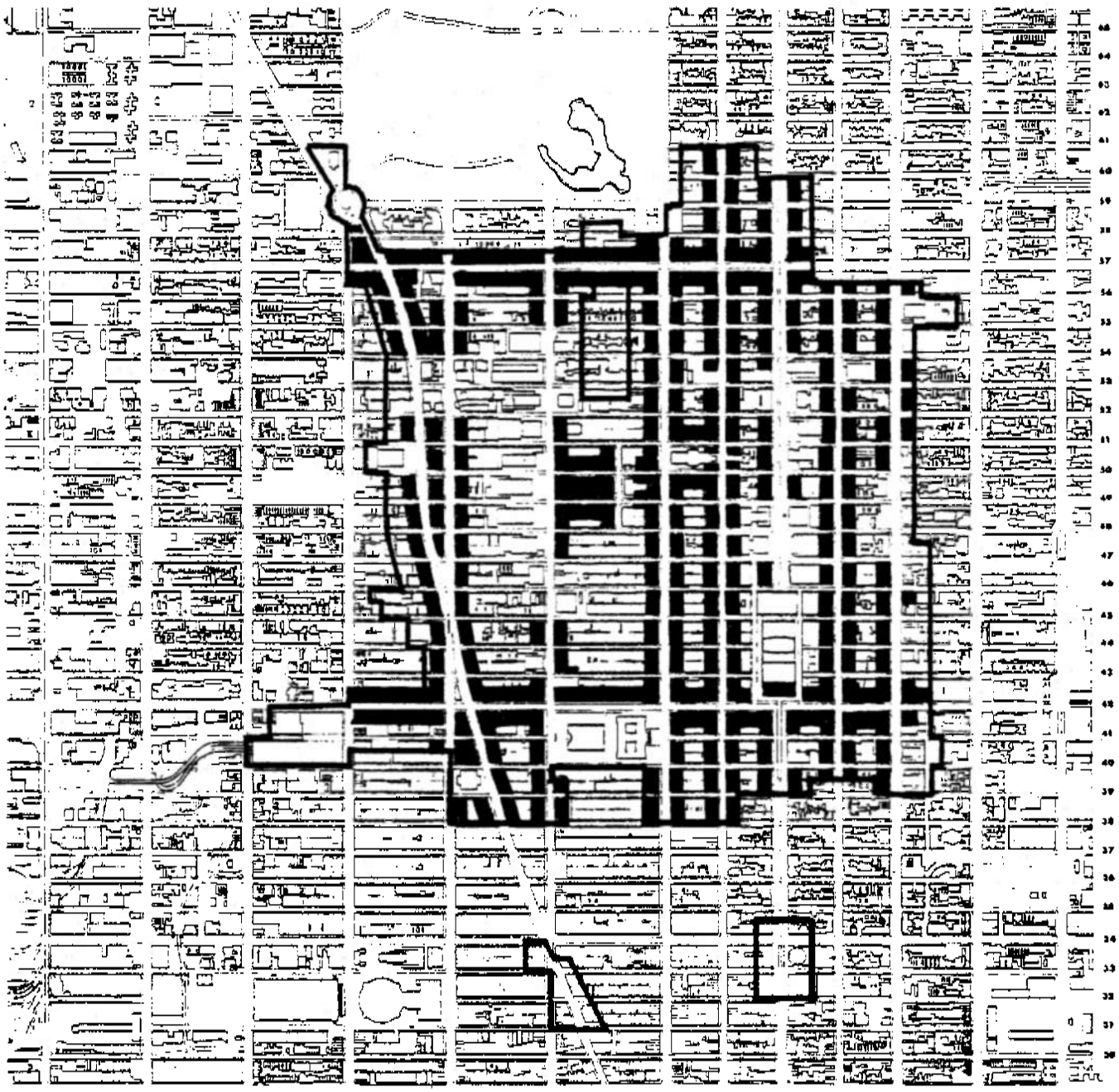
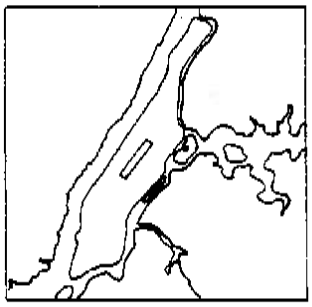


EXISTING STRONG STREET WALLS

0 800 1200'

2



CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

MANHATTAN OFFICE · DEPARTMENT OF CITY PLANNING · CITY OF NEW YORK

- 57th Street - from 8th Avenue to 3rd Avenue
- 42nd Street - from Broadway to 3rd Avenue
- 53rd Street - Broadway to 3rd Avenue
- 47th Street - 7th Avenue to 3rd Avenue
  (See map 3.)

Along these streets new developments will be required to provide ground floor space to be occupied only by retail, personal service or amusement establishments, as permitted by the regulations of the underlying zoning districts, with the exception of Fifth Avenue as described below. The range of permitted uses is expansive and should incur no hardship.

For new developments along these streets, at least 75 percent of the building frontage facing the mapped streets is to be occupied by the uses listed above. The remaining 25% or 50 feet, whichever is greater, may contain building lobbies and entrances, other kinds of uses, legal egress, service or loading entrances, or other facilities, provided that they are permitted by the underlying zoning or other applicable City rules and regulations, such as the Building Code. The covered bonus amenities of Through Block Circulation Space and Activity Space may be counted towards meeting the retail requirement.

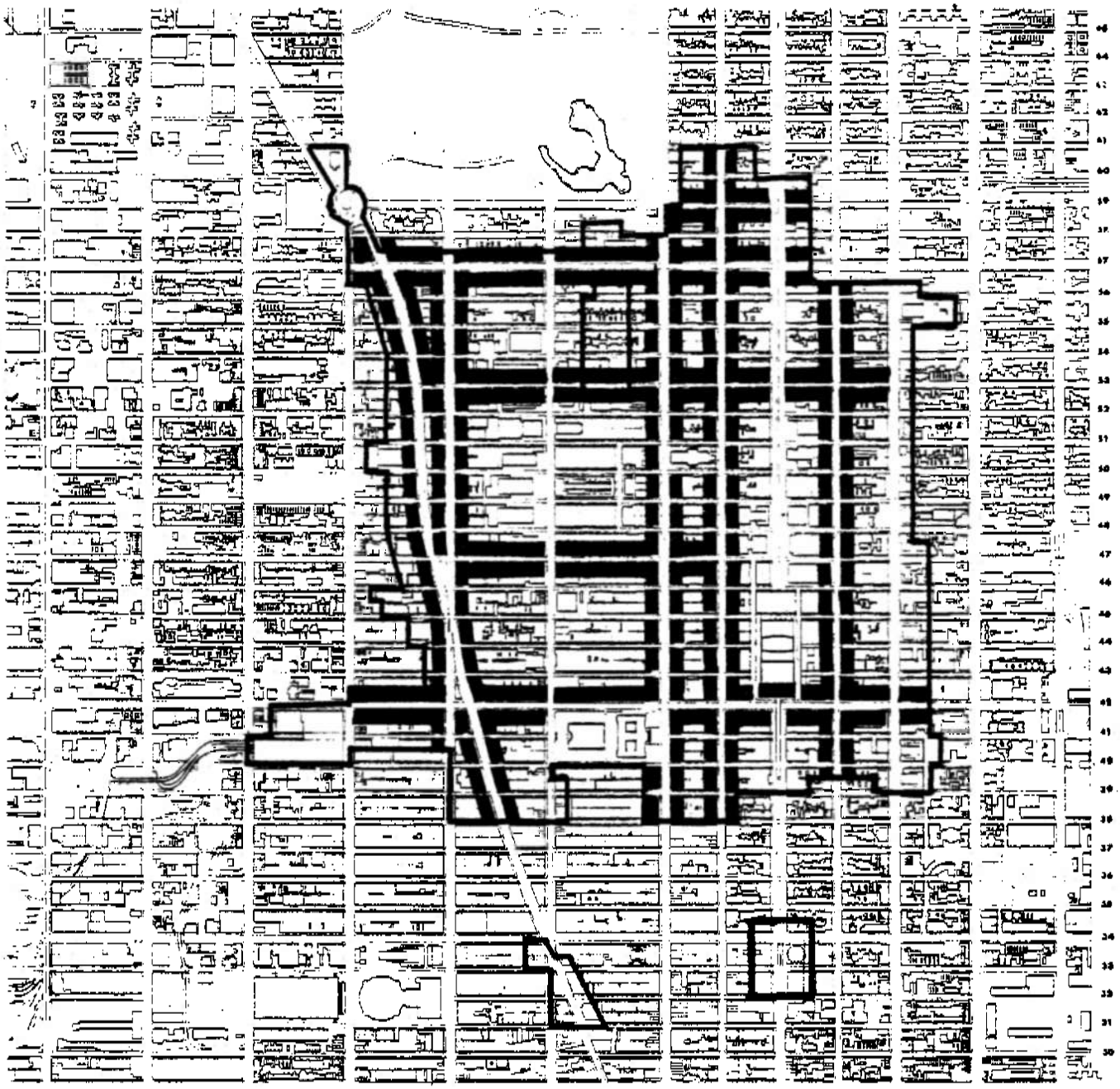
The depth of the retail is not regulated, because site conditions, building configuration and market forces should interact freely.

On narrow streets specified for retail, such as 47th Street, where the fulfillment of the retail requirements is infeasible, the requirements may be waived or modified.

Fifth Avenue, however, is special in many ways, particularly as the City's primary retail boulevard. Therefore, the current controls of the amount and the specific kind of regional retail (Use Group "F") permitted along Fifth Avenue, as provided for in the Fifth Avenue Special Zoning District, should be continued.

(2) Maintenance of existing strong street walls: Certain midtown streets are noted for their procession of existing buildings constructed at the street line which gives these streets a well-defined quality, particularly characteristic of Manhattan's grid system. New development on these streets should preserve this spatial quality, not only because this is a concomitant part of preserving retailing along the streets, but to assure that midtown maintains the variety of spatial experiences it now possesses: from more expansive streets, such as Park Avenue and Avenue of the Americas, to spatially tighter streeets, such as Madison and Lexington Avenues.

Therefore, to preserve the spatial integrity of midtown, new development along the following streets will have versions of "build-to" lines requiring specified minimum lengths and heights:

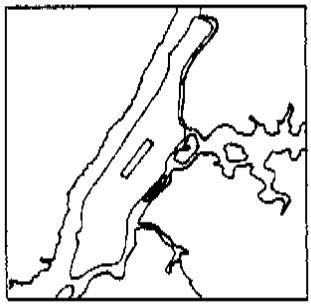


MAINTAIN RETAIL CONTINUITY

Streets where development is to provide retail use along frontage

0 600 1200'

3



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- Fifth Avenue (from 34th Street to 59th Street)
- Madison Avenue (from 38th Street to 61st Street)
- Park Avenue (from 54th Street to 60th Street)
- Lexington Avenue (from 40th Street to 61st Street)
- Avenue of the Americas (from 40th Street to 42nd Street)
- Seventh Avenue (from 42nd Street to 57th Street)
- Broadway (from 40th Street to 60th Street)
- 57th Street (from 3rd Avenue to 8th Avenue)
- 42nd Street (from 3rd Avenue to 8th Avenue)
- 40th Street (from 5th Avenue to Avenue of the Americas)

(See map 4.)

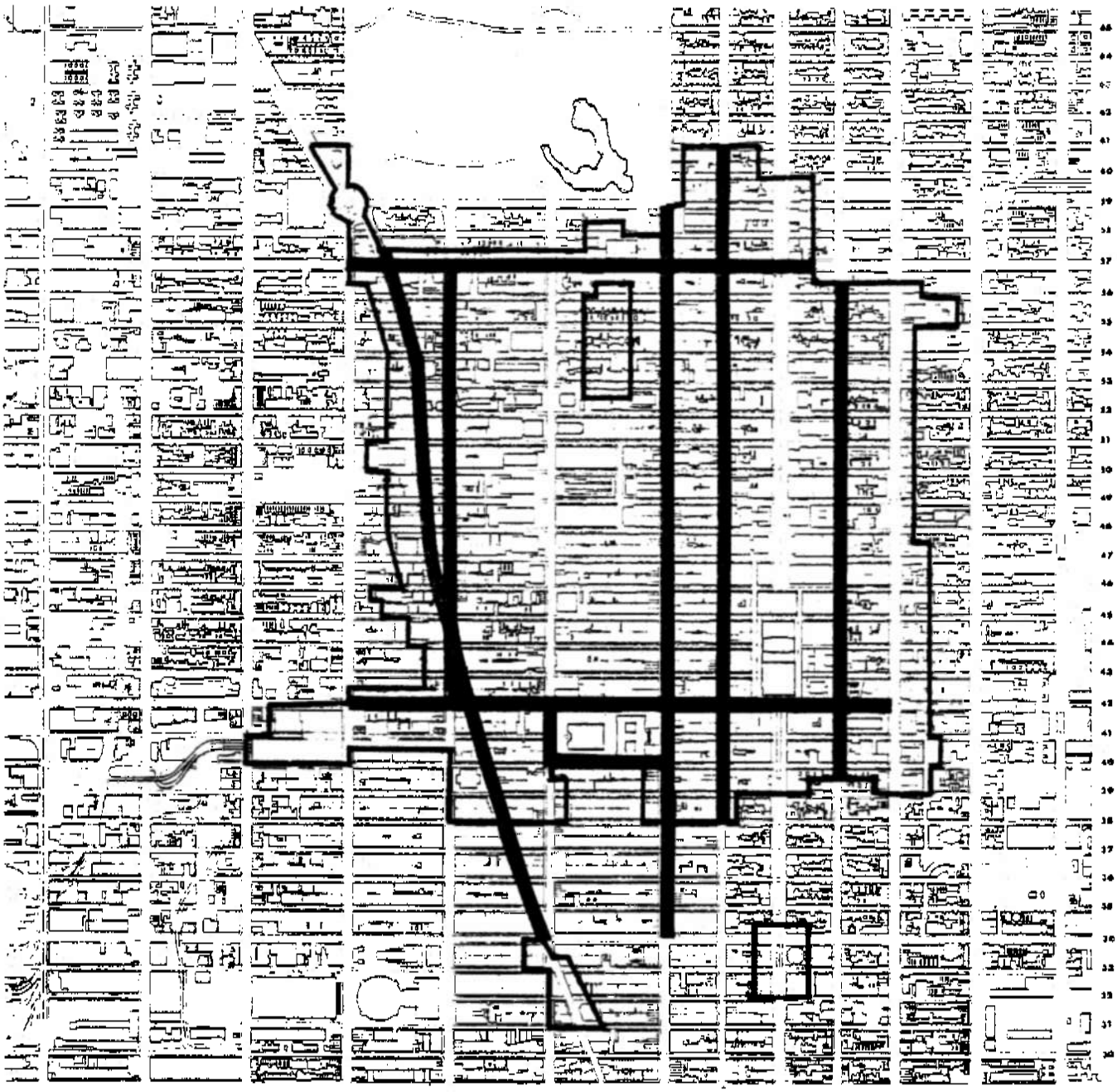
Development along these streets, except Fifth Avenue which is to have separate requirements, is to have the front building wall facing the specified streets at a minimum height as follows:

Minimum Height of Front wall (street wall)	Length of front lot line of site along specified street
4 stories or 50 feet whichever is less (absolute min. height)	up to 50 feet
6 stories or 85 feet, whichever is less (average height)	more than 50 feet

The primary plane of the front wall is to be located within 10 feet of the street line, except on 57th Street and 42nd Street where no set back is permitted. The length of the front building wall is to be at least 80% of the length of the front lot line along the specified street. The maximum height of a street wall is as specified under Bulk Regulations. Height is to be averaged by apportioning each segment of front wall height. Developments which are in their entirety not more than 2 stories high ("taxpayers") are exempt from these requirements.

Recesses in the street wall, for fenestration or architectural articulation, are permitted as indicated below:

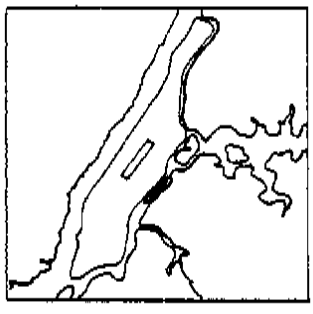
Recess	Provision
Not more than 2 feet deep	Unrestricted (may not be a full setback)
More than 2 feet deep	Not more than 30% of the total surface area of the street wall (in elevation)
Arcades or recesses on ground floor	Unrestricted



MAINTAIN EXISTING STREET WALL

0 600 1200'

4



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Along Broadway, because of its diagonal path across the grid system, special recess standards are needed to permit jogs or step backs. A new building is to establish a front wall plane within 10 feet of the Broadway Street line, and the actual front wall of the building must touch that line at a minimum of one point for each 35 feet of lot line length, up to the minimum required height. Of course, building flush to the front wall plane is permitted.

Fifth Avenue currently has special street wall requirements, and while these are to be modified, the avenue will retain distinct provisions carefully tailored to its physical characteristics. The minimum street wall length will be 90% of the lot's frontage on the avenue, with no setbacks permitted. The height of the street wall (coresponding to the predominant range of heights of existing buildings) is to be a minimum of 85 feet in height and a maximum of 125 feet in hgieht, on both sides of the street. Above that height the building must set back at least 10 feet (the current provisions mandate a set back only on one side of the street). Recesses are permitted as along any of the other streets, except Broadway.

(3) Reducing pedestrian/vehicular conflict: In order to reduce hazards to pedestrians along primary pedestrian arteries and to promote those streets as environments for pedestrians, several streets will be mapped proscribing parking or loading bays along those streets:

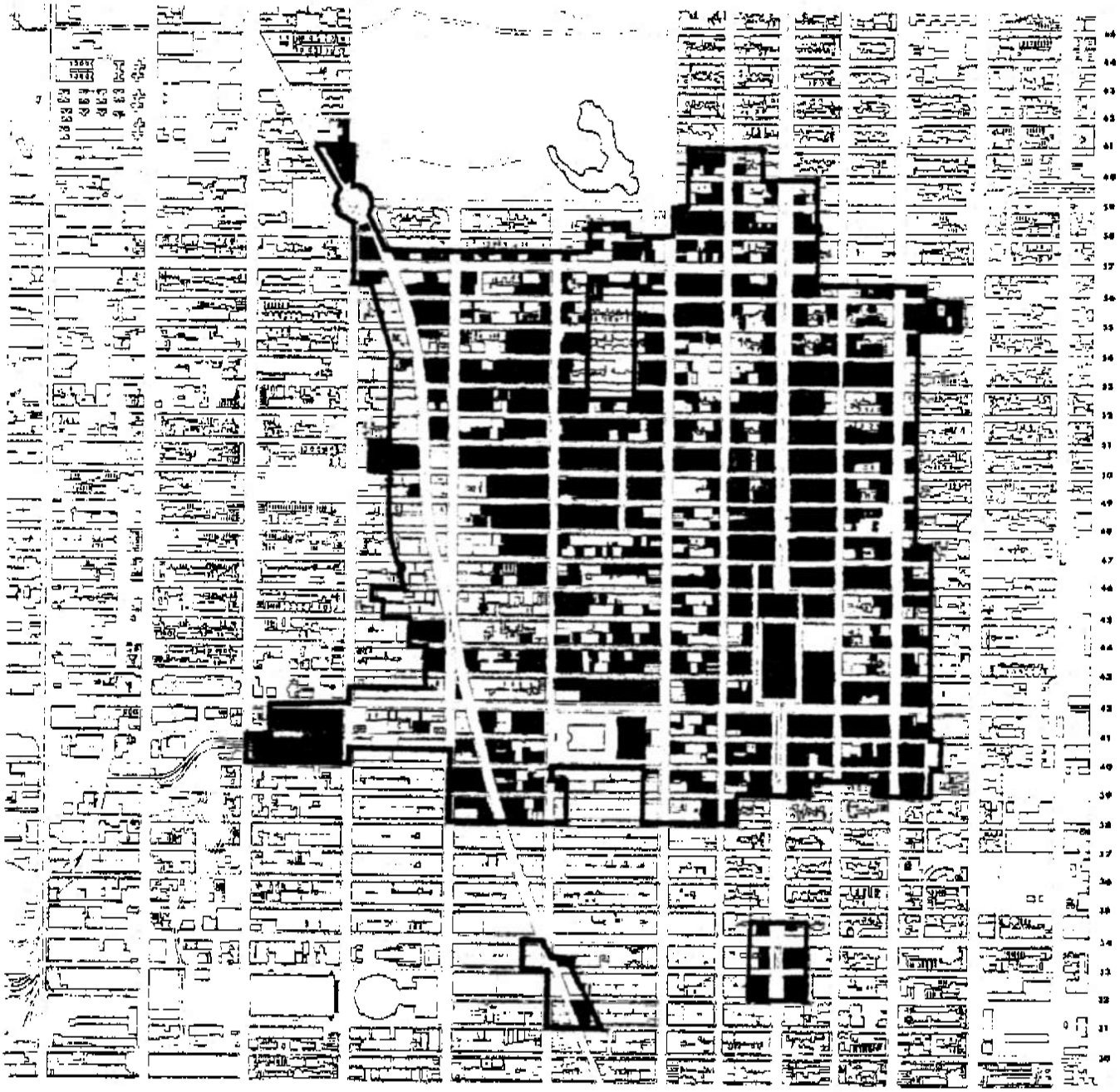
- All avenues in Midtown.
- 59th, 57th, 53rd, 47th, and 42nd Streets

Exceptions may be made where site configuration or other extenuating conditions exist to make infeasible curbcuts on alternate streets.

(4) Transit station improvements: The most worthwhile amenity that a developer can provide is an improved means of access to a subway station. With midtown and lower Manhattan mostly built up already (See Map 5) opportunities to further renovate the access points to the subways are limited; there remains in midtown only some two dozen sites that could physically connect to a subway mezzanine. But only a few of these will actually be redeveloped over the next 10-15 years. The Department of City Planning agreed with the recommendations of the M.T.A. and the Transit Authority that rather than risk losing these precious opportunities by relying on zoning devices contingent on voluntary measures, it was preferable to require that new development physically able to provide station entrances off the sidewalks do so.

Due to the costs of such an improvement, a bonus will be offered. In this regard, it is something like a mandatory bonus, the precedents for which exist in the Special Greenwich Street Special District in lower Manhattan and the Lincoln Square Special District.

Transit Improvement Zones (TIZ) will be mapped within 150-200 feet of the mezzanine of subway stations (See Map 6). Any development within a TIZ must improve access to the station. There will be several kinds of



MIDTOWN SITES

Sites Not Developable

0 600' 1200'

5

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facilities that may be provided and bonuses will be granted based upon the size, cost and degree of difficulty in achieving each type of station connection. There are additionally several contingencies in which a development, although located in a TIZ, may be released from such a requirement due to physical constraints, or may be deemed to satisfy the requirements by the provision of an easement which achieves no bonus.

The types of improvement options are:

(A) Direct major connection to station
This type of access provides a direct physical connection from within the development site to the station mezzanine level. It allows free access for the public at all times when the subway mezzanine is open, and replaces any existing subway stair in the sidewalk. Within the development site, the facility is adjoined by a street-level public space, such as an open air concourse, sidewalk widening, arcade or through block circulation space. Vertical circulation elements will include a stair and a reversible-run escalator. Additional improvements within the station itself may be required. All movement facilities must conform to Transit Authority standards.

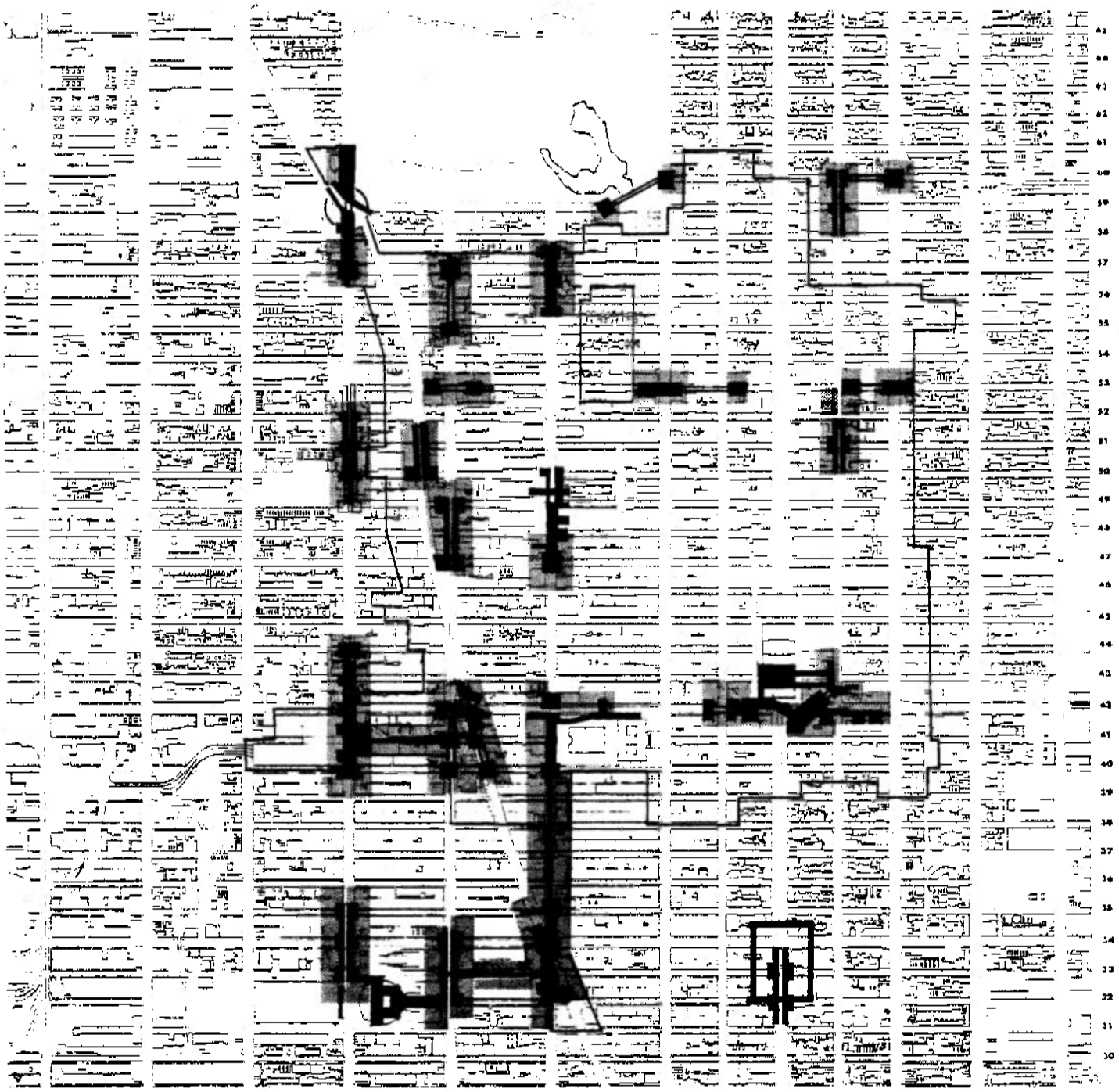
(B) Limited connection to station
This type of facility provides access from controlled areas within the building, such as a lobby or activity space, to the subway mezzanine. It may be closed when the building closes and may contain a stair and escalator. This facility may not replace a 24-hour sidewalk stair, nor would it be allowed while a stair remains on the sidewalk. It may require minor improvements in the station.

(C) Simple stair relocation
Where site size or configuration are limiting, this improvement involves simply relocating an existing stair from the sidewalk to within the property line. Stair to conform to TA standards.

(D) Transit easement volume
Where funds are available from other sources or programs, it may be acceptable to furnish an easement of a volume of space within the property for vertical circulation and access, to be constructed concurrently or at a future date. No bonus is granted for this option.

The facilities in improvements (A) through (C) would be provided and maintained by the developer, unless otherwise agreed by the Transit Authority. The developer may be required to undertake work within the station mezzanine or reimburse the TA for work it does.

Where the site lies within the TIZ, but due to site configuration a physical connection is not possible or sufficiently useful, the developer may be released from the obligation. Alternatively, it may be

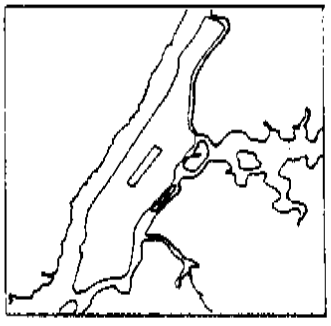


TRANSIT RELATED IMPROVEMENTS

0 600 1200'

N

6



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desirable to establish a Capital Improvement Fund to accept contributions from these developments for improvements within the station itself in exchange for a floor area bonus. Such contributions would be earmarked for special improvements within the station. This procedure could be related to the existing Transit Authority Adopt-a-Station program. Further discussions are needed to establish the advisability of such a fund.

If the public agencies are uncoordinated, seeking approvals for constructing transit-related facilities can involve frustrating and lengthy delays; therefore the administrative process will be pre-established and streamlined to deal with the application procedure. Procedures will be worked out in advance among the City Planning Commission, the Transit Authority and the Department of Buildings; specific site improvement requirements will be spelled out in the zoning text to the greatest extent possible.

Because of the limited number of sites available to supply off-sidewalk subway entrances, existing buildings would be encouraged to reconstruct their ground floor and basement to connect into stations. This would be bonused by permitting additional floors, ordinarily not permitted under the existing zoning code, to be added during renovation.

Targeting Priority Needs and Amenities

Getting the greatest value from the bonuses that are offered by the zoning resolution necessitates assuring that a development and the bonused amenity it contains closely respond to the particular needs of the immediate surroundings. To accomplish this, four categories of local area needs have been mapped and prioritized and will form the basis by which developments can achieve bonus floor area.

Each of the priorities stems from careful inventory of midtown buildings, streets and open spaces.

The four targeted priorities are:

(1) Transit station improvements (covered in previous section)
(2) Alleviating sidewalk congestion
(3) Continuing through block circulation as part of a pedestrian system
(4) Providing needed open space.

Only transit station improvements are mandated.

Most sites in midtown will have one or more priorities mapped for them. A development will be required to satisfy one or more of its priorities in order to achieve any extra floor area through a bonus. For each priority there will be several optional ways available to accomplish this, each way generating a different bonus.

For example, if the site is adjacent to a subway station, its first and mandatory priority is a station connection, and there will be a range of ways to accomplish this, from simply relocating a stair on the sidewalk to within the property line which generates a small bonus, to a major open air concourse connection which generates a substantial bonus. Depending on the size and design of such a transit facility, a development might earn all the floor area permissable up to 3 FAR or much less. But no matter how much is generated in bonus floor area, the priority will be deemed satisfied. If a sizable facility is built that uses up all 3 FAR for a first priority, then any other priorities that remain for the site do not have to be addressed. If, however, only a small or no bonus is generated producing a mass transit improvement, any second priority need (i.e., alleviating sidewalk congestion) will have to be satisfied in order to produce any additional bonus floor area. There will be several additional ways to satisfy the second priority.

If there is no Transit Improvement Zone mapped for a development site, alleviating sidewalk congestion becomes the first priority, if mapped, and continuing through block circulation, the second priority. And so on, until each priority, in order, is addressed until the maximum 18 FAR is achieved, if indeed 18 FAR is desired. Aside from a mandatory transit improvement, none of the other priorities need be met if a bonus is not desired.

It is possible for one bonused amenity to address several of the targeted priority needs simultaneously. For example the developer might elect to provide a through block urban plaza to satisfy both the priorities of continuing through block circulation and providing needed open space. Other combinations of amenities are also possible.

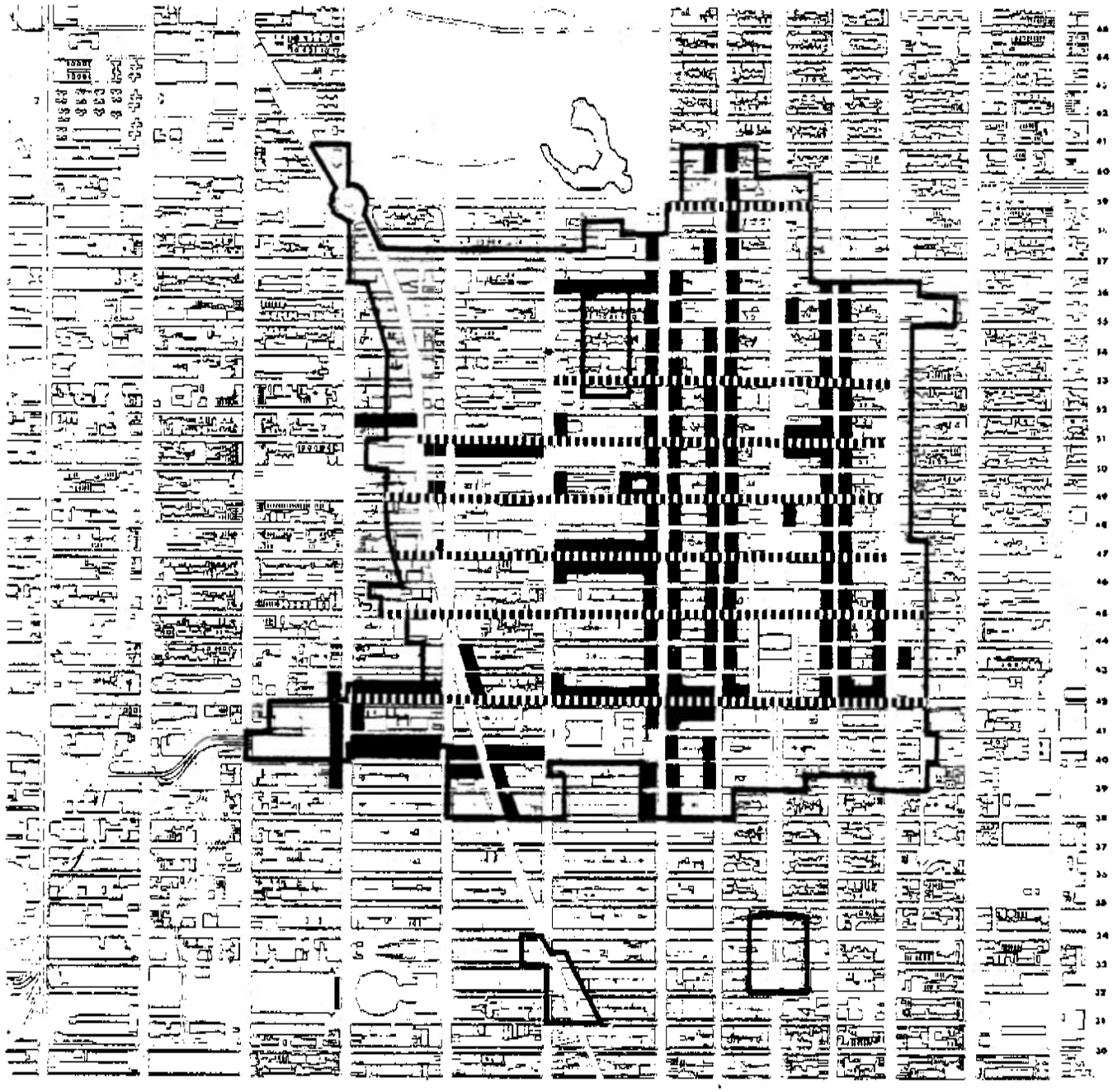
Where priority needs for an individual site are satisfied before the building achieves 18 FAR (or if no priorities have been mapped, although attempts will be made to avoid such a situation), then there are additional bonusable amenities which may be provided. These are described in the next section.

A detailed description of the targeted priority needs and amenities follows:

(1) Transit Station Improvements: Described in prior section.

(2) Alleviating Sidewalk Congestion: Numerous streets in midtown have reached high levels of pedestrian congestion. (See map 7.) As a priority second only to providing a transit connection, new developments along streets identified as congested will be required to provide additional pedestrian circulation space in order to generate additional floor area. These streets are:

- Third Avenue - from 42nd Street to 47th Street
- Lexington Avenue - from 40th Street to 61st Street.
- Madison Avenue - from 38th Street to 61st Street.



CONGESTED SIDEWALKS

0 600 1200'

Streets where sidewalks are crowded (source: RPA, DCP)

Streets with sidewalk carrying transit related pedestrian flow.

7

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- Avenue of the Americas - from 42nd Street to 57th Street
- Seventh Avenue, east side of street only - from 42nd Street to 50th Street.
- Broadway, west side - from 42nd Street to 50th Street, east side - from 38th Street to 44th Street.
- Eighth Avenue - from 38th Street to 50th Street
- 59th Street - from Second Avenue to Fifth Avenue
- 53rd Street - From Third Avenue to Avenue of the Americas
- 51st Street - from Third Avenue to Eighth Avenue
- 50th Street - from Third Avenue to Eighth Avenue
- 47th Street - from Third Avenue to Broadway
- 45th Street - from Third Avenue to Seventh Avenue
- 42nd Street - from Second Avenue to Eighth Avenue
- 41st Street - from Avenue of the Americas to Eighth Avenue
- 40th Street - from Third Avenue to Eighth Avenue.

(Note: Fifth Avenue, while congested, is excluded from this list because there is a special street-treatment plan proposed which will widen sidewalks, and it is important to maintain the shopping promenade at its present location without setbacks. Other exclusions from the above list may be made from time to time as measures for alleviating sidewalk congestion within the public street right-of-way, as are being developed by the Midtown Pedestrian Study, become implemented.) (See map 8.)

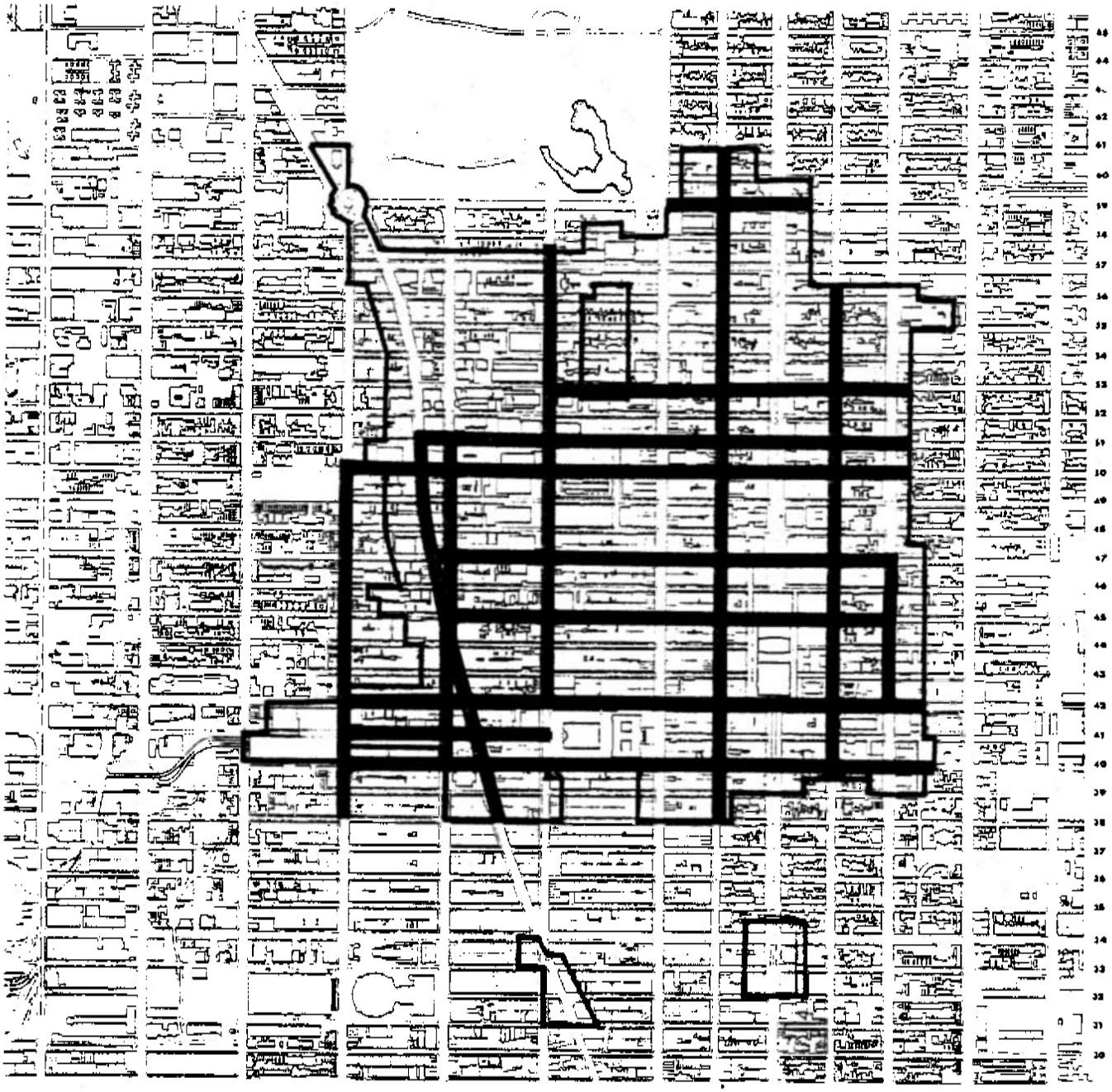
Where a development site has frontage along the above streets mapped to alleviate congestion, there are several response levels, using different bonused amenities or non-bonused solutions, from which developers may address this priority, the different levels generating varying values of bonus floor area. These include:

Level "A" provides one of the following:

- A continuous sidewalk widening, within the property line, between 5 and 10 feet deep, open to the sky and completely unobstructed.
- A continuous arcade, subject to re-defined standards.

Level "B" provides one of the following:

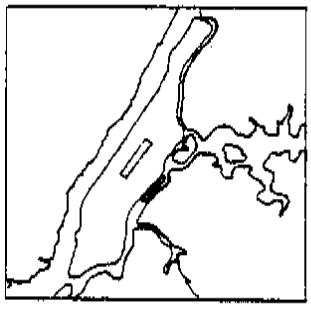
- At least two types of several newly defined circulation spaces or arcades.
- Sidewalk widenings on streets perpendicular to the street designated as congested, with no lobby entrances on the designated street.
- A corner space or corner arcade for each intersection of the designated street (avenue) with another street, and a through block circulation space, through block urban plaza, or non-bonused through block space parallel to the designated street.
- A corner space or arcade for each intersection of a designated east/west street with another street, and a through block circulation space, through block urban plaza or non-bonused through block space perpendicular to the designated east/west street.



ALLEVIATE SIDEWALK CONGESTION

0 600 1200'

8



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Level "C" provides one of the circulation spaces or arcades, and adds space to sidewalk by removing, consolidating and relocating existing large sidewalk furniture such as newspaper stands and trash receptacles (no bonus).

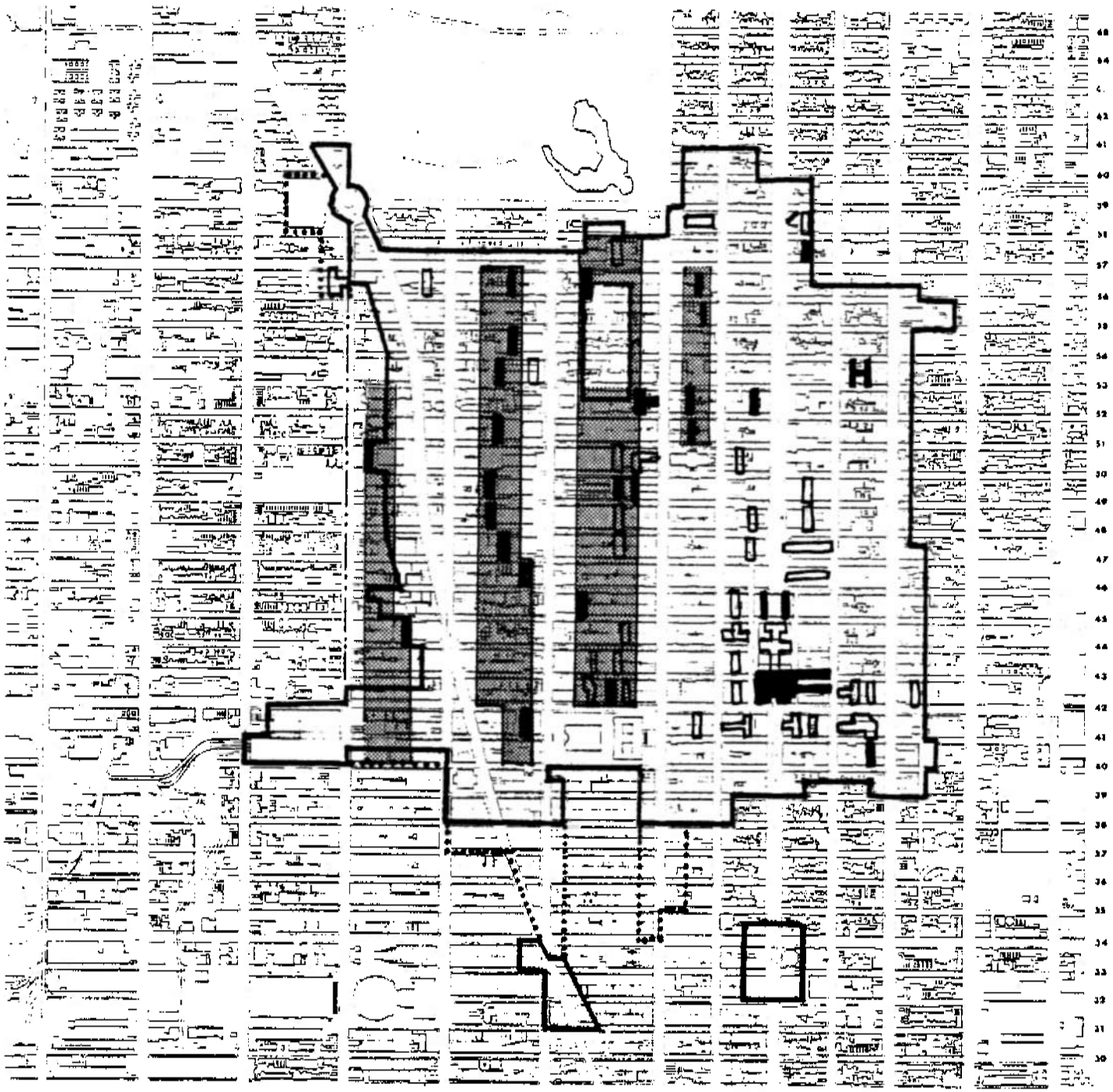
(3) Continuing through block circulation as part of a pedestrian network: Through block circulation is useful and desirable where it will help alleviate pedestrian congestion and where it provides alternative pedestrian routes. Opportunities for through block circulation should be limited, however, to the middle of long blocks (e.g., blocks between 5th and 6th Avenue), or where their positions align with other through block circulation facilities on blocks immediately adjacent. (See map 9.) To be most useful these facilities must be spaced sufficiently from the avenues.

Therefore, as a third amenity priority, certain locations in midtown will be mapped as appropriate for through block circulation. (See map 10.) As with the other amenity priorities, various options will be offered to satisfy the requirements:

- a "through block circulation space" (formerly called "through block arcade") with revised standards and bonus provisions
- a through block "urban plaza" with a minimum clear path of 15 feet
- an "activity space" (formerly called "covered pedestrian space"), with revised standards and bonus provisions, that connects two streets.
- an open arcade or through block lobby (going through a building in unbroken, parallel lines), not meeting the requirements of any bonused space and therefore unbonused.
- part of subway related facility, that, at grade, provides a clear path of 15 feet from street to street (bonused as part of transit connection).

Mapped areas are the blocks between:

- 7th and 8th Avenues, from 40th-45th Streets and Broadway and 8th Avenue, from 40th-52nd Streets
- Avenue of the Americas and Broadway, from 40th-45th Streets and Avenue of the Americas and 7th Avenue, from 45th-58th Streets
- 5th Avenue and Avenue of the Americas, from 42nd-53rd Streets and 56th-58th Streets
- Madison and 5th Avenues, from 53rd-57th Streets



EXISTING THROUGH BLOCK NETWORK

Public through block connection

Semi-public through block connection (lobbies, etc)

Potential through block connection area.

0 600 1200'

9

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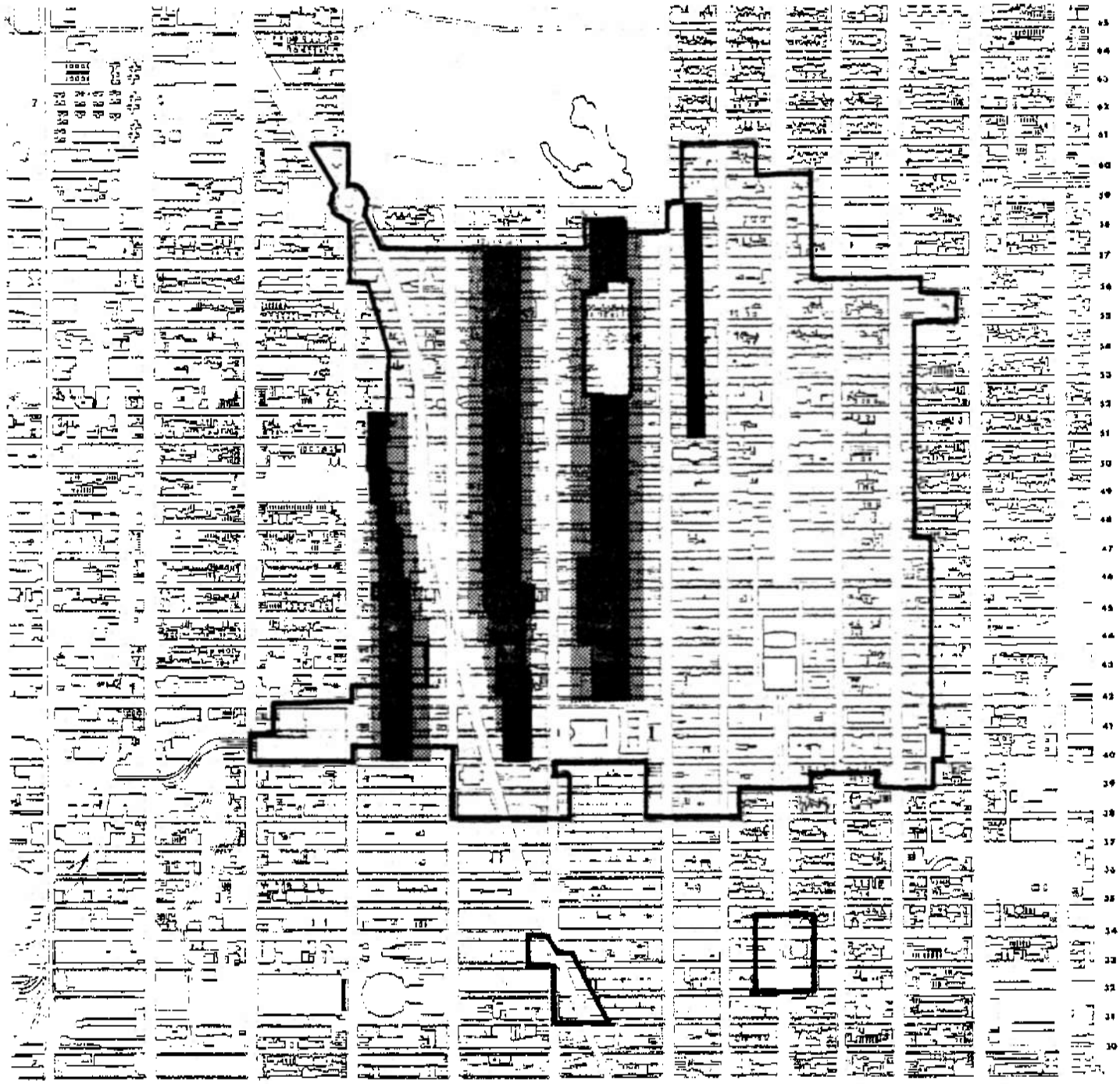


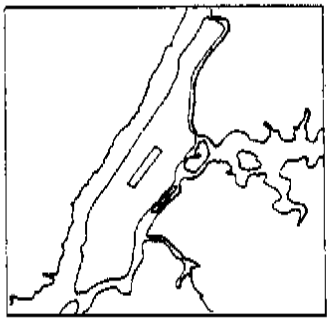
THROUGH BLOCK CIRCULATION

Through block permitted, but not closer than 150' to existing public TBC

Through block circulation required for large sites.

0 600 1200'

10



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Within the mapped areas, one of the permitted facilities providing through block circulation is targeted for a development site under the following conditions:

A. The development site consists at least in part of a through lot; and

B. There is an existing through block circulation facility with a minimum width of 12 feet on the adjacent (north/south) block;

   i. The new through block circulation facility shall be located to align with the existing through block passageway.
   ii. Where alignment is not possible due to site location or configurations, the new through block facility shall be located within the Block Center Band (an area defined below).
   iii. Where location within the Block Center Band is not possible due to site location or configuration, the through block facility may be located elsewhere on the block, but not within 100' of the intersection of two streets; or

C. Where there is no existing through block passageway on the adjacent block, but the development site lies at least in part within the block Center Band:

   i. The through block facility shall be located entirely within the Block Center Band.
   ii. Where this location is not possible due to site configuration or location, the facility may be located elsewhere on the site.

Additional requirements:

A. Definition of Block Center Band -
The area of specified width at the center of a block:

   i. For a block more than 600 feet in length the area of the Block Center Band shall extend for 150 feet on both sides of the block centerline.
   ii. For a block 600 feet or less the area of block center band shall extend 100 feet on both sides of block center line.
   iii. For a block of trapezoidal shape the center line shall be determined by averaging the differing lengths.

B. Maximum number of through block connections

   i. Where there already is a through block facility located within the block center band, the requirement to provide a through block facility will be waived.
   ii. Where there is no through block connection located within the block center band, there are to be not more than two through block facilities on that block.

C. Locational requirements

i. Through block facilities may not be closer than 200 feet to one another

ii. No through block facility may be closer than 100 feet from the intersection of two streets.

D. No through block circulation space shall be bonused outside the area of application, or where the requirements to provide a through block facility have been waived.

(4) Providing needed open space: Open space should be planned to coincide with the greatest need, and discouraged where it conflicts with other objectives, such as maintaining retail frontage along prominent streets, such as 57th Street. Mapped areas will denote locations where open space is a priority. These areas are primarily at midblock locations but also along Third Avenue. (Maps 11 and 12.)

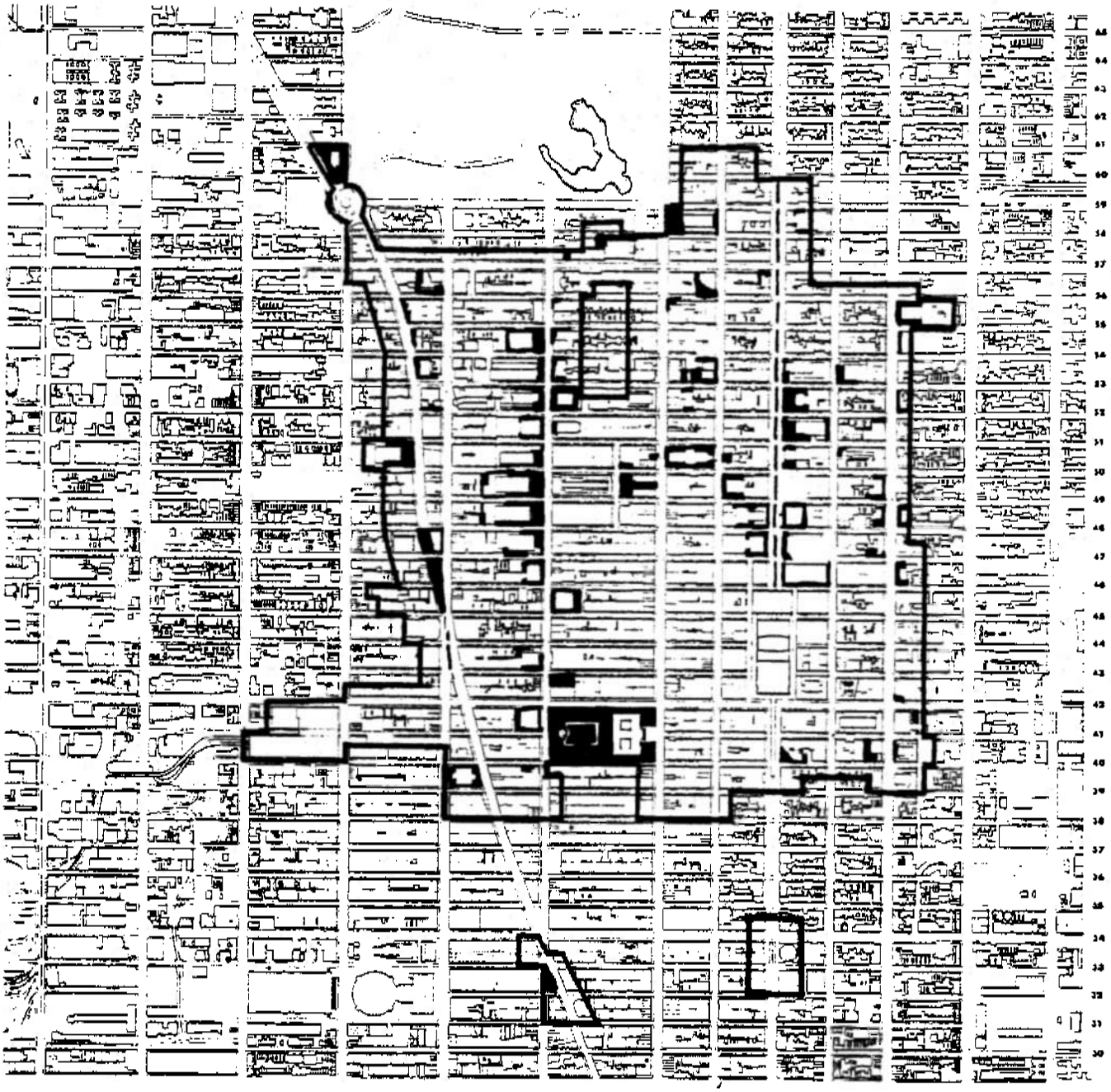
Open space needs can be met with an urban plaza of a minimum size of 1600 square feet, or with a new bonus amenity for an off-site urban park of somewhat different requirements.

Additional Bonusable Amenities

Most potential building sites in midtown Manhattan will be able to achieve some additional bonused floor area through the provision of facilities satisfying the targeting system. Where no priority has been mapped, or 18 FAR is desired but has not been achieved, the provision of amenities beyond the priority system will be permitted. The following amenities will be allowed:

- Arcade
- Circulation space
- Urban plaza
- Urban park (by special permit)
- Activity space (by special permit)

Since arcades and circulation spaces are small spaces that do not generate much bonus, development sites seeking several points of FAR will have to utilize an urban plaza, an activity space, or an urban park. These three spaces, however, will be usable primarily on larger sites only due to their minimum-size requirements. For example, an activity space cannot be bonused with a site smaller than 35,000 square feet.

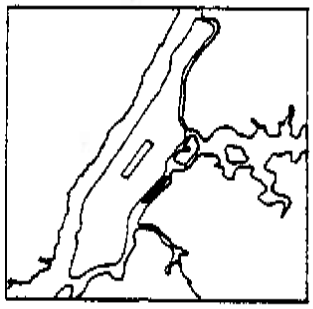


EXISTING PUBLIC OPEN SPACES

Public Open Space (including plazas, parks, and other open spaces used by the public)

0 600 1200'

11



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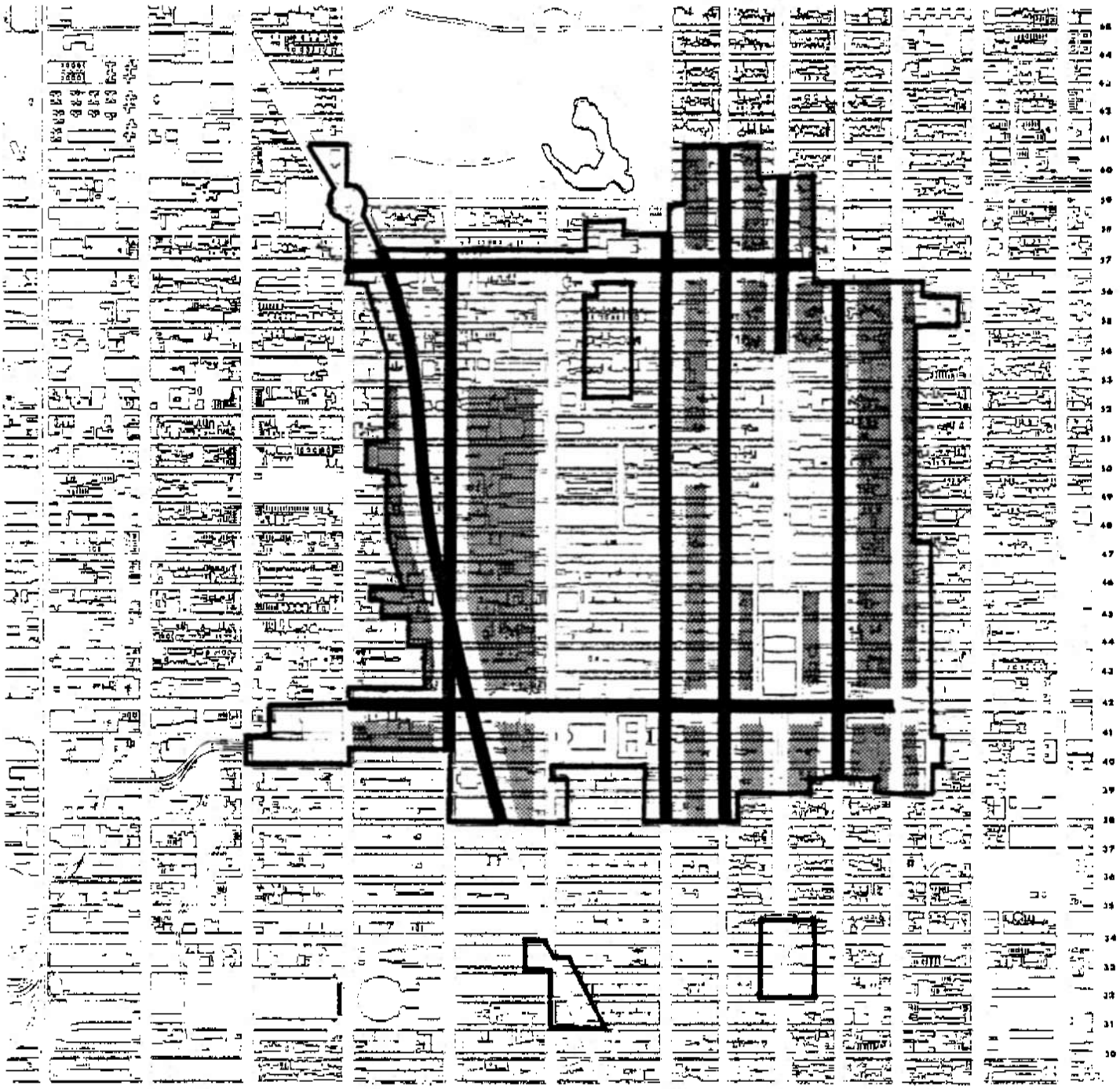


PROVIDING NEEDED OPEN SPACE

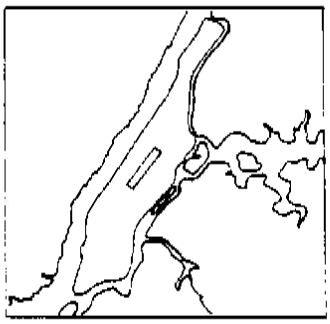
Streets where plazas are discouraged (as per street wall requirements)

Areas where open space is encouraged

Areas where open space is allowed

0 600 1200'

12



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Criteria for Amenities

Much has been learned in recent years from the experience with built amenities such as plazas, through block arcades, covered pedestrian spaces and others. The strengths and weaknesses of existing provisions and the need for new types of facilities have been identified.

Midtown continues to have need of a variety of pedestrian spaces for circulation and recreational purposes (particularly in New York's intemperate climate, options besides plazas are desirable). It is appropriate to continue to encourage the several kinds of spaces the city should have, provided that there are safeguards that the right faciilty is in the right location, that the high quality desired is achieved, and that the bulk controls are not vitiated.

Following closely suggestions of William H. Whyte, consultant to the study, every amenity provision for which a bonus is currently granted has been re-examined, and changes are proposed for all of them. Some new amenities, meeting newly defined needs, are also proposed.

The change fall into the following categories:

1. New amenities
2. Substantially revised amentieis
3. Slightly modified amenities
4. Amenities to be deleted

1. New Amenities: Several new bonus amenities, are being proposed to meet identified, targeted needs of midtown and lower Manhattan.

   (a) "Transit connections". Categories of subway station improvements are necessary, from simple stair relocations to major open air concourses with escalators. A range of bonus valuations is to be attached.

   (b) Additional pedestrian "circulation spaces". These would satisfy the particular requirements of alleviationg sidewalk congestion by placement at strategic locations, such as at corners and lobby entrances, and would earn a small bonus.

   (c) An "urban park". Modeled after Paley and Greenacre Park, and slightly different in character from a plaza. This facility may be allowed as an off-site amenity, with floor area transferred from the park to a receiving site.

2. Substantially Revised Amenities: Two amenity provisions -- the through block arcade and the covered pedestrian space -- will be rewritten to reflect the concerns expressed by the public, the recommendations of Mr. Whyte, and the lessons of built examples. Each of these spaces will be designated to perform a distinct function and threshold criteria will be devised to enhance that function. Bonuses will be variable for each, and increase as a proposed facility is improved to better perform its function.

(a) "Through Block Circulation Space" (formerly Through Block Arcade). Mandatory criteria will be for wider, higher spaces than have been built to date, with greater visibility from one street to the next assured through proportional restrictions. Location will be specified through the targeted priority mapping. The minimum bonus, now six square feet of floor area in the building for each square foot of through block (arcade) circulation space, will be reduced to three. Increments of bonus could be achieved as the space is made more attractive, in the magnetic sense. An increased bonus rate can be obtained by providing greater height, skylighting and seating and planting elements.

(b) "Activity Space" (formerly Covered Pedestrian Space). An interior public space needs to achieve a cirtical mass not only of size but of uses and services in order to successfully promote passive recreational acitivity.

The minimum requirements for activity spaces include:

- increased minimum size from 3,000 sq. ft. to approximately 7500 sq. ft., attached to a minimum site size of 35,000 sq. ft.

- retail space in an amount of floor area equalling the floor area of the activity space, with a documented marketing program, and with a convenant tieing the building's permanent certificate of occupancy to the occupancy of the retail.

- quantified seating requiremetns.

- skylighting.

Increments of bonus can also be achieved as measurable features and performance improve.

3. Slightly Modified Amenities: The following existing amenities will be slightly adjusted to reconcile them with the objectives and specifics of the entire package of zoning revisions.

(a) Urban plaza

The minimum size of an urban plaza will be increased to 1,600 square feet with a minimum dimension of 40 feet. Several other minor modifications will be made to correct provisions that are ambiguous or inappropriate.

(b) Sidewalk widening

The depth of a sidewalk widening on a wide street (avenue) will be changed from a flat 10 feet deep to between 5 to 10 deep. Sidewalk widenings on a wide street that are not continuous for an entire block front will not be permitted as-of-right. Midblock sidewalk widenings will be restricted to five feet in depth as-of-right.

(c) Open air concourse

Modifications of administrative provisions will be made to reflect mandatory nature of subway station connections. Some minimum criteria and dimensions will be altered to allow greater flexibility of design. An escalator will be required.

(d) Arcade

Limitations will be placed on arcades not serving useful circulation functions.

4. Amenities To Be Deleted

These existing amenity provisions serve no purpose and should be deleted:

(a) "Elevated" and "sunken plazas" - it is doubtful whether any more of these are wanted in midtown or lower Manhattan, but if so, they should be handled administratively as special permit modifications of either an urban plaza or open air concourse.

(b) "Public galleria" - obviated by the new "activity space" provisions.

Standards for Amenities

Arcade

Intent: An arcade is a small, covered space designed to augment needed circulation space at critical locations -- along sidewalks, at corners, and at lobby entrances.

Standards: There are to be three types of arcades:

Street arcade
Corner arcade
Entry arcade

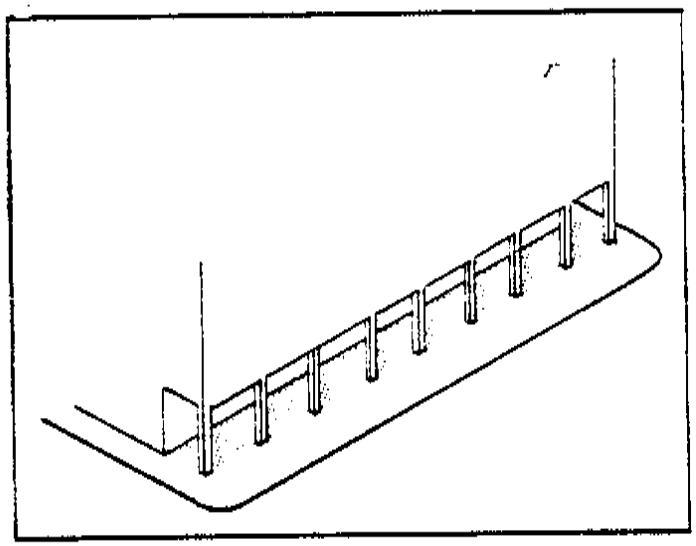
A. General Requirements

i. All arcades must have their long side front directly on a street (and not a plaza, sidewalk widening or other setback).
ii. No vehicular drives, trash storage or other objectionable uses or facilities permitted.
iii. Must be completely unobstructed except for columns as specified for each type, with no sculpture, seating, cafes, etc.
iv. Spaces under overhangs or cantilevered structures may count as arcades, if meeting other provisions.
v. An arcade must, throughout its area, be at the same level as the adjoining sidewalk.
vi. Existing buildings will be permitted to take advantage of bonus provisions if renovated to provide arcades as per requirements below.

B. Arcade Requirements

i. Street Arcade

Designed to provide continuous, weather protected circulation alongside sidewalks.



a. Allowed unconditionally if:

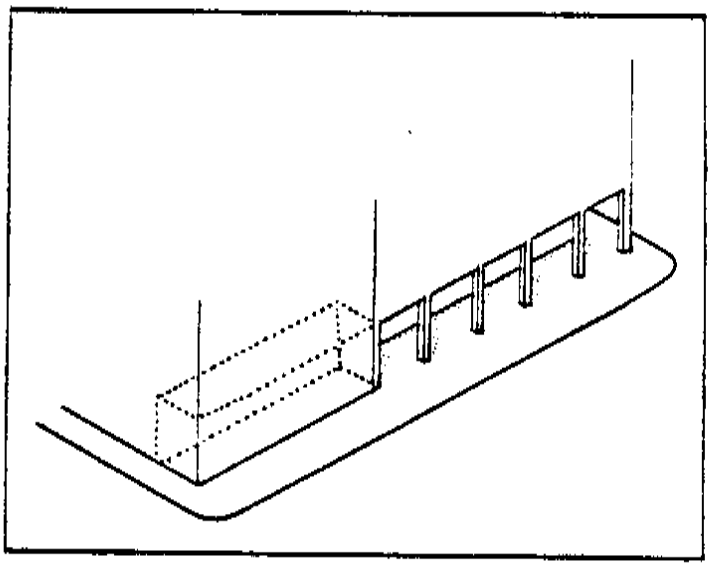
1. Open on three sides, and

2. Runs along a street line for the entire length of a block front, or

3. Less than entire block front, connects to a setback, sidewalk widening, plaza, or other arcade which is accessible to pedestrians, on the same or another lot, which will have the effect of continuing the street arcade for the entire block length.

b. Allowed conditionally if:

1. Open on two sides (not running the entire length block front), and



2. The CPC finds that there is reasonable possibility that the adjacent property can be redeveloped to provide continuity, and

3. Third side is an easily removable "Knock-out panel."

c. A new development adjoining an existing arcade is to be required to provide an arcade or other setback -- if bonus floor area is sought -- in order to continue the function of pedestrian circulation.

d. Depth of street arcade

Depth is measured perpendicular to street line.

1. Minimum - 10 feet clear, exclusive of all columns, door swings, etc.

2. Maximum - 20 feet.

e. Height - minimum 12 feet.

ii. Corner Arcade

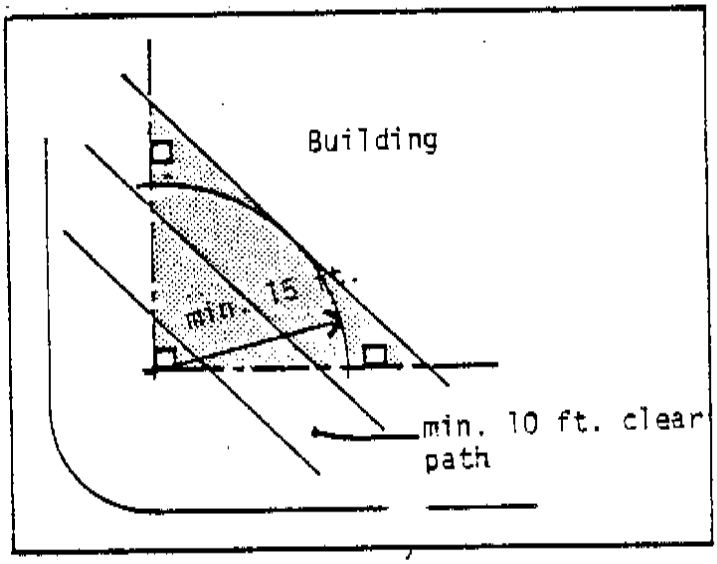
Designed to afford extra pedestrian space at corners.

a. Allowed unconditionally.

b. Located at the intersection of two street lines.

c. Depth

Depth is measured as a tangent to a radius drawn within the property from the intersection of two street lines.



1. Minimum radius - 15 feet, and

2. Is to have a clear path unobstructed by columns and door swings, consisting of a minimum distance of 10 feet between two unbroken parallel lines from street line to street line.

d. Area

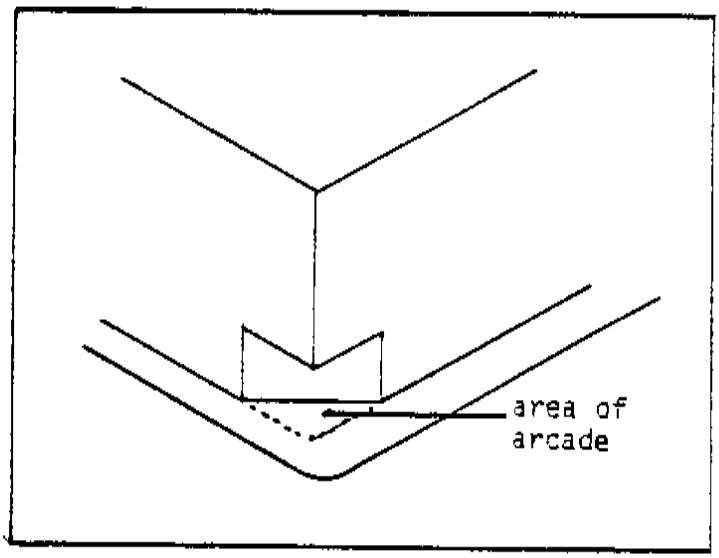
Maximum area that may be bonused is 425 square feet.

e. Building Entrances

Entrances to first floor uses are permitted from corner arcade. Entrances to building lobbies are permitted if the minimum radius is at least 20 feet, or if set back an additional 10 feet beyond the area of the corner arcade.

f. Height

Minimum height - 15 feet



iii. Entry Arcade

Designed to afford extra pedestrian space at building lobby entrances.

a. Allowed unconditionally, if located at the entrance to a use or uses occupying at least 6 floors.

b. Depth

1. Depth is measured perpendicular to street line.

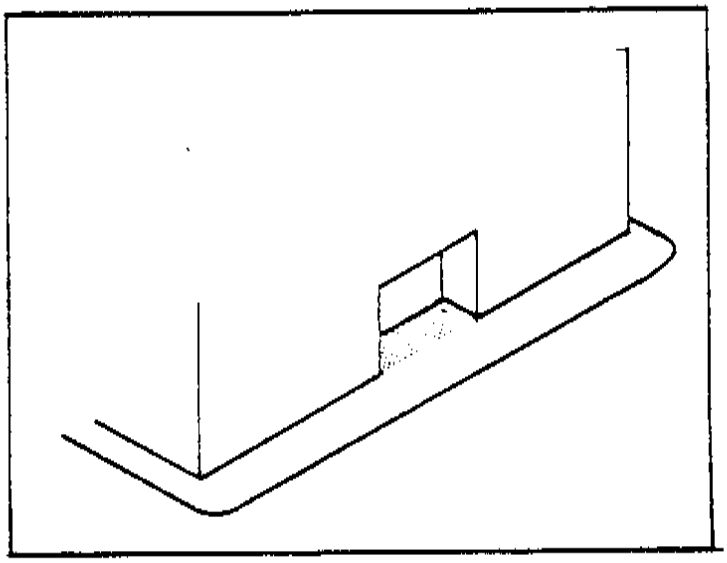
2. Minimum - 10 feet free and clear of all obstructions including door swings, columns, etc.

3. Maximum - 20 feet.

c. Maximum length - 40 feet.

d. Height

Minimum height 12 feet.



Applicability

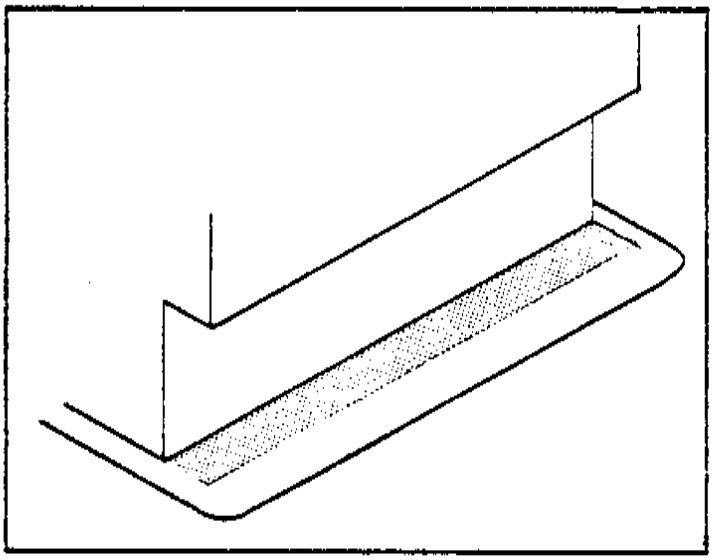
Arcades are to be permitted throughout 15 FAR districts subject to restrictions as described under "standards."

Administration and Bonus

A. The bonus rate for an arcade is 3 feet of floor area for each foot of arcade.

B. All contiguous unobstructed area up to specified maximum may be counted as arcade. Columns may not be calculated as part of the arcade area for bonus. (The area between columns may count as bonused area.)

C. An arcade that is columnless and more than 50 feet in height (as quasi-open space) is bonused at 5 square feet per square foot of arcade.



D. Existing buildings, whether complying or non-complying with existing bulk provisions, will be permitted to an increase of floor area, if renovated to provide an arcade along an entire block front, or to continue another arcade or pedestrian space, which will have the effect of completing a block front.

E. Administration

Arcades are allowed as-of-right, with a non-discretionary certification of compliance. Where an arcade is allowed conditionally, the City Planning Commission may allow the arcade bonus on a discretionary basis.

Circulation Space

Intent

A Circulation Space is a small, open space designed to augment needed space at critical locations -- along narrow sidewalks and at lobby entrances.

Standards

There are to be three types of circulation Spaces:

- o Sidewalk Widening
- o Corner Space
- o Entry Space

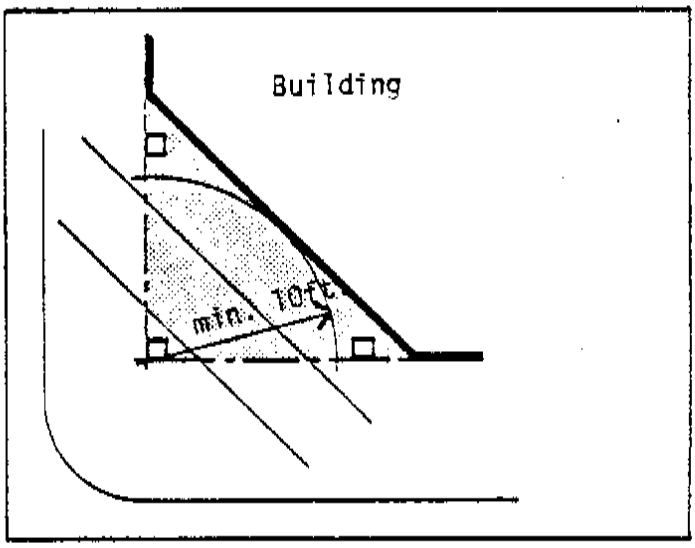
A. General Requirements

1. A circulation space must front on a street line.
2. No vehicular drives, trash storage or other objectionable uses or facilities permitted.
3. Must be completely open to the sky, except that it may have an awning covering not more than 20% of its area.
4. Must, throughout its area, be at the same level as the adjoining sidewalk plaza.

B. Circulation Space Requirements

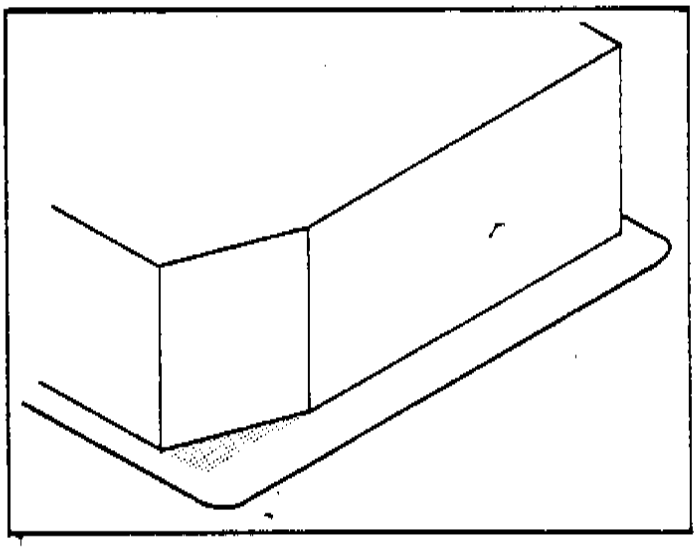
1. Sidewalk widening - will follow requirements currently under Urban Open Space provisions, with minor modifications.
2. Corner space - Designed to afford extra space at corners.
   a. Allowed unconditionally (requirements for a mandatory street wall, if any, may affect size)
   b. Located at the intersection of two street lines
   c. Must be completely clear of all obstructions, including: door swings, columns etc.

d. Minimum depth - Depth is measured as a tangent to a radius drawn within the property from the intersection of two street lines. Minimum radius -- 10 feet



e. Maximum area - maximum area that may be bonused is 425 square feet.

f. Building Entrances - entrances to first floor uses are permitted from a corner space. Entrances to building lobbies are permitted if the min. clear radius is at least 15 feet, or if set back, an additional 10 feet beyond the area of a corner space.

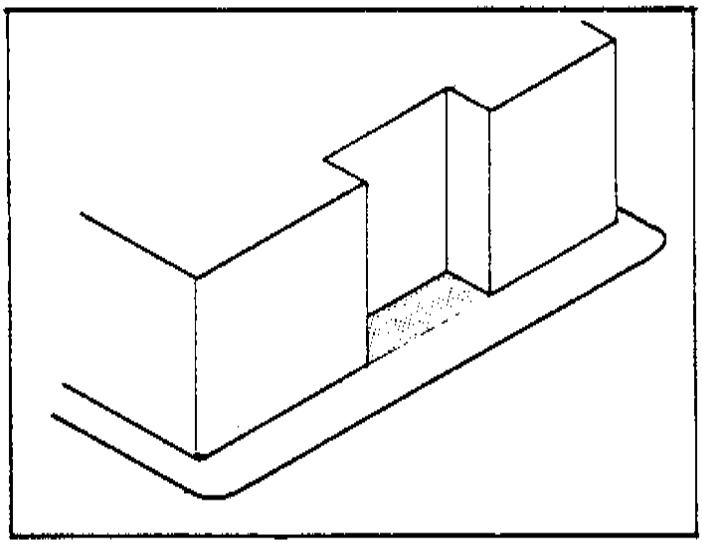


3. Entry space - Designed to afford extra walking space at building lobby entrances.

   a. Allowed unconditionally if located at the entrance to a use or uses occupying at least 6 floors.

   b. Depth - Depth is measured perpendicular to the street line. Minimum depth - 10 feet free and clear of all obstructions including door swings, except as provided below. Maximum depth-20 feet

   c. Length - Maximum length 60 feet.



   d. Obstructions - A total of up to 25% of the aggregate area of an entry space may contain seating, fountains, and planting, provided that clear paths of a minimum width of 8 feet are maintained around any such obstructions.

Applicability

Circulation spaces are to be permitted throughout 15 FAR districts subject to restrictions as described under "standards."

Administration and Bonus

The bonus rate for a circulation space is 10 square feet of floor area for each square foot of circulation space.

Circulation spaces are permitted as of right by non-discretionary certification of compliance. A sidewalk widening that does not complete a full block front is permitted on a discretionary basis by the City Planning Commission.

Through Block Circulation Space

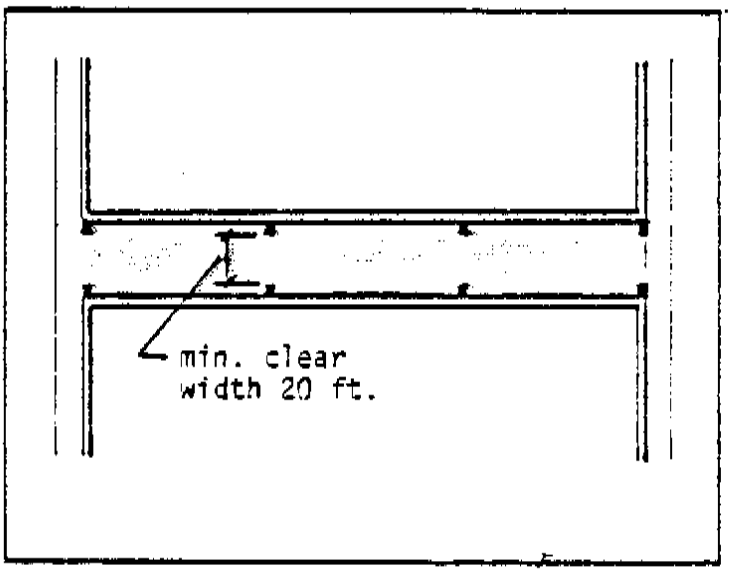
Intent: A through block circulation space (TBCS) is a major covered space designed to provide weather-protected, through block circulation as part of secondary pedestrian network. This amenity supercedes the exiting "through block arcade."

Standards: There are two levels of standards: minimum standards, which set the threshold level of compliance and which earn a fixed minimum bonus rate; and optional performance standards, which indicate features and facilities for which greater increments of bonus may be granted.

A. Minimum requirements

1. A TBCS is to front upon a sidewalk, an open space, or an arcade which is as high as the TBCS.

2. Minimum width 20 feet, free and clear of all obstructions including columns, except as modified by proportional and clear path requirements below:



3. Minimum length

Specified only by proportional requirements.

4. Minimum height

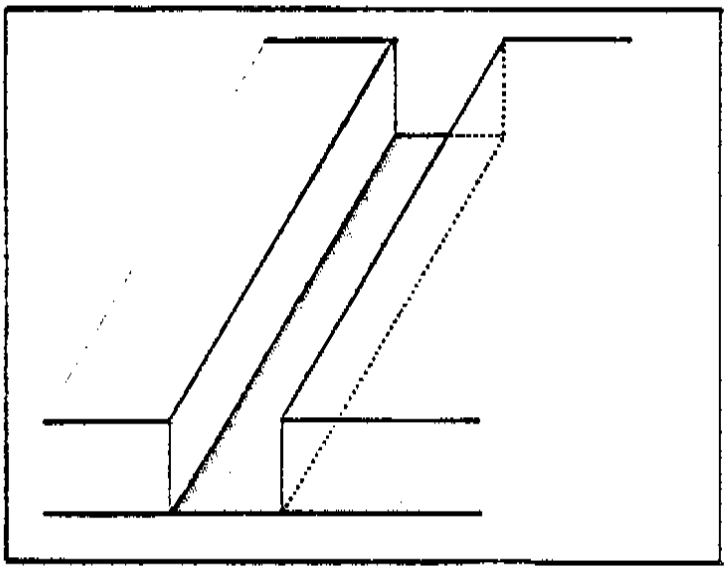
Minimum clear heights 20 feet, or as increased by proportional requirements below:

5. Proportional Requirements

Space must meet at least one of the following:

Minimum width divided by the length must be equal to or greater than 15 percent, or

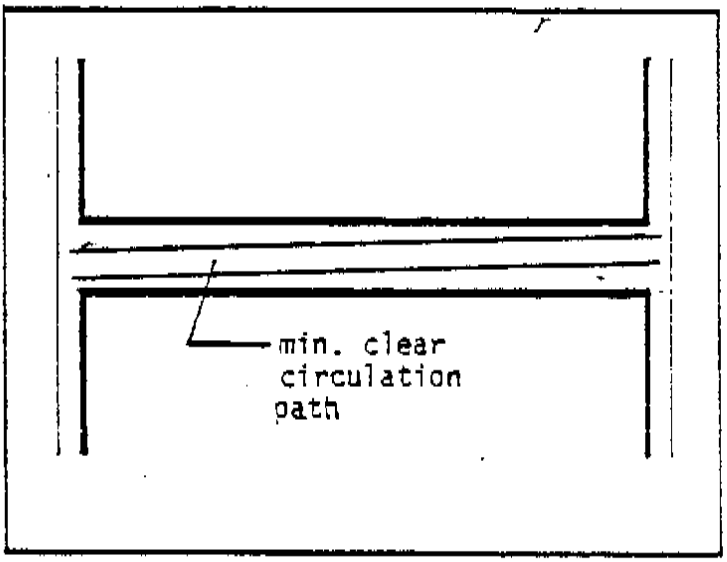
Minimum height divided by the length must be equal to or greater than 15 percent.



Effect of this provision is to increase the minimum width or height as the space gets longer. For example, 200 foot long space must have a minimum height or width of 30 feet (10 feet more than the absolute minimum).

6. Minimum clear path

Minimum clear path is 15 feet free and clear of all obstructions including door swings. Clear path is defined as the distance between two unbroken parallel lines running from one end of the space to the other.



Columns may penetrate the through block circulation space provided that:

a. There are two minimum clear paths each at least 8 feet wide, each in measured between two unbroken parallel lines, and

b. The minimum overall width is to be increased so that at any point there is an aggregate width free of columns of at least 20 feet, or the minimum width as required by the proportional requirements.

7. Entrance Conditions

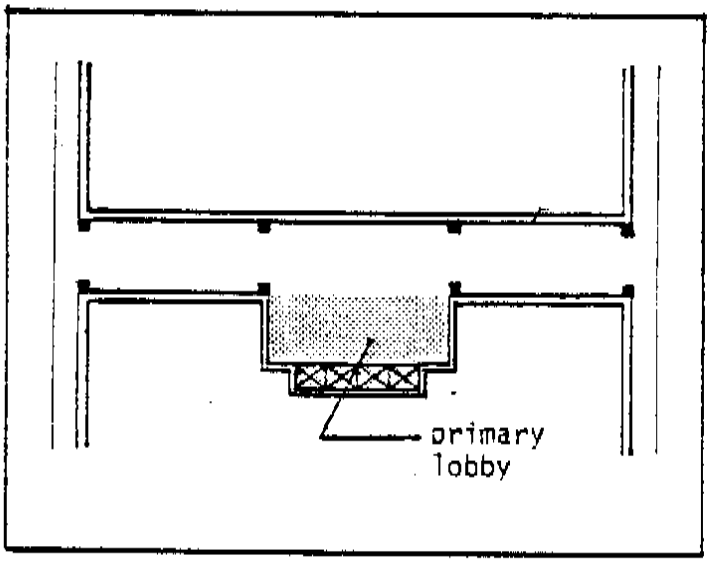
Ends facing the street must be completely unenclosed for the entire area of required opening.

8. Changes of grade

Must be at the same grade level at ends, as the sidewalks, open spaces or arcades which it connects. Level changes between ends are only permitted to reconcile grade differences at ends. All grade changes must be negotiable by wheel chair users, i.e. a ramp with a slope not more than 1 in 12.

9. No vehicular drives, trash or other storage, or other objectionable uses or facilities permitted.

10. At least one principal entrance to the lobby must be directly from the TBCS.



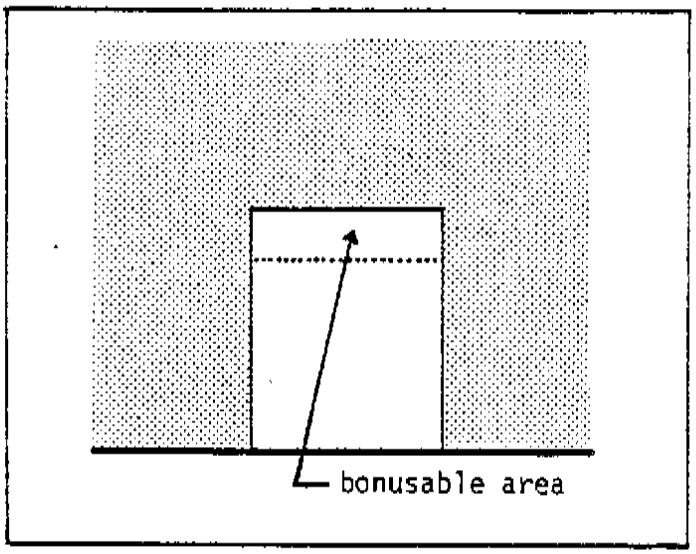
11. Hours of operation

Shall be open at least from 7 a.m. to 7 p.m. or dark, whichever is later, 6 days per week except certain legal holidays which must be specified in filed plans. Any gates, fences or devices used to close the entrances shall be completely removed during hours of opening, so as not to be visible.

B. Optional standards

For features or facilities provided below, increments of bonus may be achieved, as described in section for Administration and Bonus.

1. Increased height- greater height of a TBCS enhances visibility and increases the attractiveness of the space. Extra height above the minimum will increase the bonus rate at an increasing scale.



2. Skylighting- addition of a skylight is a valuable feature for ths utility and appeal of a TBCS. Bonus for a skylight will be proportional to the square foot area of the skylight (measured on a horizontal plane).

3. Seating, planting and landscaping will visually enhance a TBCS. As the width of a TBCS increases beyond the minimum dimension of the clear path, landscaping is required. Once the amount of seating reaches a minimum level, the bonus rate may be increased.

Within the landscaping area, features permitted in urban plazas will be permitted; however, no landscaping features may be placed within the clear path(s).

Applicability

A TBCS will be permitted only in 15 FAR districts and the Theatre District, and only in locations mapped as a priority for through-block circulation.

Administration and Bonus

A. Administration/compliance

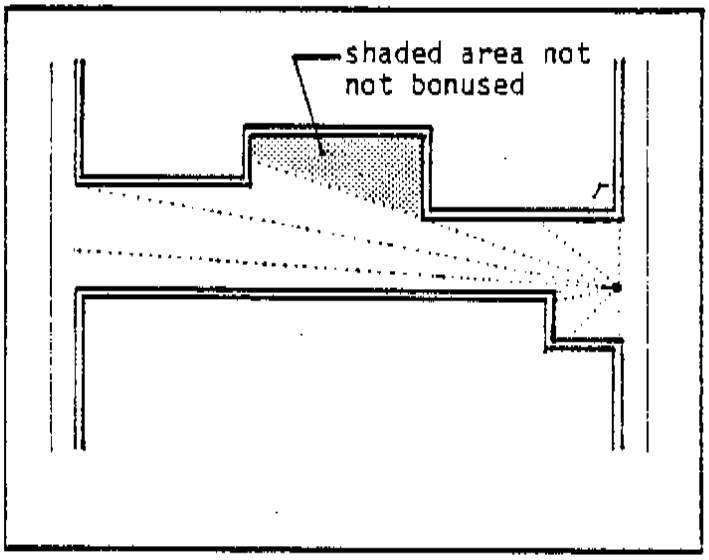
Administration process will be by a non-discretionary, certification of compliance with the regulations.

B. Minor modifications

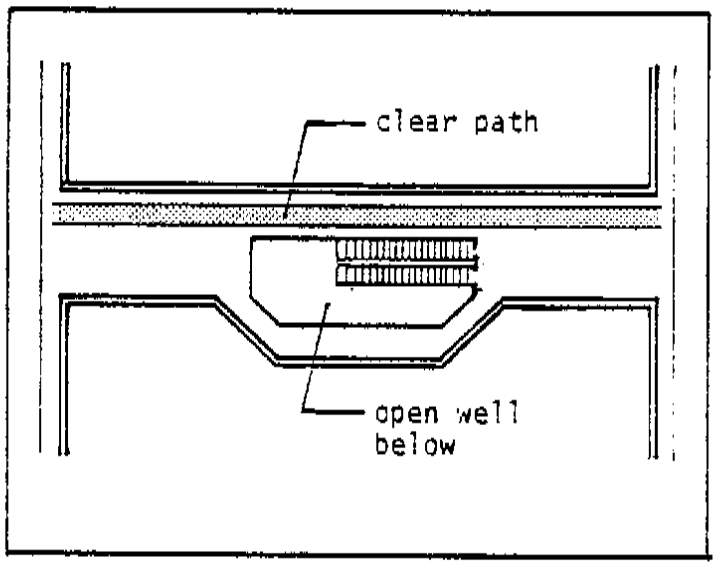
Minor modifications of minimum dimensional criteria due to problems of site configuration or due to details which improve the level of design, may be allowed by the City Planning Commission, after a public hearing and notifications of the local Community Board.

C. Area of TBCS that may be bonused

1. All contiguous area that may be seen from one vantage point at the entry line (the one point to be chosen by developer) may be counted towards bonus. Columns and other obstructions are considered to be invisible.



2. Area of columns may not count, and elevator lobbies may not count, area of wells open to areas below may count (not allowed to encroach in clear path).



D. Basic Bonus

3 sq. ft. of floor area for each square foot of TBCS.

E. Increased Bonus Rate

Rate may be increased up to 9 sq. ft. of floor area for each sq. ft. of TBCS if the following features are provided:

1. Increased Height

Increment of Height Above Minimum	Total Minimum Height	Amount by which Bonus Rate may be Increased in Sq. Ft. of Floor Area Per Sq. Foot of TBCS
First 10 feet	30	+ 0.2
Second 10 feet	40	+ 0.4
Third 10 feet	50	+ 0.6
Fourth 10 feet	60	+ 0.8
	Total Increase	2.0

2. Skylighting

For each one-third of the area of the TBCS that is skylighted, add 1 point to bonus. Skylit area is measured in a projection onto a horizontal plane (reflected ceiling plan). Total increase possible - 3.0.

3. Landscaping

A TBCS that is more than 20 feet wide shall provide landscaping and seating. Seating shall be provided at the rate of 1 linear foot of seating for every 60 sq. ft. (total) of TBCS. If seating is provided all the rate of 1 linear foot of seating for each 40 sq. ft. of TBCS, bonus may be increased by 1.0 points. Total increase possible - 1.0.

Activity Space

Intent:

An activity space is a major enclosed public space designed to provide opportunities for passive recreation. It is an optional bonus amenity which is limited to large development sites, within a limited area in midtown and lower Manhattan. These provisions supersede "covered pedestrian space", "public galleria", and "covered pedestrian space" in the Fifth Avenue Special District.

Standards

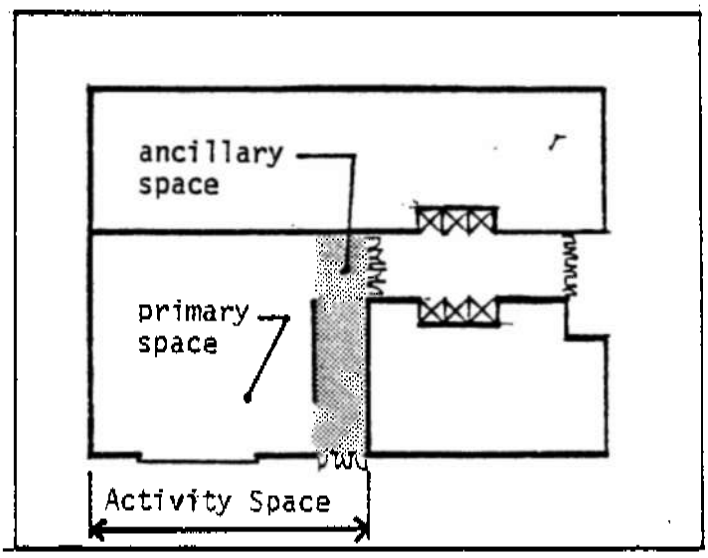
There are two levels of standards: Minimum Standards, which set the threshold level of compliance and earn a fixed minimum bonus rate, and Optional performance standards, which indicate features and facilities for higher levels of pedestrian comfort and convenience, for which greater increments of bonus may be granted.

A. Minimum requirements

An activity space is to have a "primary space" which shall be the main chamber to contain recreational uses, and "ancillary space" which serves as additional recreational areas or service circulation areas for the primary space.

1. Minimum size

The primary space is to be at least 5000 sq. ft. in area and not less than 60% of the total amount of activity space. Where the ancillary areas total less than 2000 square feet, the primary space is to be at least 6000 square feet in area.



2. Location/Orientation

An activity space may be entered from a sidewalk, from a bonused amenity, or unbonused space. However, it must have at least one "main" entrance, as defined below, facing, and visible and accessible from a street.

3. Dimensions

(a) Shape

All points within the primary space must be visible to all other points (columns or integral features and facilities of the primary space are considered invisible). Structural shear walls or walls over five feet in height are not permitted as part of a primary space.

(b) Minimum Dimension

The minimum dimension of a primary space is 40 feet.

4. Location of components

The ancillary space and the primary space are to be open one to the other. No part of any ancillary space is to be located farther than 30 feet from its boundary with the primary space.

5. Minimum height

Primary space --------30 ft. clear
Residual space -------20 ft. clear

6. Level changes

The primary space is to be all at one level, with minor adjustments of levels permitted. Ancillary space is to be at any point not more than 3 feet above nor more than 3 feet below the level of the primary space.

7. Elevation

The primary space is to be in elevation not more than 3 feet above nor more than 3 feet below the level of sidewalk fronting the main entrance.

8. Enclosure

The acitivity space is to be at least partially enclosed. It may be completely enclosed.

9. Lobby separation

In order to distinguish functions and aid in environmental control, the elevator lobby is to be separated from the activity space by walls or glass enclosures. They may be accessible to one another through doors.

10. Entry requirements

At least one entrance to the space is to be directly from a sidewalk and is to be designated as the "main" entrance. The main entrance may be at the face of an arcade, through block circulation space or other space, however, under any circumstances is to meet the following standards:

(a) May be enclosed or unenclosed.

(b) Minimum opening size, 20 feet wide and 30 feet high. The full opening is to visible to the sidewalk, with no obstructions to visibility, including columns.

(c) If enclosed, the enclosure of the opening, for its full height is to be clear, untinted glass. (See Skylight/daylight provisions below.)

(d) The main entrance is to contain public notice, signage, and information as to the existence, nature, public accessibility, and hours of opening of the space including current programs and events. (Signage program to be developed).

11. Hours of opening

Activity space to open at least from 8 a.m. to 7 p.m. six days of the week, except certain legal holidays specified in the application.

12. Circulation

Main circulation paths within the activity space are to be a minimum of 10 feet, free and clear of all obstructions.

Provisions for wheel chair accessibility must be assured, necessitating changes in grade accompanied by ramps or slopes not exceeding 1 in 12, or elevator service.

13. Environmental control

An activity space is to have air temperature and humidity controlled for comfort, but does not have to be heated or cooled to the level of the lobby or office space. Temperature may be at an intermediate range between outdoors and office space.

(New York State Energy Conservation Construction Code is applicable to these spaces. Features and facilities of the Activity space must be factored into energy budget. See Skylight/daylight provisions.)

14. Skylight/daylight

At least one-fourth of the area of an activity space is to be skylighted. Skylight area is measured on a projection onto a horizontal plane (reflected ceiling plan).

Where the primary space of the activity space is directly visible from sidewalks through clear, untinted glass walls for a minimum height of 30 feet and a length equal to one-fourth of the perimeter of the primary space, the skylighting provision may be waived.

Where glass walls or skylights are exposed to direct sunlight, heat loss/gain, may be controlled by overhangs, mechanical venting, or mechanically operated shading devices, such as blinds. Such mechanical systems shall be specified in the application and a program for their operation included.

15. Retail requirements

(a) Retail required

Unless otherwise permitted by the City Planning Commission, activity spaces are to serve by retail uses permitted by the underlying district regulations. The CPC may authorize alternative programs, see Administration and Bonus.

The amount of floor space devoted to retail use shall be equal to the amount of floor space of the activity space.

All retail shall be directly accessible to the activity space, Part of the retail space may be located on other floors directly connected to the acitivity space by means of escalators.

(b) Retail size

At least 50 per cent of the retail space shall be occupied by uses with frontage not greater than 20 feet in width.

(c) Marketing plan

The application is to contain a plan for marketing the retail space, including the kinds of retail uses being sought, and a program for advertising and public information.

16. Seating, planting and landscaping

The activity space shall contain seating, tables, planting and landscaping.

There is to be one linear foot of seating for each 30 square feet of activity space (seating standards comparable to urban open space).

There is to be one table for each eight linear feet of seating.

17. Other facilities

Public rest rooms, telephones, water fountains and other public facilities are to be included.

Kiosks not more than 120 square feet in area are permitted to occupy part of the activity space. Not more than 2 kiosks are permitted.

18. Objectionable uses.

No building service areas, vehicular accessways, building trash storage, mechanical equipment, storage facilities or other objectionable uses are permitted as part of an activity space.

B. Optional standards

For features or facilities provided below, increments of bonus may be achieved, as described in section for Administration and Bonus.

1. Increased height -- greater height of an activity space enhances visibility and increases the attractiveness of the space. Extra height above the minimum will increase the bonus rate at an increasing scale.

2. Skylighting -- additional skylighting is a valuable feature for the utility and appeal of an activity space. Bonus for skylighting will be proportional with the square foot area of the skylight (measured on a horizontal plane).

3. Once the amount of seating reaches a minimum level, the bonus rate may be increased.

Applicability

An activity space will be permitted only in FAR 15 districts and the Theatre District in accordance with the satisfaction of the priorities of the targeted amenities system. Permitted only with sites 35,000 square feet or more (site area of new construction only).

Administration and Bonus

1. Administration/compliance

Administrative process will be by a discretionary review process. The Certificate of Occupancy will be conditional upon the rental of at least 75% of the space allocated for retail use.

2. Modifications

Modifications of minimum dimensional criteria or standards due to problems of site configuration or due to details which improve the level of design may be allowed by the City Planning Commission, after a public hearing and nofitications of the local Community Board. The Commission may allow programs for the activity space, other than retail.

3. Bonus

The basic bonus rate is 9 square feet of floor area for each square foot of activity space.

4. Increased bonus rate

Rate may be increased up to 15 sq. ft. of floor area for each sq. foot of activity space if the following features are provided:

a. Increased height

Increment of height above minimum over primary space	Total minimum height	Amount by which bonus rate may be increased in sq. ft. of floor area per sq. foot of activity space
First 10 feet	40	+ 0.2
Second 10 feet	50	+ 0.4
Third 10 feet	60	+ 0.6
Fourth 10 feet	70	+ 0.8
	total increase	2.0

b. Skylighting

For each one-fourth of the area of the activity space that is skylighted above minimum requirement, add 1 point to bonus. Skylit area is measured in a projection onto a horizontal plane (reflected ceiling plan). Total increase possible -- 3.0

c. Landscaping

If seating is provided all the rate of 1 linear foot of seating for each 20 sq. ft. of activity space, bonus may be increased by 1.0 point. Total increase possible -- 1.0

Urban Park

Intent: An Urban Park is a "vest pocket" type of park designed for passive recreation to be built as an off-site amenity with the floor area transferred to a receiving site.

Standards

A. Location

1. An Urban Park must adjoin at least one narrow street.

2. At its nearest point, it must be at least 100 feet from a wide street.

3. Urban Park may not be on the same block as an existing park, unless they are adjacent and will function as a single park.

4. There must be adequate access of daylight to the Urban Park.

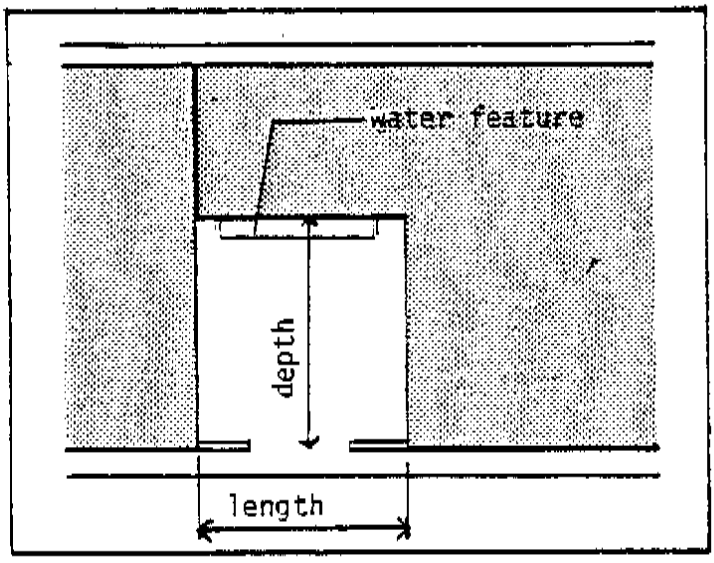
5. It may be within a 1,000 ft. radius of the receiving site.

B. Area and Dimensions

1. The minimum area is 4,000 sq. ft.

2. The minimum length is 40 ft. along any front lot line.

3. The minimum depth is 60 ft., perpendicular to any front lot line.



C. Access

1. It must be publicly accessible along at least 33% of each frontage.

2. It must be open for public access from 8:00 A.M. to dark at least six days per week, except certain legal holidays to be specified on the application.

3. Access may be provided from the Urban Park to food and beverage establishments in adjacent buildings.

D. Walls

1. Surrounding walls without entrances or windows should be decoratively finished or lined with continuous planting to a minimum of 15 ft. in height, or to the top of the walls, whichever is less.

2. To reflect as much light as possible, the surrounding walls common to adjacent buildings or located above side lot lines are to be painted or faced with light colored materials to a height of at least 40 feet or to the top of the adjacent wall, whichever is less.

E. Obstructions

1. It must be unobstructed from the lowest level to the sky except for features and equipment normally found in public parks.

F. Seating

1. The minimum is one linear foot of seating for each 20 sq. ft. of Urban Park area. Private food service seating does not qualify.

2. A maximum of 75% of the seating may be moveable and may be stored after dark.

G. Trees

1. The minimum is one tree for each 500 sq. ft. of Urban Park area.

H. Handicapped

1. Handicapped accessibility must be assured to 60% of the area.

I. Water

1. There must be a feature of continuously moving water, whose sound will mask street noise.

J. Maintenance

The Urban Park shall be permanently maintained by the owner in accordance with a maintenance plan filed with the City Planning Commission. A performance bond is required to guarantee conformance.

Applicability

An Urban Park will be permitted throughout 15 FAR districts subject to restrictions as described under "standards."

Administration and Development Rights Transfer

A. The administrative process will be a discretionary special permit procedure.

B. An Urban Park is to be in the same fee ownership as a receiving lot to which at least half of its air-rights are transferred.

C. The maximum amount of floor area transferable from an Urban Park, shall not be more than 15 times its lot area.

D. The maximum amount of floor area transferable to a receiving lot shall have a maximum of 20% of the basic allowable FAR of the receiving lot.

E. The developer must agree to file documents certified by the Commission for the transfer of air-rights and restrictions on the parcels involved.

Special Zoning Districts

A. Fifth Avenue Special District

The Fifth Avenue Special Zoning District has been successful in several respects -- preventing plazas from being constructed along the avenue and maintaining retail, for example. Several other provisions are questionable, however, notably the high density -- 21.6 FAR is permitted -- and certain provisions which generate bonuses.

When adopted in 1971, the Fifth Avenue District recognized the inadequacies of the underlying zoning for a major street such as Fifth Avenue, and the District modified every major area that zoning affects: density, use, bulk, and amenities. Now, however, the comprehensive revision of the zoning code for Midtown renders obsolete many special provisions of the Fifth Avenue District. The new bulk provisions will obviate the need for many of the special bulk provisions in the district for coverage, tower encroachment, etc. The targeting and upgrading of amenities, exactly the approach taken for the Fifth Avenue District in 1971, will now be the overall approach for all of Midtown. Fifth Avenue, therefore, will be woven into this consistent pattern of land use regulation.

All of this is not to say a Special Fifth Zoning District is unnecessary: Fifth Avenue is special and requires extraordinary treatment. The following are the overall changes to the district.

1. Density

   The current maximum FAR of 21.6 is to be reduced to a base of 15 FAR plus 3 FAR, if bonuses can be achieved, to a maximum of 18.

2. Bulk

   (a) Tower

   The special bulk provisions for tower size and encroachment should be abandoned and the revised bulk controls, which will be applicable to Fifth Avenue, substituted.

(b) Bulk distribution

An existing provision (Section 87-07) which allows an entire zoning lot to be built at 18 FAR (currently up to 21.6), even though portions of the lot may be out of the district boundary and in a 10-12 FAR zone (C5-2 district); and additionally allows the free distribution of bulk across district boundaries on an as-of-right basis, should be deleted. In this regard, Fifth Avenue should be treated uniformly with the rest of Midtown.

(c) Street wall

Mandatory street wall provisions will continue to be in effect with the exception of the change below for setbacks.

(d) Setbacks

The current mandatory setback of 40 feet at the height of 85 feet along only the west side of the street is to be modified as follows:

On both sides of the street there should be a setback of at least 10 feet occurring at a height between 85-125 feet, whichever height better matches existing building heights.

(e) Zoning Lot mergers

Zoning lot mergers on Fifth Avenue would be handled similarly to the rest of Midtown, as discussed previously.

3. Retail

Existing retail requirements of the Special District for a minimum frontage and a minimum of 1 FAR of retail floor be continued. Existing provisions which bonus additional retail should be deleted.

4. Bonuses and Amenities

Previously, special amenities and bonuses made sense for Fifth Avenue. Now, however, bonuses and amenities can and should be the same as those proposed in revisions for all of Midtown.

The following special bonus provisions should be deleted:

: All "Through Block Connections"
: Terrace Level Landscaping
: Bonuses for uses - retail, hotel or residential

5. Visual Quality

Noting one of Fifth Avenue's special qualities, that more than 80% of the existing buildings on the avenue have facades that are all or part limestone, and the jarring quality of some all-glass departures from this motif, there is strong support for mandating the use of certain materials. Therefore we are recommending a requirement that at least 20 percent of the frontage of a new building, up to its first setback at a height between 85 and 125 feet is to be of a light colored masonry.

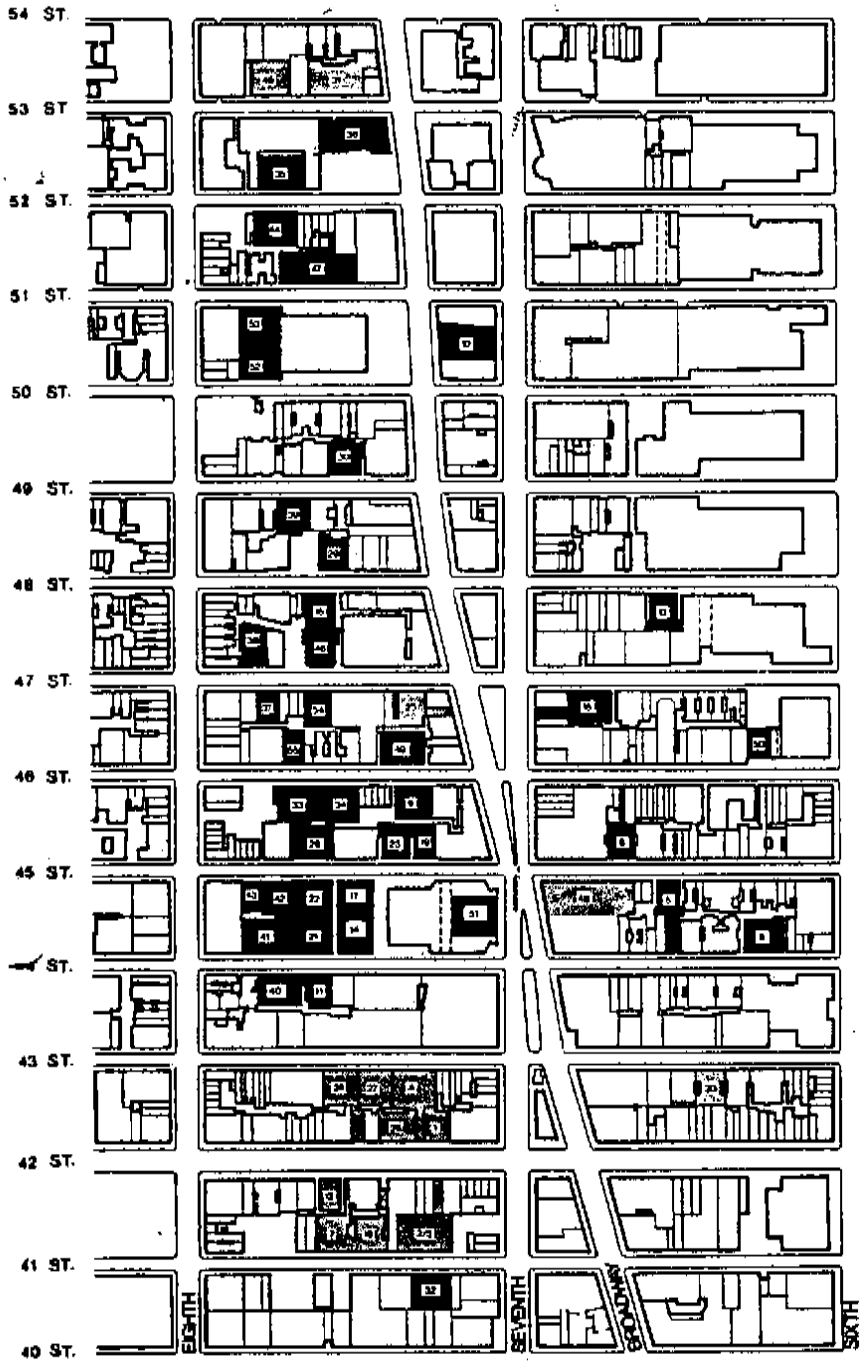
B. Theater District

A study of Special Theatre Zoning District is underway with the objective of arriving at a strategy which provides for the preservation and strengthening of the theater industry. (See Map 13.)

The study's scope extends beyond zoning, to analyze the economics of the theatre industry, tax policies and effects, and preservation techniques, among other things. While the existing special zoning district encourages the construction of new theaters in new developments, it is silent about preserving existing theatres. That policy merits revision. The existing provisions do not contain any specific standards for bulk, use or amenity which may enhance or be compatible with the construction and preservation of theatrical uses. This too should be revised.

The Theatre District Preservation Study will be able to utilize the new zoning criteria developed for midtown bulk, and the targeting and standards of amenities, modifying the provisions where necessary to suit the specialized objectives of the district and the complicated nature of preservation and development rights transfer techniques.

The findings of the Theatre District Study will be presented in the final report.



1.	VICTORY	1899	770
2.	NEW AMSTERDAM	1903	1700
3.	NEW AMSTERDAM ROOF GDN.	1903	500
4.	LYRIC	1903	1500
5.	HUDSON	1903	770+
6.	LYCEUM	1903	1000
7.	LIBERTY	1903	1234
8.	BELASCO	1907	511
9.	HELEN HAYES	1910	845
10.	WINTER GARDEN	1910	1470
11.	LITTLE	1911	518
12.	JULIAN ELTINGE	1912	518
13.	CORT	1912	1100
14.	SHUBERT	1912	1400
15.	LONGACRE	1912	1021
16.	PALACE	1912	1800
17.	BOOTH	1913	700
18.	SAM HARRIS	1913	1101
19.	BIJOU	1916	
20.	HENRY MILLER	1917	
21.	BROADHURST	1917	1120
22.	PLYMOUTH	1917	1000
23.	MOROSCO	1917	961
24.	SELWYN	1918	1100
25.	FORUM	1918	968
26.	TIMES SQUARE	1919	1030
27.	APOLLO	1919	1277
28.	MUSIC BOX	1921	1000
29.	RFK	1921	945
30.	AMBASSADOR	1921	1000
31.	CBS TV THEATRE	1921	1215
32.	BILLY ROSE	1921	1164
33.	IMPERIAL	1923	1458
34.	46TH STREET	1924	1375
35.	ANTA PLAY HOUSE	1924	934
36.	BROADWAY	1924	1890
37.	BROOKS ATKINSON	1925	1097
38.	BILTMORE	1925	920
39.	EUGENE O'NEIL	1925	1016
40.	ST. JAMES	1927	1667
41.	MAJESTIC	1927	1780
42.	ROYALE	1927	1203
43.	GOLDEN	1927	778
44.	ALVIN	1927	1387
45.	STUDIO 54	1927	
46.	ETHEL BARRYMORE	1928	1090
47.	MARK HELLINGER	1930	1600
48.	CRITERION	1935	
49.	LUNT-FONTANNE	1957	1500
50.	AMERICAN PLACE	1970	300+
51.	MINSKOFF	1971	1635
52.	CIRCLE-IN-THE-SQUARE	1971	650
53.	URIS	1971	1800+
54.	EDISON	1970's	499
55.	CENTURY	1970's	299

THEATERS

Legitimate Theaters

Other Use

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CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

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Map Changes

In establishing a development policy for Midtown, the study has identified areas of preservation, stabilization and growth. Available implementation tools, such as tax incentives programs, will be targeted based upon those policy determinates. Zoning controls must also be consistent with such strategies.

The part of the zoning code most suitable for effectuating these policies is the density controls (FAR restrictions) permitted in the zoning districts, as expressed through the zoning maps. It is proposed that in furtherance of the study's objectives, changes be made to the zoning maps to upzone (increase the permitted density) selected areas of Midtown and downzone (decrease the permitted density) of other targeted areas. (See Maps 14 and 15.)

Downzoning is recommended for limited, midblock areas, with existing high quality, low-scale buildings such as the restaurant/residential area between Fifth Avenue and Avenue of the Americas, and 54th to 56th Streets. Other areas are being studied.

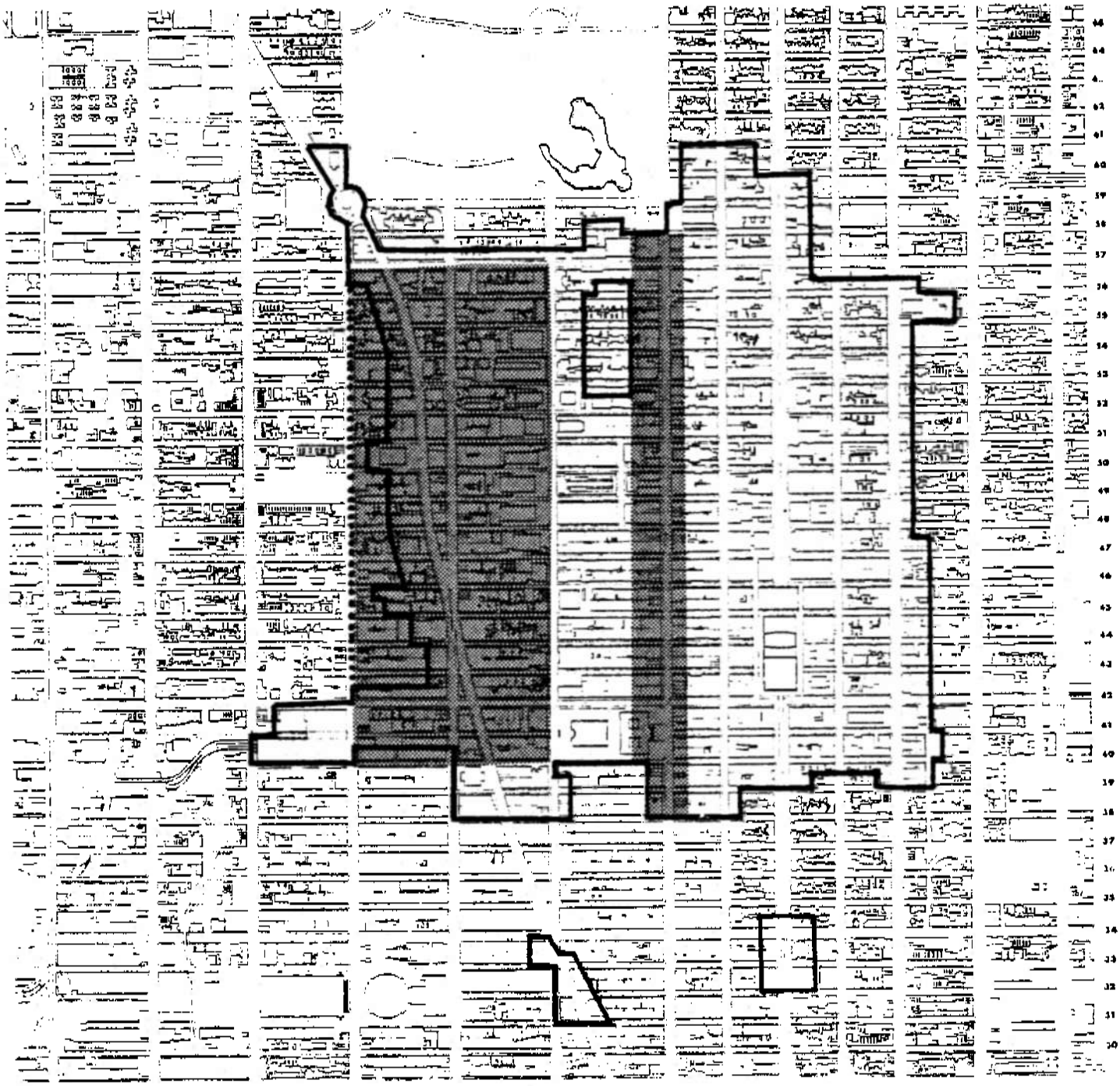
Upzoning is recommended for largely west midtown areas, such as near Columbus Circle and Penn Station, and lower Fifth Avenue and Avenue of the Americas (from 34th to 38th Streets). These are areas where new development is desirable, that are well-served by mass transportation. These areas will be upzoned from the 10-12 FAR Zones to the 15-18 FAR Zones.

Administration

The Midtown Development Project was not set up to examine the administration of the zoning resolution in detail, nor to propose fundamental changes. We have not done either. However, there are two aspects of zoning administration that require some attention if our other zoning changes are to be effectively implemented.

External Administration: We need to work closely with the agencies responsible for administering zoning, principally the Department of Buildings. It is no secret that the complexity of the zoning regulations makes their administration difficult. Any new or modified regulations should be reviewed at an early working stage with Buildings to insure that they understand what we are after and we understand any practical problems they may have. Where required, the same should be done with the Board of Standards and Appeals.

Internal Administration: Responsibility for processing major midtown buildings through the Department and to the Commission for disposition has in the past been somewhat loose and haphazard.



EXISTING ZONING FAR 15 OR GREATER IN MIDTOWN AREA.

0 600 1200'

14

15 FAR Districts

Special Districts allow 20% increase of FAR.
Boundary of Theater District and Fith Avenue District

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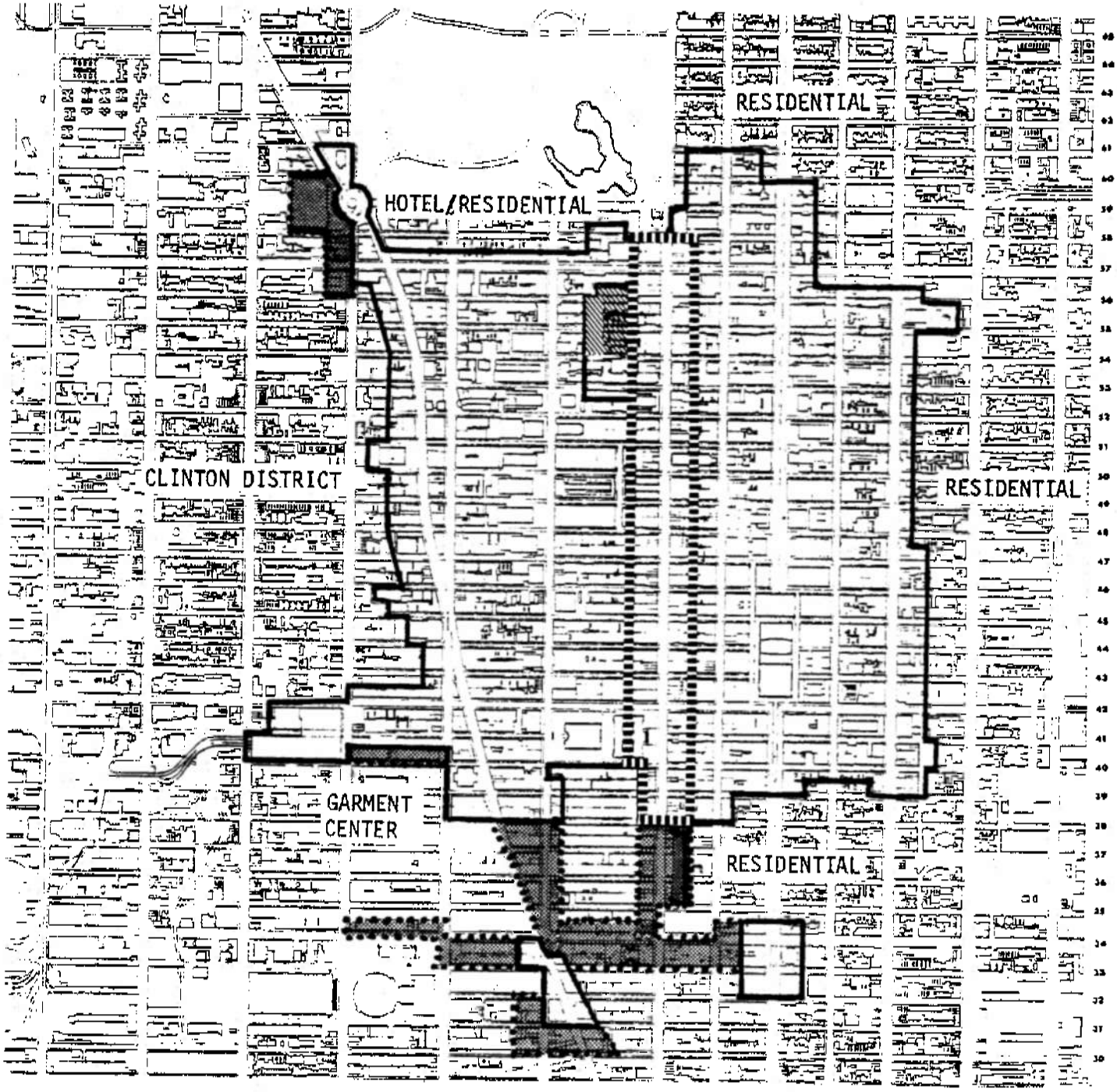

PROPOSED UPZONING and DOWNZONING

Upzone

Downzone

Revert to 15-18 FAR

0 600 1200'

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CBD DEVELOPMENT STUDY

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Builders complained tney were never sure where to go to initiate and discuss a project. At the same time it was clear that those who were experienced and sophisticated went "forum shopping," to find where they could get the most sympathetic assistance, or where attention was focused on areas they were most willing to "give" on.

The recent reorganization of the Office of Midtown Planning & Development, the Manhattan Office, and the Urban Design Group into a consolidated and strengthened Manhattan Office has eliminated that problem.

Enforcement

The Commission has recently taken several steps to address the problem of zoning enforcement-- a problem which extends well beyond the Manhattan central business district and is city-wide in nature.

The problem exists at every level of zoning; from simple as-of-right developments to complex projects involving special permits, special authorizations and certifications. The traditional procedure for zoning enforcement has involved a building inspection, a notice of violation and a court proceeding to obtain either an injunction or a fine. Given a Building Department shortage of inspectors, enforcement resource allocation has in the past been programmed primarily on a complaint basis. After the issuance of a violation, only a small number of violations are actively prosecuted in the courts by the Corporation Counsel, partly as a result of shortage of staff, partly as a result of interagency administrative difficulty. Court decisions, few and far between, reflect a consistently low regard for the goals and objectives of zoning, usually a nominal fine.

On August 16, 1979, the Board of Estimate approved a City Planning Commission amendment to the Zoning Resolution making all Certificates of Occupancy issued in connection with special permit developments-- expressly conditional on the performance of all elements of the special permit. This simple amendment has enabled the Buildings Department and the Commission to make revocation of such Certificates of Occupancy from the Board of Standards and Appeals-- the only agency authorized to revoke them. A more effective measure than was previously the case. Such steps have been taken in connection with special authorizations given to Olympic Tower and Galleria, two major midtown buildings which failed to improve their development-required public amenities in the manner called for by the City. Both projects are presently on the road to compliance.

Since the problem of zoning enforcement is city-wide in nature, the Commission has encouraged the creation of a special zoning enforcement unit-- with city-wide authority to enforce priority zoning issues-- in the Office of the Mayor with appropriate linkages to the Buildings Department and the Commission.

There exists a precedent for such an operation in the Midtown Enforcement Project which has successfully enforced the provisions of the Zoning Resolution in the area from 30th to 60th Streets in Manhattan. This unit for example, has closed down more than 50 commercial sex establishments pursuant to the requirements of the Zoning Resolution. The combination of lawyers and inspectors in one unit has produced a strike force with ability to swiftly move from inspection into prosecution and thus create respect for zoning objectives which have been written into law. The proposed special zoning enforcement unit will develop similar enforcement priorities in all of the City boroughs-- including Midtown Manhattan-- with the desirable result of not only routing out existing violations but deterring future violations.

The Commisison has also urged special legislation which will give standing to community boards to enforce the Zoning Resolution. A separate proposal would authorize injured nearby property owners to bring treble damage claims against zoning violators, premised upon the issurance of a zoning violation. Both of these measures should add additional deterrents to the creation of new zoning violations.

Generally speaking, the extent to which zoning violations occur is related to a number of factors. These range from wide disparity between zoning restrictions and market forces, to complex discretionary provisions as opposed to simple as-of-right entitlements. A simple ordinance, easily understood by communities as well as developers is more readily enforceable.

V. CAPITAL INVESTMENT STRATEGY AND CITY SERVICES

The public sector is investing substantial funds in midtown, to a greater extent than may be recognized. The goals of improvements in city services and capital investment in midtown differ for the East and West sides. Projects on the East side are intended primarily to improve access, vehicular, and pedestrian movement. Projects on the West side are intended to stimulate new development.

The West Side

To encourage a shift in construction to the West, substantial public investment in large-scale redevelopment may be necessary. In this regard, city, state, and federal resources are being directed to projects which may catalyze and accelerate development in the West side.

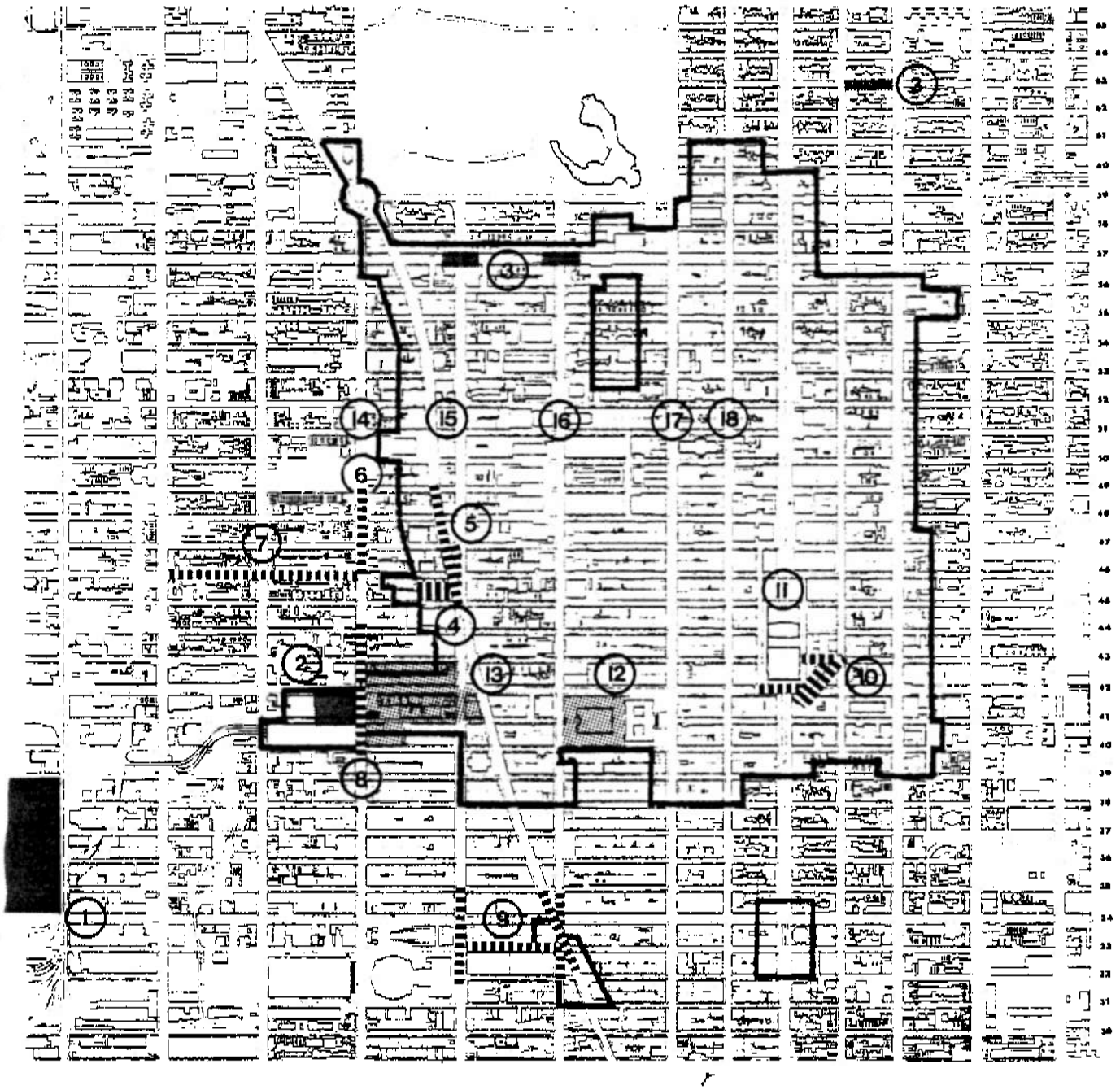
Forty Second Street Development District: Two blocks on West 42nd Street between Seventh and Eighth Avenues serve as a regional magnet for illegitimate uses. For the private sector the spill-over has negatively affected the opportunities to conduct legitimate businesses in the surrounding blocks and for the public sector the opportunity vanished to collect optimal taxes.

In the public perception this area is far larger than its actual physical boundaries. This is evidenced by the fact that investors have avoided Times Square in a radius of several blocks from 42nd Street despite the area's excellent accessibility by mass transit and despite the assets of both the theater and garment districts.

Those two blocks form the core of the 42nd Street Development District. The City has recently announced its intention to seek redevelopment proposals for the area based on its urban renewal powers. This may involve a partnership with the state or local UDC. Proposals presented to date by the City at 42nd Street and Department of City Planning have put forward mixed uses of office development, commercial development, theatre rehabilitation, pedestrian amenities, subway improvements, and retail development.

CAPITAL IMPROVEMENTS

Program	Appropriation	
1) Convention Exhibition Center	$375 million	
2) Port Authority Bus Terminal Expansion	$160 million	
3) 63rd St. subway line	$138 million	
4) Portman Hotel and Theatre Complex	$21.5 million	- UDAG grant 9.5% of total
5) Broadway Plaza	$10.5 million	
6) Commercial Revitalization (Eighth Ave. -- 46th - 49th Sts.)	$375,000 - 55% of total cost	
7) "Restaurant Row" beautification and sidewalk widening	$800,000	
8) 42nd St./Eighth Ave. Subway Improvements	$10 million	UMTA/Urban Initiatives Program
9) Herald-Greeley Square/Penn Station Joint Development Project	$16 million	UMTA/Urban Initiatives Program
10) Grand Central Terminal/42nd St.-Lexington Ave. Subway Station Improvements	$14 million	UMTA/Urban Initiatives Program
11) Structural Rehabilitation of Park Ave. viaduct	$9.975 million	(Funding due 1984)
12) Bryant Park Rehabilitation	$300,000	(Funding due 1984)
13) 42nd St. Development District		
14) Eighth Ave. reconstruction and repaving	$19.2 million	(Funding due 1983)
15) Broadway - Seventh Ave. reconstruction from 42nd St. to Central Park South	$19.1 million	(Completion due 1980)
16) Avenue of the Americas reconstruction	$9.2 million	(Completion due 1987)
17) Fifth Ave. reconstruction from Wash. Sq. Pk. to 143rd St.	$19 million	(Completion due 1989)
18) Reconstruction of Madison Ave. from 23rd St. to 37th St.	$2.5 million	(Funding due 1982)



CAPITAL IMPROVEMENTS

- Projects in Construction
- Projects Funded and Approved
- Projects Proposed

0 600 1200'

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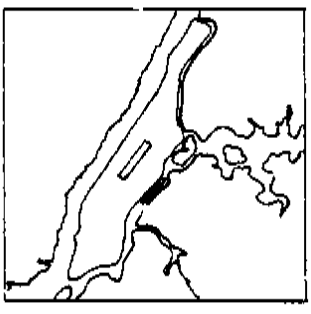

CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

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The implementation of a development plan for 42nd Street is vital for the economic recovery of Times Square and the entire West side which has been hampered due to the conditions of these blocks. The project will reconnect sound investment areas which have been disconnected by Times Square's economic decline. Linkages with those parts of midtown which currently attract unassisted risk capital investment have to be established to assure that the transformation of 42nd Street is not being accomplished in isolation or at the expense of the areas in between. Instead, it is anticipated that relatively modest public efforts in these linkage areas will ensure that the redevelopment of 42nd Street will prompt private reinvestment in the connecting areas.

The following paragraphs describe those linkages to the project area that either exist, are under construction or are planned:

Theater District: In recent years the city has expended much effort to upgrade within the Theater District the area on Broadway between 45th and 48th Streets.

Broadway Plaza, a public, pedestrian oriented space, will be built in 1981. A total of $7 million has been allocated for its implementation by UMTA of the U.S. Department of Transportation, the State of New York, and the City. A new TKTS/information pavillion will be included in the project.

A 2,000 room first class hotel with a spectacular interior atrium and a 1,500 seat new theater is planned by Portman Properties for the site on the west side of Broadway between 45th and 46th Streets. The proposed hotel will front on one of the spaces created by the Broadway Plaza project.

All of the side streets have been resurfaced between the Avenue of the Americas and Eighth Avenue and a special block improvement project has been implemented on 43rd Street between Seventh and Eighth Avenues with private sector funds.

Furthermore, under its capital budget program the City has planned the reconstruction of Broadway and Seventh Avenue between 42nd Street and Central Park South.

Sixth Avenue: Bryant Park is scheduled for rehabilitation in 1984. This will also improve the image of the West side if the rehabilitation reduces current undesirable uses.

The ongoing reconstruction of the Avenue of the Americas is due for completion in 1987.

The Convention Center - 34th Street: A keystone of West side investment is the new Convention Center for which ground has just been broken, and which will be completed in 1984. It is a good bet that the Center, with the special features I.M. Pei designed to draw the general public and make it part of the City fabric, will help transform this part of town. Together with L.I.R.R. and subway station improvements, it should be a positive influence on development in Penn Station - Herald Square area.

42nd Street West of Eighth Avenue: The section of 42nd Street between Eighth and Tenth Avenues has experienced substantial improvement over the past 6 years due to government intervention. The first significant investment was Manhattan Plaza, a 1,650 unit residential development. The project was originally conceived of as a Mitchell-Lama development and had to be refinanced under the Section 8 rent subsidy program. To date,it is a very successful residence for performing artists which stimulated investment activities in residential and commercial real estate of the surrounding blocks.

The 42nd Street Local Development Corporation assumed the initiative to redevelop the southside of 42nd Street between 9th and 10th Avenues to what is now known as Theater Row. In Phase I a row of dilapidated tenement buildings in pornographic use has been converted into theaters and restaurants. Phase II is currently under construction. It includes the West Side Air Lines Terminal building. This block is establishing itself as a center for off-off Broadway theater activities. The public sector made most of the funding available under both the UDAG and the Mayor's Business Investment Incentive Program.

Furthermore the Corporation is pursuing several other development projects west of 10th Avenue in order to bring 42nd Street to active and attractive use in its full length to the Hudson River Line and Circle Line Piers.

The Port Authority of New York and New Jersey has invested $160 million in an extension of its bus terminal building on Eighth Avenue. A brick-paved, tree-lined sidewalk on the south side of 42nd Street will be created.

These developments have removed unsightly buildings and major unkempt parking lots from West 42nd Street. The stretch between Eighth and Ninth Avenues is now a stretch of well-maintained buildings and stable land uses. A few infill projects are needed to remove the remaining 2 or 3 parking lots.

The IND subway station on Eighth Avenue is in the MTA's accelerated station improvement program. It will be refurbished with a $10 million allocation of funds.

Eighth Avenue between 40th and 54th Streets: Other than 42nd Street between Seventh and Eighth Avenues, Eighth Avenue has been the second most important negative factor affecting Times Square's legitimate industries. The avenue has functioned as a deterrent to theater-goers, hotel guests, restaurant patrons and, what has practically never been acknowledged, to investors in residential real estate in Clinton.

Only Upper-Eighth Avenue, north of 50th Street, has experienced investment activities although still assisted by government. Housing market conditions in midtown have focused development interest on this part of the Avenue.

The lower portion between 40th and 50th Streets is still in a desolate physical condition. The massage parlors have been closed by the Midtown Enforcement Project which resulted in a number of storefront vacancies. A commercial revitalization program for this stretch is planned under the City's commercial revitalization program. Program elements will include storefront and facade improvements, sidewalk repairs and street lighting in order to create an environment which is conducive for legitimate businesses and "hostile" to porn-operators. The program will intersect with a mall-type project for West 46th Street/Restaurant Row. Widened sidewalks, street furniture, trees and other program elements will improve this street between Eighth and Tenth Avenues. Funding is planned in 1983 for the reconstruction and repaving of Eighth Avenue.

Times Square at Large: The success of any plan for Times Square will also depend on the quality of public and private services. For the City's part the Police Department is committed to continuing the project "Operation Crossroads."

The successful and highly visible deployment of police officers has dramatically reduced crime in Times Square over the 24 hour day, 7 days a week. Once the Broadway Plazas are completed, the police are prepared to patrol them to whatever level is required to keep the plazas safe and cleared of illegal activities.

Sanitation is one of may critical issues for this area. The current nature of retail uses in Times Square makes it virtually impossible to keep the area clean no matter what level of City services exists. Attempts to improve the quality of retail establishments will need active support by the private sector for improvement of sanitation services. A CETA sanitation project which was implemented in 1978 will end in November 1980.

In recognition of the enormous amount of public funds already invested and about to be committed to Times Square, it is imperative that the major land owners and business associations initiate a special benefit district to continue this effort to keep the area clean. The services

provided under such a district organized and administered by the property owners would by law be their responsibility.

Should the private sector agree to assume these responsibilities the Department of Sanitation will coordinate its schedule of garbage pick-ups, street sweeping and other sanitation activities with the private program.

The East Side

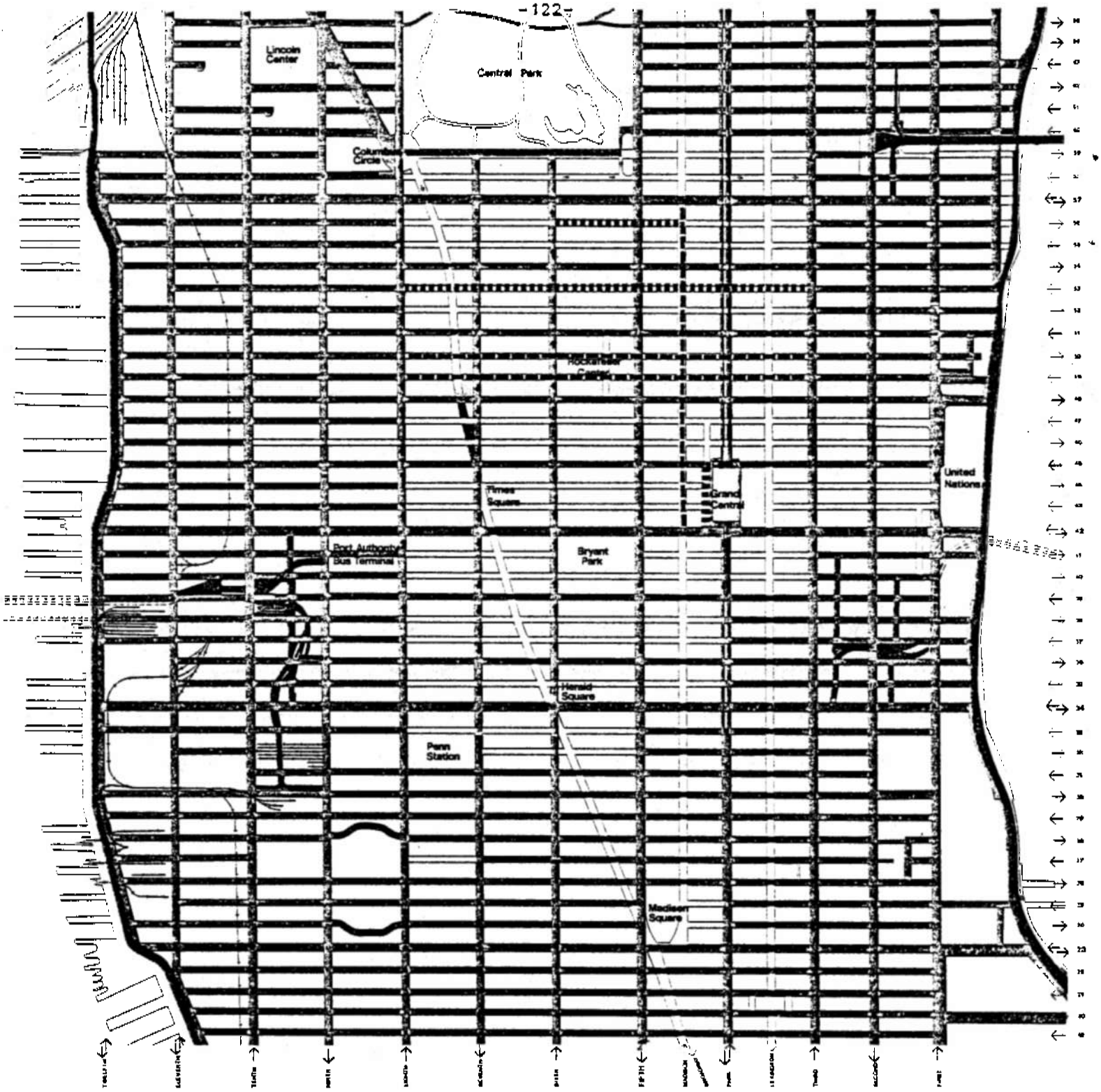
The goal of capital investments and service improvements on the East Side is to alleviate problems of pedestrian and vehicular movement. These problems are to a large extent caused more by vehicles blocking cross-walks and peddlers blocking sidewalks than by new office development. Thus, many of these problems may be solved by street, sidewalk and subway entrance improvements, as well as laws such as the new peddler law (which has noticeably improved pedestrian movement). Some planned and ongoing efforts are described below.

Fifth Avenue: The Fifth Avenue Association has published a plan for a dramatic improvement of the Avenue from 33rd to 59th Streets. It would involve repaving the Avenue, decorative and slightly widened sidewalks, new lighting and graphics, specially designed street furniture, information kiosks and extensive planting of mature street trees. Special treatment would be given to four areas as focal points: Empire State Building, New York Public Library, Rockefeller Center and Grand Army Plaza. The Fifth Avenue Association, which worked with City officials in formulating the plan, recognizes that there would have to be substantial private participation in its estimated $28,400,000 development cost as well as in its maintenance and policing. As in the Times Square improvement areas, a special benefit district may be appropriate here. Fifth Avenue is also scheduled for reconstruction from Washington Square to 143rd Street in 1989.

Lexington, Park, and Madison Avenues: Grand Central Terminal and the Lexington Avenue/42nd Street station are scheduled for improvements as part of an UMTA/Urban Initiatives Program. In a related development, the Park Avenue viaduct encircling the Terminal is due for a structural rehabilitation in 1984.

Our urban design consultant believes that the greatest relief to pedestrian congestion in midtown could be accomplished by a comparatively small widening of the sidewalks on Lexington and Madison Avenues, its two narrowest avenues. He thinks this can be done without reducing its vehicular capacity by better parking controls and utilizing a parking lane for the widening. The City's Transportation Department has shown an interest in the proposal and a willingness to study its feasibility in detail.

The City Department of Transportation has developed a plan to make the two right-hand lanes on Madison Avenue bus lanes; to prohibit parking and to severely restrict turns. This plan has the possibility of



17

PEDESTRIANSPACE

CBD DEVELOPMENT STUDY

URBAN DESIGN ANALYSIS

MANHATTAN OFFICE · DEPARTMENT OF CITY PLANNING · CITY OF NEW YORK

improving traffic flow, easing the express bus problem by providing two moving bus lanes, and improving pedestrian movement by its restrictions on turns.

Area Wide Issues

Pedestrian Space: A Department of City Planning Study is examining means of making the street grid in the core area of midtown (32nd to 59th Streets, Third to Eighth Avenues) more adaptable to midtown's particular and changing needs, especially with respect to pedestrian circulation.

Five "pilot" projects have been identified as parts of a comprehensive differentiated street grid, and the feasibility of implementing these is being examined by engineering consultants. (See Map 17.)

These projects are:

- Adapting 53rd Street to better serve as a distributor of pedestrians in relation to the subway stations along it, and to improve its function as the location of distinguished institutions and other attractions.

- Physical improvements to the 49th/50th Street crosstown transportation corridor, to more clearly differentiate its function from that of other streets, and to better serve associated pedestrian requirements.

- Sidewalk improvements along Madison Avenue to provide pedestrian amenity related to the bus lanes being planned by the Department of Transportation (see Madison Avenue section above).

- Improved street crossings in the vicinity of Grand Central Terminal

- Making 56th Street between Fifth and Madison adaptable to new local traffic conditions resulting from the major developments occurring on this street.

Vehicular Use: The Mayor's Transportation Task Force recently made a comprehensive proposal to reduce automobile entries into midtown.

The Department of Transportation has also announced its intention to increase traffic controllers at crucial intersections in midtown.

Infrastructure: The basic infrastructure serving midtown -- its sewers, watermains and utilities -- appear to have adequate capacity to meet its anticipated growth needs over the next ten to twenty years. The major problem is a gradual, scheduled replacement of over-aged facilities, but this is a city-wide problem, not unique to midtown. The midtown development priorities are transportation and access related.

Subway Service: As previously pointed out, good access is a basic requirement for the proper functioning of midtown -- as it is for the entire CBD. The City is fortunate in its legacy of a rail mass transit system; it is one of the wonders of the modern world in the length and breadth of the area it covers as its numerous lines criss-cross the City and converge on Manhattan below 60th Street, the City's CBD.

There are gaps in the system -- unserved areas and overcrowded lines resulting from post-war population and job shifts rather than generally increased subway usage. Ambitious plans have been proposed, bond issues approved, and programs initiated to fill in these gaps with new lines and extended service. Enormous cost increases resulting from initial miscalculations, long delays in moving through a cumbersome and complex public approval process, and soaring inflation have made it doubtful that we will see most of these improvements completed in the foreseeable future.

The City can somehow survive this failure to complete new projects; midtown can continue to function. What can be badly damaging, however, is the continuing breakdown of service.

Comfort and cleanliness of subways are very important. Even where there is crowding, the air-conditioning of trains has helped; the recent new flare-up of graffiti, after it seemed under control for a while, has not. But neither of these is as critical as reliability and safety. The increasing incidence of trains "going out of service" in the middle of rush-hour and the perception -- probably true -- of a rising crime rate are the real dangers to the system -- and to the City.

There are no easy answers. MTA was struggling with an extremely difficult financial situation even before the strike. The fare increase has been held to ten cents with great difficulty, and even that will be painful for many riders. But it will be worse if it is not sufficient to support maintenance and policing programs that can demonstrate real -- and visible -- service improvements. The maintenance and upgrading of the system in place must be MTA's top priority.

Express Bus Service: The increase in express bus service to midtown is of course related to failures in subway service. It helps by filling in a gap. But is also creates problems by cluttering up the streets. There are increasingly loud complaints from midtown residents and its Community Boards. They ask that the buses be eliminated, cut back or at least relegated to the periphery. Until subway service is improved, probably the most that can be done is to deny permission for any further increase.

APPENDICES

MIDTOWN DEVELOPMENT PROJECT

ZONING REGULATIONS STUDY

FINAL DRAFT

June 24, 1980

Davis, Brody and Associates, and Kwartler/Jones Architects,
Associated Architects and Urban Designers New York

Harvey Bryan, A.I.A., Solar Consultant Berkeley, Ca.

TABLE OF CONTENTS

INTRODUCTION

INTRODUCTION

The initial draft report which follows is the first part of the consultants' study of bulk regulations governing Midtown Manhattan, as part of the Midtown Development Study. The study area was defined as including the following high bulk districts: C5-3, C5-3CR, C6-6, C6-6CR, and C6-7. This corresponds roughly to an area bounded by 40th Street on the south, 57th Street on the north, Third Avenue on the east, and Eighth Avenue on the west. The consultants have been asked to review and analyze the regulations as follows:

Article III - Commercial District Regulations, Chapter 3 "Bulk Regulations for Commercial and Community Facility Buildings in Commercial Districts"

Article VII - Administration Chapter 1, Enforcement and Administration
Chapter 2, Interpretations and Variances
Chapter 3, Special Permits by the Board of Standards and Appeals (BSA)
Chapter 4, Special Permits by the City Planning Commission (CPC)

The purpose of the analysis was to develop workable As-of-Right (AOR) bulk regulations for Midtown.

While the Special Purpose Districts (Fifth Avenue and the Theater District) are not included in the study, those Districts have been reviewed in regard to their relationship to and impact on the study area. The public pedestrian amenities as formulated in the current Resolution and the recent work of the Department of City Planning and their consultant Holly Whyte have been reviewed to assess the relationship of these amenities to the bulk regulations. the primary areas of concern included:

1. The related problems of population and perceptual density resulting from:

   a) current mapped densities, bonuses and height, setback, coverage, open space regulations.
   b) the aggregation of large amounts of floor area by transfer of development rights from landmark or non-landmark buldings.

2. The problem of context given the current mix of commeercial, residential, and community facility uses and structures. This includes the impact of new buldings on existing structures and open spaces.

3. The environmental quality of outdoor space with emphasis on daylight, sunlight and streetscape.

4. The need to minimize administrative review by streamlining procedures.

In order to understand the manner in which the physical environment and zoning regulations of Midtown co-developed, the 1916 and 1961 Zoning Resolutions were reviewed in terms of both the origins of their concepts and the subsequent modifications, revisions, and amendments.

The Department of City Planning is acknowledged, with gratitude, for sharing its knowledge and experience. Special appreciation is given to Harvey Bryan, AIA for his work on daylighting.

ANALYSIS OF MIDTOWN

FORM OF MIDTOWN

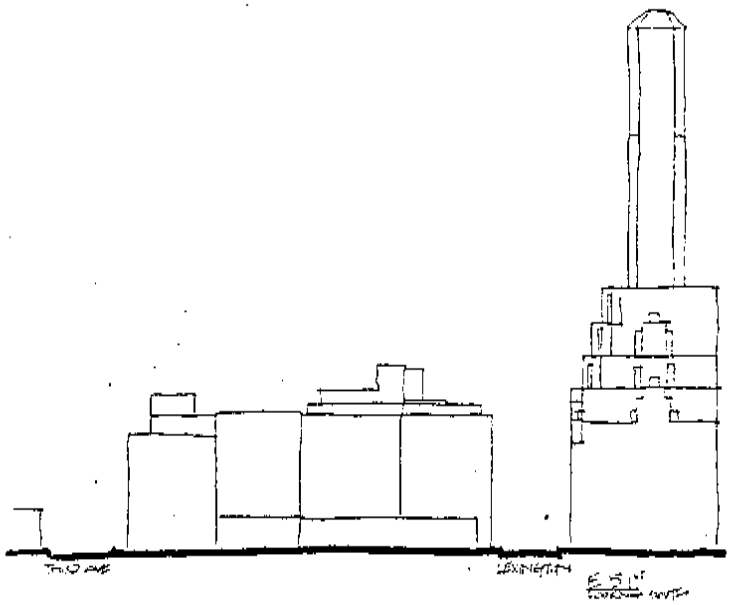
Midtown today is as much a physical realization of the impact of zoning ordinances and earlier building regulations as it is a collection of architecturally interesting buildings. Although the term Midtown covers an area of some 80 blocks, the overall homogeneity implied by the term is not apparent on closr scrutiny. The Theater District, Times Square and 42nd Street, Grand Central Station, 57th Street, the major retail carriage trade streets of Fifth and Madison Avenues, Rockefeller Center, the plazas and slabs of Sixth Avenue, the diversity of midblock conditions and the formality of Park Avenue are all in Midtown.

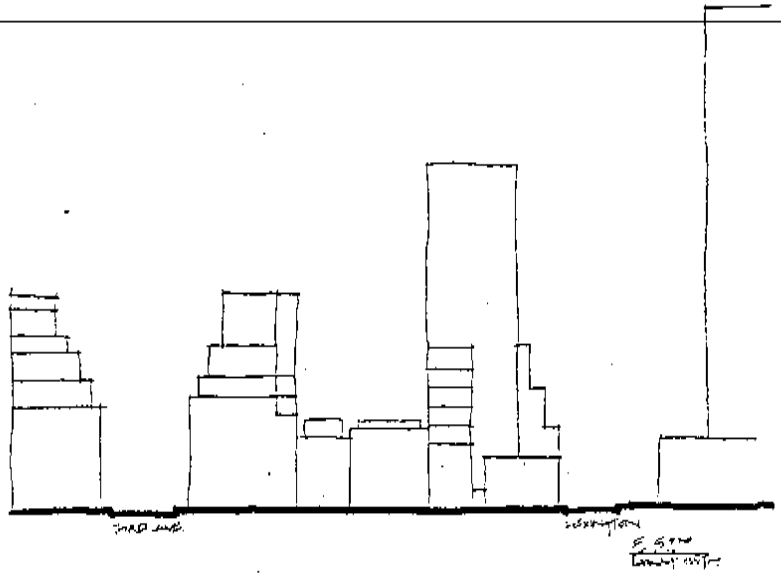
While one may have the impression from some parts that Midtown is predominantly high rise office buildings constructed after 1961, the overwhelming majority of buildings in Midtown were built before that date (See A-11 Map of Midtown illustrating Buildings by Use and Period of Construction). The predominant imagery of Broadway, Seventh Avenue, the east side of Sixth Avenue, Fifth Avenue, Madison Avenue, significant parts of Park Avenue, Lexington Avenue, 42nd Street, 57th Street and most midblocks results from the 1916 Zoning Resolution discussed earlier. That imagery is based on continuous street walls, street wall cornice lines determined by the Height Districts and the width of street, and sky exposure planes which have generally created a sense of openness and brightness by locating the upper portions of the buildings back from the street. The variety of street widths 60', 80', 100' and 120' also also create their own environments (See A3-5).

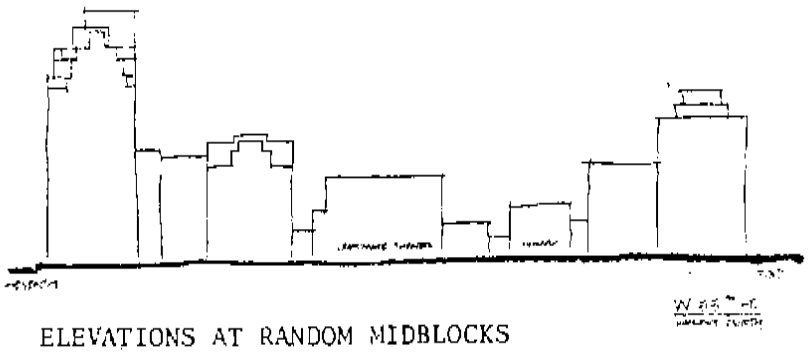
Interspersed among these structures are the newer tower and plaza structures typical of the 1961 Zoning Resolution. Groupings of this type of building cluster notably along Sixth and Third Avenues, (See A8-9). The most recent buildings primarily resulting from Special Permit actions, are the immense (500-600 foot) street wall slabs of Madison Avenue, representing an attempt to maintain the continuous frontage typical of that street.

THE MIDBLOCKS

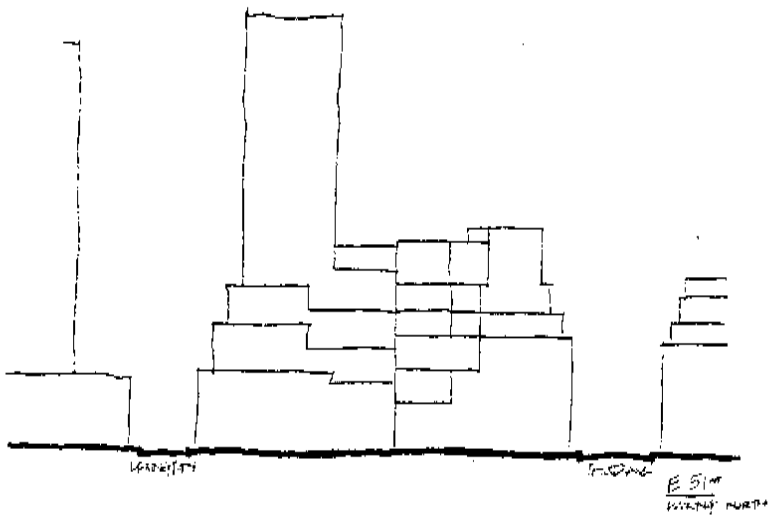
The midblock situation is more difficult to generalize about, due to the greater variety of block length and building development between the avenues. The different lengths of the blocks is an important aspect of midblock character for a number of reasons. The perceptual midblock area is a function of both the block length and the type and size of avenue development at the ends. In Midtown, on the 400 foot long blocks east of Fifth Avenue, the post war office buildings that dominate the avenue fronts also have a typical midblock frontage of 150'. On the longer 800' and 900' blocks west of Fifth Avenue, the block front buildings tend to have less presence on the midblocks, with the exception of the very deep new Rockefeller Center buildings on Sixth Avenue. The "intrusion" into the midblocks, as it is sometimes referred to, is a product of the present zoning map which maps all but a small area of Midtown to a FAR of 15 to 18, with minimum distinction as to size, type and orientation of the street. The Zoning Resolution requirement for large sites as well as the market requirements for certain size floors and locations have also played a role in increasing the penetration of large bulk buildings into the midblocks. The "intrusion" of avenue buildings appears greatest on the short blocks east of Fifth Avenue. Here the typical blockfront lot depth of 150' leaves only 100' for midblock buildings, Frequently, the blockfront lots are deeper,

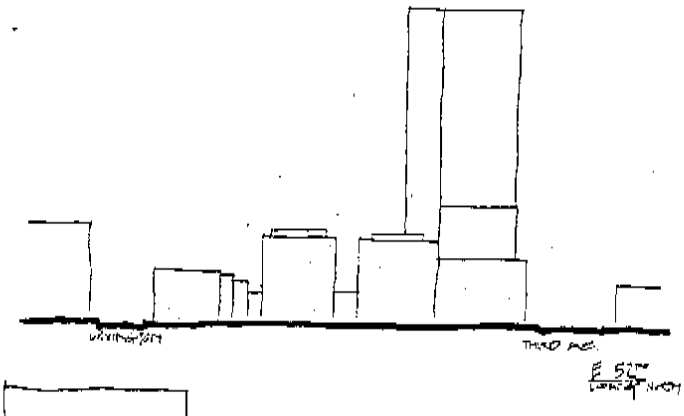


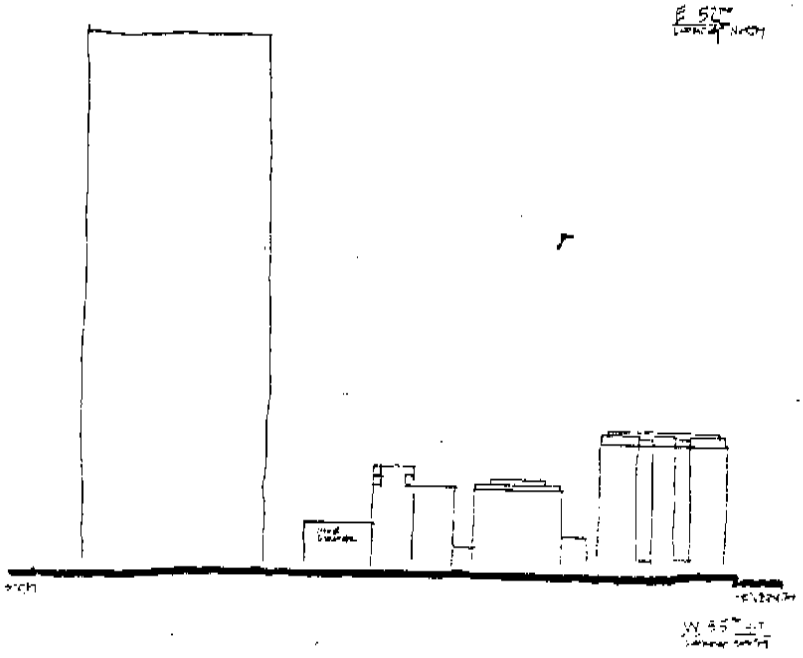


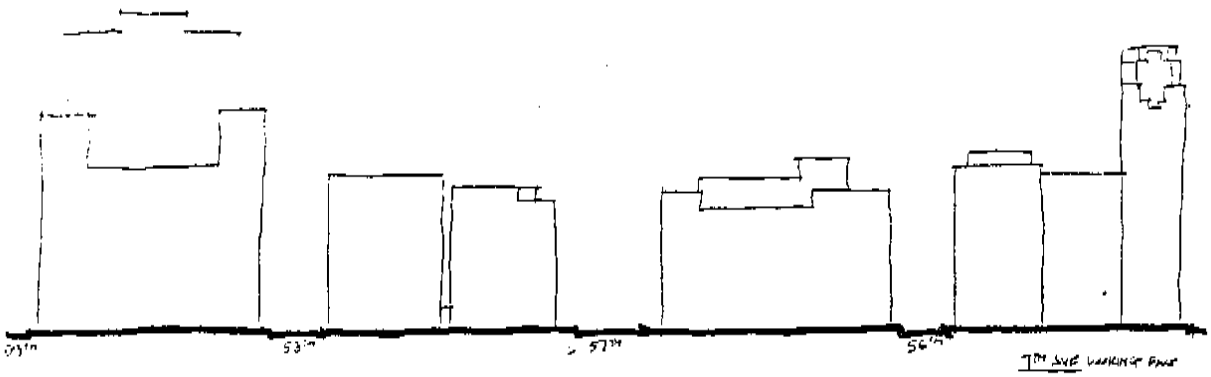


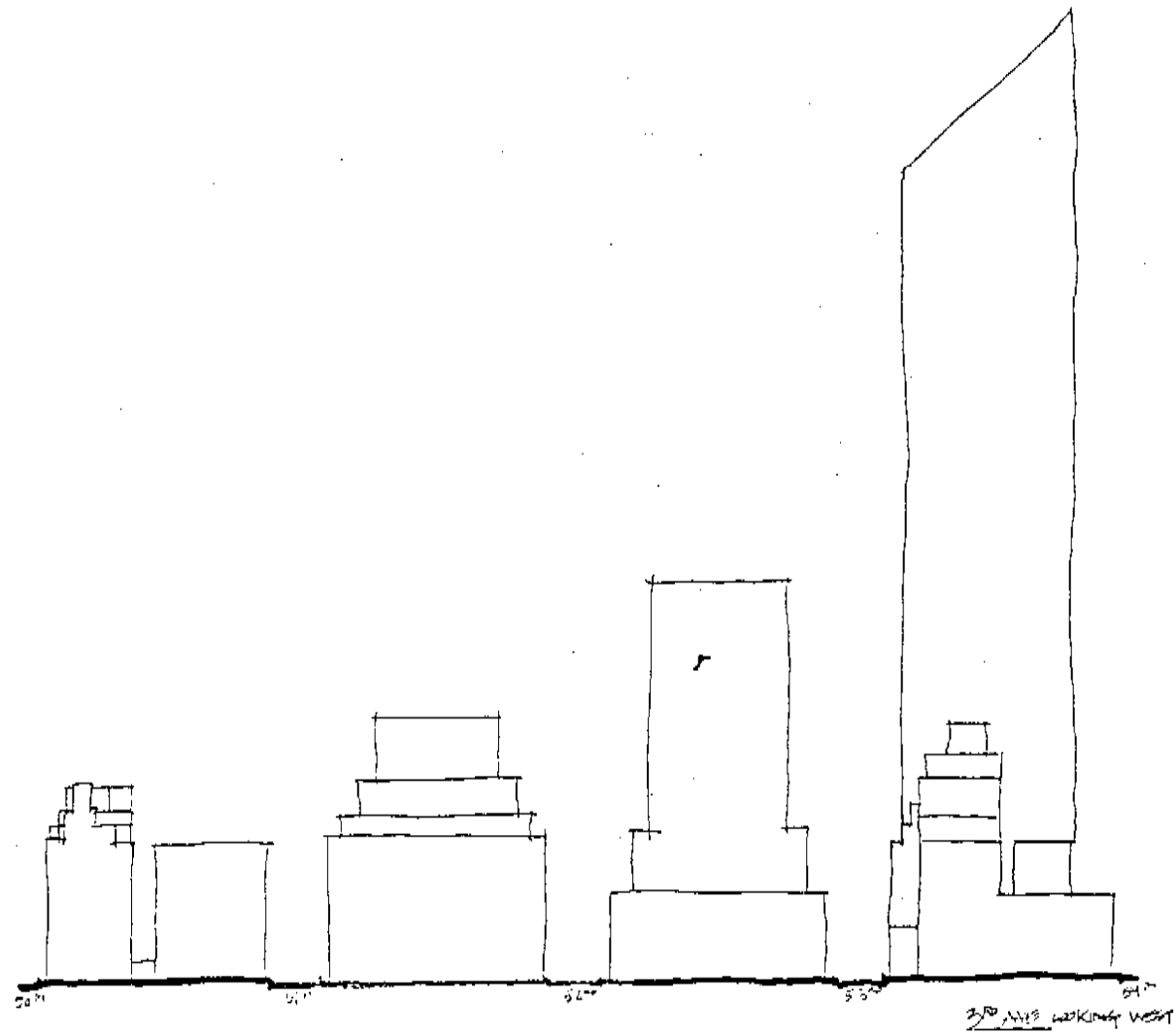
ELEVATIONS AT RANDOM MIDBLOCKS











ELEVATIONS AT AVENUES

effectively eliminating a midblock building in the case of half and whole block developments (not untypical in this area). The remaining midblock buildings on these short blocks are a mixture of a few older row houses and tenements and many pre-'61 apartment buildings, hotels and small office buildings. East of Fifth, the intersections punctuate side streets more frequently than west of Fifth Avenue. Despite high value, many potential avenue parcels exist, but have remained undeveloped due to the large-lot base of the present Resolution. The blocks west of Fifth Avenue are actually quite dense. They frequently have median street walls of 75-90' with upper stories set back, corresponding to the 1916 Ordinance 1-1/2 or 2 Height Districts. In the longer midblocks in the west Forties, higher street walls of up to 120' reflect pre-1916 loft buildings. In both cases there is a difference in scale and in openness between strets and avenues, with the midblocks functioning as a psychological and perceptual haven between hectic avenues.

As noted earlier, the predominant character of most midblocks (and in fact large sections of avenue frontage) reflect the devices of the 1916 Zoning Resolution. The Resolution required avenue buildings with a idblock presence to change the height of their street wall and sky exposure plane at 100' into the block.

Currently there is a resistance to new midblock construction for several reasons. One is a legitimate reaction to the excessive bulk and disposition of recent ZLM and midblock buildings. Another is a desire to preserve those midblocks currently built to a low scale and with distinctive residential buildings. Virtually all these blocks are the ones north of the MOMA, which are zoned at a lower density. A third reason is to save theaters, which at first appear to be midblock phenomenon. In actuality, most of the theaters are concentrated within the first 100 feet, or avenue region of the blocks; the prime area for new office construction. Many "midblock theaters" actually are entered through deep lobbies on Broadway.

EXISTING MIDBLOCK OFFICE BUILDINGS

There are a number of excellent examples of sensitive large scale midblock buildings such as the RCA Building which fronts on its plaza, (not Sixth Avenue. The Lincoln Building on 42nd, and more recently the Citicorp Building. The case of the RCA Building suggests an appropriate and desirable approach to the development of midblock plazas. The plaza is comparable in size with those on Sixth Avenue and Park Avenue, but has a greater impact by breaking up the length of the long block, while complimenting the midblock location of the RCA Building With the exception of the Lincoln Building, these buildings are coupled with pedestrian outdoor space similar in scale to the present concept of an urban park. When handled sensitively, midblock office buildings can be appropriate and positive elements in their environment.

SUNLIGHT AND DAYLIGHT IN MIDTOWN

The concern about excess mass in midblocks is also an exprssion of concern for sunlight and daylight. Calculations indicate that during the equinox, midblocks with typical street walls of 90 feet have 72 foot shadows at noon and 135 foot shadows at 9 AM and 3 PM. With 60 foot wide streets this indicates sunlight falling mostly on the upper faces of south facing buildings. This does not assume taller midblock street walls, such as occur on many of the longer blocks where sunlight occurs continuously only at the uper heights of the south facing facade. The "sunnyness" of the midblocks during the Equinox

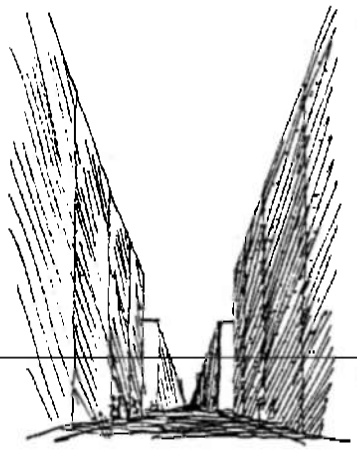
(spring and fall) is more a function of the amount of sunlight reflected off southern light-colored facades and the daylight coming over the tops and occasionally around the sides of relatively low multile setback buildings. The reflectivity of the Citicorp Tower, for example, augments the daylight apparent at its side.

The avenues present a different expectation for sunlight and daylight. The width of avenues and the orientation of the street grid relative to the true solar north produces building shadows which sweep from diagonallyu across streets to parallel with the grid ab about 1 PM Standard Time. The fortunate orientation of the avenues offers the greatest potential for sunlight at the peak lunch hour use times, unlike the narrow east-west streets. The possibility of maximizing sunlight on the sidewalks without compromising the street wall is best illustrated by Fifth Avenue. With the major exception of the skyblocking Olympc Towers, which rises shear from streetline without setbacks, Fifth Avenue's openness, brightness and urbanity are very much a product of the 1916 Zoning Ordinance. Up until 1961, Fifth Avenue was a 1-1/4 Height District, meaning the street walls at the street line could be no taller than the width of Fifth Avenue. After that, the building had to conform to a setback ratio of 1:2-1/2, (See A3) which was far more acute than the present setback ratio of 1:5.6 for street line AOR buildings (See A8-9).

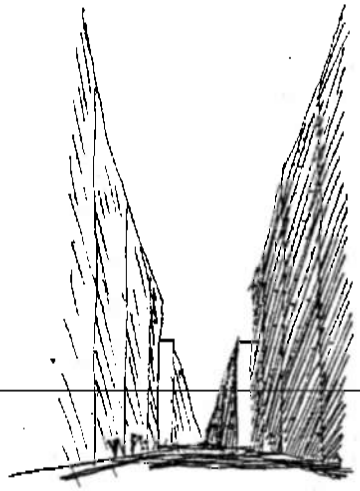
In summary, one oculd say that the perceived desirability of the midblock is in the variety of these environments and their essentially smaller scale and finer grain. They serve as a vital counterpoint to the more heroic and continuous scale of the avenues.

COMPARISON OF STREET OPENESS BY ANGLE PROPORTIONS - NEXT PAGE

Openess can be measured by the proportion of height of street wall to width of street. This can be expressed either as a ratio, or by the angle, taken from the centerline of the street, which intersects the cornice lines of buildings at the street wall (or at subsequent setbacks). Both these forms of measurement are scaleless; they are a determination of proportion irregardless of street width. The 1916 ordinance used the ratio proportion system, to determine sky exposure planes, which were angles varying from 63° 26' in the 1 1/4 districts to 72° in the 2 districts. The angles subtended by the slabs of the newer Rockefeller Center Buildings approaches 82-83° on some side streets. Recent Special Permit buildings without setbacks on Madison Avenue will reach 86°. See the Tables on p.A 54 for the relationship between angle, height, and setback for various street widths.



1 72° Street Wall



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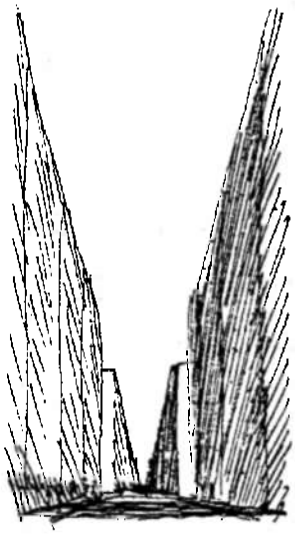
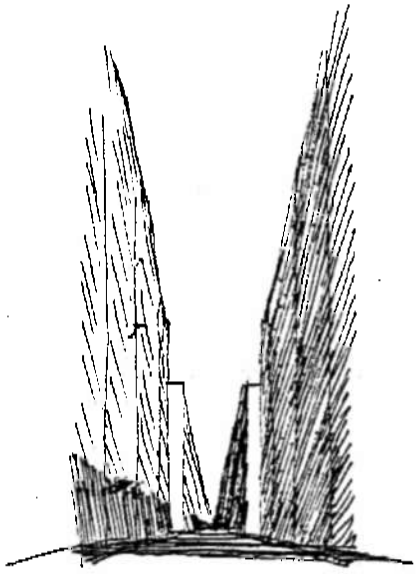
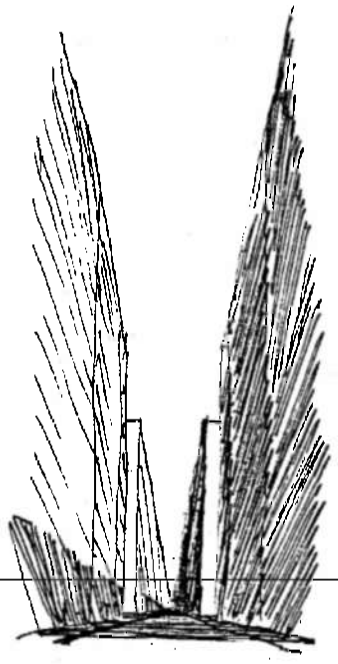


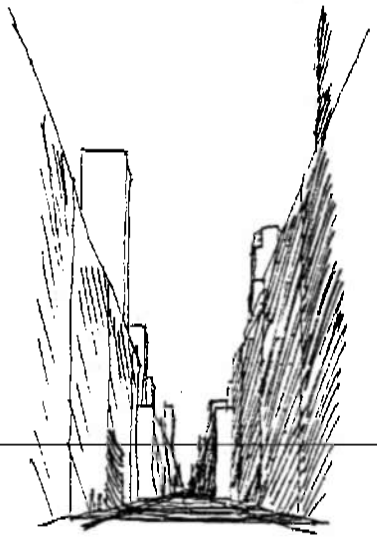
3 76° Street Wall



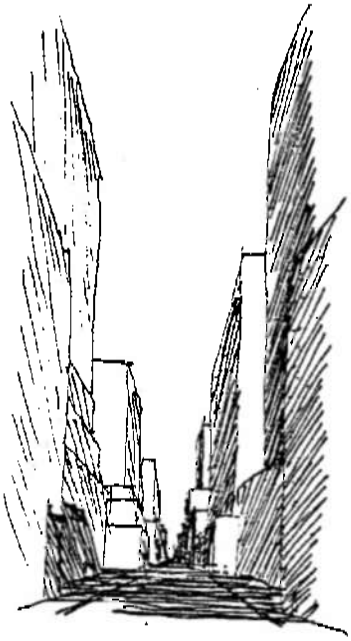
4 78° Street Wall



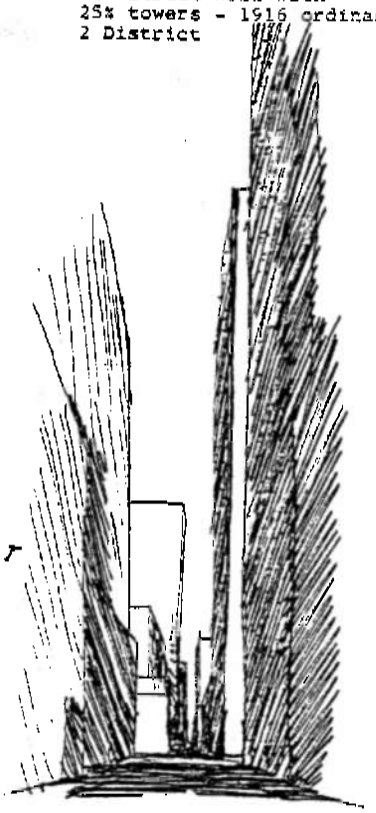
5 80° Street Wall



6 72° Street Wall with
25% towers - 1916 ordinance
2 District



7 72°± Street Wall with
40% towers - 1961 ordinance



8 84° towers with no setback
CPC Special Permit

ZONING REGULATIONS AND MIDTOWN

ZONING REGULATIONS AND MIDTOWN

1916 ZONING RESOLUTION

The inception of zoning in New York City in 1916 institutionalized Civic Design in law. In contemporary terms, Urban Design was begun. The clarification of property rights into categories of ownership and use, with use to be regulated by the municipality, represented an attempt to guide and control the physical form and functioning of the City. This was a significant advance on the constitutional notion of property rights. It set the precendent that allowed the City to determine the use and general configuration of individual buildings. The use regulations controlled what could be done on a piece of land, while the bulk regulations determined the limits as to how it would be done. The development of these early bulk, height, sback, and yard regulations in 1916 was given impetus by the darkening canyons of Wall Street, and the intensity and proximity of development throughout the City.

These regulations were concerned with guaranteeing some minimum standard of light and air to both building inhabitants and pedestrians in the street. The street wall concept (bulding wall closest to the street) whose maximum height was a fucntion of the width of the street and the intensity of development desired, and the sky exposure plane, (a simple ratio of height to depth of setback, relating to the width and centerline of the street and the street-wall height) were major technical innovations in the form of zoning. (See A3-A6). The basis of these innovations was an extensive empirical analysis of existing condition. It is important to note that there was no upset limit on the total floor area on a site as there is today with the FAR device. The total building bulk was limited by the sky exposure plane, which allowed light to come over the top of the building, and the 25% limit on tower coverage with no limit as to the height of the tower. This meant the combination of site size, market forces, and building design and technology governed the total bulk of the building. Buildings on small sites rarely had towers while buildings on larger sites generally did. The Empire State Bulding is an example of a 25% tower on an 80,000 SF site.

The districting into Height Districts of Midtown (See A1-A2) gave the planners the simple but powerful took to physically distinguish one area of Midtown from another. Fifth Avenue, with its low scale building and carriage trade retail, was designated a lower height district than surrounding streets and avenues, which assured the development of the elegant and open avenue we continue to enjoy today.

The 1916 regulations drew upon an increasing body of technical iterature regarding the need and therapeutic affects of daylighting and sunlighting. The work and writings of George Ford, AIA, who drafted the 1916 bulk regulations, reveal a keen understanding of the Civic Design implications of the regulations. The contextual quality of buildings built over the 50 years of the code, with its emphasis on the space and urbanity of the street, testifies to the conscious design concern exhibited by the 1916 Commission on Building Districts and Restrictions.

1950 PLAN FOR REZONING NEW YORK CITY

Through the life of the 1916 Resolution, few modifing amendments occurred in basic height and setback requirements. However, it became clear by the late

1940's that the more than 1400 amendments to primarily the text concerning use, and the 1439 amendments to the maps, were causing the internal structure of the Zoning Ordinance to be overly comlex and confused. The 1950, Plan for Rezoning the City of New York was a recognition on the part of the City Planning Commission that the form (structure, framework) and content of the 1916 Ordinance was no longer responsive to the needs of the City. Development on larger lot sizes, building technology, automobile and truck transportation, manufacturing practices, marketing, and life style required new devices. The 1950 Plan recommended a broad response to the new conditions including "more specialized use districts, nw and more flexible bulk controls, vertical zoning, off street parking and loading regulations, transition zoning, and amortization of non-conforming uses".

1961 ZONING RESOLUTION

While not officially adopted, the 1950 report crated the environment and groundwork for the comprehensive revision of 1961. The 1961 Zoning Resolution continued in great part the prescriptive format of the superseded regulations. This type of format is based on a set of minimum standards, prescribing in specific detail the relationship of the proposed development to the street, side, and rear lot lines by including street line setbacks, building setbacks or sky exposure plane, yard regulations, and coverage limits. The terms, structure, and techniques of the 1961 Resolution owe their debt to the Mosaic "Thou Shalt Not" zoning of an earlier period.

The innovations of 1961 resulted from a dramatic change in content rather than any substantive change in regulatory structure While the 1916 Ordinance had tended to produce street-related buildings and assumed public development of concentrated open space, the 1961 Resolution sought openness at grade on each site in the form of privately constructed plazas and sidewalk widenings. The impact of this idea was to disaggregate buildings into a series of free-standing buildings (either towers, slabs, or tower and base) resplendent in their own space. A steeper sky-exposure plane and greater tower bulk (40%) were somewhat offset by bringing more light around the sides of buildings. While the need for open space was crucial, the particular changes of the 1961 Resolution reveal a concern for both practicality and taste. Practicality led to the provision by each new development of much needed public outdoor space on the bulding lot. This was perceived as vital for an area of Manhattan possessing few parks for its large working population. This innovation was created simultaneously with the first beginnings of the bonus floor area system, which later evolved into a complex set of its own. Taste reflected the planning and architectural communities' fascination with the single form free standing tower or slab, an idea which datea back to an earlier period in the century. "Pure" detached buildings were seen as providing more light and airy openness to the city, but the form and proportionate height of the architecture was also something to be appreciated in its own right.

The 1950 report, which had begun this shift in image, also recognized a need to adjust for the scale of towers, and recomended a lower FAR for Midtown than was finally adopted. The FAR or Floor Area Ratio device was initiated as a means to limit the density of the City by defining the maximum development potential for urban land as a multiple of the lot area. Thje change from essentially lower more contextual building to the tower structure can be characterized as one "taste", using taste in the legal sense. This "taste" was to change the face of whole avenues. Sixth Avenue represents one

extra-polation of large freestanding slabs and towers, with plazas and Third Avenue, with its smaller towers and tower-base buildings and essentialy widened sidewalks, represents another. Institutionalized taste in a zoning ordinance has had enormous ramifications on the physical appearance of the City. When, as in 1961, a particular idealized building form is legislated, the effect is not only a local homogeneity, but uniformity on a grand urban scale. This approach differed fundamentally from the one taken in 1916 which expressed a concern for the public space of the street and less with any idealized bulding type or form. The fact the the "wedding cake" building became characteristic of the 1916 ordinance says more about the limits of prescriptive zoning than the intentions of the Commission.

IDEALIZED BUILDINGS FORMS ARE A-CONTEXTUAL

Designing a zoning resolution around an idealized building has two effects. First, despite the earnestness of the '61 refors, the ordinanc does not sugget nor take into account the preceeding mass of buildings. Secondly, they do not acknowledge the spatial qualities, activity and orientation of the existing streets. In fact, the 1961 sky exposure planes no longer are sensitized to the multiplicity of street widths but are steeper and considerably less restrictive than those which preceeded it. (See A10 Section 33-43 & 44). The As-of-Right (AOR) regulations of the '61 resolution are a-contextual - they are not against context; existing context and site orientation aare just not issues. Every new bulding sitting abstractly on its own site conforms instead to a vision of the "City of the Future". The massive discontinuities between new and old apparently were perceived to be some minor inconvenience until the vision reached fruition. Thus, the '61 Resolution did not continue the planning ideas of the teens, twenties, and thirties.

IMPLICATIONS OF THE1961 ZONING RESOLUTION

The implications of the form and content of a prescriptive and physically idealized ordinance on office construction in Midtown required an approach to the following:

1) The buildable floor area for a site is not a function of technology the market, site size, location, and configuration, as in the 1916 Ordinance, but is an abstract yet predetermined multiple of the lot area (FAR). Therefore a developer will tend to want to build to the abstract maximum FAR which is economically achievable AOR on certain size sites only.

2) The bonus of additional floor area for the provision of an outdoor amenity - originally limited to plazas and arcades-raised the base FAR by 20%, a significant incentive. The base FAR plus 20% of the base FAR beame the acceptable minimum buildable (in prescriptive situations, maxima have a way of becoming minima), and also served as the guide to the pricing of urban land. The provision of a full FAR bonus plaza accounted for a minimum of 33% of the zoning lot.

3) The provision of the plaza at grade on a site was then compensated for by allowing a tower to occupy up to 40% of the total site on large sites, and u to 50% on small sites, an increase of between 60% and 100% over the maximum coverage of the 1916 ordinance. (see A10 Section 33-451 et al.). The Empire State Building, Chrysler Building, and Seagram Building are all 25% towers, built under 1916 regulations. The 1961 ordinance shifted more bulk into the

tower due to the removal of bulk for open space at the tower base.

4) Although AOR provisions exist (see A10 Section 33-451) which allow for higher coverage with compensatory reductions in FAR, only the CBS Building has used them. As the total building area is reduced, less return is provided than the higher FAR sought through large lot assemblage, variances, and special permits.

5) The speculative and corporate market demands for typical floor sizes have predominated in a 15-25,000 SF per floor range, although there are many exceptions to this rule. The site size required for an AOR 18 FAR tower bulding in a Midtown C5-3, C6-6, C6-7 zone can be quickly calculated. (see A10 Section 33-45).

Tower Floor Area		Max. Cov.	Site Size
10,000 SF/FL	+	40%	25,000 SF
15,000 SF/FL	+	40%	37,500 SF
20,000 SF/FL	+	40%	50,000 SF
25,000 SF/FL	+	40%	60,000 SF
30,000 SF/FL	+	40%	75,000 SF
35,000 SF/FL	+	40%	85,000 SF

(The 85,000 SF site is equivalent to a full block development on a small east side block, a typical new Rockefeller Center Building on a site of the same area as the Empire State Building).

These sites are all considerably larger than buldings with predominantly equivalent floor sizes in pre-1961 buldings such as ITT on Park Avenue with a site size of 30,000 SF. Though its floors diminish in size with the setback provisions at the top, 80% of the floors range from 15,000 to 30,000 SF.

6) In all cases for towers, the towers were required to be no closer than 20' to 40' to a narrow street and 15' to 40' to a wide street depending o whether the entire building is a tower or a tower and base structure (see A8-9). This is coupled with a maximum area per floor allowed in an absolute number irrespective of site length. Thus as the site increases in size the regulations require a thinner slab, rather than t tower, centered on the east-west axis of the site.

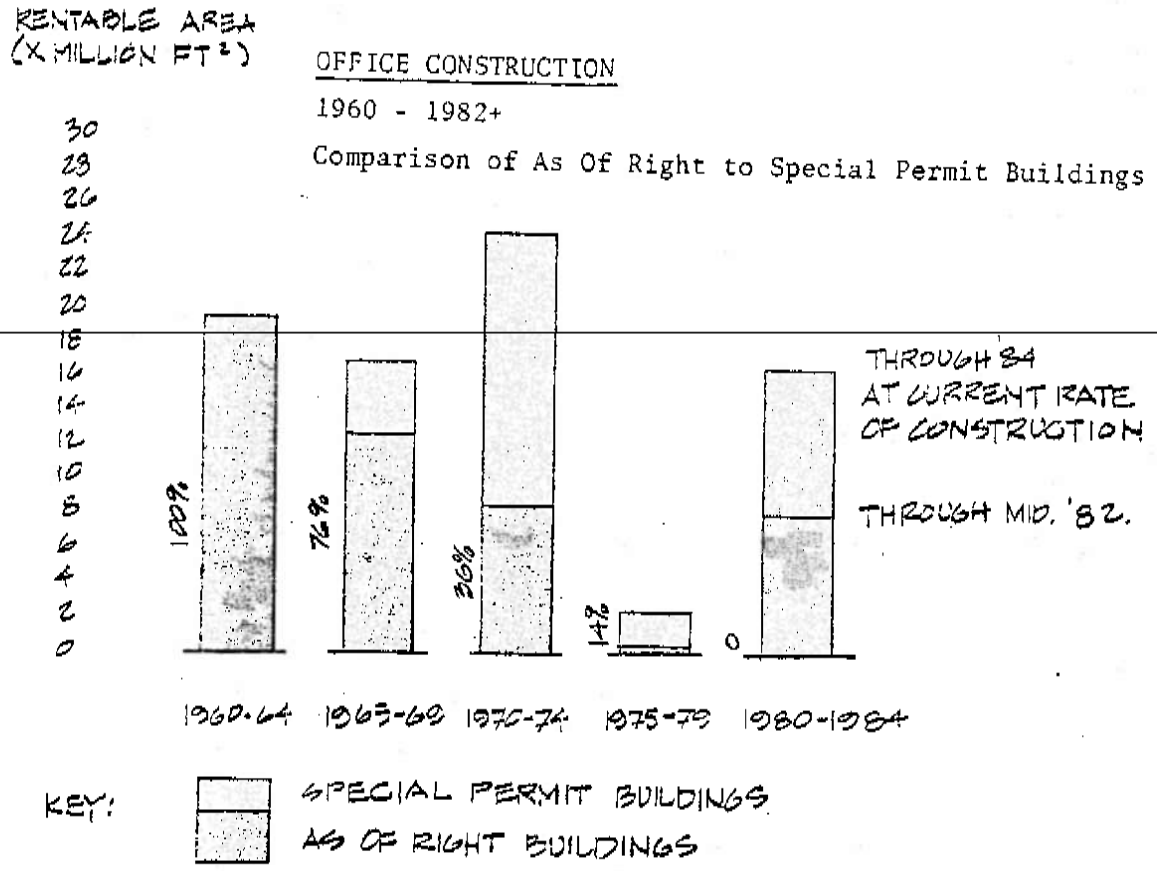
Clearly, the 1961 regulations were written for a regular, deep, avenue blockfront. The ultimate size of the building is a direct function of the lot depth - a form extruded into the midblock.

While the original, unamended 1961 ordinance contained some very specific discretinary sections requiring Special Permits, it was not until the effect of AOR regulations began to take on concrete reality that the City Planning Department responded with an expansion of the Special Permit Section and the innovations of the Special Purpose Districts.

ANALYSIS OF OFFICE BULDINGS 1960-1982

An analysis of all office buildings built under the 1961 ordinance through 1982 presents a very revealing trend. Of the total of 111 buildings constructed since 1960, 72 or 65% were bult AOR and 30 or 35% received either a BSA Special Permit or CPC Special Permit by the City Planning Commission. (see A14)½

The amount of floor area bult AOR during that 22 year period represents 58% of the total, with the remaining 42% receiving some form of public action. Closer inspection indicates a steady trend from AOR buildings to buldings requiring public waivers. As-of-Right construction accounted for 100% of all buildings in the period 1960-64, 87% in the period 1965-69, 46% in the period 1970-74, 25% in 1975-79 and 0% in the present period 1980-82. (see A15). Essentially the AOR regulations described earlier have gone unused for the last 8-10 years for the construction of Midtown office buldings.



Of the 29.6 million SF of buldings receiving either BSA or CPC action, approximately 1.6 million SF of office required BSA action, while the other 28.0 million SF were granted Special Permits by the CPC. The 7 BSA variances tended to deal with small corner or irregulat lots. Unlike the CPC, the BSA cannot invent new zoning but can merely grant waivers on specific sections of the text on the basis of specific hardship attributable to the site. It appears from a cursory perusal of the files that BSA variances had less to do with hardship than with developers purchasing undersized lots that did not fit the ideal tower described earlier, which prevented them from achieving the maximum FAR of 18. The BSA actions cluster primarily arond a few years in the late 60's and early 70's followed by a spurt of CPC additions to the Special Permit and Special Purpose District Sections of the Zoning Resolutin.

This overview of the trends in the last twenty years, from AOR to discretionary review of every new building by the CPC raises the obvious question - why did this come about? Some tentative or speculative conclusions are possible. Clearly both developers and the City Planning Commission have for whatever reasons moved away from the objectivity of AOR regulations to the negotiation procedures of discretionary zoning.

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1) Trends are revealed in reviesing Appendix A16 which compars tower floor area, site assemblage via a Zoning Lot Mergers (ZLM) and Transfer of Development Rights (TDR) and site area of buldings for the post 1974 period. Compared to the buildings of earlier periods, the buildable sites have gotten smaller for buildings of similar floor area. Only 3 of the 14 buldings sinc 1974 could have been built AOR with tower coverage representing 40% or less of the site area, bearing in mind that lots under 20,000 SF are allowed to increase their coverage up to 50% AOR depending on the size of the site; even in these situations the coverage exceeds the AOR allowable. The high incidence of ZLM and TDR represent the recent approach toward site assemblage in regard to the 40% tower requirement. As the available buldable sits have gotten smaller or assemblages on the order described earlier became more difficult or economically less feasible, the purchase of "assemblage rights" from adjoining buildings has increasingly become the method by which the developer meets the letter rather than the intent of the law. The authors of the 1961 Resolutin with their prediliction for an ideal building, ideally sited, did not either foresee or probably desire the combining of new and old buildings on the same zoning lot, as in recent ZLMs. The reason for the incompatibility of the ZLM with the AOR regulations is that the location, size, and configuration of the buildable portion of a ZLM are not subject to pre-regulation but rather result from the developer's assemblage. The building simply goes where it can go - underlying bulk regulations. The net result is that all ZLM's require waivers of height, setback, and sometimes lot coverage regulations in order to justify the exceedingly high amounts of bulk on restricted lots.

2) In the sixties the earlier CPC discretionary actions resonded to the needs of the new very large Sixth Avenue bulding for rationalized floor configurations. Deeper blockfront sites required narrower towers than shallower sites under the prescriptive formula of tower enroachment. The contradicts building practice, where the ratio of idth to depth and to height establishes norms that increase with large buildings ($\pm$) 2 million SF). The width of large buldings with their wider elevator and mechanical cores was minimally 15-20' wider than permitted under the ordinance. The early use of Sec. 74-72, a Special Permit provision allowing the waiving of the AOR bulk regulations, therefore was not used to increase tower coverage but to rationalize

configuration of tower plans.

3) With the smaller sites, the desire for higher coverage and a growing dissatisfaction with the proliferation of plaza upon plaza, the development of the indoor public amenity came about. All indoor amenities require CPC review and receive Special Permits. They allow the same if not greater FAR as for an outdoor open space. The value of the amenities has been questioned. The immediate consequence of their institutionalization included a) raising the expectation of achieving 18 FAR to the equivalent of a right on all sites b) facilitating large concentrations of building bulk on both the small lot and the small buildable portion of a ZLM.

4) In the late 60's and early 70's it became increasingly clear that Midtown was not a homogeneous area but rather a heterogeneous collection of distinct districts homogeneous in their local character. That understanding required a more sensitized approach to new construction than afforded by the 1961 AOR regulations. discretionary legislation was envisioned as promoting development sensitized to the environmental needs of location. The Special Purpose Districts, such as the Theater District, are typical of such legislation. the Fifth Avenue Special Purpose District recognizes the distinctiveness of Fifth Avenue, as did the framers of the 1916 ordinance. The character of Madison has recently become an issue with the assemblage of 4 or 5 sites on the avenue, each with the possibility of breaking the street wall and retail frontage of the avenuwe with a plaza if the AOR regulations are met. The Commission responded to the possibility of an AOR building and plaza on Madison Avenue by directing the development through discretionary review. The developer was equally concerned by the inherent building diseconomy but used the AOR building as a basis for negotiation. The CPC allowed bonuses for indoor amenities at higher rates than for outdoor amenities which may have attracted development away from the BSA variance route. In the late 60's it was perceived that the BSA was, in effect, creating zoning policy by granting height seback, and coverage waivers to buildings on small or irregular sites.

The use of discretionary review in lieu of the AOR system of pre-regulation and the development of an incentive bonus system represented a major innovation in zoning technique at the time. the planning profession had discovered during the 60's that discretionary review provided a more flexible and site specific approach than was usual in the prescriptive AOR zoning of an earlier period. These techniques were first applied in the fifties to conditional uses and later expanded for large scale developments for primarily non-urban PUD's. The boldness of the CPC to adopt this approach on the scale of Manhattan (most Special Permits and early Special Purpose districts) was greeted with enthusiasm by all parties. The decision to handle new office construction through the use of discretionary zoning techniques was based on a recognition of the more onerous and stultifying effects of the 1961 tower and open space provisions and a genuine believe that zoning could promote and regulate a good environment through design incentives. The lack of objective and uniform criteria for reviewing a proposed development and the tendency to tailor or amend existing legislation to each new bulding brought before the CPC has tended to undermine any consistent notion of certainty. The pre-certification period - which is excluded from the ULRP time restrictions for project review - is often an open ended period of negotiation in which the ground rules and in some casees the purview of the CPC are indistinct. In the process of negotiation it is unclear as to the limits of the public concern in the architectural design of a privately built office building. The role of zoning should not be to place

concerns for the appearance of individual buildings above concerns for maintaining overall environmental quality. Despite the current lack of clear AOR goals, the question remains, can the certainty and objectivity which should be inherent in an AOR system be compatible with the best characteristics of flexibility and site specificity inherent in the discretionary aproach.

CONCLUSION

It is clear from the preceeding analysis of the structure and content of the 1916 and 1961 Zoning Resolution and their realization in buildings, that a prescriptive system of AOR zoning is not flexible enough to deal with the current difficulties of development in Midtown. Nor is a purely discretionary approach, with its lack of objectivity, certainty and accountability, an acceptable approach to complex requirements which incude:

a) widely varied site assemblage-including ZLM, TDR and irregular and small sites
b) public space on the building or zoning lot
c) energy conservation and solar access
d) the need to fit the new building into an existing and valued context
e) the need to insure the vitality of the street
f) the need for marketing flexibility in floor sizes
g) the financing process which often requires the developer to program the building's floor area needs to major tenant or tenants in order to obtain financing
h) the potential objections of owners of surrounding property
i) the preservation of existing uses, character and ambience of districts within Midtown.

The above list, formidable as it is, suggests that an integrated and comprehensive approach to the design of new bulk controls for Midtown is essential. Tinkering with the present system of prescriptive AOR bulk controls by treating them in isolation, avoids the fundamental questions raised by the analysis. This is not to say AOR controls cannot work; an AOR system of zonign is desirable and viable if tuned to the present and long term environmental and economic conditions of Midtown. AOR controls ned not produce a grinding uniformity. The Chrysler, Empire State, RCA and Seagram Buldings and the building ensembles of Fifth and Madison Avenues and Central Park West bear testimony to the efficacy of such an approach.

New bulk contols must be sensitized to the buildings and spaces of Midtown which are an expression of high concentrations of diverse activity Its desirability as a workplace is dependent on the continued existence of its social and physical variety, and on its ability to draw upon the enormous reservoir of its own past, even as it moves forward. It is a place of constant change, but change which at its best preserves the enduring qualities of the existing environment. The street grid which conects all its areas in a seamless web provides an orientation framework. The uniformity of its topography and the grid are complimented by great heterogeneity within the districts. The historical differences between areas, both in use and scale, should be reinforced by new bulding activity. New buildings benefit greatly from the richness of the environment, and therefore should contribute to and enhance what remains. Displacing diseconomies on other lots is a burden on all. Self-interested actions could accumulate into a destruction of the whole, much

as incremental overuse destroyed the Commons in Garret Hardins essay, "The Tragedy of the Commons".

The anticipated comprehensive revisions to the AOR buk regulations of the Zoning Resolution will have effects far beyond the borders of Midtown. The problems experienced in Midtown are being felt in varous degress in other major American cities. As in 1916 and 1961, the City again has the opportunity to set a new zoning model, one that reflects today's concern for both environmental and developmental quality.

SUMMARY AND

GENERAL RECOMMENDATIONS

SUMMARY AND GENERAL

RECOMMENDATIONS

The present system of As-of-Right bulk controls for commercial developments in Midtown is currently moribund; it has been unused for almost 10 years. The move away from the acknowledged rigidities of an As-of-Right prescriptive system to the use of Special Permits and complete discretionary review for all new buildings has not necessarily produced environmentally sound developments. We recognize and support the strong public push to limit discretionary zoning by instituting new As-of-Right regulations that incorporate environmental objectives.

The complexities of current development problems and growing environmental awareness require a reexamination of the very concept of purely prescriptive controls. Prescriptive tools at best govern what can be anticipated; the critical impasse for zoning, and for all those concerned about development, is the constantly unanticipated. Ensured quality derives not from prescribed form but from assured environmental performance.

Any truly workable As-of-Right system must be an orchestration of all the zoning instruments available. Increased complexity and difficulty must be met with increased creativity and sophistication. New regulations should include the best aspects of prescriptive, discretionary and performance zoning techniques in an overall As-of-Right approach. But the structure and content of such an As-of-Right system must first be based on clear goals. The following general goals should be embodied in all the various tools and methods of any new zoning for Midtown:

ENVIRONMENTAL

1. Recognize the perceptual relationship between new building bulk and the existing physical context.

2. Meet a preferred level of environmental quality which is derived from a perceptual and functional analysis of the physical context of Midtown. This includes existing expectations of daylighting, and of the scalar definition of open spaces and streets.

3. Guide the physical change in Midtown to minimize the perceptual disruptions and discontinuities of very high bulk buildings, isolated structures and unusable space.

4. Encourage the perception of historial continuity by the preservation of the diversity of building types, the enhancement of existing amenities and convervation of the social and cultural diversity of Midtown.

ADMINISTRATIVE

1. Maximize the effectiveness of As-of-Right zoning by institutionalizing flexibility in site assemblage and site design.

2. Develop As-of-Right regulations that do not discriminate by lot size or configuration.

3. Insure that proposed controls satisfy both the substantitive and the procedural test by being based on empirically derived and verifiable data. The controls must be objective, uniform, and comprehensive in their application.

4. Tailor the proposed controls to be responsive to the relative simplicity or complexity of a development situation.

5. Assure that the proposed controls respond to the legitimate needs of the public, developers and architects and maximize the long term benefits for all.

6. Insure that the proposed controls have a predictability of development potential.

RECOMMENDATIONS

The goals have been translated into a comprehensive and interrelated set of recommendations that regulate bulk in concert. The components introduce new concepts as well as modifying existing regulations.

The framework of the following proposal rests upon the essential concept of the District. The District concept recognizes the environmental context of new developments and acknowledges context as a prime determinant of value.

A. THE DISTRICT:

1. Corresponds to the immediate environment affected by a proposed development.

2. Defines the perceptual locus or context that gives locational value to a proposed development.

3. Generates empirical criteria to be used in evaluating the effect of a development on the existing environment.

4. Establishes the locus for proposed off-site public amenities. The proposal also establishes a flexible approach to bulk regulation corresponding to the widest possible range of situations.

B. AN AS-OF-RIGHT TWO-TIER SYSTEM OF PERFORMANCE AND PRESCRIPTIVE BULK CONTROLS

1. Employs the performance criteria as the basis for setting the prescriptive standards, insuring an equivalent level of environmental quality.

2. Represents graduated responses appropriate to the degree of complexity of the proposed development, with the choice of tier to be elective.

3. Maintains an objective basis for the evaluation of a proposed development.

4. Delineates a Prescriptive Tier which would be:

   a) applicable in the density range of 15-18 FAR,

   b) applicable on cleared sites up to 75,000 SF with no existing

structures remaining on the development portion of the lot.

c) operates in most situations, with any pre-mandated exceptions to the Prescriptive Tier requiring the use of the Performance Tier.

5. Delineates a Performance Tier which would be:

a) Based upon a constant set of environmental standards.

b) applicable in the density range of 15-21.6 FAR, on the development portion of the lot.

c) applicable on all sites up to 75,000 SF

d) more flexible regarding building configuration and site planning, commensurate with the trade off aspect of the system and the greater sophistication of the objective evaluation tools.

The proposal advocates limiting the extensive use of Special Permits.

C. ANY SPECIAL PERMITS FOR THE WAIVER OF AS-OF-RIGHT BULK REGULATIONS:

1. Should be limited to large sites over 75,000 SF where site opportunities require a discretionary response.

2. Should employ the Performance tier as the basis for the discretionary review along with other site and District specific opportunities.

The proposal places parameters on the transfer of building bulk.

D. REGULATE THE TRANSFER OF UNUSED DEVELOPMENT RIGHTS BY:

1. limiting Zoning Lot Merger Transfers (ZLM) to a maximum of 18 FAR on the development portion (cleared) of the zoning lot.

2. allowing for a discontinuous zoning lot within the District thereby:

a) encouraging the location of public outdoor amenities in targeted locations within the District.

b) encouraging the preservation of existing buildings and their zoning envelope within the District.

3. limiting the Transfer of Development Rights (TDR)from Landmarks to to a maximum of 21.6 FAR on the development portion (cleared) of the zoning lot.

4. allowing for the transfer of unused development rights within the District.

The foundation of the proposal on the District concept follows from the understanding that the individual disposition of bulk and open space has district impact. Expectations of perceptual density and openness derive from the District. The District concept is critical if zoning is to be sensitized to the variety of physical contexts that characterize Midtown. The concept establishes a simple device, the Street District , which embraces the particular perceptual field or environment that a proposed development should

be responsive to. The Street District corresponds to the typical perception of a building within its context as experienced from the sidewalk. "Block" or "avenue" associations reflect this perceptual framework; the "block" includes structures on both sides of the street in the public mind whereas the legal definition of a block is the land and buildings surrounded by the streets. Each development establishes the limits of its own context or District, as defined in the Zoning text. As the District is measured from the boundaries of a development site, there are as many different districts as there are sites. A Street District runs 1000 ft. from the lot in both directions or until it is intersected by a street of equal or greater width.

Midtown is not a raw territory. As with any environment, the existing conditions determine our expectations. In the case of Midtown the successive layering of legislated regulation and changes in the concept of what a central district might or should be, on the part of the lay public, professionals and developers, created and defined our conception of Midtown. The proposed zoning criteria regulating mass, space, and light derive from and are consistent with the variety of environments or districts in Midtown. This may be viewed as an historical or conservationist approach to the development of civic design criteria. The criteria so derived are intended to enhance the homogeneity of individual districts, preserve the heterogeniety of Midtown, and limit the abuses so apparent today. They become the basis for the contextual evaluation of a new development.

While zoning has traditionally viewed lots in the abstract, architects, planners, developers and the public have always recognized that the value of a lot in Midtown is primarily its location. Location is the combined physical character of the surrounding environment, including buildings and open spaces, the variety of services available, transportation and historic use. Past developments have often been seen as simply exploiting their local environments. Planning and zoning should incorporate recognition of the potential each development has to reinforce its local environment or District. An environmentally integrated development can enhance the value of its district through sensitized site planning and building configuration, and through the disposition of its public amenities at locations within the district where they are most desired.

The concept of a District is not new. The proliferation of Special Purpose Districts illustrates one planning response to the fact that the aggregated environment or whole has characteristics that should be reinforced by new development as new parts, while the Special Purpose Districts generally require Special Permits and are subject to discretionary review. The following proposed As-of-Right system requires no Special Permit or discretionary review. Its internalized goals and District method become the means by which individual development decisions will also encompass concerns for the larger context and environment, without the need for further intervention.

SPECIFIC PROPOSAL

A. THE ASSURANCE OF EQUIVALENT QUALITY

The uneven results and lack of standards for discretionary zoning have led to a demand for some workable form of pre-regulation. A system based on pre-regulation has many advantages, such as procedural objectivity, certainty of development potential to both the public and developer, accountability, and

speed of processing. Still the fundamental issue is whether such a system can successfully address the environmental and economic complexitities of building in Midtown. The proposed As-of-Right two-tier system with a Performance Tier and dependent Prescriptive Tier, holds the greatest promise for integrating consistent civic goals with the dynamic nature of the Midtown environment. The two-tier system recognizes the fact that in many situations the relative simplicity of the prescriptive regulations, derived from the District and filtered through the Performance Tier, are appropriate. It also recognizes that there will continue to be many complex situations which will require a more finely tuned yet flexible set of regulations. The Performance Tier interrelates the issues of context, bulk, pedestrian amenities, daylighting and sunlight, and perceptual density which can be objectified and quantified within a tradeoff system based on goals to be achieved rather than minima to be met. The broad purpose of the two-tier system is to promote the highest obtainable standard of quality, consistent with an approach which attempts to draw clear boundaries as to the extent of the public interest in private development decisions. The proposal implies a definition of environmental quality upon which substantial agreement can be reached beforehand.

An example of an existing two tier prescriptive and performance approach is the New York State Energy Code. The tiers are essentially equivalent in the energy controls on buildings, with the simplified and more restrictive prescriptive standards being a distillation of the more complex performance tier. While the prescriptive tier prescribes maximum % of window area, and other rules of thumb, the performance tier encourages a diversity of approaches, some even more energy conserving but impossible to anticipate. The proposed design is then evaluated against a series of clearly defined goals or performance standards, with the flexibility to trade inefficiencies in one area for efficiencies in another.

Essentially the two tier approach acknowledges the limtis of a successful prescriptive system - that is, one in which the variables have been reduced to a controllable number so that the range of possible solutions falls within the selected limits. Clearly the more variables introduced in a prescriptive system, the less predictable are the results. The performance system on the other hand is capable of dealing with a larger group of variables in a predictive manner. Both produce equivalencies.

B. THE BASIS FOR STANDARDS

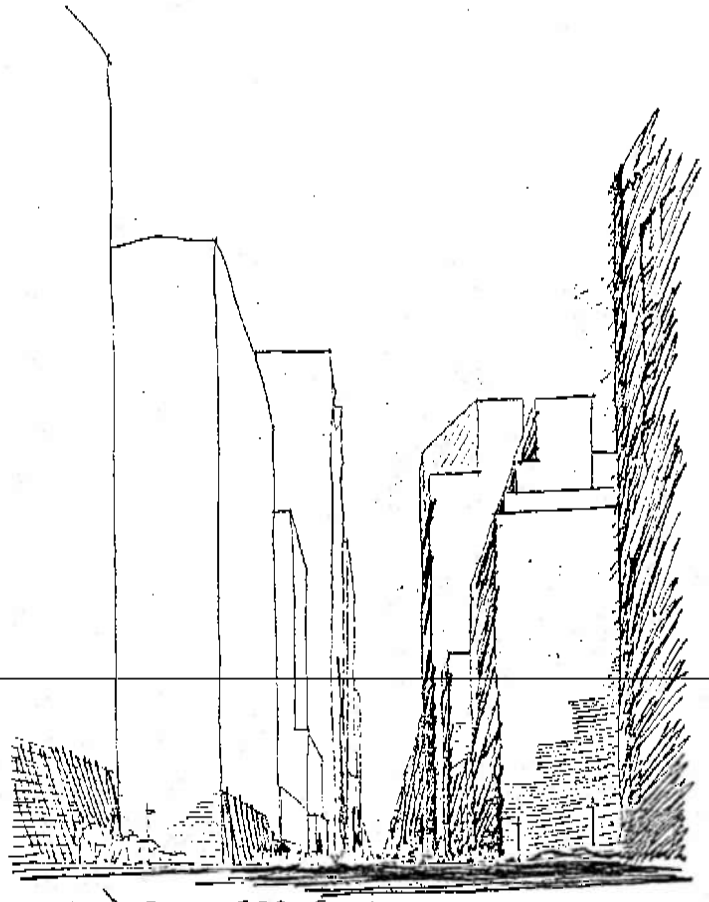
The proposed system relies on the District to generate the perceptual norms for a proposed development. Those norms are concerned with:

MASS. a) building mass at the street
b) building mass in the sky

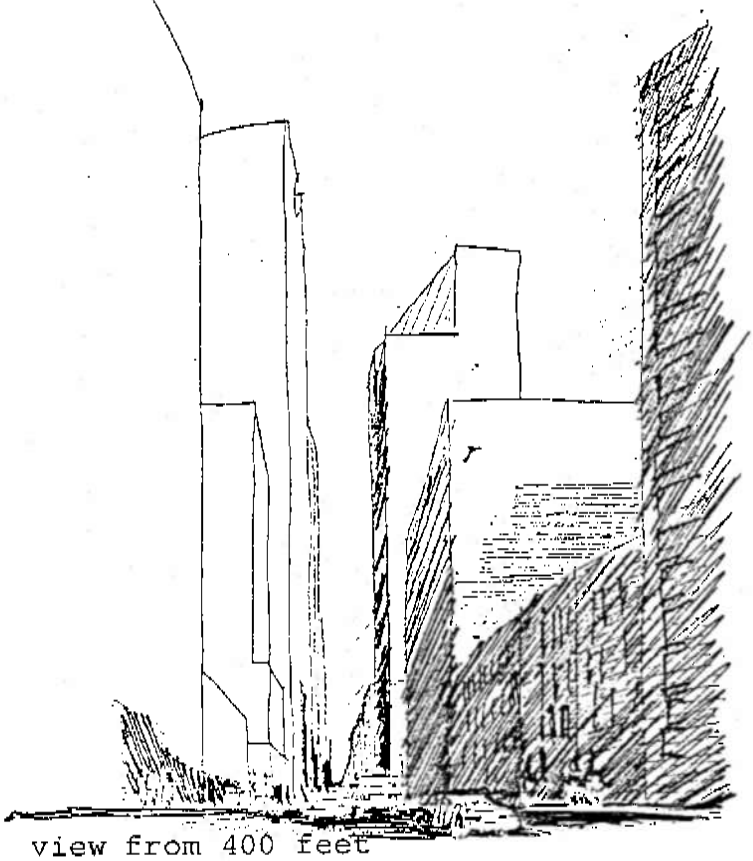
SPACE a) proportions of outdoor space
b) openness and definition of space and streets

LIGHT a) amount of daylight
b) amount of sunlight on amenities

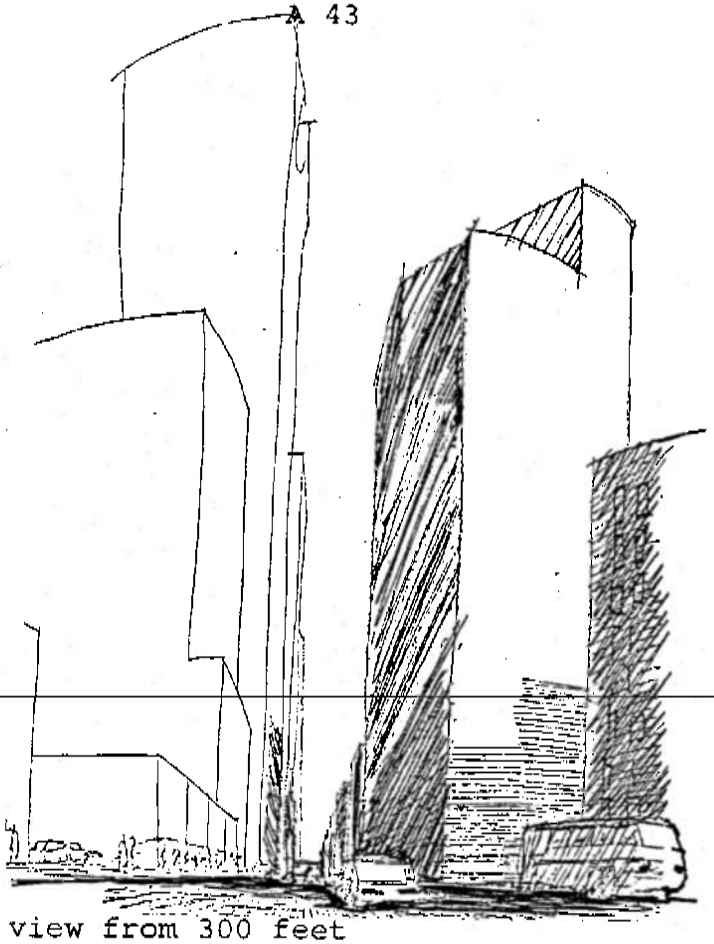
Mass, space and light are the fundamental indicators of an environment and might be correctly compared to our peripheral vision which is concerned with defining the sense and limits of a place or context. This trio had its origins



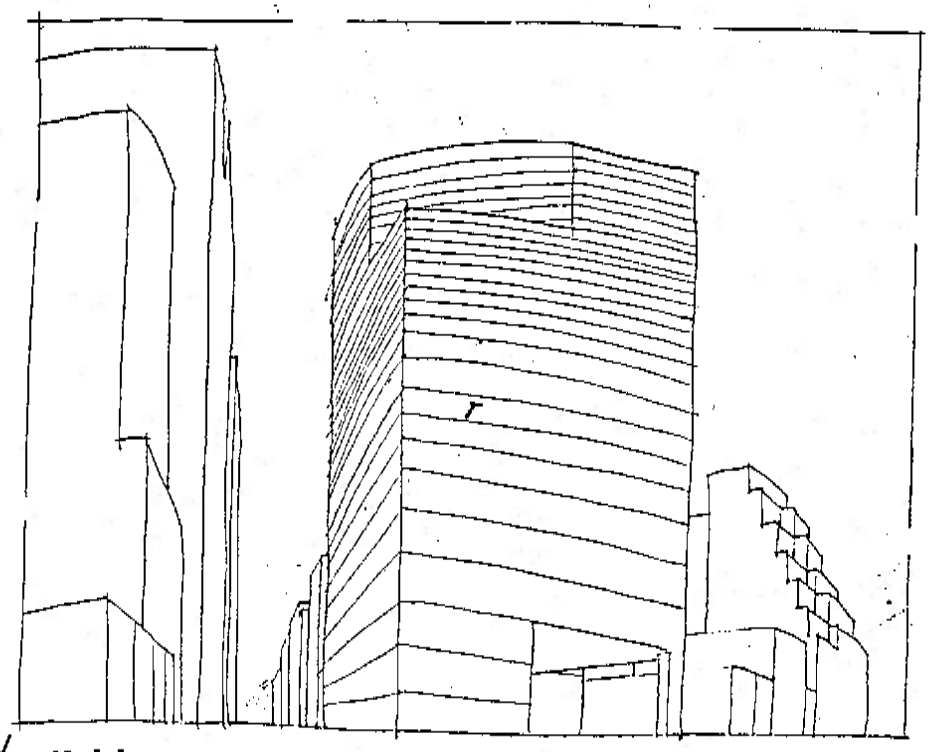
1 view from 500 feet



2 view from 400 feet



3 view from 300 feet



W Waldrum view from 250 feet

VIEWS LOOKING UP A STREET AND WALDRUM VIEW OF STREET

in the New York City 1916 Zoning Resolution and have long been recognized as the basic ingredients of civic design.

The proposed system is entirely perceptually based, thereby avoiding the potential lapse into abstraction. The point of view is always that of the pedestrian, because it is the quality of the public space of the street which is critical. Unlike the 1961 Resolution, this proposal has no idealized site nor building type in mind. It is concerned primarily with the environmental quality of the street and public outdoor amenities and assumes that the resultant improved environmental quality will positively impact both existing and new building interiors. If the predominant daylight and openness of the street to the sky is maintained or enhanced, clearly the building interior benefits.

Daylighting in the street is proposed as the primary control of building mass above the building base, while street wall length and height control the mass at the street level. With steady advances in daylighting evaluation over the last 100 years, objective methods have been developed which have adopted for use in the proposed system.

The perceptual base of the proposal is most apparent in the diagrams (see zoning text and example) used to measure daylighting in the Performance Tier, where the point of view is that of the pedestrian in the public space of the street. The Waldram diagram, which is similar to a perspective, evaluates the amount of sky blocked by a proposed development both parallel to the street (as you walk down the street) and perpendicular to the street (as you turn to loook at the proposed building). The diagramatic evaluation of daylighting accounts for both the amount of light apparent over the tops of buildings and for the amount of light apparent at the sides of buildings, including the profile of buildings as seen down the streets.

The Waldram diagram incorporates the concerns of previous codes and makes explicit the various components of daylight which determine the perception of bulk at the sky. The 1916 ordinance placed primary value on light coming over building tops, while the 1961 ordinance emphasized the value of light at building sides. The resultant building profiles have combined to determine a set of expectations for street profiles or openness looking down the streets. The proposal is based on all these interactive expectations of daylight historically provided in Midtown.

C. THE IMPACT ON NEW DEVELOPMENT

1. BUILDABILITY

The issue of the buildability of a site, as noted earlier in the analysis, has become paramount to the developer as traditional assemblages have become more difficult and smaller. The proposed two tier system does not discriminate against small lots or lots of odd or complex configurations, including Zoning Lot Mergers (ZLM). There are no arbitrary formulas regarding tower coverage, thus allowing marketable floor sizes on smaller lots when the environmental criteria of either the performance or prescriptive tier are met. Advantages accrue to the developer and architect in the flexibility to plan a building and to the public in the form of encouragement of buildings which are sensitized to reinforce the District context.

2. SPECIAL PERMITS

The components of the proposed system acknowledge the multiple options and decisions that proceed physical development so that their strength comes not from imposing artificial physical controls, but from giving freedom and flexibility at all stages, within Special Permits except as proposed below.

A workable As-of-Right system must not be undermined by a parallel system of Special Permits which would relieve the developer of compliance with substantive aspects ooof the environmental controls and offer higher densities in return for questionable amenities. The proposed Two Tier system offer all the flexibility needed to deal with any site condition, other than those sites which exhibit genuine hardship based on conditions such as underground streams, etc.

It is proposed that very large sites, those above 75,000 SF may be treated by Special Permit, as those sites present unique development opportunities both to the public as well as to the developer. The Performance Tier would still serve as an evaluation tool thus insuring an objective evaluation of a proposal. The evaluation would be administrative, thus allowing the Mass, Space and Light evaluation to be tempered by other aspects of the proposed development.

3. ZLM & TDR RECOMMENDATIONS

There are four underlying and interdependent concepts concerning the treatment of the Zoning Lot Merger (ZLM) and the Transfer of Development Rights from landmarks.

a. Use the District concept as the basis for lot assemblage, distribution of unused development rights (from either ZLMs or landmarks), the location of public outdoor amenities.

b. Differentiate the ZLM from the preservation of landmark structures through the sale of unused development rights, by valuing the development rights from landmarks more highly then ZLM and by placing a higher ceiling on the transfer of those rights to a development site.

c. Eliminate the maximum tower coverage requirements (40%) through the use of the proposed As-of-Right Two-Tier Performance/Prescriptive system of Bulk Controls.

d. Recognize the ease or difficulty of assembling a development. In descending order of complexity or difficulty assuming the same amount of buildable floor area, a typical range might include:

   1. a single cleared site with an on site outdoor amenity

   2. two cleared sites a cleared larger development site and a smaller non-contiguous site for the outdoor amenity eg. an urban park on through block urban plaza

   3. two sites - one cleared for the proposed development and the other with existing buildings remaining either contiguous or discontinuous with the development site.

The preservation of the existing scale and grain of development and the resultant openness and daylighting through the limited transfer of unused development rights should be treated as a bonusable urban amenity, and should be valued according to its relative public benefit compared to other bonuses.

The District provides the conceptual framework for governing ZLM and TDR as it does for the proosed Two Tier system. The District, rather than just the development lot itself, is the environment affected by a new development. This recognizes that both the perceptual and population density are perceived and planned in areas exceeding the limits of single lots.

The advantages and benefits to the public, developers and architects are outlined below:

1. The development assemblages will be smaller and hence minimize destruction of existing structures by allowing the amenity to be be located off-site but within the District. Preservation or targeted amenities will be spread over a wider area and be less tied to adjacencies with new construction. This also means a more marketable building on a smaller development site.

2. The District concept will minimize the jarring discontinuities between existing buildings and the proposed development by:

   a) allowing the distribution of unused development rights within the entire District, not just to adjacent lots.

   b) limiting the amount of floor area to be transferred to the development portion of the Zoning lot to 18 FAR in the case of existing structures, and 21.6 for landmarks. In no case would the lot area of the existing structures, landmark building, or off-site outdoor amenity count toward the lot area of the zoning for floor area calculations, as these large lot areas will be no longer necessary to meet tower coverage requirements.

      This proposal parallels what already exists in landmark transfers where the landmark lot is not included in the development lot calculations.

3. The discontinuous Zoning lot merger (DZLM) is of advantage to the developer because it:

a) increases the buildable options for site assemblage

b) minimizes the impact of adjacent holdouts

c) encourages smaller development assemblages on prime parcels with the amenity being either a preservation or urban outdoor space.

d) allows the developer and architect to protect views and solar access by acquiring the development rights of lower buildings either adjoining or opposite to the development site.

4. The varying ease of and desirability of assemblage of a contiguous or discontinuous zoning lot is reflected in a graduated bonus privilege by:

a) recognizing a ZLM or DZLM with existing buildings is the easiest and least costly method of site assemblage compared to a cleared site. Therefore in those situations the transfer of unused development rights will be limited to no more than half the basic FAR or the remaining unused floor area whichever is least.

b) recognizing the prime desirability of preserving existing landmark structures by allowing their unused development rights to be transferred to the non-contiguous or adjacent development lot within the District. The transfer of unused development rights would be on a one-to-ne basis up to the maximum allowable on the development lot. Essentially this places greater vaalue on floor area transferred from landmark structures.

c) treating on-and off-site public outdoor amenities in the same manner ie. 10 SF of building floor area for 1 SF of amenity up to a maximum of 18 FAR on the development lot.

5. Any transfer of unused development rights of 'bonus privilege' floor area to the development site must still meet the threshold of environmental quality set in the proposed system of bulk controls.

By no longer requiring site assemblage to reflect tower coverage, the ZLM and DZLM actually resemble the existing situation of TDR from landmark structures, in that the development lot is not being increased in size but rather that the floor area bonus or 'bonus privilege' on the development lot is gained by the purchase of the unused floor area from a perceived urban amenity. An example of such a District approach might pertain in the preservation of existing legitimate theaters where such theaters would be able to sell their unused floor area not only to contiguous developments but to a development or developments whose District includes the theater. The advantage is that the unused floor area could be absorbed on a number of development sites and the jarring perceptual discontinuities of excessive bulk next to small structures would be mitigated. Clearly further study of the impact on theaters should include an inventory of unused development rights currently available throughout the Theater District.

The tradeoff of the loss of density to the developer in the purchase of limited unused floor area from non-landmark structures, when coupled with the District locus for such transfer is fair to both the developer and public. The ability to build sooner with a marketable building rather than waiting for a larger cleared assemblage is reasonable. In effect the decision of when to stop assembling and when to build are governed by the builder and is not hindered by the Zoning ordinance.

One final reflection regarding the concept of floor area ratios (FAR) and unused developmennt rights from existing smaller structures in Midtown. As noted earlier, FAR was a device introduced in 1961 to limit density. The resullt was that each square inch of land in New York City immediatley had an abstract development potential without regard to location, configuration, market conditions, and building design and technology. In other words value was created in the abstract, whereas the previous 1916 Ordinance created value only through the actual aassemblage and construction of a bulding. The proposal here graduates that use value in response to the dessirability of the amenity to the public and cost to the developer.

PROPOSED ZONING TEXT

THE PROPOSED ZONING TEXT

The Proposed Zoning Text

The proposed two-tier system of bulk controls will supercede the existing as-of-right regulations controlling building height, setback, and coverage. The underlying use, density, sign and parking and loading regulations will remain intact.

The following outlines the structure and content of the Zoning Text for the proposed two-tier as-of-right bulk controls for Midtown. The two-tier system consists of a prescriptive and back-up performance tier. The user may elect to use either one or the other tier. Both tiers are as-of-right.

2

COMMERCIAL DEVELOPMENT BULK CONTROLS

A. PRESCRIPTIVE TIER

1. Daylighting
   a) Daylighting Considerations at the Street Line
   b) Daylighting Considerations at the Upper portions of a Development
2. Street Wall Length
3. Street Wall Height

B. PERFORMANCE TIER

1a. Daylighting	maximum points	60.0
1b. Daylighting/Building Reflectivity (optional)	maximum points	(5.0)
2. Street Wall Length	maximum points	25.0
3. Street Wall Height	maximum points	15.0
		100.0
4. Sunlighting (optional)	maximum points	10.0
Minimum Compliance Points		85.0

A. PRESCRIPTIVE TIER

1. DAYLIGHTING: to maximize openess and daylighting at the public sidewalks and other outdoor amenities

A. Daylighting Considerations at the Street Line

The dayligh angles control the disposition of building bulk on the zoning lot. The initial daylight angle (A_1) is either 72° or the angle determined by the required street wall height. All angles are taken at the center-line of the street. Ascending daylight angles are a function of the setback or setbacks (S_n) from the street line. For every 1 " of setback from the street line the angle (A) can increase by .2°. The Height of any portion of the building (H_n) is determined by the formula:

$H_n = (S+D) \times \tan (72^\circ + .2\ S_n)$

= distance to centerline of Street x tan (72°+.2° x setback)

where:

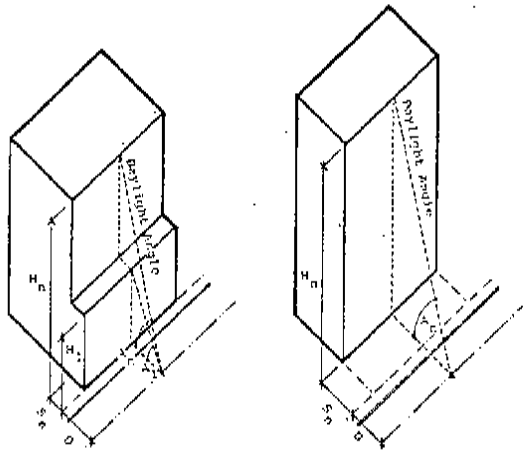
H_1 = Required Street Wall Height

H_n = Total height of any portion of the Building

D = Distance from the centerline of Street to Street Line

S_n = Distance setback from Street Line

$A_{1..n}$ = Angle subtended by portion of Building at Street Line or at setback S_n.



a. setback and base b. set back

Building Illustrations

Special Conditions

a) When the initial angle (A_1) is based on a required street wall height, the proposed street wall height may penetrate that angle up to the maximum range allowed (see 3. Street Wall Height).
b) When two streets of unequal width intersect, the required street wall height of the wider street shall be the required street wall height on the narrower street up to the depth of 100'.

60' WIDE ST. D=30' S= 0' 10' 20' 30' 40' 50' 60'

Angle	Tangent (rate of height to setback)	0'	10'	20'	30'	40'	50'	60'
88°	28.64	859'-72s	1145'-95s	1432'				
87°	19.08	572'-47s	763'-63s	954'-79s	1144'			
86°	14.30	429'-35s	572'-47s	715'-59s	858'-71s	1001'		
85°	11.43	343'-28s	457'-38s	572'-47s	583'-48s	697'-58s	812'-67s	
84°	9.51	285'-23s	380'-31s	476'-39s	571'-47s	666'-55s	761'-63s	856'-71s
83°	8.14	244'-20s	326'-27s	407'-33s	488'-40s	570'-47s	651'-54s	733'-61s
82°	7.12	214'-17s	285'-23s	356'-29s	427'-35s	498'-41s	570'-47s	641'-53s
81°	6.31	189'-15s	252'-21s	315'-26s	379'-31s	442'-35s	505'-42s	568'-47s
80°	5.67	170'-14s	227'-18s	284'-23s	340'-28s	397'-33s	454'-38s	510'-42s
79°	5.14	154'-12s	206'-17s	257'-23s	308'-25s	360'-30s	411'-34s	463'-38s
78°	4.70	141'-11s	188'-15s	235'-19s	282'-23s	329'-27s	376'-31s	454'-35s
77°	4.33	130'-11s	173'-14s	217'-18s	260'-21s	303'-25s	346'-28s	390'-32s
76°	4.01	120'-10s	160'-13s	200'-16s	241'-20s	281'-23s	321'-26s	361'-30s
75°	3.73	112'-9s	149'-12s	186'-15s	224'-18s	261'-21s	298'-24s	336'-28s
74°	3.49	105'-9s	140'-11s	175'-14s	209'-17s	244'-20s	279'-23s	314'-26s
73°	3.27	98'-8s	131'-10s	164'-13s	196'-16s	229'-19s	262'-21s	294'-24s
72°	3.08	92'-7s	123'-10s	154'-12s	185'-15s	216'-17s	247'-20s	277'-23s

80' WIDE ST. D=40' S= 0 10' 20' 30' 40' 50'

Angle	Tangent (rate of height to setback)	0	10'	20'	30'	40'	50'
88°	28.64	1145'-95s	1432'				
87°	19.08	763'-63s	954'-79s	1144'			
86°	14.30	572'-47s	715'-59s	858'-71s	1001'		
85°	11.43	457'-38s	572'-47s	583'-48s	697'-58s	812'-67s	
84°	9.51	380'-31s	476'-39s	571'-47s	666'-55s	761'-63s	856'-71s
83°	8.14	326'-27s	407'-33s	488'-40s	570'-47s	651'-54s	733'-61s
82°	7.12	285'-23s	356'-29s	427'-35s	498'-41s	570'-47s	641'-53s
81°	6.31	252'-21s	315'-26s	379'-31s	442'-35s	505'-42s	568'-47s
80°	5.67	227'-18s	284'-23s	340'-28s	397'-33s	454'-38s	510'-42s
79°	5.14	206'-17s	257'-23s	308'-25s	360'-30s	411'-34s	463'-38s
78°	4.70	188'-15s	235'-19s	282'-23s	329'-27s	376'-31s	454'-35s
77°	4.33	173'-14s	217'-18s	260'-21s	303'-25s	346'-28s	390'-32s
76°	4.01	160'-13s	200'-16s	241'-20s	281'-23s	321'-26s	361'-30s
75°	3.73	149'-12s	186'-15s	224'-18s	261'-21s	298'-24s	336'-28s
74°	3.49	140'-11s	175'-14s	209'-17s	244'-20s	279'-23s	314'-26s
73°	3.27	131'-10s	164'-13s	196'-16s	229'-19s	262'-21s	294'-24s
72°	3.08	123'-10s	154'-12s	185'-15s	216'-17s	247'-20s	277'-23s

100' WIDE ST. D=50' S= 0' 10' 20' 30' 40'

Angle	Tangent (rate of height to setback)	0'	10'	20'	30'	40'
88°	28.64	1432'				
87°	19.08	954'-79s	1144'			
86°	14.30	715'-59s	858'-71s	1001'		
85°	11.43	572'-47s	583'-48s	697'-58s	812'-67s	
84°	9.51	476'-39s	571'-47s	666'-55s	761'-63s	856'-71s
83°	8.14	407'-33s	488'-40s	570'-47s	651'-54s	733'-61s
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76°	4.01	200'-16s	241'-20s	281'-23s	321'-26s	361'-30s
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72°	3.08	154'-12s	185'-15s	216'-17s	247'-20s	277'-23s

ANGLE, HEIGHT, AND SETBACK RELATIONSHIP TABLE

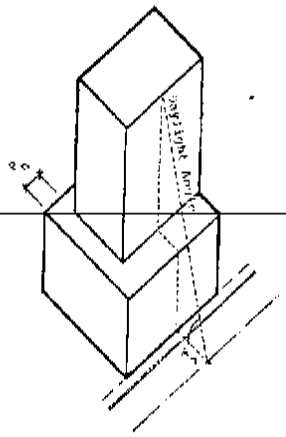
B. Daylighting Considerations at the Upper Portions of a Development

Portions of developments which subtend angles greater than 76° shall be required to set back from the lot lines. The lot line setback is expressed as a percentage of the street line, and is determined by the formula:

P_n = (angle A_n [$\geq 76°$] - 76°) x .06 x length of treet line = total aggregate side setback.

Where:

P_n = Distance setback from Lot Line



Building Illustration
Lot Line Setback

Special Conditions:

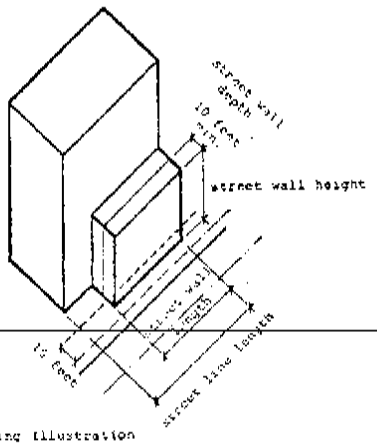
a) The required setback may be distributed between two lot lines or aggregated in one location
B) In no case can a side lot line setback be less than 15'-0".

2. STREET WALL LENGTH - to conserve the pedestrian scale of the street by visually and physically connecting the street wall of the proposed development with the Street Wall of existing nearby buildings.

The minimum proposed street wall length is a function of the length of the developments street line multiplied by the street wall length factor listed below:

factor	Street
1.00	5th Avenue
.90	Madison Avenue, Lexington Avenue, Broadway, 59th Street, and 42nd Street
.85	7th Avenue, Park Avenue
.80	3rd Avenue
.70	all other streets

A building wall must be located within 15'-0" of the street line to be a qualifying street wall. The proposed street wall must have a minimum depth of 10' for its entire length.



Building Illustration
Street Wall Length, Height, and Depth

3. STREET WALL HEIGHT: to define the space of the street and conserve existing scale by relating the height of the street wall of the proposed development to the characteristic height of nearby buildings.

The proposed street wall heights shall conform to the following listing of street wall heights with corresponding range.

Street Width	Street Wall Height	Range +	Range −
60'	90'	+10'	-15'
80'	120'	+10'	-15'
100'	150'	+10'	-25'
120'	180'	+10'	-30'
Fifth Avenue	100'	+10'	-15'

In no case can any portion of the proposed street wall be above or below the range when applied around the required street wall height. The proposed street wall must have a minimum depth of 10' for its entire length.

In the case of lots bounded by two street of unequal width the higher street wall height may be used on the narrower street up to a depth of 100" in from the wide street.

B. PERFORMANCE TIER

1a. Daylighting To maximize daylighting on the public sidewalks and other outdoor public amenities.

Maximum points 60.0 Minimum points 40.0

Requirements for Full Compliance The proposed building shall obscure none of the daylighting squares determined on the Waldram daylighting diagram.

Computation

$$(60.0)\ \frac{A - [(a_1 \times f_1) + (a_2 \times f_2)\ldots]}{A}$$

Where:

A = Total number daylighting squares

$a_{1,2}$ = Number of daylighting squares blocked by the proposed development by importance factor

$F_{1,2}$ = Importance factor.

1b. Daylighting Building Reflectivity (optional)
To maximaze daylighting on the public sidewalks and other outdoor amenities by utilizing highly reflective exterior building materials and surfaces

Maximum Points 5.0

Requirements for Full Compliance The building reflectivity value and its zone value should be unity.

Computation

$$(5.0) \times (O_v) \times (R_v)$$

O_v = orientation value

R_v = Reflectivity value

Special Conditions

i. in the case of multiple building materials eg. glass and limestone, the area of each material in elevation. Multiply the area determined by the percentage of the area to the total building area in elevation. Then multiply that amount byits reflectivity value. The sum of the weighted reflectivity values for all the materials equals the reflective value of the building in the street district.

2. Street Wall Length -to conserve the pedestrian scale of the street by visually and physically connecting the street wall of the proposed development with the street wall of existing nearby buildings.

Value Points - 25.0

Requirements for Full Compliance - the length of the building walls of the proposed development falling within 15 ' of street lines and projected perpendicularly on the street line shall equal the length of the street line within a single street district.

Computation

$$(25.0) \times \frac{(b)}{B} \times (\text{street length factor})$$

Where:

B = length of street line

b = length of street wall falling within 15" of the street line and projected perpendicularly on the street line.

Street length factors = preferred street wall length

Factor	Street
1.00	Madison, Lexington, 5th Avenue, 42nd Street, 59th Street and Broadway
0.90	7th Avenue, Park Avenue
0.85	3rd Avenue, 6th Avenue
0.75	All other crosstown streets

3. Street Wall Height - to conserve existing scale by relating the height of the street wall of the proposed development to the predominant height of the street wall of nearby buildings.

Value Points -

15.0

Requirements for Full Compliance - The proposed street wall height of the development shall occur within a zone defined by the median height of the street wall of existing buildings and a range applied around the median.

Computation

$$(15.0) \quad \frac{(c)}{C} \times \frac{(b)}{B}$$

Where:

C = existing street wall height (with or without range)
c = proposed street wall height
B = length of site street line (see #2)
b = street wall length of the proposed development falling within 15" of the street line and projected perpendicularly on the street line.

Special Conditions

i. for developments which do not have maximum compliance, compliance may be determined by the application of a range to the median height of the existing street wall. This range can be applied above and below the median.
ii. For developments which have more than one street wall height, each street wall height should be compared separately to the median height of the existing street wall or to the nearest height in the a;;lied range. The compliance of each height is weighted in relation to its portion of the total street wall area and multiplied by the maximum points. Their sum is then multiplied by the ratio (b/B).

4. SUNLIGHTING (Optional) - to maximize sunlight on-site and nearby public outdoor space including parks and plazas.

Maximum Points 10.0

Requirements for Full Compliance - The proposed shadow area shall be as small a percentage of the potential shadow area as possible.

Computation

$$(10.0)\quad \frac{S_{PR} - S_{PT}}{4000}$$

Where:

S_{PT} = Potential Shadow

S_{PR} = Proposed Shadow

Special Conditions

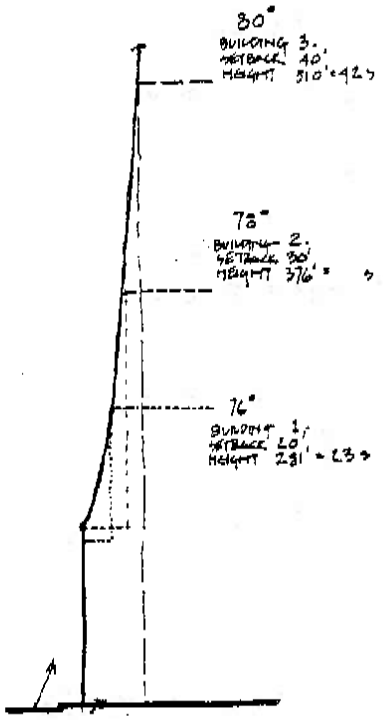
i. When computing the potential and proposed shadow subtract areas of outdoor amenities which are already in shadow by existing building at 11 AM, noon, and 1 PM.
ii. In no case can a point score of 10.0 be exceeded.

Total Computations

Programs 1a, 1b (optional), 2, and 3 shall be computed by street district optional program 4. Sunlighting is computed separately and added to the total compliance points.

When a development site is located in more than street district , programs 1a, 1b (optional), 2, and 3 shall be computed separately for each street district. The total compliance points are determined by a weighted average which is found by multiplying the total compliance points for each street district by the length of the street line pertaining to the street district. The products found are then added and then divided by the sum of the total lengths of street lines used for each street district.

1 72° Street Wall with towers at Prescriptive Tier setbacks



2 Section of Daylight Angle Curve

DAYLIGHT ANGLES: STREET VIEW AND SECTION

DEFINITIONS

DAYLIGHT ANGLES

The "daylight angles" control the disposition of building bulk on the zoning lot. All angles are taken at the centerline of the street. The "daylighting angles" ascend as the building bulk is setback from the street line.

RANGE, EXISTING STREET WALL HEIGHT

The range is an empirical measure of the degree of variation of the existing street wall heights. It is determined by first finding the average existing street wall height in the street district. Next find the area of existing street walls in elevation that are above the average existing street wall height. The range equals the sum of these areas divided by the sum of the lengths of the existing street walls. Apply the range around the median as a function of the average. In all cases the range may be a minimum of 10 feet.

SHADOW AREA, POTENTIAL

The "potential shadow area" is used in the optional sunlighting program to provide a comparative index with the proposed shadow area, by assuming a hypothetical building of 100% coverage. The "potential shadow area" is determined during the equinox (March 21) at 11 A.M., noon, and 1 P.M. standard time. The required azimuths (angle of the sun in plan) are 1) 23° East of South at 11 A.M. 2) due South at noon, and, 3) 23° West of South at 1 P.M. The lengths of the shadow measured from the lot lines is 300 feet at 11 A.M. and 1 P.M. and 250 feet at noon.

The "potential shadow area" is the total area described by the shadows East at 11 A.M., noon, and 1 P.M.

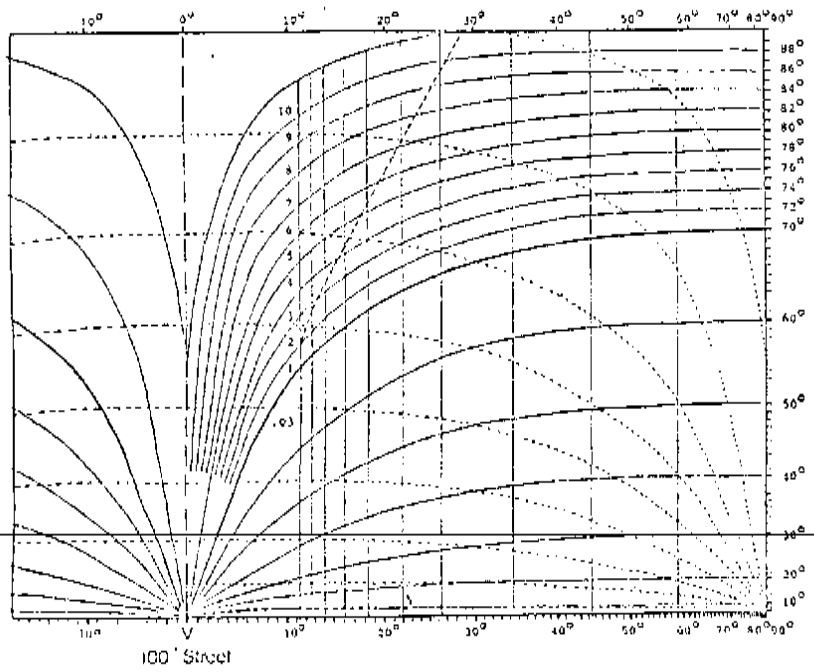
SHADOW AREA, PROPOSED

The "proposed shadow area" is the area of outdoor amenity which is within the shadow of the proposed development. As with the "potential shadow area", the "proposed shadow area" is determined during the equinox (March 21) at 11 A.M., noon, and 1 P.M. standard time coinciding with lunch hours. The required azimuths (angle of the sun in plan) are 1) 23° East of South at 11 A.M., 2) due South at noon and 3) 23° West of South at 1 P.M. The shadow lengths at 11 A.M. and 1 P.M. are .92 times the building height and .85 time the building height at noon.

The "proposed shadow area" is the total area described by the shadows cast at 11 A.M., noon, and 1 P.M.

STREET DISTRICT

A "street district" is the perceptual locus of the zoning lot. The length of the "street district" is determined by extending the centerline of the street on which the zoning lot fronts from each side lot line to the intersection of the centerline of the street of equal or greater width, except in the case of 100 foot wide cross-town streets where the street district shall extend 1,000 feet from the lot line regardless of intersecting streets. In no case, however, shall the length of a "street district" from one side lot line be greater than 1,000 feet.



ILLUMINATION ON BUILDING SURFACES (IN FOOTCANDLES)

ORIENTATION BASED ON STREET GRID

FOR MARCH 21/ SEPT 21		GRID N 180°	157.5°	135°	112.5°	GRID W 90°	67.5°	45°	22.5°	GRID S 0°	22.5°	45°	67.5°	GRID E 90°	112.5°	135°	157.5°	GRID N 180°
7AM	SOLAR	1250	—	—	—	—	—	—	—	350	700	1400	1800	3025	2850	2875	2500	1250
	SKY	400	300	250	250	200	200	250	250	350	400	650	900	925	950	750	900	400
	TOTAL	1650	300	250	250	200	200	250	250	700	1100	2050	2700	3950	3800	3625	3000	1650
8AM	SOLAR	600	—	—	—	—	—	—	—	600	1200	2800	4400	4875	4750	2975	1200	600
	SKY	550	325	300	300	275	275	400	400	550	700	875	1050	1075	1100	900	700	550
	TOTAL	1150	325	300	300	275	275	400	400	1150	1900	3675	5450	5950	5850	3875	1900	1150
9AM	SOLAR	750	—	—	—	—	—	450	550	2000	4000	4750	5500	5250	5000	3250	1500	750
	SKY	500	350	300	300	325	325	450	550	825	1100	1350	1200	1175	1150	900	650	500
	TOTAL	1250	350	300	300	325	325	450	550	2825	5100	5900	6700	6425	6150	4150	2150	1250
10AM	SOLAR	—	—	—	—	—	—	750	500	2250	4000	4800	5000	4800	4000	2000	—	—
	SKY	500	375	325	325	375	375	500	600	850	1100	1200	1300	1200	1100	850	600	500
	TOTAL	500	375	325	325	375	375	750	1100	3100	5100	6000	6300	6000	5100	2850	600	500
11AM	SOLAR	—	—	—	—	—	—	750	1500	3250	5000	5000	5000	3250	1500	750	—	—
	SKY	425	400	400	400	425	450	650	800	1000	1200	1200	1200	1025	850	660	450	425
	TOTAL	425	400	400	400	425	450	1400	2300	4250	6200	6200	6200	4275	2350	1400	450	425
NOON	SOLAR	—	—	—	—	—	—	2300	4600	4925	5250	4925	4600	2300	—	—	—	—
	SKY	425	400	425	450	525	600	850	1100	1200	1300	1200	1100	850	600	575	450	425
	TOTAL	425	400	425	450	525	600	3150	5700	6125	6550	6125	5700	3150	600	575	450	425
1PM	SOLAR	—	—	—	—	750	1500	3250	5000	5000	5000	3250	1500	750	—	—	—	—
	SKY	400	400	425	450	650	850	1025	1200	1200	1200	1000	800	650	450	425	400	400
	TOTAL	400	400	425	450	1400	2350	4275	6200	6200	6200	4250	2300	1400	450	425	400	400
2PM	SOLAR	—	—	—	—	2000	4000	4800	5000	4800	4000	2250	500	250	—	—	—	—
	SKY	325	375	500	600	850	1100	1300	1300	1200	1100	850	600	500	375	375	325	325
	TOTAL	325	375	500	600	2850	5100	6000	6900	6000	5100	3100	1100	750	375	375	325	325
3PM	SOLAR	—	—	750	1500	3250	5000	5250	5500	4750	4000	2000	—	—	—	—	—	—
	SKY	300	350	500	650	900	1150	1175	1200	1150	1100	825	550	450	325	325	300	300
	TOTAL	300	350	1250	2150	4150	6150	6425	6700	5900	5100	2825	550	450	325	325	300	300
4PM	SOLAR	—	—	600	1200	2475	4750	4875	4400	2800	1200	600	—	—	—	—	—	—
	SKY	300	325	550	700	900	1100	1075	1050	875	700	550	400	400	275	275	300	300
	TOTAL	300	325	1150	1900	3375	5850	5950	5450	3675	1900	1150	400	400	275	275	300	300
5PM	SOLAR	—	—	1250	1900	1875	3250	3025	2800	1400	700	350	—	—	—	—	—	—
	SKY	250	300	400	500	750	950	925	900	650	400	350	250	250	200	200	250	250
	TOTAL	250	300	1650	3000	3625	4200	3950	3700	2050	1100	700	250	250	200	200	250	250
DAILY TOTAL		6975	3900	6975	10,125	18,025	25,875	31,700	39,250	41,975	45,350	41,975	39,250	31,700	25,875	18,025	10,125	6975
RATIO TO MAXIMUM = ORIENTATION VALUE		.15	.09	.15	.22	.40	.57	.72	.87	.93	1.00	.93	.87	.72	.57	.40	.22	.15

WALDRUM DIAGRAM AND REFLECTIVITY ORIENTATION VALUE CHART

The depth of the "street district" is equal to the distance between the centerlines of the blocks on either side of the street on which the zoning lot fronts.

There shall be a "street district" for every street fronting on a site.

STREET WALL HEIGHT, EXISTING

The "existing street wall height" is the median or predominant height of the street walls of existing buildings which fall within the street district containing the proposed development and are on the same side of the street as the development. The "street wall height" for existing building shall be measured along the building wall which occurs within 15 feet of the street line. When less than 40% of the total adjoining street lines have no qualifying street wall, the "existing street wall height" shall be the median height of all the street walls of existing buildings falling within the street district containing the proposed development.

STREET WALL HEIGHT, PROPOSED

The "proposed street wall height" are the heights of roof surfaces 10'-0" back from the proposed street wall.

STREET WALL, PROPOSED

The "proposed street wall" is the building wall of the proposed development fallign within 15 feet of the street and having a minimum depth of 10 feet.

ORIENTATION VALUE

The "orientation value" is used in the optional program 1b. Daylighting Building Reflectivity to determine the solar orientation coefficient for the particular building facade being evaluated.

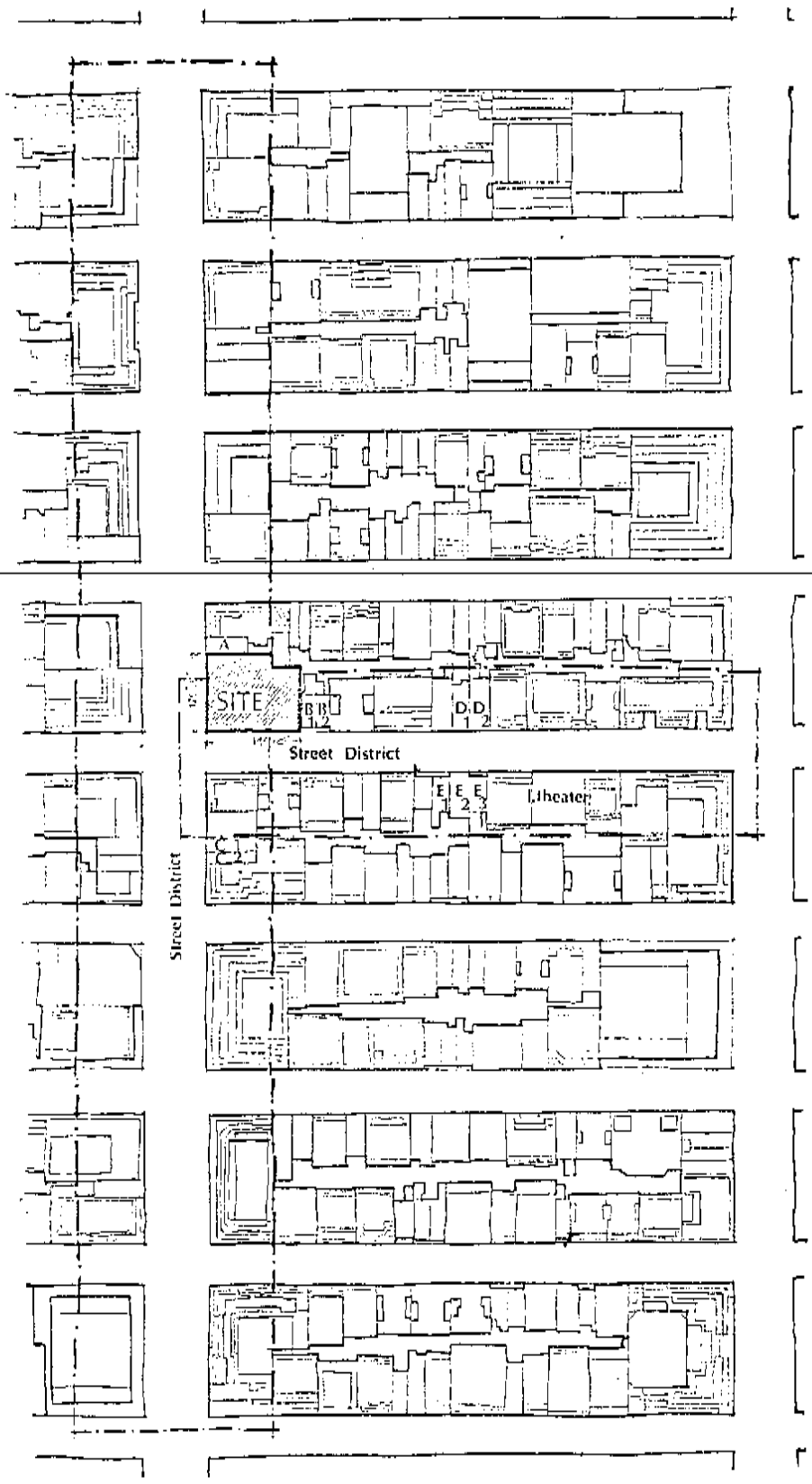
REFLECTIVITY VALUE

The "reflectivity value" used in the optional program 1b. Daylighting Building Reflectivity is the coefficient of reflectivity for the material used. The reflectivity value shall be certified by the manufacturer, licensed independent testing laboratory, or standard reference text such as Time Saver Standards, Architectural Graphic Standards, etc.

WALDRUM DIAGRAM

The Waldrum Diagram is a Daylight Evaluation Deagram upon which a building or buildings is drawn for evaluating daylight compliance. The building or buildings are drawn on the diagram by using a fixed vantage point (V) in the street and recording all horizontal and vertical angles subtended by all edges of of the building from the vantage point. The building or buildings are translated to the corresponding angle lines on the diagram. A Waldrum Diagram is required for each intersection of a lot line. The area of the building or buildings evaluated by each diagram is that area depicted from the far lot line to the ceter of the near perpendicular lot line.

EXAMPLE



1 SITE PLAN

EXAMPLE: INTRODUCTION

The proposal allows for several options in assembling lots which could gain the maximum FAR on the buildable portion. The minimum area for a building footprint, or clear site, will vary with the overall economics of location, configuration, anticipated tenant requirements, and optimum floor sizes as determined by the developer. With these parameters established, the variety of means by which a target 18 FAR may be met on any clearable site is expanded by the District concept. Where large site aggregation is limited by the difficulty of purchasing or clearing adjacent parcels, or where the inclusion of a bonusable on site amenity is too restrictive economically, additional parcels within the District(s) may be acquired to gain the bonus privilege.

The options for increasing coverage from 15 FAR to 18 FAR (or up to 21.6 FAR for Landmark Transfer) include:

1) on-site amenity
2) ~~targeted off-site amenity within the District(s)~~
3) adjacent building envelope conservation (ZLM)
4) District building envelope conservation (DZLM)
5) Landmark transfer of development rights (TDR)
6) any combination of 1) through 4)

Minimum sizes are provided for all off-site parcels to prevent scattered use of small parcels.

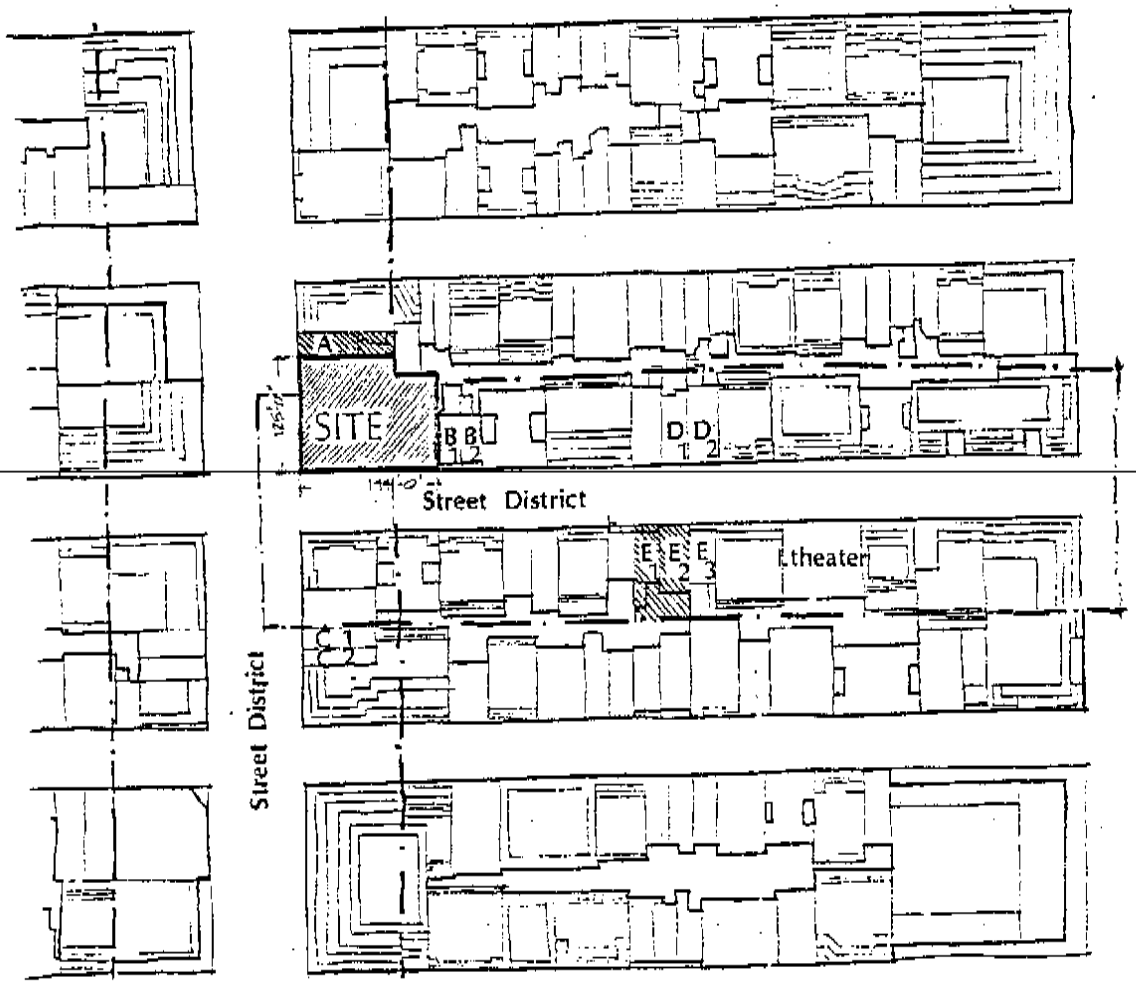
Once the clearable site has been determined, and the site assemblage goal has been met to provide the desired FAR on the buildable portion, the determination of the building form is also a process incorporating many options under the two tier system. The range of assemblage and building options is best illustrated by the following example.

EXAMPLE

An encumbered site has been acquired as indicated in illustration 1., with a total clear area of 16,900 sq. ft. (SF). Adjacent low buildings on the Avenue and side street, A and B_1, B_2, are not for sale due to tenant leases, and lack of desire to sell now. It is desired to build as soon as possible, and will forego the protracted wait for a larger lot. The target building size is 18 FAR, or 304,200 SF on the site.

After determining the Districts (see illustration), additional properties for gaining a bonus are investigated. The owner of A has a holdout tenant, but is interested in a ZLM. B_1 and B_2 are under separate ownership, and indicate a long time and a high price for reaching a ZLM agreement. Properties C_1, C_2, and $E_{1,2,6,3}$ are also available for a DZLM, though at differing prices. Parcels D_1, and D_2, which arethe right area for an off-site amenity, are within the targeted area for one, though they are not dilapidated. The legitimate theater down the street has already sold its development rights to a developer on the next Avenue.

The advantages of each option, including an on-site amenity, are investigated. It is determined that the advantage of lot line windows from acquiring A and the economics of a DZLM with E_1 and E_2 best meets the program, finance, and timing requirements. The assembled lot including ZLM and DZLM is outlined on Table 2.

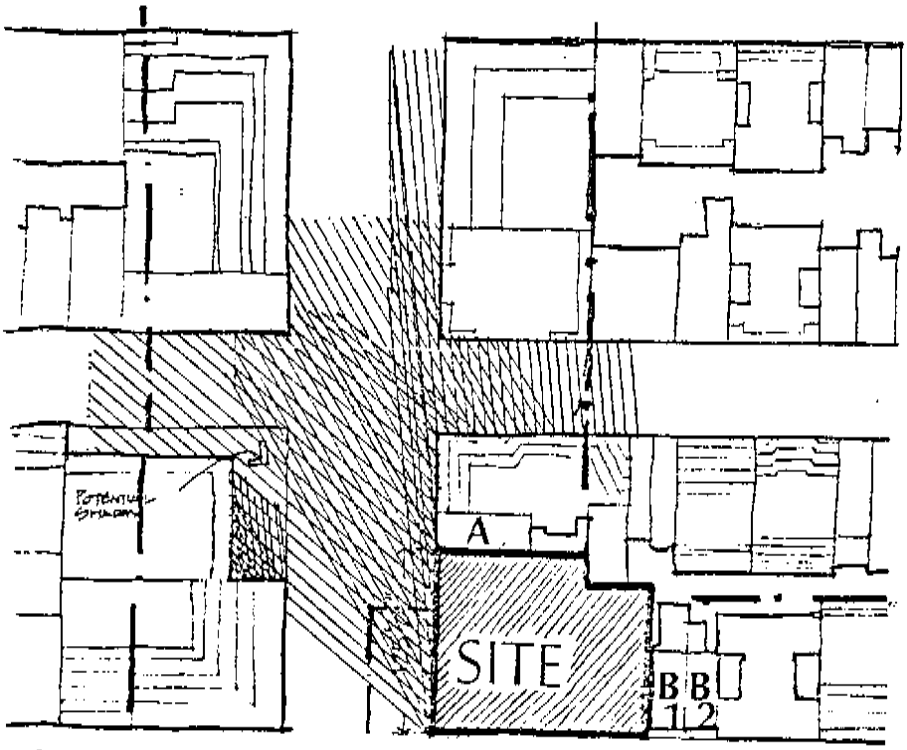


2 SITE ASSEMBLAGE WORKSHEET

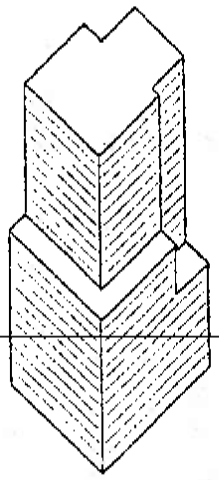
E_1 =	2500 SF	x	7.5	= 18,750	MAX. FAR
E_2 =	2750 SF	x	6.0	= 16,500	MAX. FAR
A_2 =	2500 SF	x	7.5	= 18,750	MAX. FAR
				54,000	

SITE = 16,900 SF x 3 FAR = 50,700
∴ BONUS PRIVLEDGE ACHIEVED

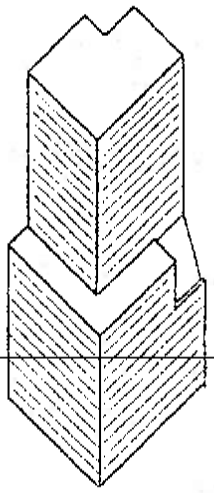
Using the Prescriptive Tier, two possible building forms are suggested, illustration 3. After consideration it is decided that a somewhat larger floor size and different image than could be gained using the Prescriptive Tier would be desirable. Therefore, it is determined that the Performance Tier will be utilized. First, the street wall height and range are calculated, then the street wall length and range for each district, to see what flexibility is available with the base portion of the building. The proximity of an existing public open space to the west brings attention to the possibility of scoring extra points for providing sunlight on it, so a shadow diagram is drawn, illustration 4. The orientation of the lot also may assist in the scoring, because the south facade with reflect a lot of daylight, so a high reflectivity value to the skin is assumed, which still allows for a variety of building materials when the design of the skin is undertaken. Then several optional forms are tested for their daylight compliance on the Waldrum Diagrams, illustrations 5 and 6. These are then scored including street wall height and length, and sunlight, and adjustments are made where necessary to achieve a minimum passing score for each district, and a final passing score for the entire lot. Though many other building forms would be possible, the final selection is made within the available range of choices investigated.



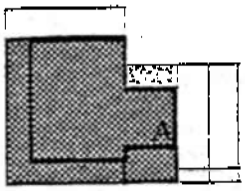
4 SHADOW DIAGRAM

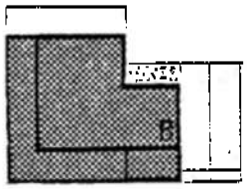


A



B

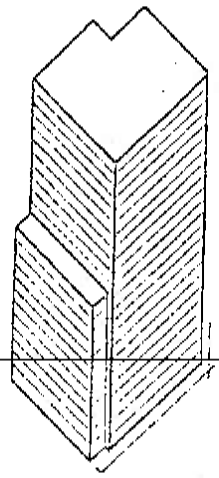




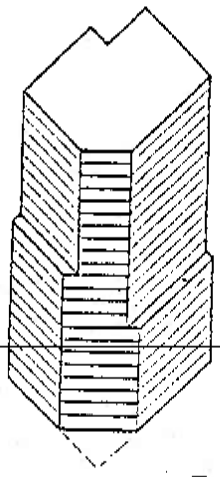
Base	12,500 x 12s =		150,000
	3,520 x 9s =		31,680
Tower	10,600 x 11s =		116,600
	1,980 x 3s =		5,940
	(62.7%)		304,220

Base	12,500 x 12s =		150,000
	3,520 x 9s =		31,680
			181,680
Tower	1,980 x 3s =		5,940
	9,480 x 13s =		123,240
	(56.1%)		310,860

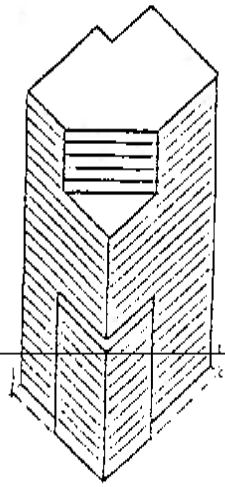
3 PRESCRIPTIVE TIER BUILDINGS A AND B



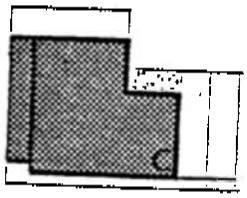
C

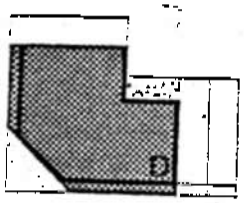


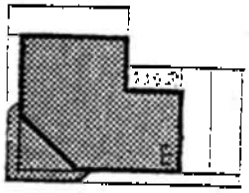
D



E







Base	14,480 x 12s =	173,760
Tower	12,200 x 11s = (72.2%)	134,280
		308,040

poor on side street street wall length and height
full compliance avenue street wall length and height
good daylight at avenue, fair on side street
good reflectivity at side street

87

Base	13,810 x 12s =	165,720
	1,100 x 8s =	8,800
		174,520
Tower	13,300 x 10s = (78.6%)	130,000
		304,520

fair on avenue street wall length and height
good on side street street wall length and height
average daylight at avenue, fair at side street
good reflectivity at side street

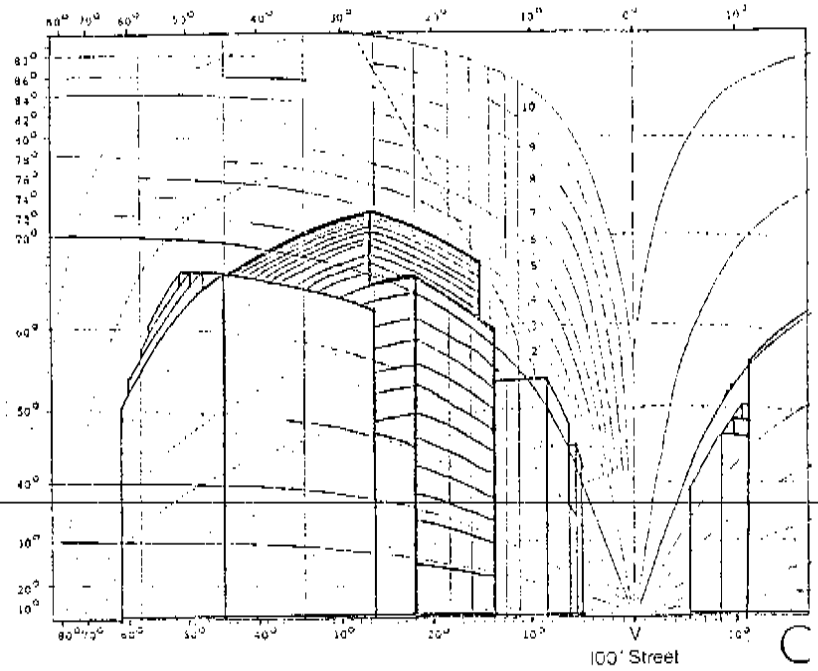
89

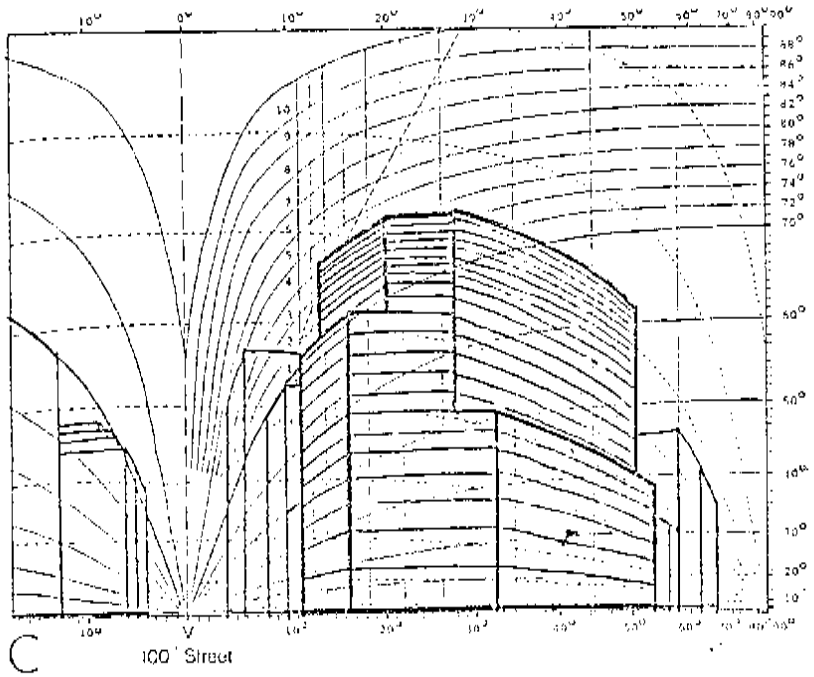
Base	15,030 x 10s =	150,300
Tower	13,330 x 8s =	106,640
	11,530 x 5s =	57,650
	(78.9% & 68.2%)	314,590

fair on side street street wall length, poor on height
fair on avenue street wall length and height
good daylight at avenue, barely passes daylight at side street
good reflectivity on side street
bonus points: notch brings sunlight to plaza across the avenue

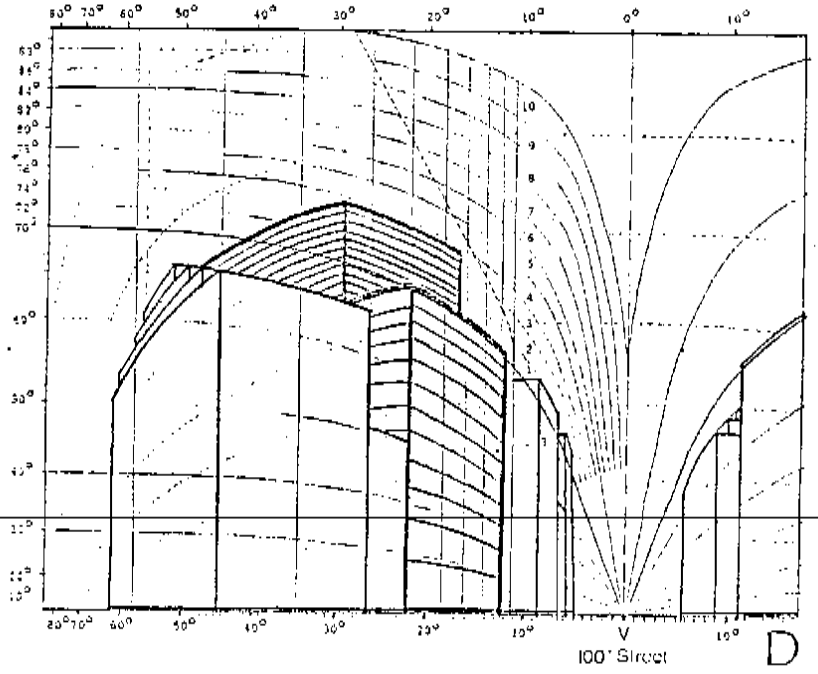
85

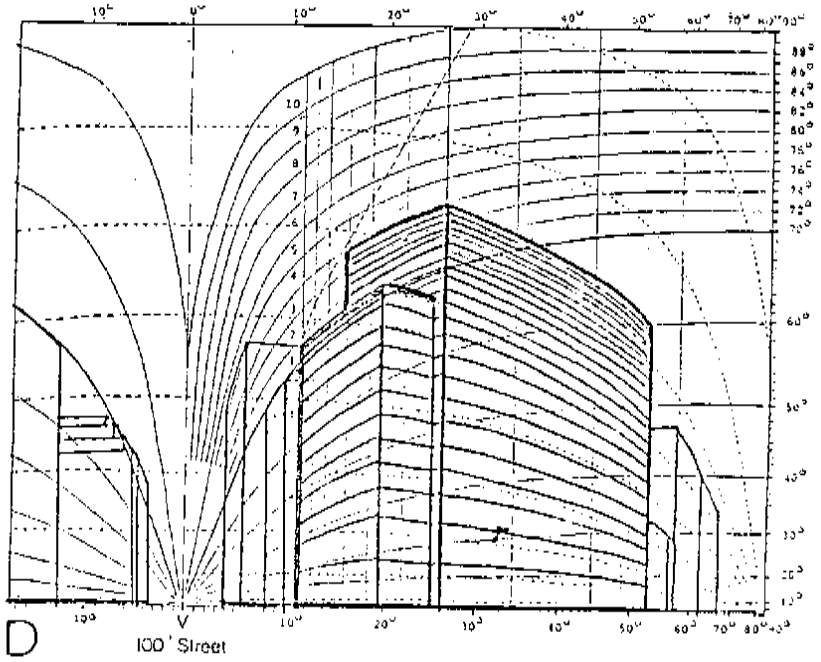
5 PERFORMANCE TIER BUILDINGS C, D, AND E





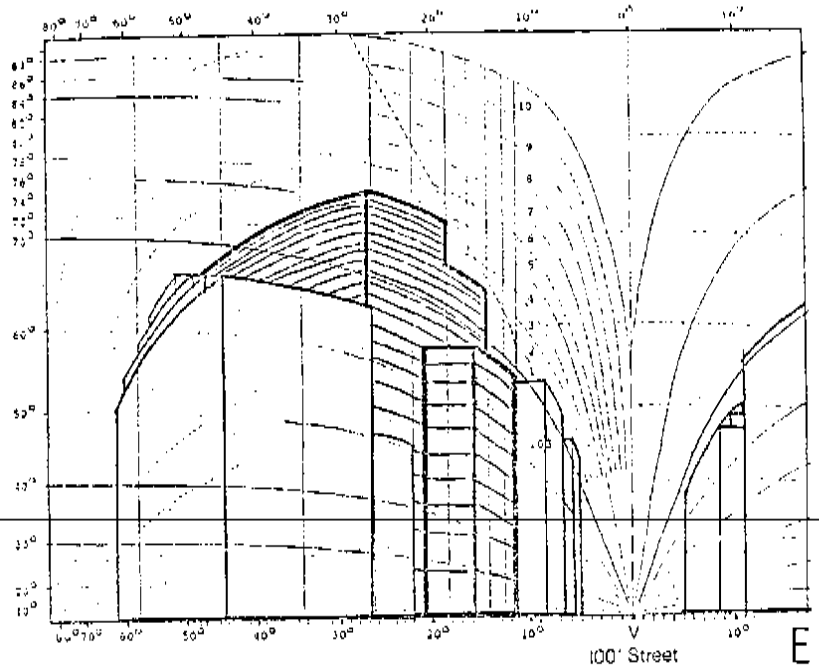
6C AVENUE WALDRUM DIAGRAMS BUILDING C

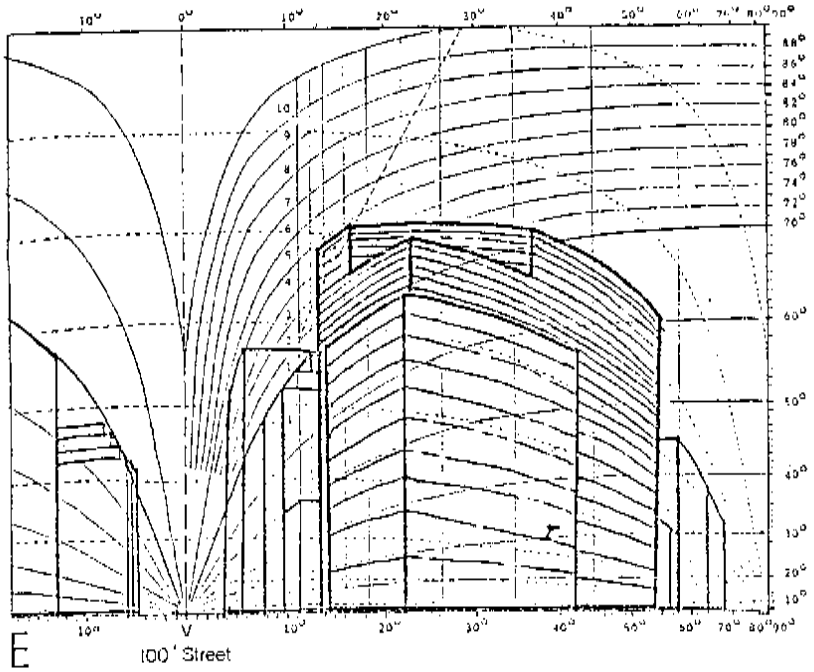




AVENUE WALDRUM DIAGRAMS BUILDING D

6D





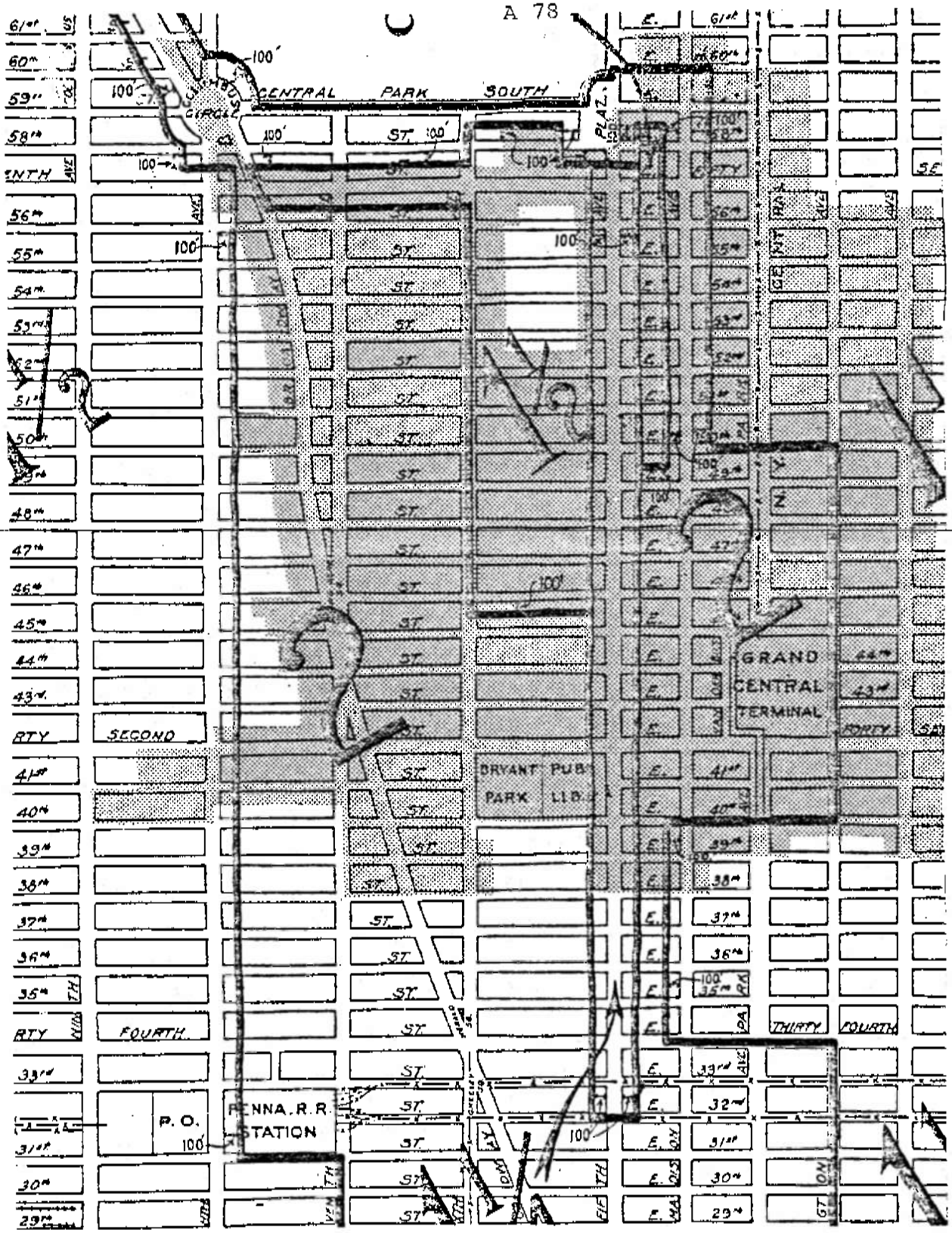
AVENUE WALDRUM DIAGRAMS BUILDING E

6E

APPENDIX

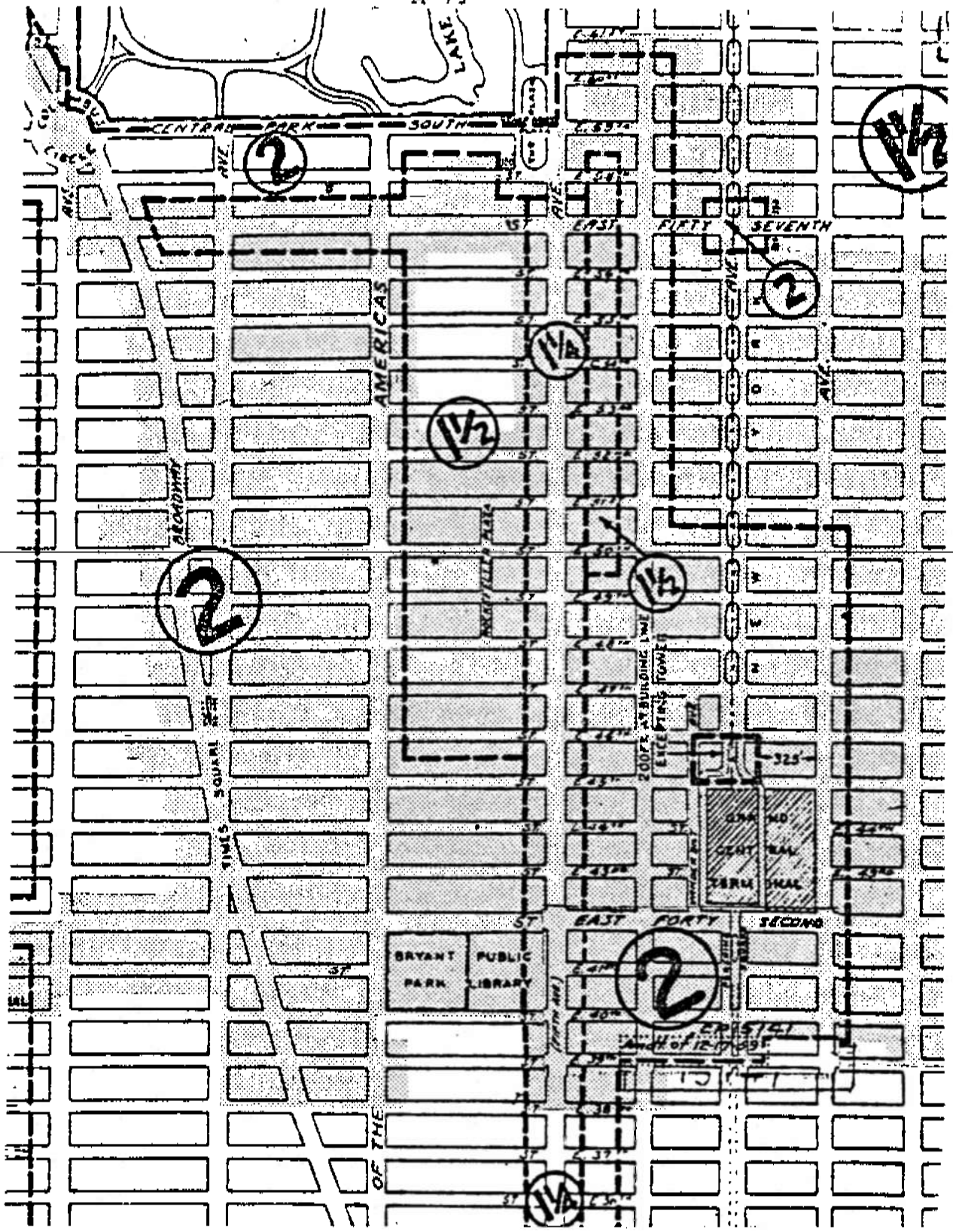
APPENDIX

TABLE OF CONTENTS



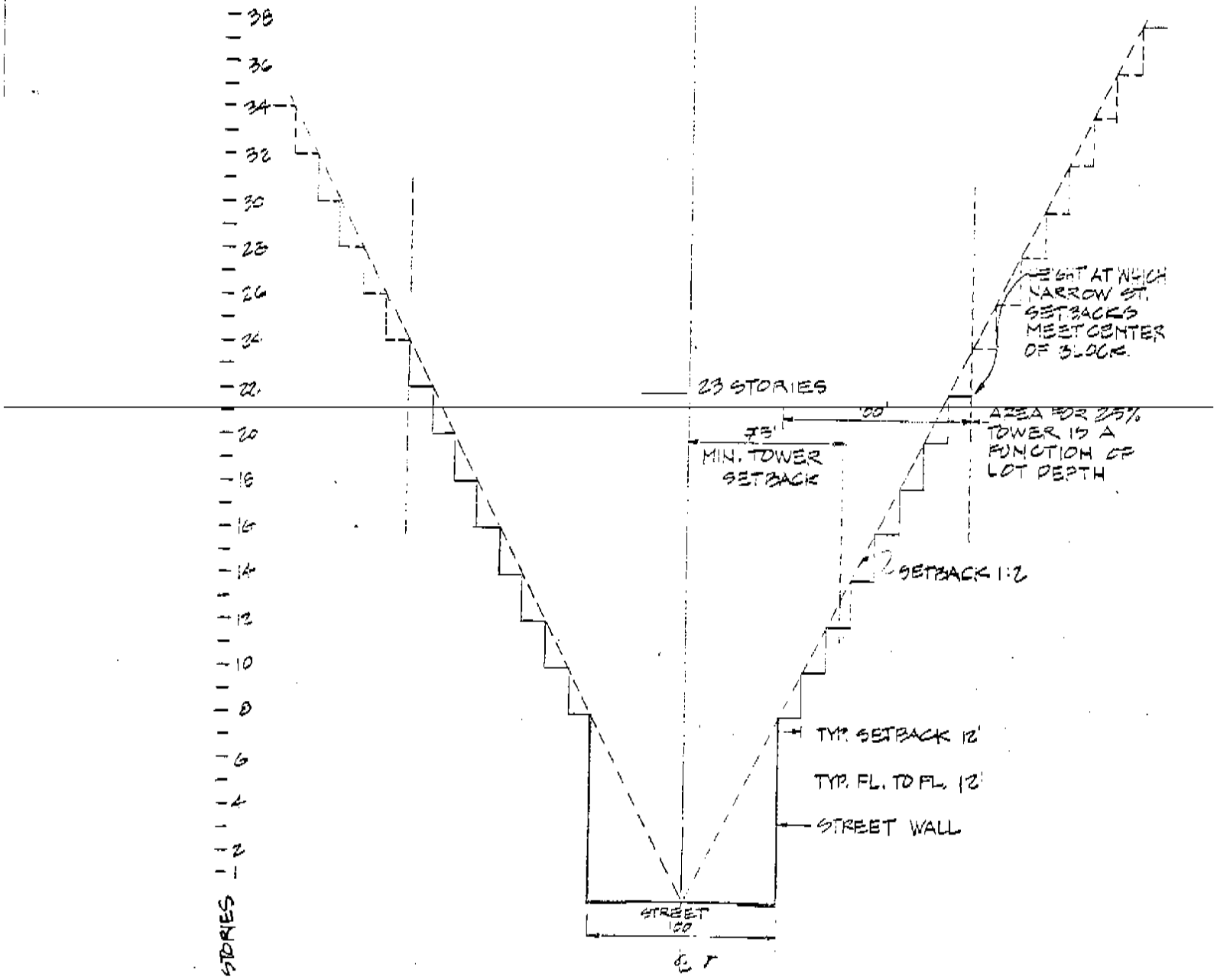
1916 ZONING RESOLUTION, HEIGHT DISTRICT MAP

A-1



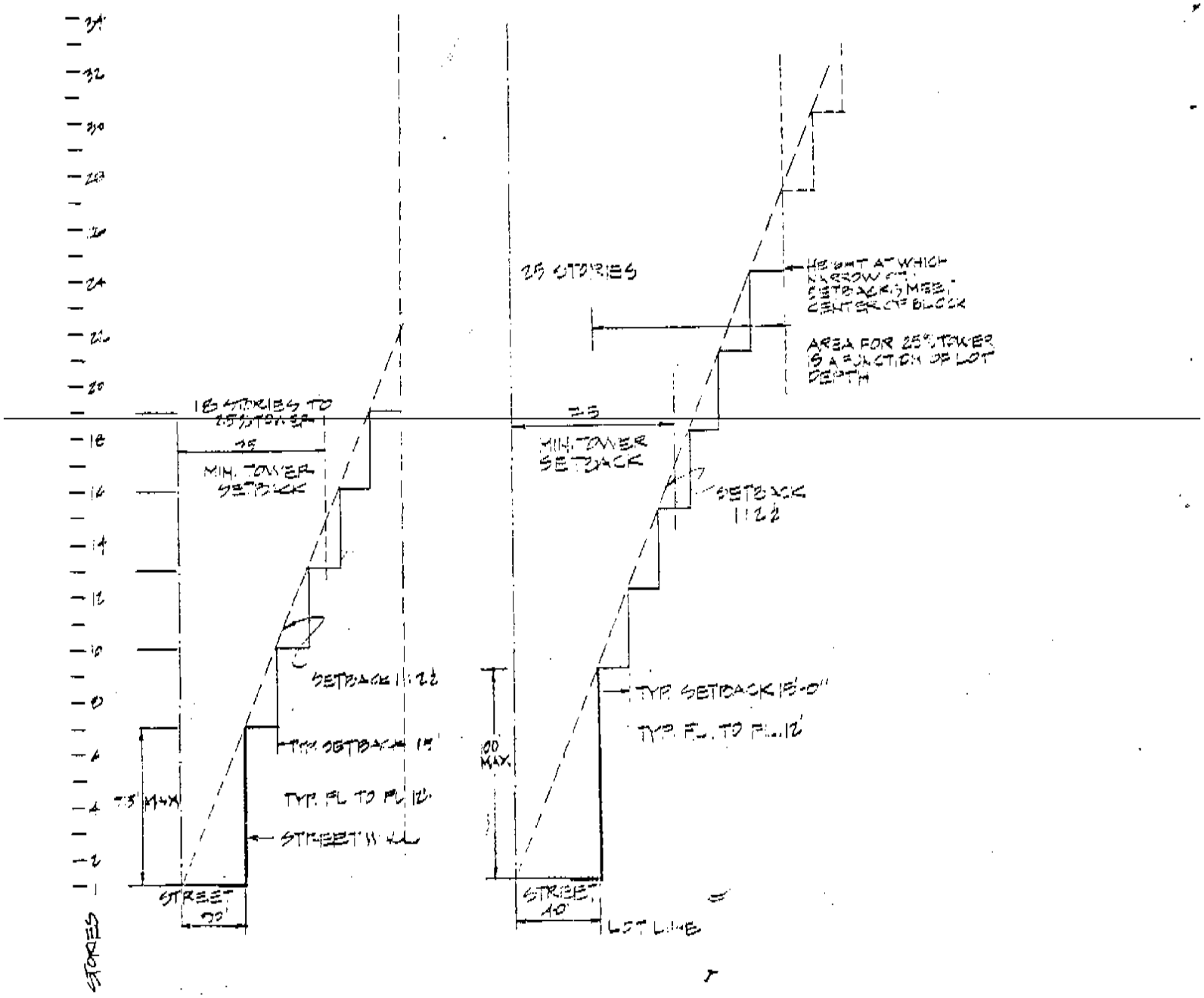
1916 ZONING RESOLUTION, HEIGHT DISTRICT MAP (REV. 1953)

A-2



1916 ZONING RESOLUTION, 1-1/4 HEIGHT DISTRICT STREET PROFILES
(FIFTH AVENUE ONLY)

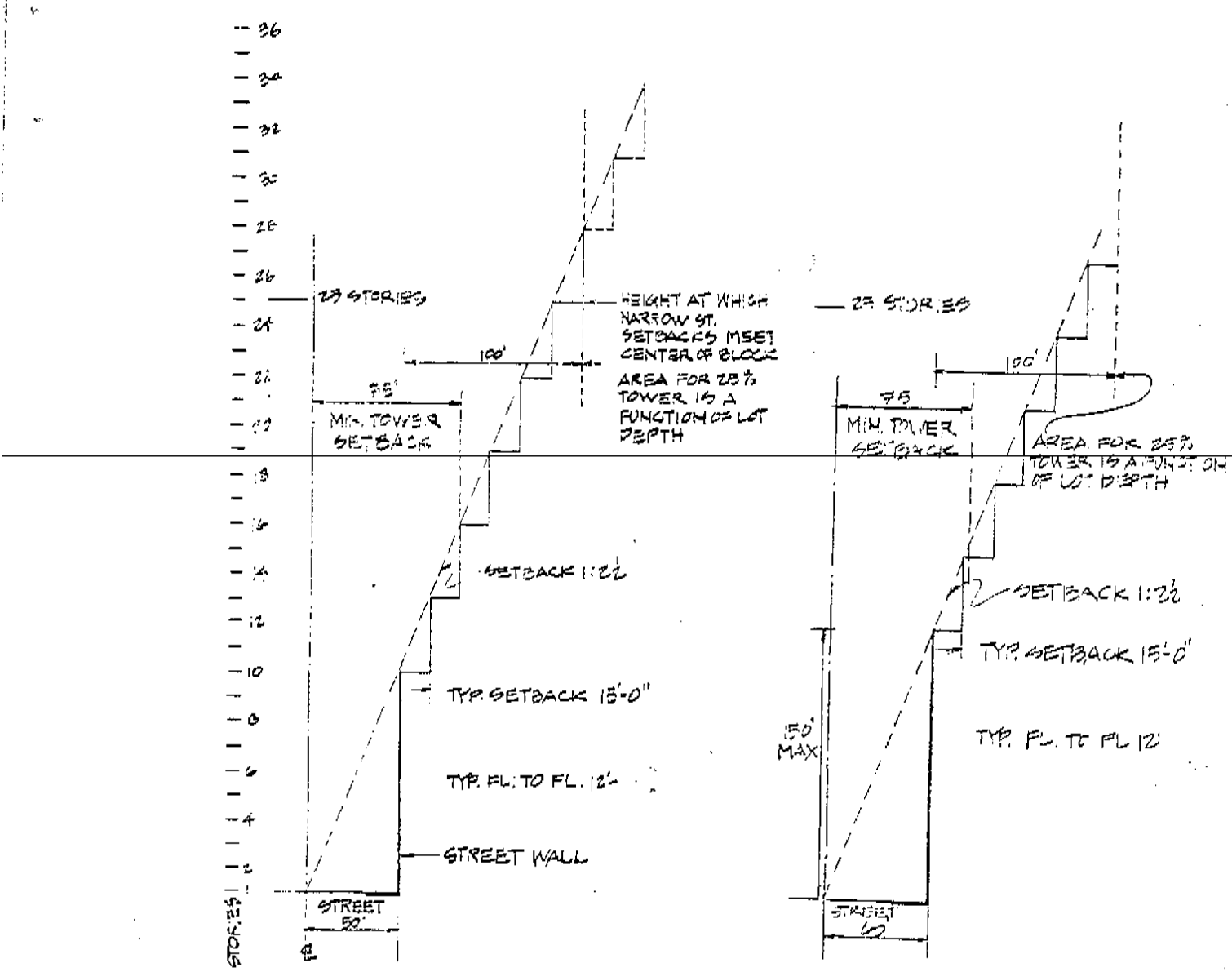
A-3



60' WIDE STREET 80' WIDE STREET

THIRD AVENUE, LEXINGTON & PARK (NORTHER PORTIONS)
MIDBLOCKS SURROUNDING FIFTH AVENUE
WEST 57TH PORTIONS OF EAST 42ND STREETS)

1916 ZONING RESOLUTION, 1-1/2 HEIGHT DISTRICT STREET PROFILES

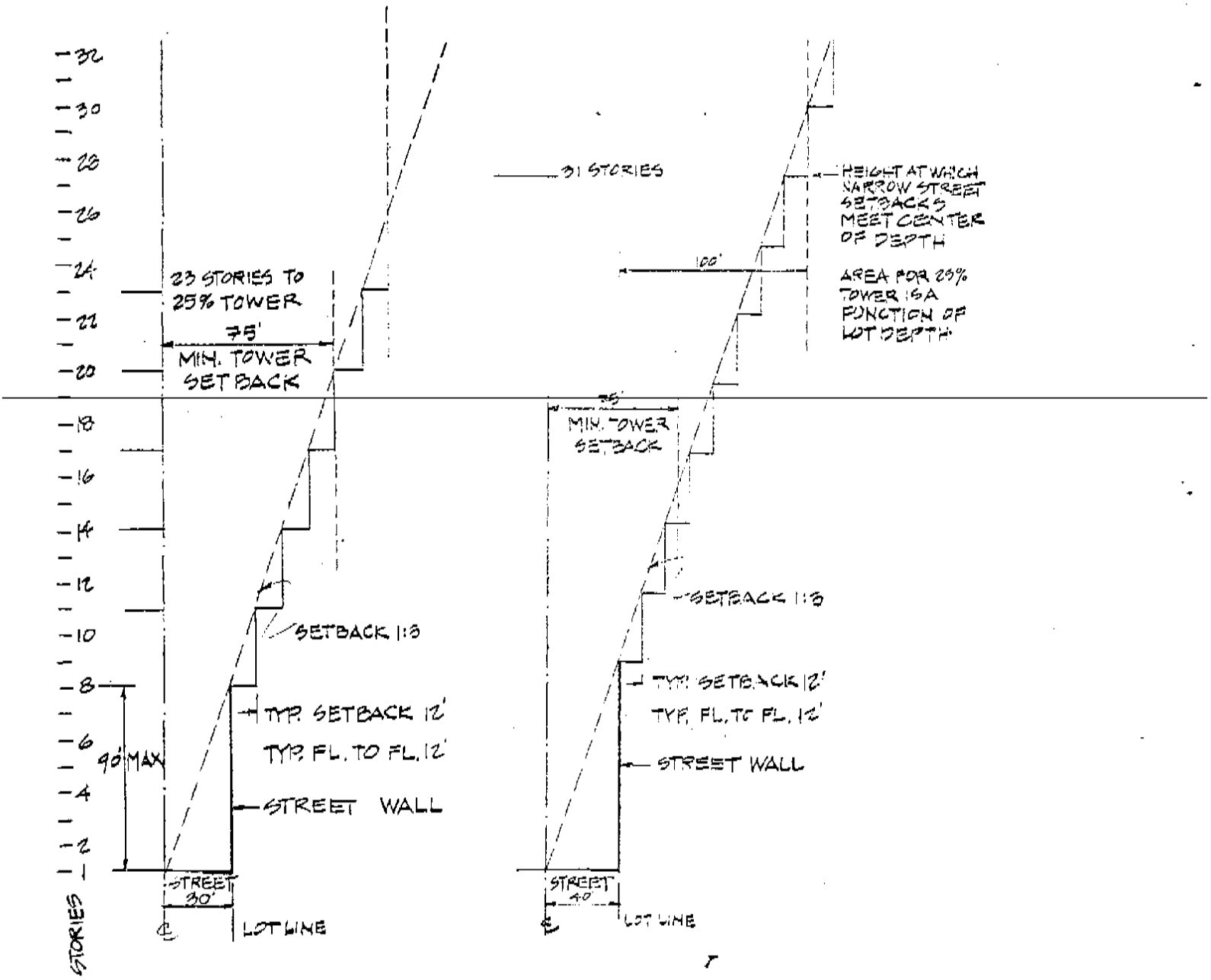


100' WIDE STREET

120' WIDE STREET

1916 ZONING RESOLUTION, 1-1/2 HEIGHT DISTRICT STREET PROFILES

A-4

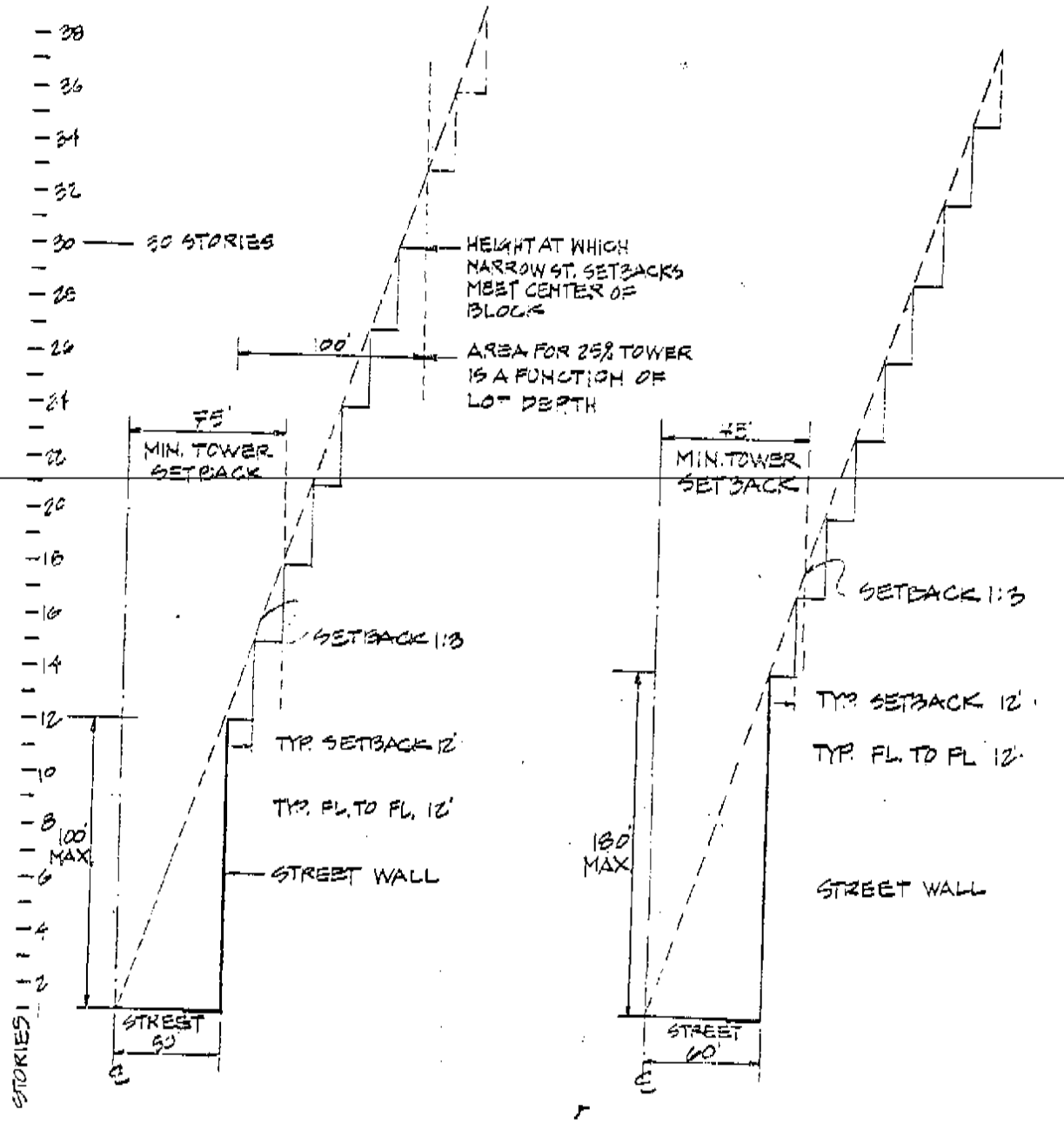


60' WIDE STREET

80' WIDE STREET

PARK, LEXINGTON, SIXTH (LOWER),
MADISON, SEVENTH, BROADWAY,
PORTIONS OF EAST & EAST 42ND STREET

1916 ZONING RESOLUTION, 2 HEIGHT DISTRICT STREET PROFILES



100' WIDE STREET

120' WIDE STREET

1916 ZONING RESOLUTION, 2 HEIGHT DISTRICT STREET PROFILES

A-5

or sign on such intersecting street beyond a distance of twenty-five feet from the intersection. Beyond such twenty-five feet, entrances not exceeding three feet six inches in width and windows other than windows designed or used for display and, when required by law, exits, ventilators, fire escapes and other appurtenances may be permitted. The provisions of this section shall not restrict openings necessary to permit ingress and egress for required or permitted parking, loading and unloading space. Where zoning for other than residence use is confined to a distance of not over 100 feet along both streets from an intersection, the limitations of this section shall not apply. In appropriate cases, the Board, after public notice and hearing, may vary the provisions of this section subject to such appropriate conditions and safeguards as are in harmony with the general purpose and intent of this section.

ARTICLE III—HEIGHT DISTRICTS

§8. Height Districts. For the purpose of regulating and limiting the height and bulk of buildings hereafter erected, The City of New York is hereby divided into eight classes of districts; (a) class one-quarter (¼) districts; (b) class one-half (½) districts; (c) class three-quarter (¾) districts; (d) class one (1) districts; (e) class one and one-quarter (1¼) districts; (f) class one and one-half (1½) districts; (g) class two (2) districts; (h) class two and one-half (2½) districts. The districts heretofore classified and referred to as one-quarter times districts; one-half times districts; three-quarter times districts; one times districts; one and one-quarter times districts; one and one-half times districts; two times districts and two and one-half times districts, as shown on the height district map consisting of twenty-seven sheets and an index sheet, each dated March 31, 1937, and signed by the Chief Engineer of the Board of Estimate and Apportionment, together with eight sheets, each dated August 2, 1943, and signed by the Senior Civil Engineer of the City Planning Commission, shall hereafter be referred to and described, respectively, as class one-quarter districts, class one-half districts, class three-quarter districts, class one districts, class one and one-quarter districts, class one and one-half districts, class two districts and class two and one-half districts. The height districts designated on said map, as amended, or as may be hereafter amended from time to time, are hereby continued and declared to be part hereof. The height district map designations and map designation rules which accompany said height district map are hereby declared to be part thereof. No building or part of a building shall be erected except in conformity with the regulations herein prescribed for the height district in which such building is located.

(a) In a class one-quarter (¼) district no building shall be erected to a height in excess of one-quarter times the width of the street, but for each two feet that the building or a portion of it sets back from the street line one foot shall be added to the height limit of such building or such portion thereof.

(b) In a class one-half (½) district no building shall be erected to a height in excess of one-half times the width of the street, but for each one foot that the building or a portion of it sets back from the street line one foot shall be added to the height limit of such building or such portion thereof.

(c) In a class three-quarter (¾) district no building shall be erected to a height in excess of three-quarter times the width of the street but for each one foot that the building or a portion of it sets back from the street line one foot shall be added to the height limit of such building or such portion thereof.

(d) In a class one (1) district no building shall be erected to a height in exces of seven-eighths times the width of the street, but for each one foot that the buildin or a portion of it sets back from the street line one and one-half feet shall he add to the height limit of such building or such portion thereof.

(e) In a class one and one-quarter (1¼) district no building shall be erect... to a height in excess of the width of the street, but for each one foot that the building or portion of it sets back from the street line two feet shall be added to the height limit of such building or such portion thereof.

(f) In a class one and one-half (1½) district no building shall be erected to a height in excess of one and one-quarter times the width of the street, but for each one foot that the building or a portion of it sets back from the street line two and one-half feet shall be added to the height limit of such building or such portion thereof.

(g) In a class two (2) district no building shall be erected to a height in excess of one and one-half times the width of the street, but for each one foot that the

building or portion of it sets back from the street line three feet shall be added to the height limit of such building or such portion thereof.

(h) In a class two and one-half (2½) district no building shall be erected to a height in excess of two times the width of the street but for each one foot that the building or a portion of it sets back from the street line four feet shall be added to the height limit of such building or such portion thereof.

§9. **Height District Exceptions.** (a) On streets less than 50 feet in width the same height regulations shall be applied as on streets 50 feet in width and, except for the purposes of paragraph d of this section, on streets more than 100 feet in width the same height regulations shall be applied as on streets 100 feet in width.

(b) Along a narrower street near its intersection with a wider street, any building or any part of any building within 100 feet of the wider street, measured at right angles from the side of the wider street, shall be governed by the height regulations provided for the wider street.

(c) Above the height limit at any level for any part of a building a dormer, elevator bulkhead or other structure may be erected provided its frontage length on any given street be not greater than 60 per cent of the length of such street frontage of such part of the building. Such frontage length of such structure at any given level shall be decreased by an amount equal to one per cent of such street frontage of such part of the building for every foot such level is above such height limit. If there are more than one such structure, their aggregate frontage shall not exceed the frontage length above permitted at any given level.

(d) If the area of the building is reduced so that above a given level it covers in the aggregate not more than 25 per cent of the area of the lot, the building above such level shall be excepted from the foregoing provisions of this article. Such portion of the building may be erected to any height, provided that the distance which it sets back from the street line on each street on which it faces, plus half of the width of the street, equals at least 75 feet. But for each one per cent of the width of the lot on the street line that such street wall is less in lengh than such width of the lot, such wall may be erected four inches nearer to the street line. This provision shall not apply to residential buildings or buildings in a residence district, or portions thereof, within 100 feet of a public park of one acre or more in area, or within 100 feet of the street line opposite such a park.

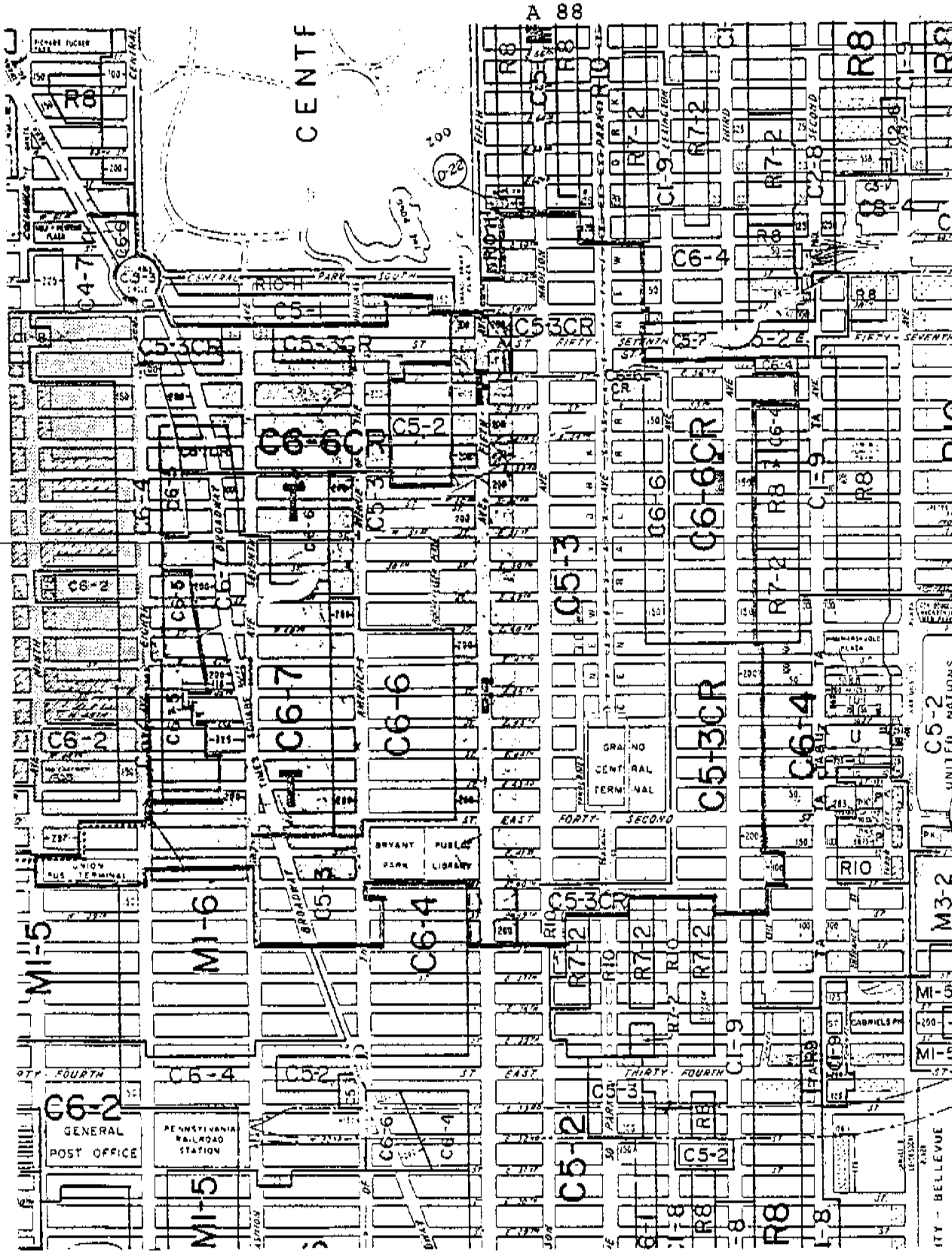
(e) When at the time plans are filed for the erection of a building there are buildings in excess of the height limits herein provided within 50 feet of either end of the street frontage of the proposed building or directly opposite such building across the street, the height to which the street wall of the proposed building may rise shall be increased by an amount not greater than the average excess height of the walls on the street line within 50 feet of either end of the street frontage of the proposed building and at right angles to the street frontage of the proposed building on the opposite side of the street. The average amount of such excess height shall be computed by adding together the excess heights above the prescribed height limit for the street frontage in question of all the walls on the street line of the buildings and parts of buildings within the above defined frontage and dividing the sum by the total number of buildings and vacant plots within such frontage.

(f) Nothing in this article shall prevent the projection of a cornice beyond the street wall to an extent not exceeding five per cent of the width of the street nor more than five feet in any case. Nothing in this article shall prevent the erection above the height limit of a parapet wall or cornice solely for ornament and without windows extending above such height limit not more than five per cent of such height limit, but such parapet wall or cornice may in any case be at least five and one-half feet high above such height limit.

(g) The provisions of this article shall not apply to the erection of church spires, belfries, chimneys, flues or gas holders.

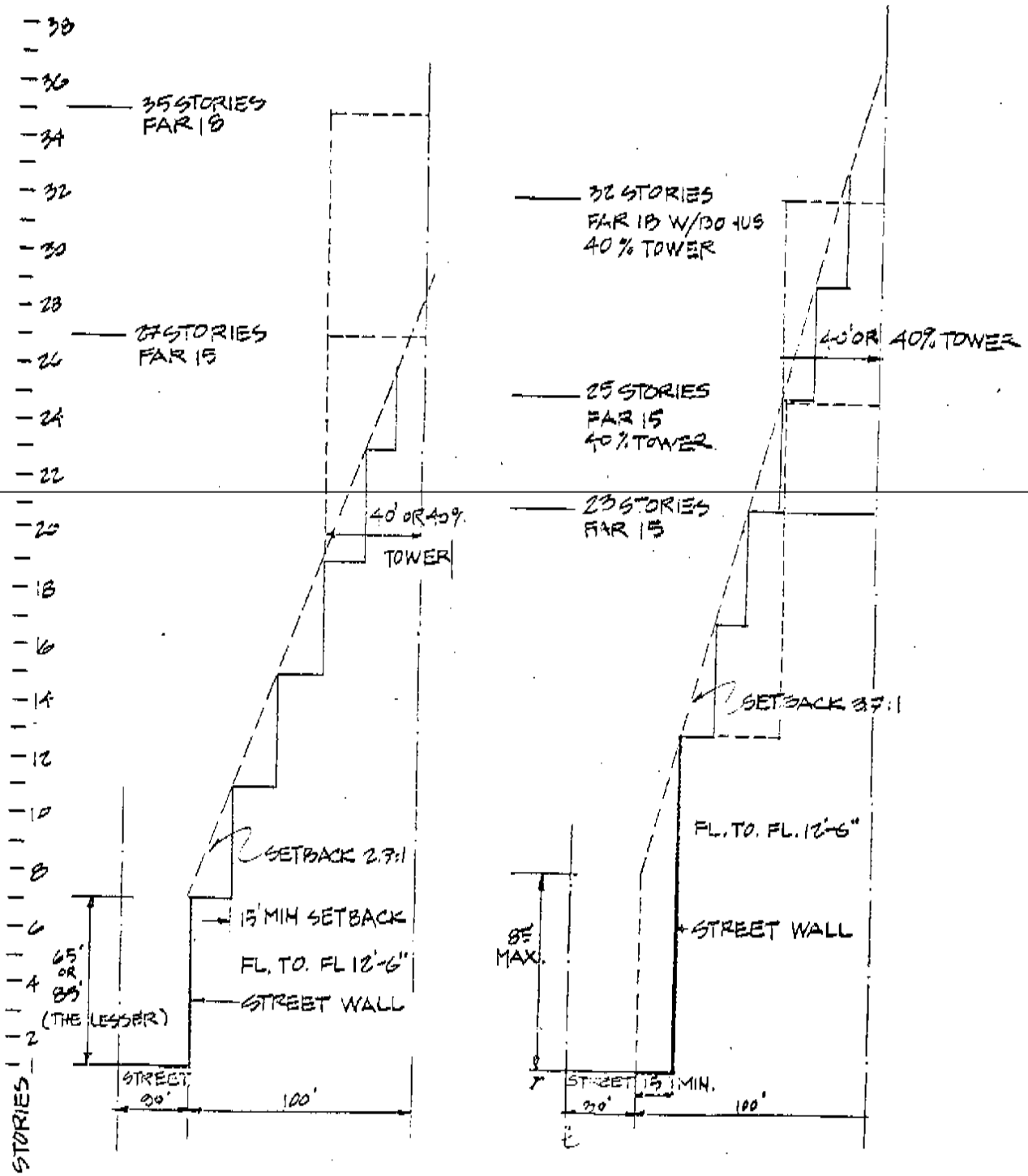
(h) Where not more than 50 feet of a street frontage would otherwise be subjected to a height limit lower than that allowed immediately beyond both ends of such frontage, the height limit on such frontage shall be equal to the lesser of such greater height limits.

(i) If an additional story or stories are added to a building existing at the time of the passage of this resolution, the existing walls of which are in excess of the height limits prescribed in this article, the height limits for such additional story or stories shall be computed from the top of the existing walls as though the latter were not in excess of the prescribed limits and the carrying up of existing elevator and stair enclosures shall be exempted from the provisions of this article.



1961 ZONING RESOLUTION, DENSITY AND USE MAP

A-7



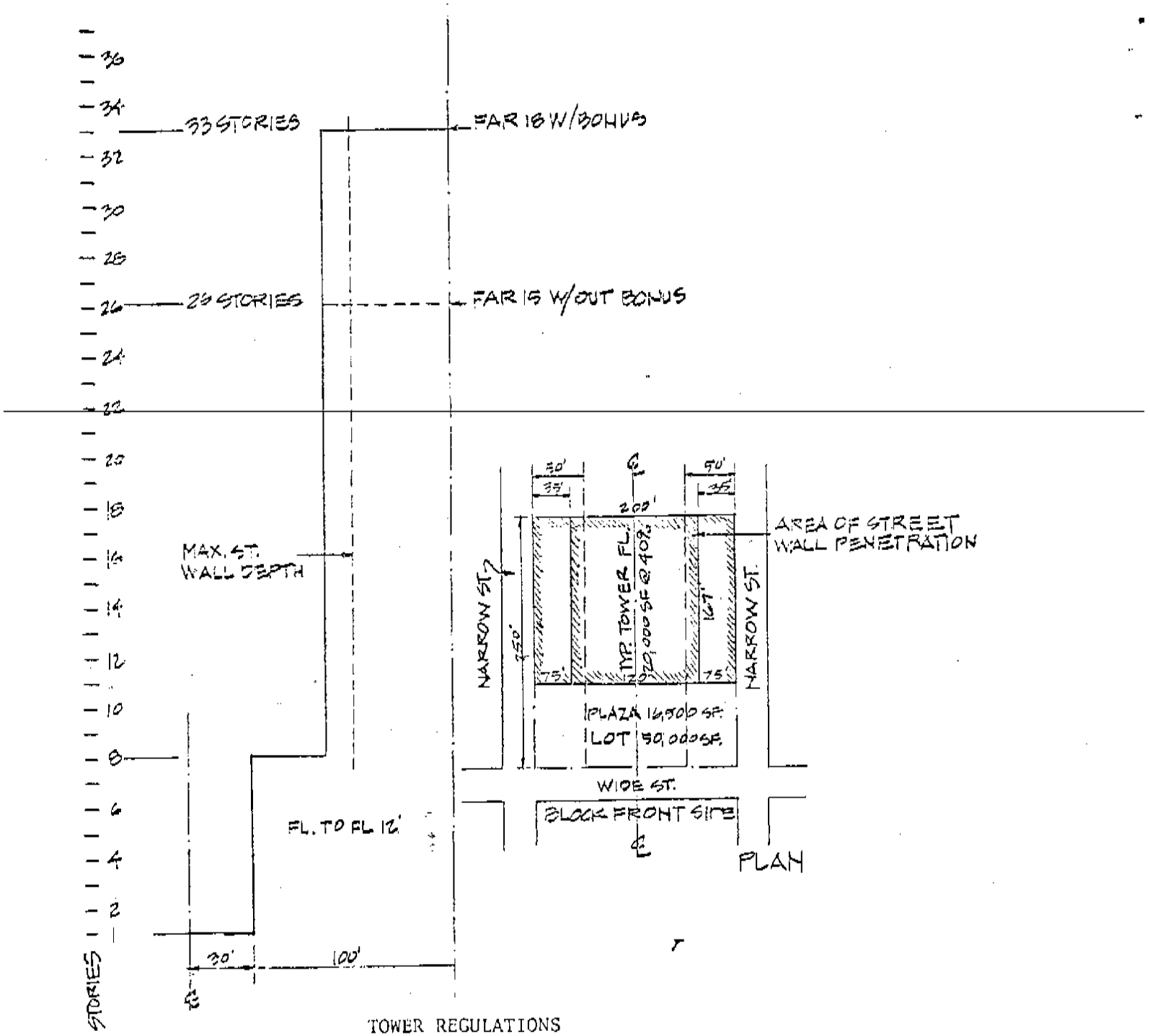
FRONTWALL SETBACK
SEC. 33-432

ALTERNATE
FRONT SETBACK
SEC. 33-442

ASSUME MID-BLOCK THROUGH LOT

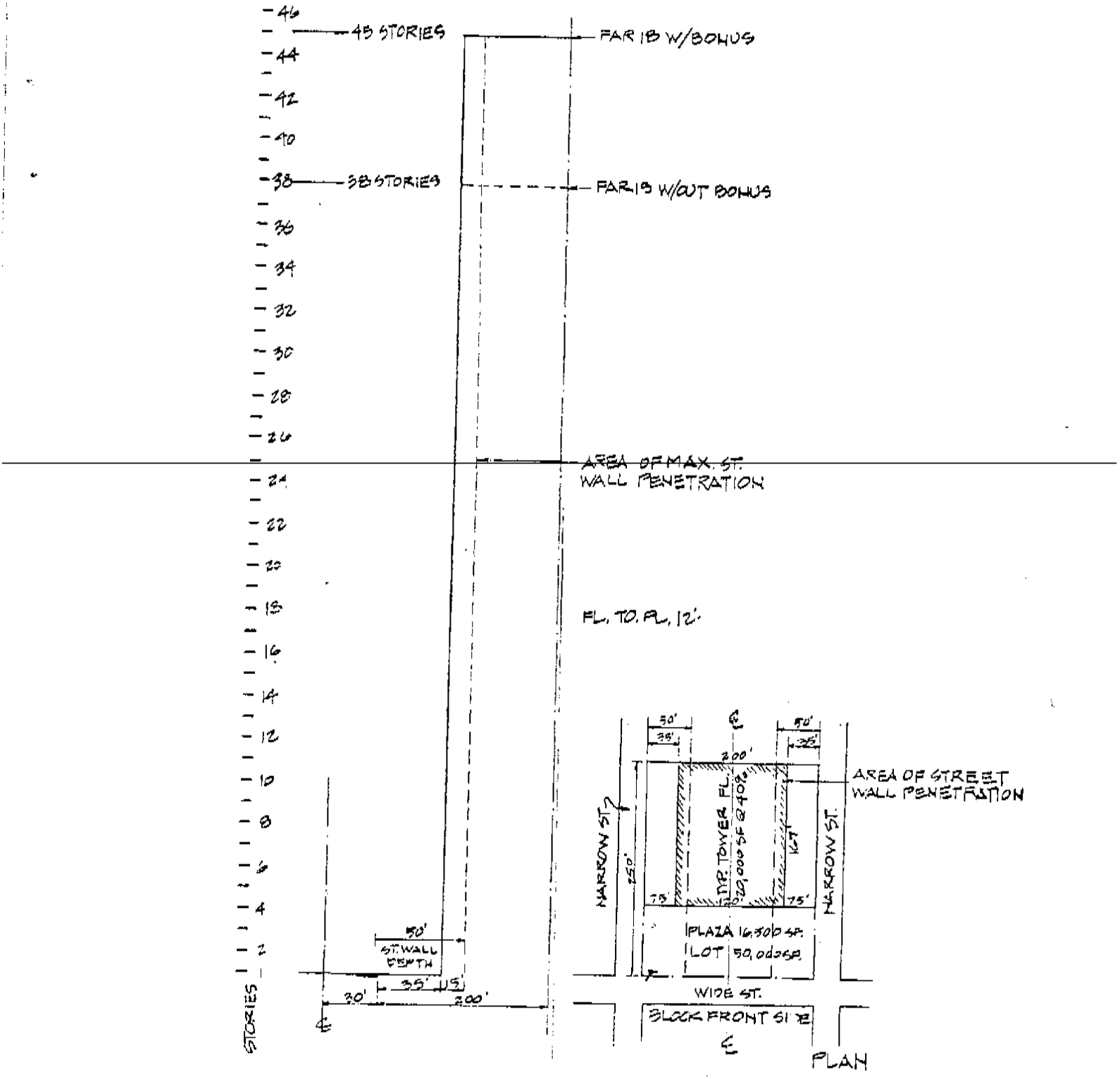
1961 ZONING RESOLUTION, NARROW STREET
HEIGHT, SETBACK, AND COVERAGE PROFILES

A-8



TOWER REGULATIONS
TOWER AND BASE
SEC. 33-451

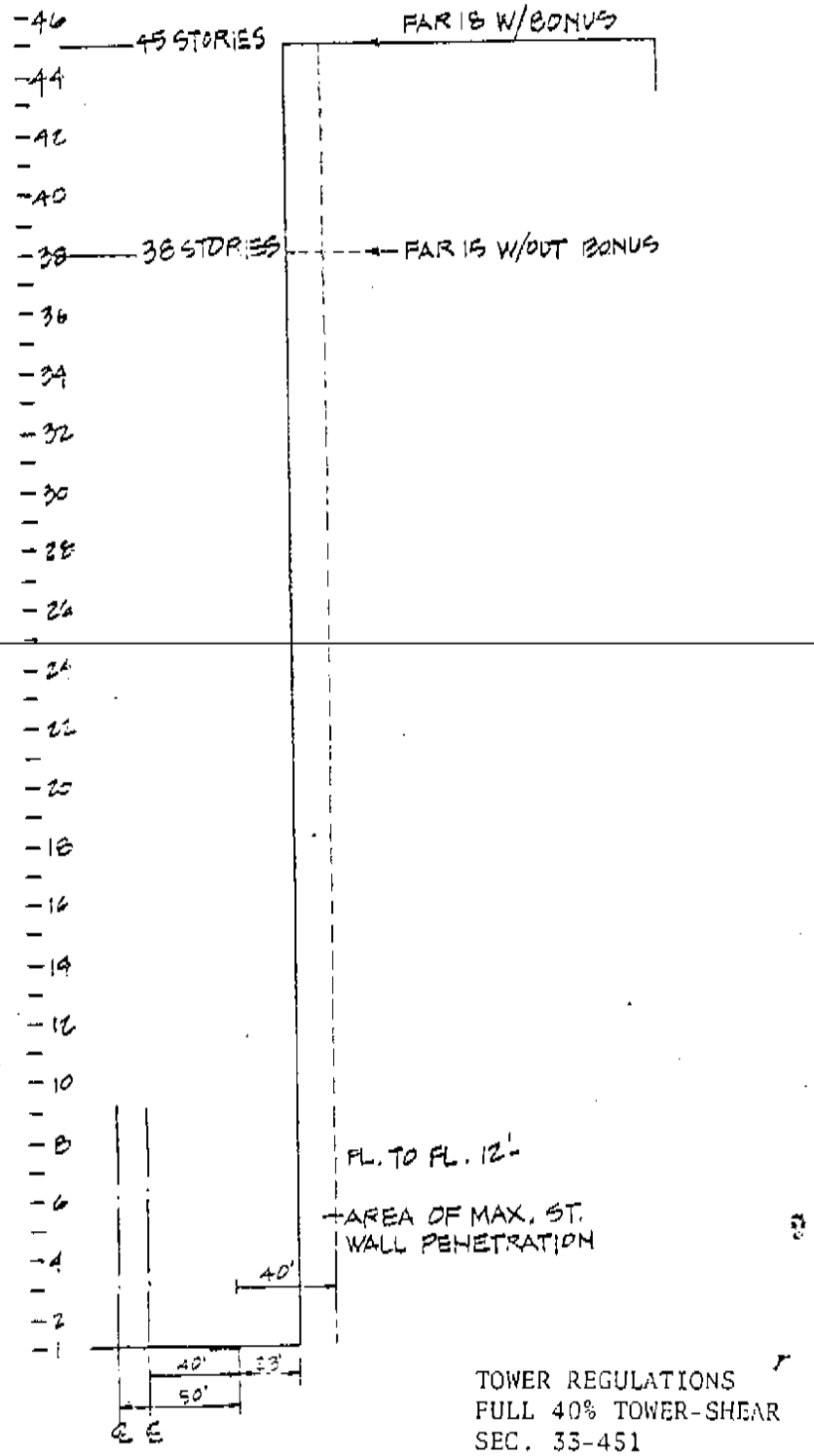
1961 ZONING RESOLUTION, NARROW STREET HEIGHT, SETBACK, AND COVERAGE PROFILES
(CONTINUED)



TOWER REGULATIONS
FULL 40% TOWER-SHEAR
SEC. 33-451

1961 ZONING RESOLUTION, NARROW STREET
HEIGHT, SETBACK, AND COVERAGE PROFILES

A-8



TOWER REGULATIONS
FULL 40% TOWER-SHEAR
SEC. 33-451

1961 ZONING RESOLUTION, WIDE STREET
HEIGHT, SETBACK AND COVERAGE PROFILES

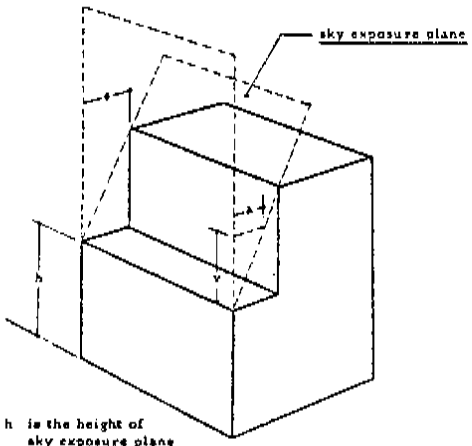
A-9

Basic Regulations

33-43

Maximum Height of Front Wall and Required Front Setbacks

In all districts, as indicated, if the front wall or other portion of a *building or other structure* is located at the *street line* or within the *initial setback distance* set forth in this Section, the height of such front wall or other portion of a *building or other structure* shall not exceed the maximum height above *curb level* set forth in this Section. Above such specified maximum height and beyond the *initial setback distance*, the *building or other structure* shall not penetrate the *sky exposure plane* set forth in this Section. The regulations of this Section shall apply except as otherwise provided in Section 33-42 (Permitted Obstructions), Section 33-44 (Alternate Front Setbacks), Section 33-45 (Tower Regulations), Section 74-85 (Height and Setback Regulations for Residential Buildings), Section 82-08 (Modification of Bulk and Height and Setback Regulations), or Section 82-11 (Building Walls along certain street lines), and Section 85-03 (Modifications of Bulk Regulations).



h is the height of sky exposure plane above street line

v is the vertical distance

a is the initial setback distance

a is the horizontal distance

ILLUSTRATION OF SKY EXPOSURE PLANE
SECTION 33-432

33-432

In other Commercial Districts

In the districts indicated, the maximum height of a front wall and the required front setback of a *building or other structure*, except as otherwise set forth in this Section, shall be as set forth in the following table:

MAXIMUM HEIGHT OF FRONT WALL AND REQUIRED FRONT SETBACKS

Initial setback distance (in feet)			*Sky exposure plane*		
				Slope over *zoning lot* (expressed as a ratio of vertical distance to horizontal distance)	
				On *narrow street*	On *wide street*
On *narrow street*	On *wide street*	Maximum height of a front wall or other portion of a *building* within the *initial setback distance*	Height above *street line* (in feet)	Vertical distance	Horizontal distance	Vertical distance	Horizontal distance
20	15	30 feet or two *stories*, whichever is less	30	1 to 1		1 to 1	
20	15	60 feet or four *stories*, whichever is less	60	2.7 to 1		5.6 to 1	
20	15	85 feet or six *stories*, whichever is less	85	2.7 to 1		5.6 to 1	

However, in accordance with the provisions of Section 32-42 (Location within Buildings), in C1, C2, or C3 Districts, no *commercial building* or portion thereof occupied by non-*residential uses* listed in Use Group 6A, 6B, 6C, 6F, 7, 8, 9, or 14 shall exceed in height 30 feet or two *stories*, whichever is less.

In C4-1 or C8-1 Districts, for *community facility buildings* or *buildings* used for both *community facility* and *commercial use*, the maximum height of a front wall shall be 35 feet or three *stories*, whichever is less, and the height above *street line* shall be 35 feet.

In C1-6, C2-6, C4-4, or C4-5 Districts, for *community facility buildings* or *buildings* used for both *community facility* and *commercial use*, the maximum height of a front wall shall be 60 feet or six *stories*, whichever is less.

33-44

Alternate Front Setbacks

In all districts as indicated, if an open area is provided along the full length of the *front lot line* with the minimum depth set forth in this Section, the provisions of Section 33-43 (Maximum Height of Front Wall and Required Front Setbacks) shall not apply. The minimum depth of such open area shall be measured perpendicular to the *front lot line*. However, in such instances, except as otherwise provided in Section 33-42 (Permitted Obstructions), Section 33-45 (Tower Regulations), Section 82-08 (Modification of Bulk Height and Setback Requirements) or Section 85-04 (Modifications of Bulk Regulations) no *building or other structure* shall penetrate the alternate *sky exposure plane* set forth in this Section, and the *sky exposure plane* shall be measured from a point above the *street line*.

If the open area provided under the terms of this Section is a *plaza*, such open area may be counted for the bonus provided for a *plaza* in the districts indicated in Section 33-13 (Floor Area Bonus for a Plaza).

33-442

In other Commercial Districts

In the districts indicated, the alternate front setback regulations applicable to a *building or other structure* shall be as set forth in the following table:

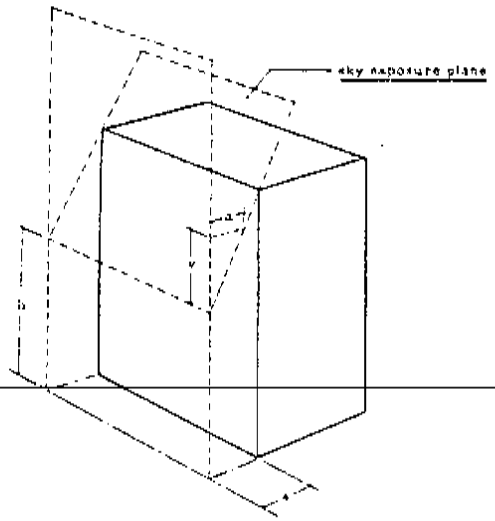
ALTERNATE REQUIRED FRONT SETBACKS

Depth of optional front open area (in feet)		Alternate *sky exposure plane*							
			Slope over *zoning lot* (expressed as a ratio of vertical distance to horizontal distance)						
			On *narrow street*			On *wide street*			
On *narrow street*	On *wide street*	Height above *street line* (in feet)	Vertical distance		Horizontal distance	Vertical distance		Horizontal distance	
15	10	30	1.4	to	1	1.4	to	1	
15	10	85	3.7	to	1	7.6	to	1	

33-442 (continued)

However, in accordance with the provisions of Section 32-42 (Location within Buildings), in C1, C2, or C3 Districts no *commercial building* or portion thereof occupied by non-*residential uses* listed in Use Group 6A, 6B, 6C, 6F, 7, 8, 9, or 14 shall exceed in height 30 feet or two *stories*, whichever is less.

In C4-1 or C8-1 Districts, for *community facility buildings* or *buildings* used for both *community facility use* and *commercial use*, the maximum height above *street line* shall be 35 feet or three *stories*, whichever is less.



h is the height of sky exposure plane above street line

a is the depth of the optional front open area

v is the vertical distance

a is the horizontal distance

ILLUSTRATION OF ALTERNATE SKY EXPOSURE PLANE
SECTION 33-442

Supplementary Regulations

33-45
Tower Regulations

33-451
In certain specified Commercial Districts

In the districts indicated, except as otherwise provided in Section 82-08 (Modification of Bulk and Height and Setback Regulations), any *buildings* or portions thereof which in the aggregate occupy not more than 40 percent of the *lot area* of a *zoning lot* or, for *zoning lots* of less than 20,000 square feet, the percent set forth in Section 33-454 (Towers on small lots), may penetrate an established *sky exposure plane*. (Such *building* or portion thereof is hereinafter referred to as a tower.) At any given level, except where the provisions set forth in Section 33-455 (Alternate regulations for towers on lots bounded by two or more streets), or Section 33-456 (Alternate setback regulations on lots bounded by two or more streets), or Section 33-457 (Tower setbacks on narrow blocks), are applicable and where the option is taken to be governed by such provisions, such tower may occupy any portion of the *zoning lot* not located less than 15 feet from the street line, of a *narrow street*, or less than 10 feet from the *street line* of a *wide street*, provided that the aggregate area so occupied within 50 feet of a *narrow street* shall not exceed 1,875 square feet and the aggregate area so occupied within 40 feet of a *wide street* shall not exceed 1,600 square feet.

If the *building* of which such tower is a portion does not occupy at any level more than the maximum percent of the *lot area* set forth in this Section or Section 33-454 for towers, the tower may occupy any portion of the *zoning lot* not located less than 20 feet from the *street line* of a *narrow street* or less than 15 feet from the *street line* of a *wide street*, provided that the aggregate area so occupied within 50 feet of a *narrow street* shall not exceed 2,250 square feet and the aggregate area so occupied within 40 feet of a *wide street* shall not exceed 2,000 square feet.

Unenclosed balconies, subject to the provisions of Section 24-175 (Balconies), are permitted to project into or over open areas not occupied by towers.

33-454
Towers on small lots

In the districts indicated, a tower permitted under the provisions of Section 33-451, 33-452, or 33-453 may occupy the percent of the *lot area* of a *zoning lot* set forth in the following table:

LOT COVERAGE OF TOWERS
ON SMALL ZONING LOTS

Area of *zoning lot* (in square feet)	Maximum percent of *lot coverage*
10,500 or less	50
10,501 to 11,500	49
11,501 to 12,500	48
12,501 to 13,500	47
13,501 to 14,500	46
14,501 to 15,500	45
15,501 to 16,500	44
16,501 to 17,500	43
17,501 to 18,500	42
18,501 to 19,999	41

33-455
Alternate regulations for towers on lots bounded by two or more streets

In the districts indicated, if a *zoning lot* is bounded by at least two *street lines*, a tower may occupy the percent of the *lot area* of a *zoning lot* set forth in this Section, provided that, except as otherwise set forth in Section 33-457 (Tower setbacks on narrow blocks), and Section 82-08 (Modification of Bulk and Height and Setback Regulations), all portions of any *building* or *buildings* on such *zoning lot*, including such tower, are set back from *street lines* as required in this Section.

(a) The maximum percent of *lot area* which may be occupied by such tower, shall be the sum of 40 percent plus one-half of one percent for every .1 by which the *floor area ratio* of such *building* is less than the *floor area ratio* permitted under the provisions of Section 33-12 (Maximum Floor Area Ratio), Section 33-13 (Floor Area Bonus for a Plaza), Section 33-14 (Floor Area Bonus for a

33-455 (Continued)

Plaza-Connected Open Area), or Section 33-15 (Floor Area Bonus for Arcades). The maximum *lot coverage* for any tower built under the provisions of this Section or for any *building* or *buildings* on any *zoning lot* occupied by such tower shall be 55 percent of the *lot area* of such *zoning lot*.

(b) At all levels, including ground level, such *building* shall be set back from a *street line* as follows:

(1) On *narrow streets*, by a distance equal to at least the fraction of the *aggregate width of street walls* of the tower, the numerator of which fraction is one and the denominator of which fraction is the sum of 3.0 plus .0667 for every .1 by which the *floor area ratio* of such *building* is less than the *floor area ratio* permitted under the provisions of Section 33-12, 33-13, 33-14, or 33-15, provided that such fraction shall be no less than one-fifth, and provided further that such setback need not exceed 45 feet.

(2) On *wide streets*, by a distance equal to at least the fraction of the *aggregate width of street walls* of the tower, the numerator of which fraction is one and the denominator of which fraction is the sum of 4.0 plus .1 for every .1 by which the *floor area ratio* of such *building* is less than the *floor area ratio* permitted under the provisions of Section 33-12, 33-13, 33-14, or 33-15, provided that such fraction shall be no less than one-seventh, and provided further that such setback need not exceed 35 feet.

(c) If a *zoning lot* occupies an entire *block*, the maximum setback set forth in paragraph (b) of this Section of 45 feet on each *narrow street* bounding the *zoning lot* may be reduced by one foot for every six feet of setback provided on a *wide street* bounding the *zoning lot* in addition to the setbacks otherwise required for *wide streets* as set forth in such paragraph, provided that no setback on a *narrow street* resulting from such reduction shall be less than 35 feet or one-tenth the *aggregate width of street walls* of the tower, whichever shall require the greater setback.

(d) The additional setbacks on *wide streets* set forth in paragraph (c) may be provided entirely on one *wide street* or divided in any proportion among any two *wide streets* bounding the *zoning lot*.

(e) Notwithstanding any other provision set forth in this Section, no *building* or portion of a *building* built under the provisions of this Section shall be set back less than 25 feet from the *street line* on *narrow streets* or less than 15 feet from the *street line* on *wide streets*.

33-456

Alternate setback regulations on lots bounded by two or more streets

In the districts indicated, except as otherwise set forth in Section 33-457 (Tower setbacks on narrow blocks), and Section 82-06 (Modification of Bulk & Height and Setback Regulations), if a *zoning lot* is bounded by at least two *street lines*, a tower occupying not more than the percent of *lot area* set forth in Section 33-451 (In certain specified Commercial Districts) or Section 33-454 (Towers on small lots) may be set back from a *street line* as follows:

(a) On *narrow streets*, by a distance equal to at least the fraction of the *aggregate width of street walls* of the tower, the numerator of which fraction is one and the denominator of which fraction is the sum of 3.0 plus .0333 for each .1 by which the *floor area ratio* of the *building* is less than the *floor area ratio* permitted under the provisions of Sections 33-12, 33-13, 33-14, or 33-15, provided that such fraction shall be no less than one-fifth, and provided further that such setback need not exceed 45 feet.

(b) On *wide streets*, by a distance equal to at least the fraction of the *aggregate width of street walls* of the tower, the numerator of which fraction is one and the denominator of which fraction is the sum of 4.0 plus .05 for each .1 by which the *floor area ratio* of the *building* is less than the *floor area ratio* permitted under the provisions of Sections 33-12, 33-13, 33-14, or 33-15, provided that such fraction shall be no less than one-seventh, and provided further that such setback need not exceed 35 feet.

(c) Notwithstanding any other provisions set forth in this Section, no tower built under the provisions of this Section shall be set back less than 25 feet from the *street line* on *narrow streets* or less than 15 feet from the *street line* on *wide streets*.

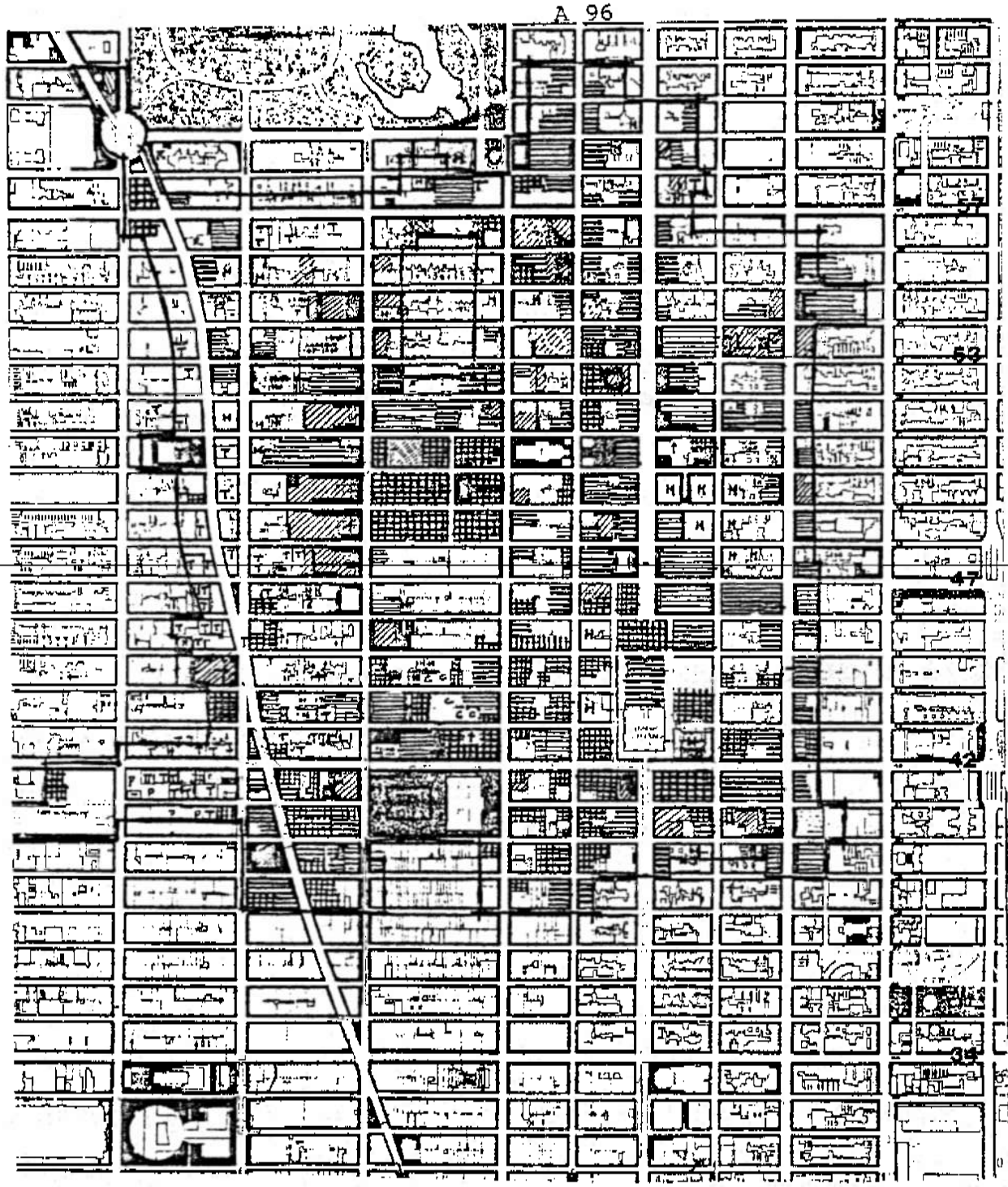
33-457

Tower setbacks on narrow blocks

In the districts indicated, if a *zoning lot* is bounded by at least three *street lines*, and any two of the *street lines* are opposite to each other and parallel or within 45 degrees of being parallel to each other, and their average distance apart is 150 feet or less, the minimum distance a tower is required to be set back from such opposite *street lines* under the provisions of Section 33-456 (Alternate regulations for towers on lots bounded by two or more streets), or Section 33-456 (Alternate setback regulations on lots bounded by two or more streets), is reduced in accordance with the following table:

TOWER SETBACKS ON NARROW BLOCKS

	Reduction of required tower setback	Minimum setback for tower built under provisions of this section
On *narrow street*	30 precent or ten feet, whichever is less	15 feet
On *wide street*	40 percent or ten feet, whichever is less	10 feet



MIDTOWN BUILDINGS: USE AND PERIOD OF CONSTRUCTION

A-11

MIDTOWN OFFICE CONSTRUCTION
1960 - 1982
By Date of Occupancy

KEY: 445 FIFTH AVE.-Denotes C.P.Action
480 FIFTH AVE.-Denotes BSA Action

	Address	Building Name	Net Rentable Sq. ft. (x 1,000)	Block No.
1960				
Midtown	270 Park Ave.	Union Carbide	1,150	1283
	320 Park Ave.	I.T.T.	526	1286
	399 Park Ave.	City Bank	1,250	1308
	155 E. 56 St.		48	1311
			2,974	
1961				
Midtown	633 Third Ave.	Continental Can	800	1314
	685 Third Ave.	American Home Products	210	1317
	733 Third Ave.	Diamond National	307	1319
	350 Third Ave.	Western Publishing	431	1306
	522 Fifth Ave.	Morgan Guarantee Trust	420	1259
	555 Madison Ave.	Coates Bldg.	340	1291
	1285 Ave. of Americas	Equitable Life	1,500	1004
			3,808	
1962				
Midtown	280 Park Ave.	Banker's Trust	321	1284
	1120 Ave.ofAmericas	Hippodrome (add.)	218	1259
	1180 Ave.ofAmericas	Phoenix	298	1262
	1290 Ave.ofAmericas	Sperry Rand	1,700	1267
			2,537	
1963				
Midtown	104 W. 40 St.	Spring Mills	153	815
	135 W. 50 St.	American Management Assn.	700	1003
	288 E. 56 St.	New York Telephone	60	1329
	757 Third Ave.	Harcourt,Brace, Jovanich	384	1321
	777 Third Ave.	U.S. Plywood	488	1322
	845 Third Ave.		303	1325
	200 Park Ave.	Pan Am	2,400	1280
	330 Madison Ave.	Sperry & Hutchinson	665	1277
			5,153	
1964				
Midtown	304 W. 58 St.	M.E.M.A. Bldg.	70	1048
	110 E. 59 St.	The Lighthouse	112	1373
	880 Third Ave.	Bank Systems	115	1308
	979 Third Ave.	Decorator & Design	327	1332
	641 Lexington Ave.	Saturday Evening Post	400	1309
	90 Park Ave.	Sterling Drug	768	869
	277 Park Ave.	Chemical Bank	1,500	1302
	410 Madison Ave.	Franklin National Bank	46	1284
	1212 Ave.ofAmericas		250	1263
	1301 Ave.ofAmericas	J.C. Penney	1,300	1005
			4,888	
1965				
Midtown				
	134 E. 40 St.	Norbrand Corp. Bldg.	14	895
	201 E. 42 St.		265	1316
	51 W. 52 St.	CBS(1500 Ave. of the Americas)	722	1268
	600 Madison Ave.		283	1293
	592 Fifth Ave.	Trade Bank & Trust	97	1263
	1330 Ave.ofAmericas	ABC	350	1269
	1435 Broadway	Garmet Bldg.	50	993
	1475 Broadway	Allied Chemical (1 Times Sq.)	114	995
	1855 Broadway		76	1113
			1,855	

MIDTOWN OFFICE CONSTRUCTION 1960-1982 BY DATE OF OCCUPANCY

A-12

	Address	Building Name	Net Rentable Sq. Ft. (x 1,000)	Block No.
1966				
	566 Third Ave.	Crowell, Collier, MacMillan	400	1307
	1350 Ave. of Americas	MGM	400	1270
	1865 Broadway	American Bible Society	127	1114
			927	
1967				
	825 Seventh Ave.		150	1006
	245 Park Ave.	American Brands	1,400	1301
	299 Park Ave.	Westvaco	900	1303
	437 Madison Ave.	I.T.T. Americas	640	1285
	210 E. 59th St.	Annex to Decorators Bldg.	186	1332
			3,276	
1968				
1969	55 E. 48th St.	Bankers' Trust	763	1284
	825 Third Ave.	Random House	500	1324
	964 Third Ave.		433	1312
	1155 Ave. of Americas	Interchemical	750	996
	1411 Broadway		1,300	815
	909 Third Ave.	FDR Post Office	667	1328
	5 E. 42nd St.	Emigrant Savings	275	1277
	110 E. 59th St.		400	1313
	~~280 Park Ave.~~	~~Bankers' Trust Annex~~	~~680~~	~~1284~~
	345 Park Ave.	Bristol Meyers	1,400	1306
	767 Fifth Ave.	General Motors	1,580	1294
	1345 Ave. of Americas	Burlington House	1,300	1007
	1700 Broadway		527	1025
			10,775	
1970				
	919 Third Ave.		1,152	1329
	540 Madison Ave.	Finland House	250	1290
	645 Madison Ave.	Pan Ocean Bldg.	140	1374
	1133 Ave. of Americas	Stevens Tower	350	999
	810 Seventh Ave.		600	1024
	888 Seventh Ave.		720	1028
	15 Columbus Circle	Gulf & Western Plaza	540	1113
			4,252	
1971				
	10 E. 53rd St.	Harper & Row	520	1288
	950 Third Ave.	Greenwich Savings Bank	330	1311
	450 Park Ave.	Franklin National Bank	300	1292
	1251 Ave. of Americas	ESSO	2,100	1002
	1301 Ave. of Americas	J.C. Penney (Annex)	225	1005
	1370 Ave. of Americas	Capital Industries	300	1271
	1515 Broadway	W.T. Grant (1 Astor Plaza)	1,138	1016
	1633 Broadway	Uris Bldg.	2,050	1022
	600 Third Ave.		175	595
			7,288	
1972				
	9 West 57th St.	Solow Bldg.	1,300	1273
	40 W. 57th St.	Lefrak Bldg. (South)	518	1272
	622 Third Ave.	Blue Cross	867	1295
	800 Third Ave.		511	1304
	489 Fifth Ave.		159	1276
	1095 Ave. of Americas	N.Y. Telephone Co.	1,120	994
	1221 Ave. of Americas	McGraw Hill	2,200	1001
	1114 Ave. of Americas	Monsanto Bldg.	1,250	1258
	1500 Broadway	Nat. General	480	996
			8,795	

MIDTOWN OFFICE CONSTRUCTION 1960-1982 BY DATE OF OCCUPANCY (CONTINUED)

	Address	Building		Net Rentable sq. ft. (x 1,000)	Block No.
1973					
	747 Third Ave.			350	1320
	1295 Ave.ofAmericas	Time/Celanese		1,800	1000
				2,150	
1974					
	665 Fifth Ave.	Rolex		135	1288
	1166 Ave.ofAmericas			1,430	1261
				1,565	
1975					
	117 E. 57th St.	Galleria		95	1312
	645 Fifth Ave.	Olympic Tower		400	1287
				495	
1976					
	685 Third Ave.	American Home Products		350	1317
				350	
1977					
	625 Lexington Ave.	Citicorp		1,300	1308
				1,300	1023
1978					
	650 Fifth Ave.	Pahlevi Foundation		300	1267
				300	
1979					
1980				0	
	727 Fifth Ave.	Tiffany & Co.		14,000	1292
	360 Madison Ave.	(Kalikow)		157,000	1281
	499 Park Ave.	(Klein)	(rehab.)	250,000	1315
	560 Lexington Ave.	(Rudin)		330,000	1305
	1 Park Ave. Plaza	(Fisher)		1,050,000	1288
				1,801,000	
1981 Scheduled for Completion					
	570 Madison Ave.	AT&T		650,000	1291
	590 Madison Ave.	IBM		744,800	1292
	120 Park Ave.	Philip Morris		600,000	1276
	466 Lexington Ave.	(Olympia & York)	(rehab)	950,000	1300
	505 Third Ave.	(Cohen Bros.)		525,000	1323
				3,469,800	
1982 and later Scheduled for Completion					
	445 Fifth Ave.	Republic Nat. Bank		250,000	869
	530 Madison Ave.	(Tishman)		800,000	1289
	535 Madison Ave.	(Klein)		420,000	1290
	875 Third Ave.	(Gladstone)		600,000	1327
	101 Park Ave.	(Kalikow)		1,037,000	1295
	725 Fifth Ave.	(Trump)		330,000	1292
	900 Third Ave.	(Minskoff)		450,000	1309
	1100 Sixth Ave.	(Nickerson) (rehab)		(500,000)	1258
	42nd and Bway	(City at 42nd)		N.A.	
	1 E. 49th St.	Saks Fifth Ave.		N.A.	1285
	135 E. 57th	(Gladstone)		N.A.	1312
	500 Park Ave.			N.A.	1294
	1270 Sixth Ave.	Rockefeller Center)		N.A.	1266

SOURCES:
1. Sanborn Maps Department of City Planning, 2 Lafayette St., New York City
2. Midtown and Urban Design Groups, Dept. of City Planning, 2 Lafayette St., NYC
3. Board of Standards and Appeals, 40 Lafayette St., New York City

MIDTOWN OFFICE CONSTRUCTION 1960-1982 BY DATE OF OCCUPANCY

A-12

TYPE OF ADMINISTRATIVE APPROVAL FOR ALL BUILDING CONSTRUCTION, 1960-1982 BY BLOCK LOCATION

BLOCK	DATE	ADDRESS	NAME	x 1000 NET R.	TYPE	CP DOCKET	CP ACTION	BSA DOCKET	BSA ACTION
815	'62	104 W. 40	Spring Mills	153	Midblock				
815	68	1411 Broadway		1000	Sm.block	19258	74-72		
869	64	90 Park Ave.	Sterling Drugs	768	B.F.				
869	82	445 5th	Republic	250	Corner	780400 800157	82-102 82-101+pending		
895	70	600-3rd		475	Shallow B.F.				
895	65	140 E. 40th	Korbrand Corp.	14	Midblock				
920	61	605-3rd	Burroughs	800	Sm. Block				
993	65	1435 Broadway	Carmet Bldg.	50	Part. B.F.				
994	72	1095-6th	N.Y. Telegraph & Telephone	1200	Deep B.F.	20877A	74-72,74-84		
995	65	1475 Broadway	Allied Chem.	114	Small Block				
996	69	1133-6th	Interchem.	730	B.F.				
996	72	1500 Bway	Nat. General	4800	B.F.				
999	70	1185-6th	Stevens Tower	720	B.F.				
1000	73	1205 -6th	Celanese	1800		21345	74-72,74-82		
1001	72	1221 -6th	McGraw Hill	160+	Deep B.F.	20465	74-72		
1002	71	1251-6th	Esso	2100	Deep B.F.	20194	74-72		
1003	63	135 W. 50th	Am. Management	700	Midblock				
1004	61	1285-6th	Equitable Life	1300	Deep B.F.	21013 770078	74-52		
1005	60	805-7th	(H) Hotel Americana	-	Deep B.F.				
1005	65	1301-6th	J.C. Penney	1300	Deep B.F.				
1006	63+80	1325-6th	(H) New York Hilton + Addition	-	Deep B.F.	790142	74-72,74-912		
1006	67	825-7th		150	Corner B.F.				
1007	68	1345-6th	Burlington	1800	Deep B.F.	19615 22816	74-72,33-122		
1009	'79+	118 E. 57th				790095	74-72,33-122		
1009	60	1385 -6th	(R) Apartments	-	Shallow BF				
1012	63	560-7th	(I) Synagogue	-	Corner				
1016	71	1515 Broadway	W.T. Grant	1348	Sm. block	780400 790315	74-52,74-87		
1020	62	790-8th	(H) Ramada Inn	-	Shallow BF	20251	74-72,81-06		
1022	72	1633 Broadway	Uris Bldg.	2052	Deep BF	20250 Theater Sp.Dist. Split Dist.	74-72,81-06		
1024	69	810-7th		600	3/4Sm.Block				

TYPE OF ADMINISTRATIVE APPROVAL FOR ALL BUILDING CONSTRUCTION, 1960-1982 BY BLOCK LOCATION

A-13

1024	64	870-8th	(R) Apartments	-	B.F.				
1025	69	1700 Bway		527	B.F.+1/2mid.				
1028	70	888-7th		720	B.F.				
1028	77	1752-Bway	(R) Apartments	-	corner			454-69	Rpd.+time to comp.walk exit
1113	70	15 Columbus Circle	Gulf & Western	540	Sm. block			431-67	Tower setbacks
1114	74	55 Columbus Circle	(R) Lincoln Plaza Tow.	-	Corner				
1116	70	1900 Broadway	(R) One Lincoln Plaza	-	B.F.				
1258	79-72	1114-6th	Grace	1250	Mid+Cor.				
1258	82	1100 -6th	(Nickerson) rehab.	300	Corner				
1259	62	1120-6th	Hippodrome (Add)	218	B.F. (Add.)				
1259	61	522-5th	Morgan Guaranty	420	Corner				
1261	72	1166-6th		1430	B.F.	780629	74-72		
1262	62	1180-6th	Phoenix	298	Corner				
1263	63	1212-6th		250	Corner				
1263	65	592-5th	Trade Bank & Trust	57	Corner				
1266	82	1270-6th	Music Hall Towers		Air rights req'd if applied B.F.				
1267	61	1290-6th	Sperry Rand	1700	Deep B.F.				
1267	77	650-5th	Pahlevi	300	Corner	21852A	74-72,87-062		
1268	63	1300-6th	CBS	722	B.F.				
1269	65	1330-6th	ABC	350	B.F.	C770261	74-72,26-07		
1270	66	1350-6th	MGM	400	Deep corner				
1271	71	1370-6th	Capital Industries	300	Corner			154-68	Interior lot, Tower encroach, Tower height
1271	61	1360-6th	(R) Apartments	-	Corner				
1271	62	65 W. 55th	(R) Apartments	-	Mid.				
1272	72	40 W. 57th	Squibb	648	Mid.	21158	74-72	250-70	Granted
1273	71	9 W. 57th	Solow	1500	Mid.				
1276	81	120 Park	Philip Morris	600	B.F.	780404	74-72,74-792 74-87		
1276	72	489-5th		139	PartB.F.			18-69	Max F.A.R. tower encroach, tower area
1277	69	S E. 42nd	Emigrant	687	Mid.				
1277	62	330 Madison	Sperry Hutchinson	665	Deep B.F.				
1280	61	200 Park Ave.	Pan Am + heliport	2400	Block	760015	Heliport Ext.		
1281	80	360 Madison	(Kalikow)	157	Corner			278-78	Withdrawn

TYPE OF ADMINISTRATIVE APPROVAL FOR ALL BUILDING CONSTRUCTION, 1960-1982 BY BLOCK LOCATION (CONTINUED)

BLOCK	DATE	ADDRESS	NAME	x 1000 NET R. (Rehab)	TYPE	CP DOCKET	CP ACTION	BSA DOCKET	BSA ACTION
1282	80	385 Madison		1150	s/s 1/2 block	22413	74-72		
1283	60	270 Park	Union Carbide	46	B.F.				
1284	63	410 Madison	Franklin Nat. Bank	321	Corner				
1284	62	280 Park	Bankers Trust	686	B.F.				
1284	69	280 Park	Bankers Trust Annex	N.A.	Mid	19411	74-72		
1285	82	1 E. 49th	Saks Fifth Ave.	648	Corner	790343	87-102		
1285	66	437 Madison	I.T.T. Americas	-	B.F.				
1286	79	455 Madison	(H) Palace Hotel	526	B.F.	780357 770348	74-72,74-82 74-712		
1286	60	320 Park	ITGT	400	Corner+mid	21940 2676-S	74-72,87-00, 87-62		
1287	75	645-5th	Olympic Towers	465	B.F.				
1287	60	350 Park	Man. Hanover	1050	Mid	780544	74-72,74-82		
1288	80	1 Park Ave. Plaza	(Fisher)	330	Mid		74-72,74-82		
1288	71-72	10 E. 53rd	Harper & Row	135	Corner				
1288	74	665-5th	Rolex	800	Corner+mid		Pending		
1289	82	520 Madison	(Tishman)	420	Corner		Pending		
1290	82	535 Madison	(Klein)	250	Corner				
1290	70	540 Madison	Finland House	650	B.F.	780301	74-72,74-87		
1291	81	570 Madison	AT&T	340	Corner				
1291	61	555 Madison	Coates	236	Corner	790143 780602	87-033 87-102		
1292	82	725 5th	(Trump)	745	B.F.	770209	33-451,74-72,74-82 74-91,87-11		
1292	79-84	580 Madison	IBM	1.4	Corner	790743	Pending		
1292	81	725-727 5th	Tiffany	-	Mid.				
1292	63	57 E. 56th	(H) Drake Hotel Annex	300	Corner			791-68	coverage,
1292	71	450 Park	Franklin Nat. Bank	283				99-77	front wall
1293	65	600 Madison		N.A.	deep corner				
1294	82	500 Park		1580	Corner				
1294	66	767 -5th	Gen. Motors	236	full block				
1295	82	101 Park	(Trump)	867	Corner	790425	Pending		
1295	71	622 Third	Blue Cross	950	Mid+corner	20947	74-72,74-82		
1300	80	466 Lexington	(Olympia/York)		full block			506-79	Rehab. on cond.

TYPE OF ADMINISTRATIVE APPROVAL FOR ALL BUILDING CONSTRUCTION, 1960-1982 BY BLOCK LOCATION

A-13

BLOCK	DATE	ADDRESS	NAME	x 1000 NET R.	TYPE	CP DOCKET	CP ACTION	BSA DOCKET	BSA ACTION
1301	65	245 Park	Am. Brands	1400	full block				
1302	62	277 Park	Chem. Bank & Trust	1500	full block				
1303	66	299 Park	West Vaco	900	B.F.	20947	74-72		
1304	70	800-3rd		511	B.F.				
1305	60	571 Lexington	(H) Summit Hotel	-	corner				
1305	80	560 Lexington	Rudin	330	Corner	780266	74-72,74-87		
1306	68	345 Park	Bristol Meyers	1400	Full block				
1306	66	850-3rd	Western Publishing	431	B.F.				
1307	66	866-3rd	McMillan	400	B.F.				
1307	56	375 Park	Seagrams		deep B.F.				
1308	75-77	625 Lexington	City Corp.	1300	3/4 block	22483	74-72,74-82, 74-87,74-91, 74-62(b)		
1308	60	399 Park	City Bank	1250	Full block				
1308	63	880 3rd	Basic Systems	115	Corner				
1309	63	641 Lexington	Sat. Even. Post	400	Mid-1 F.				
1309	80	900 3rd	(Minskoff)	450	B.F.	780520	95-041		
1310	80+	656 Lexington			corner	N7700042FM	sidewalk(permit extended)		
1311	60	155 E. 56th	Greenwich Savings	48	Mid.				
1311	71	950 3rd		330	Corner			706-68	Tower area, setback encroach.
1312	69	964 3rd	(R) Apartments	433	Mid+small B.F.				
1312	60	153 E. 57th	Gladstone	-	mid	21850			
1312	82	135 E. 57th	Galleria	606	corner	760032	Pending		
1312	74	117 E. 57th	(C) Alexanders	95	mid	21850	74-87,82-08		
1313	64	733 Lexington			Mid+B.F.				
1313	69	110 E. 59th	(Klein)	400	Mid				
1313	80	499 Park Ave.	Continental Can	250	corner	780543	12-10	936-77	setback min. lot
1314	60	633 Third		800	Deep B.F.				
1316	64	201 E. 42nd	Am. Home Products	265	Shallow B.F.				
1317	60	685 3rd	Am. Home Products Addition	210	corner				
1317	76	685 3rd		350	corner				
1320	73	747-3rd	(R) Apartments	350	B.F.				
1320	79	207-9 E. 46th	Harcourt Brace Jovanovich	-	Mid				
1321	62	757-3rd		384	Deep corner				

TYPE OF ADMINISTRATIVE APPROVAL FOR ALL BUILDING CONSTRUCTION, 1960-1982 BY BLOCK LOCATION

A-13

BLOCK	DATE	ADDRESS	NAME	x 1000 NET R.	TYPE	CP DOCKET	CP ACTION	BSA DOCKET	BSA ACTION
1322	63	777 -3rd	U.S. Plywood	988	B.F.				
1323	80	805-3rd	(Cohen)	525	2/3 B.F. + mid	790329 21236	74-79,74-87		
1324	69	825-3rd	Random House	500	corner+mid				
1325	63	845-3rd		303	ShallowB.F.				
1327	82	875-3rd	(Gladstone)	600	Mid+B.F.	770674			
1327	61	220 E. 54th	(R) Apartments	-	Mid.				
1328	66	909-3rd	U.S. Post Office	687+ 472	DeepB F.				
1329	70	919-3rd		1152	Deep B.F.				
1329	63	288 E. 56th	N.Y. Telephone	60	Mid.				
1332	64	979-3rd	Decoration & Design	327	Deep corner				
1332	67	210 E. 59th	Decoration & Design	186	Mid				
1374	70	645 Madison	Pan Ocean	140	Corner				
1394	66	746 Lexington	Dry Dock S & I.	23	Mid				

KEY: (H) Hotel
(I) Institution
(R) Residential

445 Fifth Ave. Denotes C.P. Action

489 Fifth Ave. *Denotes B.S.A. Action

1. Sanborn Maps Department of City Planning, 2 Lafayette St. New York City
2. Midtown and Urban Design Groups, Dept. of City Planning, 2 Lafayette St., New York City
3. Board of Standards and Appeals, 80 Lafayette St., New York City

COMPARISON OF AS OF RIGHT

YEAR	AS OF RIGHT (AOR) NO. OF BLDG. A.O.R.	% TOTAL	RENTABLE AREA	%	CPC/BSA ACTION RENTABLE AREA	%	TOTAL RENTABLE AREA	TOTAL # OF BLDGS.
60	4	100 %	2,974,000	100%			2,974,000	4
61	3	100 %	3,808,000	100%			3,808,000	7
62	4	100 %	2,537,000	100%			2,537,000	4
63	8	100 %	5,153,000	100%			5,153,000	8
64	10	100 %	4,888,000	100%			4,888,000	10
65	7	88 %	1,505,000	81%	C 350,000	19%	1,855,000	8
66	3	100 %	927,000	100%	C 0		927,000	3
67	5	83 %	2,376,000	62%	C 900,000	38%	3,276,000	6
68	0	85 %	0				0	0
69	11	83 %	7,975,000	74%	C 2,800,000	26%	10,775,000	13
70	6	85 %	3,712,000	87%	B 540,000	13%	4,25 ,000	7
71	1	12 %	700,000	10%	C 5,628,000 B 930,000	90%	7,258,000	8
72	4	48 %	3,741,000	43%	C 4,915,000 B 139,000	57%	8,795,000	9
73	1	50 %	350,000	16%	C 1,800,000	84%	2,150,000	2
74	1	50 %	135,000	9%	C 1,430,000	91%	1,565,000	2
75	0	0	0		C 495,000	100%	495,000	2
76	1	100 %	350,000	100%	0		350,000	0
77	0	0	0		C 1,300,000	100%	1,300,000	1
78	0	0	0		C 300,000	100%	300,000	1
79	0	0	0		0		-	0
80	0	0	0		C 1,614,000	100%	1,614,000	
81	0	0	0		C 2,519,800	100%	2,519,800	
82+	0	0	0		3,793,000	100%	3,793,000	7*
TOTAL	75		41,131,000 SF	58%	29,584,000 SF	42%	70,715,000 SF	111

* 5 additional buildings scheduled for completion in 1982 - no figures available on area but C.P. action sought on all proposals

SOURCES:

1. Sanborn Maps Department of City Planning, 2 Lafayette St.New York
2. Midtown and Urban Design Groups, Dept. of City Planning, 2 Lafayette St.
3. Board of Standards and Appeals

COMPARISON OF AS-OF-RIGHT WITH SPECIAL PERMIT CONSTRUCTION

SUMMARY OF OFFICE BUILDING CONSTRUCTION

YEAR (TOT.BLDGS)	NUMBER OF BUILDINGS A.O.R.	%	C.P./ B.S.A.	%	RENTABLE AREA OF BUILDINGS x 1000 A.O.R.	%	C.P./ B.S.A.	%	TOTAL
60-64 (33)	33	100%	0	0	19,360	100	0	0	19,360
65-69 (30)	26	87%	4	13%	12,783	76	4,050	24%	16,833
70-74 (28)	15	46%	15	54%	8,638	36%	15,382	64%	24,020
75-79 (4)	1	25	3	75%	350	14%	2,095	86%	2,445
80-82* (16)*	0	0	16*	100%	0	0	7,927	100%	8,114
TOTAL 111	72	65%	39*	35%	41,131	58%	29,584	42%	70,615

* 5 additional buildings scheduled for completion in 1982 - no figures available on area but C.P. Action sought on all proposals

** Percentage range - Low figure does not include 5 additional buildings, high figure does

SOURCES;

1. Sanborn Maps, Department of City Planning, 2 Lafayette St., New York City.
2. Midtown and Urban Design Groups, Dept. of City Planning, 2 Lafayette St., New York City
3. Board of Standards and Appeals, 40 Lafayette St., New York City

POST 1974 OFFICE BUILDINGS

Comparing Actual Tower Area on Site to Minimum site for 40% Tower

Areas (SF) x 1000

DATE	BUILDING	TYP. TOWER FLOOR AREA (SF)	FOOT-PRINT [1]	ZONING LOT [2]	40% TOWER MIN. [3]	ASSEMBLAGE [4] METHOD
74	1166 Sixth Ave.	32,400	64	84*	81	ZLM
80	Park Plaza	25,040	38	65*	62	ZLM
77	Citycorp Center	24.596	75*	75*	61	Cleared Site
82	101 Park Ave.	20,832	52	52	55	Cleared Site
81	Philip Morris	20,737	21	21	52	TDR
81	IBM	19,652	49*	49*	49	Cleared Site
81	AT&T	19,600	37	37	49	Cleared Site
81	805 Third Ave.	19,570	24	30	49	ZLM
75	Olympic Towers	18,811	25	40	47	ZLM
80	560 Lexington Ave.	14,221	17	17	35	TDR
82	535 Madison	11,922	17	23	30	ZLM
82	725 Fifth Ave.	11,454	19	35*	29	ZLM
78	650 Fifth Ave.	9,156	14	18	23	ZLM
80	499 Park Ave.	9,062	11	18	23	ZLM

1. Denotes the cleared buildable area of a zoning lot.
2. Denotes the total area of a zoning lot including on site buildings which will remain as in a Zoning Lot Merger (ZLM).
3. Denotes the minimum total zoning lot area that would be required to construct a Tower similar in floor area to those illustrated above.
4. Denotes the type of assemblage-cleared site, no buildings remaining on zoning lot, Zoning Lot Merger (ZLM), building remaining on zoning lot; Transfer of Development Rights (TDR), transfer of unused floor area from Landmark buildings.

* Denotes zoning lots sufficient to have produced a 40% tower under equivalent AOR regulations. This does not take into account adjustments for special district regulations.

ARTICLE VII - SPECIAL PERMITS BY CITY PLANNING COMMISSION

ACTION	YEAR	BLOCK	ADDRESS	LOT TYPE	LOT SIZE x 1000 NET R.	OTHER ACTION
74-52	PARKING GARAGES OR PUBLIC PARKING LOTS IN HIGH DENSITY CENTRAL AREAS					
	'61	1004	1286 - 6th Equitable Life	Deep B.F.	1300	
74-712	LANDMARK PRESERVATION; DEVELOPMENTS OR ENLARGEMENTS ON LANDMARK SITES IN CERTAIN DISTRICTS					
	(H) '79	1286	455 Madison Palace Hotel	B.F. +Mid.	-	74-72 74-82
74-72	BULK MODIFICATIONS; Height and Setback and Yard Modifications					
	'65	1269	1330-6TH -ABC	B.F.	350	26-07
	'66	1303	299 Park-West Vaco	B.F.	900	
	'68	815	1411 Bway	Small Blk.	1000	
	'68	1007	1345-6th -Burlington	Deep B.F.	1800	33-122
	'69	1284	280 Park-Bankers Trust Annex	Mid.	686	
	'71	1002	1251-6th - ESSO	Deep B.F.	2100	
	'71	1016	1515 Bway-W.T. Grant	Sm.B.F.		81-06
	'71	1295	622-3rd - Blue Cross	Mid+corner	867	74-82
	'72	994	1095-6th-N.Y.Tel.	Deep B.F.	1200	74-84
	'72	1001	1221-6th-McGraw Hill	Deep B.F.	2200	
	'72	1022	1638 Bway-Uris	Deep B.F.	2052	81-06
	'72	1261	1166-6th	B.F.	1430	
	'72	1272	40 W.57th-Squibb	Midblock	648	B.S.A.
	'72	1288	10 E. 53rd - Harper & Row	Midblock	330	74-82
	'73	1000	1205-6th -Celanese	Deep B.F.	1800	74-82
(R)	'75	1287	645-5th-Olympic Towers	Corner+Mid	400	87-00 87-62
	'75'76	1308	625 Lexington-Citicorp	3/4 block	1300	74-82 74-87 74-91
74-72	'77	1267	650-5th - Pahlevi	Corner	300	87-062
	'79	1009	118 W. 57th			33-122
(H)	'79	1286	455 Madison-Palace Hotel	B.F.+Mid	-	74-82 74-712
(H)	'80+	1006	1325-6th-N.Y. Hilton	Deep B.F.	-	74-912
	'80	1288	1 Park Ave.-Plaza(Fisher)	Midblock	1050	74-82
	'80	1292	580 Madison - IBM	B.F.	745	74-82 74-87 74-91 87-11 33-45
	'80	1305	560 Lexington -Rudin	Corner	330	74-87
	'81	1276	120 Park-Philip Morris	B.F.	600	74-792 74-87
	'81	1280	360 Madison	Corner	157	
	'81	1291	570 Madison -A.T.&T	B.F.	650	74-87

ACTION	YEAR	BLOCK	ADDRESS	LOT TYPE	LOT SIZE	x 1000 NET R.	OTHER ACTION
74-79	TRANSFER OF DEVELOPMENT RIGHTS FROM LANDMARK SITES						
	'80	1323	305-3rd (Cohen)	2/3B.F.+Mid.		525	74-87
	'80	1006	1325-6th -N.Y. Hilton	Deep B.F.			74-72
	'81	1276	120 Park-Philip Morris	B.F.		600	74-72 74-87
74-82	THROUGH BLOCK ARCADES						
	'71	1295	622-3rd -Blue Cross	Midcorner		867	74-72
	'72	1288	10 E. 53rd - Harper & Row	Midblock		330	74-72
	'73	1000	1205-6th -Celanese	Deep B.F.		1800	74-72
	'75'76	1308	625 Lexington-Citicorp	3/4 block		1300	74-72 74-72 75-87 74-91
	'79	1286	455 Madison-Palace Hotel	B.F.+Mid			74-72 74-712
	'80	1288	1 Park Ave. (Fisher)	Midblock		1050	74-72
	'80	1292	580 Madison-IBM	B.F.		745	74-72 74-87 74-91 87-11 33-451
74-84	DEVELOPMENTS WITH EXISTING BUILDINGS						
	'72	994	1095-6th -N.Y. Tel.	Deep B.F.		1200	74-72
74-87	COVERED PEDESTRIAN SPACE						
	'74	1312	117 E. 57th - Galleria	Midblock		95	82-08
	'75-76	1308	625 Lexington -Citicorp	3/4 block		1300	74-72 74-82 74-91
	'80	1292	580 Madison- IBM	B.F.		745	74-72 74-82 74-91 87-11 33-451
	'80	1305	560 Lexington-Rudin	Corner		330	74-72
	'80	1323	80--3rd -Cohen	2/3 B.F+Mid.		525	74-79
	'81	1276	120 Park - Philip Morris	b.f.		600	74-72 74-792
	'81	1291	570 Madison-A.T.&T	B.F.		650	74-72
74-91	URBAN OPEN SPACE MODIFICATIONS						
	'75'76	1308	625 Lexington - Citicorp	3/4 B.F.		1300	74-72 74-82 74-87.

ACTION	YEAR	BLOCK	ADDRESS	LOT TYPE	LOT SIZE x 1000 NET R.	OTHER ACTION
74-912						74-62(b)
(H)	'80	1292	580 Madison - IBM	B.F.	745	74-72 74-82 74-87 87-11 33-451
	'80	1005	1325-6th -N.Y. Hilton	Deep B.F.		74-72
	ARTICLE VIII - SPECIAL PURPOSE DISTRICTS					
81-06	SPECIAL THEATRE DISTRICT					
	'72	1022	1638 Bway - Uris	Deep B.F.	2052	74-72
87-00	SPECIAL FIFTH AVENUE DISTRICT					
						87-62
	'74	1285	645-5th - Olympic Towers	Corner+Mid	400	74-72
87-062	'77	1267	650-5th - Pahlevi	Corner	300	74-72
87-11	'80	1292	580 Madison - I.B.M.	Corner	745	74-72 74-82 74-87 74-91 33-451
87-033	'82	1292	725-5th - Trump	Corner	236	
87-102 (a)	'82	1292	725-5th - (Trump)	Corner	236	
	'82	869	445-5th - Republic	Corner	250	87-101(a)
87-102	'82	1284	I.E. 48th - Saks 5th Ave.	Corner	N.A.	
95-041	SPECIAL TRANSIT LAND USE DISTRICT					
	'80	1309	900-3rd (Minskoff)	B.F.	450	

NOTE (H) = Hotel
(R) = Residential

A 111

B.S.A. ACTION 1960-1982

YEAR	DOCKET	BLOCK	ADDRESS	ACTION /VARIANCE ON:
'67	431-67	1113	431-67 Col. Circle(Gulf-Western)	1. Tower setbacks-do not comply with CS-3 2. 72-21
'68	154-68	1271	1368-74 6th	1. Variance on tower height 2. Tower encroachment 3. Interior lot provisions-100' back
'68	706-68	1311	950-3rd	1. Tower excessive 2. setback encroachment 3. Area within 50' of 3rd & 57th exceeds C 5-2 & C 6-6 allowable 4. 72-71
'68	791-68	1292	450 Park-Franklin Nat. Bank	1. Variance on Max. lot coverage 2. Front wall in park-excessive 3. 72-21
'69	18-69 1276	1276 487-89 5th		1. Tower encroachment on setback 2. Excessive tower area 3. F.A.R. excessive 4. rear yard req'd on 5th side
'69	454-69	1028	1754-69 Broadway	1. Front wall height excessive 2. No initial setback 3. Tower area excessive encroach on setbacks 4. 20' rear yard not provided
'70	250-70	1272	32-46 W. 57th - Squibb	1. Penetrates skyexp.plane 2. rear yard,port. @ 1st story exceeds height 3. Pylons proj. into rear yard 4. 72-21
'77	936-77	1313	487-499 Park	1. Variance on 80 ft setback 2. Min. lot for commercial 3. 72-01(b) - & 72-21
'77	99-77	1292	450 Park	1. Proposed mezzanine contrary to calendar 72-01(b) & 72-21

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STATUS OF THE MIDTOWN OFFICE MARKET 1980

PREPARED BY:

JAMES FELT REALTY SERVICES, INC.

MAY, 1980

STATUS OF THE MANHATTAN OFFICE MARKET 1980

The current conditions and prospects for the New York City office market have been the subject of numerous articles in industry publications. All have similar themes and basically deal with the acute shortage of prime office space in Manhattan with resultant escalation of rents to historically high levels. Of course, demand is only one of the factors contributing to the high rent levels; increased financing and development costs/risks are translating into substantially higher rents than could have been imagined a decade ago. Analysis of office market conditions substantiate the conditions reported in newspaper articles.

The effects of inflation and the high cost of financing need little elaboration as to their combined impact on construction and real estate development. Traditional sources of long-term (mortgage) financing are increasingly hesitant to make commitments, even in proven areas. Further, there is a developing trend of lenders requiring either equity participation or participation in earnings as a hedge against inflation and to insure adequate returns. Rents for suburban space, although rapidly escalating from previous levels, are still in most instances substantially less than those in New York City. The two primary factors; involved in the differentials in rentals are the cost of the land and type of construction in Manhattan. The consequences of this trend will further escalate required economic rents and conceivably make office space in Manhattan somewhat less attractive than suburban areas to space users having viable alternatives either for main or "back office" space. Recent increases in real estate taxes, with resultant impact on occupancy costs being "passed through" to tenants by reason of escalation provisions in leases, only can exacerbate this problem and in long range terms may make the City's search for additional revenues self defeating.

The current office space "squeeze" in Manhattan for prime locations with the resultant spillover to secondary and even marginal locations, can be traced back to the boom in construction that occurred in the late 60's and early 70's, when overzealous

developers, believing that the demand for office space would continue ad infinitum, completed 68 new buildings between 1969 - 1973 and "flooded" the market with some 57,000,000 square feet of rentable space. The 1973 - 1974 recession, coupled with New York City's financial problems, caused the bubble to burst; alarming increases in vacancy rates resulted in reduced rental rates and real estate values.

The stability and historic attraction of Manhattan was seriously in question. Some major corporations as well as small businesses were relocating to the suburbs. Conditions aggravated the already swollen inventory of available office space and it took the greater part of the balance of the decade for the market to stabilize and absorb the imbalance. Developers and lending institutions with these painful memories still fresh, were and still are reluctant to make commitments unless they can substantially pre-lease projected buildings. The key element has been the reluctance of the institutions to provide financing without such commitments.

Despite the amount of current construction activity, only a relatively small percentage of space in the new office buildings will be available to satisfy the current demand. Three of the new buildings are being developed by users, i.e.; IBM, AT&T, and Philip Morris. Upon completion, space presently occupied by these firms will be vacated and available to the market. However, the space to become available will not have a significant impact on supply. Most of the buildings scheduled for completion in 1980 and 1981 are substantially pre-leased.

It should be noted that there are only a few remaining choice building sites available at prestige locations in the core of the Midtown Business District. Most of these are smaller than what would have been considered optimum size a few years ago. Consequently, developers are forced to "shoehorn in" their buildings or look to what heretofore would have been considered less desirable and marginal locations. With the pending development of the proposed Republic National Bank home office building at Fifth Avenue and 39th Street, one might anticipate developers seeking opportunities on Fifth Avenue south of 42nd Street.

The Avenue of the Americas south of 46th Street, Broadway, and the Times Square District have increasingly become the focus of developers who view these areas as offering potential for large scale

redevelopment. There is a general consensus that for these areas to be developed, the projects must be of sufficient size to significantly impact the immediate environs in order to market the space at economically viable rentals.

The strength of the office market in the Midtown area is underscored by some of the ambitious plans that recently have been proposed for the Times Square District and vicinity. City at 42nd, a non-profit foundation, in conjunction with Olympia & York have proposed three new office towers and a 2,500,000 square foot Fashion Mart between Seventh and Eighth Avenues as the core of a large scale redevelopment and upgrading of the area. Other plans for the Times Square District sponsored by John Portman, and although in preliminary stages by Frederick DeMatteis and Charles Shaw, hopefully will lead to a clean-up of the Times Square area and the revival of interest in the west side as a potential area for expansion of the Central Manhattan Business District.

We recognize that the aforementioned proposals are still embryonic and will undoubtedly be substantially changed to comply with requirements of various agencies, and will probably require subsidies of one kind or another to be viable. The proposals have been highlighted to demonstrate the potential for development of quality office space and the trend to development west of the Midtown core area.

The recently announced Convention Center adds further credibility to New York City's determination to remain one of the major business and cultural centers in the nation. When completed, this project will substantially impact the future of its neighborhood, and the proximity to the Times Square District will have a beneficial long term effect on the West Side Midtown area. The Convention Center will become an anchor for further development of the West Side provided that the areas adjoining the site are rezoned to reflect potential changes in usage. Land values in the area have appreciated because of speculation by investors; however, more importantly, insurance companies and other representatives of the private sector believe that this will have a positive long-term effect on the area.

There are only three significant projects scheduled for completion in 1980 in the Midtown area. These will bring only 735,000 square feet to the market and are all substantially pre-leased. Build-

ings scheduled for completion in 1981 total approximately 5,590,000 square feet of which some 2,245,000, or about 40%, is noncompetitive. There are a few projects in the Midtown area scheduled for completion in 1982 and later. However, with few exceptions, plans are still not finalized and financing has not been obtained.

Asking rents in Midtown for desirable space range from $25.00 to $35.00 per square foot with reports of some space being leased for $40.00 per square foot and more. It should be noted that despite the strength of the office market, taking rents are often below the asking rents. Occupancy costs are being further increased because landlords have become less generous regarding the terms of work letters and more intransigent when it comes to negotiating leases. In many cases tenants are taking space "as is" and have agreed to a landlord's election of the "higher" of alternative escalation provisions.

Regarding the upper end of the rental spectrum, these levels are being achieved in special circumstances in prestigious buildings in the Midtown core. While some companies requiring expansion space have paid these significantly higher rents, they are able to average out their new rental expenses as part of their overall rental, including space previously committed for at much lower rents. Users of smaller space units, many from overseas, wanting a prestigious address, are prepared to pay rents in excess of $40.00 per square foot for new buildings. Very recently, one of our clients who had offered $25 a square foot for a 20,000 square foot unit (and who probably would have paid $30) was unable to conclude a lease. The building rented the unit to an existing large space user at between $33 and $35 per square foot. This tenant was able to average its rental cost against more space occupied at substantially lower rentals. A recent transaction involving some 6,000 square feet in a prestigious building in the Plaza Area was concluded at about $42 per square foot and management believes that if the space became available today it could be leased at between $50 and $60 per square foot. Nevertheless, there are no reports of large space users paying such upper spectrum rentals and it should be noted that, despite the strength of the market in the core of the Central Business District, average rents in buildings do not approach market rents as reflected by either asking or taking prices. Many users of

large space are still in possession under leases negotiated years back at then market rentals, including "caps" on escalation and favorable renewal options. Increased costs, not compensated for in such instances, have resulted in severe dimunition of property values and in some cases, severe hardships to operators of properties so affected.

Landlords in general consider full-floor tenants preferable with optimum size floors in the 20,000-25,000 square foot range. This, of course, presupposes specific type of tenancy associated with prestigious quality office buildings as compared with back office and clerical type operations.

A recent study of available space in buildings completed since 1971 emphasizes the strength of the leasing market over the past two years. In January, 1978 in the Midtown area there was 2,866,000 square feet available in newer buildings (completed after 1971) reduced to 1,908,000 square feet as of January, 1979, and to 600,000 square feet as of January, 1980. The same study shows that in buildings completed between 1946 and 1970 (i.e., Post World War II buildings) in the Midtown area in January, 1978, there was 3,132,000 square feet available, shrinking to 1,796,000 square feet as of January, 1979 and 1,192,000 square feet as of January, 1980. (See Graph in Addendum.)

The spillover of demand for space is reflected in demand and increased rentals in less desirable buildings. These buildings are commanding rents in the $13.00 to $16.00 per square foot range, with space in more desirable buildings ranging from $18 to $25 per square foot.

West side rental rates vary widely between the Times Square District and the area at Broadway and Seventh Avenue north of 50th Street. In the Times Square District rates are in the range of $10.00 to $12.00 per square foot, with $15.00 to $16.00 per square foot prevalent north of 50th Street.

The market for office space in the Downtown/ Lower Manhattan area has also improved, although rental rates are substantially below those in the core of the preferred Midtown Central Business District. A recent survey of available space in buildings completed since 1971 in the Downtown area indicates an increased demand for space. As of January, 1978 there was 1,583,000 square feet, compared with 439,000 square feet as of January, 1979, and only 86,000

square feet as of January, 1980, available. The same study also showed a marked increase in demand for space in buildings completed between 1946 - 1970. As of January, 1978 there was 1,810,000 square feet compared with 1,028,000 square feet as of January, 1979 and 730,000 square feet available as of January, 1980. Rentals have risen commensurately as space has been absorbed. (See Graph in Addendum.)

Better buildings are leasing at $15.00 - $16.00 per square foot, with rentals for acceptable space in the range of $12.00 - $ 14.00 and less desirable buildings leasing in the $9.00 - $10.00 range. It can be reasonably anticipated that these rents will escalate as space "tightens up". In most instances owners are still providing acceptable work letters for tenant installations.

We envision growth and demand for quality office space will be generated by foreign sources viewing the City as a prerequisite for doing business in the country, and from major Fortune 500 type companies that recognize New York City's preeminence as the financial and business center of the United States. The trend towards decentralization of operations and the continued establishment of regional corporate headquarters will continue because of the necessity to provide local service from national and international companies that are domiciled elsewhere.

The limited supply of desirable space may well change demand requirements and occupancy costs could result in substantial changes in space requirements and scope of companies' operations performed in New York City. An analysis of space requirements per employee provides interesting insights into the types of space that will be in demand in the future.

Space requirements per employee vary widely depending on the operation and type of business and more importantly, the structure and layout of the physical plant. Typically the larger the space occupied, the less square footage per employee. Space planners in their computations allocate cafeteria (if any), library, computer, file and conference rooms as well as common areas in their calculations of space per employee. The matter is further complicated by differing terminology. Space planners refer to net square feet not in terms of net rentable area but rather as useable square feet. Leases in New York City office buildings almost universally reflect net rentable areas including allocations of common areas. This tends to distort comparisons of space planners' references to net area per employee.

Large open spaces with concommitant utilizable column modules are more efficient on a per square foot per employee basis than smaller areas. These large spaces lend themselves to clerical types of functions where the minimum space per employee excluding filing area is usually estimated at 96 square feet per employee. This is computed as follows: 80 square feet for a desk and chair plus a circulation factor of 1.2 times. If common areas were to be included in the computation, the square foot area per employee for clerical functions would range from 120 square feet to 135 square feet. Accounting firms average 185 square feet per person and law firms and advertising agencies are about 200 square feet per person.

The following illustrates actual requirements in various specific situations in New York City and demonstrate the difficulty of generalizing with respect to space requirements per person.

1. 78,000 square feet of net rentable area occupied by a major consulting firm with 417 employees computes to 188 square feet per employee. Estimates over the next 10-year period indicate that they expect to have 791 employees occupying 130,000 net square feet, or 170 square feet per employee.

2. A medium sized securities firm with a total of 102,000 net square feet including a 5,000 square foot computer installation, 10,000 square feet for a vault and a small cafeteria, develops a space utilization of 166 square feet per employee.

3. A major insurance company with 530± employees occupying 100,000 square feet reflects 190 square feet per person.

Despite the improved market, we do not believe that new development will take place Downtown so long as economically viable rentals exceed what the market will pay. The proposals for new buildings which seem to have substance basically involve users creating space for their own needs either independently or in conjunction with a builder/developer joint venturer. These include 180 Maiden Lane, the new home for Continental Insurance and the estimated 900,000 square foot Galbreath-Ruffin proposal at 85 Broad Street that will house Goldman Sachs' new headquarters of approximately 600,000 square feet.

Consequently, we do not believe this will alleviate pressure on the core of the Central Business District or stimulate development on the west side. The future of the west side is integrally connected with a master plan that must be formulated and sponsored by the City in order to allay the fears of the private sector. This master plan must include program goals by the City and incentives to stimulate and coordinate west side development. Hopefully large scale development of the west side will lead to a narrowing of the differential in rents between the east and west sides.

Among the buildings projected for the downtown area, it would be reasonable to assume that the proposed 400,000 square foot home for the American Stock Exchange at Battery Park City will become a reality. The necessary components to effectuate the transaction are almost in place, including the transfer of Battery Park City to the New York State Urban Development Corporation, an amended lease to the Battery Park City Authority which will afford the opportunity to grant development incentives, and a substantial Federal Urban Development Action Grant.

Assuming completion of the pending new plan for Battery Park City, the future potential for some 6,000,000 square feet of office/commercial space, may be assisted by the Authority's ability to grant development incentives for the initial phases (about 2,000,000 square feet) of development. Apart from the aforementioned, with respect to the other buildings referred to in the attached schedule of those projected for occupancy Downtown in 1981 and subsequently, including the 1,000,000 square foot addition to the World Trade Center and proposal for development over the Brooklyn/Battery Tunnel, only economic viability will determine whether these become reality.

For various reasons, rents have risen to historically high levels in Manhattan. The most obvious and critical is the dearth of currently available blocks of space required by the market or the likelihood of such availability in the near future. One knowledgeable industry source, commenting on the availability of large blocks of space, knew of "only six blocks of space of 100,000 square feet, none in post- 1970 buildings, and only two that could be conceivably thought of as prestigious". This has been substantiated by investigations undertaken by our office in attempting to locate space for a client. We have found that large users of space will have to wait until 1982 before being able to occupy space in prime locations in the Midtown Central Business District. A trade publication estimates that there are probably only 20 buildings that currently have 30,000 square foot blocks of space available. A survey of leasing brokers' reports on the office market conditions in Manhattan would seem to confirm reports of a 3% overall vacancy rate in the Central Business District. This effectively means that tenants have little bargaining power in this landlords' market. Assuming continuation of present economic conditions, we foresee no basic change in the market in the reasonably near future, with escalating occupancy costs for office space to be anticipated.

ADDENDUM

MANHATTAN OFFICE CONSTRUCTION

MIDTOWN

LOCATION	DEVELOPER/OWNER	STORIES	SQUARE FEET
	1979 COMPLETIONS		
207-17 East 46th St.	Walter C. Goldstein	34	25,000
320 West 57th St.	Rose Associates	50	85,000*
11 West 42nd St.	Silverstein, Tishman, Speyer	32	700,000#
	1980 SCHEDULED COMPLETIONS		
~~360 Madison Ave.~~	~~Richard Kalikow~~	~~17~~	~~155,000#~~
560 Lexington Ave.	Rudin Management	22	330,000
499 Park Ave.	George Klein	25	250,000
	1981 SCHEDULED COMPLETIONS		
Park Avenue Plaza	Fisher Brothers	44	1,050,000
805 Third Avenue	Cohen Bros.	41	520,000
466 Lexington Ave.	Olympia & York	21	950,000#
520 Madison Ave.	Tishman-Speyer	38	825,000
120 Park Avenue	Philip Morris	26	600,000**
570 Madison Ave.	AT&T	37	800,000**
590 Madison Ave.	IBM	43	845,000**
	1982 SCHEDULED COMPLETIONS		
535 Madison Ave.	George Klein	36	420,000
101 Park Avenue	H. J. Kalikow	50	1,000,000
725 Fifth Avenue	Trump/Equitable	56	170,000*
900 Third Avenue	Sam Minskoff & Sons	35	500,000
875 Third Avenue	Madison Equities	-	600,000
767 Third Avenue	William Kaufmann	39	252,000

*Mixed Use
**User
#Major Reconstruction

MANHATTAN OFFICE CONSTRUCTION

MIDTOWN

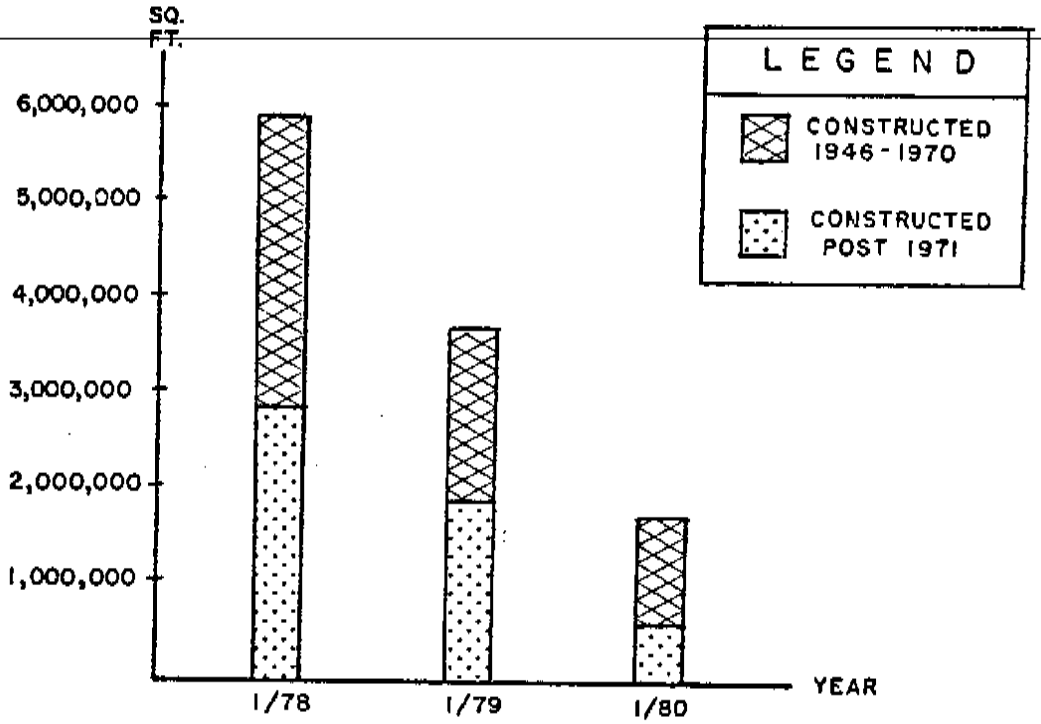
LOCATION	DEVELOPER/OWNER	STORIES	SQUARE FEET
BUILDINGS PROJECTED 1983 AND BEYOND			
Fifth Avenue 39th - 40th Streets	Republic National Bank		
42nd Street - 8th Avenue to Broadway	City at 42nd Street		
135 East 57th Street	Kenneth Gladstone		
1100 Avenue of the Americas	Nickerson Assoc.	15	300,000
1270 Avenue of the Americas	Rockefeller Center		
500 Park Avenue	-	Reconstruction	

MANHATTAN OFFICE CONSTRUCTION

FINANCIAL DISTRICT

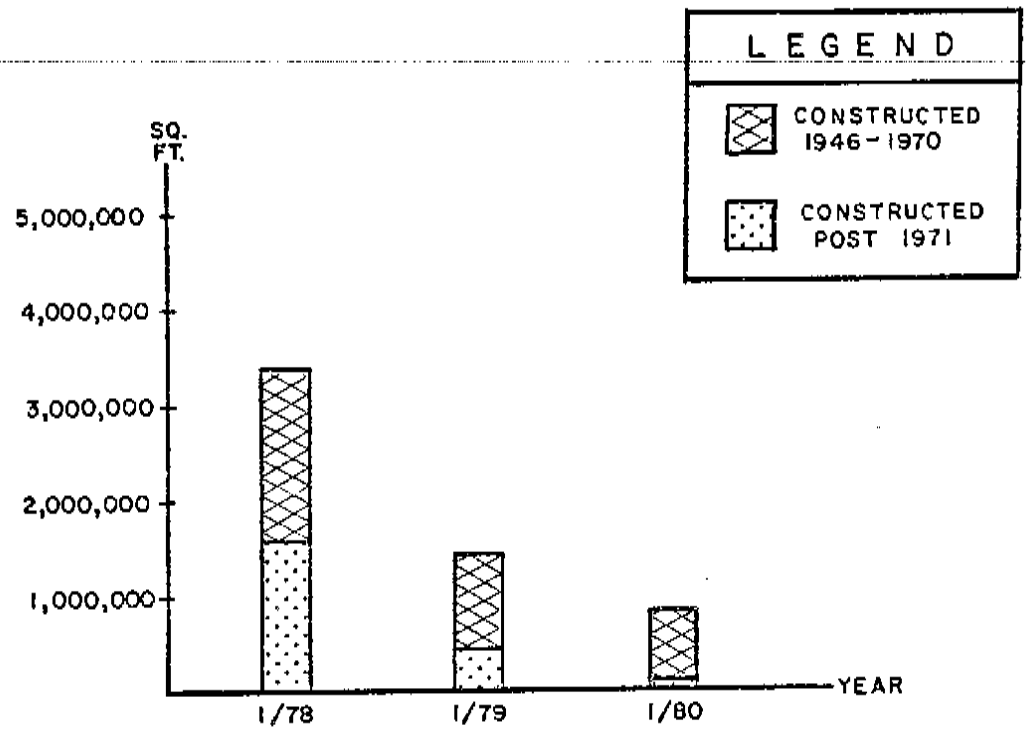
LOCATION	DEVELOPER/OWNER	STORIES	SQUARE FEET
	BUILDING PROJECTED 1981 AND BEYOND		
Battery Park City	American Stock Exchange (User)	-	400,000E
Battery Park City	Undesignated	-	4,500,000E
180 Maiden Lane	Continental Insurance (User)	37	900,000E
52 Broadway	Jack Resnick	18	388,000
World Trade Center	Port Authority	40	1,000,000
60 Wall Street	American International Group and Bank of New York	-	1,600,000
10 Battery Place	Undesignated	-	1,000,000
85 Broad Street	Galbreath-Ruffin (User)	31	930,000
7 Hanover Square	Sweig, Weiler/Milsteins	40	800,000
250 Water Street	Milstein Family	30	600,000
Battery Tunnel	Silverstein Properties	28	1,000,000

E- Estimated



MIDTOWN MANHATTAN
OFFICE SPACE FOR LEASE

James Felt Realty Services, Inc.



DOWNTOWN MANHATTAN
OFFICE SPACE FOR LEASE

James Felt Realty Services, Inc.

Midtown Development Study

William H. Whyte

Pedestrian Congestion

Urban Parks

Covered Pedestrian Areas

Arcades

Terraces

Through Block Circulation Areas

Through Block Networks

Entrances

Odds and Ends

I. PEDESTRIAN CONGESTION

The pedestrian congestion problem in midtown is not due to too many people in too big buildings. You could empty the top floors of all the big buildings and the congestion down on the street would still be fierce. The problem, basically, is sidewalk space for pedestrians on two major avenues -- Lexington and Madison -- and the crowding at the major subway stations.

In the mind's eye, congestion is heavy throughout midtown. But it is a skewed image. In the places where it is concentrated the maldistribution of space is so bad that it colors our perception of the whole. Lexington and Madison account for less than 10 percent of the sidewalk space of midtown; the subway stations far less. Brief as a run of the gauntlet might be, it can be so intense that even though the rest of one's journey might be on broad sidewalks, the image of crowding persists. Even Fifth Avenue is included, and, ironically, this pleasantest of avenues is the one most used to show how horrible New York crowding is. (Stock shot: looking north from the Library at eight blocks of people squeezed together, with a telephoto lens.)

But there is a good side to these skewed images. If the overall problem is disproportionately the consequence of a few parts, then action to improve them can have a disproportionately good effect. A reallocation of space on Madison and Lexington, I will submit, would dramatically improve the pedestrian's midtown, and not at the cost of transportation efficiency, but the improvement of it. A subway station improvement program focused on the high traffic choke points could have a similarly leveraged effect.

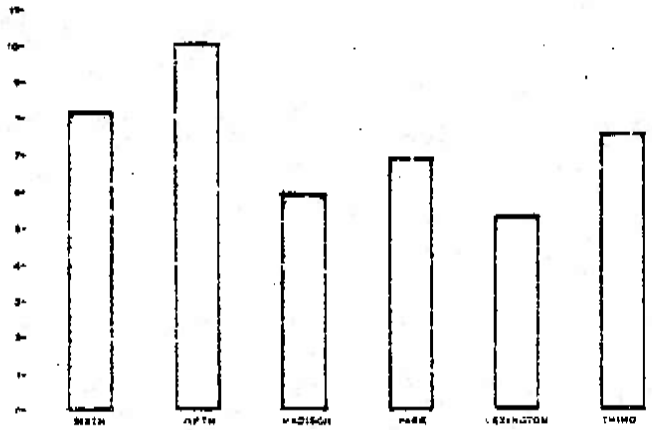
The Anatomy of Congestion

Let us take a close up look at Lexington. The sidewalks have been cut down to a width of twelve and a half feet. But that is only nominal. What with trash containers, mailboxes, bent sign poles, floral displays, newstands, signs, merchandise vendors, food vendors, cops arresting vendors, sidewalk storage, and what not, the effective walkway width is rarely more than six to seven feet. Between 57th and 58th Streets, at the defile just north of 57th Street, it is about four feet.

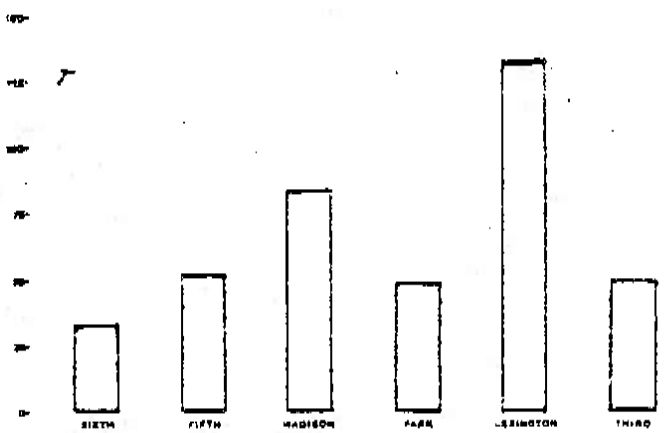
LEXINGTON AVENUE AT 57th STREET

SQUARE FEET OF PEDESTRIAN SPACE

between 57th & 58th street



PEDESTRIAN/SPACE RATIO



Now consider the load. Each working day some 22,000 people thread their way on the east sidewalk; slightly less than 19,000 on the west sidewalk; in total, 41,000 people through about ten feet of space. By all rational transportation formulae this is impossible. But they do it.

It is a remarkable performance. From directly overhead we have filmed in slow and regular motion many hours of this pedestrian maneuvering, and it is impressive to behold; the exquisitely timed retards and accelerations, the broken field running, the feints and bluffs, the agressive jaywalking and bullying of cars. It makes one proud of New Yorkers. The hard fact, however, is that they are aggressive and skillful because they very well have to be. There is no choice. The conditions are loaded against them. New York is a city of great pedestrians which treats pedestrians very badly.

Madison furnishes another demonstration. There the city gives them a bit more width - seven inches and the sidewalks are somewhat less busied up with displays and vendors. But the rush hour crowding is about as bad, and at the crosswalks the tangle of pedestrians and blocked vehicles sometimes becomes absolute.

The charts above show why Madison and Lexington are so jammed. Compared to the other avenues, they have about as many or more pedestrians to carry; less sidewalk space to do it in. Per square foot, as a consequence, their loads are far greater. These charts are for the block 57th-58th; in the mid-fifties Lexington doesn't compare quite so badly. But the basic imbalance is the same.

Vehicular Congestion

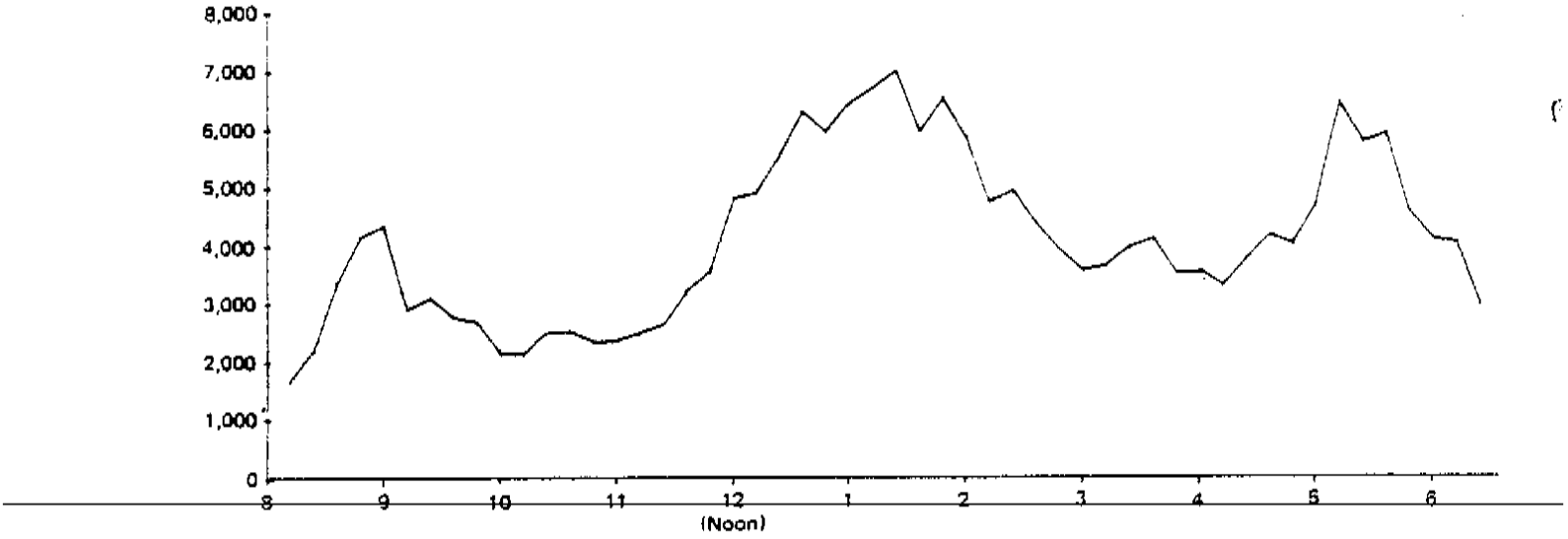
Thought: why not take some of the vehicular space and give it back to the pedestrians? The idea seems simple enough, and just, but it also is considered impractical. Oddly, even those who pushed for making Madison a 100 percent pedestrian mall now consider a more partial measure as visionary. Where would all the vehicles go? They are as congested as the pedestrians, it is argued, and there is no room to give.

Or is there? To grapple with pedestrian congestion it is in order to take a fair look at the vehicular kind. On Lexington Avenue at 58th and 60th Streets we mounted cameras and filmed the traffic from early a.m. to seven p.m. Then, frame by frame, we analyzed the flow. We recorded every single vehicle, what type it was, what lane it was in, and the exact time it passed by.

Here is what we found out:

1. The vehicles move easiest and fastest when the flow is at its heaviest -- around 7:00-8:00 a.m. This is before the parkers arrive.

LEXINGTON AVENUE: East and west sidewalks combined, 57th-58th Streets. Wednesday July 10, 1974; pedestrian flow. Counts taken at six minute intervals, alternating between northbound and southbound. Chart records estimated total north-south flow at twelve minute intervals. Male-female counts are recorded similarly.

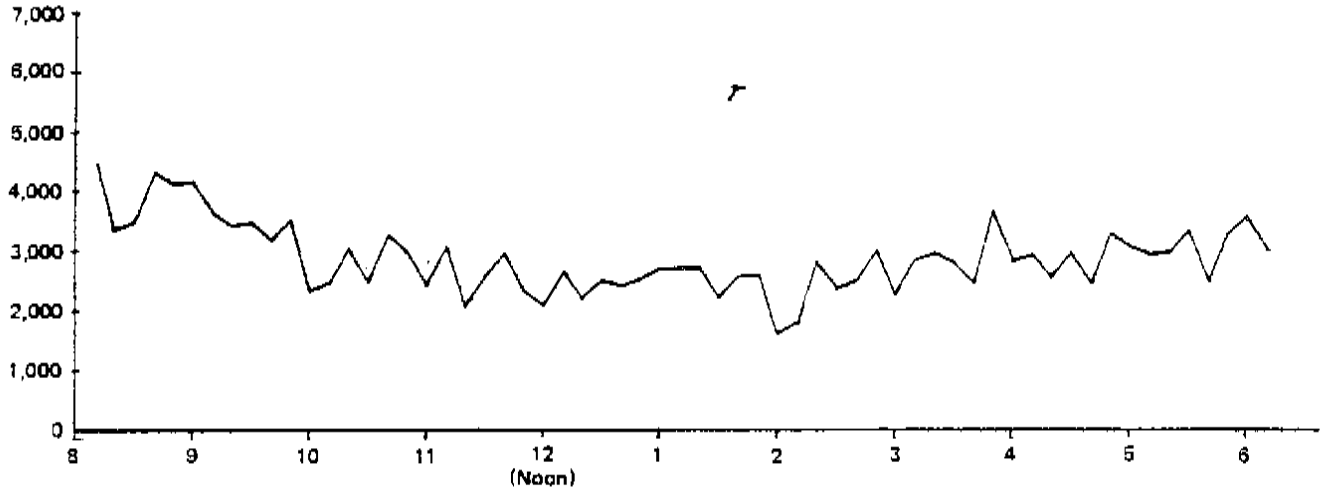


Here are the daily patterns of the two flows on Lexington, and there is a moral in them. The pedestrian flows, above, trace a 3 peak pattern, with the heaviest activity during the lunch hours. This is the pattern throughout midtown.

Many people assume that vehicular flows are heaviest when pedestrian flows are. This is not so. The vehicular flows are heaviest around 9 a.m., lowest at midday.

In sum, when the pedestrians most need extra space, vehicles need it least. Could there not be an accommodation?

LEXINGTON AVENUE: Street, 4 lanes traffic 59th-60th Streets. Thursday September 19, 1974. Number of people carried in vehicles, hourly rate; total vehicular flow. Chart shows ten-minute totals, all types of vehicle; average number of people: 1.6 for cars and taxis, 1.4 for trucks, and 21 for buses.



2. During the day the traffic follows a fairly uniform saucer pattern; lightest at mid-day, when the pedestrian flow is heaviest.

3. The bulk of the vehicular flow is carried in two of the five lanes.

4. The easternmost lane is rarely used for vehicular movement. In the early morning the drivers don't need to use it; the rest of the day they can't.

5. The easternmost lane is almost always blocked by parkers.

6. The westernmost bus lane is not used much for movement. Bus drivers favor the middle lanes.

7. Buses carry a disproportionate share of the load. They are only 4 percent of the vehicles, but they carry 37 percent of the people in vehicles.

8. The vehicles that cause the most trouble -- private cars -- carry the fewest people. They average 1.6 occupants per car. The bigger the car, the smaller the fraction.

This chart shows how unevenly the vehicle flows are distributed; three of the five lanes carry less than a quarter of the vehicles. Note the infinitesimal flow in lane five.

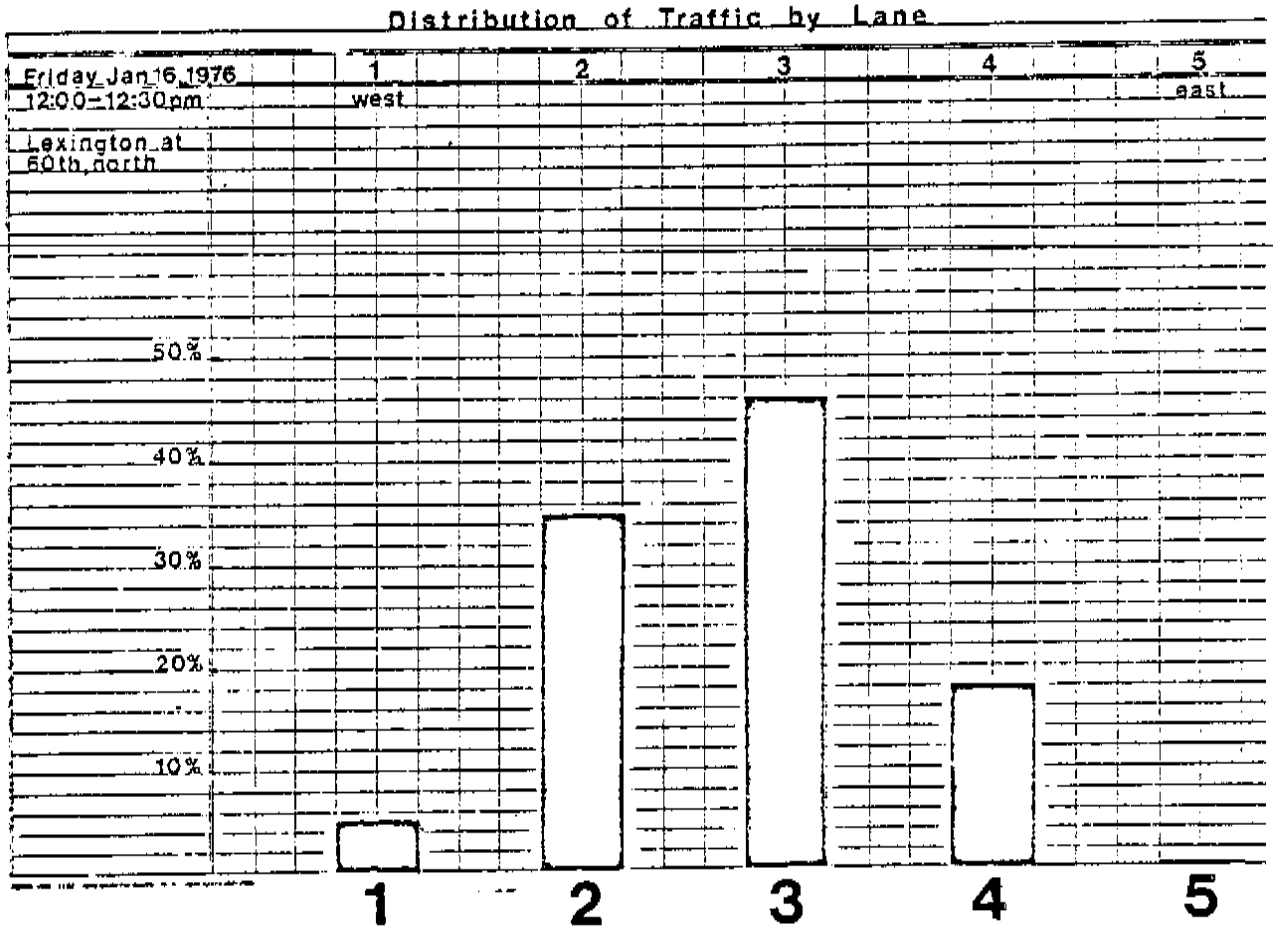
The swing factor, clearly, was the blockage of the easternmost lane by parking. We decided to do some close-up studies. Who were the parkers? How long did they stay? What was the average turn-over?

From time-lapse footage we made charts like player piano rolls of a day's parking in a number of blocks. What the charts showed was that a small number of long-term parkers accounted for over two-thirds of the parking use. They came early, they stayed late. In the few spaces they didn't hog there was some turn-over. But not much, and little of the kind that retailers like to believe takes place. The parking spaces were not being used by in and out shoppers. As a matter of fact the parked cars were more likely to be those of store-owners themselves. But the main parkers were the special privilege people: the DPL's, the MD's, the NYP's and Federal and State and City government people.

Double parking? When we started charting the number of double parkers per block we were somewhat surprised. There were not as many as we had expected. But the number, we found, was not the critical factor. It was the amount of time a lane was out of action because of double parkers -- whatever the number. One or two will do.

Much of the double parking is by vehicles which need access to the curb -- trucks unloading, vehicles on service calls. Another category is limousines. Their drivers are a privileged group too; they certainly behave so, and often double park even when curb space is available.

Distribution of Traffic by Lane



But the principal villain is the curbside parker. By hogging the curb lane, he forces others to double park; he makes buses detour, and he cuts down the capacity of the adjoining lanes. He is a factor, even when he isn't there. The expectation of him is so strong that even when a curb lane is open for a block or so drivers won't use it. They've been mousetrapped too often. They are also wary of sudden pull-outs by parkers and tend to under-use the bordering lane.

There is a remarkable disefficiency in all this. In few places will you see so many vehicles obstructed by so few. A recent film record of traffic on Fifth shows a typical pattern: the flow is being constricted to three lanes by parking in the curb lanes -- and by just four cars, three in the east lane, one in the west.

Traffic jams show the same leverage. What is notable is how effectively just a few elements are combined to bring if off: a standing limousine, a mail truck -- characteristically way outboard, a Con Ed manhole crew. Add just one double parker at the right spot and the right instant and traffic comes to a screeching halt. It is as if some malign mastermind guided them there with radio control. Spend time at Madison and 57th Street and you are sure there is such a person.

So far, we have been looking at Lexington and Madison Avenues. Now let us consider all of the avenues and streets of midtown. In 1977, my research group did an every-car-count of midtown parking. With the help of sixteen graduate students from Columbia we made a progressive count starting at 9:30 a.m. In a three hour sweep north to south and east to west, we mapped the location of every vehicle, its license number, any special identification card under the windshield, whether the car was parked legally or not, and whether double parked.

Here's what we found:

1. On every block of every street and avenue at least one lane was closed to traffic by parkers. There were no exceptions.

2. Not very many cars were doing the blocking. On the 36 miles of street of midtown, we found a total of 1,346 cars, 274 taxis, and 2,321 trucks. Cars predominated on the avenues, trucks on the crosstown streets.

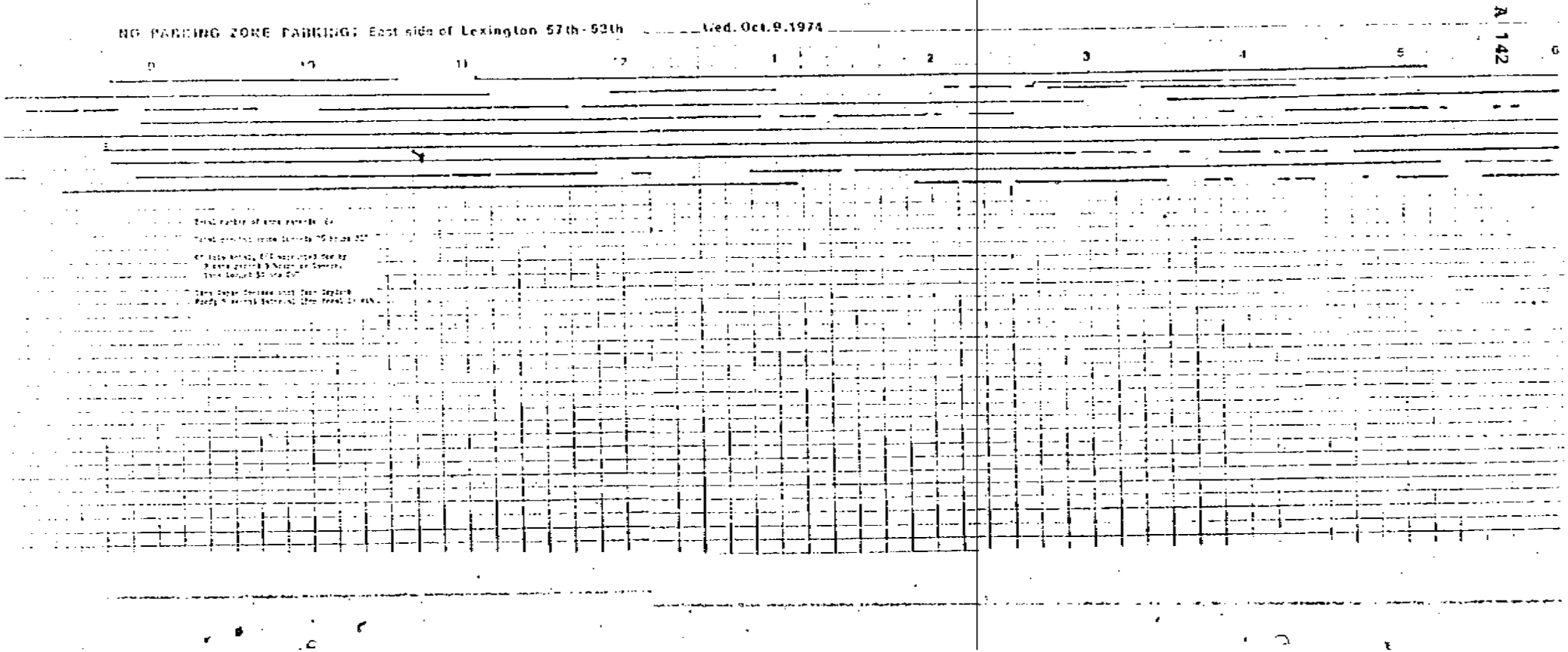
3. On the avenues, most of the parked cars were special privilege -- 384 DPL's, FC's, NYP's and MD's.

4. Half of all the vehicles parked were parked illegally.

5. Special privilege cars led the pack. In addition to the space legally allotted them, they took a good part of the rest, often showing a partiality for fire-hydrants.

6. Of the 2,000 vehicles illegally parked, we observed 22 that were ticketed.

Here is a typical day's parking in the no-parking lane on the east side of Lexington 57th--58th. Long term parkers dominate. Of the 76 total parking hours logged below, two thirds were accounted for by just nine cars. Two of them spent most of the day there; one of them, as we will note later, was DPL 316. Today, pretty much the same crew is still on hand and the patterns are little changed.



Since then the situation has changed little. Recent checks that I have been making indicate that, if anything, the number of parkers may have increased somewhat. In a 1977 count, the left lane of Madison from 34th to 59th Streets had 144 parked vehicles in it; in a comparable count this January, the number was 177. Mail trucks continue to be the most egregious of the double parkers.

How much is the space worth? By any calculation, the subsidy to the parkers is enormous. The city has turned over to them a thirty-six mile linear strip of the most valuable real estate in the world. And it isn't even charging them. If it did -- at parking lot rates -- the millions realized would still fall far short of the true market value.

For a clue, consider the case of the Korean wig seller. On Lexington above 57th Street he set up his stand in front of a boutique. It took up four square feet. For agreeing to this use of public space the owner of the boutique charged him $400 a month. This was deplorable, to be sure, but it does furnish a yardstick. At the curb, DPL 316 habitually parked his brown Mercedes. It took up about 170 square feet. Had he been similarly charged he would have had to pay $17,000 a month. Had all six of the DPLs who regularly parked on the block paid, the take would be over 1.2 million a year. Preposterous? So is the situation.

The Space Imbalance

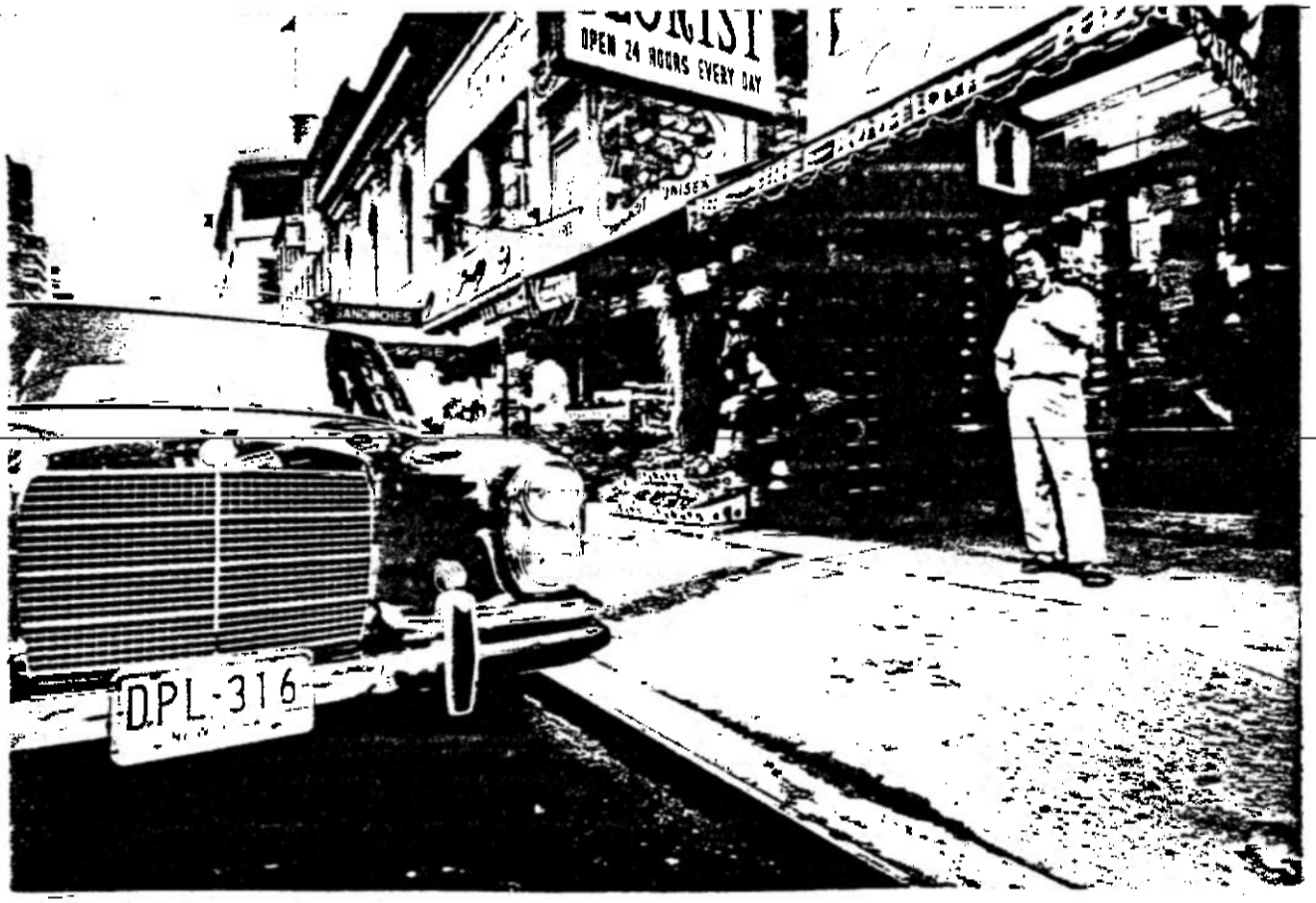
We have looked at the pedestrian flows and at the vehicular flows. Now let's see how the available space is divided up between them. The Lexington corridor is seventy-five feet wide. Through the block 57th-58th approximately 70,000 people pass between 7 a.m. and 7 p.m. Of these people, 60 percent are on foot; 40 percent in vehicles.

And how is the space alloted? In inverse proportion to use. Two thirds of the space goes to vehicles; one-third to pedestrians. Lane by lane, the imbalance is even more striking. In the chart below are shown the seven lanes of the corridor and the number of people carried in each.

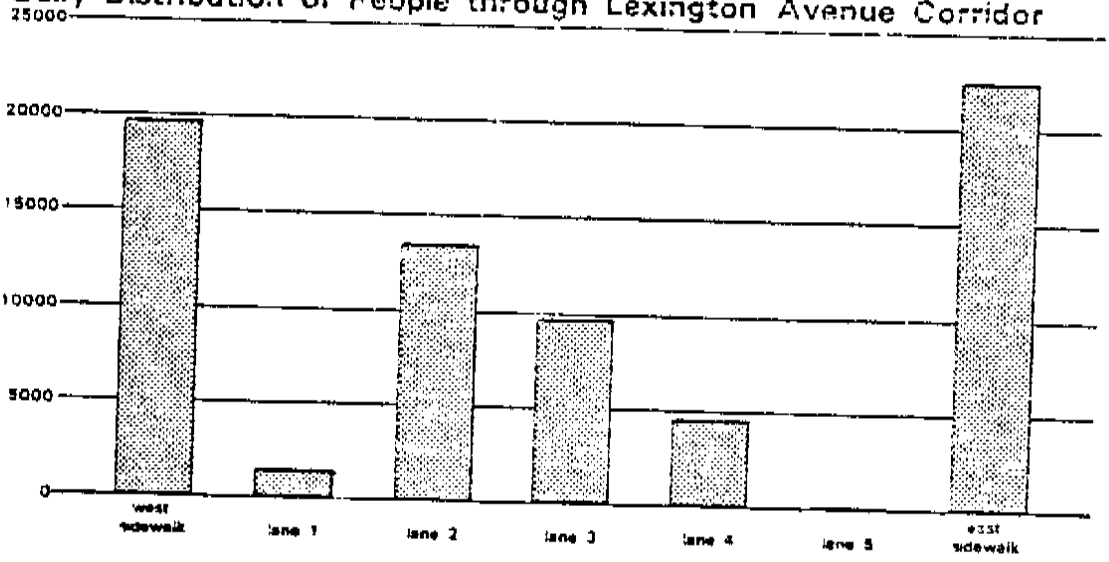
Recommendation: convert the curb space from vehicular non-movement to pedestrian use. At minimum, one ten-foot lane on both Lexington and Madison Avenues should be re-allocated and the space divided up to widen the two sidewalks.

Five additional feet per sidewalk doesn't sound like much. But since the usual obstructions are already in place, the additional five feet can double the effective walkway width. For an idea of just how big a difference five feet can make, walk Lexington alongside Citicorp.

The modest additional width makes other things possible: more benches, better bus stop areas; larger corners (and with mitered building corners they would be larger still). There are many design possibilities. One approach might be that proposed for 86th Street;


OPEN 24 HOURS EVERY DAY
UNISEX
DPL-316

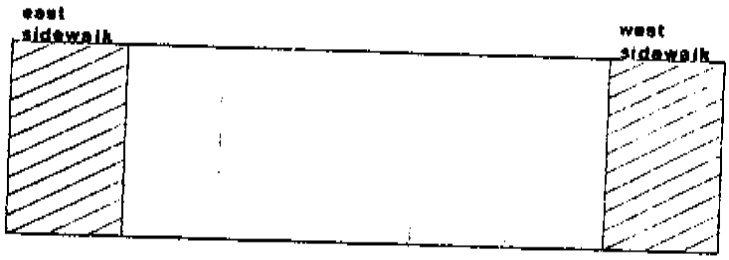
Daily Distribution of People through Lexington Avenue Corridor



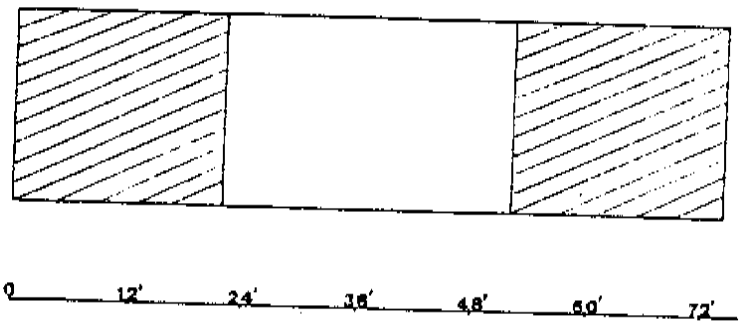
LANE WIDTH

Lexington Avenue 57 - 59 St.

as it is



if width were determined by use



where the existing sidewalk is reasonably wide, the extra lane's width would be added at the corners, leaving lay-byes along the middle of the block for truck unloading. In some cases it might be in order to mass the additional space along one side of the street to provide enough room for outdoor cafes and small sitting areas.

More sidewalk space can mean more trees. If there is a place that needs them it is Madison Avenue. Its height/width relationship is the most constricted of all of the avenues. It looks like a canyon; it feels like a canyon. Trees would be good for lots of reasons, but especially for their canopy effect, and the way they have of bringing the scale down to human proportions.

As time goes on, a re-allocation of space would be in order for other thoroughfares. In terms of pedestrian amenity, Fifth Avenue has been the closest we have to the happy mean. Its twenty-two and a half foot sidewalks are broad enough to handle loads in the range of 5,000 to 6,000 people an hour, yet be stimulatingly busy. Much of the apparent congestion, furthermore, is self-congestion: People in conversations in the 100 percent locations at the corners; people exchanging interminable goodbyes, schmoozers, girl watchers, legions of Juillard students playing music. It does indeed get a bit busy and it would be no bad thing to widen the sidewalk to 25 feet. The Project for Public Spaces has proposed a widening at the corners, with curb-side laybyes for truck delivery.

Higher Standards

It could be argued that such modest widenings are nowhere near enough. In its excellently thorough study of pedestrian space needs the Regional Plan Association has advocated minimum sidewalk widths considerably more generous than here proposed. As a yardstick, RPA sought widths that would make possible unimpeded or only partially impeded flows at peak times. This calls for lots of space: for Lexington and Madison Avenues RPA recommended 37 feet sidewalks. RPA suggested compromise widths also. But even those are quite generous.

Quite aside from questions of feasibility, there is a point beyond which additional space is not a benefit. RPA has done a service in holding up such yard sticks. But I think there's a bit too much emphasis on the peak needs. A space that's big enough to be easy going at the height of the rush hours is apt to seem a bit empty most of the rest of the time.

Since the likelihood of too much space is the least of the problems that need concern us I won't belabor the point. But it is worth mention that in the instances where very large sidewalks have been created the effect has been deadening. Alongside the Exxon building, for example, the sidewalks of 50th and 49th Streets were made some 75 feet wide. But the space proved dull; oppressively sterile and empty. To fill the void the management put in round planters and benches. It's still dull.

The Limits of Capacity

There is a question to be answered on the other side of the coin. Even modest additions to sidewalk space might generate additions to the traffic. Might not so much be induced as to crowd the space as much as before? Up to a point, probably yes. Our studies of what happened during the Madison mall experiment in 1971 showed that pedestrian volumes during the noon to two period doubled. This was not a subtraction from the number on the parallel avenues; volume remained as high as it had been before. The existence of the new amenity, evidently, had created a new constituency.

This was evident in the character of the flows. Pedestrian traffic remained heavy on the sidewalks; the roadway attracted promenaders, people walking three and four abreast; people stopping to sit or buy food from vendors. Contrary to retailers' complaints, there were few "hippies" or other undesirables. The strollers were the people who worked and shopped in midtown and they were clearly enjoying themselves. It was, alas, a lost success. Here we are eight years later pondering measures far less bold.

Wider sidewalks would probably induce pedestrian flows over and above today's flows; most especially during the lunch hours. But this would be a discretionary addition over and above the level needed for the journey to and from work. This has remainded fairly constant. The amenity factor is the key variable.

It is somewhat self-regulating. In examining the question of over-use at places like Paley Park, Seagram Plaza, we found that people instinctively set a kind of norm for a place; when the numbers get beyond that, someone doesn't choose to stay, someone else doesn't choose to come, and thus is effective capacity determined. It's not ruled by physical capacity -- which is usually far greater. It is determined by people's perception. A street, of course, is a different kind of place, but I don't think it's straining the analogy to venture that if sufficient space is provided for the basic flows, additional space for amenity will not induce overcrowding.

Widenings by Bonus

Bonuses for sidewalk widenings in new construction have been advocated as a major approach. I do not think they are the way to go. In the case of a building occupying a whole blockfront, or a continuous line of new buildings, such widenings can make sense. Citicorp's provision of five extra feet along Lexington Avenue is a case in point. But along most streets development is likely to be partial and intermittent. It would take a long time for even an incremental approach to produce a consistently amenable path: on some blocks, never, and in more cases than not, a series of irregular widths.

Irregularities do have their uses. Where an extra bit of space penetrates a walkway people veer over and use it as a passing lane. By and large, however, the narrowest width of a walkway defines its capacity and it sets the flow pattern. Where a narrow sidewalk debouches onto a much larger one, as at Exxon, people don't shift over to use the additional space. Unless they're going into the building, they persist on their original course. You see the same pattern alongside the Union Carbide Building. It's the outboard portion that gets the use.

This is not to argue against additional spaces. Elsewhere I will discuss the possibility of encouraging odds and ends of useful space, frontage space especially, and the use of incentives to this end. For something so necesssary as sidewalk, however -- and necessary now -- the city itself must take the initiative.

The first step in freeing up space for pedestrians is to get rid of the parkers. All of them.

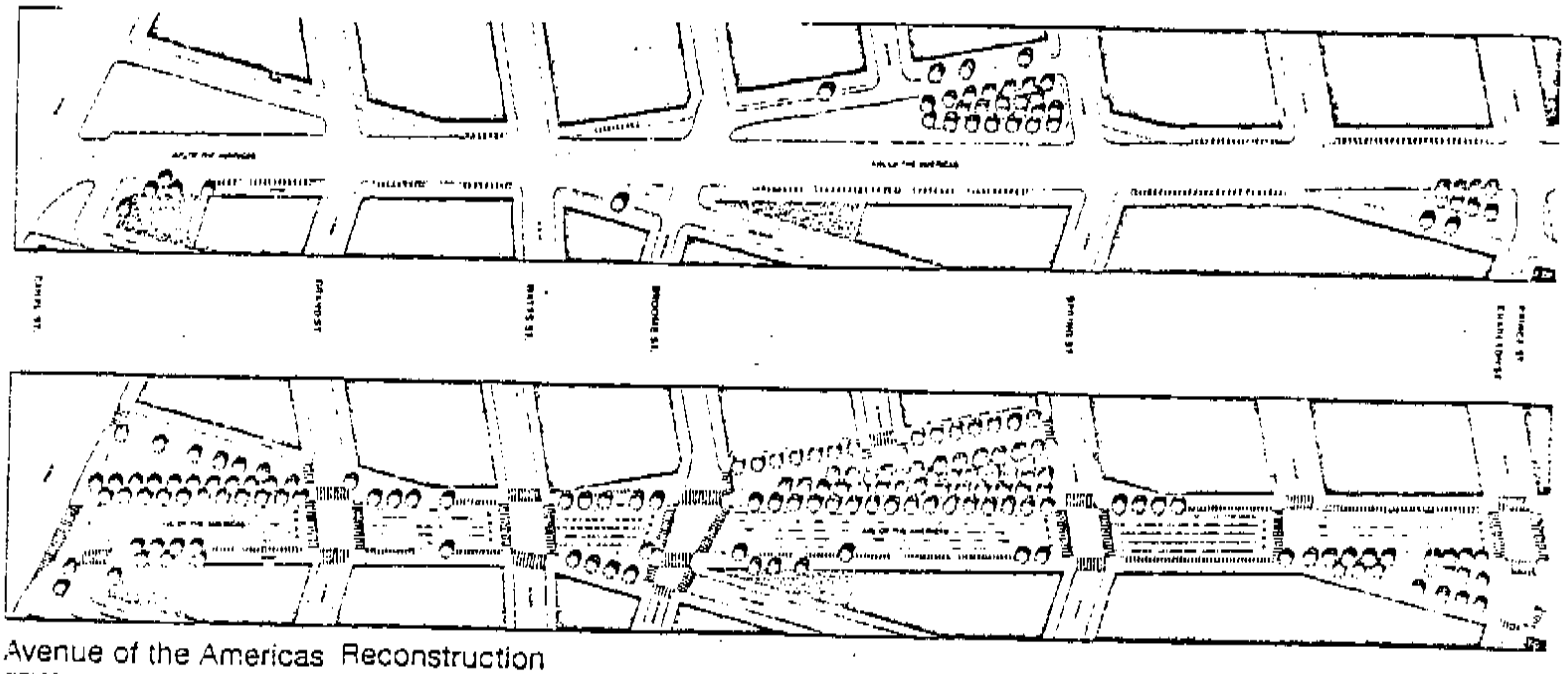
In the Transportation Department's study of authorized parking in midtown the recommendation was made that there be a reduction of authorized spaces, with no more than 50 percent of any avenue blockface reserved for parking. What is needed is elimination of such parking. As we have seen, the disefficiency of the parked car is so great that one or two of them can tie up a lane just as effectively as five or six. Partial reduction would accomplish little. Indeed, if the city isn't going to ban midtown parking it might as well let down the bars and open up the curb space to more parkers.

Relocating authorized spaces will undoubtedly pose a lot of protocol problems. But a piecemeal approach is likely to cause as many problems as a thorough one. Presented as part of a comprehensive effort to clean up congestion, a ban on parking on midtown streets would have the considerable virtue of fairness. And of good sense. Diplomats and U.N. people I've talked to privately express wonder that the city is so indulgent with its parking privileges. No other great world city is, certainly not with its key spaces. And why are we so indulgent with the U.S. government? It is hectoring us to shape up on air pollution and car over-use. So we should, and to that end boot the legion of U.S. government employees from their privileged spaces.

It is a good time for action. By terms of the City Charter, the Department of Transportation has long been responsible for vehicular and pedestrian transportation, and now it is paying attention to the second part. Sam Schwartz and his associates in the Bureau of Transportation and Planning Research are sympathetic to the proposals described here, and they see their programs as complementary. On Madison Avenue, for example, dual bus lanes are proposed, and the right turns that so often become stalled right turns are to be eliminated. The hope is to reduce trip time between 42nd Street and 59th Street from 15 minutes to 10. This should reduce pedestrian crowding on the sidewalk due to over-aged bus queues.

For the reallocation of space to pedestrians the Transportation Department has already provided an excellent precedent. When it undertook the repaving of the lower part of 6th Avenue several years ago it decided to convert a good bit of redundant space into a series of small parks and sitting areas. It did the job well. The sitting areas are very pleasant and well-used, and they were created at a cost of only a few hundred thousand over and above that of the basic program.

There are many reasons advanced for an increase in pedestrian space -- amenity, reduction of air pollution, reduction in noise. But it's fundamentally a transportation measure, and fully justified on this basis alone. It is, furthermore, the most economical of measures. The infrastructure is in place. Other cities are planning to invest large capital sums for automated, self-propelled people movers. We already have the best kind. The New York pedestrian.



Avenue of the Americas Reconstruction

CITY OF NEW YORK
TRANSPORTATION ADMINISTRATION
DEPARTMENT OF HIGHWAYS
URBAN DESIGN SECTION

II. URBAN PARKS

Recommendation: legislate provision for off-site urban parks and couple it with the maximum bonus.

It is clear that the small urban park is a great amenity and has an effect on its surrounding area out of all proportion to its modest size. Paley and Greenacre Parks have been the outstanding examples. They are both privately funded, and very well too, but as McGraw-Hill's small parklet has demonstrated, such parks can work very well as adjuncts to office building construction, and corporate sponsors can enjoy a very parental pride in their operation.

No new legislation is required for parks that are incorporated as part of a building site. The 1975 amendments provide all the necessary guidelines. What about an off-site park? In a number of instances it would be preferable not to break the building line along an avenue with yet another open space -- the Avenue of the Americas is witness to that. The developer could earn his bonus by providing a small park on a side-street nearby.

Such a provision was drafted in 1974 as part of the proposed open space zoning amendments. The Urban Design Group did a very careful job on this; among other things it initiated an excellent survey of a cross-section of park and plaza users to get a better idea of constituencies, effective radius of the parks and the like. The legislation called for a high amenity park on the order of Paley and Greenacre. For providing such a park and maintaining it, the developer could transfer the development rights of the park site to his office building site. It would be a good deal for the public; a first class amenity and at no expense. It would be a good deal for the developer; in effect, he could buy space at sidestreet prices and multiply it into avenue space.

Too good, felt some community board people. They worried that the provision would be a boon to developers who had not been able to assemble enough avenue space for a workable building. The new option, it was feared, would trigger construction on many hitherto failed assemblages. The Urban Design Group's investigations indicated that there would be few such cases. There still was opposition; there was, indeed, opposition in one planning board to the whole kit of proposals. To ameliorate matters, the Chairman of the Planning Commission offered up the off-site park provision as a sacrifice to win support for the rest of the proposals. When deleted, however, it was with the idea that it would be re-introduced as a separate piece of legislation later.

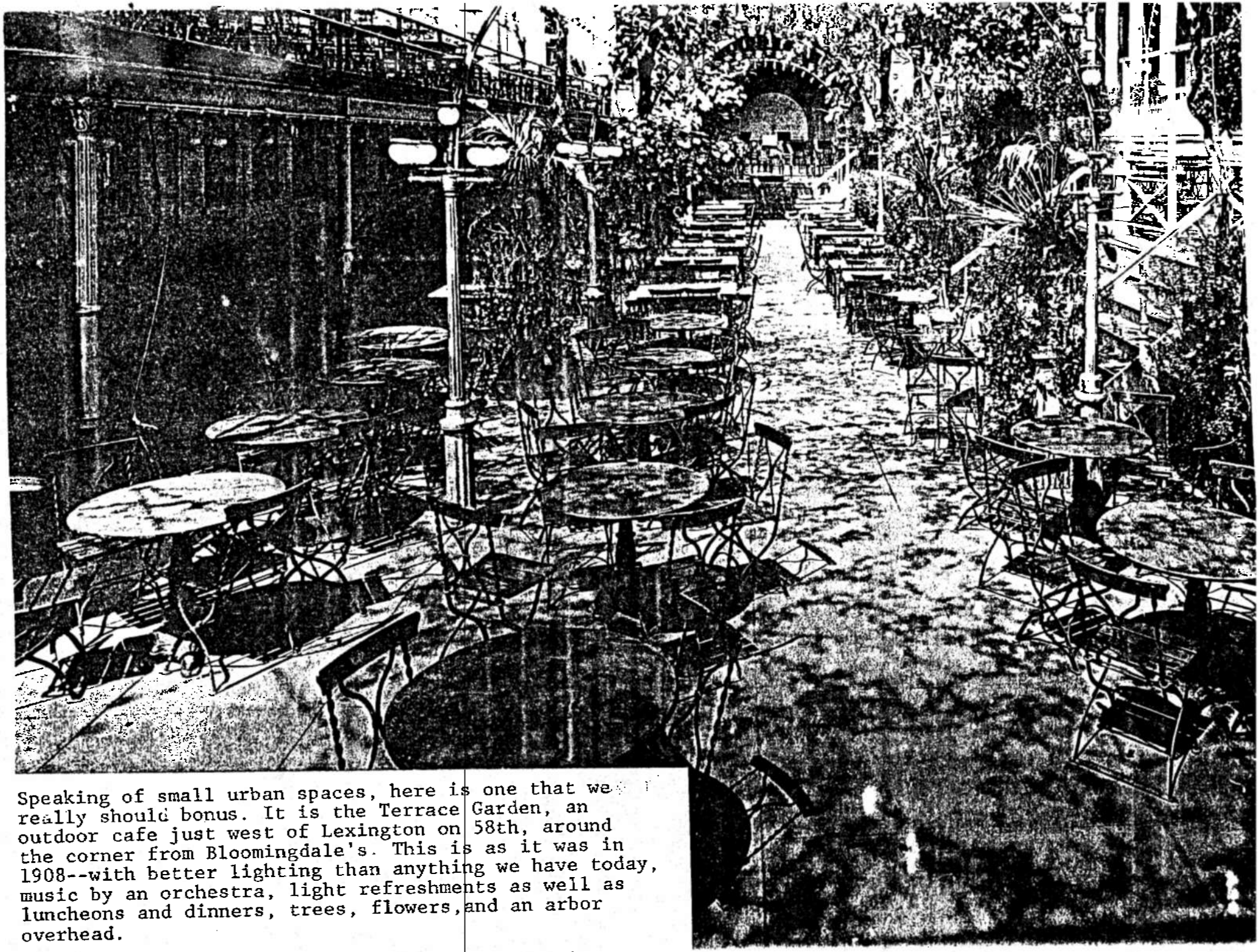
Now it is later, and time to re-introduce the off-site park proposal. The legislation proposed in 1974 stands up very well. In early drafts there was undue regard for Paley and Greenacre Parks, with provisions virtually calling for replicas, even to the placement of the food counters. But as more homework was done, the proposals were simplified to the important basics, and over-specific particulars were eliminated. Here's a brief summary of the salient provisions.

- minimum width, 40 feet, minimum area, 400 square feet. This is slightly less than Paley Park;
- at least half the frontage to be open to the street;
- to be accessible to the public from 8 a.m. until dark at least 6 days a week;
- adequate access of sunlight;
- a minimum of one linear foot of sitting space for each 20 square feet of open space;
- up to 75 percent of the required sitting can be in the form of movable chairs;
- one tree for each 500 square feet of area;
- a fountain, water wall, or, "other features of continuously rushing water that provides white noise which will exclude deleterious street noise."

Now let's look at the bonus. It is quite generous. First, there is the addition to the floor area provided by the development rights transfer from the park -- up to 18 times its area. In the case of a small park of Paley dimensions, this would amount to 72,000 square feet. Then there is the bonus the developer gets by providing amenities on his main site. He is required to provide at least two points worth, a maximum of three. Putting everything together, he is allowed to go up to a maximum of 21.6 F.A.R.

This is pretty rich and if F.A.R. maximums are to be scaled down, this should be too. I would suggest, however, that whatever the maximum, it apply to the off-site park.

I have one other suggestion, a minimum width for steps and entryways. The stipulation that the park be open to the street for at least 50 percent of the frontage is fine as far as it goes. But it can be interpreted in several ways. The design of the park for the International Paper Company is a case in point. There is visual accessibility along the entire street frontage of the park. But the steps at one end were made unduly narrow -- about 12 feet; and the narrowness was accentuated by a box-like structure for the gates. After prompting by the Planning Commission, the steps were redesigned to be 15



Speaking of small urban spaces, here is one that we really should bonus. It is the Terrace Garden, an outdoor cafe just west of Lexington on 58th, around the corner from Bloomingdale's. This is as it was in 1908--with better lighting than anything we have today, music by an orchestra, light refreshments as well as luncheons and dinners, trees, flowers, and an arbor overhead.

feet wide. The difference might seem slight, but as I note in the section on entrances, a modest widening can make the critical difference in whether steps invite one in or require a decision to go in. My research supports no optimum width or ratios but it does support that as a minimum steps and entrances to open spaces ought to be at least fifteen feet wide and I suggest a stipulation to that effect.

III. COVERED PEDESTRIAN AREAS

The Citicorp atrium is a very successful place. There are going to be some other good ones too: the Whitney sculpture garden in the Philip Morris building; the greenhouse-like indoor park in the IBM building; the cafe and sitting area in the Fisher Galleria. Even the justifiably maligned Olympic Place may turn out to be a good spot if they ever get that pastry in.

But some strong caveats are in order, and now, as the trend is gathering momentum, is the time to heed them. The eagerness with which developers are seizing on the indoor space for their bonus is itself a warning; before long we're going to be awash in atriums and indoor spaces of one kind or another, and the design cliche of the 80's will be waterwalls and indoor greenery and little white tables. Not a bad cliche, in moderation, but that is the rub.

There is a problem of degree. Whatever the merits of any one space, they are an internalization of public space, and cumulatively, a drain on the vitality of the street. So far, there have not been enough to make much difference. But there could be, and other cities, less disciplined by a tight street layout than New York are testimony. Spend some time in the closed spaces of the new Atlanta, Houston, and Los Angeles and you will see a future that should not be ours.

The argument, let it be conceded, is somewhat hypothetical. I am comparing a visible amenity with a possible detriment, and one in the future at that. But the reason it is in the future is the extraordinary vitality of our streets as they are now. To put it another way; we already have the prime amenity of a CBD. The reinforcement of it should be the top priority.

Since the Citicorp atrium is the principal exhibit for the internal space a closer look at it is in order. It is the product of a rather unique set of circumstances. The building that Citicorp first built between Park and Lexington Avenues in the late fifties was the old Citicorp: hard nosed, philistine, suspicious of people, glassed in with mirrored windows they could see out of but you couldn't see in.

Then the new one, so strikingly different. Credit must certainly go to Citicorp's management and to the architect. But the building was also the beneficiary of some external forces: the increasing muscle of the city's urban design program; the new prototypes that had been built since 1960; the strong hand of Rev. Ralph Peterson and St. Peter's Church.

But another major factor is where the building is. In good part, Citicorp is successful because of its surroundings. They are so different from it. This is a lively, tacky area. The original Citicorp building deadened a blockfront with windows curtained against the street, but there is still a lot of Lexington around -- in particular, the splendidly grubby block just to the south. The porno place on 53rd Street is no help, but there's much else of interest -- more so than the dull streetscape along Citicorp's building wall, with windows which give you only a slit of a view to the activity down below. But around the corner is Third Avenue, and still very much Third, thanks be. Bad taste is a fine foil. (Seagram's never looked better than when the purple Harwyn Club and Al Schacht's Steak House and its big vulgar sign were across 52nd Street.)

We realize the importance of such surroundings when they are gone. There is an analogy to the plazas of Sixth Avenue. Too late, it became apparent that the repetition of them had eliminated many of the amenities of the street and its shops and cafes and put little comparable in their place. In a messy way some of the vacuum has been filled. In good weather the sidewalk in front of the Exxon building is so jammed with food carts and vendors and people buying from them that there is barely room to walk. The revenge of the street.

Places like Citicorp draw life from their surroundings; indeed, much of their sense of place depends on them. Citicorp's atrium somewhat resembles the central court of a suburban shopping mall. The context is so urban, however, you know you are not in one, but in the city. Change the context, and the sense of place can be very much affected.

The worst thing that could happen to Citicorp would be replication of it. Imagine for the moment that the few grubby blocks left were cleared and big bonused buildings with atriums were put up in their stead. The place would be much less interesting. So would the atrium.

The basic issue is the internalization of public space. One problem, raised by Suzanne Stephens in her critique of Citicorp in Progressive Architecture is "privatization" -- the screening out, intended or otherwise, of a considerable segment of the public. On this score, Citicorp has been notably hospitable. Its clientele is overwhelmingly white collar and up (and heavily east side). The prices virtually guarantee white collar and up, but there has been no effort by the management to exclude anyone. The guards are easy-going and there seem a fair number of eccentrics about. (A bag man perches regularly on the left ledge at the top of the steps to Lexington.) The management has been putting in additional chairs and tables for brown baggers; keeps the rest rooms in commendably good order.

But privatization is a problem in many internal spaces. Some managers operate on the assumption that they have the right to bar not only bad conduct but people and activities they don't much like. There have been a number of court cases, and even where it is private property, as in shopping malls, there have been findings to the effect that in places that are de facto public all normal activities are proper.

But the main problem is the street. The internalization of public spaces siphons activity from it, and though in any one instance there might be quite enough vitality to spare, cumulatively the loss can be great. It has been in a number of cities and it certainly can be here. Let us lock the barn door ahead of time.

It is recommended that the bonus for covered pedestrian areas be given only in exceptional cases; that the specifications be further stiffened, and that there be a much more vigorous evaluation and monitoring of environmental impact. The latter, in theory, is already provided for; both by the city's environmental review procedures, and by the findings required of the Planning Commission. Galleria zoning, for example, requires that the Planning Commission find that the amenity is needed in the area and that it will relieve pedestrian congestion. On these two points alone most gallerias could be disqualified. None have been. Nor have any been disqualified by Environmental Quality Review; routinely they are declared to pose "no significant effect."

The Urban Design Group proposes tightened standards for interior spaces, re-defining them as "circulation spaces" and "activity spaces." The objective is to assure enhancement of the recreation function, with the bonus to be given for such enhancement. Minimums are to be raised; retailing, for example, is to be on 100 percent of the frontage of activity spaces. I suggest that public toilets also be made mandatory; the Rubicon has been crossed. I also suggest spelling out new criteria for entrances. Guarantee of performance, of course, is vital and tight legislation on this is much needed.

IV. ARCADES

Do we need arcades? More to the point, should builders be rewarded for providing them? I recommend that they not be and that the bonus be withdrawn.

The literature of urban design is rich with examples of arcades -- the Rue de Rivoli, the ancient arcades of Italian cities. In this country there are some fine old examples saved. It should be noted, not so much by economic urges as the efforts of historic preservationists. It is understandable that this city put arcades in its incentive zoning program -- both for the through-block arcade with shops and the arcaded sidewalk.

Let's consider the arcaded sidewalk. It has several benefits. It adds considerable additional space for pedestrian circulation, in most cases more than doubling the effective sidewalk width. Second, it offers protection from the rain, snow and from hot summer sun.

And that's about it. It may be a purely subjective response but I find them dark and gloomy compared to the open sidewalk, and there is some evidence that a good many other people share the same feeling. Cursory observation indicates that most people follow the main pedestrian path on the open street and it takes pretty fierce weather for them to detour through the arcaded portion.

An arcaded sidewalk keeps retailing. But it takes something away; proximity. As distance from the main pedestrian flow increases the pulling power of window displays decreases. At the Squibb building I've noted that occasionally some of the passersby on the open sidewalk will do a sort of doubletake and then make an abrupt turn and walk in under the arcade to take a closer look at a particular shop window. The necessity of decision is a measure of lost potential. When the shop windows are close by you get first takes, many of them.

For the building being designed by Edward Barnes for Madison Avenue at 54th Street it was suggested that part of the bonus be earned by providing an arcaded sidewalk along Madison Avenue. The builder balked. He did not want stores set back. The open space will be in the form of an urban park on 54th Street and adjoining arcade. The avenue frontage will be 100 percent retail, flush to the sidewalk. I think the builder was quite right on this point. The sidewalk will be as narrow and

crowded as ever but decent sidewalk widths are the responsibllity of the city and it has a very direct and effective way of meeting this responsibility. Widening them.

Shopping Arcades

Now let us turn to the shopping arcade. Most of the examples at hand are so poor it's almost unfair to cite them: the bleak corridor behind the Equitable Building, for example, between 51st and 52nd Streets, going from nowhere to nowhere, and nothing much in between. But let us consider the arcade at its potential best. By combining the through-block with retailing, it is hoped, there is a synergistic effect and the result is a pedestrian amenity of strong drawing power. London's Burlington Arcade is a prime citation.

By analogy, there is a further argument to be made. The suburban shopping mall can be viewed as a system of shopping arcades; even to their dimensions their shop lined walkways are similar to those prescribed in our zoning for arcades. Certainly they have been successful in suburbia. Why not in the city as well?

Suppose that they could be. Is this what the city should be promoting? Success could be worse than failure. Whatever their benefits, by bonusing shopping arcades we are adding yet another incentive for diverting people and activity from the streets.

New York's streets are so lively, it is said, that they could stand the competition. In particular circumstances, perhaps so, but a given area can support just so many stores and restaurants and while the ceiling may be higher than is assumed, there is a tipping point. Smaller cities, more prone to fighting suburbia at its own game, are particularly vulnerable. In the form of second level shopping ways, concourses and enclosed passages they have tried to liven their streets by getting people off them and the provision of their surrogate streets has often had a deadening effect on the real ones.

New York, of course, has unusually high densities to begin with; its pedestrian volumes are so strong, its sidewalk space so limited that the danger of dilution is much less strong than in most cities. Yes, indeed, and that is why we have the best CBD in the world. The genius of the place is its streets. It should not be policy to undercut them.

The argument is not against shopping arcades. One here and one there might work out well, and if the voice of the marketplace were to tell developers they could make money with them, there will be more arcades. The argument is against bonusing arcades; against bonusing a hierarchy of spaces the denominator of which is that they are withdrawn from the street and the success of which depends on withdrawing people from them.

V. TERRACES

Another kind of open space for which bonuses are given is the landscaped terrace. The Trump building is going to be bigger by some 15,976 square feet by virtue of providing a landscaped terrace on a fifth floor rooftop -- an extra F.A.R. of 2.0. Will the public benefits be commensurate? Experience indicates that they will not be. Key to the success of small parks is a close and easy relationship with the street; the kind that promotes spontaneous use by passersby. As a space is removed from street level, usage falls off markedly and this has been recognized in the zoning requirements that most urban open spaces be only slightly elevated or depressed from street level. But a landscaped terrace is far removed, and no matter how physically accessible it is via escalators and elevators; psychologically, it is many decision points away. Theoretically, it is easily accessible to the general public; practically speaking, it is not.

The best roof gardens in New York are those of Rockefeller Center. They are not available to the general public, but this fact is of little moment. Even people to whom they are available -- the tenants -- rarely venture on them. I have used them often as perches for observation and time lapse photography but I can recall only two or three occasions when other people were there. (The roof of the Music Hall is an exception; in summer the Rockettes sunbathe on it.)

There is a visual benefit. Roof gardens can provide a more interesting view to people in tower floors up above. But they are the ones who least need such amenity and a formula which weights benefits their way is a bit regressive.

Recommendation: eliminate the bonus for landscaped terraces.

VI. THROUGH-BLOCK CIRCULATION AREAS

Through-block passageways do not provide enough of a benefit to justify a bonus.

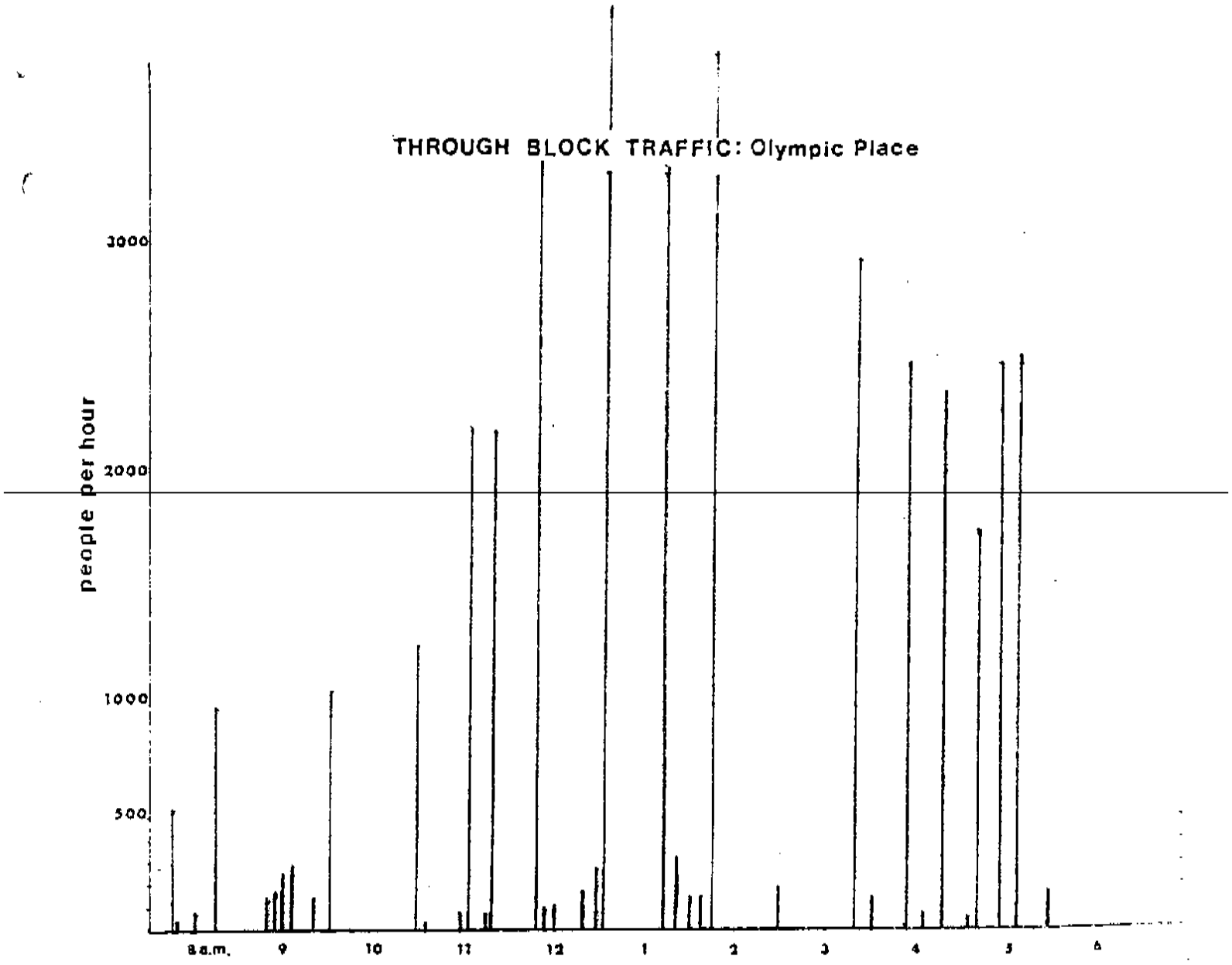
How much through traffic do through-block passageways serve? If my checks are valid, very little. Since most of the passageways also lead to the office building elevators, there is a good bit of an in and out traffic at either end. But this is essentially office lobby traffic. The bonus is for through circulation. When you count this -- that is, the number of people who come in one end and go out the other -- you will find that they are relatively few in number. You will also find that they are only a fraction of the flows on the adjacent sidewalks.

Squibb Building passageway; 56th-57th: This passageway, open at each end, serves a high traffic area and has the strongest through-flows of any passageway studied. Between 1:30 and 1:45 p.m., a peak time, the rate is about 600 people per hour. The flow from 57th Street to the building lobby in the middle of the passageway is about 1,980 people per hour. The flow on the adjacent 57th Street sidewalk: 4,500 per hour.

Celanese Bulilding; 48th-47th: This drafty tunnel offers a short cut to Rockefeller Center workers bound to and from Penn Station and the bus terminal. The flow averages about 232 people.

Olympic Place; 51st-52nd, off Fifth: This should be the best. It has glassed entrances, is comfortably warm in winter, cool in summer; it has a small sitting area, and a waterwall with a nice sound. It runs parallel to one of the most heavily traversed sidewalks in the city: Fifth Avenue between 51st - 52nd Streets.

But the through-block traffic is scant; at peak, about 250 people per hour (pph). At the same period, the flow on the parallel sidewalk of Fifth Avenue averages 4,500. In the chart overleaf are counts taken at different times of the day on a number of days. Many of them were taken on bitterly cold days. Interestingly, the cold doesn't seem to make very much difference. People who use it, use it; others don't. (Messenger and delivery boys are prime users.) Olympic has been open long enough for a constituency to have been established and it is clear that the through-block users are not a very considerable one.



Here is a comparison of pedestrian flows through Olympic Place and flows on the parallel east sidewalk of Fifth Avenue (in red). These counts were taken at various times on weekdays in January and February 1980, and with few exceptions were on very cold days. As chart shows, through block flows were only a fraction of those on the sidewalk. People going to and from office elevators outnumber through block people by about five to one. Number of people sitting in area in front of the waterfall ran between 18 and 25 during 12-2 period.

Olympic should provide a good before and after comparison. Delices La Cote Basque is scheduled to open a patisserie-cafe operation in March. They have splendid pastry and coffee and if their Lexington Avenue shop at 74th Street is an indication, the cafe should draw a lot of people. This in turn should stimulate some additional through-block traffic -- it is always more interesting to walk through a place that is lively with activity. But most of the increase, I would guess, will be in people going to and from the cafe and sitting area. But let us check and see.

Harper & Row: 52nd-53rd, east of Fifth: Catty cornered across 53rd Street from Olympic Place is the entrance to the open passageway through the Harper & Row building. Since it is open at both ends it is much colder and windier than Olympic. But it gets more through traffic than Olympic: typically, 300 - 500 pph during the 12-2 period.

What else has the bonus provided? There are, as required some retail shops, and they are good ones. Visually, there is a nice connection from 52nd Street looking through to Paley Park across 53rd Street.

There is a blemish on the view. Most of the time Paley Park is in shadow -- from the building which got its extra floors as a bonus for providing the passageway.

To be fair, it should be noted that even a lower building would have taken away much of Paley's sun and the want of air rights protection for Paley cannot be blamed on the developer. What he did, he did as of right. The zoning virtually asked him to put up additional floors and provide a passageway. The sun matter was inadvertent. Which is just the problem. If such trade-offs are a consequence of the zoning, there is something wrong with it.

There is certainly something wrong with one of its principal assumptions. As major justification for bonusing through block passageways is that it will reduce pedestrian congestion. The actual flows, as we have seen are a small fraction of the flows on the adjoining or parallel streets. Whatever their other merits, the passageways have not been reducing congestion in any appreciable way.

Could they? With better design, better placement, more amenities, more emphasis on continuity, it can be argued, traffic could be greatly increased in the future and congestion on the neighboring streets thereby reduced. But one does not follow the other. Even if passageway traffic were increased, congestion on the streets might not decrease: indeed, just as likely a consequence would be an increase in congestion.

The Fisher Galleria between 52nd and 53rd Streets may be a case in point. The spot zoning legislation drawn up for it called for a finding that the through-block space would "reduce pedestrian congestion in the area."

How in the world could it? The building will add not an inch to the 13.1 foot width of 52nd and 53rd Streets. And the galleria is not an alternative to them, but a connector. The more people that go in and out of the galleria, the more people that must use 52nd and 53rd Streets to do it. Save by landing on the roof in a helicopter there is no other access. Physically, then, the galleria has to increase the pedestrian load on the streets, not reduce it. The only conceivable dilution would be on Park Avenue. But it's not congested.

There are positive things to be said. It's fine that Skidmore Owings and Merrill have turned their hand to designing spaces for people. This space, with its cafe, chairs and tables, its waterfall, should draw many of them, and if there is more crowding on 52nd and 53rd Streets this might be a small price to pay.

But there is a price to pay. What is disconcerting about this kind of legislation is the way it blurs costs and transmutes them into benefits. A 900,000 square foot building on a mid-block site is a good bit to take; to ask that it also be regarded as a way of reducing pedestrian congestion beggars common sense.

In arguing against bonuses for through flows I am not arguing against through flows. They are good to have and they are not at all antithetical to the other, more social uses of the space. Or vice versa. When the 1975 zoning amendments were in preparation I did a special study of the Exxon Minipark to shed light on whether or not we ought to cut down seating requirements in through flow areas. Usage showed that we should not. People like to sit where there is the most action, they also like to stand and talk in the middle of traffic. The people passing through manage very well just the same. The through flow at Exxon seemed to thrive best when the middle of the passage was virtually lined with large round sitting planters.

Another section of this report bespeaks entrances and easier steps to promote better pedestrian flows in and out of places and through them. In a separate report on Bryant Park, the major point made is the need for opening up with more entrances and with more diagonal paths to encourage cross block flows.

But these are not things that should be promoted as options. They ought to be done; they ought to be required and with no extra reward for providing a good basic feature instead of a bad one.

VII. THROUGH-BLOCK NETWORKS

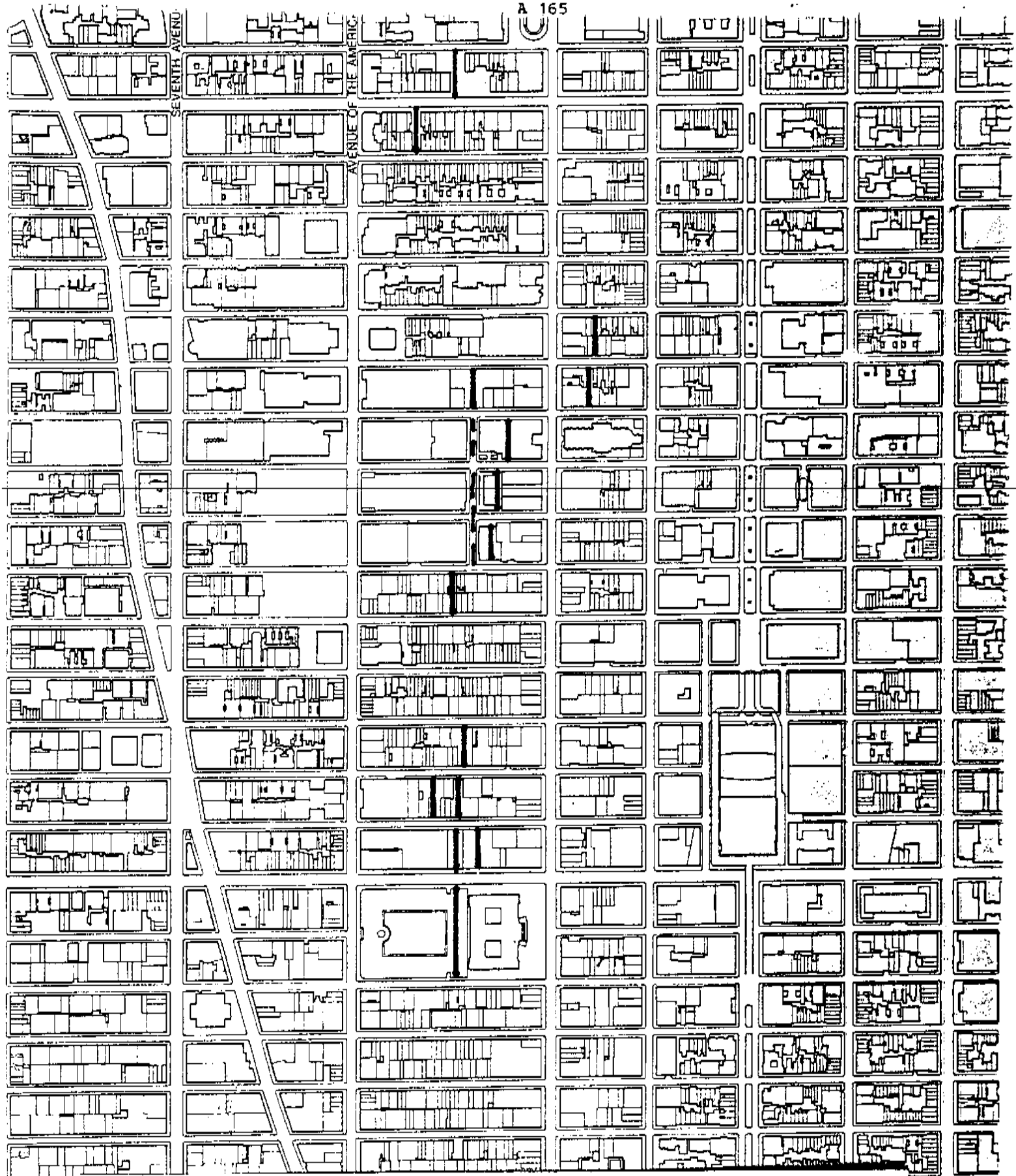
If through block passages connected with other through block passages as parts of a continuous system they would certainly get more use. To promote such continuity the Urban Design Group has recommended that through-block passages be mandated and bonused in certain areas -- principally, the long blocks between 5th and 8th Avenues. A development site which contains a through lot would have to provide a passage and align it with any existing passage on the adjacent block; or, if none, to locate it near the center of the block.

Happily, the elements of a system already exist and though unplanned is no less interesting for that. It starts at 42nd Street at the entrance to the CUNY Graduate Center. One goes through the passage to 43rd Street, then across to the Bar Building, through its long lobby to 44th Street and thence across to the Berkeley Building and through its long lobby to 45th Street. There the trail goes cold and one must go to the Avenue. But it picks up again in the middle of 47th Street with the newly opened jewelry arcade through to 48th Street. There one can cut through 1 Rockefeller Plaza to the plaza, then down under 50th Street by concourse, up at 51st Street and on through the Warner Communications Building to 52nd Street; zig to 666 Fifth and through its passage to 53rd Street. There, for the moment, it dead ends.

Before long, thanks to the recently approved plan for Bryant Park, there will be a further extension on the southern end. The upper terrace of the park -- which is directly across the street from the Graduate Center -- is to be opened up as a through promenade with new steps and ramps at 42nd and 40th Streets.

Pedestrian flows vary considerably. The Graduate Center passage gets considerable use, despite its strong drafts. (9:30 a.m. rate about 500 people per hour.) The office building passages get less (mid-morning flows; about 200 pph). One has to know them and they are rather narrow. But they do have shops and newsstands.

As a veteran of this area I am rather pleased with myself that I know all these nooks and zig-zags. But one reason is that I know very few other people do. By all indications most people use the segments; few use the system. Were it more complete more people would but it is important not to overestimate the potential.



Through block network: 42d Street north

Between 5th and 6th Avenues the only missing links are the two blocks between 45th and 47th. Note that every site with frontage on two parallel streets has a through block passage. Exception; the Harvard Club on 44th-45th

Let me cite the Rockefeller Center concourse again. In plan, it is satisfyingly comprehensive and continuous. In actual usage, a few main corridors account for the great bulk of the flow. Once off them the traffic drops markedly. One of the longest passages runs from beneath 630 Fifth Avenue to the lobby of the Sperry Rand building on Sixth Avenue. A relative handful of people use it. Per light bulb, per escalator it costs as much as the high traffic areas.

Pedestrian studies show that usage is highly localized; like origin-destination studies of vehicular traffic, they usually indicate that the bulk of the people using a given place are from a place within a few blocks of it. So it would likely be with a walkway system; most users would be on a short journey -- one or two blocks -- and the number on journeys three or four or more would be very small. The segments would have to be functional in their own right; what system advantages there might be would be a plus.

But not one to pay a lot for. I bring up these points not to scant the desirability of more through-block connections; but to assess better how much of a price should be paid for them. I don't think any price should be paid for them. It is entirely in order to mandate through-block connections in new buildings which have through lots. But why bonus them too? A developer would be crazy if he didn't provide one. The buildings in the 5th-6th Avenues area which had through lots did provide connections. It was to their self-interest to. If you have a building running between two busy streets it is good sense to connect your lobby to them. And maybe have some stores. And a newsstand.

VIII. ENTRANCES

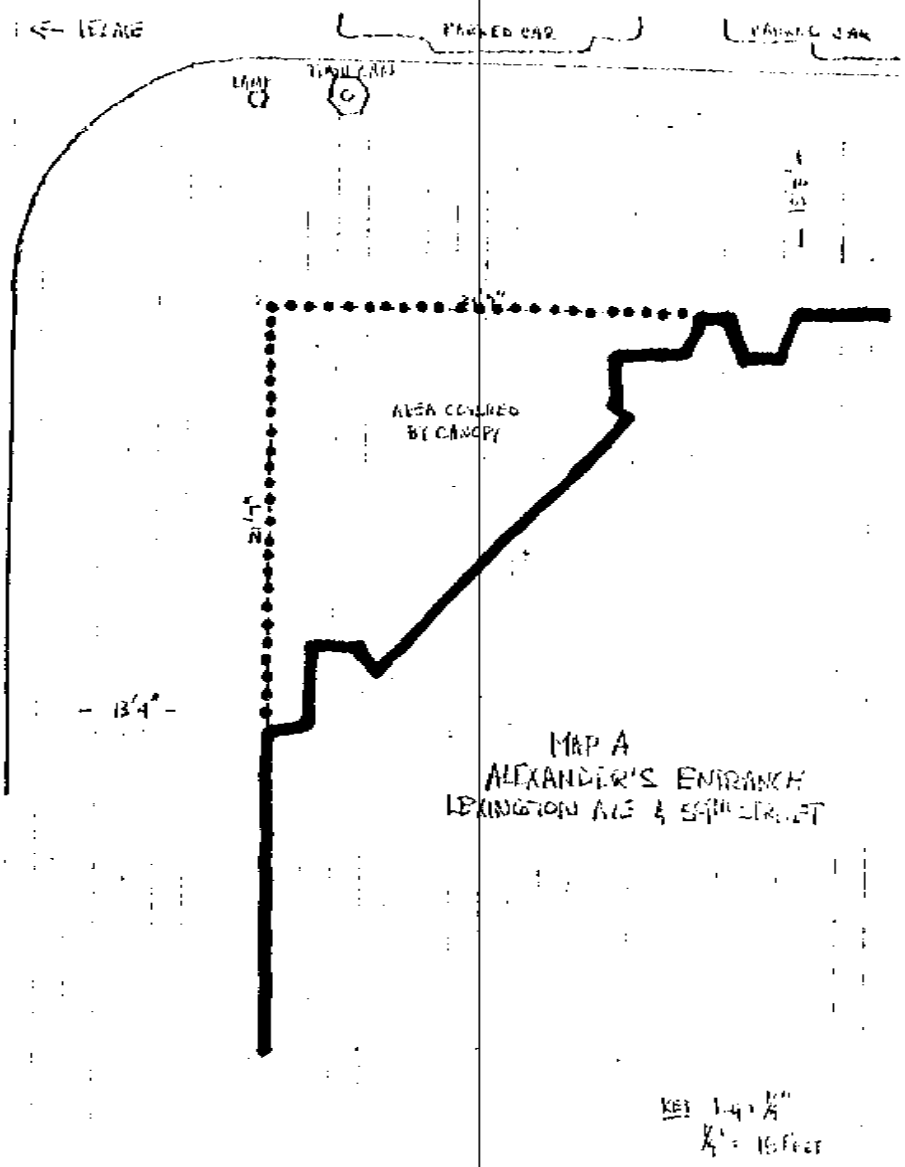
The biggest obstacles to pedestrian movement in midtown are the entrances to its buildings. They are hard to get in and out of. Most usually, they consist of a set of two of revolving doors, flanked on either side by doors that swing open if you push them hard enough but which are not meant to be used anyway. There is a sign on them saying "Please Use Other Door;" sometimes the sign is mounted on a pedestal and placed directly in their path, which does seem inconsistent for doors required for panic exit. In any event, it is tough going. The revolving doors don't really revolve; you revolve them and it often takes many foot pounds of energy to do it. In some buildings, a second set of doors is added for good measure.

All this is necessary, we are told, to keep outside weather outside, and, more important, to maintain an air seal so that violent winds don't whistle up elevator shafts in a "stack effect." Maybe so, but I have noted many occasions when building guards propped revolving doors in the open position and no calamity ensued. The same might be true with the Fisher Galleria. The architects insisted on revolving doors as a necessity. It might be interesting to have the doors propped open for several hours. (I'd lay a bet the building would still stand.)

But there is a curious thing about these doorways. Swinging or revolving, they work best when there is a crowd; indeed, they virtually require a crowd to operate efficiently. There is a lesson in this anomaly.

When I started doing pedestrian counts at heavy traffic entrances I was puzzled by a shift in rhythms of the flows at peak hours. Shortly before the peak, say at 8:45 a.m. there would be considerable congestion, with people lined up one behind one another. Then, as the number of people mounted -- say, from a rate of 4,000 people an hour to 6,000 -- the congestion did not, as one would expect, increase. It decreased. People moved more quickly and easily.

The answer lies in the phenomenon of the open door. It is enormously inductive. Some people are natural door openers; most are not. Given the choice, they head for the door that is already open, or going to be opened by someone else. At slack periods they will often queue up three and four deep rather than strike out on their own.


AREA COVERED BY CANOPY
MAP A
ALEXANDER'S ENTRANCE
LEXINGTON AVE & 59TH STREET

As the crowd swells, however, more doors will be kept ajar; the people distribute themselves more evenly across the entrance, and finally, at peak, they will be streaming through. Most are going in the same direction and the headway between them is much shorter than is regarded comfortable. But that is why they move so quickly. Doors don't get a chance to close.

During the off-peak hours doorways are at their most inefficient. The in and out traffic is sporadic and headway between people is so great that the swinging doors swing closed by the time the next person arrives. The revolving doors seem to slow to a dead halt just as one comes upon them. Per foot pounds per person, all this requires a considerable expenditure of energy.

Thought: why not leave a door open?

This would make things easier for people during the off-hours; far more so in rush hours. In making time lapse film studies of doorway behavior I happened upon several instances when some doors were left open, purposely or otherwise. Their carrying capacity for peak flows proved to be astonishing.

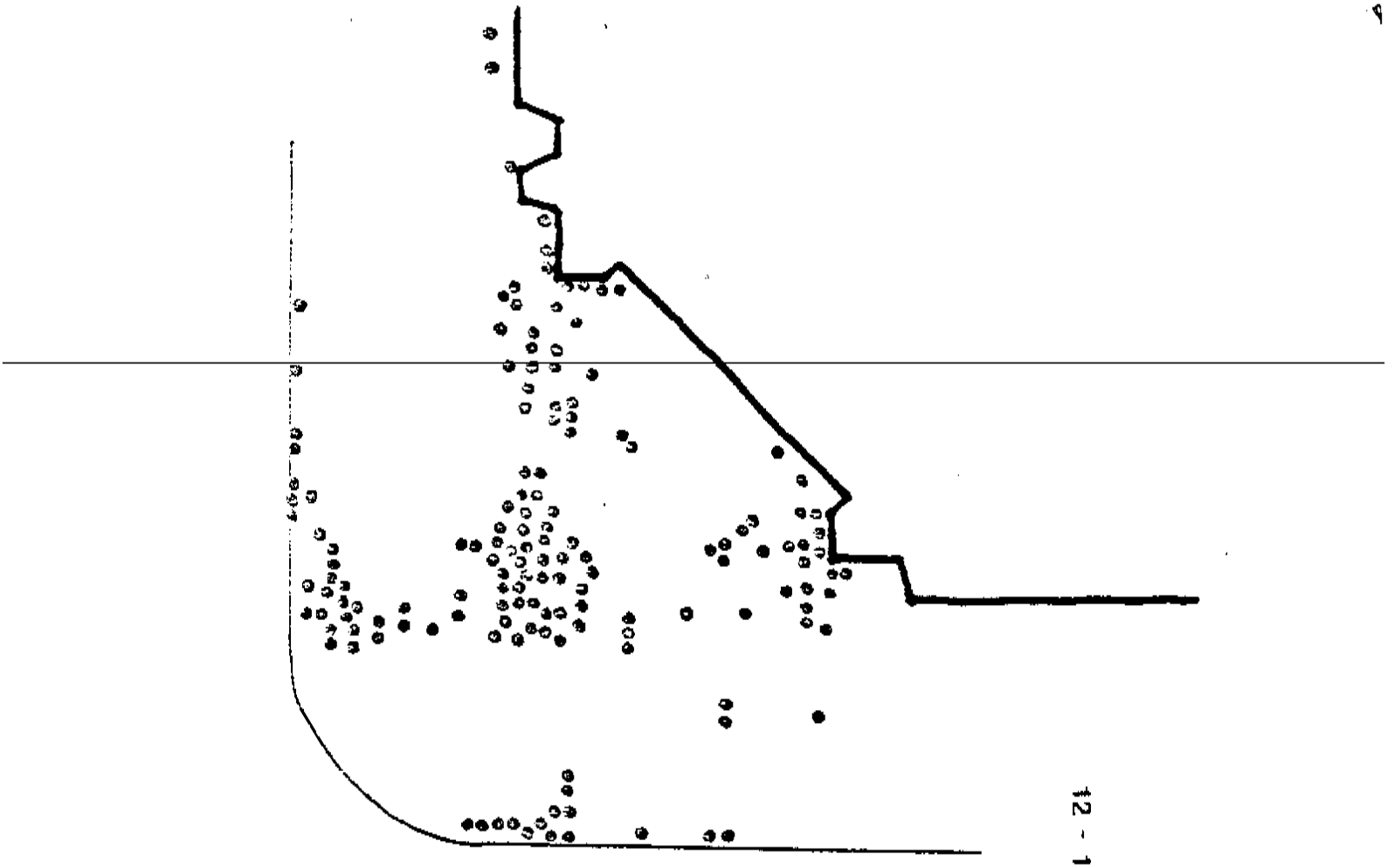
Here are some examples:

One morning at the concourse entrance to the RCA Building, all of the eight swinging doors were positioned open. At peak, the flow was some 8,000 people per hour. Two-thirds of the flow went through 2 of the 8 doors. These were the two doors at right for those entering. The great bulk of the flow was inward, the few people going in the other direction obligingly using the doors to their right.

Grand Central Station; set of 9 swinging doors at the corner of Vanderbilt Avenue and 42nd Street; At 9 a.m. flow rate: 5,700 people per hour. Three doors propped open. Thirty-one percent of the people went through these three doors; 42 percent went through a door kept open by people ahead. Total open door people: 73 percent. A set of nine doors at the 42nd Street entrance under the Park Avenue ramp shows similar patterns. Even at peak, the bulk of the people go through about three of the nine doors.

Another doorway worth noting is Alexander's at the corner of Lexington Avenue and 58th Street. It combines several features; the corner is mitered, and provides an unusually spacious street corner area. The doorway, eighteen feet wide has eight swinging doors. In fair weather they are positioned open and operate as air doors.

It works very well as an entrance -- never a jam. It works even better as a place. A great many people stop in the entrance area. People coming out of the store often will pause, as if to get their bearings; look at a watch, light a cigarette. Then there are people just standing there, eating an ice cream cone, waiting for someone. Groups of people will be chatting.



12 - 1

Below is one of a sequence of charts we plotted. It shows all people who stopped in the entrance area one day between 12 and 1. You will note that the invisible extension of the building line functions as a boundary. You will also note that cumulatively, the greatest concentration of people is directly in the middle of the pedestrian flow. (In a comparison study of Tokyo we found that the social patterns outside the doorways to two of the leading department stores were very similar.)

In a perverse way, Bloomingdale's south entrance illustrates the value of the open door. It is a model of all that is bad in doorways. There are two revolving doors at either side. Between them are two swinging doors. Once inside, there is another set of swinging doors to get through, plus a nun sitting on a chair. Jams are constantly recurring. As elsewhere, people queue up behind one another rather than open a door themselves, but with more reason than usual: the doors are extremely hard to open and you often see someone try and then give up when they find how hard it is. Of the 4 doors of the outer entrance the revolving door at the right accounts for 83 percent of the people entering; the two middle doors, eight percent and one percent; the other revolving door, eight percent. The people coming out show a somewhat similar maldistribution, also skewed to the right.

In part because the choice is so forced, the revolving doors handle the load poorly: when crowding is most intense many a person will be confused by the pace, pause a fraction of a second too long and miss a turn. If a man steps to the left to let a woman into the door first he will find himself mousetrapped, with the line going through on his right. The race is to the quickest. It is a tribute to Bloomingdale's inner attractions that so many people go to so much trouble to get inside. One wonders what would happen if it were made easy.

Let me digress to make a point about sidewalk space. Whatever the difficulties of ingress, Bloominndale's entrance area is a very lively one from a social point of view. It has the highest pedestrian densities I have ever clocked in New York City outside of the subway, and while the jamming at the entrance is one reason, there is a great deal of voluntary stopping, chatting, window-looking. When the vendors set up shop at the entrance on a Saturday afternoon people spill out onto the streets and the scene is sheer pandemonium. This is a great recreation area: on Saturdays it is filled with family groups, young couples and teenagers. In the section on re-allocation of space for sidewalks, I put the argument largely in transportation terms. But there is a social-recreational rationale as well. Natural gathering places like this are tremendously important to the life of the city and with only modest additions of space they could function much better and for more people.

To recapitulate: the most inviting -- and the most efficient entrance is an open door. There are a number of ways of achieving this, but the principle should be required of entrances to bonused interior spaces. If there might be a stack effect problem because of elevators -- this could be met by enclosing the elevator banks. The point of a bonused space is that it is a public amenity and easy access should be mandatory. This is certainly the intent of the zoning provisions for covered pedestrian areas and the fact that the energy shortage has invalidated the air door should not be an excuse for falling back on conventional formats.

A test of the open door will be provided when the new Philip Morris building is completed. An inviting entrance for the indoor sculpture garden was important; were there no energy shortage an air door would have been desirable and was so specified in the zoning for such areas. But this was out of the question now.

Based on our doorway studies, architect Ulrich Franzen designed a mostly-open door. Visually, the entrance will be 20 feet wide -- all glass. At the center there will be a pair of sliding doors that in good weather will be kept open to a width of six feet -- enough to take care of any likely flows. For overflows, and people who like to open doors, there will be swinging doors at either side. In poor weather the center doors will open and shut automatically. If all works well people will hardly notice them.

There should be easier entrances in general, bonus or no bonus. One hates to call for more studies in a report but in this case a hard, technical look could be helpful. Engineering standards embedded in custom are usually overengineered; like the subdivision requirements for burying small streams in concrete culverts; building over-sized roads for peak loads that never come about.

The New York City building code does not talk about entrances. It talks about exits -- in great detail, and is almost wholly concerned with getting people safely from the inside out. This is proper enough as far as it goes; and let it be said most of the provisions are not hamstringing. Basically, they require enough doors for panic egress. There must be swinging doors that swing in the direction of exit travel, and which are self-closing. Revolving doors are optional; they can account for only half the exit capacity at any location, with swinging doors providing the rest. Power operated doors may be used provided they remain closed in the event of power failure and can be manually operated. They must swing in the direction of exit travel. (Thought: what if they are sliding doors, as in the Philip Morris building? The code does not appear to acknowledge them.) The code says that exit doors "shall normally be kept in the closed position."

Whether embodied in the code or in custom, there are some assumptions that ought to be put to the test, and to beat the engineers some engineers should be involved. Why should doors "normally be kept in the closed position?" How serious is the stack effect problem? What is the heat loss through open doors during the six or so months of moderate weather? Why do multiple entrances in concourses seem to accentuate drafts rather than mitigate them? And accentuate abrupt shifts in changes in temperature? Must doors be so hard to push open? (Through small turbines, might not it be possible to harness the kinetic energy generated by people pushing revolving doors?)

What is needed is a shift in perspective -- from the defensive one of safe egress to the broader one of inviting ingress. Some controlled experiments -- Bloomingdale's comes to mind -- might indicate that the economics would be quite favorable. It also might be that from an environmental and micro-climatic viewpoint as well, the easy, open entrance would prove more functional then the cumbersome affairs we so docilely submit to.

For existing buildings some second looks could uncover many redundant doors. Such was the case at the Rockefeller Center Concourse. It was a revolving door manufacturer's dream: thousands of feet of concourse going this way and that, and wherever they went under a building line or a street there would be another set of doors. Study of usage indicated that, if anything, they accentuated climatic changes and drafts. As part of a major upgrading program, many of the doorways were removed and sitting places and additional lighting provided. The flows are now much easier and less congested. They are also more sociable, particularly at lunchtime. Where previously groups were broken up by having to go single file, now they amble on. There is more shmoozing, more 100 percent conversations. Other building managements would do well to have a look.

IX. ODDS AND ENDS

Some of the best small spaces in New York are accidental spaces, left-over spaces, nooks and crannies. My favorite is the indented ledge at the Chase branch on 57th Street facing the new IBM building. It's a perfect sun trap -- or has been -- it offers protection from drafts, can be used to sit on or to use as a desk; there's usually a vendor next to it selling orange juice or something and there almost always is an interesting parade of people going by.

There are some good sitting niches on 42nd Street at Third and at Second Avenues. Fifth Avenue has several fine wind and sun traps. On windy cold weather such as we have been having lately the utility of the simple doorway becomes apparent. In better weather the function of fire standpipes can be seen; they provide the best -- and almost only -- sitting on Madison Avenue.

Most of these amenities are unintended. Might not a nudge bring about many more of them? They cost little or nothing -- a few lines on a plan if they're drawn in early in the game. The Urban Design Group's proposals for recesses suggest a number of opportunities. On certain streets and avenues front wall recesses are to be permitted up to a depth of six feet. They could be turned to good uses. Whether some sort of bonus point system would be in order I don't know. The Urban Design Group's experience with the options offered in the revised residential zoning might give answers. Board Five Chairman Dan Biederman suggests that another route might be an all purpose declaration about such amenities with the builder to consult with the Urban Design Group about their inclusion, and before certification.

Here are some of the possibilities:

- a sitting ledge (minimum: 12" depth; height 16"-24");
- a small ledge low enough to use for tying one's shoelaces. Don't laugh. Watch a fire hydrant for a while.
- a ledge to be used as a shelf for rearranging packages, going over papers. Height: up to 40";
- a drinking fountain. Whatever happened to this fine street object?
- a mirrored surface. Women frequently use the dark glass walls of office buildings as mirrors; polished steel sculpture can serve the same purpose. Men need mirrors down to the ground to check the cuff length of trousers. Lots of options here;
- chiming poles. People love to touch or rap objects they pass and if an unusual sound is to be heard all the better. Maybe a chiming metal mirror.

(More crazy ideas welcomed.)