

# Reurbanizing the Box

## Speculations

Robert N. Lane



## Introduction

Despite decades of retrenchment and despite the more recent sensational stories of the collapse of the auto industry, manufacturing, is actually leading the United States recovery at a pace that is three times that of the rest of the economy. (*WSJ 01.19.2010*). For urban designers and planners, this raises fundamental if familiar questions about the places of production in cities and of the kinds of lands and buildings that may be needed. At the same time, large scale retailers continue to look for opportunities in the cities, often turning their eyes to the large tracts of underutilized industrial land that suit their needs for space and highway access. In 20\_\_\_, on the once bustling Red Hook waterfront in Brooklyn, IKEA opened a major store. A more recent controversy is the proposal to build a Wallamrt in Brooklyn.

The redevelopment of underutilized industrial land for suburban scale superstores has revived the debate as to whether these properties should be preserved for manufacturing and warehousing or given over to retail commercial uses. Ironically, this debate has overlooked a surprising convergence, both in terms of building form and site planning, between new industrial park redevelopment projects and the new retail facilities. Both are large, single story forms with few openings, little articulation, and limited orientation. The sites are open with low coverage. Many of the same issues have been raised about both kinds of developments - that they connect poorly to context and present large expanses of masonry wall to the street. This essay examines the origins and meaning of this convergence and explores the possibility of a new paradigm - that a more flexible approach to the "big box" might accommodate multiple programs over its life.

On the one hand, the very things which we deplore most about both the big box factory and store - its lack of specificity - may actually be an opportunity to be exploited: to the degree that the building is non-specific in terms of its internal programmatic requirements, the building may be

able to respond to the external requirements of its context. The same may be said of the site plan: while we may long for the sophistication with which automobile, pedestrian and truck circulation was handled in the earlier regional shopping centers, the fact that only the most basic infrastructure is provided for the big box should theoretically leave a site that is more easily re-used.

On the other hand, the fact that the big box volume is apparently simple does not obviate the fact that there are a very limited number of programs that can easily occupy a single 120,000sf windowless shell. Large loft structures - the "big box" factories and department stores of an earlier day - have proven to be tractable over time despite the fact that they are highly specific in terms of architectural expression, exterior wall and often footprint configuration. These are issues of scale of interior structure, ability to subdivide, and relationship to street wall that this essay will consider.

The underlying premise of this exercise is that the tractability or reusability of a structure and site as large as a big box factory or big box store, and the ability of a structure to support a variety of uses over its life span, is a measure of its success as a building: a reusable site may become part of the collective memory of a neighborhood as it is reused and reinterpreted over time; a reusable site will not become a "white elephant" burden on the community after its first generation use is expended; and a reusable site will conserve the public investment in infrastructure.

Most importantly, the formal explorations that follow will illuminate a number of important issues, including: the value of a contingent approach towards the management of large sites; the limits of the public interest in large sites; and the role of infrastructure in shaping the built environment.

This exploration is about both space and time, exploring the ways in which design can anticipate the requalification of urban sites.



Industrial "Big Box" at the Bathgate Industrial Park, Bronx, NY



Retail "Big Box"



Sears Department Store, Brooklyn (1930)



Spring Creek Industrial Park, Brooklyn 1950

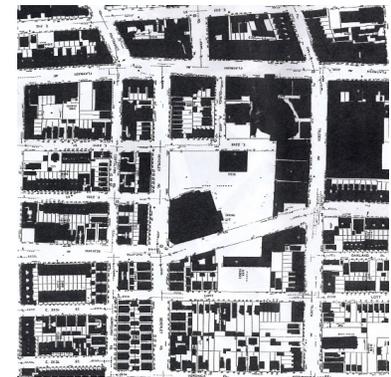
## Complexities and Divergence

The apparent convergence of industrial and retail building types is only the most recent manifestation of a complex, shared history of the two development types, punctuated by a number of other earlier coincidences not only of form, but of attitudes towards the city, the suburbs and the landscape. This shared history is complex because a wide variety of configurations for both retail and industrial developments are evident at different times, defeating any categorical classification that might, for example, place all automobile-oriented stores in the suburbs or all dense industrial districts in the city.

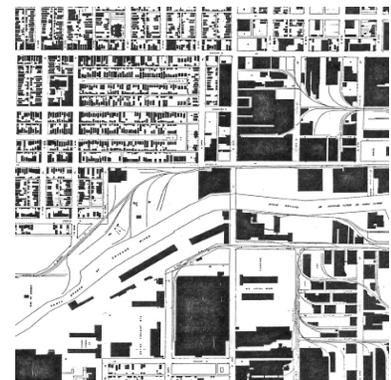
Single story, auto-dependent configurations for both department stores and factories - in many ways the precursors to the suburban retail and factory Big Boxes of today - actually appeared first in the city as early as the 1930's. In Flatbush, Queens, Sears built one of the first automobile-oriented shopping centers. By this time as well, the one-story factory had begun to replace the loft factory in the city, a result of Taylorization and horizontal assembly methods and the demise of gravity-flow production techniques. New low-rise manufacturing districts, the precursors of the urban and

suburban industrial parks of today, were pioneered not in the suburbs but in downtown Chicago at the Crawford Industrial District (1931) and in New York City at Spring Creek (1952). These early urban retail and industrial developments shared a number of characteristics and interestingly, were well connected to the surrounding street network.

In the suburbs as well, a number of characteristics were the same. In this early period, industrial district planning was more than just an exercise in pure utility as industrialists, like their retail counterparts, sought to give their districts a distinctive character, to name it often after some distinctive landscape feature and, as at a shopping center, to find a large, prestigious "anchor tenant." As with retail developments, the highway was exploited for its drive-by advertising value. The horizontal expression that characterizes the architecture of so many of the retail developments of this period, is also characteristic of many of the factories in these early districts, and the often exuberant articulation of the offices and entry clipped onto the front of the industrial shed spoke to an enthusiasm and faith in commercial and technical progress.



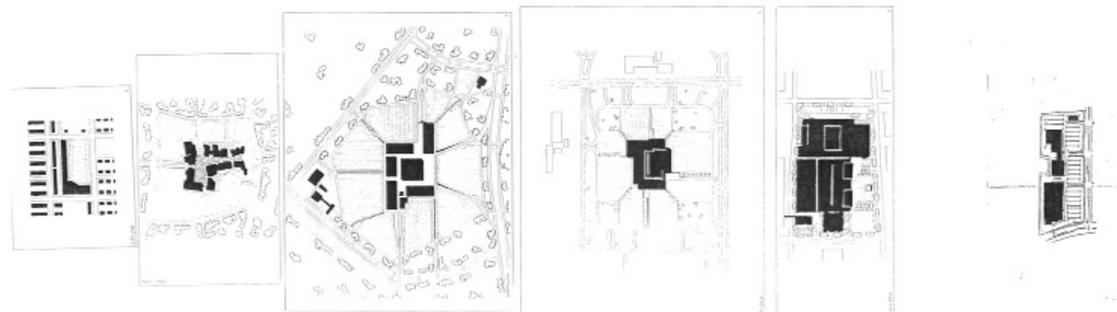
Sears Department Store, Brooklyn (1930) Early auto-oriented shopping in an urban context



Crawford Manufacturing District, Chicago (1931) Many early urban industrial districts were low-rise but connected to the city grid.



**Industrial Districts, 1930s to present.** This progression is marked by reduced density, decreasing scale of buildings and more integration with context.



**Retail Districts, 1930s to present.** This progression is marked by increasing scale of buildings and more--autonomy from context.

However, once freed of the constraints of an urban location, the suburban retail and industrial developments began to evolve in different ways as each responded to very different internal and external pressures, revealing not only differences in program, but fundamental ideas about landscape and settlement. Two representative and contemporaneous developments, the Park Forest Shopping Center (1954) and the New England Industrial District (1954) reveal the degree to which the two kinds of developments differed, in terms of overall site size and coverage, connections to context and relationship to the automobile.

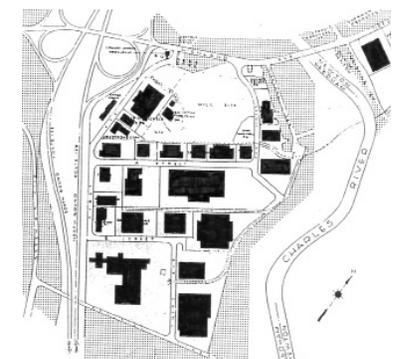
Retail developments, driven by economies of and growing dependence upon, and convenience towards, the automobile, would become progressively larger, integrated mixed-use complexes. The

progression from convenience center, to pedestrian and regional shopping center, to enclosed mall and mixed use center is marked by the ever increasing scale and autonomy from context.

Industrial developments on the other hand, driven by the shift towards smaller, cleaner light manufacturing (while continuing to be intensive in terms of land use), would become progressively less dense, more picturesque in lay-out, and more specialized in terms of use. The progression from suburban industrial district to industrial park to research park is, unlike their retail counterparts, marked by decreasing scale of buildings and more integration with context.



**Park Forest Shopping Center (1954)**



**New England Industrial District**

## Convergence

Over the last several decades, industrial and retail developments have begun to converge again. A gradual erosion of the technical and programmatic forces that informed the differentiation between retail and industrial typologies as well as the re-agglomeration of these activities into new mixed-use ex-urban centers, has leveled many of the earlier differences.

Profound changes in the manufacturing economy have enabled smaller, cleaner manufacturers to co-locate (as was the case in the loft factories) with different kinds of uses. Warehousing, retail, office, research and development, and light manufacturing are now located on the same site or even within the same building. The rigid exclusionary covenants of the first industrial parks have given

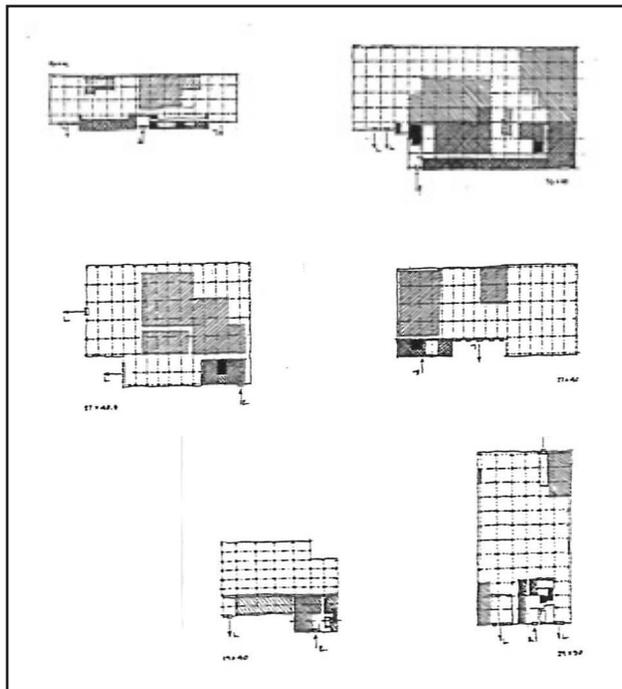
way to performance guidelines and other flexible regulatory tools that can accommodate not only mixed-use, but *blurred*-use, so that the industrial park has been superseded by the “mixed-use business park”.

The convergence around the mixed-use/blurred use program has given rise to hybrid building typologies. Warehousing has become an increasingly larger proportion of both factory and retail building types. The big box superstore, in order to exploit economies of scale with wholesale distributors and take advantage of the willingness of cost-conscious consumers to serve themselves, devotes more space to accessible warehousing - resulting in a hybrid building: the warehouse/store. Similarly, in manufacturing buildings the proportion of space devoted to warehousing is increasing, resulting in hybrid building: the factory/warehouse

(with the automated warehousing and distribution systems tending to determine building form).

Unfortunately, there is also a convergence around impoverished architecture, a paucity of expression that is a function not only of economy, but of a loss of content. Both the department stores and the factories are increasingly becoming the singular box, the object building bereft of articulation. The department store had been a way of projecting corporate identity and the suburban shopping center sought to evoke images of the “town center.” No longer. The retail big box is stripped down to its essential warehouse form with only the minimum amount of expression reserved for the entry and signage.

In the same way, the articulated front office and the clerestory glazing of the earlier single story



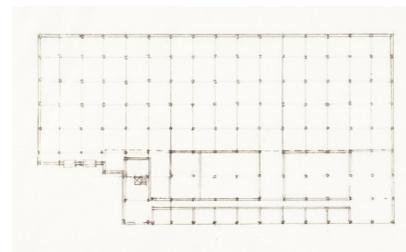
Factory Plans:  
Dark shading indicates office and entry. Light shading indicates warehousing and distribution



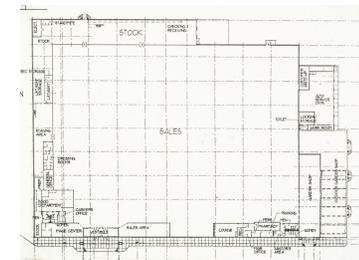
Industrial “big box” interior:  
Home Depot, NY



Retail “big box” interior:  
IKEA, Brooklyn, NY



Industrial “big box” floor plan:  
Rheingold Industrial Park, NY



Retail “big box” floor plan:  
Home Depot, NY

factories have been abandoned, reducing the new warehouse/factory to the most basic and unrelieved volume. While the office functions tend to be located in a zone along one side of the factory, there are few attempts to modulate the unrelieved massing of the utilitarian shed by articulating as built form, some program element. Recent factories such as the Display Creations Building in Brooklyn reveal that the continuous clerestory, so characteristic of the earlier lot-line factories, is now gone and with it the horizontal expression and structural transparency that helped relieve all four sides of the production shed. The only articulation of the building takes place along one side of the factory only, and this singular orientation, so characteristic of the suburban industrial park, results in huge expanses of blank masonry walls along the streets of the city.

This raises the question of whether there may be, as there was in the 1950's, a shared aesthetic for the big box that would both relieve its current deadly state and support the reuse of the structure for either industry or retailing.

**Site Planning** Both developments have sought out oversized sites larger than the existing block and street system with good highway access in places where there are few sensitive adjacencies, creating developments that are often out of scale with, and relate poorly to the context. Interestingly, for both kinds of developments, a two-block superblock is an ideal site size. A 120,000 square foot superstore with 6000 parking spaces requires almost exactly the typical New York City superblock. As it turns out this is also the ideal size for new industrial districts. Coverage for both kinds of developments is similar: industrial developments which are required to have spaces for off-street loading, and parking, have reduced the site coverage from 60% (Bathgate) to as little as 50% (East New York Incubator). Even at the Display Creation building, perhaps the closest to the traditional lot-line shed, the factory is set back from the two wide streets, presenting a fenced-in parking lot

along the primary frontage.

The apparent convergence of big box retail and factory types is in large part due to the desire to replicate in the city the planning principles of low-density suburban sites. While it is true that when real estate values justify it, big box retailers will build more complicated structures and develop more sophisticated site plans, in general retailers try to replicate the specific layout and merchandising strategy which they have invested so heavily in and which their patrons find familiar.

It is true that not every new urban factory has become the most basic box. But in general, manufacturers are self consciously trying to replicate the advantages of the suburban industrial park in the city, particularly in terms of off-street parking and loading and separation from context, a tradition that dates back to the first industrial urban



Industrial "big box" entry:  
Rheingold Industrial Park, NY



Retail "big box" entry:  
Home Depot, NY



Industrial "big box" site plan:  
Rheingold Industrial Park, NY



Retail "big box" site plan:  
Home Depot, NY

renewal project of the 1950's, such as the Flatlands Industrial Park, and is the basis more recently for the Bathgate and Rheingold Industrial Parks.

Attitudes towards orientation, service and entry, which were so different in the suburbs, have also become similar. Earlier pedestrian malls such as Park Forest, because they could be entered from any side, handled the separation service and entry with considerable discretion and sophistication. In contrast, the internalized site plan of the industrial park meant that the factories could be essentially singular in their orientation: All of the formal entry and presentation takes place one side of the factory and service activities behind, out of view.

With the advent of the superstore, the legacy of resolving the service-and-served dimensions of the site plan in an architecturally sophisticated way is abandoned, and the ready formula of the industrial park - of separating entry and service functions by simply placing them on opposite sides of the box - is adopted. Site planning principles are reduced to two rules: maintain frontage of a highly visible entry along the parking lot and separate car and truck traffic as much as possible. Now both the shopping center and the factory share the issues created when a development type with only one orientation is set in a context where there are two or more important edge conditions. No longer considered a comprehensive architectural problem, the site plans are not complex enough to respond to the vagaries of different locations and the singular orientation is awkward on sites with two or more important streets.

### Infrastructure Reconsidered

Both development types raise interesting issues about how infrastructure is used to shape future development.

Industrial district planning, especially in suburban contexts, has been based not on a comprehensive design, but on a strategy for extending infrastructure as needed so that individual manufacturers can build out the district over time according to their own requirements. The need to provide this flexibility has resulted typically in districts that are more dispersed and less comprehensive than their retail counterparts. Buildings rarely have anything to do with each other and the spaces between them are purely residual.

Retail developments on the other hand - with the notable exception of some of the recent superstore malls - were traditionally conceived, designed and built as comprehensive projects according to an overall design for both architecture and infra-

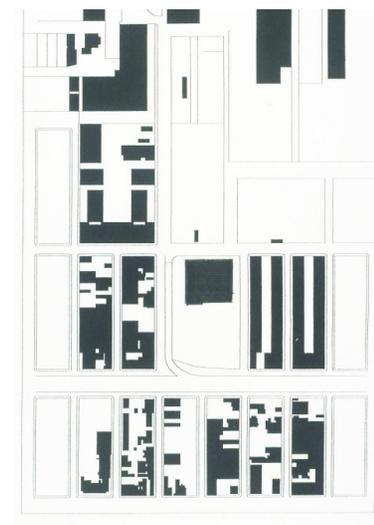
structure, accounting for the density and unified image of traditional malls and shopping centers, and their often sophisticated entry and service functions.

However, with the advent of the big box, retail district planning has become essentially infrastructure planning, as the planning of industrial districts had always been. So complete is this convergence of industrial park and power center planning that there are now "power parks" in which individual retailers in-fill a pre-established infrastructure on a lot-by-lot basis, just as manufacturers had always done in industrial parks.

This raises a fundamental urban design challenge: what happens when expandable site planning strategies come up against constrained urban contexts.



Bathgate Industrial Park, Bronx, NY.  
The two-block superblock as industrial park.



Price-Costco , Brooklyn, NY  
The two-block superblock as big box superstore site.-



## Complexity

The convergence around so many aspects of the big box factory and the big box store, would seem to make the two nearly interchangeable, but there are a number of issues which must be addressed and which inform the formal speculations that follow.

First, despite the formal similarities in the site plans, there remain fundamental differences in attitudes towards service and entry. The superstore site plan is driven by the relationship between the building entrance and the parking lot and the need to separate as much as possible the car and pedestrian traffic from the truck traffic, mirroring internal prerogatives - product is delivered to one side of the building and taken out the other. In contrast, industrial district planning does not require the single minded separation of service-and entry orientations. In fact, it is nearly the opposite, with truck service and front office entrances often near one another, sharing a common orientation to the center of the industrial park

The interchangeable use of industrial and retail big box sites must also resolve differences in context connections. In keeping with the early pedestrian malls such as Forest Park, which made deliberate and well considered connections to their neighborhoods (thereby reflecting the civic role these new shopping centers were thought to fulfill), the superstore site plan is as open as possible to maximize the visibility of the superstore. The industrial district site plan, on the other hand, in keeping with the tradition established by the early suburban industrial developments such as the New England Industrial District, is driven by the need to create an internalized precinct, and thereby avoid land use conflicts and encroachment by “higher and better” uses. Sites were safely buffered from nearby residences and connections to local through streets were avoided. In keeping with this formula, urban industrial parks are organized around a common interior service court - formerly the street down the middle of the superblock - created by setting

the buildings back to allow room for trucking operations. The backs of the factories are pushed up against the perimeter streets, creating a hard and defensible edge. This hard edge is not only about internalizing service operations, or even utility, but about defending manufacturers against conflicts and encroachment with other uses. Recycling the big box site plan would have to reconcile this fundamental difference of open and closed site plans.



Industrial district - aerial photo



Superstore site - aerial photos

## Reusing the Box

In terms of re-use for industry, a single large manufacturer, or more likely a combination manufacturing/assembly/warehousing operation, would most readily adapt the prototypical big box store, although a number of issues would need to be resolved. The warehousing component of the factory has some basic requirements including bay height and spacing. The 16 foot to 18 foot clear heights within the retail big box, while suitable for most light manufacturing operations, will not work for the warehouse component, where ceiling heights of between 22 feet and 24 feet would be required to create a truly flexible building capable of accommodating automated warehousing as well as a mezzanine for either front offices, shop supervision, or whatever gravity flow production activities may be required. A more tractable big box might actually be higher than some of the current large retail warehouses.

Other internal programmatic differences must be resolved. This is apparent in a comparison of the two floor plans - a factory and a K-mart - of roughly the same size. The internal layout of the K-Mart is completely and intentionally non-hierarchical: one is meant only to wander in as non-directed way as possible, exposed incidentally to as much merchandise as possible. In contrast, the layout of the factory floor, despite the relatively small manufacturing component, never the less is driven by a specific sequence of operations. Such issues impact the exterior of the building in terms of location of entrances, truck docks, and to a lesser degree, building services.

In addition, the flow of material to the superstore is one-directional: material is delivered only to one side of the building, it moves to the sales floor and is taken out in smaller scale units by customers. The factory, however, must be configured not only to receive materials, but to ship them. This requires additional loading docks which again, may

be located in accordance with specific production processes. A more tractable big box would anticipate new openings on various walls of the shed and minimize the number of fixed program elements along the perimeter.

The most fundamental problem with reusing the big box is the difficulty in subdividing the large, square footprint for the multiple smaller manufacturers who dominate the current market for industrial space and who need between 40,000sf to 10,000sf. The strongest demand in the city and suburbs is for so-called "flex" industrial buildings. These are relatively small buildings (10,000 to 60,000 square feet) that can be easily subdivided or re-configured for different kinds of users. These buildings tend to have long, narrow footprints making multiple entrances and loading docks possible.

At the Bathgate Industrial Park(1980), however poorly the buildings relate to the street, the typical factory has certainly lived up to its billing as a suburban -style "flex" building. One building has been subdivided to contain institutional uses and warehousing. In the south half of one building, the tenant, Continental Bakeries, created a factory retail outlet, selling their products directly to the local market and finally giving the Bathgate Industrial Park, at least along one small portion of its massive and unrelieved facade, a storefront presence on 3rd Avenue. The building footprint, roughly 45 feet deep, produced a building that in fact is reusable and has been adapted for four use groups - manufacturing, warehousing, retail and institutional.

The factories at the Flatlands Industrial Park on the other hand, which were built in 1955 to suit the single users typical of that period, are between 425,000sf and 325,000sf and have been difficult to subdivide. This is apparent in the most recent adaptation of the building where the location of the front offices and the loading docks at opposite sides of a 300 foot wide building, has made it nec-

essary to create an extremely inefficient, long and narrow spaces for new, smaller tenants. A more tractable big box should anticipate the subdivision of the deep footprint of the superstore or large warehouse/factory.

## Formal Explorations

In the drawings that follow, a variety of formal speculations are presented and their implications for a more tractable box are explored. These attempt to restore layers of complexity while accepting the basic size and configuration of the superstore. While there is no one typical site for an urban superstore or factory, the two-block superblock with two or more important frontages is the basis for the formal speculations that follow because it is the generic site that captures the common characteristics of many of the superstore sites and condenses most of the issues. In fact, the formal speculations that follow are informed by a strategy that can be the basis for urban design guidelines: specifically, the separation of the edge of the site from the interior of the site. While urban design guidelines may focus only on the plane of the street wall, here the principle is expanded to create a perimeter zone that has depth within the site. Through this "edge and core" strategy, the interior structure can become neutral and generic, perhaps even larger and less descript than the current big boxes, in order to allow the edge to become architecturally expressive and to house multiple uses more in scale with the street. While this strategy is not new, this research will show that it is particularly relevant for this problem and solves a number of issues - not just of a single street wall, but for the proposition of re-using the big box building and site for industry.

## Issues of Program

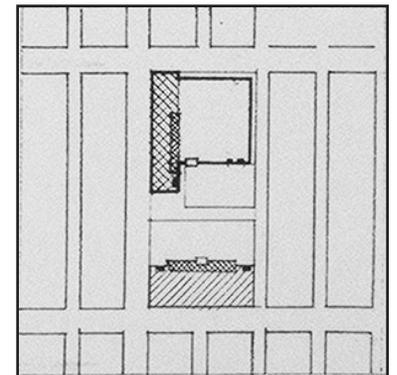
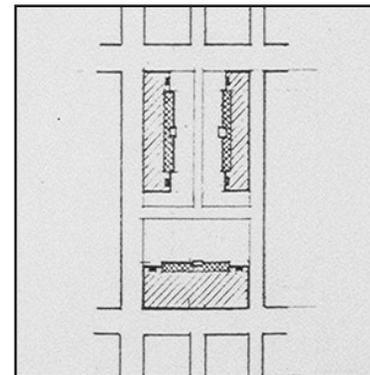
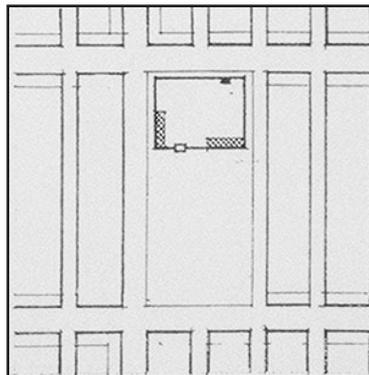
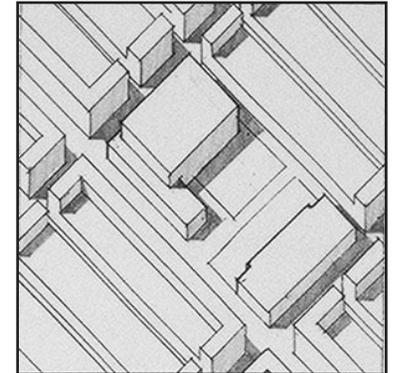
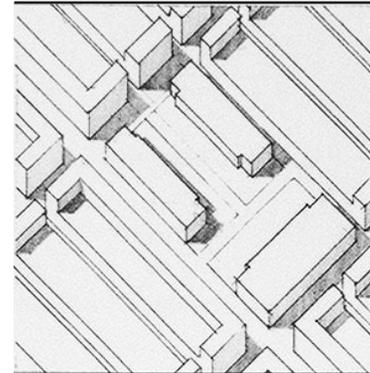
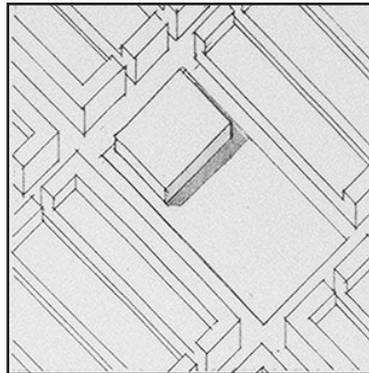
**Proposition:** Find the intersection of big box retail and industrial district programs.

**Implications:** The big box volume becomes the warehouse and distribution facility for the manufacturers within the superblock, allowing warehousing operations to drive the building form. It implies a core structure that is neutral and even taller than the standard big box in order to accommodate automated distribution systems.

Program Alternative 1: The two block superblock is ideal not only for the superstore but is also, as seen at Bathgate, ideal for a new industrial development.

Program Alternative 2: The two block superblock is also the ideal site for two or more flex industrial buildings forming an internal service yard (Bathgate model)

Synthesis: Hybrid solution combining the superstore big box with the flex industrial warehousing activities. Office/production activities are in a zone along one edge of the factory.

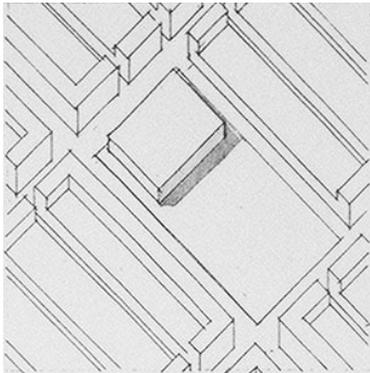


## Issues of Building Form

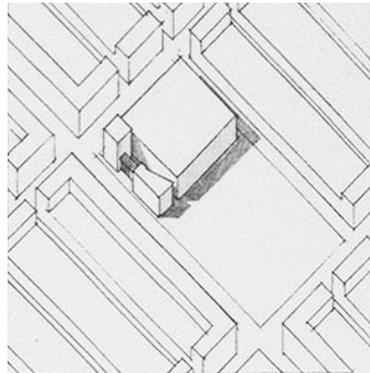
**Proposition:** Provide additional program elements to mediate the singularity of both the big box factory and the big box store.

**Implications:** Create a zone within the big box that is sub dividable and free of fixed program elements. The form becomes more neutral, scaleless and uncommitted to anyone program. This creates a foil against which the smaller program elements can respond to context.

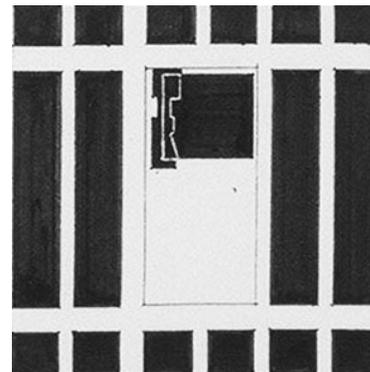
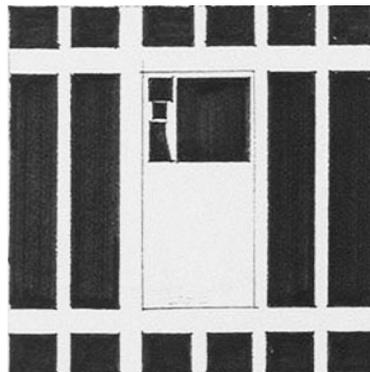
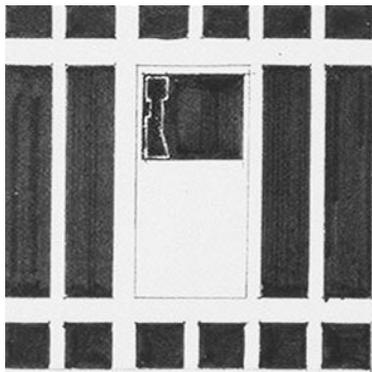
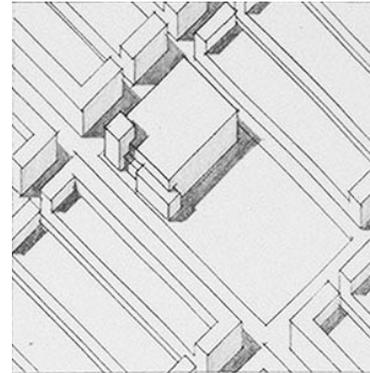
Massing Alternative 1: Additional program elements are contained within the box and expressed on the façade.



Massing Alternative 2: A completely separate zone is created along the edges of the site in which the additional program elements are expressed as volumes.



Synthesis: Separate program elements engage the big box. This proposition implies a dialog between the smaller program elements and big box. It suggests a number of scenarios: retail outlets for a large manufacturer within the big box; or smaller manufacturers feeding product to a shared warehouse/distribution firm.



# Issues of Site Planning

**Proposition:** *The reuse of the site is conditioned by our acceptance or denial of the "superblock" as an appropriate scale.*

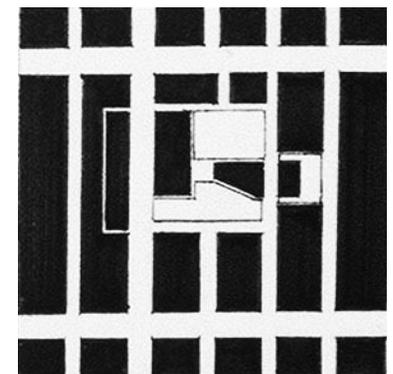
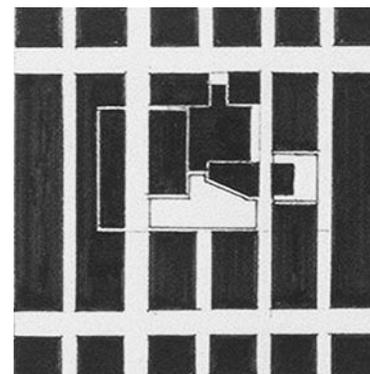
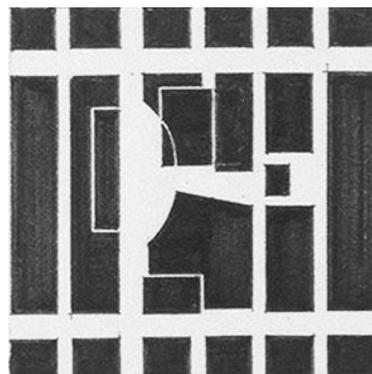
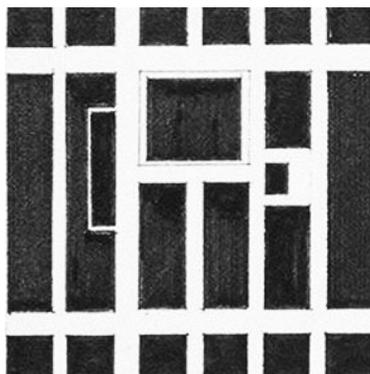
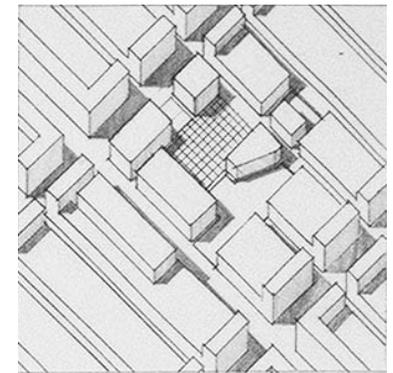
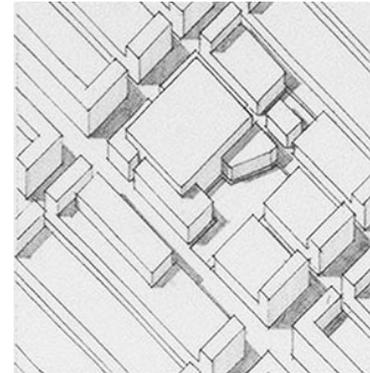
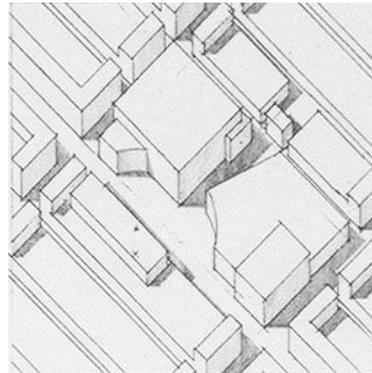
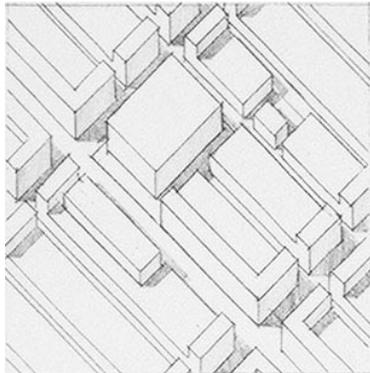
**Implications:** *If the big box cannot provide for a richer program within itself, and express this richness on the street wall facade, then the box back should be set behind a new zone that is deep enough to allow for additional program, not merely along the street but along the frontage within the superblock.*

Site Plan Alternative 1: The superblock is considered an inappropriate scale. Restoration of the site means extending for the full extent of the site the surrounding street pattern. All the multiplicity and complexity of context is regained, however there is no space left to mediate the scale of the box.

Site Plan Alternative 2: The superblock is considered an appropriate scale for the larger context and the big box simply becomes part of a larger composition. This allows for a completely plastic response to various context conditions and the residual spaces around the big box and its context are infilled with smaller, mediating uses. However, the loss of continuity created by the superblock may result in a development that is out of scale with its context.

Synthesis: The street system is restored for most of the site, but a portion of the site continues to function as a superblock, maintaining a zone around the big box that is deep enough to accommodate smaller scale structures which mediate between the big box and the street and which enable a more plastic response to the larger, off-site urban design opportunities.

At some point in the future the big box is removed and the space it occupied is repossessed as a flexible, mixed use public open space. The zone of smaller structures provides the massing necessary to define the new open space.



## Urban Form Exploration: The Flexible Box

**Premise:** The purpose of this exercise, which builds on the formal explorations above, is to explore what strategies might inform the initial development of a superblock-scale site so as to anticipate the re-use of the development in the future.

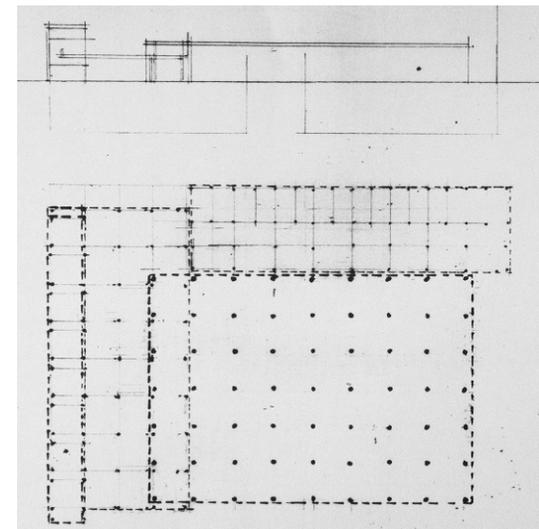
To explore these strategies, this design study speculates on the tractability of a superstore site by following the “big box” through three incarnations:

1. the big box is a 120,000 sf stand-alone superstore with an open parking lot in the prototypical configuration
2. the big box is re-used as a 120,000 sf warehousing and distribution facility for a variety of ancillary small and medium sized manufacturers
3. the big box is repossessed as shared open space for a variety of smaller, incubator-scale enterprises.

This sequence reflects current trends in urban manufacturing towards smaller, flexible enterprises and on the city’s strength as fertile ground for small business starts.

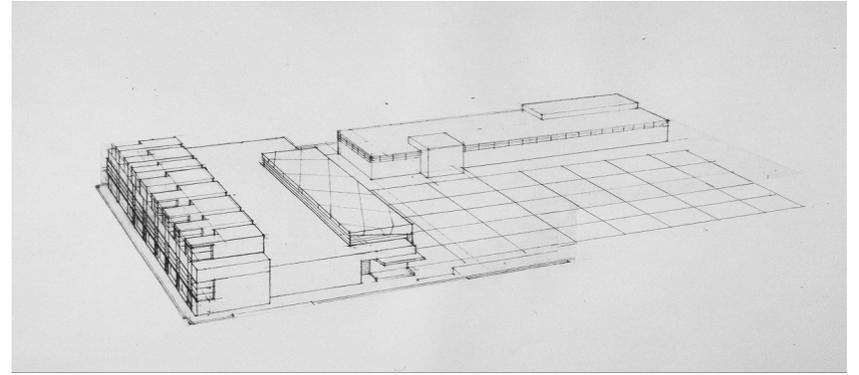
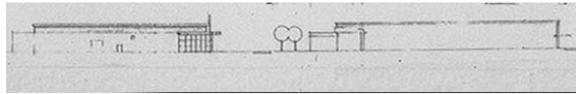
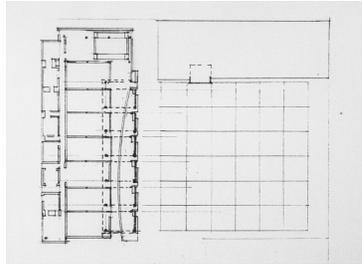
**Grids** This exercise also postulates a development strategy in which the site is ordered by structural grids of different scales, corresponding to the zones created by the Edge and Core strategy. Each of the three scenarios is developed using the same initial structural layout. The proposition is that a smaller scale structure in the edge zone would ultimately accommodate a greater variety of uses at a scale appropriate to the street.

The core area contains the largest and most economical structure - a 40’ by 40’ by 24’ high bay system appropriate to the automated warehousing and distribution program. The perimeter zone contains a smaller scale and lower structure appropriate to the intermediate and small scale enterprises that fill in this zone in the subsequent developments. Finally, a small scale structure occupies a thirty-foot deep zone. This is appropriate to the smaller scale front office and storefront operations which would ultimately line the street.



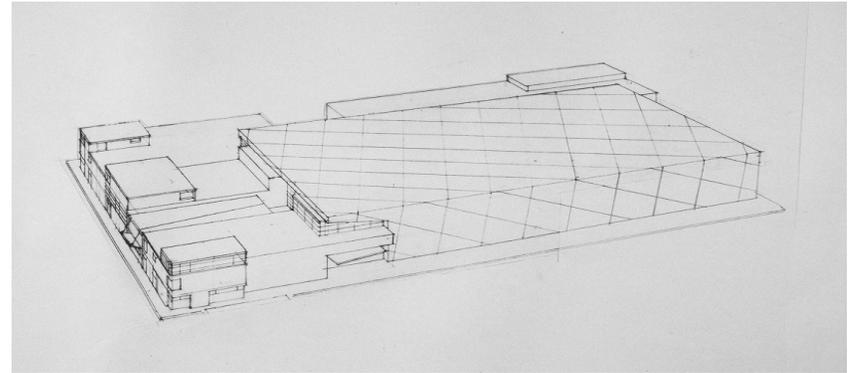
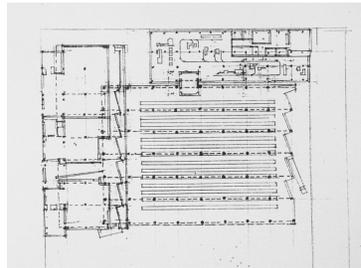
**Structural grids:** A flexible future for both the site and the building is anticipated by providing overlapping grids of different scales at the edges and core of the site.

3. Big Box as Open Space: Plan, section and elevation.



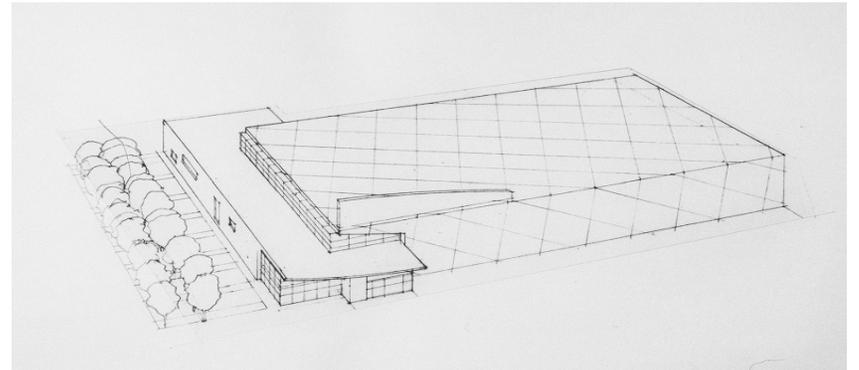
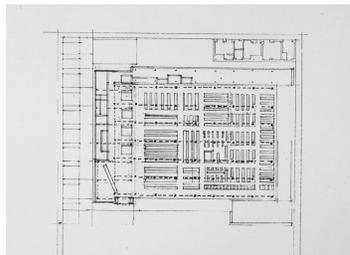
3. Big Box as open space. Fragment remains as shared space for industrial incubator.

2. Big Box as distribution facility: plan, section and elevation.



2. Big Box as distribution facility

1. Big Box as Superstore: plan, section, elevation



1. Big Box as superstore

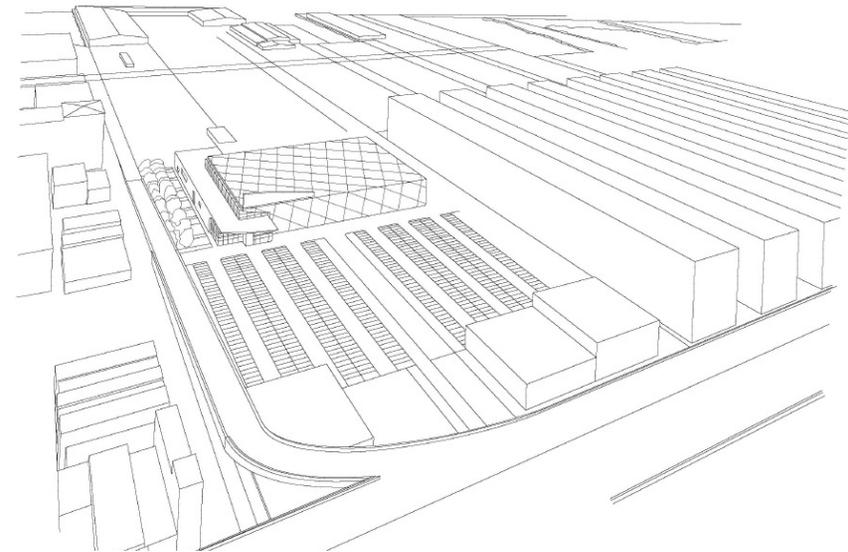
## Urban Design Exploration: Edge and Core

Each of the three scenarios here is informed by the same site strategy: the site is organized in terms of an edge and core. The core zone is the least restrictive. In fact, the core zone may accommodate a structure that is even larger and less descriptive than many of the proposed superstores. Programmatically, this core area is informed by the requirements for large scale warehousing and distribution operations that both the big box retailer and manufacturer share.

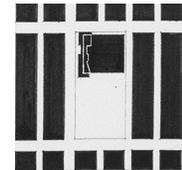
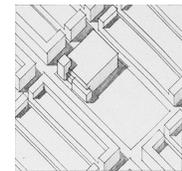
The perimeter zone is more restricted. This zone is constrained by requirements for street wall articulation - glazing and massing. A development which cannot meet these requirements (as has been assumed in the first scenario) must be set back behind this zone so that it may be reserved for future development that can meet the restrictions. In the subsequent developments, the medium sized manufacturers and, ultimately, the industrial incubator occupy this zone and provide the required articulation (This represents a return to the "clip-on" strategy of the factory).



**Site Diagram: "Edge and Core" Zones**  
A flexible future for the site is anticipated by allowing an unrestricted core area but reserving a context- and program-sensitive edge zone

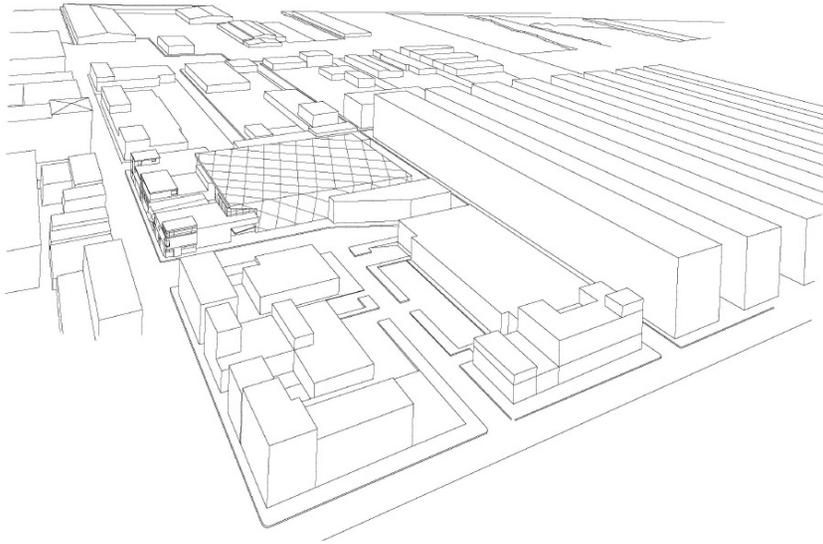


**1. Immediate Term:** The superstore site, in keeping with the big box program, is a superblock with a large, open parking lot. The context is largely undeveloped waterfront. The 39th Street corridor is as yet undeveloped.

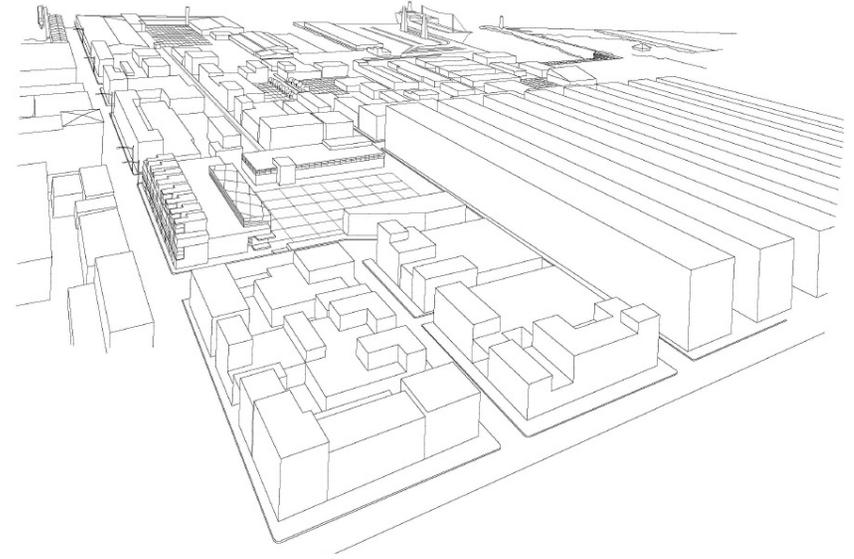
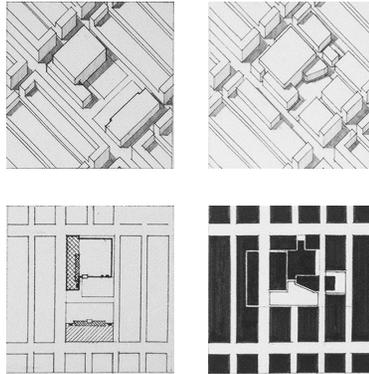


In these scenarios, the superblock is considered a temporary aberration in what should ideally be a restored and continuous street pattern. However, a portion of the site around the big box structure continues to function as a superblock. A zone around the big box is maintained that is deep enough to accommodate smaller scale structures, to mediate between the big box and the street and to allow a more plastic response to the larger, off site urban design opportunities. Therefore, while in each scenario the parking lot is gradually in-filled, a zone in front of the big box as well as the street side is reserved for smaller structures and a cross-block connection to other industrial buildings.

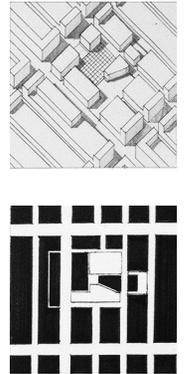
(These urban design speculations are for a two-block superblock in Sunset Park in Brooklyn which was developed for a Price-Costco Superstore.)



2. Intermediate term: The "big box" is now a warehousing and distribution facility for a variety of small and medium sized manufacturers. The block and street pattern is re-imposed as other medium sized manufacturers begin to fill in the parking lot. The waterfront context and the 39th Street corridor are starting to be redeveloped.



3. Long term: The "big box" is repossessed as open space. The rest of the superblock has been filled in with small-scale mixed use development. The open space of the former big box is now part of a system of open spaces as a redeveloped waterfront.



**Zones of Exchange**      The intermediate scale structure of the perimeter zone and the large scale structure of the core zone are made to overlap and are shifted. This creates a zone within each of the building incarnations that takes on special significance: the level of complexity allows the concept of “exchange” to be reinterpreted in different ways throughout the life cycle of the big box - a zone of exchange conceived in the broadest terms to include all forms of exchange - the exchange of currency, of goods and of ideas.

In the superstore, this zone is a zone of literal exchange of currency for goods. It is occupied by the check-out area. It mediates between the warehouse scale floor and the smaller scale support program spaces one finds in a superstore (offices, ancillary retail, etc.).

In the next stage of development, this zone becomes the point of exchange between the manufacturers and the shared warehousing and distribution facility.

In the last incarnation, this zone becomes one in which ideas are exchanged. It is the common space, typical in many incubators, in which the incubator-scale businesses can share products, ideas and interface with one another. The public open space created in the core of the site formerly occupied by the big box is in turn a place where the other manufacturers can exchange their ideas with each other and with the public.

## Conclusion

The formal exploration described above is based only on the one specific scenario suggested by the current superstore controversy: what is the potential for a “big box” structure to be re-used over time for either industry or retail? Similar explorations could be undertaken for other building types and other re-use scenarios.

In some ways, this exercise is highly theoretical. But with many communities facing, or about to face, the problem of what to do with abandoned superstores, it is important to consider ways of incorporating these design studies into public policy or private decision making.

Certainly the formal discoveries suggest some specific recommendations for re-usable structures on large sites. These include, for instance, the flexibility of smaller scale building structure and its suitability at the edges of the site; the potential flexibility of an even larger structure at the core of the site to allow for mezzanines and modern distribution technologies; the use of some redundant structure to allow for future subdivision of the building; the need for a permeable external wall that can accommodate changes in openings for entry and service.

In addition, these studies suggest another way of thinking about large sites.

- The exercise demonstrates the value of a more contingent approach towards regulating and managing large sites. The reuse scenario described above, and other flexible re-use scenarios, could only take place within a dynamic regulatory framework that allows a broad range of uses. These uses could not be prescribed in advance because they may not even be known to us now. Rather, uses would be evaluated on the basis of perfor-

mance - performance conceived here not only as compatibility with other uses (noise, dust, etc.), but performance in terms of how suitable the uses are to a changing context.

- The exercise demonstrates the value of a more complex interface between the public and private realms, captured here in the “core and edge” strategy. In the formal exercise above, a zone at the edge of the site has enough depth to accommodate a variety of programs in a smaller scale structural frame. This zone is deeper than the two-dimensional plane of the property line, which has traditionally represented a more absolute division between the public and private realms. The public interest in sites of a certain size may justify this “trespassing” of public regulation onto private property.

- The exercise demonstrates the value of a sophisticated approach to the planning of public infrastructure. Beyond the simple mapping of streets and tax lots, the location of infrastructure and utilities should anticipate the re-use and adaptation of the site. For example, on large sites utility easements could be reserved that anticipated the future subdivision of the site, particularly in circumstances where blocks have been combined. In keeping with the “edge and core” strategy and the implied complex relationship between the public and private realms that strategy implies, infrastructure investments might anticipate the re-use of the edge of the site.