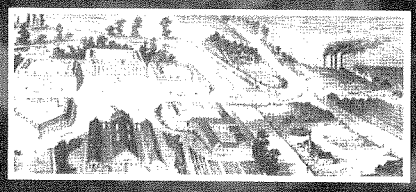
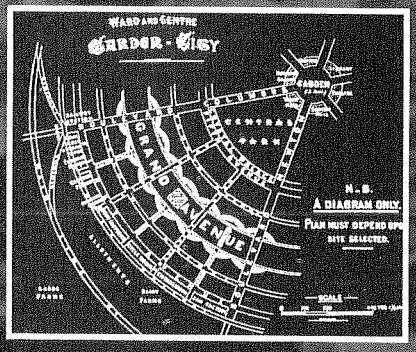
# The Machine Next Door

*Robert Lane*





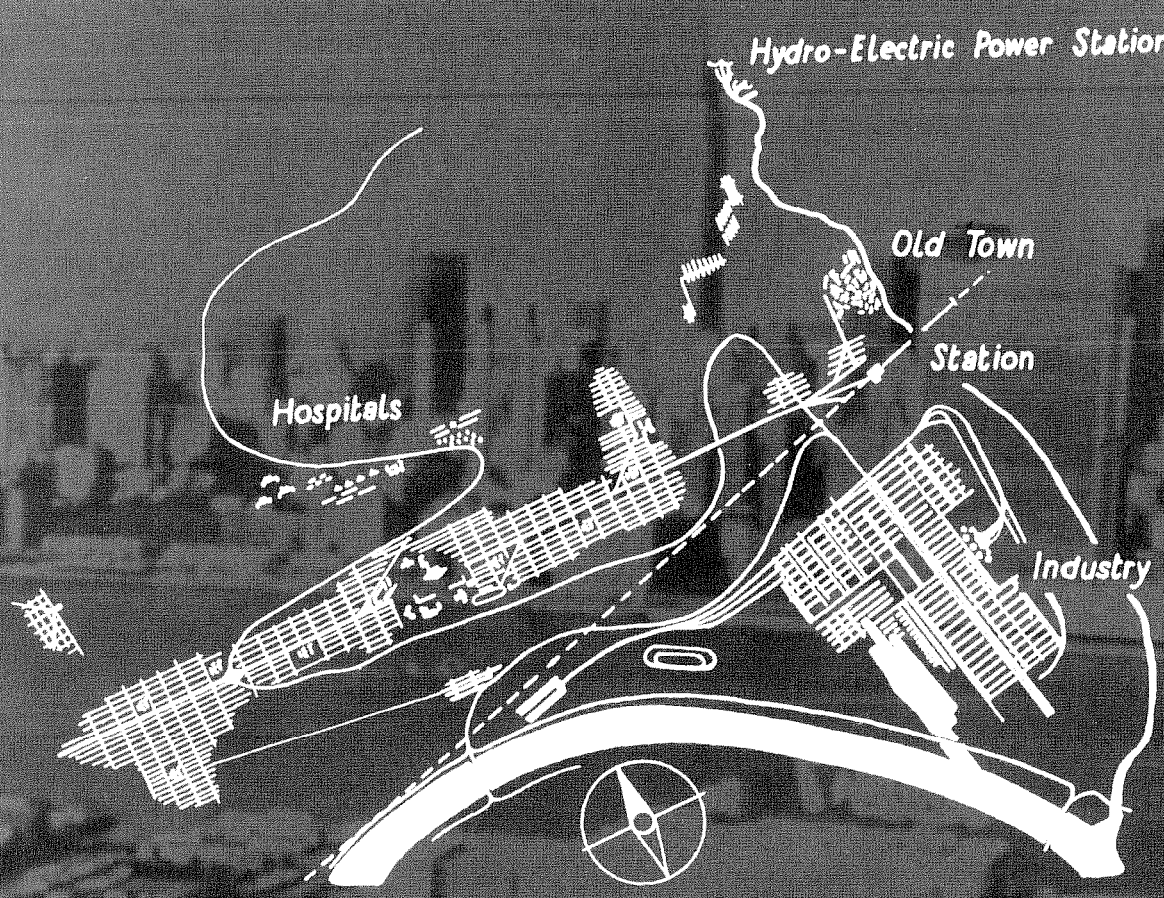

Top: Jean Baptiste Godin's familistere proposed for Guise, France (1871) sought to remake the industrial city from scratch.

Above: Diagram for a garden city, from Ebeneezer Howard's *Garden Cities of To-morrow* (1898).

Despite the well-documented decline of urban manufacturing, new in-city industrial districts are still being developed — not by private enterprises, as they once were, but by public agencies that want to revive deteriorating inner-city neighborhoods and bolster sagging urban economies.

The hope is that these new districts can offer modern, competitive accommodations for manufacturing. More often than not, their design looks to the model of the suburban industrial park, not to the neighborhoods that surround them or to manufacturing areas that have evolved more or less organically elsewhere in the city (and are considered obsolete). Characteristically, the result is a single-purpose district that is laid out on superblocks and developed with large floor-plate, single-story factories surrounded by ample space for off-street loading and parking.

These "in-city industrial parks" respond to many concerns that cause manufacturers to leave cities for suburban sites, their sponsors say. They minimize conflicts (environmental and transportation, for example) with surrounding areas, provide room for expansion and deter real-estate speculation. Most importantly, they create inwardly focused precincts exclu-




sively for industry, protecting the manufacturers from the problems of the marginalized neighborhoods in which they are located.

But how viable is the suburban industrial park model for in-city industrial districts? The appeal of ample space far from the congestion and conflicts of the city must be reconciled with the desire of many firms to locate near the city center — near specialized design, finance and marketing services; accessible to a flexible, diverse and specialized labor pool; and close to networks of suppliers and contractors that often remain centered around historic industrial nodes. (Two-thirds of New York City's industrial jobs, for example, are within a three-mile radius of Midtown.)

The single-use character and coarse grain of the suburban industrial park may be appropriate for some in-city industrial districts. But many manufacturers benefit from proximity to shops, services and housing. Even the suburban industrial park has been superseded by the mixed-use "business park," which contains light industry, offices, wholesaling, research and development, recreational facilities and day care. (Some aggressively managed urban districts, such as the Brooklyn Army

Above: Diagram of Tony Garnier's prototype *Cité Industriel* (1904), showing segregation of industrial, residential and historic districts.

Background: Mixed industrial-residential Hunters Point district in Queens, New York, across the East River from Midtown Manhattan.

(Illustrations courtesy Robert Lane)

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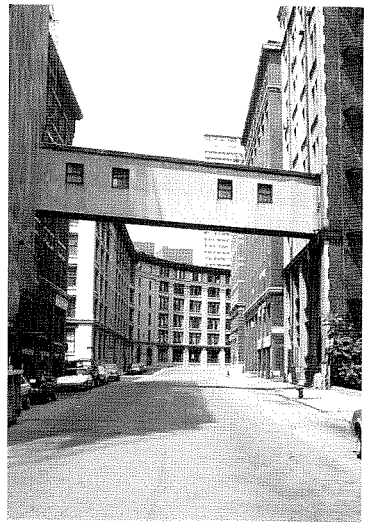
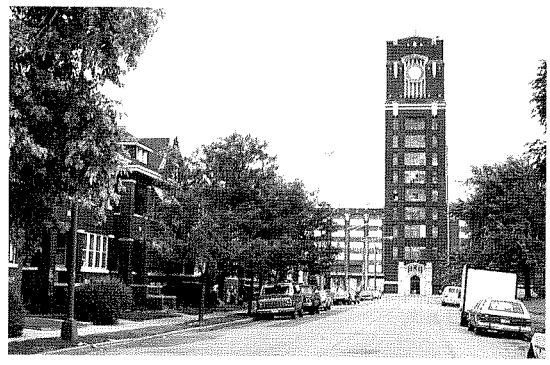
In New York, industrial areas (darkest shades) cluster along waterfronts and within three miles of the downtown and midtown commercial cores. Industry is remarkably dispersed, with more than a third located outside areas zoned for manufacturing. (New York City Department of City Planning)





Top: Nineteenth-century loft district near Commonwealth Flats, Boston.

Above: Pershing Road planned industrial district, Chicago.

Terminal, follow this strategy.) Also, a healthy manufacturing economy needs a mix of businesses — big and small; fabricators, assemblers and distributors; those that serve regional markets and those that serve special niches. In-city industrial parks are rarely developed with that complexity in mind.

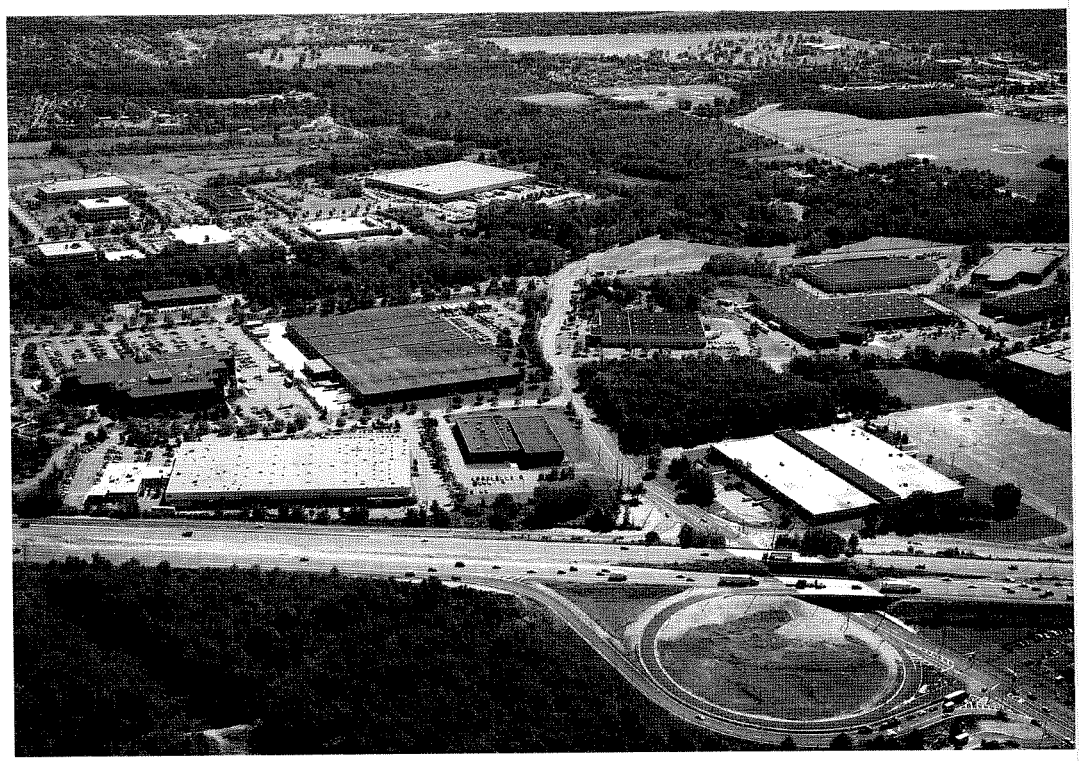
If the agenda for urban renewal includes the economic and social goals of revitalizing deteriorating neighborhoods, then industrial districts must do more than address the programmatic and city planning requirements of manufacturers. They must weave industry back into the city by combining it with other uses, particularly housing. For many communities, large-scale, inwardly-focused or fenced-off industrial parks are as much a blighting influence as what was there before.

### From Industrial Park to Urban Renewal

The practice of using suburban industrial parks as a model for new, in-city industrial districts can be seen as an outgrowth of the century-old planning practice of rooting industry out of cities and relocating it in the landscape.

Nineteenth-century ideal town plans abandoned the city, choosing instead to propose new communities in rural landscapes. Industrialists were motivated by the desire to find healthier and more productive living conditions for their workers ("workers villages" such as Saltaire in Bradford, England, 1852, and Pullman City, Chicago, 1867). Utopian Socialists, on the other hand, were motivated by the desire to remake the city from scratch according to new scientific, social or political programs (for example, Robert Owens' settlement at New Harmony, Indiana, 1826 and Jean Baptiste Godin's *familistere* at Guise, 1871).

Industrialists and reformers alike proposed that buildings be grouped according to function with housing and industry separated (a notion formalized in zoning). Even Tony Garnier's *Une Cité Industrielle* (1904), which celebrated industry as integral to the urban economy, followed this tradition, locating industry securely in a separate precinct, away from the "old town" city center and the new residential and commercial districts.



Typical contemporary suburban, industrial park.

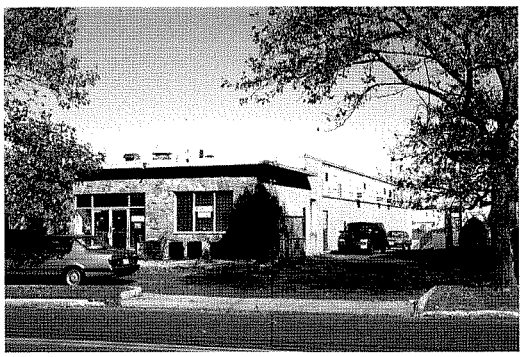
Planned industrial districts were successfully pioneered in the U.S. at Bush Terminal in New York (1895-1915) and the Central Manufacturing Districts in Chicago (1905-1931) and Los Angeles (1922). The history of these districts (which were often sponsored by railroads) is not a linear progression from city to suburb or from lofts to horizontal factory; a mixture of configurations is evident even in the earliest districts. At Chicago's Pershing Road development (1916), elaborately detailed, monumental loft factories create an urban edge to a park and a residential neighborhood. At the other extreme, Chicago's Clearing districts (1909), were among the first to be located beyond existing industrial concentrations and to provide horizontal factories with removable end and side walls for expansion.

Nevertheless, these early developments shared a number of characteristics that became hallmarks of industrial district planning: the use of large sites (as much as 40 acres) to allow for expansion, off-street loading and landscaping; developer control over issues like the types of industries that could locate in the district, building materials; and, with the execption of some specialized support services, such as shipping management and banking, they all prohibited non-industrial uses.

By the late 1940s, industry began to locate along emerging highway networks, especially ring roads. The New England Industrial Center on Route 128 (Needham, Mass., 1949) is the paradigm of this kind of development. These are the first real suburban industrial parks, differing from earlier planned districts in their reduced site coverage, complete reliance on the horizontal factory and emphasis on appearance and landscaping. They offered large tracts of inexpensive, easily developable land with flexibility for expansion and convenient access. There was a political agenda as well: the suburban campus of low-rise factories surrounded by landscaping came to symbolize not only clean, modern industry, but also freedom from the crime, congestion and labor unrest of the industrial city.

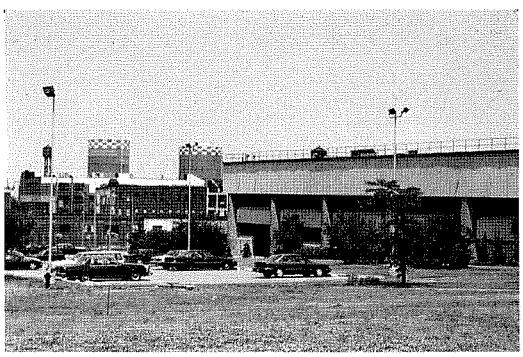
At the same time, private developers abandoned the concept of the planned urban industrial district. Those who chose to build in the city found themselves constrained by zoning that seemed to reflect suburban planning principles — encouraging single-use areas with large-scale, low-site coverage buildings. Rather than building out the allowable floor area with expensive multistory buildings, industrialists built economical single-story factories, leaving a third of the site open for the off-street parking and loading spaces required by the zoning.

The adoption of performance standards as a basis for zoning seemed to suggest that industry could be accommodated in the city and close to other activities, if nuisances could be controlled (noise, unhealthful or noxious emissions, truck traffic). But severe restrictions on commercial activities and



Above: Typical suburban industrial building, with articulated front office.

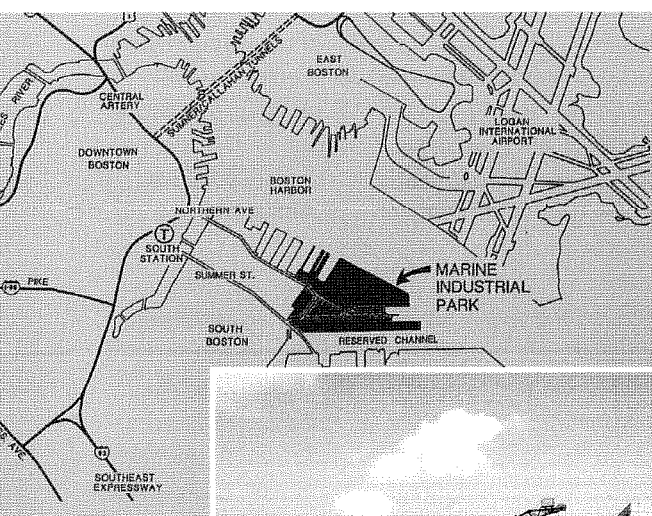
Below: A single-story factory recently built at the Rheingold Industrial Park in Brooklyn.



the absolute prohibition of residential uses in manufacturing districts seemed to suggest that industry must be isolated. These restrictions sought to protect the manufacturing areas from real estate speculation and displacement, but at the same time they tended to cut manufacturers off from the rest of the urban economy.

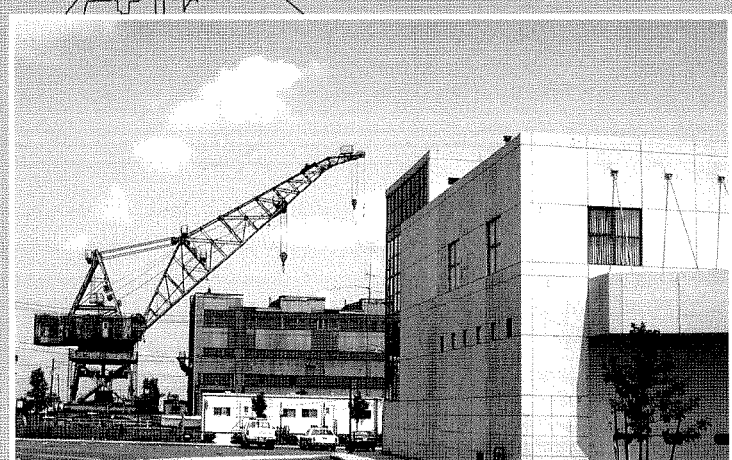
As urban manufacturing has continued to decline, the planning of new, in-city manufacturing districts has been left to public development agencies trying to save what remains. Theoretically, the urban renewal process allows these agencies to experiment with new configurations unconstrained by the limitations of zoning. But these agencies have ignored the lessons of earlier urban industrial districts, instead using urban renewal to replicate the building types and planning principles of the suburban industrial park. Often, urban renewal plans simply rely on the standard zoning regulations.

Neither zoning nor urban renewal practices have kept pace with the changing nature of manufacturing. Performance standards, for example, do not reflect innovations in production technology and environmental regulations have made many manufacturers less noxious. The separation of uses does not recognize that many manufacturers thrive on easy access to housing, services and shops. Nor does zoning easily accommodate the healthy mixing of activities that is occurring within manufacturing enterprises — fabrication, assembly, warehous-




Left: Location of Marine Park and Commonwealth Flats industrial areas.

Below: Connection to a waterfront viewing area, Marine Industrial Park.



## Mixing Uses in Manufacturing Districts

One of the fundamental problems of fitting industry in cities is economic. Although manufacturers might prefer locations near the city core, they typically cannot afford the rents that commercial or residential activities command and can easily be priced out, through either redevelopment or speculation.

In Boston, designers are addressing this issue by proposing mixed-use building types that combine production spaces with businesses that generate

ing, management and retail sales often take place in the same facility. Live-work spaces that combine small studios or workshops with living spaces are increasingly common.

In New York City, the resilience of mixed-use neighborhoods like Hunters Point and Williamsburghas resulted in increasingly complex and sensitive regulations for these places. Special districts that recognize and reinforce the existing mix of industrial and residential activities have been mapped. Unfortunately, special district zoning is essentially static, preserving what already exists rather than allowing a mix of activities to replicate itself in new places or to reinvent itself in a modern form.

### The Problems of Building Type and Site Planning

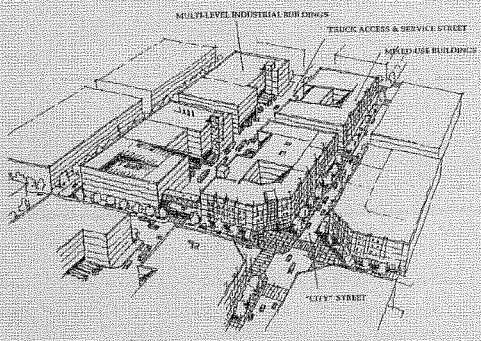
The suburban industrial building type is essentially a one-story structure with a large floor plate and surrounded by open space for parking and loading. Often, when buildings like these are introduced into older urban areas, they are out of scale with their surroundings, and their architecture often lacks the complexity of the urban fabric.

They are rarely expressive of the activities that occur inside and relate poorly to nearby buildings and public spaces. In the suburbs, architects address this problem through the design of other program elements, particularly the front office, which

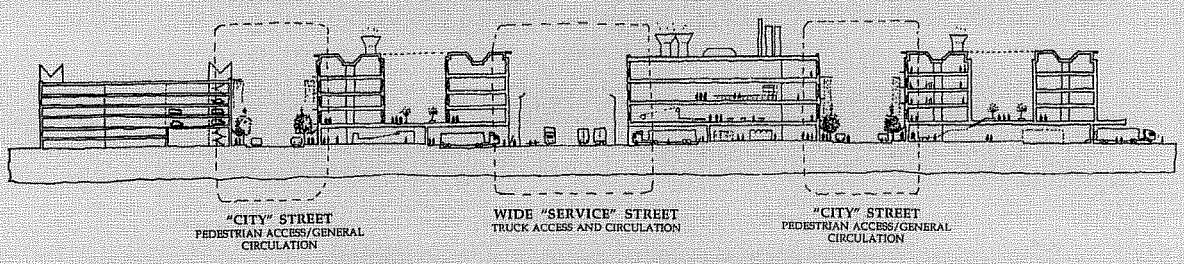
New York City manufacturing building with glazing at the upper level.

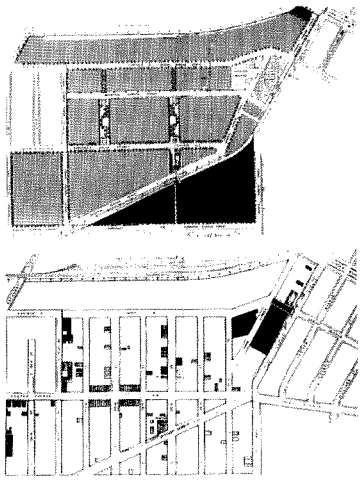
higher rents (such as offices or studio space) coupled with new public infrastructure (parking garages, pedestrian streets and public spaces) necessary to support denser working districts.

One proposal was set forth in the late 1980s for Marine Industrial Park, a former military base along Boston Harbor east of downtown. The plan, prepared by the design firm Arrowstreet for the city's Economic



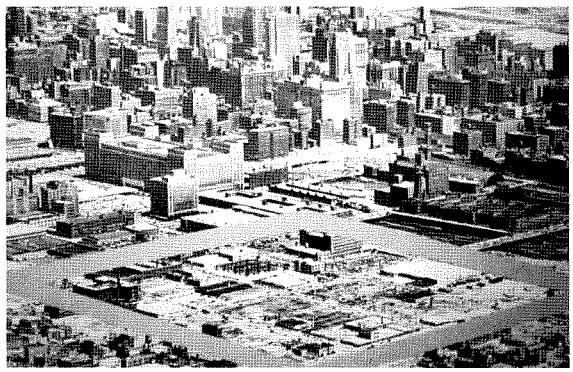

Proposal for Commonwealth Flats Industrial District. Buildings can accommodate industry, offices or studios. Some streets are pedestrian oriented, others are service oriented. Courtesy David Dixon.





Flatlands Industrial Park, Brooklyn, after (top) and before urban renewal, demonstrating the superblock strategy (1959).

Below: Chicago's West Central Industrial District (1956), an early industrial urban renewal project.



becomes a highly articulated and symbolic element placed in front of the factory to modulate the otherwise unrelieved mass of the factory box. On other walls, the only relief is an occasional row of clerestory windows that lets light into production and storage spaces. In urban areas, for reasons of cost and security, front office space tends to be represented only as a strip of windows at mezzanine level and a single large entry below. Blank side and rear elevations help give industrial districts a hard edge, but also create an uninviting streetscape.

The problem is not necessarily the large floor area that these factories seek; older manufacturing districts thrived with enormous, monumental loft buildings (sometimes 150,000 s.f. per floor) that not only have strong architectural character but also animate the street with their multiple entries and large number of workers. In urban renewal areas, however, factories can be several hundred thousand square feet on one story, one entrance and a loading area set back from the street. This building type provides the expansive, column-free space manufacturers favor for horizontal production methods, but it rarely incorporates other uses (restaurants, stores, etc.) at a neighborhood scale.

These problems are exacerbated by the application of suburban site planning principles, in particular the desire to create ample off-street parking and truck loading areas. These vast, passive open spaces result in reduced densities that are often

Industrial Development Corporation, suggested that buildings with up to four stories of industrial space and four stories of offices above (space for research and development operations, for example) would be economically feasible.

For the nearby Commonwealth Flats area, urban designer David Dixon has proposed a "kit of parts" of building and street types for a high-density industrial district. Mixed-use buildings would include industrial space on the ground floor and space for compatible, related uses, such as design or engineering firms, above. Industrial buildings would provide multilevel space for industry (such as high-tech assembly or food-related industries). Parking would be provided in garages.

Dixon also proposed that industry-related activities and pedestrian-related activities be segregated onto alternating streets. Buildings on "city" streets would have a consistent streetwall lined at ground level with retail and support office space. Pedestrian entries to all buildings, including garages, would front these streets. Wider "service" streets would provide space for truck circulation and loading.

Street character was also an important issue at Marine Park. Pedestrians routinely pass through the site, not only to get to work, but also to reach public spaces along the harbor, attend job-training programs and take industrial tours. The plan established a "public pedestrian zone" that included both streets and key features like harbor overlooks, a transit center and a public plaza. These would be positive, comfortable, interesting spaces — with well-defined streetwalls; plantings, signage and street furniture scaled to pedestrians; and building design that makes industrial processes apparent from public places

— Todd W. Bressi

incongruous with the surrounding urban pattern. They can be contrasted with older manufacturing districts, in which one-story factories or multistory lofts create a streetwall that helps establish the street as a positive, urban space. Parking takes place on the street, on consolidated open lots or within the building itself. Trucks load from the street or within the building. In the in-city industrial park, however, a factory will cover at most two-thirds of its site in order to provide off-street parking, loading and landscaping — spaces that are not active enough to animate the street.

Finally, industrial redevelopment plans still labor under the legacy of the urban renewal process itself, which has tended to replace older urban patterns with larger scale, lower site coverage developments. This history is well known in relation to housing projects: Slums were cleared and streets were closed so they could be replaced with tall towers arranged in large open spaces.

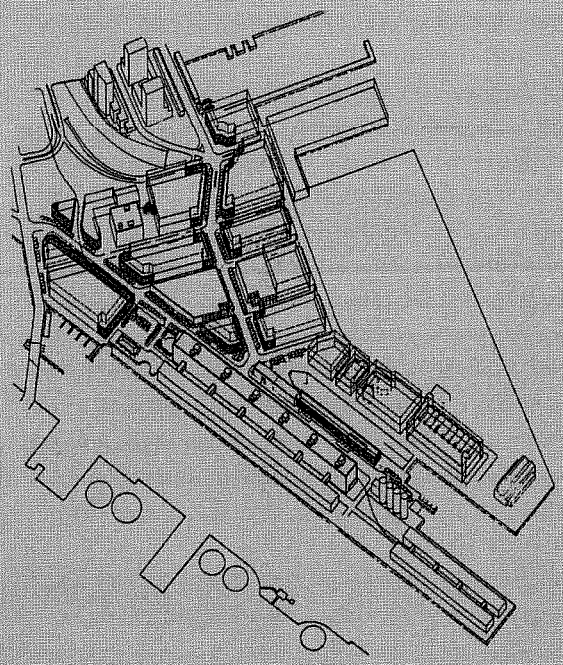
A similar strategy was employed for industrial projects. Of the 676 federally assisted urban renewal projects planned or underway in 1962, 119 were industrial, comprising 23 percent of the acreage of all urban renewal projects. Streets were closed to create superblocks large enough for the large horizontal factories and the associated off-street parking and loading. By closing some streets and allowing others to remain open, the superblock strategy was a compromise between the notion of a secure, limited access precinct and the need to make some connections to the surrounding street system.

Industrial urban renewal areas were planned in locations as disparate as Murfreesboro, Tenn. (1954), Norfolk, Va. (1956), and New York City. The 1956 cover of *Commerce* featured a photograph of Chicago's new West Central Industrial District district and boasted: "Slums like this make way for new industrial plants." Significantly, the photograph gives no suggestion of the district's urban location, despite its proximity to Chicago's Loop.

While the "tower-in-the-park" approach to housing has fallen out of favor, the model of recreating the suburban industrial park in the city has not been abandoned. Recent industrial redevelopment projects such as the Rheingold Industrial Park (Bushwick and Flushing Avenues, Brooklyn, 1987) and the Mid-Bronx Industrial Park (Bryant and Longfellow Avenues, Bronx, 1988) continue to rely on suburban planning principles.

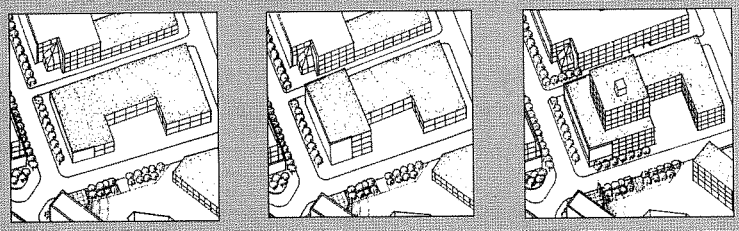
### The Industrial Park Considered: Bathgate

Several industrial urban renewal projects have been located in the South Bronx. A comparison between the existing Bathgate Industrial Park and the proposed Morrisania Industrial Park illustrates the powerful hold suburban industrial park principles have on city agencies and the difficulty such projects have



Left: Plan for Marine Industrial Park, showing possible buildouts and the use of building form to define public ways.

Below: Prototype building forms at three densities that mix industrial uses on the ground floor and studio or office uses above.



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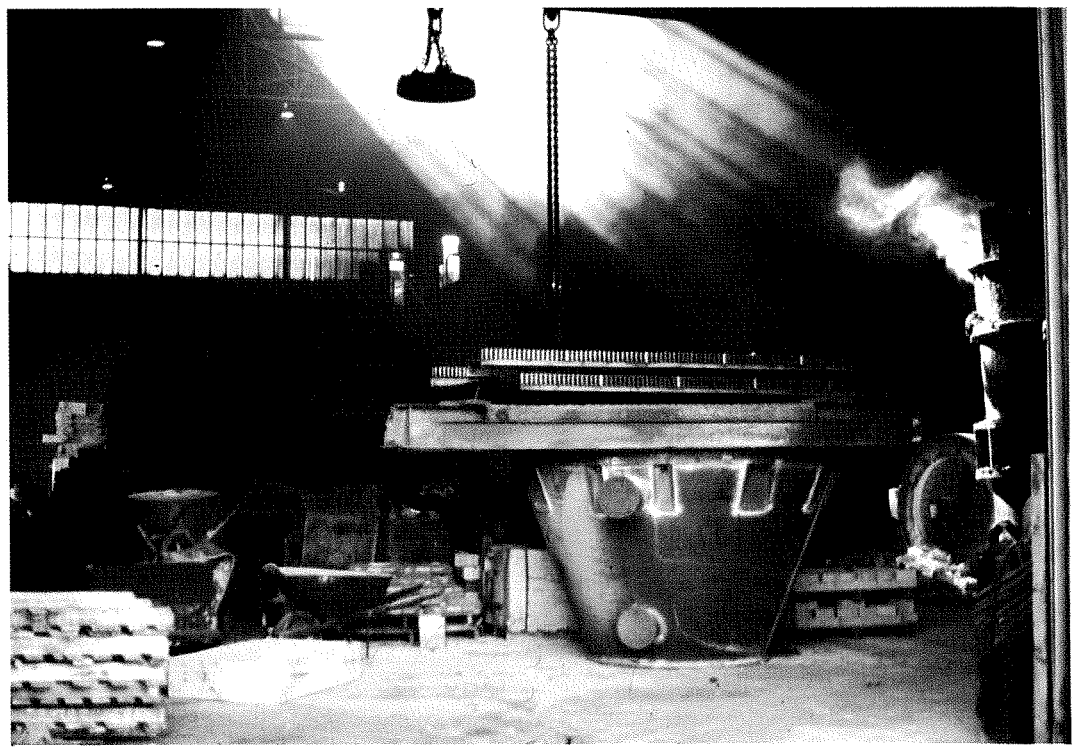


Heavy industry still exists near downtown Chicago in the Clybourn corridor, now designated a "planned manufacturing district."

in catalyzing renewal in surrounding neighborhoods.

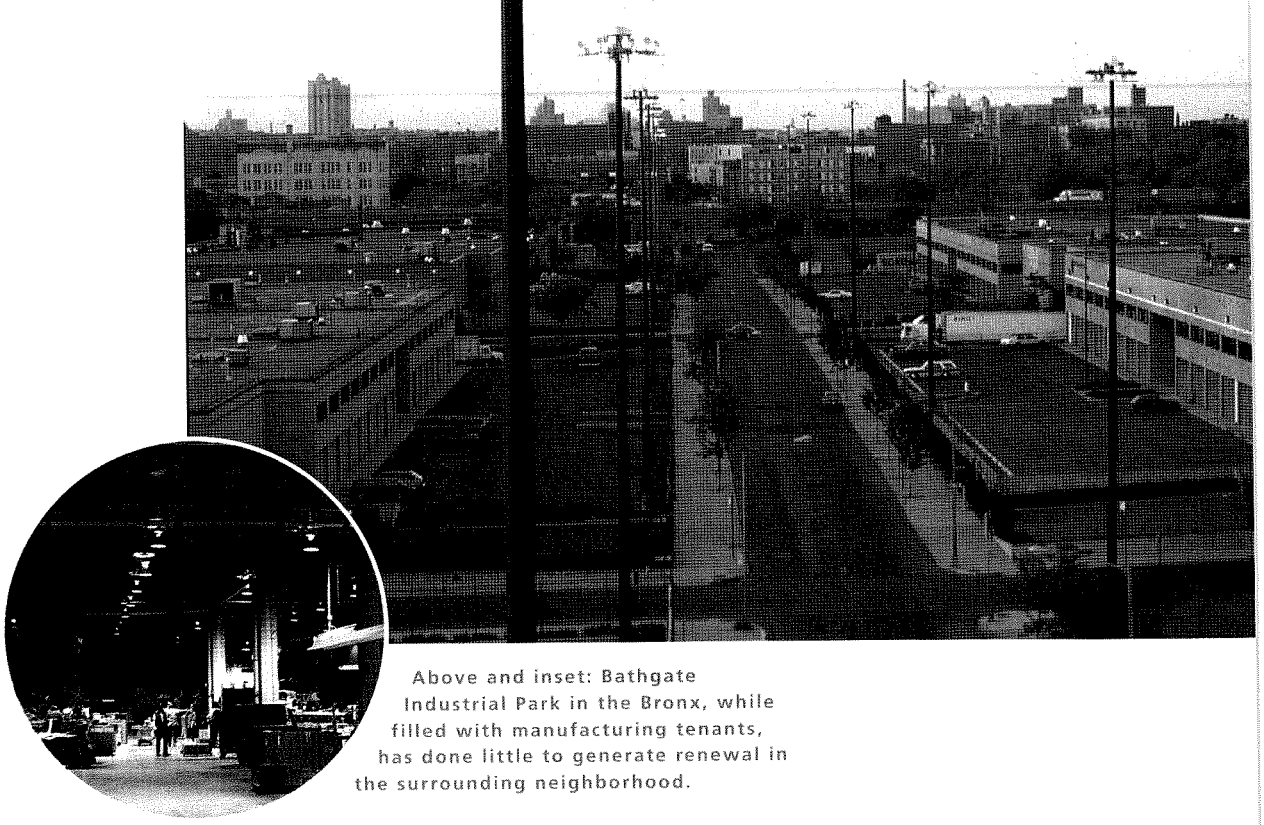
Bathgate, developed by the Port Authority of New York and New Jersey, occupies a two-block by four-block site, about 21.5 acres, along Third Avenue just south of the Cross Bronx Expressway. Six large horizontal factories have been developed there; each is about 70,000 square feet; each offers a simple masonry shell with high ceilings and a flexible, column free floor plan. Unlike most urban renewal projects, existing streets (Bathgate Avenue and several cross streets) were maintained.

Bathgate has been a success as far as industrial redevelopment is concerned, so much so that there are plans for expansion. It has been almost continuously occupied by a variety of industries, including printing and manufacturers of generic drugs, aircraft supplies, picture frames, and computer hardware. Bathgate employs a total of 1,550 people, most of whom are from the Bronx.

But Bathgate has not been a successful catalyst for renewal of the surrounding area. Neither of the two housing projects built recently in the area engage the industrial park. To the east, the Crotona Terrace Apartments project (1994) is oriented towards Crotona Park, turning its back entirely on Bathgate. New housing is being developed to the south, probably because this is the one edge of Bathgate where existing residential fabric was allowed to remain.

Bathgate is an alien presence in the neighborhood. Despite the continuity of streets through the site, it is widely perceived as a fortress because of the fences, the security patrols and the fact that the few windows and doors that exist face only the park interior. Looking north from Claremont Parkway, a view framed by the few remaining tenements, one senses the tremendous contrast in scale and density between the industrial park (marked by its flat production buildings and strange high-mast security lighting) and the more typical tenement-scale fabric of the Bronx.

Bathgate, according to its marketing literature, "combines the advantages of a well-supervised suburban industrial park



Above and inset: Bathgate Industrial Park in the Bronx, while filled with manufacturing tenants, has done little to generate renewal in the surrounding neighborhood.

The Bathgate Industrial Park site, before (left) and after (right) urban renewal took place.

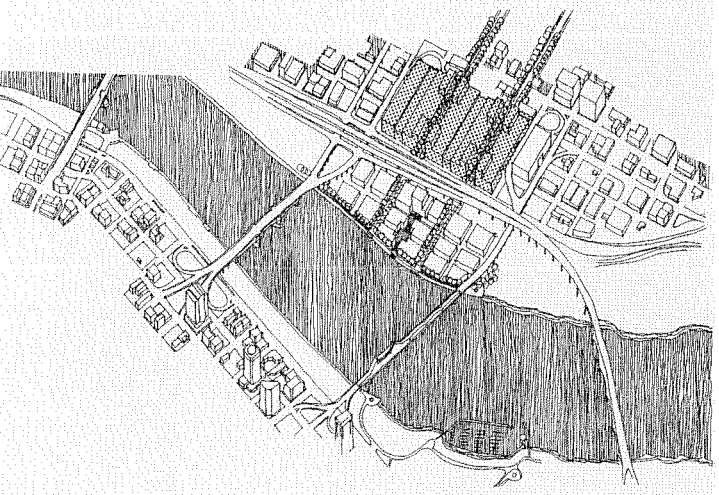
with a prime urban location." This statement is at least half true. Bathgate offers the advantages of a suburban industrial park, but it cannot possibly offer the advantages of an urban location if that is meant to include benefits like access to housing and business support services, the ability to share resources and information with companies in related industries, and local places to eat and relax. Ironically, because of the state of the surrounding neighborhood, a Business Assistance Center was built within the park to provide support services, such as photocopying, postal, secretarial and restaurant services — the very things that a truly urban location would offer.

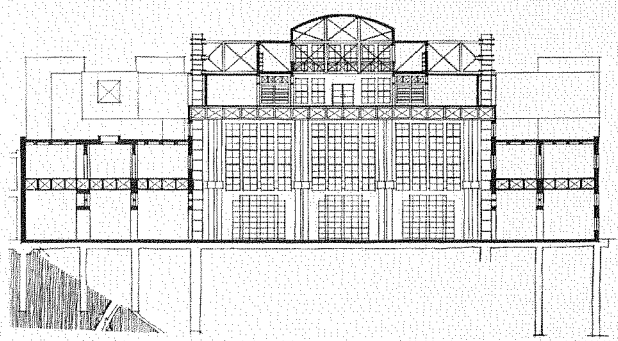
### The Industrial Park Reconsidered: Morrisania

The Morrisania Industrial Park has been proposed for an island of industrially zoned land in a desolate neighborhood at the geographic center of the South Bronx (although plans now are on hold). The site is especially attractive because its unusual street configuration produces a number of over-sized blocks that contain what the city calls "mid-range industrial sites," parcels of 25,000 to 100,000 square feet that are difficult to find, even in the de-urbanized South Bronx. Unlike most urban renewal projects, no streets will have to be eliminated to accommodate horizontal factories.

In a number of ways, the city's proposal for the Morrisania Industrial Park represents a new direction. It accepts a mixed-use approach to the site, allowing community facilities (churches, a post office, a fire station) and even tenements to remain, at least in the short term.

More importantly, the proposal is organized not around an inward-looking parking and loading space but along a street, Washington Avenue, which connects two residential areas — the Claremont Village public housing project and Melrose Commons. The plan calls for developing Washington Avenue as an urban amenity and all entrances and front office spaces associated with the industrial buildings face this central street.





Illustrations courtesy James Pettinari.

## A Twenty-First Century Production District

Sandwiched between the east bank of the Willamette River and a commercial corridor a few blocks inland is one of Portland's "industrial sanctuaries" — districts in which zoning protects industry from the speculative advance of housing and offices. Several years ago University of Oregon architecture professor James Pettinari led a series of community charrettes to design a "Twenty-First Century Production District" characterized by mixed uses and modern industry.

The proposal shown above, one of several alternatives, couples a waterfront park with a "superblock" scheme for the sanctuary. Pedestrian-oriented streets run from the park through the sanctuary, connecting to the Union/Grand commercial corridor and neighborhoods to the east. These streets alternate with industrial service streets. The superblock edges along the pedestrian streets would contain retail, commercial and showroom uses; along the service streets they would be devoted to truck access. The larger-scale drawing shows the head building of a river-edge campus; it includes meeting and exhibit halls for industrial and public use.

Instead of making a clearly defined and defensible precinct, such as Bathgate, this proposal attempts to make connections to the neighborhood.

Ultimately, the Morrisania Industrial Park would be subject to the same limitations as other industrial parks. It would be comprised of large, windowless factories, covering at most two thirds of their sites. Open space would be configured in a way that reflects only haphazard land ownership patterns, instead of a clear urban design intent. The problem of the vast parking and loading areas has not been solved but, simply, moved to Third Avenue, also an important local street. Placing front-office functions along Washington Avenue will not add much life to the street unless they are expressed more strongly in the building design than has been typical for new in-city factories. Most importantly, the plan does not include the non-industrial uses that the manufacturers depend upon and help comprise integrated, working neighborhoods — restaurants, shops, recreation facilities, support services, even places to live.

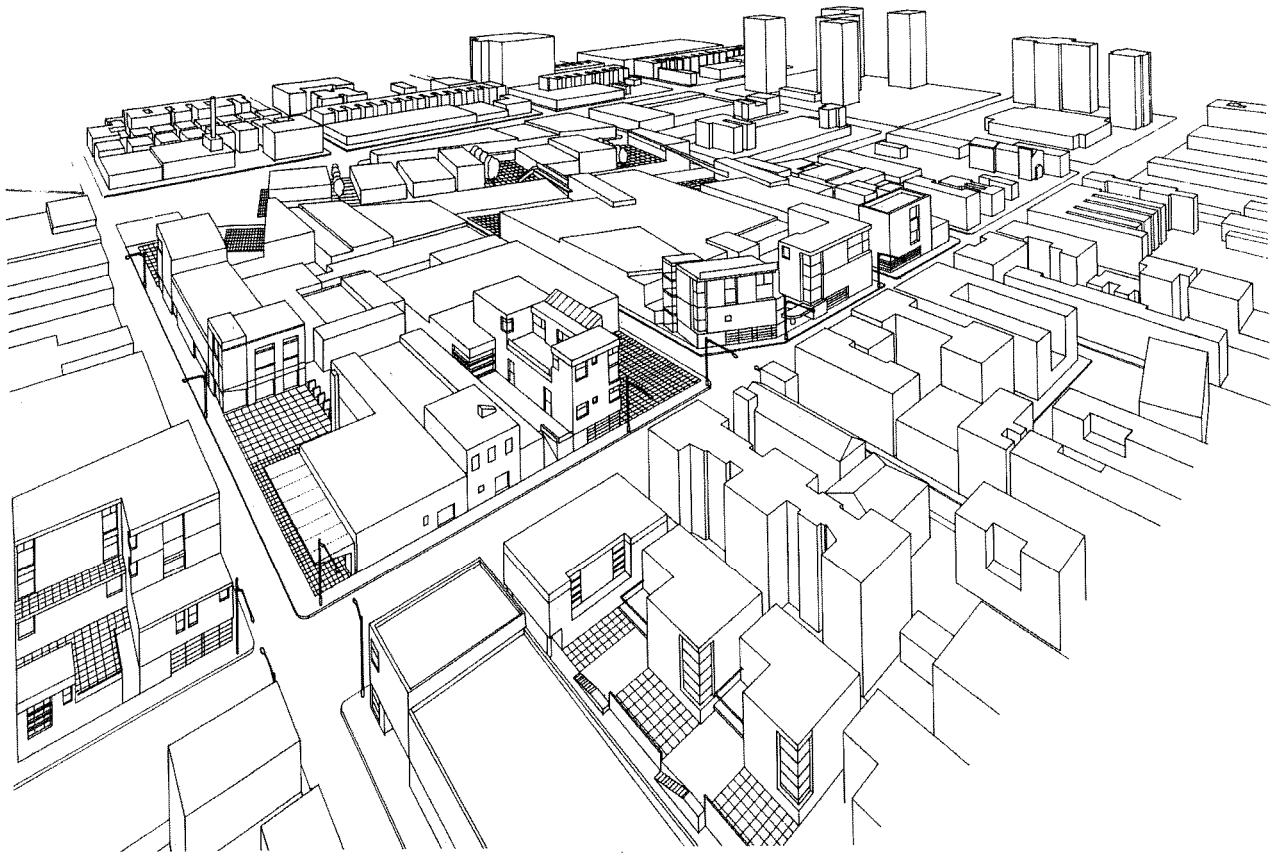
There is no argument in the surrounding community about the need for public and private investment. But as much as the community wants industrial jobs, it also wants housing because repopulation will bring more political representation and power. There is real skepticism in the community that the Morrisania Industrial Park will bring renewal to the neighborhood.

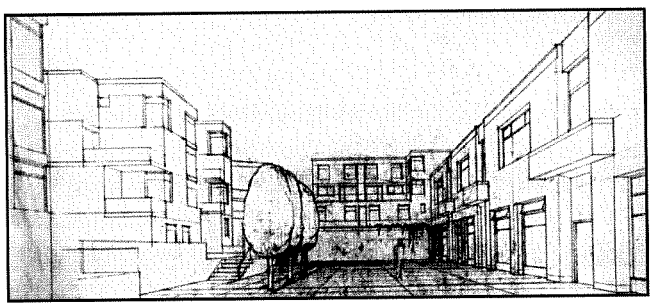
### Morrisania as Middle Ground

The following proposal for Morrisania builds on the model of New York's working neighborhoods, in which manufacturing is part of a continuum of economic and social activities. It suggests ways in which the separation of housing and industry can be compromised in favor of a more complex and finely-scaled mix of activities — one that reinforces the neighborhood's physical, social and economic structure and reconciles the city's desire for industry with the community's desire for housing.

This proposal also accepts the principal features of a 1990 community plan prepared with the help of Columbia University's graduate planning program. That plan calls for both residential and industrial development in the area, with industry confined to the blocks west of Washington Avenue, which would function as a residential spine.

There are two strategies for combining housing and industry and for structuring open space. The first occurs along the west side of Washington Avenue, where blocks of housing are placed in front of or intersect with factories. The residential buildings modulate the massing of the factories, which would otherwise remain unarticulated utilitarian boxes, and maintain the character of Washington Avenue as an important residen-





Alternative proposal for developing a manufacturing district in Morrisania.

Above: Looking northwest. In foreground, live-work buildings, housing and associated spaces east of Washington Avenue. Housing fronts production buildings on the west side of Washington Avenue.

Left: Typical interior of mixed-use perimeter block east of Washington Avenue.

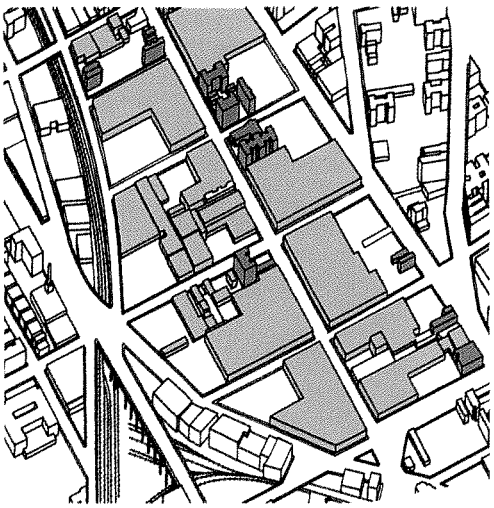
tial spine. Essentially, the residential buildings become the facades of the factories; at some locations, the first story of the housing penetrates into the factory at the mezzanine level.

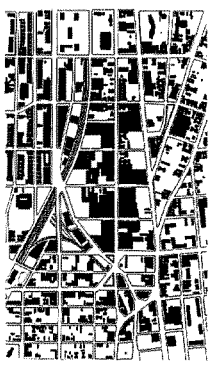
West of Washington Avenue, large, horizontal sheds would be the basic factory type, as at other in-city industrial parks. However, exposed masonry factory walls would be glazed at the clerestory level, keeping with precedents for this type of building. Production buildings would be configured so that they could be subdivided and include additional entrances for multiple users.

Shared off-street parking and loading spaces would be staggered throughout the area west of Washington Avenue; some parking would be located along a railroad cut on the west side of the site and connect via a series of bridges. Parking and loading spaces would be configured to create a sense of spatial order and be located so that they reduce the occurance of streets fronted by unarticulated building walls on each side.

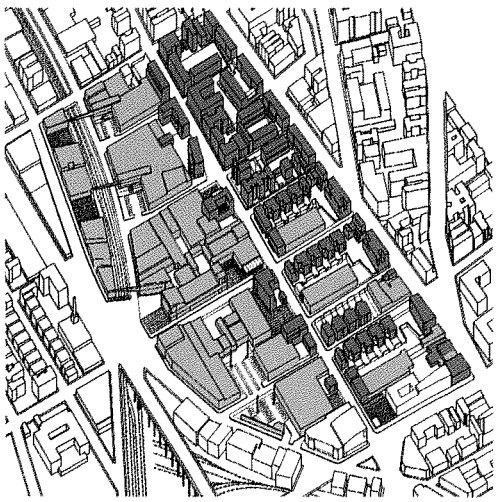
East of Washington Avenue, the proposal suggests another way to bring housing and industry together. Here, industrial buildings would penetrate blocks that are mostly comprised of housing. They would be smaller in scale than those west of Washington Avenue, constructed on the module of the housing and glazed extensively. They would contain industries of a small, almost artisan scale, some of which would provide support for the larger industries west of Washington Avenue.

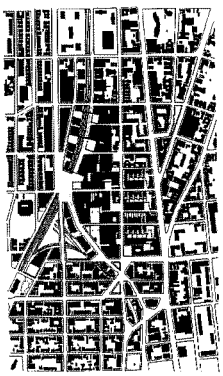
The residential and industrial buildings would be arranged with strong streetwalls along the perimeter of the block. The grade change between Washington and Third avenues would



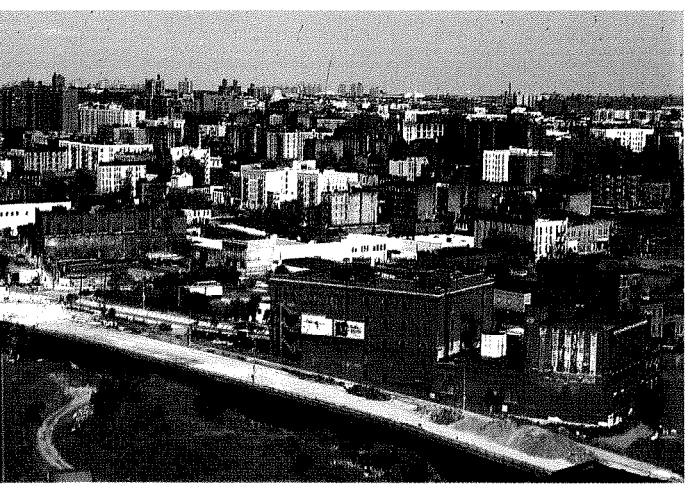


New York City's proposal for Morrisania Industrial Park. The street pattern is retained, but many existing buildings are demolished and no new housing is proposed. Housing is orange; industrial buildings are pink.





Alternative proposal that retains most existing buildings and closely integrates housing and industrial development. Housing is orange; industrial buildings are pink.

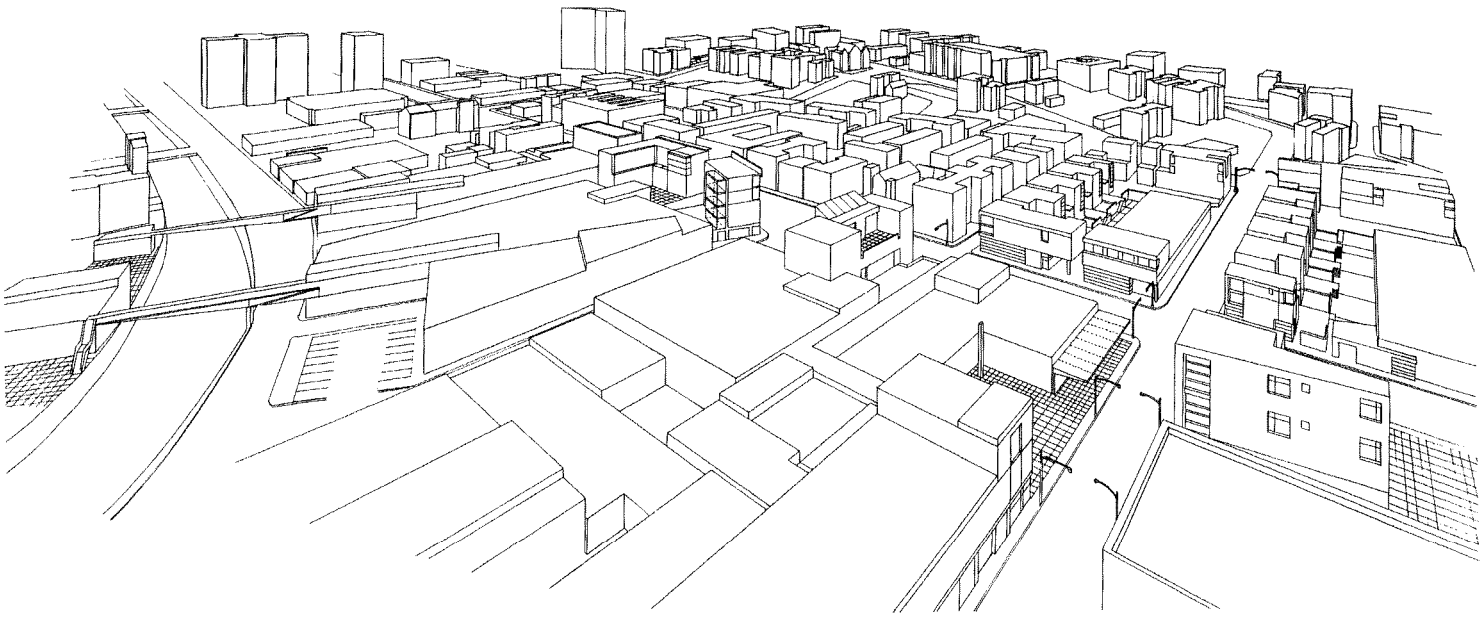


Site of the proposed Morrisania Industrial Park in the South Bronx.

enable the space within the perimeter block to be divided along its length, creating both private backyards for the housing and a semi-public space along the side of the factory.

This proposal would animate the streets and make connections among the different activities in several ways. Most current residential, commercial and community uses would be maintained, preserving a variety of activities and building types. As in active manufacturing neighborhoods, the ground floor of the residential buildings along Washington Avenue would contain small retail, service and manufacturing establishments, and the scattered parking and loading areas would generate pedestrian traffic and create opportunities for street-level retail to be interspersed with industrial development.

This proposal for Morrisania represents a middle ground between two scales. One is the fine scale at which diverse but interrelated activities coexist in New York's working neighborhoods, where a single artisan may live and work in a row house or above a storefront shop. The other is the coarse scale at which manufacturers occupy industrial parks, where a single factory may be as large as an entire block. The bridging of



Alternative proposal for developing a manufacturing district in Morrisania.

Above: Looking northeast, towards the mixed-use perimeter blocks east of Washington Avenue.

these scales is critical for building neighborhoods that work for manufacturers and residents alike.

### Why Industry Can Work

Although there is a great deal of skepticism about the future of urban manufacturing, cities like New York have an important advantage: the economies that result from access to firms involved in complementary activities, to design, marketing, research and sales services, and to large consumer and business markets. This advantage is especially important for emerging industries that develop high-end, short production-run items, where the cost of the finished product is less important than the quality of the design and the ability to market it quickly.

While there will always be a need for some large-scale, isolated industrial sites in cities, the changing nature of production suggests that industrial development must also become more finely tuned. The tools of zoning and urban renewal must recognize the diverse mix of uses characteristic of true working neighborhoods.

A number of factors — building typology, zoning and the urban renewal process — have resulted in the substitution of industrial park planning for industrial district planning, favoring the creation of large, single-purpose developments. For industrial redevelopment to succeed, it will have to accommodate to the smaller scale enterprises that are the true strength of an urban location. The greatest obstacle is not the formal problem of combining disparate uses, but overcoming the prejudice that has made the suburban industrial park the totem of the reformed city — and has branded the working quarters of the industrial neighborhood a symbol of a dying past rather than a vibrant future.

Alternative proposal for developing a manufacturing district in Morrisania.