

III. Project Narrative

INTRODUCTION

The following section summarizes MSG's proposed development plan for the Site. The narrative follows the outline in the RFP and is organized as follows: 1) Proposed Program Concept, 2) Proposed Site Management, 3) Operating Characteristics, 4) Architectural Features, 5) Relationship to the Surrounding Environment, and 6) Economic Impact.

1. PROPOSED PROGRAM CONCEPT

Goals of the Development

The proposed development is intended to meet the following goals:

- To make the highest and best use of the Site while providing the greatest value to the MTA.
- To address fully the need of the MTA to operate the rail yards on the Site, without interruption, and to locate other transit-related facilities on the Site.
- To produce housing, including affordable housing, to address the ongoing demand for new homes generated by the City's growing population and the Mayor's goal of producing 65,000 units of affordable housing.
- To provide public access to the Hudson River waterfront.
- To devote a significant portion of the Site to public open space.
- To include community facilities that will fulfill identified needs of the people who live and work in the surrounding area.
- To provide facilities that support the neighboring Jacob Javits Convention Center.

Program

The plan envisions a new residential community surrounding a five-acre public park and a promenade overlooking the Hudson River, connected to the waterfront by a pedestrian bridge. A range of uses are included in the plan to support the new residences and to enliven and support the new development expected to occur in the neighboring Hudson Yards District. The major program components consist of the following:

<u>Program Elements</u>	<u>Square Feet</u>
5,800 Residential Units	5,815,000
750-Room Hotel	505,000
Retail	270,000
Office	150,000
Community Facilities (public elementary school and public library)	<u>100,000</u>
TOTAL NEW DEVELOPMENT	6,840,000

Approximately 57 percent of the Site (7.4 acres) will be devoted to open space, including parks, courtyards, walkways and streets. Up to 600 parking spaces will also be provided on the Site. A detailed breakdown of the development program precedes the HVS Economic Impact Analysis which is at the end of this section.

Parks and Open Spaces

The centerpiece of the development plan is open space, occupying more than half of the Site and providing visual and physical access to the Hudson River waterfront. A five-acre public park, extending the full 800 feet from 11th Avenue to 12th Avenue, will connect via a broad pedestrian bridge over 12th Avenue to the river's edge. The main entrance to the park is a 150-foot frontage on 11th Avenue. In addition, two diagonal pedestrian corridors orient people from the 33rd Street and 30th Street approaches directly into the park and surrounding development. There also will be a direct connection from Hudson Gardens to the new park planned for the High Line. The overall Site plan will channel pedestrians into the park and the interior of the block and then provide a broadening green expanse and vista as the park widens to 280 feet as it approaches the Hudson River. The triangular shape of the park will maximize views of the river for members of the public entering from the east and for the apartments situated to the north and south. The park will contain playgrounds, an outdoor cafe, public bathrooms and fountains.

Hudson Gardens may be unique for Manhattan in that residents will be able to walk on pedestrian paths for many miles without crossing a street at grade. The pedestrian bridge across 12th Avenue will provide access to Hudson River Park. The High Line, when it is converted into a park, will provide an elevated uninterrupted walkway from Hudson Gardens through Chelsea.

The northern and southern edges of the park will be aligned with the mid-rise blocks of housing, which at their base will contain retail and neighborhood services. The taller residential towers will be distanced from the park edge to minimize their presence and shadows on the park environment.

The western edge of the development will be devoted to a public esplanade overlooking the Hudson River. If the City develops a park above grade on the block to the south, as is contemplated by the plans recently approved by the City Council and the City Planning Commission, then a pedestrian bridge across 30th Street will provide a direct link from the esplanade.

A New Residential Community

A new residential community of approximately 5,800 housing units will bring activity and life to its immediate surroundings, which are currently dominated by the rail yards and by bus and truck parking. The size of the Site and amount of housing proposed creates an opportunity – unique to this Site in Manhattan – to develop housing on a large scale in a single integrated project, rather than one or two buildings at a time.

The location of the Site on the waterfront will result in a significant contribution to the City's skyline in an area where residential towers will not overwhelm their surroundings and where the premium apartment prices for waterfront homes will support an investment in high-quality architectural design.

The towers rise in height from the riverfront and culminate in the tallest tower on 11th Avenue. This 70-story tower sits on a substantial retail and office base near the future entrance to the 34th Street station of the 7 Train extension. The complex of retail and office spaces in the base of this iconic tower will be a center of activity, straddling the two major entry points into the new community and providing a focal point for the 32nd Street corridor contemplated by the Department of City Planning.

The buildings will include a full array of services and amenities for residents, including athletic facilities, daycare centers, doctors' offices, restaurants and neighborhood retail establishments.

Affordable Housing

The development will include approximately 800 units of affordable housing. These units will result from the construction on the Site of subsidized apartments to qualify for the inclusionary housing bonus in the City Zoning Resolution. In addition, approximately 40 percent of the residential space will be in rental buildings that are expected to participate in the 80-20 tax-exempt financing program, assuring that 20 percent of the households in these buildings will have incomes at or below 50 percent of median. It is anticipated that the rental buildings will benefit from the Section 421(a) tax abatement program. To integrate fully the income levels of the residents, special efforts will be made to attract, and to accommodate the needs of, families with moderate incomes.

Community Facilities – a New Public Elementary School and Public Library

Approximately 100,000 square feet of building space is planned for community facilities. The Environmental Impact Statement for the Hudson Yards Special Zoning District and the Board of Education's capital plan indicate that there will be a need for a new public elementary school in the area — where school enrollment is anticipated to increase dramatically over the next decade. To address this need, a public elementary school of approximately 60,000 square feet to be located near the playground in the park is contemplated. Space is also available for a new public library in a building adjacent to the school to service the thousands of new residents and persons employed in the community, as well as the students.

Hotel and Other Uses Supporting the Javits Convention Center

Hudson Gardens will support the Javits Convention Center in a number of ways. A 750-room hotel proposed for the northeast corner of the Site will assure the availability of plenty of reasonably priced hotel rooms for visitors attending conventions at the expanded Javits Center at a time when many hotel rooms in the City are being converted to condominium units. The hotel is expected to offer rooms at a moderate price point. It is intended to complement, and not to compete with, the planned new convention hotel on 42nd Street.

Other elements of the proposed development will also enhance the Javits Center:

- Restaurants overlooking the Hudson River will provide entertainment and dining opportunities in the immediate vicinity of the convention center that do not exist today.
- 11th Avenue will be lined with restaurants and stores for the convenience of people attending conventions.
- The block to the north of the development between 33rd and 34th Streets will now provide an opportunity for further expansion of the Javits Center. If the truck marshalling yards on this site are enclosed, a 200,000-square-foot convention facility could be located on this block.

Performing Arts Enclave

Hudson Gardens will address a pressing need for support facilities for the performing arts by providing 50,000 square feet of commercial space earmarked for such purpose. The performances staged on Broadway and at other theaters throughout the City depend on the efforts of many people who never appear on stage. The workplaces for those who provide critical support to theater, musical and dance performances are dispersed, not readily accessible and in short supply. New facilities grouped together at a single location will benefit this industry. These proposed uses include the following:

- offices for directors, writers, composers, and sound, costume, set and lighting designers;
- sound, lighting and recording studios;
- workshops for set designers and costume makers; and
- stores for costumes, supplies and equipment most in demand by the performing arts.

Restaurants and Retail

Street-front restaurants and stores will line the 11th Avenue frontage of the development, bringing to the blank walls of the existing streetscape the vibrancy of a Manhattan avenue lined with shop windows, interesting doorways, canopies, portals and intriguing views into the interior of the block. The restaurants and stores will be designed to cater to the needs of the local community and of visitors to the Javits Convention Center.

Structural Deck over the Rail Yards

A continuous structural deck over the entire Site (including the area reserved for the bus depot) will serve as "ground" for the new development somewhat above the grade of 11th Avenue. It will be engineered to provide the required clearance above track level for Long Island Rail Road operations. Severud Associates has completed preliminary work on the design of an intermediate level between the rail yards below and the new development above that will serve the purpose of transferring loads from the widely spaced column grid between the train tracks to the more narrowly spaced columns supporting the new buildings.

MTA Bus Garage

Consistent with the requirements of the RFP, the development accommodates an MTA bus garage in the area of the Site between 30th and 31st Streets. The structural deck extends over this area with three housing clusters and portions of the retail environment occupying the area above. Given sufficient flexibility in the layout of the bus garage, it is hoped that, at one or more points along 30th Street, stairs and elevators can provide direct connections to the park and the residential buildings above.

The High Line

Hudson Gardens will complement the existing plans to convert the High Line into a park, providing an elevated pedestrian spine and neighborhood connector. The High Line will offer a pedestrian pathway from the Site into Chelsea. Hudson Gardens, in turn, will provide an anchor for the north end of the High Line park and an attractive destination for people walking up the High Line from Chelsea.

The High Line reaches the site at the southeast corner (11th Avenue and 30th Street) and connects to the platform, leading people immediately into the new park and on to the public promenade along the western edge of the Site.

Although the RFP is not specific on this point, legal requirements relating to the High Line right-of-way may require that the full extent of the High Line right-of-way remain unimpeded by new development. Documents prepared on behalf of the MTA in the 1980s suggest that the possibility of linking the High Line directly to the eastern half of the MTA's rail yards may obviate the need for preserving the entire right-of-way intact on the western half of the rail yard. If the existing right-of-way must be retained, the development plans can preserve the High Line right-of-way in its entirety. MSG is committed to developing the project with the High Line right-of-way remaining intact, if this preservation is necessary to the High Line's conversion to a public park, and to preserving the architectural elements of the High Line that have historical significance.

Zoning

MSG's bid is not contingent on any zoning changes. MSG intends to pursue a zoning change to a C6-4 district or a state zoning override that would permit development in accordance with the

provisions of the Zoning Resolution governing a C6-4 district. A C6-4 zone permits a mix of residential, commercial and community facility uses at a base floor area ratio of 10, bonusable to 12 through the provision of affordable housing pursuant to the Inclusionary Housing Program, and open space – both of which are components of MSG's plan for the Site.

Mass Transit

The development plan is designed to accommodate connections from the 34th Street station of the proposed 7 Train extension, although the project does not depend on the extension of subway service. Prior to the completion of the 7 Train extension, it is expected that enhanced bus service will provide residents and visitors to the Site with access to transit centers at Penn Station, Times Square and the proposed Moynihan/Farley facility.

Current east-to-west bus service is provided by the M34 line with stops along 34th street between 11th and 12th Avenues. North-to-south service is provided by the M11 line one block east, with stops along 10th Avenue. Additional private transportation in the area includes New York Waterway bus service to and from the West 38th Street Midtown Ferry Terminal (with stops along 34th Street) and a taxi stand located one block north at the Javits Convention Center.

Green Development

The buildings and design guidelines on the Site will assure sustainable urban development, including the innovations and technologies associated with "green" building development. The goal will be to achieve Leadership in Energy and Environmental Design (LEED) Green Building certification and to take advantage of the New York Green Building Tax Credit.

2. PROPOSED SITE MANAGEMENT

The MSG team possesses significant relevant experience in all facets of property and asset management. Jones Lang LaSalle is the industry leader in property and facility management services with a portfolio of more than 836 million square feet worldwide. In New York alone, Jones Lang LaSalle has over 11.3 million rentable square feet of third-party office leasing and management assignments, including signature projects such as Two World Financial Center and the NY Life Building. With respect to hotel expertise, the project team has extensive transaction and management experience, having provided expert advice on projects totaling more than \$35 billion. Jones Lang LaSalle also has extensive residential management expertise, presently serving as property manager for more than 90 million square feet. Jones Lang LaSalle will manage the Site, including central office management, leasing, selling and development of a robust marketing strategy.

3. OPERATING CHARACTERISTICS

Hudson Gardens will operate much as other residential communities in Manhattan operate. Unlike the plans for the eastern half of the MTA rail yard, which is predominantly slated for commercial development, the dominant residential character of Hudson Gardens will encourage active street life in the evenings and on weekends as well as during office hours. The hotel and the park will also attract weekend visitors. Trips to and from the new community will not be as concentrated in the morning and evening rush hours as would be the case with an office complex, although obviously some residents will head out in the morning to work and return home in the evening. Hotel guests can be expected to return in the late evening. Hudson Gardens will be active at all hours. Meanwhile, the provision of stores, restaurants, a school and a library on the Site will reduce the numbers of trips by residents that would be generated if these services were provided off-site. It is worth noting that the MTA's Environmental Impact Statement for the No. 7 Subway Extension, Hudson Yards Rezoning and Development Program, includes analysis of alternative development scenarios, which involve residential development on the Site. Alternative T in that document, for example, is based on a community-initiated plan involving residential development.

4. ARCHITECTURAL FEATURES

The development team includes the distinguished Harvard University professor of planning and design, Alex Krieger, and his firm, Chan Krieger & Associates. They have produced the building program and the site plan for Hudson Gardens. Their vision and designs are best captured in their own words:

A public garden growing in scale as it stretches from 11th Avenue and approaches the Hudson River ... active garden level uses for residents and neighbors to enjoy as they stroll towards the river, or to their homes ... mid-rise, balcony-filled residential terraces defining the edges of the five-acre garden ... slender residential towers rising from landscaped courtyards offering city and river views "to die for" ... The Hudson Gardens neighborhood bustles with activity at its green base, and shimmers in the afternoon light — a striking addition to Midtown's majestic silhouette.

Six clusters of buildings array themselves around the public garden. Each cluster mixes lower and higher building masses and a landscaped courtyard or base building to achieve a distinctive, dynamic profile. Indeed, each of these is, conceptually speaking, a separate miniature Manhattan block, combining public uses at its base and private, elegant living quarters above.

The largest of these clusters, nearest the corner of 11th Avenue and 33rd Street, is the most complex, aggregating an extensive retail and office base, a hotel, and two residential towers, one of which, the tallest, faces 11th Avenue and forms the spatial, mixed-use fulcrum for the overall site plan. The city's proposed 32nd Street pedestrian corridor is welcomed at this point, extending directly into the retail and entertainment base, and ultimately to the garden beyond. A diagonal pedestrian promenade cuts through this cluster, beckoning people from 11th Avenue, 33rd Street and the future 7th Avenue Line subway stop to move toward the public garden. Along this promenade, a pedestrian will walk past fine shops, cafes and restaurants, with senses and expectations aroused.

Similarly, at its southern edge, this cluster opens directly to the public garden and its interactive fountain, the start of a sequence of park and garden spaces that lead from 11th Avenue to the river.

The cluster nearest the corner of 30th Street and 11th Avenue is similar in its diversity of uses and spatial complexity. A diagonal pathway in the form of a stairway and the continuation of the High Line bring people up to the garden level from the lower elevation at this intersection. The stairway and path move through a three-story retail base that contains a neighborhood supermarket, among other neighborhood services.

Thus, at the two ends of 11th Avenue, at 33rd Street, at 30th Street, and along the length of the block between these, the street is lined with shops and amenities as a proper Manhattan Avenue must be.

The other four building clusters offer variations on an organizational theme. Each contains lower buildings that surround a discreet landscaped courtyard, from one end of which a slender residential point tower rises. The courtyards of each of these blocks open to the south or west, to take better advantage of views and sunlight. The two courtyards to the north of the garden are raised a level above the public garden, assuring greater privacy and enabling the accommodation of community functions, including a neighborhood school and banquet facility, beneath them.

Along the westerly edge of the entire Site is a continuous promenade looking over 12th Avenue and towards the Hudson beyond. Direct connections from this promenade to the river and to the deck park immediately to the south are made by generous pedestrian bridges. The overall Site plan behaves like a civic-scaled funnel channeling pedestrians from Midtown streets to the garden at the interior of the block, which then broadens out towards 12th Avenue and the Hudson River vistas.

The architectural expression of Hudson Gardens is unabashedly contemporary. Generously glazed facades are accented by masonry and terracotta wall panels, and graced by bay windows and balconies that take advantage of the marvelous views. Ground-level transparencies highlight visual connection to the services and amenities that line 11th Avenue and the facades along the garden. The atmosphere — as the accompanying illustrations demonstrate — is elegant and cosmopolitan: the west side of Midtown no longer stigmatized by industrial impediments, service yards and back-of-house functions, instead exuding the metropolitan grace and seductions of a place one associates with the best of Manhattan.

5. RELATIONSHIP TO THE SURROUNDING ENVIRONMENT

Alex Krieger and his firm describe the relationship of Hudson Gardens to the surrounding area as follows:

To minimize the potentially isolating condition of a residential community sitting upon its deck, public access is provided in a variety of ways. The Site is organized in nine parts, in a

sense nine miniature Manhattan blocks. The three center "blocks" contain the five-acre public park, with three "blocks" lining the park to the north, angled slightly to the northwest to maximize sunlight and river views, and three "blocks" defining the park's southern edge. The courtyards of each of these blocks also open to the south or west, again, to take better advantage of views and sunlight.

The desired overall sense is that the Site and its central park can be approached from numerous points along all four surrounding streets. In several places, this access is via stairs and elevators, while along the length of 11th Avenue, pedestrian access leads directly to the park via a slight incline to reach the park level. In addition to the park itself opening up to 11th Avenue, two diagonal pedestrian corridors orient people from the 34th Street and 30th Street approaches directly to the middle of the Site. The overall Site plan behaves somewhat like a funnel channeling pedestrians to the park at the interior of the block and then broadening the park dimensions towards 12th Avenue and the Hudson River vistas.

The five-acre public park forms the centerpiece – geometrically and symbolically – of the entire plan. It is easily approached by pedestrians from 11th Avenue (*see above*) and extends via a broad bridge over 12th Avenue to the Hudson River. The park is more than 150 feet wide at its 11th Avenue end (two-thirds the width of a typical Manhattan block), and it widens out to approximately 280 feet at the 12th Avenue side (more than a Manhattan block wide). There are few Manhattan precedents for such a broad perpendicular open space connecting directly to the river.

The northern and southern edges of the park are lined with the lower housing blocks that at their base contain either retail or neighborhood services. The taller housing towers are positioned away from the park edge to minimize their presence and their shadows on the park environment. While the housing clusters line, overlook and give proper scale to the park, each of them organized about around its own private open courtyard, leaving the park itself to be a more truly public space. Limited automobile access to the deck level, to provide convenient access to the housing and emergency access, is provided in the form of narrow, tree-lined lanes, analogous to pathways bordering other city parks. All of the physical design 'clues' will reinforce the sensibility that the park is predominantly a pedestrian environment, with the automobile as the carefully controlled intruder.

What is envisioned is a generous, urbane, green space: a great asset for all of the people who will live along its edges, to be sure, but also a wonderful amenity for the surrounding neighborhoods and Midtown at large.

6. ECONOMIC IMPACT

HVS International has completed an "Economic Impact Analysis of the Proposed Hudson Gardens" (included at the end of this section). The economic impacts are as follows:

- The construction budget for Hudson Gardens is approximately \$3.5 billion.
- During the 12-year period of active construction of Hudson Gardens, the project will generate an average of 3,200 construction jobs per year.

- Hudson Gardens will generate more than \$100 million per year in City and State tax revenue by 2010. City and State tax revenue will escalate to \$275 million per year by 2018.
- Hudson Gardens will generate 4,400 permanent jobs by 2012, and will generate more than 13,000 jobs by the time construction is completed in 2018.

MSG is committed to employment diversity and compliance with EEO practices, and to involving minority-owned and women-owned businesses in the development and construction of Hudson Gardens to ensure that employment opportunities are widely distributed and fully characteristic of the diversity of New York.

HUDSON GARDENS
BREAKDOWN OF DEVELOPMENT PROGRAM
SECTION III

	BUILDING	# FL.	RESIDENTIAL		RETAIL	OFFICE	HOTEL	COMMUNITY		PARKING
			UNITS/TOTAL UNITS	SF/FL				TOTAL SF	SF/FL	
A	TOWER	46	8	368	8,800					
	MID-RISE 1	12	18	216	17,100					
	MID-RISE 2	9	12	108	16,700					
	BASE - Banquet Facilities	1				30,800				
	BLDG. TOTAL	46		692	42,600	30,800				
B	TOWER	30	22	672	16,800					
	BASE - Public Library	2						16,800		33,600
	BLDG. TOTAL	32		672	16,800					33,600
C	TOWER Upper	40	8	320	10,000					
	TOWER Lower	12	13	160	10,000					
	MID-RISE 1	12	22	269	16,800					
	MID-RISE 2	9	14	127	10,600					
	BASE - Elem. School	2						31,600		63,200
	BLDG. TOTAL	52		876	47,400					63,200
D	HOTEL	25					13,900		347,500	
	BASE	2					9,600		9,600	
	BASE/HOTEL FUNCTIONS	5					29,600		148,000	
	BLDG. TOTAL	32				40,000			505,100	
E	TOWER	56	8	448	9,300					
	BASE	2				18,600				
	BLDG. TOTAL	58		448		18,600				
F	OFFICE	6						25,000	150,000	
	BASE	2								
	RESIDENTIAL	58	13	754	15,800					
	BLDG. TOTAL	66		754	15,800	50,000			150,000	
G	MID-RISE	9	15	136	11,300					
	BASE	3				33,900				
	BLDG. TOTAL	12		136		33,900				
H	TOWER	56	13	747	10,000					
	MID-RISE	12	25	302	18,900					
	BASE - Supermarket	2				28,900				
	BLDG. TOTAL	58		1,049	28,900	57,800				
I/J	TOWER	52	8	416	10,000					
	MID-RISE 1	12	8	96	6,000					
	MID-RISE 2	9	16	144	14,500					
	BASE	1				20,500				
	BLDG. TOTAL	52		656	30,500	20,500				
K	TOWER	46	8	368	10,000					
	MID-RISE 1	12	8	96	9,000					
	MID-RISE 2	9	16	144	13,000					
	BASE	1				22,000				
	BLDG. TOTAL	46		608	32,000	22,000				
	PARKING (not counted in FAR)	2								100,000
TOTAL				5,881	5,814,500	273,600	150,000	505,100	96,800	not in FAR

Economic Impact Analysis of the Proposed Hudson Gardens

Summary of Salient Conclusions

HVS International Convention, Sports & Entertainment Facilities Consulting (HVS) estimated the economic and fiscal impacts of the proposed Hudson Gardens development. HVS developed distinct economic models for the New York City (City) and State of New York (State) economic to enable accurate estimates of both economic and fiscal impacts in each jurisdiction. HVS analyzed three basic sources of economic impacts associated with the proposed development:

- Spending by residents of the residential development, which includes 5,891 total units.
- Spending associated with the proposed retail and hotel development.
- Construction spending.

Economic Impacts

Table 1 shows the results of the HVS impact analysis for the City of New York economy.

Table 1
Summary of Estimated City Spending and Employment Impacts (Thousands of Inflated Dollars)

Type of Impact	2006	2008	2010	2012	2014	2016	2018	Total ¹
Spending of Residents								
Direct	\$0	\$0	\$114,733	\$249,523	\$634,965	\$693,925	\$997,645	\$4,892,118
Indirect & Induced	0	0	45,248	98,405	250,416	273,668	393,448	1,929,333
Total	\$0	\$0	\$159,981	\$347,928	\$885,381	\$967,593	\$1,391,093	\$6,821,451
Employment	0	0	953	1,866	4,560	4,736	6,480	--
Retail & Hotel Spending								
Direct	\$0	\$0	\$52,166	\$88,250	\$144,008	\$147,583	\$180,627	\$1,151,455
Indirect & Induced	0	0	33,381	62,635	108,128	110,416	137,040	844,304
Total	\$0	\$0	\$85,547	\$150,885	\$252,136	\$257,999	\$317,667	\$1,995,759
Employment	0	0	555	1,158	2,099	2,137	2,683	--
Construction Spending								
Direct	\$10,776	\$203,691	\$449,760	\$298,527	\$348,918	\$363,320	\$95,497	\$3,531,513
Indirect & Induced	7,998	145,597	324,157	214,091	249,119	262,742	66,404	2,534,103
Total	\$18,773	\$349,289	\$773,917	\$512,618	\$598,038	\$626,061	\$161,901	\$6,065,616
Employment	145	2,568	5,302	3,503	4,106	4,276	1,064	--
Total City Impacts								
Direct	\$10,776	\$203,691	\$616,659	\$636,299	\$1,127,892	\$1,204,828	\$1,273,769	\$9,575,086
Indirect & Induced	7,998	145,597	402,786	375,131	607,663	646,826	596,892	5,307,740
Total	\$18,773	\$349,289	\$1,019,444	\$1,011,430	\$1,735,555	\$1,851,653	\$1,870,661	\$14,882,825
Employment	145	2,568	6,810	6,526	10,765	11,149	10,227	--

¹ Total includes alternate years not displayed in the table. Impacts Begin in 2005.

Source: HVS

The analysis estimates that the proposed development would generate \$1.87 billion in total spending and 10,227 jobs in the City on an annual basis by 2018 (the year in which construction is completed). The impacts from the residential and retail/hotel spending (\$1.71 billion) and employment (9,163 jobs) would continue on an annual basis subsequent to 2018. Inflation would cause the spending impacts to continue to increase as well. Between 2006 and 2018, the number of construction jobs would average 3,220 per year, peaking at 5,302 in 2010.

Table 2 shows the results of the HVS impact analysis for the State's economy.

Table 2
Summary of Estimated State Spending and Employment Impacts (Thousands of Inflated Dollars)

Type of Impact	2006	2008	2010	2012	2014	2016	2018	Total ¹
Spending of Residents								
Direct	\$0	\$0	\$114,733	\$249,523	\$634,965	\$693,925	\$997,645	\$4,892,118
Indirect & Induced	0	0	60,427	131,418	334,418	365,475	525,437	2,576,558
Total	\$0	\$0	\$175,160	\$380,940	\$969,383	\$1,059,399	\$1,523,082	\$7,468,675
Employment	0	0	1,270	2,544	6,218	6,458	8,837	--
Retail & Hotel Spending								
Direct	\$0	\$0	\$69,488	\$112,241	\$178,057	\$182,819	\$222,113	\$1,561,464
Indirect & Induced	0	0	51,989	93,585	158,123	161,687	199,626	1,352,585
Total	\$0	\$0	\$121,477	\$205,825	\$336,180	\$344,506	\$421,739	\$2,914,049
Employment	0	0	962	1,878	3,305	3,371	4,203	--
Construction Spending								
Direct	\$10,776	\$203,691	\$449,760	\$298,527	\$348,918	\$363,320	\$95,497	\$3,531,513
Indirect & Induced	9,706	171,136	388,930	257,481	297,687	317,922	80,016	3,038,259
Total	\$20,482	\$374,827	\$838,690	\$556,008	\$646,606	\$681,241	\$175,513	\$6,569,771
Employment	176	3,061	6,447	4,271	4,976	5,241	1,310	--
Total State Impacts								
Direct	\$10,776	\$203,691	\$633,981	\$660,290	\$1,161,940	\$1,240,063	\$1,315,255	\$9,985,094
Indirect & Induced	9,706	171,136	501,347	482,484	790,229	845,083	805,079	6,967,402
Total	\$20,482	\$374,827	\$1,135,328	\$1,142,774	\$1,952,169	\$2,085,146	\$2,120,334	\$16,952,496
Employment	176	3,061	8,679	8,693	14,498	15,069	14,349	--

¹ Total includes alternate years not displayed in the table. Impacts Begin in 2005.

Source: HVS

The estimated impacts for the State are somewhat larger than the City estimates because the State would lose less spending through leakage to other areas.

Other than the construction impacts, the positive economic impacts associated with the proposed development would occur on an annual basis beyond the period displayed in the previous two tables.

Fiscal Impacts

HVS also estimated the amount of fiscal tax revenue the City and State would receive from the economic activity associated with the proposed development. Table 3 shows the estimated fiscal tax revenues.

This chart does not include approximately \$10 million in City and State transfer taxes that will be paid in 2005 when Madison Square Garden acquires the property or mortgage recording tax that will be paid when Madison Square Garden finances the property.

Table 3
Estimated City and State Fiscal Tax Revenues (Thousands of Inflated Dollars)

Area / Fiscal Impact	2006	2008	2010	2012	2014	2016	2018	Total ¹
City								
Residential / Retail / Hotel Spending								
Direct	\$0	\$0	\$45,480	\$26,345	\$101,448	\$73,542	\$88,718	\$666,578
Indirect & Induced	0	0	1,199	2,486	5,570	5,967	8,251	43,015
Total	\$0	\$0	\$46,679	\$28,831	\$107,018	\$79,509	\$96,969	\$709,594
Direct Property Taxes	\$6,499	\$6,879	\$7,235	\$33,909	\$42,815	\$63,736	\$68,216	\$423,121
Construction Spending								
Direct	\$176	\$3,571	\$7,612	\$4,999	\$5,916	\$6,100	\$1,481	\$59,639
Indirect & Induced	210	3,709	8,395	5,546	6,418	6,842	1,722	65,516
Total	\$386	\$7,281	\$16,007	\$10,546	\$12,334	\$12,942	\$3,203	\$125,155
Total City Tax Revenues	\$6,885	\$14,159	\$69,921	\$73,286	\$162,166	\$156,187	\$168,388	\$1,257,870
State								
Direct	\$0	\$0	\$13,449	\$26,830	\$64,250	\$70,237	\$99,763	\$501,562
Indirect & Induced	0	0	1,972	3,959	8,523	9,086	12,413	68,387
Total	\$0	\$0	\$15,421	\$30,790	\$72,773	\$79,323	\$112,177	\$569,949
Construction Spending								
Direct	\$225	\$4,510	\$9,722	\$6,398	\$7,544	\$7,831	\$1,907	\$76,172
Indirect & Induced	210	3,709	8,395	5,546	6,418	6,842	1,722	65,516
Total	\$435	\$8,219	\$18,117	\$11,944	\$13,962	\$14,672	\$3,629	\$141,689
Total State Tax Revenues	\$435	\$8,219	\$33,538	\$42,734	\$86,735	\$93,996	\$115,805	\$711,638

¹ Total includes alternate years not displayed in the table. Impacts begin in 2005.

Source: HVS

Estimated annual City and State tax revenues exceed \$275 million annually once construction is completed. The fiscal impacts vary from year to year in part due to the mortgage recording and real estate tax revenues realized in specific years when the condominiums are assumed to be sold. The City fiscal tax impacts, which are approximately \$165 million in 2018 in the City (not including construction-related tax revenues), will continue annually

beyond the projection period. Table 4 shows an estimate of annual City tax revenues generated by the proposed development subsequent to 2018.

Table 4
Estimated Annual City Tax Revenues Subsequent to Development Period (Thousands of Inflated Dollars)

Type of City Tax Revenue	2019	2020	2021	2022	2023	2024
Estimated Property Tax Payments	\$87,901	\$90,255	\$92,679	\$95,176	\$99,874	\$102,590
All Other City Fiscal Revenues from Project	99,393	101,878	104,425	107,036	109,712	112,455
Total City Tax Revenue	\$187,294	\$192,133	\$197,104	\$202,212	\$209,586	\$215,045

Sources: Jones Lange LaSalle & HVS

Estimated annual property tax payments increase significantly in 2019 as payments from the last buildings commence. The total City tax revenues are estimated to exceed \$200 million annually by 2022.

Background

The potential for increased positive economic impact from residential, retail, and hotel development is considerable. The anticipated high income levels of the households that would purchase and occupy the market-rate condominium units provide a significant base of economic activity. The analysis estimates the economic and fiscal impact associated with the spending by households in the condominiums and both the market-rate and affordable rental units.

HVS utilized the IMPLAN input-output model to estimate indirect and induced impacts. IMPLAN is a nationally recognized model commonly used to estimate economic impacts. An input-output model generally describes the commodities and income that normally flow through the various sectors of the economy. The indirect and induced spending and employment effects shown here represent the estimated changes in the flow of income and goods caused by the projected direct spending. The IMPLAN model accounts for the specific characteristics of the City and State economies and estimates the share of indirect and induced spending that each will retain.

Description of Spending Types

HVS estimates three types of spending impacts in the analysis:

- *Direct impacts* include the spending resulting from the residential households, retail stores, and the planned 750-room hotel. For

example, households are estimated to spend a portion of their income on various goods and services.

- *Indirect impacts* are the supply of goods and services resulting from the initial direct spending associated with the development. For example, a household's direct expenditure on a restaurant meal causes the restaurant to purchase food and other items from suppliers. The portion of these restaurant purchases that are within the study area's economy is counted as an indirect economic impact.
- *Induced impacts* represent the change in local consumption due to the personal spending by employees whose incomes are affected by direct and indirect spending. For example, a waitress at the restaurant may have more personal income as a result of the household spending on restaurant meals. The amount of the increased income that the waitress spends in the local economy is considered an induced impact.

Indirect and induced impacts are often referred to as multiplier effects. These effects, which vary based upon the specific characteristics of a market's economy, typically make up approximately 20 to 45 percent of the total economic impact.

Sources of Spending Estimates

HVS relied on existing studies of household income and resultant direct tax revenues for new residential development on the Hudson Yards site developed by the Regional Plan Association ("Urban Development Alternatives for the Hudson Rail Yards") in a study published in December of 2004. Table 5 shows the estimated household income levels and direct tax payments by type of residential unit.

Table 5
Estimated Household Income and Direct Tax Payments by Type of Unit

Type of Residential Units	Household Income	State Income Tax	NYC Income Tax	Sales Tax
Market Rate Condo Units	\$170,000	\$7,728	\$4,326	\$8,367
Market Rate Renters	\$138,000	\$7,248	\$4,071	\$6,156
Income Targeted Households	\$47,000	\$1,419	\$963	\$2,046

Source: Regional Plan Association

The hotel spending associated with the proposed 750-room hotel was derived from a feasibility analysis and operating estimated developed by HVS. The projections call for the hotel to stabilize at 80 percent occupancy with an average daily rate of \$242.25. Retail spending is estimated at \$700 per square foot. In order to avoid double counting of retail spending by residents the analysis only includes the portion of on-site retail spending associated with non-development residents (estimated at 25 percent).

Fiscal Impact Estimate Methodology

Where possible, HVS used specific estimates of taxable spending, income, and real estate sales to calculate fiscal tax revenue. In certain cases, HVS relied upon the elasticity-adjusted ratios of taxes to personal income to determine the taxes collected on the spending and income generated by the proposed development. Table 6 shows a summary of the estimated ratios of tax collections by type to personal income, which provides a basis for estimating the tax revenues from estimated personal income.

Table 6
Ratios of Tax Collections to Personal Income

City Taxes	Ratio	State Taxes	Ratio
Real Property	2.73%	Personal Income	3.84%
Comm. Rent	0.12%	Corporation & Business	0.70%
Mortgage Recording	0.14%	Sales, Excise, & User	1.52%
Real Property Transfe	0.15%	Property Transfers	0.17%
Personal Income	1.61%	Other Taxes & Fees	0.01%
General Corp.	0.54%		
Banking Corp.	0.12%		
Uninc. Business	0.27%		
All Sales	1.17%		
Utility	0.09%		
Other	0.37%		

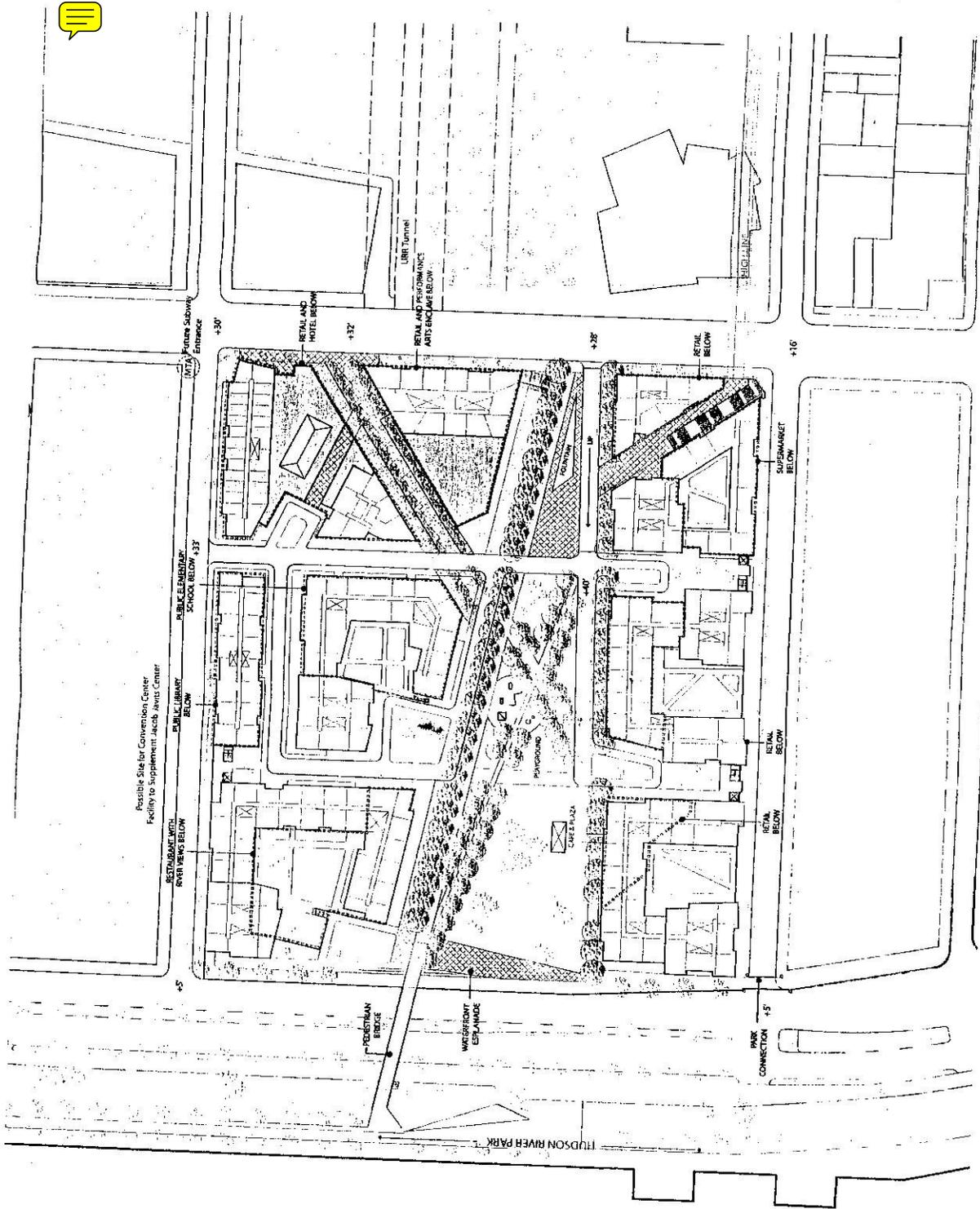
Sources: City of New York Office of Management & Budget,
 New York State Dept. of Taxation & Finance, BEA

For construction spending, HVS used the sector outputs of the IMPLAN model to estimate sales tax revenues.

IV. Drawings & Plans

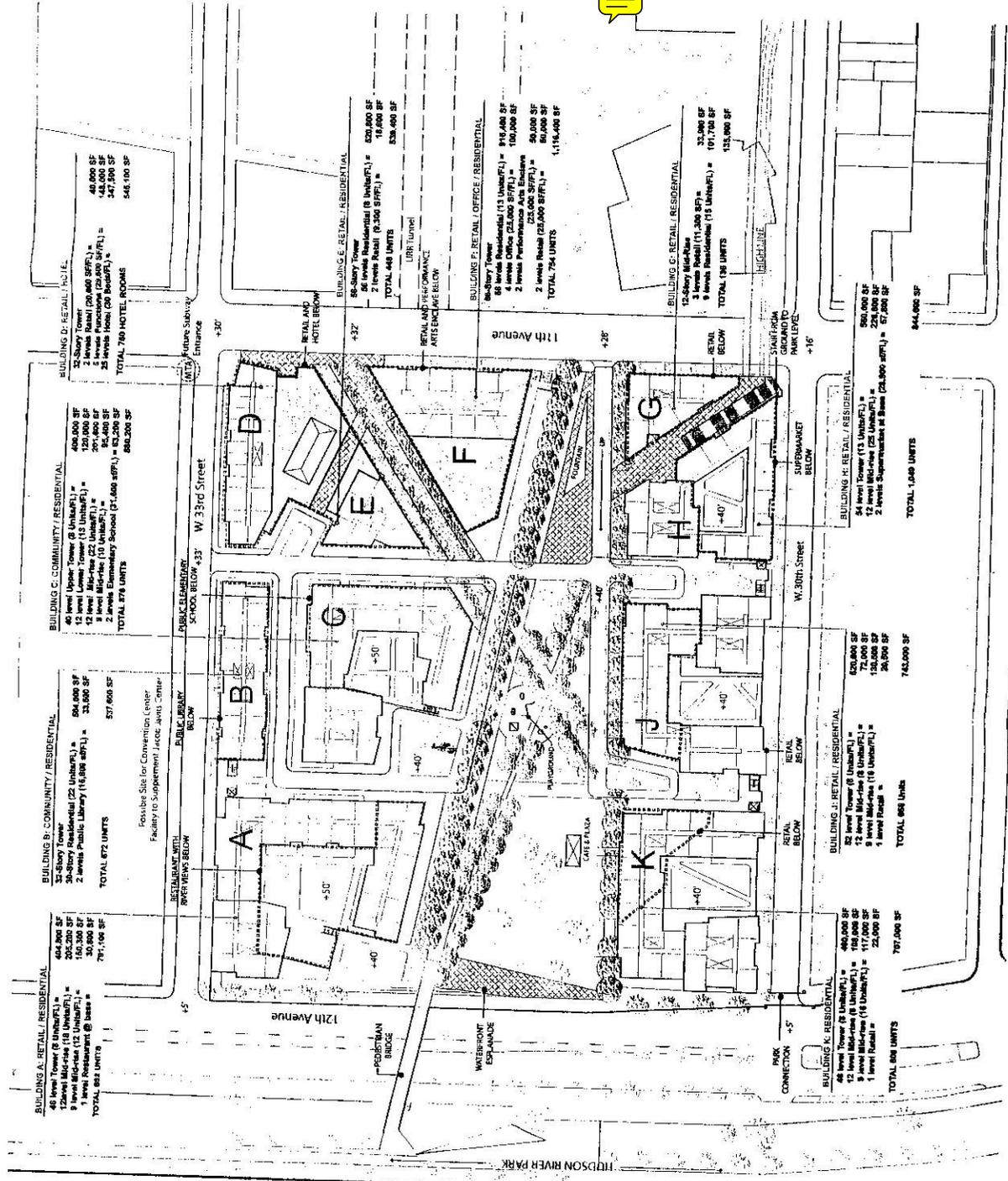
LIST OF ATTACHED DRAWINGS AND PLANS

1. Site Plan
2. Site Plan (annotated)
3. Alternate Site Plan: High Line Preservation
4. Urban Design Diagrams
5. View in Park Looking Northwest
6. View from Café Looking West
7. View from Fountain at 11th Avenue Looking West
8. View from 11th Avenue Looking Southwest
9. Aerial View from Hudson River
10. Site Context



Possible Site for Convention Center Facility to Supplement Jacobs Jobs Center

Site Plan



BUILDING D: RETAIL / HOTEL
 32-Story Tower
 2 levels Retail (20,000 SF) = 40,000 SF
 12 levels Hotel (22,000 SF) = 264,000 SF
 25 levels Hotel (200,000 SF) = 5,000,000 SF
TOTAL 700 HOTEL ROOMS
 548,000 SF

BUILDING C: COMMUNITY / RESIDENTIAL
 40 level Tower (8 Units) = 400,000 SF
 13 level Mid-rise (22 Units) = 120,000 SF
 12 level Mid-rise (22 Units) = 120,000 SF
 9 level Mid-rise (10 Units) = 50,000 SF
 3 levels Elementary School (21,000 SF) = 63,000 SF
TOTAL 478 UNITS
 883,000 SF

BUILDING B: COMMUNITY / RESIDENTIAL
 32-Story Tower
 2 levels Retail (20,000 SF) = 40,000 SF
 2 levels Public Library (10,000 SF) = 20,000 SF
TOTAL 672 UNITS
 577,000 SF

BUILDING A: RETAIL / RESIDENTIAL
 48 level Tower (8 Units) = 480,000 SF
 12 level Mid-rise (8 Units) = 120,000 SF
 9 level Mid-rise (12 Units) = 108,000 SF
 1 level Retail = 22,000 SF
TOTAL 692 UNITS
 730,000 SF

BUILDING E: RETAIL / RESIDENTIAL
 86-Story Tower
 2 levels Retail (20,000 SF) = 40,000 SF
 10 levels Residential (8 Units) = 80,000 SF
 10 levels Residential (8 Units) = 80,000 SF
TOTAL 400 UNITS
 200,000 SF

BUILDING F: RETAIL / OFFICE / RESIDENTIAL
 86-Story Tower
 8 levels Residential (13 Units) = 116,000 SF
 10 levels Residential (8 Units) = 80,000 SF
 2 levels Performance Arts = 20,000 SF
 2 levels Retail (20,000 SF) = 40,000 SF
TOTAL 794 UNITS
 1,116,000 SF

BUILDING G: RETAIL / RESIDENTIAL
 12-Story Mid-rise
 12 level Mid-rise (8 Units) = 120,000 SF
 9 levels Residential (12 Units) = 108,000 SF
TOTAL 120 UNITS
 228,000 SF

BUILDING H: RETAIL / RESIDENTIAL
 12 level Tower (13 Units) = 120,000 SF
 12 level Mid-rise (8 Units) = 120,000 SF
 2 levels Supermarket of Store (20,000 SF) = 40,000 SF
TOTAL 1,040 UNITS
 844,000 SF

BUILDING I: RETAIL / RESIDENTIAL
 82 level Tower (8 Units) = 820,000 SF
 12 level Mid-rise (8 Units) = 120,000 SF
 1 level Retail = 22,000 SF
TOTAL 698 UNITS
 742,000 SF

BUILDING J: RETAIL / RESIDENTIAL
 48 level Tower (8 Units) = 480,000 SF
 12 level Mid-rise (8 Units) = 120,000 SF
 9 level Mid-rise (12 Units) = 108,000 SF
 1 level Retail = 22,000 SF
TOTAL 692 UNITS
 730,000 SF

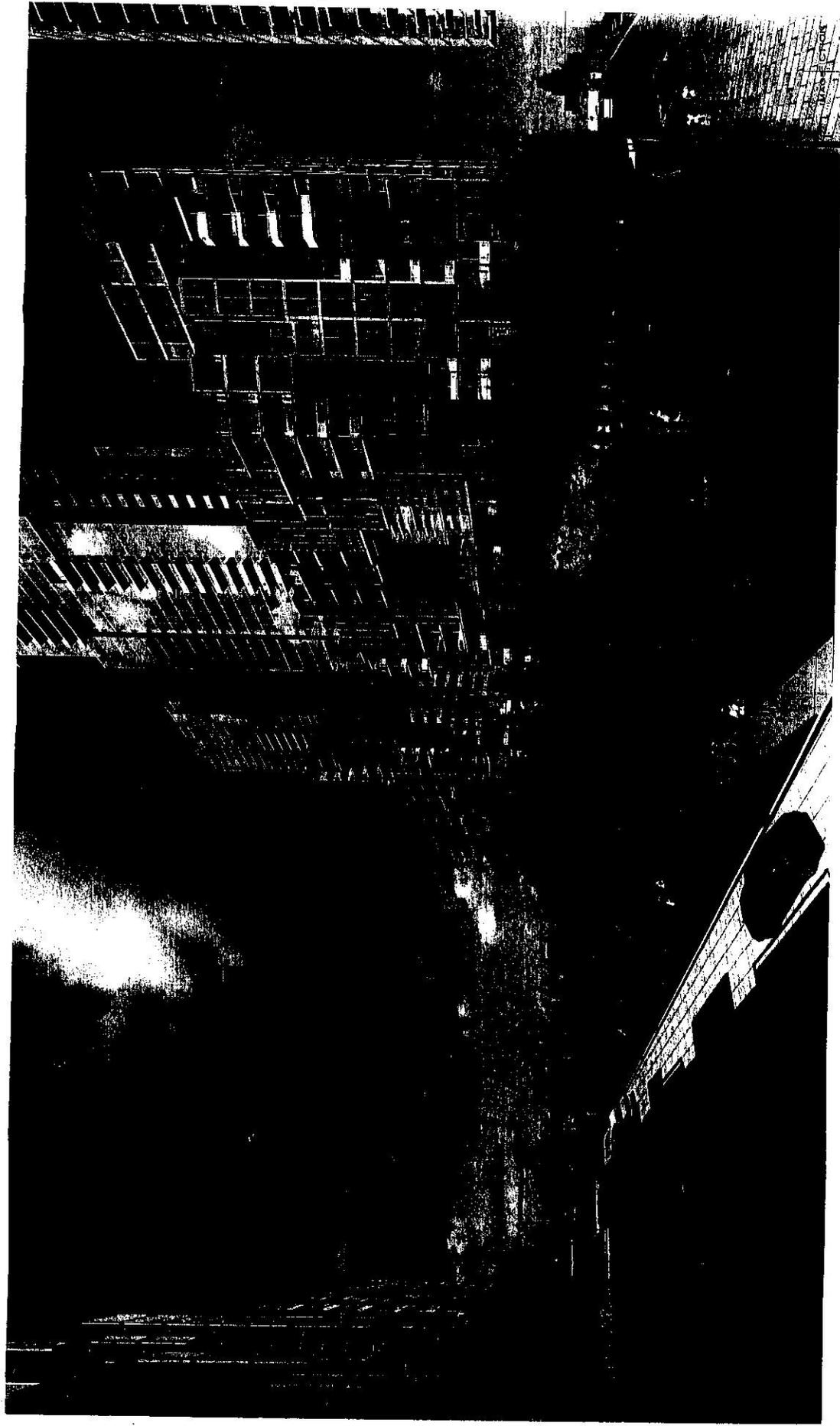
KEY

- OFFICE
- RESIDENTIAL HIGH RISE
- RESIDENTIAL MEDIUM RISE
- HOTEL
- RETAIL
- COMMUNITY/CULTURAL
- EXISTING TRANSIT STOP
- FUTURE TRANSIT STOP

PROGRAM SUMMARY

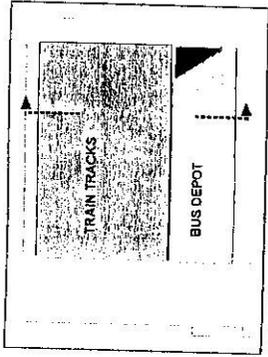
- Residential (6,897 Units): 6,897,000 SF
- Office: 150,000 SF
- Hotel: 273,000 SF
- Retail: 595,100 SF
- Community/Cultural: 93,000 SF
- TOTAL: 8,448,100 SF**

Site Plan

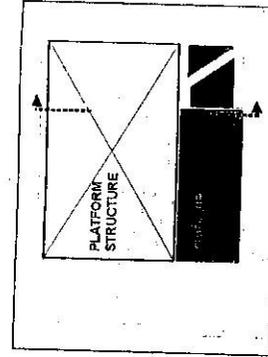


View In Park Looking Northwest

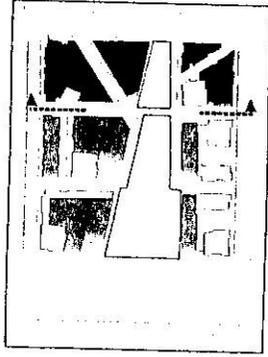
CHAN KRIEGER & ASSOCIATES
ARCHITECTURE AND URBAN DESIGN
HARGREAVES



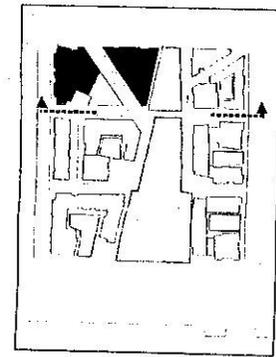
+8.5' TRACK ELEVATION
BUS DEPOT
RETAIL



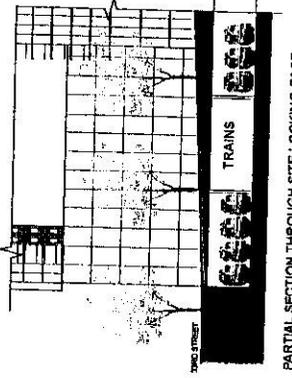
+30' PLATFORM STRUCTURE
GARAGE PARKING
RETAIL



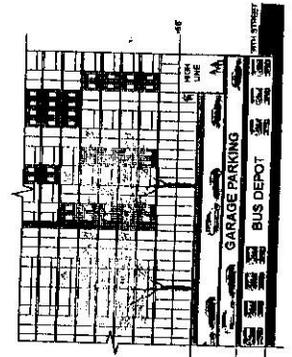
+43 PARK LEVEL
RETAIL HOTEL
COMMUNITY, RESIDENTIAL



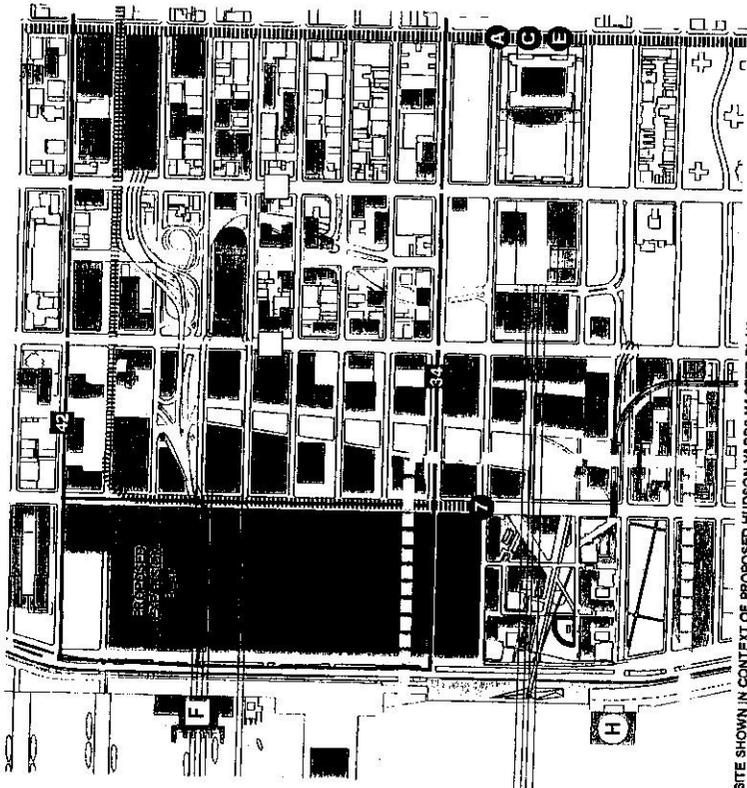
+55' UPPER LEVEL
RESIDENTIAL, GARDENS
HOTEL, OFFICES



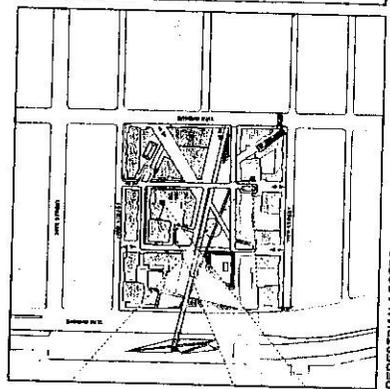
PARTIAL SECTION THROUGH SITE LOOKING EAST



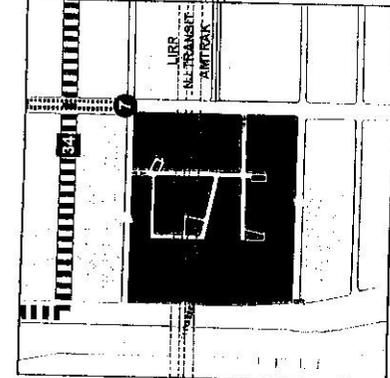
PARTIAL SECTION THROUGH SITE LOOKING EAST



SITE SHOWN IN CONTEXT OF PROPOSED HUDSON YARDS MASTER PLAN



PEDESTRIAN ACCESS,
PUBLIC SPACE & VIEWS



VEHICULAR ACCESS &
TRANSIT ROUTES

URBAN DESIGN DIAGRAMS

CHAN KRIEGER & ASSOCIATES
ARCHITECTURE and URBAN DESIGN
HARGREAVES
ASSOCIATES March 21, 2005



View From Cafe Looking West

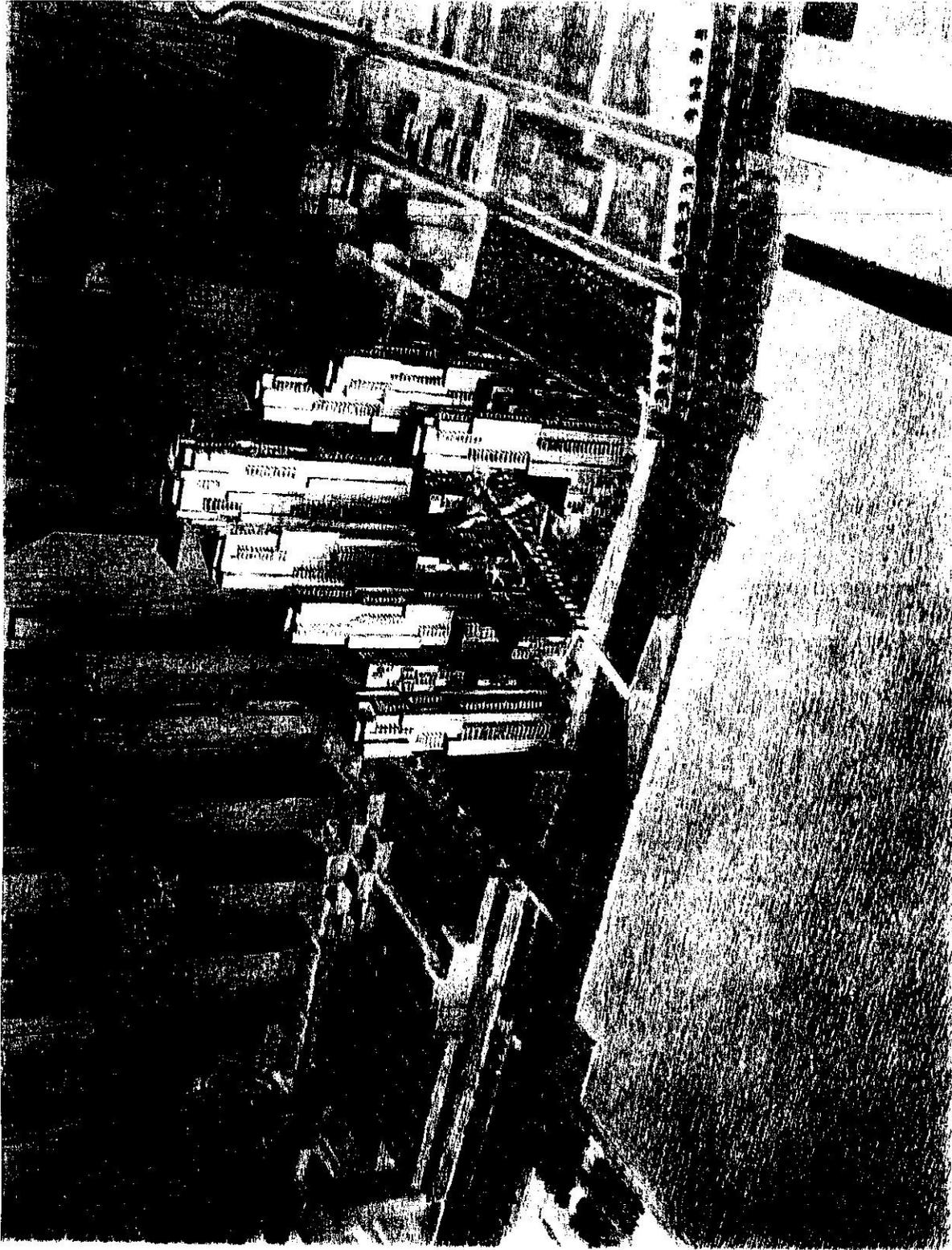


View From Fountain at 11th Avenue Looking West



View From 11th Avenue Looking Southwest

CHAN KRIEGER & ASSOCIATES
ARCHITECTURE and URBAN DESIGN
HARGREAVES



Aerial View From Hudson River

CHAN KRUEGER & ASSOCIATES
ARCHITECTURE and URBAN DESIGN
HARGREAVES
ASSOCIATES 145-14 04 0006

