



MANHATTAN COMMUNITY BOARD SIX

366 United Nations Plaza – Ste. 308, New York, NY 10017

Phone: (212) 319-3750 Fax: (212) 319-3750

E-mail CB6MGOV@aol.com

corresp

Mark Adams Taylor
Chair

Timothy McGinn
First Vice Chair

Charles Buchwald
Second Vice Chair

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Secretary

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Toni Carlina
District Manager

September 23, 2002

Maureen O. Helmer, Chair
Public Service Commission
3 Empire State Plaza
Albany, NY 12223

*FRES
C99-F-1314*

Re: Con Edison DGEIS Resolution with Various Committee Statements

Dear Ms. Helmer:

Enclosed please find a resolution passed by Community Board Six concerning the above captioned matter.

If there are any questions pertaining to this resolution, please contact the Board Office at (212) 319-3750.

Sincerely,

Toni Carlina
District Manager

Encl.

- cc: Thomas J. Dunleavy, PSC
- James D. Bennett, PSC
- Leonard A. Weiss, PSC
- Neal N. Galvin, PSC
- C. Virginia Fields, Manhattan Borough President
- Liz Krueger, NYS Senator
- Steve Sanders, State Assembly Member
- Eva Moskowitz, City Council Member

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CON-EDISION SUBCOMMITTEE OF THE LAND USE COMMITTEE AND OTHER COMMITTEES SEPTEMBER 2002

Re: Con Edison DGEIS

WHEREAS, in response to New York State's program to deregulate the electric industry Con Edison proposed in 1998 to dispose of its steam system, including the Waterside and East River Generating Stations, to a new operator and to dispose of three sites along First Ave. between 35 and 41 Streets, specifically 708 First Ave., 685 First Ave., and 616 First Ave., for redevelopment, and in 1999 modified its proposal so as to retain the steam system, relocate power generation from Waterside to East River, and add Waterside to the properties to be disposed of for redevelopment; and

WHEREAS, in furtherance of this plan Con Edison applied in September 1999 (under Article X of the Public Service Law, case # 99-F-1314) to "repower" the East River Generating Station at 14 Street, applied in March 2001 (under Section 70 of the Public Service Law, case # 01-E-0377) to dispose of the Waterside properties to FSM East River Associates LLC for redevelopment, expects to apply in late 2002 or early 2003 (under the Uniform Land Use Review Procedure) to rezone the Waterside properties, and may apply to decommission Waterside when its generating capacity has been replaced at East River; and

WHEREAS, recognizing that absent the opportunity to sell the Waterside properties Con Edison would have little incentive to relocate power generation from Waterside, business activities from 708 First Ave., and parking from the garage on the bottom three floors of 708 First Ave. and parking lots on the river front and at 616 and 685 First Ave., most of which seems to be intended to go to the East River Generating Station and adjacent properties along the East River near 14 Street, Community Board Six in a November 1999 resolution and consistently since then has argued that all of these actions are inextricably interrelated and must be considered together rather than segmented, in order to best understand their consequences and opportunities; and

WHEREAS, concurrent significant land use and transportation proposals within the ambit of Con Edison's project include:

1. The redesign and reconstruction of the 34 Street Viaduct and the rehabilitation of the FDR Drive between 25 and 42 Streets and, eventually, in the vicinity of 14 Street,
2. A gaggle of proposed buildings for the Bellevue/NYU campus,
3. The East Side Access project to bring LIRR service to Grand Central Terminal,
4. The design and the continuation of construction of the Second Avenue Subway,
5. An effort, by the Economic Development Corporation, to anticipate the future needs of the United Nations in the community,
6. The expansion of East River ferry service, including the reconfiguration of the ferry landing and bus stop at 34 Street,
7. The completion of Stuyvesant Cove Park,

8. The redevelopment of various sites such as the south side of 34 Street between Second and Third Avenues and the west side of Second Avenue between 36 and 37 Streets; and

WHEREAS, the Public Service Commission is likely to consider its decision as to the disposition of the Waterside properties through its institutional lens in terms of the value of the site for the production of energy compared to applying the proceeds of its sale to repaying investment and subsidizing operations; and

WHEREAS, Con Edison and FSM East River Associates LLC may intend the generic environmental analysis for the application for the disposition of the Waterside properties to also serve, with supplementation, for site specific environmental analysis of the rezoning application; and

WHEREAS, the Public Service Commission on or about 18 June 2002 released for comment a draft generic environmental impact statement concerning Con Edison's proposal to sell to FSM East River Associates LLC its Waterside properties; and

WHEREAS, the Public Service Commission may permit Con Edison to dispose of some or all of its properties at Waterside and may attach appropriate conditions to such disposition to protect the public interest; and

WHEREAS, although absent the anticipated rezoning application one can but adumbrate many of the impacts and possible mitigations of this project that may arise during the Uniform Land Use Review Procedure review of such an application; now

Therefore, be it

RESOLVED, that Community Board Six offers testimony on the following aspects of the DGEIS in keeping with the attached statements and resolutions:

- Land Use, Zoning, and Public Policy (DGEIS Section 2)
-- by Land Use Committee
- Socioeconomic Conditions (DGEIS Section 3)
-- by Housing and Homeless Services Committee
- Community Facilities and Services – Police (DGEIS Section 4)
-- by Public Safety, Environment, and Human Rights Committee
- Community Facilities and Services – Fire (DGEIS Section 4)
-- by Public Safety, Environment, and Human Rights Committee
- Community Facilities and Services – Schools (DGEIS Section 4)
-- by Youth and Education Committee
- Open Space and Recreation Facilities (DGEIS Section 5)
-- by Parks, Landmarks, and Cultural Affairs Committee
- Shadows (DGEIS Section 6)
-- by Land Use Committee
- Historic and Archaeological Resources – Architecture (DGEIS Section 7)
-- by Parks, Landmarks, and Cultural Affairs Committee
- Urban Design and Visual Resources (DGEIS Section 8)
-- by Land Use Committee

- Neighborhood Character (DGEIS Section 9)
-- by Land Use Committee
- Hazardous Materials (DGEIS Section 10)
-- by Public Safety, Environment, and Human Rights Committee
- Infrastructure – Electromagnetic Fields (DGEIS Section 11)
-- by Public Safety, Environment, and Human Rights Committee
- Traffic and Parking (DGEIS Section 12)
-- by Transportation Committee
- Pedestrians and Transit (DGEIS Section 13)
-- by Transportation Committee
- Air Quality (DGEIS Section 14)
-- by Public Safety, Environment, and Human Rights Committee
- Noise (DGEIS Section 15)
-- by Public Safety, Environment, and Human Rights Committee
- Coastal Zone Management (DGEIS Section 16)
-- by Transportation Committee and Parks, Landmarks, and Cultural Affairs Committee
- Alternatives – 6 FAR (DGEIS Section 19)
-- by Land Use Committee
- Alternatives – Adaptive Waterside Reuse (DGEIS Section 19)
-- by Land Use Committee

And be it further

RESOLVED, that Community Board Six asks the Public Service Commission to recognize the impacts described in this testimony and to consider alternatives and mitigation that would address these impacts; and be it further

RESOLVED, that Community Board Six recommends that, in the public's interest, the Public Service Commission impose the following conditions on the disposition of Con Edison's Waterside properties:

1. That 39 and 40 Streets between First Avenue and the FDR Drive service road be disposed of to the City to be remapped and used as streets,
2. That if space is needed along the east edge of the properties for the improvement of the FDR Drive it be provided to the New York State Department of Transportation,
3. That if a portion of the site is needed for office space or other purposes by the United Nations it be offered to the United Nations Development Corporation,
4. That there be commitments to provide off-site public open space including:
 - i. **The esplanade between 38 and 42 Streets**
 - ii. The esplanade between 13 and 15 Streets
 - iii. Enlarged and relocated ball fields between 16 and 18 Streets
 - iv. A deck over the FDR Drive between 38 and 41 Streets
 - v. Parks at the Queens Midtown Tunnel access block,
5. That space be provided for a school, probably pre-K through 5,

6. That the historic portions of the Waterside Generating Station not be destroyed before a serious and fair analysis of their reuse been performed,
7. That the heights of new buildings be limited to 400 feet,
8. That the total zoning floor area of the project be substantially less than is being applied for,
9. That parking be limited to accessory parking and to approximately ten spaces per 100 apartments,
10. That 20 percent of the total apartments in the project be affordable under the 80:20 program, which qualifies the project for 421a real estate tax abatement,
11. That a portion of the disposition proceeds be set aside by the Public Service Commission to pay for such mitigation as off-site open space, the school, and historic restoration; and

And be it further

RESOLVED, that Community Board Six requests assurance that the scope of the environmental review of the anticipated rezoning application will not be limited or constrained by the environmental review of the application to the Public Service Commission.

PASSED: 34 in Favor, 0 Opposed, 1 Abstention, 2 Not Entitled

COMMENTS ON THE DRAFT DGEIS FOR THE DISPOSITION OF THE CON EDISON

WATERSIDE PARCELS

1. The residential plaza bonus provision has been removed from the NYC Zoning Resolution Text and should not be reintroduced at this site since it is contrary to zoning policy in the study area.
2. Community Board Six (CB 6) and the East Side Rezoning Alliance (ERSA) worked closely with City Planning to create contextual zoning districts in the CB 6 area from East 34th Street to East 14th Street in the mid-blocks and along the avenues. It is the intent of CB 6 and ESRA to continue to press the contextual district rezoning in the study area.
3. The rezoning of The Rivergate, Manhattan Place and Horizon sites to C1-9 from manufacturing use in the eighties was further limited by the City Planning Commission (CPC) to Floor Area Ratios (FAR) of + 10.5, and with substantial on-site and off-site public amenities. The proposed 12.0 FAR for the Con Edison sites East of First Avenue is therefore, inconsistent with CPC policy.
4. The analysis of the study area does not adequately recognize the overwhelmingly residential neighborhoods surrounding the development site. With the exception of the major institutions located in the study area along First Avenue, (NYU Medical Center, and the United Nations, and the United Nations Development Corporation's (UNDC) UN affiliated buildings), the neighborhood is residential in character.

(DEIS)

p. 2-39 “The residential development program is entirely consistent with land use, zoning and public policy in the study area.”

2 -36 “The residential development program would be compatible with public development policy as evidenced by zoning trends over the last two decades.”

2-21 5. The statement that public policy “promotes a high density largely residential neighborhood north of East 34th Street on the far east side, a higher density, more commercially-oriented development near the UN”, is not accurate. The special function of the UN and UNDC developments are unique and an exception in an otherwise residential East Side. Any policy which would promote the extension of the Commercial Central Business District (CBD) to the far east side is contrary to public policy.

2-21 6. The agreement between Con Edison and the purchaser (FSM) assumes a potential for development of up to 12.0 FAR. The site, with East 39th Street and East 40th Street currently unmapped with a maximum potential of 12.0 FAR, will actually be closer to 13.0 FAR over the entire site. This is inconsistent with the City Planning Commissions previous approvals of 10.5 + FAR at the Rivergate, and Manhattan Place and Horizon development sites.

Con't.

2-13 In addition, the DEIS erroneously states that “ The Rivergate and Manhattan Place developers took advantage of the plaza bonus to construct their buildings at a FAR of 12.0.”

2-24 7. In the residential development program, although a maximum density residential sites could be rezoned to C1-9, “in practice, it is more likely that the sponsor would request a rezoning to a full commercial district, such as C5-2 -----or C6-4, another common Manhattan CBD commercial district.”

C5-2 permits retail uses that serve the metro region. C6-4 is a Central Business District zone that allows in addition, entertainment and amusement uses. The commercial uses allowed in both C5-2 and C6-4 are inappropriate uses for a residential neighborhood.

8 Permitting the plaza bonus for the development site is contrary to zoning policy, and inconsistent with the underlying residential zoning in the study area. In addition, the maximum heights of buildings should be limited to a maximum to 400 feet. This is

2-4 consistent with the overwhelming number of buildings used in Table 2-1 which shows buildings in the study area to be between 20 and 35 stories and under 400 feet. A four hundred foot height limit would also respect the importance of the UN Secretariat building at 500 feet.

9. The number of parking spaces, 2600, for the residential and mixed use development

2-35 programs are excessive. For the residential development program, 2600 spaces represent over 42% of residential units. The maximum number of accessory parking spaces permitted

for much of Manhattan is twenty percent. This would be a maximum of 1,233 accessory parking spaces for the development. Therefore, 1,367 parking spaces are contemplated for transient use. Article 1 chapter 3 of the zoning resolution was established to address air quality problems due to traffic in the Manhattan CBD by limiting parking. The parking spaces mentioned in the DEIS contradicts public policy and has not been adequately justified.

10. The NYS Dept. of Transportation is currently studying various options for the reconstruction of the FDR Drive. The disposition of the site should include the possibility of easements or the ceding of portions of eastern edge of the site to the NYS DOT in order to enable the redesign and configuration of the highway, which would afford the easiest pedestrian access to the riverfront as well as the creation of the widest possible public open space at the river.
11. The DEIS does not adequately address the preservation of all or portions of the existing waterside plant through adaptive reuses beneficial to the far east side.
12. Existing R8 zoning on the west side of First Avenue between East 34th Street and East 36th Street suggests the possibility for a lower density development for the 616 First Avenue site. A lower density development at 616 First Avenue would better relate to the scale of residential densities that exist below East 34th Street.
13. East 39th Street and East 40th Street east of First Avenue are currently unmapped. As a condition of the disposition of the waterside parcels, those streets should be mapped as public streets. Mapping these streets would:
 1. Allow permanent view corridors and/or public access to the river.

2. Reduce the overall site area and the maximum FAR permitted, and be more sympathetic to Manhattan block densities.
 3. Allow the development sites to be more fully integrated into the Manhattan grid system.
 4. Mapping of the streets would require buildings to adhere to height and setback regulations and be consistent with tower-on-a-base zoning regulations in the study area.
-
14. The development of the waterside sites should provide for significant off-site improvements to the waterfront. A continuous waterfront park/promenade along the Manhattan waterfront with easy access from the cross streets is a planning priority of CB 6 and a public policy for Manhattan and the rest of the city. Precedent for significant on-site and off-site public improvements has been established with the creation of a waterfront park between East 36th Street and East 38th Street as a component of the Manhattan Place development at East 36th Street and First Avenue, and an ice skating rink at First Avenue and East 34th Street, as a component of the Rivergate development at East 34th Street and First Avenue.
-
15. The nexus of Robert Moses Park just south of the U.N. campus would make that site suitable for future U.N. use. The DEIS should study the feasibility of exchanging the 685 First Avenue site for Robert Moses Park, and mapping 685 First Avenue as a public Park.
-
16. Public policy statements in the DEIS which describes the replacement of obsolete manufacturing uses on the east side, particularly along the East River is accurate. However, the DEIS statement that justify only high density development, in particular, the two mixed use scenarios is not consistent with NYC zoning policy for the study area. Since the development

parcels' unique location on the far east side is distant from good public transportation. Public policy actions suggest the extension of existing moderate to dense residential development with significant waterfront improvements and local retail uses along First Avenue.

DRAFT

24 Jul 02

Land Use, Zoning, and Public Policy (Section 2)

The thesis of this section seems to be that land use and zoning changes in this area during the last 30 years can be read as a public policy in favor of the proposed project. This seems correct in terms of the proposed change of land use from industrial to residential with some commercial at the northern end of the site. It seems wrong in terms of the proposed density, configuration of buildings, and parking.

The proposed density is 12.0 FAR. (Actually it is closer to 13.0 because the zoning lots include two streets.) Although the nearby rezonings have generally been to C1-9 this is not consistent with 12.0 FAR based on plaza bonuses.

- The zoning text has been changed to remove the bonus for residential plazas.
- Rivergate, Manhattan Plaza, and the Horizon, although zoned C1-9 and including substantial on- and off-site open space, are built at less than 12.0 FAR. The DGEIS should disclose the FARs and the types and amounts of open space, including the endowment for the esplanade. The DGEIS is wrong where it states that "[t]he Rivergate and Manhattan Place developers took advantage of the plaza bonus to construct their buildings at an FAR of 12.0." (page 2-13, last paragraph)

The proposed buildings are generally sheer towers rising to 700 feet and more and do not provide street walls relating to the surrounding built context.

- The ESRA rezonings have established extensive contextual districts throughout CB#6.
- The Special Midtown District provides for street walls and limits the location and bonusability of plazas.
- Most of the project would be subject to tower-on-a-base regulations.
- The Special United Nations Development District limits its buildings to various heights and disallows a bonus for plazas.

The proposal includes parking for 2,600 cars. This is substantially more than allowed for accessory use. The DGEIS does not seem to present a policy argument for the large amount of proposed parking.

- Article I, Chapter 3 of the Zoning Resolution was established to address air quality problems due to traffic in the Manhattan CBD by limiting parking.

The DGEIS should be revised to disclose and correct its discussions of the items outlined above. It should also present alternatives and mitigation addressing these issues. These should include, but not be limited to:

- Remapping 39 and 40 Streets to remove the excess zoning lot area that distorts the FAR calculations.
- Reducing the FAR to remove the plaza bonus.
- An alternative configuration of the buildings that uses tower-on-a-base regulations and is more contextual.
- Providing less parking in order to reduce traffic.

LAND USE, ZONING, AND PUBLIC POLICY

A. INTRODUCTION

The transfer of the Disposition Parcels from Con Edison to FSM East River Associates, LLC, would permit substantial new development along the eastern edge of Midtown Manhattan in the Kips Bay area. This location, which has had in the past a tradition of heavy industrial use, has been undergoing considerable change over the last 30 years. The issue for this chapter is whether the anticipated new development that would take place as a result of the Proposed Action would be compatible with land use patterns in the area and consistent with zoning trends and public policy.

The analysis presented below concludes that the As-of-Right Development Scenario and the hypothetical programs associated with the Rezoning Scenario would have different effects on land use, zoning, and public policy in the study area. Under the As-of-Right Scenario, manufacturing zoning would remain, although no new manufacturing uses would be anticipated. The commercial uses that could be constructed under this scenario would be less consistent with development trends in that it would not promote the development of a high density residential neighborhood north of East 34th Street, high density mixed-use development near the U.N., and very dense, active commercial development in the Midtown CBD.

All of the programs under the Rezoning Scenario would be consistent with trends in the study area in that they would replace the obsolete manufacturing zoning currently mapped on the Disposition Parcels with zoning and development that would be more compatible with City policy for the area. The Residential Development Program, built using prevailing zoning districts to the density underlying most recent nearby development, would be entirely consistent with land use, zoning, and public policy in the study area. The Mixed-Use Development Program, which assumes substantial office development two to four blocks south of East 42nd Street, would be less consistent with land use, zoning, and public policy in the study area, which does not contemplate an office district so far south, but on balance that effect would not be significant. The Mixed-Use on 708 First Avenue Development Program, by placing commercial office development on the most northerly site, closest to the high density mixed-use district near the U.N., would be consistent with land use, zoning, and public policy in the study area.

B. ANALYSIS APPROACH

The study area for land use, zoning and public policy analysis encompasses the region within a ½ mile of the Disposition Parcels, a distance that, according to the *CEQR Technical Manual*, defines the area in which the Proposed Action could reasonably be expected to create potential direct and indirect impacts. The study area is further divided to create a primary study area, within a ¼-mile radius, where effects of the Proposed Action are likely to be the most direct, and a secondary study area covering the blocks within a ¼- to ½-mile distance from the Disposition Parcels.

Within these areas, the analysis examines whether the Proposed Action would be compatible with surrounding land use and consistent with zoning and public policy or whether it would change land use patterns and trends enough to trigger additional, indirect changes in land use. In so doing, the analysis first presents existing land use and zoning in the study area and projects those conditions to the future analysis years (2007 and 2011) without the Proposed Action by identifying proposed development and other land use, zoning or public policy changes anticipated to occur within this time frame.

C. EXISTING CONDITIONS

DEVELOPMENT HISTORY OF THE STUDY AREA AND RECENT TRENDS

The study area lies primarily within the Kips Bay area of Manhattan. This section developed from farmland (18th Century) to country estates by the water (early to mid-19th Century) to one of the most intense industrial centers in the City, surrounded by tenements and slums. The industrialization of this portion of the East River waterfront was well-established by the 1880s, and continued through the middle of the 20th Century. In the 1920s, when luxury apartment living was beginning to take hold in Manhattan, high-rise apartment buildings began to appear (the most notable in the study area being the Tudor City apartments). The *WPA Guide to New York City*, published in 1939, describes it as follows:

Huge industrial enterprises—breweries, laundries, abattoirs, power plants—along the waterfront face squalid tenements not far away from new apartment dwellings attracted to the section by its river view and its central position. The numerous plants shower this district with the heaviest sootfall in the city—150 tons to the square mile annually. ... El trains of the Second and Third Avenue lines thunder by constantly, and First Avenue, an important commercial traffic artery, brings an endless, noisy procession of trucks.

With the construction of the FDR Drive and the Midtown Tunnel in the 1930s—which demolished development along the river and more than 10 square blocks of industrial buildings and tenements—the restrictions on slaughterhouses in Manhattan, and general industrial decline that followed World War II, the heavy industries of Kips Bay began to disappear. The change was also spurred by the demolition of the Second Avenue El in 1940 and the Third Avenue El in 1955. The United Nations was built on the Abattoir Center, which extended from 42nd to 46th Streets on First Avenue. NYU Medical Center was built on industrial land between 30th and 34th Streets, extending the medical complex (Bellevue Hospital had been developed much earlier) northward.

Beginning in the 1960s and continuing to today, properties east of Third Avenue began to be developed for high-rise residential use. Since 1980, major high rise buildings have been developed along First and Second Avenues between 34th and 40th Streets; most of these required rezoning, since much of the manufacturing zoning along First Avenue still remained. As discussed later in the chapter, these rezonings have in many cases resulted in increasing the maximum allowable floor area on a given site and have supported the expansion of high density residential or commercial uses eastward. In all cases the zoning changes were consonant with City policy, which acknowledged the decline of the manufacturing district and promoted high density residential redevelopment above a commercial base along the wide avenue streets.

EXISTING LAND USE

Today the Disposition Parcels account for nearly all that is left of the enormous waterfront district that once stretched through the study area and beyond in both directions. They are surrounded by the land use pattern of an East Midtown residential district on the edge of Midtown Manhattan's Central Business District (CBD), as described below.

DISPOSITION PARCELS

The developable portion of the Disposition Parcels have an aggregate area of approximately 378,280 square feet, or approximately 8.7 acres. (Including the portion of the 685 First Avenue Parcel

containing the East 40th Street substation, from which development rights could be transferred, the aggregate area would be approximately 9.8 acres.) Each parcel is described below.

616 First Avenue

The 616 First Avenue site encompasses an entire City block bounded by First Avenue, East 36th Street, the Franklin Delano Roosevelt (FDR) Drive, and East 35th Street with an area of approximately 68,770 square feet. On the western portion of the property, a fuel storage facility for the Waterside Station is currently undergoing environmental remediation. Today, the eastern portion of the property contains a fenced-in gravel and dirt parking area.

685 First Avenue

The 685 First Avenue site is a 32,365-square-foot parcel located between East 39th and East 40th Streets, west of First Avenue. It is part of a larger, 80,677-square-foot zoning lot that includes a Con Edison substation and an open area used by Con Edison in servicing the substation. A Special Permit issued by the New York City Board of Standards and Appeals regulates the 685 First Avenue zoning lot and limits its use to a substation and an accessory parking lot for Con Edison.

708 First Avenue

The 708 First Avenue site is located within the area bounded by First Avenue, East 41st Street, the FDR Drive, and the extension of the northern street line of East 40th Street (discontinued), and has an area of 82,424 square feet. The site is improved with a 10-story office building for Con Edison containing 491,622 gross square feet (gsf) of floor area.

Waterside

The Waterside site is bounded by First Avenue, the southern boundary of 708 First Avenue, the FDR Drive, and East 38th Street, and has an area of approximately 194,721 square feet. The site is fully developed with the Waterside Station—an active power generating facility—and with related Con Edison facilities.

STUDY AREA

Primary Study Area

The primary study area covers a large portion of Midtown's far east side. It extends from East 30th to East 46th Street, primarily east of Third Avenue, although a narrow section between East 36th and East 43rd Streets extends westward towards (but does not reach) Lexington Avenue. The most prominent uses include Tudor City, Kips Bay Plaza—a 1960s housing development designed by I.M. Pei, the NYU medical center, the United Nations (U.N.), the ramps and entrances to the Queens Midtown Tunnel, the FDR Drive and East River waterfront, and the Waterside site itself. Throughout the area are examples of a full range of moderate-to-dense urban uses, as described, by use, below.

Residential Use. Overall, residential uses prevail in the primary study area (see Figure 2-1). In the section closest to the Disposition Parcels (east of Second Avenue, from East 34th to East 42nd Streets) high-rise apartment buildings line First and Second Avenues. Many of these, mostly built in the last two decades, are tall, ranging up to 512 feet in height (see Table 2-1 and Figure 2-2). Tudor City represents high-rise residential development from an early era, as do many of the smaller apartment buildings, tenements and row houses that line the midblocks and are interspersed along Second Avenue.

Table 2-1

High Density Residential Development in the Primary Study Area

| Map No. | Building | Height | Stories | Year Built | Bonus Type |
|---------|----------------------------------------------------------------------------|--------|---------|------------|----------------------|
| 1 | River East - 251 East 32nd Street | 195 | 20 | 1964 | |
| 2 | 229 East 36th Street | 191 | 21 | 1963 | |
| 3 | Paramount - 240 East 39th Street | 525* | 52 | 1999 | Inclusionary Housing |
| 4 | Kips Bay Park Apts - 333-343 East 30th Street and 300-330 East 33rd Street | 208 | 20 | 1962 | |
| 5 | 300 East 34th Street | 365 | 36 | 1974 | plaza |
| 6 | 347 East 33rd Street | N/A | 35 | 1910 | |
| 7 | 308 East 38th Street | N/A | 20 | 1964 | |
| 8 | New York Tower - 330 East 39th Street | 351 | 38 | 1980 | plaza |
| 9 | Sonoma - 312-314 East 39th Street | 250 | 27 | 2000 | |
| 10 | Whitney - 311 East 38th Street | 305* | 30 | 1984 | plaza |
| 11 | Rivergate - 606 First Avenue | 358 | 35 | 1985 | plaza |
| 12 | Highpoint - 250 East 40th Street | 312 | 36 | 1972 | plaza |
| 13 | Vanderbilt - 235 East 40th Street | 343 | 41 | NA | plaza |
| 14 | 239-245 East 44th Street | 345 | 33 | 1986 | |
| 15 | 825-835 Second Avenue | 186 | 21 | 1964 | |
| 16 | 748-760 Second Avenue | 190 | 21 | 1963 | |
| 17 | Windsor Tower - 1-19 Tudor City Place | 206 | 26 | 1930 | |
| 18 | 25 Tudor City Place | 238 | 23 | 1928 | |
| 19 | 45 Tudor City Place | 232 | 25 | 1927 | |
| 20 | 312-324 East 42nd Street | NA | 32 | 1929 | |
| 21 | The Churchill - 728 Second Avenue | 305 | 32 | 1966 | plaza |
| 22 | Horizon - 415 East 37th Street | 378 | 42 | 1989 | |
| 23 | Manhattan Place - 630 First Avenue | 317 | 37 | 1984 | plaza |
| 24 | Corinthian - 330 East 38th Street | 512 | 55 | 1987 | plaza |
| 25 | Turtle Bay - 305 East 45th Street | 318 | 24 | 1929 | |
| 26 | 314-324 East 46th Street | N/A | 32 | 1981 | |

Note: Refer to Figure 2-2.
* Estimated height.
Sources: LotInfo 2001; Sanborn Insurance and Land Maps; *Privately Owned Public Space: The New York City Experience*, Kayden, NYCDP, and MAS 2000; NYCDP Manhattan Office; and Allee King Rosen & Fleming, Inc., field surveys conducted April, May, and June 2001 and March 2002.

Farther north, south and west from the Disposition Parcels, residential uses come in a variety of forms, as well—the distinctive, 21-story, towers-on-superblock at Kips Bay Plaza (a development form prevalent in the 1950s and 1960s), more recent high-rise buildings along East 34th Street and along Second and Third Avenues (south of East 39th Street), and the older brownstones, row houses, and mid- and high-rise buildings of the Murray Hill neighborhood west of Third Avenue. During the 1970s and 1980s, many high-rise residential towers with floor area ratios (FARs) of 10.0 to 12.0, were constructed in the primary study area. Many of the towers took advantage of the plaza bonus provisions of the City's zoning resolution, which allow construction of larger buildings in exchange for the provision of a publicly accessible plaza on site. The plazas, which by law must be open to the public, must contain minimum amounts of landscaping and seating, and often contain paved areas and water features. The towers are concentrated largely between Second and Third Avenues. North

of 43rd Street, residential uses—predominantly a mix of residential towers and brownstones—are concentrated east of Second Avenue in the area known as Turtle Bay.

Commercial Uses. With the exception of a dense office commercial corridor along Third Avenue north of East 39th Street and the area around the U.N., commercial uses in the primary study area tend to be neighborhood oriented—shops, restaurants and delis, and local commercial establishments and services. These retail uses are concentrated in the ground floors of buildings along the avenues, along East 34th Street, and in the Kips Bay Plaza strip of stores, restaurants and movie theaters on the east side of Second Avenue from East 30th to East 32nd Streets. Given the proximity of the area to Midtown, however, the primary study area does contain a number of hotels, such as the 40-story, 384-foot Helmsley Hotel on East 42nd Street between Second and Third Avenues, the Millennium United Nations at East 44th Street and First Avenue, the 20-story Crowne Plaza Hotel on East 42nd Street between First and Second Avenues, and the Dumont Plaza on East 34th Street between Lexington and Third Avenues.

East 39th Street and Second Avenue generally mark the respective southern and eastern borders of Manhattan's CBD. This area is dominated by tall office towers, many of which range from 20 to 50 stories, 200 to 450 feet tall. West of Second Avenue, East 42nd Street, a major two-way street, is dominated by commercial office towers with ground-floor retail uses. Additional commercial buildings are located between First and Second Avenues near the U.N.

Institutions, Community Facilities, and Publicly Accessible Open Spaces. The study area contains three world renowned institutions: the headquarters of the U.N., the NYU medical complex, and the Ford Foundation. The U.N. extends from East 42nd Street to East 48th Street between First Avenue and FDR Drive in four main buildings: the General Assembly Building, the Conference Building, the 39-story, 503-foot Secretariat Building, and the Dag Hammarskjold Library. The missions and diplomatic offices of many countries are located on streets surrounding the U.N.

The NYU Hospitals Center and NYU School of Medicine occupy the superblock between East 30th and East 34th Streets, east of First Avenue, with the exception of three small lots. The complex includes Tisch Hospital, the Post-Graduate Medical School, the Skirball Institute of Biomolecular Medicine, the Sackler Graduate School in Biomedical Sciences, the Kaplan Comprehensive Cancer Center, the Nelson Institute of Environmental Medicine, and the Center for AIDS Research. NYU also operates an ancillary facility on First Avenue between East 37th and East 38th Streets and its Child Study Center on First Avenue between East 34th and East 35th Streets. The Ford Foundation occupies its headquarters office building and atrium on East 42nd Street between First and Second Avenues.

More local institutional uses include, among others, the Bide-A-Wee animal adoption center, the St. Vartan Armenian Cathedral, a public elementary school and intermediate school, both on East 33rd Street, and the Kips Bay Public Library, and a fire station on East 29th Street.

There are several publicly accessible open spaces in the primary study area.* Robert Moses Playground, located just north of the 708 First Avenue site between East 41st and 42nd Streets, contains basketball and handball courts and a paved baseball diamond. A stretch of the East River Esplanade, containing benches and a walkway, extends from south of East 38th Street to East 30th Street, with a few interruptions. St. Vartan Park, with both active and passive recreational facilities,

*Publicly accessible open space is discussed in detail in Chapter 5, "Open Space and Recreational Facilities."

occupies the entire block between East 35th and East 36th Streets, and First and Second Avenues. Two public playgrounds and two publicly accessible (but privately owned) gardens are located at the center of the Tudor City development. There are several public plazas associated with residential buildings in the area, including New York Tower, the Whitney, the Corinthian, the Churchill, the Rivergate, and Manhattan Place Condominiums. These plazas are predominantly paved, with benches, trees, and the occasional water feature. Rivergate Plaza has active recreational facilities, including a basketball court and play equipment.

Industrial, Transportation, and Other Infrastructure Uses. As noted above, the Waterside plants comprise a large portion of the remains of an industrial district that once lined the East River waterfront. Other industrial or related infrastructure uses include a New York City Department of Environmental Protection (NYCDEP) water maintenance facility directly south of Waterside and two Con Edison substations, one just south of the NYCDEP facility and one on the 685 First Avenue Disposition Parcel. Major transportation uses of land in the primary study area, other than streets, are the FDR Drive, which parallels the waterfront through the study area, and the entrance to the Queens Midtown Tunnel, which occupies virtually the entire block between First and Second Avenues, East 36th to East 37th Street, and a portion of the block to the west. Additional north-south streets east and west of Second Avenue run from East 34th to East 40th Streets to give access to and from the tunnel. The tunnel is vented through a structure that stands in the middle of Robert Moses Park on East 41st Street, east of First Avenue. Also, the area contains a ferry terminal on the waterfront at approximately East 35th Street and a heliport south of East 34th Street, also on the waterfront.

Secondary Study Area

The secondary study area extends another ¼ mile from the primary study area, and extends north to East 51st Street west to the east side of Madison Avenue at its widest point, and south to East 25th Street (see Figure 2-3). The East River remains the boundary of both study areas. The northwestern quadrant contains the southeast portion of Manhattan's Midtown office district (CBD). The other sections are largely residential. Major single uses include Grand Central Terminal and the Bellevue Hospital complex.

Residential Uses. Several residential neighborhoods are located in the northern and southern portions of the secondary study area. Loosely defined neighborhoods include Turtle Bay, east of Third Avenue and north of East 48th Street; Murray Hill between East 34th and East 40th Streets, east of Madison Avenue; Kips Bay to the south of Murray Hill, bounded by East 27th and East 34th Streets, the East River, and Third Avenue; and Midtown South to the west of Kips Bay. Each of these neighborhoods contains a mixture of residential towers, smaller residential buildings, ground-floor retail uses primarily along the avenues, and smaller office buildings. Like the primary area, the secondary study area has experienced substantial development of high-rise apartment buildings, often with bonusable plazas, in the last two to three decades (see Table 2-2 and Figure 2-2). Trump World Tower, the City's tallest residential tower (72 stories and 881 feet), is located in the northern portion of the study area.

Commercial Uses. As noted above, the northwestern portion of the secondary study area includes part of Manhattan's Midtown CBD. This CBD is the most densely developed area of the City, and the section of the CBD that falls within the secondary study area boundaries is dominated by a mix of office towers and mid-rise office buildings. Among the largest office towers in the study area are the 1,046-foot, 77-story Chrysler Building on Lexington Avenue, between East 42nd and East 43rd

Table 2-2

High Density Residential Development in the Secondary Study Area

| Map No. | Building | Height | Stories | Year Built | Bonus Type |
|---------|------------------------------------------|--------|---------|------------|------------|
| 27 | 10-12 Park Avenue | 383 | 26 | 1932 | |
| 28 | 20-28 Park Avenue | 229 | 20 | 1939 | |
| 29 | 30 Park Avenue | 207 | 20 | 1955 | |
| 30 | 52 Park Avenue | NA | 22 | 1986 | |
| 31 | Townhouse - 106-114 East 38th Street | 262 | 27 | 1930 | |
| 32 | Carlton Regency - 287 Lexington Ave | 242 | 26 | 1974 | plaza |
| 33 | 273-275 Lexington Avenue | 211 | 24 | 1966 | |
| 34 | 115 East 34th Street | NA | 21 | 1980 | |
| 35 | 5-7 Park Avenue | 168 | 22 | 1953 | |
| 36 | Murray Hill Park - 228-230 Lexington Ave | 203 | 21 | 1962 | |
| 37 | Biltmore - 416-426 Third Avenue | 317 | 35 | 1981 | plaza |
| 38 | Pierpont - 111 East 30th Street | 224 | 21 | 1984 | |
| 39 | Windsor Court - 151 East 31st Street | 289 | 31 | 1988 | plaza |
| 40 | 470-476 Third Avenue | 177 | 20 | 1964 | |
| 41 | Murray Hill Manor - 488 Third Avenue | NA | 20 | 1975 | |
| 42 | 560-572 Third Avenue | 334 | 35 | 1975 | |
| 43 | 148 & 158 East 44th Street | NA | 48 | 2001 | |
| 44 | 234-236 East 46th Street | 224 | 20 | 1986 | |
| 45 | 211 East 46th Street | 310 | 34 | 1979 | |
| 46 | Dag Hammarskjold - 238-240 East 47th St | 438 | 44 | 1982 | plaza |
| 47 | 902-916 Second Avenue | 189 | 20 | 1964 | |
| 48 | 871 First Avenue | 199 | 23 | 1990 | |
| 49 | Trump World Tower | 881 | 70 | 2000 | |
| 50 | 884-890 Second Avenue | 207 | 21 | 1961 | |
| 51 | 319-333 East 46th Street | 174 | 20 | 1959 | |
| 52 | East Hills Apts - 471 Third Avenue | 327 | 33 | 1972 | plaza |
| 53 | Sterling Plaza - 255 East 49th Street | 328 | 32 | NA | plaza |
| 54 | 407 Third Avenue | NA | 20 | 1964 | |
| 55 | 200 East 32nd Street | 391 | 35 | NA | plaza |
| 56 | Nathan Strauss - 225-233 East 27th St | 174 | 20 | 1965 | plaza |
| 57 | Parc East Tower - 463-479 Second Ave | 223 | 26 | 1977 | plaza |
| 58 | 441-447 Second Avenue | 174 | 20 | 1964 | |
| 59 | Henry Phipps Plaza - 442-458 Second Ave | 298 | 35 | 1970 | plaza |
| 60 | NYU Residence - 334 East 26th Street | 212 | 25 | 1984 | |
| 61 | NYCHA - 463-477 First Avenue | 225 | 26 | 1970 | |
| 62 | Henry Phipps - 500 Second Avenue | 243 | 28 | 1975 | plaza |
| 63 | Henry Phipps - 479-493 First Avenue | 187 | 20 | 1972 | plaza |
| 64 | Waterside Houses - 2500 FDR Service Rd | 338 | 37 | 1973 | |

Note: Refer to Figure 2-2.

Sources: LotInfo 2001; Sanborn Insurance and Land Maps; *Privately Owned Public Space: The New York City Experience*, Kayden, NYCDPC, and MAS 2000; and Allee King Rosen & Fleming field surveys conducted April, May, and June 2001 and March 2002.

Streets, and the approximately 800-foot, 58-story Met Life Building at 200 Park Avenue, north of Grand Central Terminal. Since its renovation, Grand Central Terminal has become a retail and

restaurant center, with restaurants, food court, food market, and shops. Most of the avenues and many of the side streets in the CBD are lined with restaurants, banks, and shops. Commercial uses in the residential portions of the study area are limited to ground floor retail and neighborhood services.

Like the primary study area, the secondary area contains a number of hotels, including the Grand Hyatt, the Waldorf Astoria, the Inter-continental, the Beekman Tower Hotel, Morgans, and W New York.

Institutions, Community Facilities, and Publicly Accessible Open Space. The Bellevue Hospital campus, which extends from East 26th to East 30th Street, is part of a medical corridor between First Avenue and FDR Drive that includes the NYU Hospitals/NYUSOM campus to the north, the Veterans Administration Hospital to the south between East 23rd and East 25th Streets, and the Hunter College Brookdale Campus between East 25th and East 26th Streets. The Pierpont Morgan Library, with its collections of illuminated, literary, and historical manuscripts; early printed books; and old master drawings and prints, is located at East 36th Street and Madison Avenue.

Many schools are located throughout the study area. Publicly accessible open spaces in the secondary study area tend to be relatively small plazas associated with tower development. Larger facilities (more than an acre) include Bellevue South Playground and Bellevue Courtyard along First Avenue between East 26th and East 28th Streets, MacArthur and Peter Detmold Parks on the FDR Drive from East 48th to East 53rd Streets, and Dag Hammarskjold Plaza on East 47th Street between First and Second Avenues.

Industrial, Transportation and Other Infrastructure Uses. The secondary study area has virtually no industrial or major infrastructure uses. However, like the primary area, it contains the FDR Drive. More important, it contains Grand Central Terminal, which is the terminus for the Metro-North commuter rail line set above a major subway station for the 4, 5, 6, 7, and shuttle routes; this complex performs as a gateway to Manhattan's East Midtown CBD. The terminal is located on the superblock bounded by Lexington and Park Avenues, East 42nd and East 45th Streets, and Park Avenue is routed around the terminal on viaducts.

ZONING

The Disposition Parcels lie within the only remaining manufacturing districts within the primary and secondary study areas. With one exception, the parcels are covered by M1-5 or M3-2 zoning districts. The exception is 685 First Avenue, which, although it is zoned for high density residential use over a commercial base typical of the study area, has a BSA permit limiting its development to the existing Con Edison substation and parking lot. This is in sharp contrast to the remainder of both the primary and secondary study areas, which are zoned for residential and commercial development, primarily at high densities, as discussed below.

DISPOSITION PARCELS

616 First Avenue

The site at 616 First Avenue is within both an M1-5 zoning district (39,500 square feet) and an M3-2 zoning district (29,270 square feet), which permit development of low- to moderate-density commercial and manufacturing uses at FARs of 5.0 and 2.0, respectively (see Table 2-3 and Figure 2-4). The M1-5 district also permits community facility development to a maximum FAR of 6.5. Thus, the development potential on this site is 256,040 square feet for commercial and manufacturing uses

Table 2-3

Zoning Districts Located in Primary and Secondary Study Areas

| Zoning District | Maximum FAR | Uses/Zone Type | Study Area |
|-----------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------|
| R7-2 | 0.87 to 3.44 residential, 6.5 community facility | Medium-density apartment house district | Secondary |
| R7B | 3.0 residential, 3.0 community facility | General residence district, contextual district 6-story apartment houses typical | Secondary |
| R8 | 0.94 to 6.02 residential, 6.5 community | General residence district | Both |
| R8A | 6.02 residential, 6.5 community facility | General residence district; contextual | Primary |
| R8B | 4.0 residential, 4.0 community facility | General residence district; contextual | Both |
| R9 | 0.99 to 7.52 residential, 10.0 community | General residence district | Primary |
| R9X | 9.0 residential, 10.0 community facility | General residence district, 15-story apartment house typical | Secondary |
| R10 | 10.0 (12.0 with bonus); 10.0 community | General residence district | Both |
| C1-8 | 2.0 commercial, 0.99 to 7.52 residential, 10.0 community facility | Local shopping and services; contextual district | Secondary |
| C1-8A | 2.0 commercial, 7.52 residential 7.50 community facility | Local shopping and services | Both |
| C1-9 | 2.0 commercial, 10.0 (12.0 with bonus) residential, 10.0 community facility | Local shopping and services; contextual district | Both |
| C1-9TA | same as C1-9 | Special Transit District | Secondary |
| C1-9A | 2.0 commercial, 10.0 (12.0 with bonus) residential, 10.0 community facility | Local shopping and services | Primary |
| C2-7 | 2.0 commercial, 0.99 to 7.52 residential, 10.0 community facility | Local shopping and services with residential uses, intended to serve a wider audience than C1 districts | Secondary |
| C2-8 | 2.0 commercial, 10.0 (12.0 with bonus) residential, 10.0 community facility | Local Shopping and Services with residential uses, intended to serve a wider audience than C1 districts | Secondary |
| C4-5A | 4.0 commercial, 4.0 residential, 4.0 community facility | Shopping centers and offices in more densely built areas; contextual district | Secondary |
| C5-2 | 10.0 (12.0 with bonus) commercial 10.0 (12.0 with bonus) residential 10.0 community facility | Restricted Central Commercial District intended primarily for retail uses that serve metropolitan region | Both |
| C5-2.5 | 12.0 (14.4 with bonus) commercial 10.0 (12.0 with bonus) residential 12.0 community facility | Commercial district generally mapped in the midblocks of the Special Midtown District | Both |
| C5-3 | 15.0 (18.0 with bonus) commercial 10.0 (12.0 with bonus) residential 15.0 community facility | High bulk commercial district | Both |
| C6-2 | 6.0 (7.2 with bonus) commercial 0.94 to 6.02 residential 6.5 community facility | General commercial district outside CBD | Secondary |
| C6-2A | 6.0 commercial, 6.02 residential, 6.5 community facility | Contextual commercial district outside CBD | Secondary |
| C6-4 | 10.0 (12.0 with bonus) commercial 10.0 FAR (12.0 with bonus) residential 10.0 community facility | Medium bulk office district with wide range of uses for CBD | Both |
| C6-4A | 10.0 (12.0 with bonus) commercial 10.0 (12.0 with bonus) residential 10.0 community facility | Contextual commercial district | Secondary |
| C6-4.5 | 12.0 (14.4 with bonus) | Special Midtown District | Secondary |
| C6-6 | 15.0 (18.0 with bonus) commercial 10.0 (12.0 with bonus) residential 15.0 community facility | High bulk office district, wide range of high bulk commercial uses requiring a central location | Secondary |
| M1-5 | 5.0 commercial or manufacturing 6.5 community facility (use group 4 only)* | High performance light manufacturing for loft areas located mainly in Manhattan CBD | Primary |
| M3-2 | 2.0 commercial or manufacturing | Low performance heavy manufacturing | Primary |

*use group 4A by Special Permit only.

Sources: NYC Zoning Resolution; Zoning Handbook: A Guide to New York City's Zoning Resolution, NYCDP July 1990.

and 315,290 square feet with a community facility development on the M1-5 portion of the site. M1-5 zoning districts permit a wide variety of both manufacturing and commercial uses. A range of retail, entertainment and office uses are permitted in M1 districts as-of-right, and Use Group 4 community facilities are allowed by special permit. M3-2 districts are intended for heavy industries that generate noise, traffic, and pollutants, but they, too, permit a range of retail, entertainment and commercial uses. Power plants (as 616 First Avenue formerly contained) are typical of the types of heavy industrial uses permitted in M3 districts.

685 First Avenue

The site at 685 First Avenue is within a C1-9 zoning district, which permits high density residential development with some neighborhood retail and service uses. C1-9 districts have a maximum commercial FAR of 2.0 and a maximum residential FAR of 10.0 (12.0 with an on-site or off-site low-income housing bonus or arcade—a plaza bonus is not included in C1-9 districts). C1 districts are intended to accommodate the retail and personal service shops needed in residential neighborhoods. A range of uses are allowed in the district, such as single-family housing, apartments, community facilities, hotels, and retail stores and personal service establishments. However, the redevelopment of the 685 First Avenue parcel requires approval of the BSA, which granted the site a Special Permit under calendar number BSA No. 257-81 BZ, authorizing development of the substation. The Special Permit requires that the portion of the site east of the existing substation be used solely for Con Edison parking. Thus, new development on the site would require BSA approval for a modification to the special permit and the vacant portion of the lot currently has no as-of-right development potential.

708 First Avenue

The 708 First Avenue site is mapped within an M3-2 zoning district, as described above. As the lot is 82,424 square feet, it has a development potential of 164,848 square feet.

Waterside

The Waterside site is covered by an M3-2 zoning district, as described above. As the lot is 194,721 square feet, it has a zoning development potential of 389,442 square feet.

STUDY AREA

An examination of zoning in the study area, as it supports and regulates land use, shows a distinction from north to south, with higher densities permitted in the area generally north of East 34th Street and more moderate densities permitted to the south, reflecting the difference between the Midtown CBD and more local far east side neighborhoods (see Figures 2-4 and 2-5).

Primary Study Area

Because of the number of zoning districts in the primary study area and the variety of regulations that each district mandates, the discussion below discusses the districts shown on Figure 2-4 and Table 2-3 as they support the four land use categories in the area: residential, commercial, community facility, and manufacturing. The general characteristics of design regulations for the districts are discussed as well.

Zoning to Support Residential Use. Overall, the primary study area is zoned for high density residential use (see Figure 2-4 and Table 2-3). North of East 34th Street, nearly all of the districts permit residential development of at least 10.0 FAR, with bonuses to 12.0 FAR. The qualification

for the bonus varies, depends on the district, and can include plazas, plazas, and inclusionary housing. The most typical "residential" district in the area is actually a commercial district, C1-9, which permits local retail and commercial use of up to 2.0 FAR in the base, and residential development of up to 10.0 FAR, which

can be raised to 12.0 FAR with a lower-income housing bonus. This is equivalent to an R10 district, the most dense residential district mapped in the City. R10 districts themselves are also mapped in the primary study area, the major example being the area covering Tudor City across the street from the Disposition Parcels. The districts permitting residential use closest to the Disposition Parcels are C1-9 and R10. North of approximately East 39th Street, commercial districts permitting residential use include C5-2, C5-3, and C6-4. For residential development, these districts have essentially the same requirements as C1-9 and R10. Portions of the C1-9 districts along Second Avenue are in the Special Transit Land Use District, mapped in anticipation of construction of the Second Avenue subway and discussed under "Public Policy," below.

As is typical in the City, lower-density residential districts, such as R8 (residential FAR 6.02) and R8B (FAR 4.0, no tower development permitted), are mapped in the some of the midblocks. These are found largely south of East 39th Street, in the more residential areas. Kips Bay Plaza also lies within an R8 district.

Zoning to Support Commercial Use. Within the primary study area, zoning to support commercial use varies by location. South of East 39th Street, commercial uses are subject to the regulations of C1-9 and C1-8 districts, and C2-5 overlays of residential districts. These districts are intended to accommodate the retail and service shops needed in residential neighborhoods. C2 is intended to serve a wider neighborhood and so permits some additional retail, such as bowling alleys, business and trade stores and funeral homes that could not be supported by a smaller neighborhood. In all cases, the maximum floor area ratio for commercial use is 2.0.

In the northern portion of the primary study area, zoning to support commercial use is markedly different, and focuses on relatively high density commercial uses. The C5-2 district, which is most prevalent and closest to the Disposition Parcels (it covers the U.N. Headquarters, for example) allows a maximum FAR of 10.0 for commercial uses, 12.0 with bonus. This district, known as a "restricted central commercial district," is designed to provide for office buildings and a great variety of large retail stores and related activities in the CBD. Similar to the C5-2 district is the C6-4 district, a small portion of which is also located in the primary area. This district also permits a maximum commercial FAR of 10.0, 12.0 with bonus. However, it differs from C5-2, in that it is a "general central commercial district" and thus permits a wider variety of uses. For example, entertainment and amusement uses, including theaters, are permitted in C6-4 districts, as are certain custom manufacturing and auto uses. The primary study area also contains a C5-3 district, which permits commercial use at the highest density (FAR 15.0, 18.0 with bonus) permitted in Manhattan. This district is part of the Special Midtown District, which is discussed under "Public Policy," below. The U.N. Special Development District, across from the U.N. on First Avenue, is also subject to the regulations of C5-3 districts, although that district is not actually mapped over the special district area (see also "Public Policy," below).

In addition to the above, the manufacturing districts mapped on and near the Disposition Parcels also permit a wide range of commercial uses.

Zoning to Support Institutions and Community Facilities. Except for the area's heavy manufacturing districts, all of the districts mapped in the primary study area permit community facility uses. As shown on Table 2-3, in most cases the maximum FAR of a community facility is greater than that of a residential building in the same district. In commercial districts, the maximum FAR for a community facility is usually equal to that of the commercial use, and it may exceed 10.0; in many residential districts, the maximum FAR for a community facility is greater than that permitted for residential development. In creating the 1961 Zoning Resolution the City Planning Commission acknowledged that community facilities generally have different bulk requirements from those of a residential development and often must be of a larger size in order to function efficiently—particularly in the lower-density residential and commercial districts.

Zoning to Support Manufacturing Uses. A small portion of the primary study area's waterfront industrial zone remains, and it is represented primarily by two manufacturing districts east of First Avenue: M1-5 and M3-2. Both of these districts are described above under the description of zoning on the Disposition Parcels. In short, M1-5, light manufacturing, permits such uses to a maximum FAR of 5.0, and M3-2, heavy manufacturing permits such uses to a maximum FAR of 2.0. In addition, there is a small M2-3 zone along the waterfront south of the Disposition Parcels. This district, with an FAR of 2.0, is for waterfront manufacturing and is located only in the Manhattan CBD.

Design Regulations of Primary Study Area Zoning Districts. The New York City Zoning Resolution sets forth design regulations that control placement and shape of a structure to be built on a lot. These regulations can be intricate and in areas of particularly high density may require sky exposure plane calculations. In general, however, in understanding the shape of buildings to come, the districts can be categorized as "contextual" or "non-contextual." Contextual districts, indicated by a letter (usually A or B) following the district number, are mapped where the prevailing visual character or "context" of a street relies on a consistent building form. The purpose of the design regulations of a contextual district is to promote development of compatible building forms. Since the prevailing context of many of Manhattan's neighborhoods dates from the first half of the 20th century, or, as with row houses, from the 19th century, generally, contextual districts require high lot coverage. Non-contextual districts permit a much wider flexibility in building placement and shape. Allowing for provision of light and air, buildings in these districts can be of high lot coverage (similar to some contextual district buildings) or low lot coverage, i.e., a tower on plaza or low base. In the primary study area, the predominant zoning districts are non-contextual, such as R8, R10, C1-9, C5-2, and C6-4. This is particularly true of the districts closest to the Disposition Parcels. However, there are small areas of C1-9A on East 34th Street, and an R8B district in the midblocks north of East 34th Street between Second and Third Avenues.

Secondary Study Area

The secondary study area contains many of the same districts as those in the primary study area, and the discussion of design regulations, above, applies to the secondary as well as primary study area. However, where the secondary area is closer to the core of the Midtown CBD, its districts are more dense. Where it is farther from the CBD, its districts are generally less dense, as discussed below. The secondary study area contains no manufacturing districts.

Zoning to Support Residential Uses. North and west of the primary study area, the level of residential development permitted in the secondary study area is similar to that of the primary study area. R10 and R10-equivalent commercial districts are mapped along the avenues and wide streets. In Murray

Hill and Beekman Place/Turkey, a lower midblock district, R8B with residential FAR of 4.0, is more prevalent than in the primary study area. South of East 34th Street, residential use is permitted on some avenues at an R10 equivalent (C1-9 and C2-8), but also at an R9 equivalent (C1-8), with a residential FAR of up to 7.52, and R8 or its equivalent (C6-2), with a residential FAR of up to 6.02. The midblocks are generally mapped R8B, with a small area mapped R7B (residential FAR of 3.0).

Zoning to Support Commercial Uses. The distinction between the Midtown CBD and other areas of the far east side are very clear with respect to support of commercial uses in the secondary study area. The northwest corner of the study area is primarily mapped C5-3, which, as described above, permits commercial development to a maximum FAR of 15.0, 18.0 with a bonus. This is the highest bulk allowed in New York City. The area also contains a C6-6 district, which permits commercial development to the same level as C5-3, but allows for a greater variety of uses, including entertainment uses. The midblocks in this section of the study area, which extends southward to approximately East 39th Street, are mapped for C5-2.5, with a maximum FAR of 12.0 (14.4 with bonus). All of these districts lie within the Special Midtown District, described in more detail under "Public Policy," below. The Grand Central Subdistrict of the Special Midtown District is also largely within the boundaries of the secondary study area.

Farther south, the area's zoning generally permits commercial development at a lower density, including C6-2 (commercial FAR 6.0), C4-5A (commercial FAR 4.0) and C2 and C1 districts (FAR 2.0). A small area of C5-3 district is mapped on Park Avenue south of East 34th Street, at the northern end of the Midtown South commercial area.

Zoning to Support Institutions and Community Facilities. As discussed for the primary study area, all of the secondary study area's districts permit community facilities to be constructed at the same or somewhat higher FAR than the density of the prevailing use.

PUBLIC POLICY

The analysis of existing zoning gives a strong indication of public policy for land use in a given area at a given point in time. However, in the primary and secondary study areas, existing zoning is actually part of a trend towards rezoning to institute new policies for support and control of land use development. In addition, the City mapped several special districts to promote area-specific land use related policies.

TRENDS IN ZONING ACTIONS

As shown on Table 2-4 and Figure 2-6, broad sections of the primary and secondary study areas have been rezoned over the past two decades. Looking at the table, two trends in land use policy are clear: manufacturing districts have been replaced by either C1-8 or C1-9 districts in the primary study area; and broad areas of C6-4 districts—primarily along First and Second Avenues—have been replaced by C1-9 in both the primary and secondary study areas. The remapping of the manufacturing districts to a district that permits high density residential use occurred close to the Disposition Parcels and resulted in construction of the Rivergate, Manhattan Place, and Horizon developments on the east side of First Avenue on both sides of the 616 First Avenue site. The Rivergate and Manhattan Place developers took advantage of the plaza bonus to construct their buildings at an FAR of 12.0. The second change was to remove the possibility of constructing moderately high density commercial buildings along First and Second Avenues in the primary and secondary study areas. C6-4 offers the same FAR for residential use as C1-9, but C1-9 only allows up to 2.0 FAR of neighborhood

Table 2-4

Zoning Actions in the Primary and Secondary Study Areas 1981-2001

| Site | Year | General Vicinity | Study Area | From: | | To: | |
|-----------------|------|------------------------------------------------------------|------------|---------------------------|-------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------|
| | | | | District | FAR | District | Max FAR |
| 1 | 1981 | First Avenue and 34th Street | Primary | M1-5 | C & M 5.0, CF 6.5 | C1-9 | C 2 & R 10 (bonus to 12) |
| 2 ¹ | 1982 | First Avenue and 36th Street | Primary | M1-5 | see above | C6-4 | 10.0 all uses |
| 3 ² | 1982 | Midtown CBD | Both | C5-3CR C5-3 | 10.0 (12.0) to 15.0 (18.0) | C5-2.5 C5-3 C6-4.5 C6-6 | 12.0 (14.4) to 15.0 (18.0) |
| 4 | 1983 | Second Avenue, 36th to 49th Streets | Both | C6-4 | C & R 10(12) | C1-9, C1-9TA C5-2 R10 | C 2 & R 10(12) same as C1-9 C & R 10 (12) R 10 (12) |
| 5 | 1985 | 49th to 52nd, east of First Avenue | Secondary | R10 | R 10.0 (12.0) | R8B | R 4.0 |
| 6 | 1985 | First Avenue, 28th to 30th Streets | Secondary | R8 | R 0.94 to 6.02 | R8, C2-5 | R 0.94 to 6.02 C 2.0 |
| 7 | 1986 | 35th Street, First to Second Avenues | Primary | R8 | R 0.94 to 6.02 | R8B | R 4.0 |
| 8 ³ | 1986 | First Avenue to FDR, 36th to 38th Streets | Primary | M3-2 M1-5 C6-4 | 2.0 to 10.0 (12.0) | C1-9 | C 2 & R 10(12) |
| 9 | 1986 | First Avenue, 37th to 40th Streets | Primary | C6-4 | see above | C1-9 | see above |
| 10 | 1986 | Midblocks 34th to 40th Streets, Third to Madison Avenues | Secondary | R7-2, R10 | R 0.87 to 10.0 (12.0) | R8B R9X | R 4.0 R 9.0 |
| 11 | 1987 | Midblocks 47th to 59th Streets | Secondary | R8, R7-2, C6-4 | R 0.87 to 10 (12), C 10(12) | R8B | R 4.0 |
| 12 ⁴ | 1992 | Grand Central Subdistrict | Secondary | C5-3 | C15 (18) C15 R 10 (12) | C5-3 | C 21.6 with development rights transfer |
| 13a | 1995 | First Avenue to Park Avenue South, south of 34th Street | Primary | R8 R9 C1-8 C2-5 | R 6.02 R 7.52 C 2 & R 7.52 C 2.0 | R8B C1-9A C1-8A | R 4.0 same as C1-9 same as C1-8 |
| 13b | 1995 | First Avenue to Park Avenue, South of 34th Street | Secondary | C5-2, C1-8, R8 C6-1 | R 0.87-10(12) C 2 to 10 (12) | R7B, R8B, C6-2A C4-5A C1-8A C6-4A | R 3.0, R 4.0 R6.02, C6, CF6.5 4.0 all uses 10(12) all uses R 7.52, C10, CF2 |
| 14 | 1996 | 30th Street, First to Second Avenues | Secondary | R8 | R 0.94 to 6.02 | R7B | R 3.0 |
| 15 | 2001 | East River Science Park 28-30th St., east of First Ave. | Secondary | R8 C2-5 | R 0.94 to 6.02 C 2.0 | C6-2 | R 6.02, C6, CF 6.5 |

Notes: Refer to Figure 2-6.

R=residential; C=commercial; CF=community facility; M=manufacturing.

¹ Resulted in development of Manhattan Place Condominiums. Rezoned to C1-9 in 1986.

² Creation of Special Midtown District.

³ Resulted in development of Horizon Building. A portion of this district was rezoned from M1-5 to C6-4 in 1982 (see Site 2).

⁴ Subdistrict of Special Midtown District to permit transfer of development rights from Grand Central Terminal to receiving sites in the subdistrict.

Sources: NYC Zoning Resolution; NYCDCP.

commercial use, as opposed to the wide range of regional, CBD-type, commercial, entertainment, and custom manufacturing uses permitted in C6-4 zones with an FAR of up to 12.0 with bonus. Both trends show a clear public policy preference to promote development along First and Second Avenues of a high density, Manhattan residential district, alive with ground floor retail and supported by neighborhood oriented commercial uses and services.

In creating a largely residential neighborhood on Midtown's far east side, zoning changes show that the City intended to maintain the moderate density of the area south of East 34th Street and that it was concerned for the quality of development and scale of the midblocks throughout. Changes south of East 34th Street with rare exception did not introduce a residential FAR greater than an R9 equivalent (up to 7.52). The modifications primarily mapped contextual zones of the same or equivalent density as the former non-contextual zones, but also included downzoning of the midblocks from R8 (up to 6.02 with towers permitted) to R8B (4.0, no towers permitted). A rezoning from R8 to R1-9A on the south side of East 34th Street between First and Second Avenues matched the rezoning of the East 34th Street corridor from C1-9 to C1-9A farther west. Other actions that generally downzoned commercial, community facility and some residential use in the area outside the Midtown CBD included changes from C1-8 to C6-2A along Lexington Avenue in the secondary study area and from C6-1 to C4-5A in the midblock from Lexington to Park Avenues.

In summary, the zoning actions that have taken place over the past two decades show a policy to promote moderate to high density, urban residential neighborhoods on the far east side both near the Disposition Parcels, where manufacturing had once thrived, and throughout the First and Second Avenue corridors. The changes display a clear preference for more moderate residential densities south of East 34th Street and in the midblocks. And overall, the changes were intended to distinguish the area east of Second Avenue as well as the area farther west, but south of East 39th Street, from the core of the Midtown CBD.

SPECIAL USE DISTRICTS

The study area contains all or part of three special use districts and one distinct subdistrict, mapped by the City to promote specific development and urban design objectives oriented to the character and planning goals of a particular area. The three districts are the Special United Nations Development District, Special Transit Land Use District, and the Special Midtown District. Within the Special Midtown District is the Grand Central Subdistrict, as well.

Special United Nations Development District

This special use district, located entirely within the primary study area, occupies a small area (East 43rd Street to approximately East 45th Street) on First Avenue across from the U.N. Its purpose is to promote development that supports the U.N., such as housing for personnel or delegations, hotels for visitors, meeting rooms and other facilities, but respects the prominence and design of the headquarters complex across the street. The district was established in March 1970 with the placement of a "U" on the zoning map. The underlying regulations were those of a C5-3 district (restricted commercial with a maximum FAR of 15, 18 with bonus), although the zoning designation was not mapped. Since then, the special district has undergone several modifications. In 1980, the City passed a provision limiting the height of buildings in the district within 200 feet of First Avenue to below that of the Secretariat. More recent changes (1990 and 2001) have increased flexibility in the range of uses permitted and the transfer of development among parcels within the district, but have removed the possibility of achieving more than a total FAR of 15 for the district overall. The

special district zoning has permitted development of three large towers, ranging up to 369 feet in height: One U.N. Plaza (Millennium U.N. Hotel), Two U.N. Plaza (primarily U.N. missions and related offices) and Three U.N. Plaza (office and residential). The density permitted and scale of development are unusual for the primary study area.

Special Transit Land Use District

This district was established in 1974 along Second Avenue to support construction of the Second Avenue subway. Located in the areas where subway stations were anticipated, the district requires that new development or substantial enlargements provide an easement, if New York City Transit wants it, for access to the subway beneath. The purpose of the district is to site entrances inside property lines so that they do not impede pedestrian flow on surrounding sidewalks, and to provide light and air and weather protection to the subway entrance itself. The district is mapped within the primary study area on Second Avenue around East 34th Street, East 38th Street, and East 42nd to East 45th Streets. The latter section extends into the secondary study area as far as East 48th Street.

Special Midtown District

The Special Midtown District, established in 1982, represented a broad City policy to strengthen the Midtown CBD by guiding growth towards the areas most able to accommodate development (primarily the west side), preserving historic areas, landmarks and the theater district, protecting the Fifth Avenue shopping district, and fostering a substantially better pedestrian environment. The portion of the district that lies within the study area is its southeast corner; it contains most of the Grand Central Subdistrict described in the next subsection. With exception of the subdistrict, the policy for this portion of the special district has been to permit commercial development at the highest density, but not with the bulk flexibility and variety of bonuses available west of Sixth Avenue. When the special district was mapped, the City did not change the underlying C5 zoning. Thus this area of the district differs from sections farther west, where C6 zones prevail, in that it does not permit use groups 7, 8, and 12, which include a variety of repair shops, public parking garages, bowling alleys, pawn shops, pool halls, and theaters of any kind.

Grand Central Subdistrict

The Grand Central Subdistrict of the Special Midtown District was mapped in 1992 and revised subsequently, the latest time being 2001. Its purpose is to preserve Grand Central Terminal, an historic resource, by permitting the sale and transfer of its development rights to receiving sites within the district that are not necessarily contiguous to the terminal. The maximum FAR permitted on a receiving site is 21.6. The subdistrict also contains regulations on the shape of new or substantially enlarged structures to preserve the historic context of Grand Central on the streetscape, and on the accommodation of the large number of pedestrians going through the subdistrict to and from the terminal.

D. FUTURE WITHOUT THE PROPOSED ACTION

The future without the Proposed Action projects current land use, zoning, and public policy into the future analysis years, 2007 and 2011, without the sale of the Disposition Parcels. The analysis addresses conditions on the Disposition Parcels and in the study area, as discussed below.

2007

*LAND USE**Disposition Parcels*

Use of the Disposition Parcels in the future without the Proposed Action would reflect Con Edison's long term plans for production and delivery of steam. Con Edison will transfer steam production from Waterside to the East River Plant. In the future without the Proposed Action, then, the use of the Disposition Parcels would be greatly reduced. It is anticipated that by 2007 remediation and demolition on all the parcels will have begun. No interim uses are anticipated for the Disposition Parcels. Specifically:

616 First Avenue. In the future without the Proposed Action, it is currently anticipated that hazardous material conditions at 616 First Avenue would be remediated. The gravel and dirt parking area on the eastern portion of the site as well as the area that was formerly occupied by a fuel storage facility would remain vacant.

685 First Avenue. In the future without the Proposed Action, it is currently anticipated that the East 40th Street Substation at 685 First Avenue would remain active, but the parking lot that occupies the eastern portion of the parcel would remain vacant.

708 First Avenue. In the future without the Proposed Action, it is currently anticipated that the office building at 708 First Avenue would be demolished and the site would be remediated. Absent a disposition, the site is anticipated to remain vacant. The unimproved property is not currently anticipated to be used for any interim use.

Waterside Plant. It is currently anticipated that Waterside Station would be demolished and the site would be remediated. Absent a disposition, the site is currently anticipated to remain vacant. The unimproved property is not anticipated to be used for any interim use.

Study Area

Overall, based on background growth rates recommended by the *CEQR Technical Manual*, it is estimated that the study area's residential and employee populations would each grow at a rate of 0.5 percent per year, or 3.5 percent between 2001 and 2007. This growth implies some increase in residential and commercial development. As discussed below, that development is expected to occur in both the primary and secondary study areas through specific known projects and the potential for additional development not yet planned or announced.

Primary Study Area. In the future without the Proposed Action, it is expected that the land use trends set in motion by zoning and public policy to foster high density, primarily residential communities generally north of East 34th Street and moderate density to the south will continue, as will trends in the denser commercial areas near the U.N. and in the Special Midtown District. As shown on Table 2-5 and Figure 2-7, five developments are anticipated in the primary study area, three by 2007. The timing for the other two is unknown, but it is possible that these, too, will be complete by 2007. Two of the projects are residential, both on or near Second Avenue from East 34th Street north. One is commercial, a 365,00 square-foot office building at 222 East 41st Street, and two can be classified as institutional: NYU medical school's research building on the FDR Drive at East 31st Street, and the United States Mission to the U.N. on First Avenue at East 44th Street.

Table 2-5

Projects Under Construction or Proposed for the Land Use Study Area

| Map No. | Name/Location | Type of Development | Floor Area/No. Of Units | Year of Completion | FAR | Stories | Approval Process | Status |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------|--------------------|---------------|---------|-----------------------------|--------------------|
| Primary Study Area | | | | | | | | |
| 1 | 214-230 East 34th Street | Residential | 600 units | Pre 2007 | N/A | N/A | NYCT Easement | Under construction |
| 2 | Second Avenue (west side) between 36th and 37th Streets | Residential/Community Facility | 480 units, 214 parking spaces, US Post Office | Unknown | N/A | N/A | BSA variance | In review |
| 3 | 222 East 41st Street | Office | 365,000-sf office | 2003 | 15.0*** | 25 | As-of-Right | Under construction |
| 4 | NYUSOM Research Building FDR Drive and 31st Street | Medical Research Laboratory | 180,000 gsf | 2003 | 4.5** | 16 | BSA waivers | Under construction |
| 5 | US Mission to the UN, 779 First Avenue | Institutional office | 140,000 sf | Unknown | | 23 | Federal approvals | Proposed |
| Secondary Study Area | | | | | | | | |
| 6 | The Metropolis 150 East 44th Street | Residential | 361 units, 5,500 gsf retail | 2001 | 12.0*** | 52 | As-of-Right | Recently complete |
| 7 | Trump World Tower First Av 47th-48th Sts | Residential | 371 units | 2001 | 10.4 | 72 | CPC Certification | Recently complete |
| 8 | 325 East 28th Street | Residential | 200 units | Pre 2007 | N/A | N/A | As-of-Right | Under construction |
| 9 | 243 Lexington Ave at East 34th Street (northeast corner) | Commercial | Conference and study center | 2002 | | 18 | As-of-Right | Recently complete |
| 10 | Third Ave 36th-37th Streets (west side) | Commercial | Hotel | 2002 | | 30 | As-of-Right | Under construction |
| 11 | East River Science Park 28th to 30th Streets between First Ave. and FDR Drive | Biotechnology and Medical Office | 1,544,865 gsf of biotechnology, medical office, and community facility | 2004 | 5.2 | 9-16 | ULURP | Approved |
| 12 | South Bellevue Project 26th to 28th Sts between First Avenue and FDR Drive | DNA Laboratory Ambulatory Care Facility | 321,620-gsf DNA lab and EMS 207,000-gsf ambulatory care | 2004 | 4.2** | 6, 11 | DASNY | Under construction |
| 13 | Churchill School 301 East 29th Street | School | 400-seat school | 2001 | N/A | N/A | As-of-Right | Recently complete |
| 14 | Scandinavia House 58 Park Avenue (west side) between 37th and 38th Streets | Community Facility | Cultural center, café galleries, 168-seat auditorium, library, learning center | 2002 | | 10 | As-of-Right | Recently complete |
| Major Developments Just Outside of the Secondary Study Area | | | | | | | | |
| 15 | 383 Madison Avenue (Bear Stearns)* | Office/trading/retail | 1.2 million-gsf office, 5,000 gsf retail | 2002 | 21.6*** | 45 | ULURP and CPC Certification | Recently complete |
| 16 | 300 Madison Avenue | Office | 1.0 million-gsf office space | 2004 | 15.0, 12.0*** | 35 | NYCIDA, CPC Certif. | Under construction |
| 17 | 505 Fifth Avenue* | Office/ground-floor retail | 250,000-gsf office, 10,000 gsf retail | 2003/4 | | 26 | As-of-Right | Announced |
| Notes: Refer to Figure 2-7. * Project is located immediately outside the study area. ** Building is part of a "medical" campus, the FAR noted is the FAR of entire campus with building included. *** Building is constructed to maximum extent permitted by zoning and purchased or transferred development rights. Sources: NYC Department of City Planning; Manhattan Community Board 6; Allee King Rosen & Fleming field surveys conducted May and June 2001 and March 2002; and EIS's where applicable. | | | | | | | | |

Secondary Study Area. As in the primary study area, in the foreseeable future the secondary study area is expected to see a continuation of current land use trends, with denser development in the north and more moderate density development in the south. As noted on Table 2-5 and Figure 2-7, nine specific development projects are slated to be completed and occupied in the secondary study area by 2007. Three of these are residential, and include two towards the north of the study area, which were recently completed, but not yet fully occupied at the time of the EIS studies: Trump World Tower on First Avenue between East 47th and East 48th Streets, and the Metropolis at 150 East 44th Street. The third is under construction on East 28th Street near First Avenue.

Two commercial projects, one a conference center on Lexington Avenue at East 34th Street and the other a hotel on Third Avenue between East 36th and East 37th Streets, are expected. Although no office development is expected within the secondary study area, three major buildings will be completed just outside its borders by 2007. These are 383 Madison Avenue, a recently completed 1.2 million square-foot office building with trading floors near Grand Central Terminal in the Grand Central Subdistrict, 300 Madison Avenue, a 1 million square foot office building under construction as headquarters for the Canadian Imperial Bank of Commerce, and 505 Fifth Avenue, a 250,000 square-foot office building proposed for the northeast corner of Fifth Avenue and East 42nd Street.

Four institutional projects are slated for completion in the secondary study area, as well. Two of these are located in the southern portion (south of East 30th Street) of the NYU-Bellevue medical complex: East River Science Park, a 1.5 million square-foot biotechnology and medical office project approved for development east of First Avenue between East 28th and East 30th Streets, and the South Bellevue project, a 321,620 square foot new DNA laboratory and ambulatory facility under construction east of First Avenue between East 26th and East 28th Streets. With the NYUSOM research laboratory in the primary study area, these three projects signal the expansion and strengthening of this important medical complex. The other two institutional projects are recently completed: the 400-seat Churchill School at Second Avenue and East 29th Street, and Scandinavia House, a cultural center on Park Avenue between East 37th and East 38th Streets.

ZONING

Disposition Parcels

In the future without the Proposed Action, no changes to the zoning or the BSA Special Permit on the Disposition Parcels are expected.

Study Area

In the future without the Proposed Action, few changes to zoning in the primary and secondary study areas are expected. As noted on Table 2-5, only two of the actions required for the anticipated development projects in and near the study area require a zoning action; seven are as-of-right, three need CPC Certification, two need actions from the Board of Standards and Appeals, and the remainder need funding or other approvals from state and federal agencies.

The two zoning actions occurred outside the primary study area, as follows. To facilitate the construction of 1.5 million square feet of biotechnology and other space, a portion of the Bellevue Hospital Campus in the secondary study area between 28th and 30th Streets, First Avenue and the FDR Drive was recently rezoned from R8 and R8 (C2-5 overlay) to C6-2 to permit development of the East River Science Park. In this case, the previous zoning allowed commercial development of 2.0 FAR, and the rezoning would allow commercial development of 6.0 or 7.2 with a bonus. This

change would allow the proposed project to be built, but it did not alter the overall moderate density of the southern portion of the secondary study area. The second zoning action occurred in connection with a development rights transfer to 383 Madison Avenue in the Grand Central subdistrict of the Special Midtown District. These actions resulted in a building with the maximum FAR permitted in subdistrict, 21.6.

In the future, specific parcels could be rezoned in association with as yet unanticipated development projects, continuing a trend in zoning actions over the past 20 years that has, in many cases, allowed maximum FARs of up to 10.0 or 12.0.

PUBLIC POLICY

Public policy governing development in the primary and secondary study areas is not expected to change in the future. That policy, set forth in a number of zoning actions that have taken place over the past 20 years, promotes a high density, largely residential neighborhood north of East 34th Street on the far east side, a higher density, more commercially-oriented development near the U.N., a moderate density largely residential neighborhood south of East 34th Street east of Third Avenue, and a dense commercial Midtown CBD.

2011

LAND USE

Disposition Parcels

From 2007 to 2011, no changes are expected to occur on the Disposition Parcels. The sites would remain vacant and undeveloped, with the exception of the parking lot and substation at 685 First Avenue, which would continue to operate.

Study Area

Commercial and residential development is expected to continue in the study area between 2007 and 2011, with the area's residential and employee population each growing at a rate of 0.5 percent per year, as described above. At this time, no specific development projects have been identified for completion during this time period. However, two major transportation infrastructure projects currently in planning that would improve access and activity levels in the area are slated for completion in or shortly after 2011. The Metropolitan Transportation Authority (MTA) and the Long Island Rail Road (LIRR) plan to provide LIRR service to Grand Central Terminal via a Park Avenue tunnel. Known as East Side Access and slated for completion in 2011, this project has been approved for final design by the Federal Transit Administration and MTA/LIRR. NYCT proposes to build a new Second Avenue subway from East 125th Street to Wall Street. The new subway would have four stations on Second Avenue with access in or just outside the study area: East 42nd Street and East 34th Street in the primary study area, and East 23rd Street and East 53rd Street just outside the secondary study area. Access to the No. 7 train would be available at the East 42nd Street station. This project is in its preliminary engineering stages; if it is approved and funded it would be scheduled for completion in or before 2020. Both projects are the subject of detailed impact studies as presented in the *MTA LIRR East Side Access Final Environmental Impact Statement* published in March 2001 and the Supplemental Draft Environmental Impact Statement currently being prepared for the Manhattan East Side Transit Alternatives Study (MESA)/Second Avenue Subway.

ZONING

Disposition Parcels

Without the Proposed Action, no changes to the zoning on the Disposition Parcels are expected between 2007 and 2011.

Study Area

Without the Proposed Action, no specific changes to the zoning in the study area are expected to occur between 2007 and 2011. As noted above, zoning changes could occur in association with future development projects that have not been planned at this time.

PUBLIC POLICY

As discussed above, public policy governing development in the primary and secondary study areas is not expected to change in the future. That policy promotes a high density, largely residential neighborhood north of East 34th Street on the far east side, a higher density, more commercially-oriented development near the U.N., a moderate density largely residential neighborhood south of East 34th Street east of Third Avenue, and a dense commercial Midtown CBD.

E. PROBABLE IMPACTS OF THE PROPOSED ACTION

As discussed in Chapter 1, "Project Description," the sale of Con Edison's four parcels is intended to bring maximum benefits to rate payers by maximizing the value of the properties through their development potential. The agreement between Con Edison and the buyer, FSM, assumes a potential for development of up to 12 FAR. Currently, the sites are either zoned for a much lower density or encumbered by Special Permit to allow no new development at all. Therefore, it is clear that some additional zoning and other land use actions will be required in the future if the maximum benefits to Con Edison's rate payers are to be achieved. But since those actions are not the subject of this GEIS and will be addressed in a land use process pursuant to City procedures at a later time, it is not possible to be specific as to the size, type, and shape of that future development.

The following analysis addresses an As-of-Right Scenario, in which development can occur once the disposition is approved, with no new actions or environmental review. This scenario serves to allow an understanding of the level and type of development that could occur and the impacts of that development on the surrounding area. The analysis also includes a scenario that assumes future improvements on the Disposition Parcels pursuant to a rezoning that would be limited to a maximum FAR of 12.0. There are no specific project plans for the Disposition Parcels. The analysis of a Residential and two Mixed-Use Development Programs is provided to disclose the potential environmental impacts that could result if redevelopment of the sites were to occur pursuant to a future rezoning and other actions. None of the development proposed under these scenarios can occur unless and until future action is taken by the New York City Department of City Planning (DCP), BSA, and the New York City Council.

In considering the effects of the redevelopment scenarios—one residential and two mixed-use options—the analysis acknowledges that they would require zoning actions to allow the level of residential and commercial uses anticipated. As discussed above in this chapter, existing zoning throughout the primary study area and along First Avenue permits residential FARs of 10 (12 with plaza or inclusionary zoning bonus) and commercial FARs of from 2 to 10 (12 with bonus). The development anticipated would likely also require the adoption of a large scale development plan

area comprising the 708 and 685 First Avenue parcels and the Waterside site. The relationship of zoning options to the zoning and public policy prevalent in the primary and secondary study areas is discussed below, along with the land use effects that the As-of-Right and three redevelopment scenarios could have.

2007 INTERIM BUILD YEAR

AS-OF-RIGHT DEVELOPMENT PROGRAM

In the future with the Proposed Action, the As-of-Right Development Program assumes development of the Disposition Parcels in a manner consistent with and at maximum reasonable densities permitted by the existing zoning. However, no plan exists to redevelop any of the Disposition Parcels under existing zoning. The analysis is provided to disclose the potential environmental impacts that could result, without environmental review, if redevelopment were to occur under existing zoning. Beyond the Proposed Action, no further discretionary approvals would be required to develop the As-of-Right Program.

Land Use

Disposition Parcels. The maximum development on the Disposition Parcels with this Program is presented below and in Table 2-6. (The illustrative development outlined below, and presented in Chapter 1, "Project Description," were formulated in consultation with NYCDCP and are intended to represent a reasonable worst case envelope for assessing potential impacts; they do not represent an actual proposal or plan from FSM.) As-of-right development is first calculated in "zoning square feet" (zsf) and then converted to gross square feet (gsf) for use in this GEIS. A certain portion of the development, such as mechanical space and below-grade space, is not considered in the zoning floor area calculation, yet it would indeed be built. Therefore, to arrive at gsf figures, 3 percent of the zsf was added to residential and retail uses and 10 percent of the zsf was added for office and community facility uses. These multipliers are those commonly used by professionals at the early stages of a project to determine the overall envelope of a proposed building.

Table 2-6

As-of-Right Development Program: 2007

| Site | Retail (zsf*) | Office (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|--------------------------|----------------|----------------|----------------|
| 616 First Avenue | 23,000 | 218,000 | 15,000 | 256,000 | 279,990 | 210 |
| 685 First Avenue | No Development** | | | | | |
| 708 First Avenue | 83,780 | 440,000 | 0 | 523,780 | 568,980 | 250 |
| Total: | 106,780 | 658,000 | 15,000 | 779,780 | 848,970 | 460 |
| Note: * Retail square footage figures include zoning square feet for above-grade development plus 43,780 square feet of below-grade retail space at the 708 First Avenue site. ** Discretionary approval of the BSA to modify a BSA Special Permit would be necessary for any new development on the 685 First Avenue site. | | | | | | |

In 2007, development under the As-of-Right Program would occur on the northernmost and southernmost of the four sites. Such development would be essentially unrelated since the two sites are nearly a quarter-mile from one another and arise from differing underlying zoning. On 616 First Avenue, the office use would differ from the uses on either side of the disposition parcel (high density residential towers), and it would be at a lower scale (FAR of less than 5, compared to and

FAR of 12). At 708 First Avenue, adjacent uses would be an empty lot at Waterside, a park and the U.N. headquarters to the north, and Tudor City to the west. The small office building would be added to a more varied mix of uses, albeit at a lower scale than the baseline development. The concentration of retail uses on 708 First Avenue into a "destination" mix would be new to the area, but at a relatively small scale.

- The 616 First Avenue site could be improved with an office building containing 218,000 square feet of zoning floor area of office space, 23,000 square feet of zoning floor area of ground-floor retail space, and 15,000 square feet of medical office space. This site would also accommodate 60 spaces of indoor accessory parking and a 150-space, at-grade public parking lot.
- The 685 First Avenue site has no as-of-right development potential because of the conditions in the Special Permit. Any development other than a parking lot requires that the BSA approve an amendment to the Special Permit, which would be a discretionary action subject to CEQR. Therefore, the As-of-Right Program assumes retention of existing uses and no new development on the 685 First Avenue site.
- The 708 First Avenue site could be improved with an office building containing 440,000 zsf of office space (484,000 gsf), 40,000 zsf of ground-floor retail space (41,200 gsf), as well as 100 spaces of indoor accessory parking plus a 150-space public parking lot. The 708 First Avenue site would also contain approximately 44,000 square feet of below-grade destination retail uses. Although retail uses as well as entertainment uses are permitted on the site under its M3-2 zoning, certain stores, like department stores and supermarkets, are not permitted in excess of 10,000 zsf without a Special Permit. Therefore, the "destination" retail use program, totally 84,980 gsf, assumes a combination of several independent stores, each less than 10,000 zsf, that together draw customers from a larger-than-local area or stores or restaurants in combination with an entertainment use, such as a movie theater. No publicly accessible open space would be provided on the site.
- In 2007, the Waterside site would not be redeveloped. However, the process of decommissioning the station, demolishing the structure, and remediating the site is expected to be underway. It is not currently anticipated that the Waterside site will be programmed with any uses by 2007. It is likely that redevelopment of the Waterside site, should it occur under existing zoning, would not be completed until 2011.

Primary Study Area. The As-of-Right Development Program, which would bring a mixture of office, retail and community facility uses to two of the four development sites in 2007, would be compatible with the mixed-use character of the surrounding area but would occur at a lower density than surrounding uses. The introduction of stores and/or movie theaters on the 708 parcel would be new to the immediate area, but similar to the strip of stores and theaters on Second Avenue adjacent to Kips Bay Plaza. That concentration of retail, at approximately 100,000 square feet, is approximately 20 percent larger than the development that might occur on the 708 parcel under the As-of-Right Program. Currently, ground-floor retail uses in the area are neighborhood services such as restaurants and dry cleaners. The office use on 616 First Avenue would differ from this portion of the primary study area, where land uses are more uniformly residential and community facilities.

Secondary Study Area. Under the As-of-Right Program, the moderate density development on two sites would not be enough to affect land use in the secondary study area.

Zoning and Public Policy

Primary Study Area. Without a zoning change, the existing manufacturing districts would remain in place. These districts permit manufacturing and heavy commercial uses that are less consistent with existing uses and do not foster the policies of the past two decades that have replaced manufacturing zones in the primary study area to allow for high density residential and mixed-use development.

Secondary Study Area. Maintaining the existing manufacturing districts and redeveloping under their regulations would be inconsistent with zoning and public policy in the secondary study area as well as the primary study area.

RESIDENTIAL DEVELOPMENT PROGRAM

Should sale of the Disposition Parcels be approved by the PSC, the Board of Standards and Appeals (BSA), CPC, and the New York City Council could subsequently approve zoning and other land use actions to permit residential and commercial uses on these sites at a density higher than currently permitted. The Residential Development Program's assumes a maximum FAR of 12.0 consistent with the permitted densities of the zoning districts mapped immediately adjacent to the Disposition Parcels. It should be noted that for this and the other two redevelopment programs, the project sponsors do not consider the 616 First Avenue site to be appropriate or feasible for dense office use. Therefore, in all cases, the rezoning on that site is assumed to change from the current M1-5 and M3-2 to C1-9, the prevailing district supporting high density residential use and local commercial uses and services in the area closest to that site. Under the Residential Program, the remaining sites could also be zoned C1-9, but in practice it is more likely that the sponsor would request a rezoning to a full commercial district, such as C5-2, which is mapped nearby, or C6-4, another common Manhattan CBD commercial district with a maximum FAR of 12, with appropriate bonus, since these sites could be developed commercially, as shown in the two mixed-use scenarios, below.

In addition, the BSA special permit would have to be amended to permit development to proceed on the 685 First Avenue site, and other special permits from CPC could be required. Such permits might include permits to modify height and setback, yard and other bulk controls, to allow the distribution of floor area without regard to zoning lot lines (e.g., large scale development plan), and to authorize parking garages and other restricted uses in buildings on redevelopment properties. Additional zoning text amendments and/or land use actions may also be required for the redevelopment scenarios, depending on the site plan ultimately proposed.

Land Use

Disposition Parcels. The 2007 Residential Development Program would include approximately 3.1 million zsf of residential space (3,887 units), 21,100 zsf of retail space, 76,500 zsf of medical community facility uses, approximately 62,978 sf of open space, and 1,350 parking spaces (see Table 2-7). Of the parking spaces, 350 on 616 and 685 would be accessory to the program uses and

Table 2-7

Residential Development Program: 2007

| Site | Residential (zsf) | Residential (units) | Retail (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces | Open Space (sf) |
|------------------|-------------------|---------------------|---------------|--------------------------|------------------|------------------|----------------|-----------------|
| 616 First Avenue | 801,000 | 1,001 | 8,000 | 16,000 | 825,000 | 850,870 | 200 | 25,000 |
| 685 First Avenue | 899,236 | 1,158 | 13,100 | 0 | 912,336 | 939,706 | 150 | 15,700 |
| 708 First Avenue | 1,409,494 | 1,762 | 0 | 60,500 | 1,469,994 | 1,518,329 | 1,000 | 22,278 |
| Esplanade* | | | | | | | | 54,000 |
| Total | 3,109,730 | 3,921 | 21,100 | 76,500 | 3,207,330 | 3,308,905 | 1,350 | 116,978 |

Note: *FSM committed to at-grade improvements. Requires City approval for use of City-owned land.

1,000 would be public parking. In addition, as part of the Rezoning Scenario FSM has committed to providing all at-grade improvements associated with construction of an approximately 54,000-square-foot esplanade along the East River between East 38th and East 41st Streets. (Construction of the esplanade will require public approval for use of City-owned land.) The program components are assumed to be distributed as follows.

- 616 First Avenue. The 616 First Avenue parcel would include approximately 801,000 zsf (825,030 gsf) of residential space, 8,000 zsf (8,240 gsf) of ground-floor retail space, and 16,000 zsf (17,600 gsf) of medical community facility space. This site would also accommodate 200 accessory parking spaces. Approximately 25,000 sf of public open space would be provided.
- 685 First Avenue. The 685 First Avenue parcel would include approximately 899,236 zsf (926,213 gsf) of residential space and approximately 13,100 zsf (13,493 gsf) of ground-floor retail space. This site would also accommodate 150 accessory parking spaces. Approximately 15,700 sf of public open space would be provided.
- 708 First Avenue. The 708 First Avenue parcel would include approximately 1.41 million zsf (1.45 million gsf) of residential space, approximately 60,500 zsf (66,550 gsf) of medical community facility space, and approximately 22,278 sf of public open space. The 708 First Avenue site could accommodate a total of approximately 1,000 parking spaces.
- Waterside. In 2007, development on the Waterside parcel would not be completed. However, the process of decommissioning and demolishing the station and remediating the site may have commenced. Construction for new development at this site may have commenced by 2007.

When complete in 2011, this land use program, like the other two development programs below, would achieve a full 12 FAR by use of plaza bonuses. The scenario assumes a mechanism for the transfer of bulk among the three northerly sites, 685 First Avenue, 708 First Avenue, and Waterside, most likely through a special permit for large scale development. As shown in Chapter 1, "Project Description," the ultimate plan would offer substantial bonus-eligible open space on the Waterside site to offset smaller plazas at 685 and 708 First Avenue. This open space would not be available in 2007. However, the Waterside site would be cleared but not built upon in 2007; it is assumed that the large-scale development or other transfer mechanism would be in place by then. Looking at the four sites together, with no development on Waterside, the total zoning floor area proposed in the 2007 Residential Program on 685 and 708 First Avenue, 3.2 million, would be less than 10 FAR, approximately 4.3 million, and so would require no bonus.

In 2007, the site at 616 First Avenue, which is independent of the three northerly sites, would provide an open space that would be large enough to qualify for the 2 FAR bonus assuming a zoning text amendment to permit a plaza bonus were also to be approved. For the 68,770-square-foot site, a bonus of 2 FAR or 137,540 square feet, would require a public plaza of approximately 22,824 square feet. The program assumes a 25,000-square-foot plaza. Without the text amendment, a 2FAR bonus could be provided by complying with Inclusionary Housing regulations. However, as noted in Chapter 1, "Project Description," at this time FSM is not contemplating an Inclusionary Housing bonus. In addition, the public parking on 708 First Avenue would require a special permit from CPC.

The development of the three sites under the Residential Development Program would represent a substantial change in land use for the parcels, which would be vacant in the No Action condition. However, as discussed below, this change in land use would be compatible with the surrounding land uses and densities in the surrounding neighborhood and would strengthen the land use character of the area. The program would replace vacant lots and those containing aged industrial uses, with residential buildings and substantial open space. This would occur in a mixed-use neighborhood dominated by residential uses. It would also follow development trends for construction of large residential towers.

Primary Study Area. The Residential Development Program, characterized by a mixture of residential buildings, retail space, and medical community facility uses would be compatible with the surrounding mixed residential area. Several large residential towers are located adjacent to the Disposition Parcels. The Churchill, a residential tower, is located directly west of the 685 First Avenue parcel, across Tunnel Entrance Street. New York Tower is located directly south of the parcel and across First Avenue from the Waterside Station. The Corinthian is located on the west side of First Avenue between East 37th and East 38th Streets. The Residential Development Program would be compatible with these nearby residential uses and the land use character of the study area.

The medical community facility space would be compatible with the NYU medical facility located between East 37th and East 38th Street and the medical corridor that extends from East 34th Street to East 23rd Street east of First Avenue. It is likely that the residential construction, with approximately 3.1 million zsf of residential space would induce demand for neighborhood retail services and transform the immediate area into a vital residential community. Thus, the Residential Development Program would be compatible with both existing and planned future land uses in the study area and would continue existing trends of residential development towards the East River, and it would not result in significant adverse impacts on land use in the study area.

Secondary Study Area. As described in the existing conditions section of this chapter, the secondary study area differs from the primary study area in that its uses are denser and more commercial in the northwestern portion and less dense and more consistently residential and community facility in the southern portion and in the Murray Hill neighborhood to the west. In introducing primary residential uses at an FAR of 12, the potential residential scenario would not affect this balance.

Zoning

The Residential Program (as well as the mixed-use programs discussed below) could not be built under the existing M3-2 and M1-5 districts. These districts, the few remaining from the previous waterfront industrial uses east of First Avenue, permit light and heavy manufacturing and commercial uses that are no longer compatible with the surrounding land uses. The removal of these districts would therefore be appropriate to zoning in the area, and not adverse.

Zoning required to facilitate development of the Residential Program would be available using districts already mapped in the primary study area. For example, C1-9 would suffice, if the commercial component were to be limited to 2 FAR or less. As discussed above, it is likely that C1-9 would be requested for the site at 616 First Avenue, along with a text amendment to permit a plaza bonus. Residential use at a maximum FAR of 12 with a plaza bonus could also be developed using C5-2 on the 685, 708 and Waterside sites. That district is mapped just north of the Disposition Parcels at the U.N. The use of C6-4 would reintroduce to the primary study area a district that had been demapped over the past two decades and replaced with C1-9 and C5-2. It differs from C5-2 in that it permits entertainment and amusement uses more typical of areas such as Times Square and could promote uses that are not especially compatible with the land use character of the area. Both the C5 and C6 districts would permit commercial use at an FAR greater than 2, as discussed under the Mixed-Use Programs below. All three districts are non-contextual and permit either high or low coverage (towers) buildings.

As discussed above, the open space on the 616 First Avenue site is assumed to qualify for a 2 FAR plaza bonus, bringing total FAR on the site to 12. The two other sites would not yet qualify for a bonus, but assuming that a mechanism, such as a large scale designation, is in place for both sites plus Waterside, the zoning floor area contemplated on 685 and 708 First Avenue in 2007 would be less than 10 FAR over the three sites.

Public Policy

The Residential Development Program would be compatible with public development policy as evidenced by zoning trends over the last two decades, existing mapped zoning, and special purpose districts. These factors spell out a policy to eliminate obsolete manufacturing zoning districts, to promote high density residential neighborhoods on Midtown's far east side north of East 34th Street and to continue to support the high density, active commercial core of Manhattan that is the Midtown CBD. The Residential Development Program would create a high density residential neighborhood on sites that are now either largely vacant or contain power plants that are slated for decommissioning and demolition.

The program could be made possible by rezoning to a choice of districts permitting high density (FAR 10, 12 with bonus) currently mapped in the study area. The scenario assumes non-contextual districts, permitting high or low coverage buildings; such districts are prevalent in the primary study area near the Disposition Parcels. Except for the need to amend the current BSA special permit on the 685 First Avenue site, the development program could be implemented at the discretion of CPC and the City Council using compatible zoning districts, bonus mechanisms already set forth in the zoning resolution, and special permits available in the zoning resolution.

MIXED-USE DEVELOPMENT PROGRAM

The Mixed-Use Development Program would require the same zoning and other BSA, CPC, and City Council approvals as the Residential Program, described above. However, the Mixed-Use Program assumes development of a mix of office space and residential units, rather than predominantly residential units.

Land Use

Disposition Parcels. Under the Mixed-Use Development Program the 616, 685, and 708 First Avenue sites would be developed with a total of approximately 1.75 million zsf (1.8 million gsf) of residential space (2,186 units), 33,250 zsf of retail space (34,248 gsf), 725,730 zsf of office space (798,303 gsf), and 64,500 zsf (70,950 gsf) of community facility space (see Table 2-8). Some 1,350 parking spaces would be included; 350 on 616 and 685 would be accessory to the program uses and the remaining 1,000 would be public parking. Approximately 53,810 sf of public open space would also be provided. In addition, FSM has committed to providing all at-grade improvements associated with construction of an approximately 54,000-square-foot esplanade along the East River between East 38th and East 41st Streets. (Construction of the esplanade will require public approval for use of City-owned land.)

Table 2-8
Mixed-Use Development Program: 2007

| Site | Residential | | Retail (zsf) | Office (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces | Open Space (sf) |
|---------------|------------------|--------------|---------------|----------------|--------------------------|------------------|------------------|----------------|-----------------|
| | (zsf) | (units) | | | | | | | |
| 616 First Ave | 801,000 | 1,001 | 8,000 | 0 | 16,000 | 825,000 | 850,870 | 200 | 25,000 |
| 685 First Ave | 0 | 0 | 25,250 | 725,730 | 0 | 750,980 | 824,311 | 150 | 0 |
| 708 First Ave | 947,636 | 1,185 | 0 | 0 | 48,500 | 996,136 | 1,029,415 | 1,000 | 28,810 |
| Esplanade | | | | | | | | | 54,000 |
| Total | 1,748,636 | 2,186 | 33,250 | 725,730 | 64,500 | 2,572,116 | 2,704,596 | 1,350 | 107,810 |

Note: *FSM committed to at-grade improvements. Requires City approval for use of City-owned land.

- The 616 First Avenue parcel would be developed with the same space and square footage specifications as with the Residential Development Program. The same amount of public open space and parking spaces would also be provided.
- The 685 First Avenue parcel would be developed with approximately 725,730 zsf (798,303 gsf) of office space, and 25,250 zsf (26,008 gsf) of retail space. No public open space would be provided on this site under this scenario.
- The 708 First Avenue parcel would include approximately 947,636 zsf (976,065 gsf) of residential space, approximately 48,500 zsf (53,350 gsf) of medical community facility space, and a total of approximately 1,000 public parking spaces.
- It is not expected that the Waterside parcel would be redeveloped by 2007 under the Mixed-Use Program. However, decommissioning and demolition of the station and remediation of the site is currently anticipated to begin prior to 2007.

When complete in 2011, the Mixed-Use Program, like the other two development programs, would achieve a full 12 FAR by use of plaza bonuses. The scenario assumes a mechanism for the transfer

of bulk among the three northerly sites, 685 First Avenue, 708 First Avenue and Waterside, most likely through a special permit for large scale development. As shown in Chapter 1, "Project Description," the ultimate plan would offer substantial bonus-eligible open space on the Waterside site to offset smaller plazas at 685 and 708 First Avenue. This open space would not be available in 2007. However, the Waterside site would be cleared but not built upon in 2007; it is assumed that the large-scale development or other transfer mechanism would be in place by then. Looking at the four sites together, with no development on Waterside, the total zoning floor area proposed in the 2007 Residential Program on 685 and 708 First Avenue, 2.6 million, would be less than 10 FAR, approximately 4.3 million, and so would require no bonus. In 2007, the site at 616 First Avenue, which is independent of the three northerly sites, would provide an open space that would be large enough to qualify for a 2 FAR bonus assuming a text amendment to permit it. In addition, the public parking would require a special permit from CPC and City Council.

Development of the three parcels under the Mixed-Use Program, characterized by a mixture of residential and office uses with retail and community facility space would generally be compatible with land uses in the study area. The Mixed-Use Development Program would be compatible with the many nearby residential uses discussed above, as well as the adjacent office uses at the U.N. and across the street from the parcels. The medical community facility space would be compatible with the NYU medical facility located between East 37th and East 38th Street and the medical corridor that extends from East 34th Street to East 23rd Street east of First Avenue.

Primary Study Area. Development under the 2007 Mixed-Use Program would be compatible with surrounding uses. As with the Residential Program, residential use on 616 First Avenue at 12 FAR would be appropriate, given the similar apartment buildings on either side of the site on First Avenue. Residential use on 708 First Avenue, across from Tudor City, would also compliment surrounding uses. The office building on 685 First Avenue would introduce commercial use at a density not now available south of East 41st Street. Nonetheless, it would not be incompatible with uses in the primary study area, especially those office-type uses to the immediate north, near the U.N. Furthermore, by replacing largely vacant sites and obsolete power plant uses that contrast with surrounding uses, with residential, commercial and community facility land uses, the Mixed-Use Program would be consistent with the land use character of the study area. Thus, the Mixed-Use Program would not result in significant adverse impacts on land use in the primary study area in 2007.

Secondary Study Area. By placing a dense office building south of East 40th Street on First Avenue, the Mixed-Use Program would slightly alter the relationship between the primary study area, which is largely residential (particularly along First Avenue) and the densely commercial northwestern portion of the secondary study area. This change would not significantly affect the land use character of the secondary study area.

Zoning

Like the Residential Development Program, the Mixed-Use Development Program could not be built under the existing M3-2 and M1-5 districts. These districts, which permit light and heavy manufacturing and commercial uses, are no longer compatible with the surrounding zoning pattern and related land uses. The removal of these districts would therefore be appropriate to zoning in the area, and not adverse.

The Mixed-Use Program would require rezoning to a district that permits commercial use to an FAR of 10, 12 with bonus. Directly north of the Disposition Parcels is a C5-2 district, and west of Tudor City, both C5-2 and C6-4 districts are mapped. As noted above, C6-4 districts have actually been demapped over the past two decades and replaced with C1-9 and C5-2, because C6 districts allow a wider range of commercial uses more typical of the center of the CBD. Both C5 and C6 districts are non-contextual and permit either high or low coverage (towers) buildings.

As discussed above, the open space on the 616 First Avenue site is assumed to qualify for the 2 FAR plaza bonus, bringing total FAR on the site to 12. The two other sites would not yet qualify for a plaza bonus, but assuming that a mechanism, such as a large scale designation, is in place for both sites plus Waterside, the zoning floor area contemplated on 685 and 708 First Avenue in 2007 would be less than 10 FAR over the three sites. Any proposed public parking would require a special permit from CPC and City Council.

Public Policy

The 2007 Mixed-Use Development Program would be compatible with public development policy as evidenced by zoning trends over the last two decades, existing mapped zoning, and special purpose districts. These factors spell out a policy to eliminate obsolete manufacturing zoning districts, to promote high density residential neighborhoods on midtown's far east side north of East 34th Street and to continue to support a higher density, mixed-use development near the U.N. as well as the high density, active commercial core of Manhattan that is the Midtown CBD. The Mixed-Use Development Program would support both the high density residential neighborhood as well as the more mixed-used development near the U.N. on sites that are now either largely vacant or contain power plants that are slated for decommissioning and demolition.

The program could be made possible by rezoning to a choice of districts permitting high density (FAR 10, 12 with bonus) currently mapped in the study area. The scenario assumes non-contextual districts, permitting high or low coverage buildings; such districts are prevalent in the primary study area near the Disposition Parcels. Except for the need to amend the current BSA special permit on the 685 First Avenue site, the development scenario could be implemented at the discretion of CPC and the City Council using compatible zoning districts, bonus mechanisms already set forth in the zoning resolution, and special permits available in the zoning resolution.

MIXED-USE DEVELOPMENT PROGRAM WITH OFFICE ON 708 FIRST AVENUE

This version of a mixed-use development program contemplates construction of the entire commercial office space program in 2007 on one site: 708 First Avenue. It differs markedly from the other two scenarios in that than 80 percent of the development would be complete by 2007, bringing new office use in Midtown on line as early as possible. The location of the office use also would be different, in that the Mixed-Use Development Program previously discussed considered residential use on 708 First Avenue, locating the office use across First Avenue on the 685 First Avenue parcel.

Land Use

Disposition Parcels. Under the Mixed-Use Development Program with Office on 708 First Avenue the 616, 685, and 708 First Avenue sites would be developed with a total of approximately 1.6 million zsf (1.7 million gsf) of residential space (2,040 units), 63,350 zsf of retail space (65,251 gsf), 2.4 million zsf of office space (2.6 million gsf), and 64,500 zsf (70,950 gsf) of community facility spaces (see Table 2-9). Some 350 accessory parking spaces, as well as approximately 1,000 public

parking spaces would be included. Also, 40,700 sf of public open space would be provided. No space on 708 First Avenue would be available for public open space. In this, as in the other programs, an additional approximately 54,000-sf public waterfront esplanade would be built between East 38th and East 41st Street.

Table 2-9

Mixed-Use Development Program with Office on 708 First Avenue: 2007

| Site | Residential | | Retail (zsf) | Office (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces | Open Space (sf) |
|---------------|------------------|--------------|-----------------|------------------|--------------------------------|------------------|------------------|-------------------|-----------------------|
| | (zsf) | (units) | | | | | | | |
| 616 First Ave | 801,000 | 1,001 | 8,000 | 0 | 16,000 | 825,000 | 850,870 | 200 | 25,000 |
| 685 First Ave | 830,829 | 1,039 | 13,100 | 0 | 0 | 843,929 | 869,247 | 150 | 15,700 |
| 708 First Ave | 0 | 0 | 42,250 | 2,409,250 | 48,500 | 2,500,000 | 2,747,043 | 1,000* | 0 |
| Esplanade** | | | | | | | | | 54,000 |
| Total: | 1,631,829 | 2,040 | 63,350 | 2,409,250 | 64,500 | 4,168,929 | 4,467,159 | 1,350 | 94,700 |

Note: * Estimate only; allocation between 708 First Avenue and Waterside not yet specified.
**FSM committed to at-grade improvements. Requires City approval for use of City-owned land.

- The 616 First Avenue parcel would be developed with the same space and square footage specifications as with the Residential Development Program. The same amount of public open space and accessory parking spaces would also be provided.
- The 685 First Avenue parcel would be developed with approximately 830,829 zsf (855,754 gsf) of residential space (1,185 units), and 13,100 zsf (13,493 gsf) of retail space. Approximately 15,700 square feet of public open space could be provided on this site under this scenario.
- The 708 First Avenue parcel would include approximately 2,409,250 zsf (2,650,175 gsf) of residential space, approximately 48,500 zsf (53,350 gsf) of medical community facility space. No parking or open space could be provided on this site under this program.
- It is not expected that the Waterside parcel would be redeveloped by 2007 under the Mixed-Use Program. However, decommissioning and demolition of the station and remediation of the site is currently anticipated to begin prior to 2007.

When complete in 2011, this mixed-use land use program, like the other two development programs, would achieve a full 12 FAR by use of plaza bonuses. The scenario assumes a mechanism for the transfer of bulk among the three northerly sites, 685 First Avenue, 708 First Avenue, and Waterside, most likely through a special permit for large scale development. As shown in Chapter 1, "Project Description," the ultimate plan would offer substantial bonus-eligible open space on the Waterside site to offset smaller plazas at 685 and 708 First Avenue. This open space would not be available in 2007. However, the Waterside site would be cleared but not built upon in 2007; it is assumed that the large-scale development or other transfer mechanism would be in place by then. Looking at the four sites together, with no development on Waterside, the total zoning floor area proposed in the 2007 Residential Program on 685 and 708 First Avenue, 4.2 million zsf, would be less than 10 FAR, approximately 4.3 million zsf, and so would require no bonus. In 2007, the site at 616 First Avenue, which is independent of the three northerly sites, would provide an open space that would be large enough to qualify for the 2 FAR bonus.

Development of the three parcels under the Mixed-Use Development Program with Office on 708 First Avenue, characterized by a mixture of residential and office uses with retail and community facility space would, like the other two redevelopment programs, be compatible with surrounding land uses. By massing all the commercial office space on the most northerly site, which until recently contained Con Edison offices, this program would relate well to the more commercial mix directly north of the Disposition Parcels near the U.N. and be compatible with the many nearby residential uses. The medical community facility space would be compatible with the NYU medical facility located between East 37th and East 38th Street and the medical corridor that extends from East 34th Street to East 23rd Street east of First Avenue.

Primary Study Area. As noted above, development under the 2007 Mixed-Use Program with Office on 708 First Avenue would be compatible with surrounding uses in the primary study area. As with the Residential Program, residential use on 616 and 685 First Avenue at 12 FAR would be appropriate, given the similar apartment buildings next to the sites. Dense office use on 708 First Avenue, across Robert Moses park from the U.N. headquarters, would also compliment uses to the north. Furthermore, by replacing largely vacant sites and obsolete power plant uses that contrast with surrounding uses, with residential, commercial and community facility land uses, the Program would be consistent with land use in the study area. Thus, the Mixed-Use Program with Office on 708 First Avenue Development would not result in significant adverse impacts on land use in the primary study area in 2007.

Secondary Study Area. By placing a dense office building at East 41st Street and First Avenue, the Mixed-Use Program with Office on 708 First Avenue would relate to and enlarge the dense mixed-use development district near the U.N. This change, which would be rather distant from the dense commercial areas of the CBD in the secondary study area, would not significantly affect the land use character of the secondary study area.

Zoning

Like the other two programs, this program could not be built under the existing M3-2 and M1-5 districts. These districts, which permit light and heavy manufacturing and commercial uses, are no longer compatible with the surrounding zoning pattern and related land uses. The removal of these districts would therefore be appropriate to zoning in the area, and not adverse.

The Mixed-Use Development Program with Office on 708 First Avenue would require rezoning to a district that permits commercial use to an FAR of 10, 12 with bonus. Directly north of the Disposition Parcels is a C5-2 district, and west of Tudor City, both C5-2 and C6-4 districts are mapped. As noted above, C6-4 districts have actually been demapped over the past two decades and replaced with C1-9 and C5-2, because C6 districts allow a wider range of commercial uses more typical of the center of the CBD. Both C5 and C6 districts are non-contextual and permit either high or low coverage (towers) buildings.

As discussed above, the open space on the 616 First Avenue site is assumed to qualify for a 2 FAR bonus, bringing total FAR on the site to 12. The two other sites would not yet qualify for a plaza bonus, but assuming that a mechanism, such as a large scale designation, is in place for both sites plus Waterside, the zoning floor area contemplated on 685 and 708 First Avenue in 2007 would be slightly less than 10 FAR over the three sites and thus would not yet need a bonus. Also, because none of the proposed parking in 2007 would be for public use, no special permit from CPC and City Council would be required.

Public Policy

Like the other two development programs in the Rezoning Scenario, the Mixed-Use Program with Office on 708 First Avenue in 2007 would be compatible with public development policy as evidenced by zoning trends over the last two decades, existing mapped zoning, and special purpose districts. These factors spell out a policy to eliminate obsolete manufacturing zoning districts, to promote high density residential neighborhoods on midtown's far east side north of East 34th Street and to continue to support a higher density, mixed-use development near the U.N. as well as the high density, active commercial core of Manhattan that is the Midtown CBD. To an even greater extent than the Mixed-Use Program, this development program would support both the high density residential neighborhood as well as the more mixed-used development near the U.N. on sites that are now either largely vacant or contain power plants that are slated for decommissioning and demolition.

The program could be made possible by rezoning to a choice of districts permitting high density (10 FAR, 12 with bonus) currently mapped in the study area. The scenario assumes non-contextual districts, permitting high or low coverage buildings; such districts are prevalent in the primary study area near the Disposition Parcels. Except for the need to amend the current BSA special permit on the 685 First Avenue site, the development scenario could be implemented at the discretion of CPC and the City Council using compatible zoning districts, bonus mechanisms already set forth in the zoning resolution, and special permits available in the zoning resolution.

2011 FINAL BUILD YEAR*AS-OF-RIGHT DEVELOPMENT PROGRAM*

Under the As-of-Right Development Program, three of the Disposition Parcels would be developed according to existing zoning by 2007 and the fourth, Waterside, by 2011. As noted above however, no plan exists to redevelop any of the Disposition Parcels under existing zoning. The analysis is provided to disclose the potential environmental impacts that could result if redevelopment were to occur under existing zoning.

Land Use

Disposition Parcels. Under the As-of-Right Program, there would be no change in the assumed land uses on 616, 685, and 708 First Avenue from that which was analyzed under the 2007 Build Condition. However, by 2011 the Waterside site would be developed, adding 45,000 zsf of above-grade retail space (46,350 gsf) and 181,220 gsf of below-grade retail space, as well as an aggregate of 600 public parking spaces in four separate parking lots (see Table 2-10).

The As-of-Right Program in 2011 would add more street-level and below-ground retail uses to the area through the development of the Waterside site, but would not add any public open space. With full development the As-of-Right Development Program would add more than a million gsf of development, virtually all of it commercial. New office, retail, and parking uses would be developed on parcels that would be vacant in the future without the Proposed Action. As discussed below, these uses, particularly destination commercial retail and entertainment uses, would be new to the primary study area and would not be as compatible as those of the three Rezoning Scenario programs.

Table 2-10

As-of-Right Development Program: 2011

| Site | Retail (zsf*) | Office (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces |
|------------------|------------------|----------------|--------------------------|------------------|------------------|----------------|
| 616 First Avenue | 23,000 | 218,000 | 15,000 | 256,000 | 279,990 | 210 |
| 685 First Avenue | No Development** | | | | | |
| 708 First Avenue | 83,780 | 440,000 | 0 | 523,780 | 568,980 | 250 |
| Waterside | 226,220 | 0 | 0 | 226,220 | 227,570 | 600 |
| Total: | 333,000 | 658,000 | 15,000 | 1,006,000 | 1,076,540 | 1,060 |

Note: * Retail square footage figures include zoning square feet for above-grade development plus 225,000 square feet of below-grade retail space at the 708 First Avenue and Waterside sites.
** Discretionary approval of the BSA to modify a BSA Special Permit would be necessary for any new development on the 685 First Avenue site.

Primary Study Area. Although it is unlikely that the full As-of-Right Scenario, if it were built, would affect land use trends overall in the primary study, its uses would not be as compatible as those of the three redevelopment programs. More than a million gsf of commercial uses are contemplated, with office use on the 616 and 708 First Avenue sites, and an aggregate of more than 300,000 gsf of destination retail. Under existing zoning, this latter use could include stores that do not require a special permit (e.g., hardware stores such as a Home Depot), movies theaters, and a concentration of smaller stores (less than 10,000 zsf) and restaurants. Currently, there is a retail strip with a movie theater complex on Second Avenue at Kips Bay Plaza. The As-of-Right program would place approximately three times as much destination retail on 708/Waterside. This type of use—particularly if it included a “big box” such as a Home Depot—would be new to the primary study area and would differ from the trend towards high density residential neighborhoods with a mixed-use area near the U.N. In addition, a 279,990-gsf commercial office building with ground-floor retail on 616 First Avenue, the most southerly of the Disposition Parcels, would be a departure from that portion of First Avenue, which is far from the mixed-use area near the U.N., and is primarily residential, with some medical uses.

Secondary Study Area. Manhattan’s brand of destination retail and entertainment uses largely lie just outside the secondary study area, along Fifth Avenue and in Times Square. The destination retail uses possible under the As-of-Right Program would be too distant to conflict with or detract from these uses.

Zoning

The As-of-Right Program would not alter existing zoning on the Disposition Parcels. Thus, the M1-5 and M3-2 manufacturing districts, intended for light and heavy industrial development, would remain in place. The density of development and range of uses permitted under M districts is not consistent with the remaining zoning in both the primary and secondary study areas.

Public Policy

As noted above, public policy over the past 20 years has been to acknowledge the loss of industrial use along the East River waterfront and to support development of high density residential neighborhoods on the far east side north of East 34th Street, of a mixed-use development near the U.N. and of the high density commercial center that is the Midtown CBD. Maintaining the M

districts on the disposition parcels would be less compatible with this policy that it would not help to foster the orderly growth and enhancement of residential, commercial and community facility uses in the study area.

RESIDENTIAL DEVELOPMENT PROGRAM

By 2011, the Waterside parcel would be developed under the Residential Development Program, completing the full level of FAR 12 development considered to be the practical maximum that could be achieved on the four Disposition Parcels. As noted above, this program, like the two mixed-use programs, are not actually proposed, but are for analysis purposes only. None of the development considered under these scenarios can occur until future action is taken by CPC, BSA, and City Council.

Land Use

Disposition Parcels. In the Residential Development Program, the Waterside site would be redeveloped in 2011 with approximately 1.795 million zsf (1.849 million gsf) of residential space (2,244 units), 17,000 zsf (17,510 gsf) of retail space, approximately 43,500 zsf (47,850 gsf) of community facility space, and 81,334 square feet (1.87 acres) of open space (see Table 2-11) In addition, the Waterside site would supply 1,250 parking spaces, 250 of which would be accessory and 1,000 of which would be public parking. This would yield a total of approximately 5.0 million zsf of development in 2011, inclusive of the 2007 projected development.

Table 2-11

Residential Development Program: 2011

| Site | Residential | | Retail (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces | Open Space (sf) |
|------------------|------------------|--------------|---------------|--------------------------|------------------|------------------|----------------|-----------------|
| | (zsf) | (units) | | | | | | |
| 616 First Avenue | 801,000 | 1,001 | 8,000 | 16,000 | 825,000 | 850,870 | 200 | 25,000 |
| 685 First Avenue | 899,236 | 1,158 | 13,100 | 0 | 912,336 | 939,706 | 150 | 15,700 |
| 708 First Avenue | 1,409,494 | 1,762 | 0 | 60,500 | 1,469,994 | 1,518,329 | 1,000 | 22,278 |
| Waterside | 1,795,246 | 2,244 | 17,000 | 43,500 | 1,855,746 | 1,914,463 | 1,250 | 81,334 |
| Esplanade* | | | | | | | | 54,000 |
| Total: | 4,904,976 | 6,165 | 38,100 | 120,000 | 5,063,076 | 5,223,368 | 2,600 | 198,312 |

Note: *FSM committed to at-grade improvements. Requires City approval for use of City-owned land.

By 2011, all open space would be in place, including nearly two acres on the Waterside site. The 144,312 sf of open space, if programmed to the satisfaction of the regulations, would be enough to create additional floor area of approximately 865,900 square feet. This would be enough to qualify all four sites for a bonus from 10 FAR to 12 FAR. As noted above, 616 First Avenue could be built to 12 FAR in 2007 based on a plaza bonus. By 2011, using a mechanism such as a large-scale plan designation, the three northerly sites would combine with ample publicly accessible open space to raise the FAR on all three sites from 10 to 12 and create the development at the level set forth above.

As in 2007, the uses and scale of the Residential Program would represent a substantial change in land use over No Action conditions, but would be compatible in both type and density with the many residential land uses in the surrounding area. Thus the Residential Development Program in 2011 would not be expected to result in significant adverse land use impacts. Furthermore, by replacing parcels that would most likely be vacant in the No Action condition with land uses compatible with

those in the surrounding area, the Residential Program would conform to the land use character of the area, as discussed below.

Primary Study Area. In 2011, the study area is expected to continue to develop as projected for 2007. Commercial and residential projects would be developed in the study area. These projects would be consistent with development trends from the past 20 to 30 years that have extended commercial development eastward and have created many large residential towers along both the avenues and streets in the Murray Hill, Turtle Bay, Kips Bay, and Midtown East neighborhoods. The development occurring under the Residential Development Program in 2011 would intensify residential use in the area immediately surrounding the sites, but would be consistent with those trends.

Secondary Study Area. As described in the existing conditions section of this chapter, the secondary study area differs from the primary study area in that its uses are denser and more commercial in the northwestern portion and less dense and more consistently residential and community facility in the southern portion and in the Murray Hill neighborhood to the west. In introducing residential uses at an FAR of 12 into the primary area, the potential residential scenario would not affect this balance.

Zoning

It is assumed that all of the zoning actions and special permits necessary to facilitate the development of the full Residential Program would take place before 2007. As noted above, there would be a number of compatible districts available to permit development of this program, and their implementation would not be adverse.

Public Policy

As noted above, the Residential Development Program would be compatible with public development policy as evidenced by zoning trends over the last two decades, and it would create a high density residential neighborhood on sites that are now either largely vacant or contain power plants that are slated for decommissioning and demolition. The full 2011 program would strengthen this conclusion.

MIXED-USE DEVELOPMENT PROGRAM

Land Use

Disposition Parcels. In the Mixed-Use Program, Waterside would be redeveloped in 2011 with approximately 602,441 zsf (620,514 gsf) of residential space (753 units), 35,000 zsf (36,050 gsf) of retail space, 1.798 million zsf (1.979 million gsf) of office space, 55,500 zsf (61,050 gsf) of community facility space, 1,250 parking spaces (250 accessory and 1,000 public), and 90,490 square feet (2.08 acres) of open space, in addition to development that would occur by 2007 (see Table 2-12). This development program would yield a total of approximately 5.0 million zsf in 2011, with half of the space devoted to office uses and a slightly lesser amount for residential uses.

As in 2007, these uses would represent a substantial change in land use over No Action conditions. By placing a large portion of office use at the southern end of Waterside (East 38th Street), this program would be less compatible than the residential scenario with the type of land uses in the surrounding area. However, by replacing parcels that would most likely be vacant in the No Action condition, with land uses compatible with those in the surrounding area, this program would still be consistent with the land use character of the area, as discussed below.

Table 2-12

Mixed-Use Development Program: 2011

| Site | Residential | | Retail (zsf) | Office (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces | Open Space (sf) |
|---------------|------------------|--------------|-----------------|------------------|--------------------------------|------------------|------------------|-------------------|-----------------------|
| | (zsf) | (units) | | | | | | | |
| 616 First Ave | 801,000 | 1,001 | 8,000 | 0 | 16,000 | 825,000 | 850,870 | 200 | 25,000 |
| 685 First Ave | 0 | 0 | 25,250 | 725,730 | 0 | 750,980 | 824,311 | 150 | 0 |
| 708 First Ave | 947,636 | 1,185 | 0 | 0 | 48,500 | 996,136 | 1,029,415 | 1,000 | 28,810 |
| Waterside | 602,441 | 753 | 35,000 | 1,798,017 | 55,500 | 2,490,958 | 2,695,433 | 1,250 | 90,490 |
| Esplanade* | | | | | | | | | 54,000 |
| Total: | 2,351,077 | 2,939 | 68,250 | 2,523,747 | 120,000 | 5,063,074 | 5,400,029 | 2,600 | 198,300 |

Note: *FSM committed to at-grade improvements. Requires City approval for use of City-owned land.

By 2011, all open space would be in place, including more than two acres on the Waterside site. The 144,300 sf of open space on the three sites, if programmed to the satisfaction of the regulations, would be enough to create additional floor area of approximately 865,900 square feet. This would be enough to qualify all four sites for a bonus from FAR 10 to FAR 12. As noted above, 616 First Avenue could be built to 12 FAR in 2007 based on a plaza bonus. By 2011, using a mechanism such as a large-scale plan designation, the three northerly sites would combine with ample publicly accessible open space to raise the FAR on all three sites from 10 to 12 and create the development at the level set forth above.

Primary Study Area. As noted above, residential development under the Mixed-Use Program would be compatible with surrounding uses in the primary study area and the office building on 685 First Avenue would introduce commercial use at a density not now available south of East 41st Street. Nonetheless, it would not be incompatible with uses in the primary study area, especially those office-type uses to the immediate north, near the U.N. The large commercial office building contemplated for Waterside in 2011, however, would be less compatible with surrounding uses, which are largely high density residential. Commercial uses are located across the street, but these are at a much lower scale. This office building in combination with the building assumed at 685 First Avenue would create a small high density office district in the primary study area.

Still, by replacing largely vacant sites and obsolete power plant uses that contrast with surrounding uses, with residential, commercial and community facility land uses, the Mixed-Use Program would be consistent with the land use character of the study area. Thus, on balance, the Mixed-Use Program would not result in significant adverse impacts on land use in the primary study area in 2011.

Secondary Study Area. By placing a two dense office buildings south of East 40th Street on First Avenue, the Mixed-Use Program would slightly alter the relationship between the primary study area, which is largely residential (particularly along First Avenue) and the densely commercial northwestern portion of the secondary study area. This change would not significantly affect the land use character of the secondary study area.

Zoning

It is assumed that all of the zoning actions and special permits necessary to facilitate the development of the full Mixed-Use Development Program would take place before 2007. As noted above,

there would be a number of compatible districts available to permit development of this program, and their implementation would not be adverse.

Public Policy

The addition of a large, dense office building at the southern end of the Waterside site in the 2011 Mixed-Use Development Program would be less compatible than the other two development programs with public development policy as evidenced by zoning trends over the last two decades, existing mapped zoning, and special purpose districts. These factors spell out a policy to eliminate obsolete manufacturing zoning districts, to promote high density residential neighborhoods on midtown's far east side north of East 34th Street and to continue to support a higher density, mixed-use development near the U.N. as well as the high density, active commercial core of Manhattan that is the Midtown CBD. The 2011 Mixed-Use Development Program would develop sites that are now either largely vacant or contain power plants that are slated for decommissioning and demolition, but would create a new dense office area between East 38th and East 40th Streets on First Avenue. This use in this location was not contemplated by development policy, which has favored high density residential with local commercial uses south of East 42nd Street along First Avenue.

MIXED-USE DEVELOPMENT PROGRAM WITH OFFICE ON 708 FIRST AVENUE

Land Use

Disposition Parcels. As noted above, most of the development assumed in this rezoning program would take place by 2007. The additional residential development on Waterside in 2011 would represent less than 18 percent of the total development in the program, as shown on Table 2-13. The Waterside development would add 841,098 zsf (866,331 gsf) of residential use (1,051 units) and 55,500 zsf (61,050 sf) of community facility space to the program. Waterside would supply an estimated 1,250 parking spaces (250 accessory and 1,000 public) and 103,600 square feet (2.38 acres) of open space. The total development would include 5,065,527 zsf (5,394,540 gsf).

Table 2-13

Mixed-Use Development Program with Office on 708 First Avenue: 2011

| Site | Residential | | Retail (zsf) | Office (zsf) | Community Facility (zsf) | Total (zsf) | Total (gsf) | Parking Spaces | Open Space (sf) |
|---------------|------------------|--------------|-----------------|------------------|--------------------------------|------------------|------------------|-------------------|-----------------------|
| | (zsf) | (units) | | | | | | | |
| 616 First Ave | 801,000 | 1,001 | 8,000 | 0 | 16,000 | 825,000 | 850,870 | 200 | 25,000 |
| 685 First Ave | 830,829 | 1,039 | 13,100 | 0 | 0 | 843,929 | 869,247 | 150 | 15,700 |
| 708 First Ave | 0 | 0 | 42,250 | 2,409,250 | 48,500 | 2,500,000 | 2,747,043 | 1,000* | 0 |
| Waterside | 841,098 | 1,051 | 0 | 0 | 55,500 | 896,598 | 927,381 | 1,250* | 103,600 |
| Esplanade** | | | | | | | | | 54,000 |
| Total: | 2,472,927 | 3,091 | 63,350 | 2,409,250 | 120,000 | 5,065,527 | 5,394,540 | 2,600 | 198,300 |

Note: * Estimate only; allocation between 708 First Avenue and Waterside not yet specified.
**FSM committed to at-grade improvements. Requires City approval for use of City-owned land.

Primary Study Area. By placing all of the mixed-use program's office use at the northern end of the project area with residential at the southern end of Waterside, this program would acknowledge surrounding land uses—dense, mixed-use development near the U.N. to the north and primarily residential uses to the south along First Avenue—and would be compatible with land use in the primary study area.

Secondary Study Area. As noted above for 2007, by placing a dense office building at East 41st Street and First Avenue, the Mixed-Use Program with Office on 708 First Avenue would relate to and enlarge the dense mixed-use development district near the U.N. This change, which would be rather distant from the dense commercial areas of the CBD in the secondary study area would not significantly affect the land use character of the secondary study area. The addition of residential use on East 38th Street in 2011 would have no effect on land use in the secondary study area.

Zoning

As noted above, the zoning actions and special permits required to implement the redevelopment scenario programs and the mechanism for transferring bulk among the three northerly Disposition Parcels would be in place before 2007. These are all compatible with the type of zoning districts assumed for the Proposed Action.

Public Policy

As noted above, this development program would support both the high density residential neighborhood as well as the more mixed-used development near the U.N. on sites that are now either largely vacant or contain power plants that are slated for decommissioning and demolition. In 2011, with the addition of residential use at East 38th Street and First Avenue, the Mixed-Use Development Program with Office on 708 First Avenue would strengthen its compatibility with public development policy in the study area.

F. CONCLUSIONS

The As-of-Right Program and the hypothetical programs associated with the Rezoning Scenario would have different effects on land use, zoning, and public policy in the study area. Under the As-of-Right Program, manufacturing zoning would remain, although no new manufacturing uses would be anticipated. The commercial uses that could be constructed under this scenario would be less consistent with development trends, in that it would not promote high density residential development north of East 34th Street, high density mixed-use development near the U.N., and very dense, active commercial development in the Midtown CBD.

All of the programs under the Rezoning Scenario would be consistent with public policy in the study area in that they would replace the obsolete manufacturing zoning currently mapped on the Disposition Parcels with zoning and development that would be more compatible with City policy for the area. The Residential Development Program, built using prevailing zoning districts to the density underlying most recent nearby development, would be entirely consistent with land use, zoning, and public policy in the study area. The Mixed-Use Development Program, which assumes substantial office development two to four blocks south of East 42nd Street, would be less consistent with land use, zoning, and public policy in the study area, which does not contemplate an office district so far south, but on balance that effect would not be significant. The Mixed-Use Development Program with Office on 708 First Avenue, by placing commercial office development on the most northerly site, closest to the high density mixed-use district near the U.N., would be consistent with land use, zoning, and public policy in the study area. ❖



MANHATTAN COMMUNITY BOARD SIX

866 United Nations Plaza – Ste. 308, New York, NY 10017

Phone: (212) 319-3750 Fax: (212) 319-

E-mail CB6MGOV@aol.com

Mark Adams Taylor
Chair

Toni Carlina
District Manager

HOUSING AND HOMELESS COMMITTEE, Claude Winfield, Chair

Draft Generic Environmental Impact Statement, DGEIS ConEdison Site

Community Board 6, CB6, is a diverse and integrated neighborhood. It is made up of many high income, middle income, and moderate-income high rise rental and cooperative apartments. The median income for the area is \$65,370. The neighborhood is composed of many long term blue-collar workers, policemen, librarians, teachers, nurses, doctors and lawyers. In the early 1950s, State Senator MacNeil Mitchell, from the Upper East Side, proposed the Mitchell-Lama law. This law was designed for the purpose of building affordable housing for middle income residents. A total of 209 developments were built. A number of these developments were constructed in CB6 (i.e., Waterside Plaza, Phipps Plaza East, East Midtown Plaza, & Cooper Gramercy.

In the last two years, most of these developments have withdrawn from the program under a process called "buyout." This process has led to a significant and continuing eroding of the economic fabric of this community. It has created an outward migration of our economic base.

The need for affordable housing in New York City is an accepted fact. Indeed, there is a severe shortage of affordable housing in NYC.

The designated study area, ConEd Site, is located within the Manhattan Exclusionary Zone (which is located between 14th street and 96th street). Similarly, this site is located within CB6. It is noted that specific requirements are maintained within this area to enhance the building of affordable housing units.

The average household size in Manhattan is 2.0 residents per unit. In CB6 the average household size is 1.6 to 1.8 resident per unit. Notably, the study site has an average household size of 1.5 resident per unit.

NYC has a vacancy rate of 3.19. However, the vacancy rate for Manhattan and the study area are significantly higher, respectively 7.5 and 9.0. This high vacancy rate for the study area can be attributed to the mobile and immigrating population that resides in this area. This population is composed of young doctors, nurses, and professional people in their primary living arrangements. They are usually willing to pay higher rents per unit. Similarly, they are highly willing and able to move when a better situation becomes available. They, also, have a tendency to move as they begin to establish their families and have children.

Again the average median income for CB6 is \$65,370. It is \$56,000 for Manhattan. This is a significant factor in determining the building of affordable housing units. Consequently, rental units within the surrounding community go for an entry level price of;

Studio: \$1,995, 1 Bedroom: \$2,495, 2 Bedroom: \$3,495, and 3 Bedroom: \$7,395

These are not rental prices that will maintain our existing economic base in this community. Indeed, an immigrant population is increasing daily. The established community is moving to states and communities where there are still opportunities for moderate and middle-income families to exist on \$50,000 a year. This is especially true for the retirees that are living on pensions. Many are former city employees for whom Mitchell-Lama was designed to keep in the city.

At the same time, the study area and CB6 shows a population grow rate of 8% from 1990 to 2000.

More important, since the year 2000, CB6 has seen a number of the Mitchell-Lama developments opt out (i.e., Waterside Plaza, Phipps Plaza East, Cooper Gramercy, and the Booth House). In addition, Peter Cooper and Stuyvesant Town are being continually decontrolled by MCI and vacancy decontrol regulations. In the last two years, this community has witness a loss of nearly 2000 moderate to middle-income housing units.

At the same time, the community has witness an explosion of hi-rise buildings being constructed. The majority of these units are being rented at market rate. For example, the following buildings have completed construction since 2000;

| | | |
|----------------------------------------------------|--------------------------------|-------|
| The Aurora | 126 units | |
| Sonoma | 259 units | 80-20 |
| Post Luminaria | 138 units | |
| Pearlbinder | 480 units (projected) | |
| 214-230 34 th St | 620 units (under construction) | |
| Metropolis | 361 units | 80-20 |
| Kennerly/30 th St & 2 nd Ave | 81 units | |
| Montrose | ? | |

In accordance with the DGEIS report there is a critical need for affordable housing in the study area. The developer has suggested a variety of residential and mixed-use plans. It is important to note that each plan does not suggest a true 80/20 building scheme. In each case, the developer has withheld 20% of the residential space for *owner-occupied condominium units*. Most condominiums with a size of 800sf, sell in the study area, at a rate of \$450,000 to \$780,000 per unit. A plan that provides for an adequate number of moderate and middle-income housing units is needed. Perhaps, the developer should consider making the ratio 75/25 with the remaining units after he has withheld his initial 20%.

It is an accepted fact that NYC has a severe shortage of affordable housing. Consequently, any large development being constructed in the Manhattan Exclusionary Zone must meet this commitment.

DRAFT

PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

September 2002

**COMMUNITY FACILITIES AND SERVICES - POLICE SERVICES (DGEIS
Section 4)**

WHEREAS, the Con Edison's Disposition Parcels are in the New York City Police Department's 17th Precinct, which has its headquarters at 167 East 51st Street in Manhattan. The boundaries of the 17th Precinct extend from East 59th Street south to East 30th Street, and from the East River west to Lexington Avenue (except between East 34th Street and East 40th Street where the precinct extends further west to Madison Avenue); and

WHEREAS, the Draft Generic Environmental Impact Statement is incorrect by stating that the "17th Precinct has a force of approximately 200 officers." The 17th Precinct has 144 officers and if you include their supervisors, the total amount is about 180. This information was given by the 17th Precinct Community Affairs Officer; and

WHEREAS, according to the Office of the Deputy Commissioner, Management & Budget of the NYC Police Department, the construction of millions of additional square feet of office or retail space may necessitate the assignment of additional personnel, resources and equipment. To determine such a need, the following would have to be considered:

- Composition of the rental space
- Type of shoppers/workers/clients
- Hours of operation
- Vehicle traffic flow
- Pedestrian traffic
- Transient population
- Permanent population; and

WHEREAS, in the absence of information on the above was provided to the New York City Police Department, the conclusion stated in the Draft Generic Environmental Impact Statement section E. (Probable Impacts of the Proposed Action) (Police Services), page 4-15, that "effective, efficient service is not expected to be adversely affected by the development programs resulting from the Proposed Acton" should not be considered by the New York State Public Service Commission when it reviews this DGEIS; now

Therefore, be it

PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

RESOLVED, that the Draft Generic Environmental Impact Statement should include the specific response of the Police Department, including the numbers of officers that would provide adequate public safety to our neighborhood as a result of the Proposed Action Development; and be it further

RESOLVED, that all Proposed Action information be given to the New York City Police Department in order for it to determine what additional personnel, resources and equipment would be required to protect our quality of life and safety.

DRAFT

PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

September 2002

COMMUNITY FACILITIES AND SERVICES – FIRE PROTECTION (DGEIS Section 4)

WHEREAS, according to The Captain of Engine Company 16 and Ladder Company 7, Engine Company 21 located at 238 East 40th Street in Manhattan Engine provide fire protection to the Disposition Parcels, not Engine Company 16 and Ladder Company 7 located at 234 East 29th Street as stated in the Draft Generic Environmental Impact Statement section 4 (page 4-1). Engine Company will provide Ladder rescue if needed. Other engine companies respond as needed. The Captain of Engine Company 16 and Ladder Company 7: and

WHEREAS, no information regarding type of construction, height of buildings, or nature of use of buildings and approximate population was given to the New York City Fire Department, the conclusion of in the Draft Generic Environmental Impact Statement section E. (Probable Impacts of the Proposed Action) (Fire Protection), which stet (page 4-15), that “no impact on fire services is expected as a result of the development programs subsequent to the Proposed Action,” should not be considered by the New York State Public Service Commission when it review this DGEIS; now

Therefore, be it

RESOLVED, that all Proposed Action Development information be given to the New York City Fire Department in order for it to determine and the DGEIS to disclose what additional personnel, resources and equipment that would be required to give our neighborhood good fire protection and address any specific concerns related to building construction, height and emergency.



MANHATTAN COMMUNITY BOARD SIX

36 United Nations Plaza – Ste. 308, New York, NY 10017

Phone: (212) 319-3750 Fax: (212) 319-3772

E-mail CB6MGOV@aol.com

Mark Adams Taylor
Chair

Toni Carlina
District Manager

YOUTH AND EDUCATION COMMITTEE

Community Facilities and Services – Schools (DGEIS Section 4)

-
-
- According to the DGEIS, District 2 of the Department of Education, DOE, projects a sharp increase in birth rate. This projection indicates 763 additional public elementary school students, or a 5% net increase by 2007.

By the year 2010, the Division of School Facilities of DOE predicts a large increase in elementary school enrollment (approximately 2.0 percent per year). Applying this rate of increase, District 2's enrollment by the year 2011 will project a 104% utilization. The elementary school enrollment would increase approximately 23 percent between 2000 and 2011.

When this rate of increase is applied to the three elementary schools located in the vicinity of the Disposition Parcels, we obtain a projection of 379 additional students. This would result in a shortfall of 303 seats (117 percent utilization).

- PS 116-121 percent capacity
- PS 59 - 122 percent capacity
- PS 40 - 110 percent capacity

The 117 percent utilization does not include the projected growth due to the development of the site.

Significantly, the DGEIS does not account for many newly constructed buildings in the study area that will impact on these schools. For example,

| | | | |
|----------------|-------------------|-----------|-------------------|
| Post Luminaria | 385 First Avenue | 138 units | |
| Aurora | 554 Third Avenue | 126 units | |
| Metropolis | 150 East 44th St. | 361 units | |
| Pearlbinder | 245 East 36th St. | 480 units | in planning stage |
| Sonoma | 300 East 39th St. | 259 units | |

All of these schools in the designated area presently do not have 6 grade students as stated in the DGEIS. Therefore the projected number reflects kindergarten to 5th grade elementary schools.

The suggestion to send District 2 students to District 1 would be unacceptable! Recently released math scores indicate that at the suggested school, PS19, in District 1, only 48% of the students met state standards. At the schools affected by the disposition site, students met the state standards at a rate of 93% for PS116, 89% for PS 40, and 71% for PS 59. The reading scores are similar.

Would you send your children to a failing school outside of your District?

District 2 and new Visions for Public Schools has submitted a design proposal to develop a school at the development site. They recognize the negative impact this development will have on the surrounding schools.

The community supports the building of a new school in order to accommodate the increased need for student seats as generated by the development of the disposition site.



MANHATTAN COMMUNITY BOARD SIX

6 United Nations Plaza – Ste. 308, New York, NY 10017

Phone: (212) 319-3750 Fax: (212) 319-3772

E-mail CB6MGOV@aol.com

Mark Adams Taylor
Chair

Toni Carlina
District Manager

YOUTH AND EDUCATION COMMITTEE

DRAFT

Community Facilities and Services Day Care (DGEIS Section4) Youth and Education committee

WHERE AS, the 80/20 Residential Development Program will result in an introduction of [493 to 981] low- to moderate-income units,

WHERE AS, there are approximately 153 public day care center slots within the one-mile area but would likely be above the 5 percent collective capacity of public day care centers in the area,

WHEREAS, private day care in the designated area are presently at capacity,

WHERE AS, with the addition of thousands of units in the area, and the projected excessive demand for additional elementary school seats, day care center facilities will be provide a means of continuity for families with small children,

THEREFORE, be it

RESOLVED, Community Board Six, Manhattan, supports the development of day care center, whether public or private, to facilitate the increase in additional units of the complex.



MANHATTAN COMMUNITY BOARD SIX

866 United Nations Plaza – Ste. 308, New York, NY 10017

Phone: (212) 319-3750 Fax: (212) 319-3752

E-mail CB6MGOV@aol.com

Mark Adams Taylor
Chair

Toni Carlina
District Manager

PARKS, LANDMARKS & CULTURAL AFFAIRS, Gary Papush, Chair

CON EDISON – DGEIS OPEN SPACE AND RECREATIONAL FACILITIES

Community Board 6 has traditionally had the lowest amount of available open space of any area in New York City. The current DGEIS does not sufficiently answer this problem. The inventory of current existing open space includes private owned spaces that could be closed off from public use at any time. There is no indication that the United Nations would ever permit general public access to their open space. Quite the contrary with security concerns so paramount with everybody. The increase of residential populations requires the need not only for open space but substantial more active open space. The potential for this space either exists already or could be created off-site by a partnership of the developer, Con-Ed and public authorities.(a list of specific locations for off-site spaces are in the further resolved of the draft resolution).

HISTORIC AND ARCHAEOLOGICAL RESOURCES

A debate exists over the historic value of the Waterside Generating Station. It does not seem clear that a sufficient analysis has really been done. In fact the DGEIS has contradictory statements of the sites just one page apart. While it states that the NYSOPRHP has rejected eligibility for S/NR listing, the following page has the author of the DGEIS stating that the structures do meet such criteria.

SHADOWS

A. INTRODUCTION

The proposed Section 70 disposition of the Con Edison parcels could result in the development of a number of buildings of varying heights under each of the four development programs. Buildings in all of these scenarios would cast shadows onto adjacent nearby areas that are somewhat different and greater than the shadows currently cast by existing buildings. The tallest buildings in each scenario range from approximately 256 feet in the As-of-Right Development Program to 770 feet in both the Residential and Mixed-Use Development Programs, to 850 feet in the Mixed-Use Development Program with Office on 708 First Avenue.*

This chapter considers the shadow increments that may be cast on sensitive receptors—specifically public open spaces, historic resources with significant sun-sensitive features, and important natural resources—by the buildings that could be constructed as a result of the proposed sale of the Con Edison properties. It follows the guidelines of the *City Environmental Quality Review (CEQR) Technical Manual* (2001). The analysis assesses potential shadows impacts for four representative days of the year: June 21 (summer solstice), May 6/August 6 (halfway between solstice and equinox), March 21/September 21 (vernal/autumnal equinox), and December 21 (winter solstice). During each of these representative days, the shadow analysis period runs from 1½ hours after sunrise to 1½ hours before sunset, since, according to the *CEQR Technical Manual*, any shadows cast just after sunrise and just before sunset are not considered significant.

The *CEQR Technical Manual* identifies the following as situations when a significant shadow impact may occur:

- Substantial reduction in sunlight where a sensitive use is already subject to substandard sunlight (i.e., less than the minimum time necessary for survival);
- Reduction in sunlight available to a sensitive use from more to less than the minimum time necessary for its survival;
- Substantial reduction in sunlight to a sun-sensitive use or feature; and
- Substantial reduction in the usability of the open space.

Based on these four impact criteria significant adverse impacts were identified for the Tudor City open spaces on the December 21 analysis day with the Residential Development Program and both Mixed-Use Development Programs. No other significant adverse impacts were identified. Adverse impacts which are not significant because of the lack of sun sensitive uses, the lack of use in general, or the availability of alternative space within the park that is not shadowed would occur at other open spaces in the study area. The Manhattan Place triangular plaza would be less attractive for sun-seekers in the midday in the spring, summer, and fall. Robert Moses Playground would receive new shadow, but its sun-sensitive uses are already largely in shadow. Trygve Lie Plaza would also receive substantial new shadow, but it lacks both plantings and users. Ralph Bunche Park would also receive more shadow, but the southern end, where most shadows would fall, is similar to Trygve Lie and lacks users and plantings.

* The building height and shadow analyses contained in this chapter include height due to mechanical space at the top of each building; heights to the roof would be approximately 40 feet less.

Overall, however, the three rezoning programs would be providing a major infusion of new publicly accessible open space that would be located so that major portions would be in sunlight for major parts of the day.

B. DEVELOPMENT PROGRAMS

Since there is currently no specific project plan, four development programs (one requiring no further discretionary actions subsequent to the Proposed Action and three requiring a rezoning by the City Planning Commission, among other discretionary actions) have been presented to allow for a generic analysis of shadow impacts. These four development programs include buildings at a range of heights to represent an illustrative outline of the bulk envelope that could be developed as part of the master planning effort. At such time as a specific rezoning application is made to the Department of City Planning (DCP), detailed shadow analyses would be made of that plan in conjunction with the environmental review for the rezoning actions pursuant to the Uniform Land Use Review Procedure (ULURP). Generally, the As-of-Right Program would develop buildings of low to moderate height, while the three programs of the Rezoning Scenario would develop a mixture of low-rise buildings and high-rise towers, as described below.

It has been assumed for the purposes of this analysis that the Disposition Parcels would be cleared in the future without the Proposed Action. Therefore, there is no deduction from development program shadows to account for the shadows cast by currently existing buildings on the Disposition Parcels. However, shadow diagrams do indicate shadows from existing buildings elsewhere in the analysis area.

AS-OF-RIGHT DEVELOPMENT PROGRAM

The heights of buildings projected for development in the As-of-Right Program would range from 34 feet at Waterside to 256 feet on portions of 616 First Avenue and at 708 First Avenue. Much of the Waterside parcel and all of the 685 First Avenue parcel would remain undeveloped in this program.

REZONING SCENARIO: RESIDENTIAL DEVELOPMENT PROGRAM

The Residential Development Program is intended to illustrate the potential reasonable worst-case shadows that may result from a rezoning of the Disposition Parcels and development of a group of primarily residential buildings. It contemplates building heights as follows:

- 616 First Avenue—655-foot main tower located approximately 127 feet east of First Avenue with 20- to 210-foot bases extending east from the tower;
- 685 First Avenue—770-foot building on First Avenue and 170-foot wing on 40th Street;
- 708 First Avenue—two 660-foot towers; and
- Waterside—505-foot tower and two 655-foot towers, connected by bases ranging from 20 to 50 feet.

All development is projected to occur by 2007, except for development at Waterside, which would occur by 2011.

REZONING SCENARIO: MIXED-USE DEVELOPMENT PROGRAM

The Mixed-Use Program contemplates the following:

- 616 First Avenue—655-foot main tower located approximately 127 feet east of First Avenue with 20- to 210-foot bases extending east from the tower (same as the Residential Program);
- 685 First Avenue—540-foot-tall building;
- 708 First Avenue—680-foot-tall building; and
- Waterside—a narrow, 660-foot-tall building to the north and a square, 770-foot-tall building to the south.

As with the Residential Development Program, all development is projected to occur by 2007, except for development at Waterside, which would occur by 2011.

REZONING SCENARIO: MIXED-USE DEVELOPMENT PROGRAM—OFFICE ON 708 FIRST AVENUE

This rezoning scenario would differ from the Mixed-Use Development Program described above. Most notably the building at 708 First Avenue would have an 850-foot tall tower with a large square floor plate at the corner of 41st Street and First Avenue. A second shorter tower with similarly-sized floor plates would be located at the east end of the site by the FDR. On the Waterside parcel, there would only be one building: a slab parallel to 38th Street at the south end of the site. This design would leave a large open area between the Waterside building on the south and the 708 First Avenue building on the north.

C. IDENTIFICATION OF SENSITIVE RECEPTORS

A screening analysis was undertaken to identify which open spaces could potentially be affected by any of the program buildings on our study sites. It eliminated from consideration open spaces that would be out of shadow range of the program buildings, that would not be affected by program shadows due to intervening buildings, or that are in the area south of the sites in which no program shadow would fall. Table 6-1 shows open spaces within the maximum shadow length and indicates which were eliminated due to intervening buildings.

PUBLIC OPEN SPACES

The public open spaces that fall within the maximum new shadow length from the Disposition Parcels but are not fully shaded by intervening buildings are briefly described below (see Figure 6-1). They are considered in more detail in Chapter 5, "Open Space and Recreational Facilities."

Rivergate (Joseph Slifka Park) is located on the east side of First Avenue between East 33rd and 34th Streets, directly south of the 616 First Avenue site. This space contains basketball courts, a playground, and seating areas.

St. Vartan Park stretches from First to Second Avenue between East 35th and 36th Streets, directly west of the 616 First Avenue site. Amenities include basketball and handball courts along Second Avenue, a large paved ballfield in the middle, and in the eastern portion a sitting area and playground with a seasonal water element (sprinkler). According to the Park Supervisor, the sprinkler would typically be turned on from May through September from 10AM to 5 PM, although

Table 6-1
**Shadows Screening:
 Open Spaces Within Maximum Shadow Distance**

| Open Space | Open Spaces Within Maximum Shadow Distance | Beyond Max Shadow Distance? | Fully Shaded by Intervening Buildings? |
|------------|--------------------------------------------|-----------------------------|----------------------------------------|
| 1 | Rivergate (Joseph Slifka Park) | NO | NO |
| 2 | St. Vartan Park | NO | NO |
| 3 | Manhattan Place—630 First Avenue | NO | NO |
| 4 | Corinthian—330 East 38th Street | NO | NO |
| 5 | Robert Moses Playground | NO | NO |
| 6 | Trygve Lie Plaza | NO | NO |
| 7 | Tudor City Greens | NO | NO |
| 8 | Tudor Grove Playground | NO | NO |
| 9 | Mary O'Connor Playground | NO | NO |
| 10 | Ralph J. Bunche Park | NO | NO |
| 11 | United Nations Park | NO | NO |
| 12 | Glick Esplanade | NO | NO |
| 13 | 300 East 34th Street | NO | YES |
| 14 | Murray Hill Mews—560 Third Avenue | NO | YES |
| 15 | 240 East 38th Street | NO | YES |
| 16 | Whitney—311 West 38th Street | NO | YES |
| 17 | Eastgate Tower—222 East 39th Street | NO | YES |
| 18 | New York Tower—330 East 39th Street | NO | YES |
| 19 | Churchill—728 Second Avenue | NO | YES |
| 20 | Vanderbilt—235 East 40th Street | NO | YES |
| 21 | Highpoint—250 East 40th Street | NO | YES |
| 22 | 600 Third Avenue | NO | YES |
| 23 | Grand Central Plaza—622 Third Avenue | NO | YES |
| 24 | Helmsley Hotel—212 East 42nd Street | NO | YES |
| 25 | Plaza at 201 East 42nd Street | NO | YES |
| 26 | International Plaza—303 East 42nd | NO | YES |
| 27 | 3 United Nations Plaza | NO | YES |

the dates and times are not specifically set. The First Avenue frontage of the park is a fenced lawn area that is not publicly accessible. While the lawn area contributes to the general attractiveness of the Park when seen from near First Avenue, it could not be considered an important natural feature of the landscape. The eastern portion also has tall Sycamore trees, which form a fairly continuous tree canopy about 30 feet above street level.

Manhattan Place is located at 630 First Avenue on the east side of First Avenue between East 36th and 37th Streets, directly north of the 616 First Avenue site. This public plaza has benches, seating, flower beds, and a fountain. While it is well-used during the warmer months, its use drops in the colder months, especially in winter.

Corinthian is located at 330 East 38th Street on the west side of First Avenue and contains benches alongside plants and trees. A sculpture and seasonal water element are also in the plaza east of the building's porte cochere but are not visible from the sidewalk along First Avenue.

Robert Moses Playground is located just north of the 708 First Avenue parcel, between East 48th and 49th Streets, the FDR Drive, and First Avenue. It shares this block with a large ventilation structure for the Queens-Midtown Tunnel. While the open space does contain some benches and a number of trees, it is primarily a place of active recreation. On the west end there is a large paved area with a baseball backstop and two benches on the south end. This area is often used for roller hockey. North of the ventilation structure in the middle of the block along 42nd Street is a dog run. It also has benches where dog owners or walkers sit. East of the ventilation structure along the FDR there is a comfort station, hand ball courts and basketball courts. Along the curve formed by the access road from 42nd Street to the FDR Drive, there are also benches.

Trygve Lie Plaza is a small paved strip on the west side of First Avenue between East 41st and 42nd Streets. It contains four benches along an enlarged portion of the sidewalk. The sidewalk is in poor condition and the benches are currently blocked off by heavy timber sections.

Tudor City Open Spaces consist of four sections. There are north and south Greens that run along the west side of Tudor Place, between East 41st and 43rd Streets, north of the Disposition Parcels. Tudor City Greens, as well as Tudor Place, are at an elevation approximately 30 feet above First Avenue and 42nd Street. These passive open spaces contain trees and benches. In addition, there are two playgrounds in Tudor City. Tudor Grove Playground is located just west of the south Greens on the south side of 42nd Street. It is primarily an active open space with a tot lot, trees, and some benches. Mary O'Connor Playground is just west of the north Greens on the north side of 42nd Street. Like Tudor Grove Playground, Mary O'Connor Playground has a tot lot, benches, and trees.

Ralph J. Bunche Park is a continuation of the linear open space of Trygve Lie Plaza. It is on the west side of First Avenue between East 42nd and 43rd Streets. It leads to stairs up to Tudor City. It consists of a few benches and sculptures along an enlarged portion of the sidewalk. The benches are currently blocked off by heavy timber sections.

United Nations Park runs from 45th to 48th Streets between First Avenue and the East River. The park contains seating areas, walkways, lawns, and a paved plaza.

Glick Esplanade is located east of the 616 First Avenue site between East 36th and 38th Streets. This paved area between the FDR Drive and the East River contains a walking path, seating, a fountain, flowers, and an exercise station.

HISTORIC RESOURCES

The Ford Foundation is a New York City Landmark (NYCL) and its atrium is a designated Interior Landmark. The building is located immediately west of Tudor City between 42nd and 43rd Streets. The atrium has large glass walls on 42nd Street and Mary O'Connor playground, and it can be seen from both the 42nd Street sidewalk and Mary O'Connor playground as well as through the entrance lobby on 43rd Street. Because it is not open to the public, the atrium is not considered as an open space resource.

Although not officially designated, the U.N. complex on First Avenue north of 42nd Street is a potential historic resource. The southern face of the U.N. Library is a glass curtain wall, approximately 220 feet long and 40 feet tall. However, many factors indicate that this is not a

sun-sensitive feature. The north facade is exactly the same as the south facade and is facing away from the sun. There are no major interior spaces such as an atrium along the inside of the south wall that might be sunlight-dependent. The shades are drawn in many of the windows indicating that the occupants want to keep direct sunlight out. Further, it appears that a reflective film has been placed on the windows to lower the heat and light transfer, even when the shades are up. The U.N. Park is considered above under open spaces.

Tudor City is another historic resource. Its sun-sensitive features are its open spaces which are described along with the other open spaces above.

The former Kips Bay Brewery is located on the east side of First Avenue just south of the Waterside parcel. Any shadows from potential development at Waterside would fall on its north facing facade which because it faces north would not be considered sun-sensitive. Therefore, shadows on the former Kips Bay Brewery are not considered in the analysis.

EAST RIVER

Shadows from the new buildings on the Con Edison parcels would reach the East River in the afternoon throughout the year. The area in the shadow path would have been in the sunlight all morning. Even in the wintertime when shadows are longest, the shadows would only fall on a small portion of the river. Further, the current flows rather swiftly in the East River. For all these reasons, the shadows of the buildings (to be located on the west side of the FDR) would not significantly affect aquatic resources (plankton or fish) in the East River nor would they significantly affect any recreational boating. Therefore, shadows on the East River are not considered in the detailed analysis below.

D. SHADOW EFFECTS

The sun rises in the east and casts its earliest (and longest) shadows towards the west. Later in the morning, the sun rises higher in the sky, casting shorter shadows towards the northwest. At noon, the sun is at its highest point in the sky and casts the shortest shadows of the day directly north. (During Daylight Savings Time, this occurs at 1 PM rather than at noon.) In the afternoon, the sun continues to move west and begins to descend, casting longer shadows toward the northeast and east.

In its yearly cycle, the height of the sun in the sky and the time and directional location at which it rises and sets varies by season. In the winter, the sun travels in a low arc across the southern sky, rising late in the southeast and setting early in the southwest. Because it is so low in the sky, it casts longer shadows. In the spring and fall, the sun arcs through the sky at a somewhat higher angle, rises earlier in the east, and sets later in the west. In these seasons, shadows are of moderate length. In the summer, the sun arcs through the sky at its highest angle, rising almost directly overhead at noon. For this reason, summer shadows are shortest. However, in the summer, the sun rises earliest and sets latest; it also travels farther, from the northeast to the northwest. Thus, the summer sun casts shadows in more directions than those seen in other seasons and its late sunset and early sunrise creates shadows earlier in the morning and later in the evening than in other seasons.

The shadow diagrams and analysis presented below were developed using building envelope and topographical information provided to the project by Urban Data Solutions, Inc. Shadows were modeled using the solar rendering capabilities of Microstation software.

AS-OF-RIGHT DEVELOPMENT PROGRAM—2007 and 2011

Since buildings in the As-of-Right Development Program would be no taller than 256 feet, they would cast shadows predominantly on adjacent open spaces, including St. Vartan Park and Manhattan Place adjacent to 616 First Avenue and Robert Moses Playground adjacent to 708 First Avenue. Since the majority of development in the As-of-Right Program would occur by 2007, most of the shadows cast by new buildings in this program would also occur by 2007. Additional development projected to occur by 2011 would be on the Waterside parcel and would include below-grade retail space, as well as a small, one- to two-story building at the northern portion of this parcel. At this height the additional building would not cast any incremental new shadows on surrounding sensitive receptors. Therefore, shadows cast on sensitive receptors by buildings in the As-of-Right Program in 2011 would be the same as shadows cast by buildings in 2007.

Shadows are discussed below first by season and then by receptor.

SHADOWS BY SEASON

This section briefly reviews the shadows cast by each building on each analysis day (see Table 6-2).

March 21 (Analysis Period: 7:36 AM EST to 4:29 PM EST) (Figures 6-2 to 6-4)

In March, 616 First Avenue would cast shadows on St. Vartan Park from 7:36 AM to 11:15 AM and on Manhattan Place from 10:30 AM to 3:30 PM. The building at 708 First Avenue would also cast a shadow on Trygve Lie Plaza in the late morning and on Robert Moses Playground from 10:45 AM to 4 PM. The Glick Esplanade would be in shadow from 616 First Avenue from 3:15 PM to 4:29 PM.

May 6 (7:27 AM EDT to 6:18 PM EDT) (Figures 6-5 to 6-7)

On May 6, 616 First Avenue would cast shadows on Rivergate 7:27 AM to 8:45 AM, on St. Vartan Park from 7:27 AM to 10:45 AM, and on Manhattan Place from 12:45 PM to 3:15 PM. 708 First Avenue would cast shadow on Robert Moses Playground from 1 PM to 6 PM. In the late afternoon 616 First Avenue would cast shadow on Glick Esplanade from 4:45 PM to 6:18 PM.

June 21 (6:57 AM EDT to 7:01 PM EDT) (Figures 6-8 to 6-10)

At the summer solstice, 616 First Avenue would cast shadows on Rivergate from 6:57 AM to 9:30 AM. Shadows would move northwest to fall on St. Vartan Park from 8 AM to 10:30 AM. 708 First Avenue would cast a shadow on Robert Moses Playground from 2 PM to 6 PM. In the afternoon 616 First Avenue shadows would fall on Manhattan Place from 2 PM to 3 PM and on Glick Esplanade from 4:45 PM to 7:01 PM.

December 21 (8:51 AM EST to 2:53 PM EST) (Figures 6-11 to 6-13)

From 8:51 AM until 10 AM, shadows from 616 First Avenue would be cast on St. Vartan Park. By 9:30 AM, these shadows would shift to fall Manhattan Place until 12:15 PM, when they would move within existing shadow. They would reach the Corinthian between 10:45 AM and 12:30 PM. Shadows from 708 First Avenue would fall on Robert Moses Playground from 9:30 AM to 2:53 PM, on Trygve Lie from 8:51 AM to 12:45 PM, on southern open spaces in Tudor City from 8:51 AM to 9:45 AM, and on Ralph Bunche Park from 11:15 AM to 1 PM.

**Table 6-2
Potential Extent and Duration of New Shadows:
As-of-Right Development Program**

| Open Space Name | March 21 (all times EST) ¹ | | | May 6 (all times EDT) ² | | | June 21 (all times EDT) | | | December 21 (all times EST) | | |
|----------------------------------------------------------|---------------------------------------|----------|------------------------|------------------------------------|----------|------------------------|-------------------------|----------|-----------------------|-----------------------------|----------|------------------------|
| | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ |
| Rivergate (Joseph Slifka Park) | — | — | — | 7:27 AM | 8:45 AM | 25% / 95% | 6:57 AM | 9:30 AM | 45% / 100% | — | — | — |
| St. Vartan Park | 7:36 AM | 11:15 AM | 40% / 40% | 7:27 AM | 10:45 AM | 15% / 80% | 8:00 AM | 10:30 AM | 5% / 5% | 8:51 AM | 10:00 AM | 20% / 95% |
| Manhattan Place | 10:30 AM | 3:30 PM | 90% / 95% ⁴ | 12:45 PM | 3:15 PM | 10% / 10% ⁴ | 2:00 PM | 3:00 PM | 5% / 5% | 9:30 AM | 2:53 PM | 95% / 100% |
| Corinthian | — | — | — | — | — | — | — | — | — | 10:45 AM | 12:30 PM | 50% / 75% |
| Robert Moses Playground | 10:30 AM | 4:00 PM | 35% / 60% ⁴ | 1:00 PM | 6:00 PM | 5% / 10% ⁴ | 2:00 PM | 6:00 PM | 5% / 20% ⁴ | 9:30 AM | 2:53 PM | 70% / 70% |
| Trygve Lie Plaza | 10:15 AM | 11:45 AM | 25% / 25% ⁴ | — | — | — | — | — | — | 8:51 AM | 12:45 PM | 100% / 100% |
| Ford Foundation | — | — | — | — | — | — | — | — | — | — | — | — |
| Tudor City Green (South)/ Tudor Grove Playground | — | — | — | — | — | — | — | — | — | 8:51 AM | 9:45 AM | 5% / 100% |
| Tudor City Green (North)/ Mary O'Connor Playground | — | — | — | — | — | — | — | — | — | — | — | — |
| Tudor City Open Spaces | — | — | — | — | — | — | — | — | — | 8:51 AM | 9:45 AM | 5% / 90% |
| Ralph J. Bunche Park | — | — | — | — | — | — | — | — | — | 11:15 AM | 1:00 PM | 45% / 45% ⁴ |
| U.N. Park | — | — | — | — | — | — | — | — | — | — | — | — |
| Glick Esplanade | 3:15 PM | 4:29 PM | 60% / 100% | 4:45 PM | 6:18 PM | 30% / 90% | 4:45 PM | 7:01 PM | 10% / 85% | — | — | — |

Notes:

- September 21 corresponds to March 21, but one hour later.
- May 6 corresponds to August 6.
- Max %—The first number gives an estimate of the highest percentage of the open space that could be covered by new shadows from the As-of-Right Development Program, the second number is an estimate of the highest percentage of the open space that could be covered by existing and new shadows.
- Open space is covered 100% at some time but not at the time when the As-of-Right Development Programs shadows cover the highest percentage.

EST—Eastern Standard Time
EDT—Eastern Daylight Time
March Analysis Period – 7:36 AM – 4:29 PM EST
May Analysis Period – 7:27 AM – 6:18 PM EDT
June Analysis Period – 6:57 AM – 7:01 PM EDT
December Analysis Period – 8:51 AM – 2:53 PM EST

5-13-02

EFFECT ON SENSITIVE RECEPTORS

There would be no new shadow on the on the Ford Foundation, Tudor City open spaces north of 42nd Street, or the U.N. Park with the As-of-Right Development Program.

Rivergate (Joseph Slifka Park)

The As-of-Right building at 616 First Avenue would cast shadow on up to 25 percent of the Rivergate open space for about 90 minutes beginning at 6:57 AM on June 21 (see Figures 6-8 and 6-9). In May it would cast up to 5 percent of the Rivergate open space in shadow for about 75 minutes beginning at 7:27 AM (see Figure 6-5). At no other time and no other season would the As-of-Right Program buildings cast shadow on this open space.

St. Vartan Park

As described above, it is the eastern portion of St. Vartan Park's that is considered sun-sensitive. The As-of-Right building at 616 First Avenue would cast some new shadow on this Park throughout the year. These new shadows would occur before noon and would stay on the park for about 3.5 hours on March 21 and May 6, about 2.5 hours on June 21, and only 70 minutes on December 21. At most on March 21 shadows would cover up to 40 percent of the Park; but in June the maximum coverage would only be 5 percent (see Figures 6-2, 6-3, 6-5, 6-6, 6-9, and 6-11).

Manhattan Place

616 First Avenue would cast shadows on Manhattan Place throughout the year. Shadows would be the least in June when they would fall on this open space from 2 PM to 3 PM and would only reach a maximum coverage of 5 percent. In May the duration would be 2.75 hours beginning after noon and would reach a maximum coverage of only 10 percent. In March, the duration would be 5 hours beginning at 10:30 AM and the maximum coverage would be 90 percent (see Figures 6-3 and 6-4). In December, the duration would be 2.75 hours beginning at 9:30 AM, and the maximum coverage would be 95 percent (see Figure 6-12). While the June and May shadows are limited in coverage and would not be considered significant impacts, the longer duration in March and greater extent in March and December are a greater concern. However, in December there are fewer users, the fountain is likely to be turned off, and the vegetation is dormant.

Corinthian

616 First Avenue would also cast shadows on the Corinthian's open space on December 21 from 10:45 AM to 12:30 PM (see Figure 6-12) reaching a maximum coverage of 50 percent. This would not affect the dormant vegetation. The fountain would most likely be turned off and the plaza users would be fewest.

Robert Moses Playground

The As-of-Right development would cast moderate incremental new shadows on Robert Moses Playground throughout the year. Shadows would be the least in June and May (maximum coverage of 5 percent) when they would fall on this open space for 5 hours beginning at 1 PM in May and 4 hours beginning at 2 PM in June. On March 21 the duration would be 5.5 hours beginning at 10:30 AM and the maximum coverage would be 35 percent (see Figure 6-4). In December the duration would be 5.5 hours beginning at 9:30 AM, and the maximum coverage would be 70 percent (see Figures 6-12 and 6-13). The June and May shadows are very limited in coverage and would not be

considered significant. The greatest coverage occurs in December when there are fewer users and any vegetation is dormant.

Trygve Lie Plaza

There would be new shadow on the few benches along First Avenue that make up Trygve Lie Plaza on March 21 for 1.5 hours beginning at 10:15 AM and reaching a maximum coverage of 20 percent and on December 21 for about 4 hours beginning at 8:51 AM and reaching a maximum coverage of 100 percent (see Figures 6-3 and 6-12).

Tudor City Greens/Tudor Grove Playground/Mary O'Connor Playground

New shadows from the As-of-Right Development Program would reach the Tudor City open spaces on December 21, when the southern Tudor City open spaces (i.e., Tudor Grove Playground and the south Greens) would be in shadow for less than an hour beginning at 8:51 AM. The maximum coverage from the program on these southern open spaces would reach 5 percent (see Figure 6-11).

Ralph J. Bunche Park

On December 21 new shadows would be cast on up to 45 percent of Ralph J. Bunche Park for less than two hours beginning at 11:15 AM.

Glick Esplanade

616 First Avenue would cast shadows on the Glick Esplanade on June 21 from 4:45 PM to 7:01 PM but would cover only up to 10 percent. On May 6 the shadow would fall on the Glick Esplanade from 4:45 PM to 6:18 PM with a maximum coverage of 30 percent. On March 21 the duration would be 1.25 hours beginning at 3:15 PM, but the maximum coverage would reach 60 percent.

RESIDENTIAL DEVELOPMENT PROGRAM—2007 and 2011

The Residential Development Program buildings would be taller than the As-of-Right Program buildings and there would be two more buildings (685 First Avenue [2007] and a building on the southern portion of the Waterside parcel [2011]). Overall, this development would cast shadows of greater extent and duration than the As-of-Right Program (see Table 6-3).

Incremental shadows would fall on St. Vartan Park, Manhattan Place, the Corinthian, Trygve Lie Plaza, and Robert Moses Playground during all seasons. During portions of the December 21 and March 21 analysis days, areas of Ralph Bunche Park and the Tudor City open spaces would also experience more shadow. On December 21, a portion of the U.N. Park would also be affected. The on-site open spaces constructed in conjunction with the Residential Development Program would also be generally in shadow during all seasons at some times of day. Given the movement of shadows during the day, the period of maximum coverage is generally of limited duration.

As 2011 represents the full buildout of the program, it is discussed below. Shadows which would not occur until 2011 are identified.

**Table 6-3
Potential Extent and Duration of New Shadows:
Residential Development Program**

| Open Space Name | March 21 (all times EST) ¹ | | | May 6 (all times EDT) ² | | | June 21 (all times EDT) | | | December 21 (all times EST) | | |
|--------------------------------------------------------------------|---------------------------------------|---------------------|------------------------|------------------------------------|----------|------------------------|-------------------------|----------|------------------------|-----------------------------|--------------------|------------------------|
| | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ |
| Rivergate (Joseph Slifka Park) | — | — | — | 7:27 AM | 9:15 AM | 10% / 100% | 6:57 AM | 9:45 AM | 40% / 100% | — | — | — |
| St. Vartan Park ⁵ | 7:36 AM | 11:00 AM | 85% / 85% | 7:27 AM | 12:00 PM | 40% / 40% | 8:15 AM | 12:00 PM | 25% / 25% | 8:51 AM | 10:15 AM | 20% / 95% |
| Manhattan Place | 10:30 AM | 1:30 PM | 95% / 100% | 11:45 AM | 2:30 PM | 95% / 100% | 12:15 PM | 1:45 PM | 55% / 60% | 9:15 AM | 12:15 PM | 95% / 100% |
| Corinthian ⁵ | 7:36 AM 11:15 AM | 8:30 AM 12:15 PM | 25% / 50% ⁴ | 7:27 AM | 10:15 AM | 70% / 100% | 6:57 AM | 10:45 AM | 90% / 100% | 10:30 AM | 12:30 PM | 60% / 100% |
| Robert Moses Playground | 9:45 AM | 4:29 PM | 45% / 55% ⁴ | 11:15 AM | 6:00 PM | 75% / 75% ⁴ | 11:45 AM | 6:00 PM | 50% 65% ⁴ | 8:51 AM | 2:53 PM | 60% / 95% |
| Trygve Lie Plaza ⁵ | 9:15 AM | 12:45 PM | 100% / 100% | 11:15 AM | 1:00 PM | 75% / 75% ⁴ | 11:45 AM | 12:45 PM | 25% / 25% ⁴ | 8:51 AM | 1:30 PM | 100% / 100% |
| Ford Foundation | — | — | — | — | — | — | — | — | — | 9:30 AM | 12:30 PM | 50% / 50% ⁴ |
| Tudor City Green (South)/ Tudor Grove Playground ⁵ | 9:15 AM | 1:00 PM | 55% / 80% ⁴ | 11:15 AM | 11:45 AM | 10% / 20% ⁴ | — | — | — | 8:51 AM 11:30 AM | 9:30 AM 1:15 PM | 45% / 90% ⁴ |
| Tudor City Green (North)/ Mary O'Connor Playground ⁵ | — | — | — | — | — | — | — | — | — | 9:30 AM | 1:30 PM | 65% / 100% |
| Tudor City Open Spaces | 9:15 AM | 1:00 PM | 35% / 40% ⁴ | 11:15 AM | 11:45 AM | 3% / 10% ⁴ | — | — | — | 8:51 AM | 1:30 PM | 45% / 95% ⁴ |
| Ralph J. Bunche Park | 11:15 AM | 1:00 PM | 60% / 60% ⁴ | — | — | — | — | — | — | 10:15 AM | 1:30 PM | 100% / 100% |
| U.N. Park | — | — | — | — | — | — | — | — | — | 1:00 PM | 2:53 PM | 30% / 70% |
| Glick Esplanade | 2:45 PM | 4:29 PM | 60% / 95% | 3:15 PM | 6:18 PM | 50% / 50% | 3:15 PM | 7:01 PM | 50% / 50% | — | — | — |

Notes:
¹ September 21 corresponds to March 21, but one hour later.
² May 6 corresponds to August 6.
³ Max %—The first number gives an estimate of the highest percentage of the open space that could be covered by new shadows from the Residential Development Program, the second number is an estimate of the highest percentage of the open space that could be covered by existing and new shadows.
⁴ Open space is covered 100% at some time but not at the time when the Residential Development Programs shadows cover the highest percentage.
⁵ Duration and coverage of shadow lesser in 2007 than 2011.
 EST—Eastern Standard Time
 EDT—Eastern Daylight Time
 March Analysis Period – 7:36 AM – 4:29 PM EST
 May Analysis Period – 7:27 AM – 6:18 PM EDT
 June Analysis Period – 6:57 AM – 7:01 PM EDT
 December Analysis Period – 8:51 AM – 2:53 PM EST

5-13-02

*SHADOWS BY SEASON**March 21 Analysis Period (7:36 AM EST to 4:29 PM EST) (Figures 6-14 to 6-18)*

In March 21, 616 First Avenue would cast shadows west onto St. Vartan Park from 7:36 AM to 11 AM, on Manhattan Place from 10:30 AM to 1:45 PM, and on the Corinthian from 11:15 AM to 12:15 PM. When it is built in 2011, the southern Waterside building would cast shadow on the Corinthian for about an hour beginning at 7:36 AM.

708 First Avenue would cast new shadows on Trygve Lie Plaza from 9:15 AM to 12:45 PM with a maximum coverage from the program of 100 percent, Ralph Bunche Park from 11:15 AM to 1 PM, and on Robert Moses Playground from 9:45 AM to 4:29 PM. The Tudor City open spaces south of 42nd Street would be in shadow from 9:15 AM to 1 PM.

At 2:45 PM, shadows from 616 First Avenue would begin to fall on part of the Glick Esplanade remaining there through the end of the analysis period.

Since the open spaces in the Residential Program would be built adjacent to the tall buildings on each of the Disposition Parcels, portions of these open spaces would be in shadow during all of the analysis period. At 616 First Avenue, the on-site open space would be west of the new building and would be in shadow at the beginning of the analysis period. The open space at 708 First Avenue would be southwest and east of the new building, and would be in shadow from 708 First Avenue at the beginning and the end of the analysis period and from the Waterside buildings (in 2011) in the middle of the day. At 685 First Avenue, the on-site open space would be at the southwest portion of the parcel, so the 685 First Avenue building would cast shadows on it in the morning. Varying portions of open spaces on the Waterside parcel would also be in shadow throughout the day when the open spaces and buildings are built in 2011.

May 6 Analysis Period (7:27 AM DST to 6:18 PM DST) (Figures 6-19 to 6-23)

616 First Avenue would cast shadows on Rivergate from 7:27 AM until 9:15 AM, on St. Vartan Park from 7:27 AM until 12 noon, and on Manhattan Place from 11:45 AM to 2:30 PM. In 2011 the southern Waterside building would cast shadow on the Corinthian from 7:27 AM until 10:15 AM and on the western portion of St. Vartan Park from 7:27 AM until 8:15 AM.

From 11:15 AM shadows from 708 First Avenue would fall on Robert Moses Playground until 6 PM and on Trygve Lie Plaza to 1 PM. A small portion of the Tudor City open spaces south of 42nd Street would be in shadow about a half hour in the late morning (11:15 AM to 11:45 AM).

Shadows from 616 First Avenue would reach the Glick Esplanade from 3:15 PM to the end of the analysis period at 6:18 PM.

As in March, program buildings would cast new shadows on program open spaces in the morning and afternoon with the least shadow around noon.

June 21 Analysis Period (6:57 AM DST to 7:01 PM DST) (Figures 6-24 to 6-27)

On June 21, new shadows would be cast fewer open spaces: Rivergate, St. Vartan Park, Manhattan Place, the Corinthian, Robert Moses Playground, Trygve Lie Plaza, and the Glick Esplanade.

The building at 616 First Avenue would cast morning shadows on Rivergate from 6:57 AM to 9:45 AM, on St. Vartan Park from 8:15 AM to noon, and on Manhattan Place from 12:15 PM to 1:45 PM.

The southern Waterside building would cast new shadows on the Corinthian from 6:57 AM until 10:45 AM and on St. Vartan Park from 6:57 AM until 8:30 AM.

Shadows from 708 First Avenue would fall on Robert Moses Playground from 11:45 AM to 6 PM. In the later part of the day, shadows from 616 First Avenue would fall on the Glick Esplanade from 3:15 PM to 7:01 PM.

Similar to shadows on the March and May analysis days, program open spaces would be in shadow from program buildings at all times of the day. Spaces to the west of program buildings would be in shadow from buildings to the east in the morning, while open spaces to the east of buildings would be in shadow in the afternoon. Finally spaces to the north of program buildings would be in shadow around noon. However, in the summer shadows would be shortest and would be most likely appreciated.

December 21 Analysis Period (8:51 AM EST to 2:53 PM EST) (Figures 6-28 to 6-32)

In the December analysis period, which is characterized by the sun being low in the sky and casting long shadows, existing buildings already cast in shadow many of the open spaces in the vicinity of the Disposition Parcels. As compared to the spring, summer, and fall analysis days, program shadows would not fall on two of the southern open spaces—Rivergate and the Glick Esplanade. However, they would reach to resources further north than in other seasons, including the Ford Foundation, the open spaces in Tudor City north of 42nd Street, and the U.N. Park.

New shadows from 616 First Avenue would fall on St. Vartan Park 8:51 AM to 10:15 AM. These new shadows would move to fall on the Manhattan Place from 9:15 AM to 12:15 PM and on the Corinthian from 10:30 AM to 12:30 PM.

New shadows from 708 First Avenue would fall on Robert Moses Playground from 8:51 AM to 2:53 PM, on Trygve Lie Plaza from 8:51 AM until 1:30 PM, and on Ralph Bunche Park from 10:15 AM to 1:30 PM.

The Tudor City open spaces are currently cast in shadow during winter mornings by the tall Tudor City apartment buildings to the east and south. The new buildings at 685 First Avenue and 708 First Avenue would cast shadow on the Tudor City open spaces from 8:51 AM to 1:30 PM. Program shadows would also reach the Ford Foundation from 9:30 AM to 12:30 PM.

Program shadows would again fall on portions of the on-site pen spaces through out the analysis period and they would be longer on this analysis day than at other times of the year.

EFFECTS ON SENSITIVE RECEPTORS

Rivergate (Joseph Slifka Park)

On June 21, Rivergate open space would have new shadows from 616 First Avenue from 6:57 AM until 9:45 AM. At their greatest extent at the beginning of the analysis period, shadows would cover 40 percent of the open space (see Figure 6-24). The extent of shadow would decrease after that time. Shadows would also be cast on a small portion (10 percent) of this open space on May 6 from 7:27 AM to 9:15 AM (see Figure 6-19).

St. Vartan Park

The buildings in the Residential Program, primarily 616 First Avenue, would cast shadows on St. Vartan Park in the morning during all seasons. The southern Waterside building (2011) would also cast shadow on the western end of the park briefly at the beginning of the analysis period in May and June. However, since the buildings south of the park are relatively short (5 and 6 stories), the park would still receive ample sunlight for the remainder of the day.

On December 21 (analysis period 8:51 AM to 2:53 PM) the incremental shadow of 616 First Avenue would fall the northeastern corner of the of the park (including the inaccessible lawn) from the beginning of the analysis period at 8:51 AM to 10:15 AM (see Figure 6-28). The maximum coverage would be 20 percent occurring at the beginning of the analysis period.

On June 21 (analysis period 6:57 AM to 7:01 PM) the 616 First Avenue shadow increment would fall on the park from 8:15 AM until 12 noon (see Figures 6-24 and 6-25). The shadow coverage would reach a maximum of 25 percent between 9:30 AM and 11:30 AM falling primarily on the inaccessible lawn area (because shadows are shortest in this season and lawn is on the eastern end of the park). In 2011, the southern Waterside building would cast new shadows on the northwest corner of the park from 6:57 AM until 8:30 AM. All of this area in shadow is the paved, active recreation portion of the park. The shadow would be of short duration early in the day when the park users are likely to be fewest. The two sets of shadows would fall on different and limited portions of St. Vartan Park.

On March 21 (analysis period 7:36 AM to 4:29 PM; one hour later on September 21) the weather would most likely be conducive to park use. The 616 First Avenue shadow increment would fall on the park in the morning until 11:00 AM (12PM EDT in September). The increment would reach across the entire park at 8:45 AM (see Figure 6-15) covering over 85 percent. However, as the western end is paved, used for active recreation (baseball, handball, and basketball), and is not considered sun-sensitive.

The eastern end with the children's play area, benches, picnic tables, and a seasonal water element (which is likely to be turned on in September but not March) was of greater concern and was examined in detail. It was determined that the 9:45 AM (10:45 AM EDT) shadow would only fall on about half the publicly accessible area. By 10 AM (11 AM EDT) the shadow would have moved north enough to be partially off the area of the water element and shading only the benches and tables on the north side (see Figure 6-16); and by 10:15 AM (11:15 EDT) the shadow would be completely off the water element and only fall on the northeast corner of the park. The shadow would move completely off the park after 11 AM (12 noon EDT). The period when this shadow would fall on the park would occur early in the day when the park is least used and mostly before the water element is expected to be turned on at 10 AM. Although this is longer and larger increment is this season, the park is largely in sunlight the remainder of the day.

On May 6 (analysis period 7:27 AM to 6:18 PM EDT) the weather would also be conducive to park use. The 616 First Avenue shadow increment would fall on the park from 7:27 AM until noon covering a maximum of 40 percent at 10:30 AM. At 9:45 AM it would cover about the southern half the eastern two-thirds of the park (see Figure 6-20). This area includes the paved ball field as well as the children's play area and the inaccessible lawn. At 11 AM the shadow would still reach to the water element (see Figure 6-21), but would move northeast and off the sprinkler area during the next half hour. The sprinkler and the park would be largely in sunlight for the rest of the day. Given the

warm weather at this time of year, the increment occurring in the morning when the park is likely to have the least use, part of the increment falling on inaccessible lawn and paved ballfields, and the amount of sun on the park the rest of the day, this is not considered overall to be a significant adverse effect. However, the enjoyment of the children's play area and the seating there may be diminished, especially between 9:45 AM and 11 AM. In 2011 the southern Waterside building would cast new shadows on the northwest corner of the park from the beginning of the analysis period until 8:15 AM. As all of this area in shadow is the paved, active recreation portion of the park and the shadow would be of short duration early in the day when the park users are likely to be fewest. The two sets of shadows would fall on different and limited portions of St. Vartan Park.

Manhattan Place

The corner plaza at Manhattan Place is immediately north of the 616 First Avenue parcel. The building would cast new shadows on the plaza in the midday or morning on all analysis days.

On March 21, 616 First Avenue would cast shadows on the plaza area for three hours beginning at 10:30 AM, lasting through noon, and reaching a maximum coverage of 95 percent around noon. By 12:30 PM the shadow would begin to move off the fountain area near the corner of First Avenue and 37th Street. On May 6, the shadow duration would be 2 hours and 45 minutes starting at 11:45 AM. The maximum coverage would be 96 percent. At 1 PM the shadow would be about to move off the western edge of the plaza (see Figure 6-22). On June 21 the duration would be shortest, 1.5 hours beginning at 12:15 PM. The maximum coverage would reach 55 percent for a brief time at 12:45 PM. At 1 PM the shadow would have already moved off the western edge of the plaza (see Figure 6-26). In the morning the plaza is already in shadow from the Manhattan Place building itself, so the new shadow would not change the character of the open space. However, the plaza could be generally less attractive to users seeking sunlight in these seasons; although in the heat of noontime in the summer, shadow might be most appreciated. Further, on these spring, summer, and fall analysis days, the plaza would be in sunlight for the remainder of the afternoon.

On December 21 the plaza is again in shadow from 616 First Avenue for three hours, but, due to the sun angle in this season, this occurs beginning at 9:15 AM. The maximum coverage is 95 percent (see Figure 6-29). In the winter the fountain is turned off and on winter mornings the plaza is least likely to have users. In fact, over this winter, the plaza has been closed. Nevertheless, should the plaza be open in the future in the winter, any users seeking sunlight would find the plaza less attractive.

The Corinthian

The Corinthian plaza has benches under trees along First Avenue, a high planted area curving through the middle, and a fountain area with a sculpture and seating near the building's porte cochere. New shadows from 616 First Avenue in 2007 would reach this open space in March and December. In 2011 the southern Waterside building would also cast shadow on the plaza at the beginning of the analysis periods in March, May, and June.

On March 21 the Waterside shadows would fall on the north edge of the Corinthian plaza briefly from 7:36 AM to 8:30 AM (see Figure 6-14). Shadows from 616 First Avenue would fall on the plaza for an hour starting at 11:15 AM only reaching a maximum coverage of 25 percent. Both these shadows are of short duration and fall on limited areas of the plaza.

On May 6 Waterside shadows would fall on a portion of the Corinthian plaza from 7:27 AM to 10:15 AM (see Figure 6-19 and 6-20). The maximum coverage of 70 percent would be of limited

duration; but, from 7:27 AM to 8:30 AM, the total coverage would reach 100 percent. Users seeking sunlight will find the plaza less attractive to use at this time. On the other hand, shadows from 616 First Avenue would not reach the Corinthian in this season; and most of this plaza is in sunlight for most of the rest of the day since the Queens-Midtown Tunnel entrance is in the block to the south.

On June 21 Waterside shadows would fall on a portion of the Corinthian plaza from 6:57 AM to 10:45 AM (see Figure 6-24). The maximum coverage would reach 90 percent. After 11 AM the plaza would largely be in sunlight the rest of the day because in June the shadows are shortest and the tunnel entrance occupies the block south of the Corinthian.

In the December analysis period, shadows from 616 First Avenue would reach the Corinthian plaza for two hours from 10:30 AM to 12:30 PM and would cover 60 percent of the space at their greatest extent (see Figure 6-29). Since shadows are longest in this season, shadows from other buildings already cover much of the plaza so the program increment would bring the total coverage to 100 percent from 11 AM to 11:45 AM. However, there are the fewest users in the winter and the fountain is turned off. Further, from 12:45 PM to the end of the analysis period the plaza would largely be in sunlight.

Robert Moses Playground

708 First Avenue would cast additional shadows on Robert Moses Playground in all seasons of the year as it would occupy the block south of this playground.

On March 21, 708 First Avenue shadows would fall on Robert Moses Playground from 9:45 AM to 4:29 PM with the maximum coverage reaching 45 percent (see Figures 6-16 and 6-17). On May 6, shadows would fall on the playground from 11:15 AM to 6 PM with the maximum coverage reaching 70 percent (see Figures 6-22 and 6-23). On June 21, shadows would fall on the playground from 11:45 AM to 6 PM with the maximum coverage reaching 50 percent (see Figures 6-26 and 6-27). On December 21, 708 First Avenue shadows would fall on the playground from 8:51 AM to the end of the analysis period at 2:53 PM with the maximum coverage reaching 70 percent (see Figures 6-28 to 6-32).

As described at the beginning of this chapter, Robert Moses Playground is largely a place of active recreation, with a large, open, paved area with a baseball backstop (frequently used for roller hockey), handball and basketball courts, and a dog run. Currently many of its activities occur in shade, given the Queens-Midtown Tunnel vent structure in the midst of the open space and the surrounding buildings that cast shadows on the space during much of the day. The dog run where owners often sit on benches is already generally in shadow as it is immediately north of the vent structure.

Trygve Lie Plaza

708 First Avenue would cast shadows on Trygve Lie Plaza in all seasons. On March 21, incremental shadow from the program would fall on Trygve Lie Plaza through most of the morning, 9:15 AM to 12:45 PM (see Figure 6-16), reaching a maximum coverage of 100 percent for about 90 minutes. On May 6, the incremental shadow would last less than two hours in the midday, 11:15 AM to 1 PM, reaching a maximum coverage of 75 percent. On June 21, the shadow would reach Trygve Lie Plaza for only the hour between 11:45 AM and 12:45 PM, reaching a maximum coverage of 25 percent. On December 21, the project shadow would fall on this plaza from 8:51 AM until 1:30 PM (see Figures 6-28 to 6-30), reaching a maximum coverage of 100 percent. The short shadow durations on the May and June analysis days do not indicate any significant impact. The March duration of 3.5

hours, the December duration of 4.5 hours, and the coverage reaching 100 percent coverage indicate a greater potential for effect.

Tudor City Greens/Tudor Grove Playground/Mary O'Connor Playground

The buildings at 708 First Avenue and 685 First Avenue would cast shadows on the open spaces at Tudor City on the March, May, and December analysis days. On June 21, however, shadows are too short to reach any of the Tudor City open spaces. On May 6, the shadows would be somewhat longer, but the project increments would only reach a small portion of the Tudor City open space south of 42nd Street and the duration would only be about a half hour.

On March 21 (analysis period 7:36 AM to 4:29 PM), the project increments would again reach only the southern portion of the open spaces: the south Greens and Tudor Grove Playground (see Figure 6-16). The larger coverage on this sun-sensitive, well-used open space was considered in more detail. From 8:51 AM to 9:30 AM, 708 First Avenue would add shadows to the south Greens, reaching a maximum of 5 percent coverage of the total open space at 8:51 AM. Until 9:30 AM, the small increment would be on the south Greens. At 10:15 AM, it would fall on the playground. At 12:15 and 12:30 PM, the shadows from 685 First Avenue would reach their maximum, covering about 35 percent of the total open space. The project increment on the Tudor City open spaces would end at 1 PM. The project coverage only reaches or exceeds 20 percent on the total open spaces from 10:30 AM to 11 AM and from 12 noon to 12:30 PM. At these times, the north Tudor City Greens and Mary O'Connor Playground would be in sunlight and a park user seeking sunlight could easily walk to the north side. Nevertheless, the portions of the south Greens and Tudor Grove Playground that would receive new shadow from the program would be less attractive to sun-seeking passive users in the spring and fall.

On December 21 (analysis period 8:51 AM to 2:53 PM), the weather is most likely to be cold and not conducive to park use; but sunlight would be most appreciated. Shadows are longest; and project shadows would reach the north Greens and Mary O'Connor Playground (see Figures 6-29 and 6-30). Again, given the extent and the duration of project shadows, more detailed consideration was given. Shadows from 708 First Avenue would fall on portions of the Tudor City open spaces from 8:51 AM to 11:45 AM, immediately succeeded by shadows from 685 First Avenue from 11:45 AM to 1:15 PM. The project increment would remove all or most of the existing sunlight from 9:45 AM to 12:30 PM. The total coverage would be between 95 and 100 percent during this time. The coverage of the increment would vary between 8 and 40 percent with the increment being 8 or 9 percent from 10:45 AM to 11:30 AM. Maximum incremental shadow from 708 First Avenue would occur at 10:00 AM, reaching 13 percent of the open space. At this time, all the open space would be in shadow. From noon to 1 PM, 685 First Avenue would add its maximum incremental shadow, reaching 44 percent of the open space at approximately 12:45 PM when 90 percent of the overall open space would be in shadow. At 1 PM, the project coverage would be 35 percent and the total coverage would be 68 percent. At 1:15 PM, the project coverage would be 16 percent and the total coverage would be 48 percent. By 1:30 PM, there would no longer be any project shadow on the Tudor City open spaces.

Ford Foundation

Shadows from 685 First Avenue would reach the Ford Foundation only in December when shadows are longest. They would fall on some portion of the south or east facade or the roof from 9:30 AM to 12:30 PM. Since the atrium (a New York City Landmark [NYCL]) is on the southeast corner of the building, which is closest to 685 First Avenue, it would receive less sun light during this period. However, it would still receive light from all the office floors of the building, which have glass walls

overlooking the atrium and which, even after dark, keep the atrium well lit. Since the atrium is a climate-controlled interior space and December is not the growing season, the loss of sunlight would not adversely affect the vegetation. The atrium is no longer open to the public and there are no benches in the space, so the loss of sunlight is unlikely to affect use or users.

Ralph J. Bunche Park

Shadows from 708 First Avenue would reach not reach Ralph J. Bunche Park on either the May or June analysis days. On March 21, however, they would reach it for 1.75 hours, 11:15 AM to 1 PM, with a maximum coverage of 60 percent. On December 21, the park would be in project shadow for 3.25 hours, 10:15 AM to 1:30 PM, reaching a maximum coverage of 100 percent (see Figures 6-29 and 6-30).

U.N. Park

Shadow from 708 First Avenue would reach the U.N. Park on December 21 from 1 PM to the end of the analysis period at 2:53 PM, reaching a maximum coverage of 30 percent (see Figures 6-31 and 6-32).

Glick Esplanade

Located east of 616 First Avenue, the Glick Esplanade would have new shadows cast on it during the mid- to late afternoon/early evening except in the winter. In the May and June analysis periods (i.e., the summer months, when the esplanade is most heavily used), these shadows would last from around 3:15 PM to the end of the analysis period (see Figures 6-23 and 6-27). New shadows would cover half of the esplanade at their greatest extent in the May and June analysis periods. In the March analysis period, new shadows would be cast on the esplanade for less than two hours, from 2:45 PM to the end of the analysis period at 4:29 PM (see Figures 6-17 and 6-18). These shadows would cast much of the remaining portions of the esplanade into shadow.

On-Site Open Spaces

Since the new development program open spaces would be sited adjacent to new tall buildings and in an area of Manhattan that currently contains tall buildings, it would be impossible to avoid shadows. The new open spaces projected for development at 685 First Avenue and 708 First Avenue would be on the southern portion of the sites, while the open space at 616 First Avenue would be on the western end of the site. While there would be morning, midday, and afternoon shadows on these open spaces, their locations were selected to ensure that direct sunlight is provided for some portion of the day (see Figures 6-14 through 6-32).

The additional on-site open space provided at Waterside by 2011 would be generally north and west of the new buildings on Waterside, with a small amount of open space east of new buildings. Some portion of this open space would be in shadow through the day. The buildings at Waterside, particularly the north one, would also cast shadows on the 708 First Avenue open space in the midday.

MIXED-USE DEVELOPMENT PROGRAM—2007 and 2011

The Mixed-Use Development Program is intended to illustrate a rezoning of the Disposition Parcels and development of a mixed office and residential project. By 2007, under the Mixed-Use Development Program, buildings would be constructed at 616 First Avenue (the same as the Residential Development Program), 685 First Avenue (up to 540 feet tall), and 708 First Avenue (up

to 680 feet tall). In addition, the Mixed-Use Development Program would provide on-site open spaces at 616 and 708 First Avenue by 2007. In contrast to the Residential Development Program, it would not provide open space on the 685 First Avenue parcel. By 2011, a 660-foot-tall residential building would be built in the center of the Waterside site, and a square, 770-foot-tall office building would be built on the southern portion of the parcel. The project would also provide additional open space on this site.

The general shadow effects of the Mixed-Use Development Program would be similar to the effects of the Residential Development Program, discussed above, for each of the four analysis periods (see Table 6-4). Differences are noted below. Similar to development conditions with the Residential Program, some portions of the on-site open spaces would be in shadow during some portion of the day in all seasons.

SHADOWS BY SEASON

March 21 (Analysis Period—7:36 AM EST to 4:29 PM EST) (Figures 6-33 to 6-37)

On March 21, 616 First Avenue would cast shadows on St. Vartan Park from 7:36 AM to 11 AM, on Manhattan Place from 10:30 AM to 1:45 PM, and on the Corinthian from 11:15 AM to 12:15 PM just as it would with the Residential Development Program. When it is built in 2011, the southern Waterside building would cast shadow on the Corinthian for less than 45 minutes from 7:36 AM; this would be slightly less than with the Residential Development Program.

708 First Avenue would cast new shadows on Trygve Lie Plaza from 9:30 AM to 1 PM, Ralph J. Bunche Park from 11:15 AM to 1 PM, and on Robert Moses Playground from 10 AM to 4:29 PM. The Tudor City open spaces south of 42nd Street would be in program shadow from 9:15 AM to 11:15 AM and from 12:30 PM to 1:30 PM.

At 2:45 PM, shadows from 616 First Avenue would begin to fall on part of the Glick Esplanade remaining there through the end of the analysis period at 4:29 PM, just as they would with the Residential Development Program.

Since development program open spaces would be built adjacent to the tall buildings on each of the Disposition Parcels, portions of these open spaces would be in shadow during some part of the day. At 616 First Avenue, the on-site open space would be west of the new building and would be in shadow at the beginning of the analysis period. The open space at 708 First Avenue would be southwest and east of the new building, and would be in shadow from 708 First Avenue at the beginning and end of the analysis period and from the Waterside buildings (in 2011) in the middle of the day. Varying portions of project open spaces on the Waterside parcel would also be in shadow throughout the day when the open spaces and buildings are built in 2011.

**Table 6-4
Potential Extent and Duration of New Shadows:
Mixed-Use Development Program**

| Open Space Name | March 21 (all times EST) ¹ | | | May 6 (all times EDT) ² | | | June 21 (all times EDT) | | | December 21 (all times EST) | | |
|--------------------------------------------------------------------|---------------------------------------|---------------------|------------------------|------------------------------------|----------|------------------------|-------------------------|----------|------------------------|-----------------------------|--------------------|------------------------|
| | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ |
| Rivergate (Joseph Slifka Park) | — | — | — | 7:27 AM | 9:15 AM | 10% / 100% | 6:57 AM | 9:45 AM | 40% / 100% | — | — | — |
| St. Vartan Park ⁵ | 7:36 AM | 11:00 AM | 85% / 85% | 7:27 AM | 12:00 PM | 40% / 40% | 8:15 AM | 12:00 PM | 25% / 25% | 8:51 AM | 10:15 AM | 20% / 95% |
| Manhattan Place | 10:30 AM | 1:30 PM | 95% / 100% | 11:45 AM | 2:30 PM | 95% / 100% | 12:15 PM | 1:45 PM | 55% / 60% | 9:15 AM | 12:15 PM | 95% / 100% |
| Corinthian ⁵ | 7:36 AM 11:15 AM | 8:15 AM 12:15 PM | 25% / 50% ⁴ | 7:27 AM | 10:15 AM | 55% / 100% | 6:57 AM | 10:45 AM | 75% / 95% ⁴ | 10:30 AM | 12:30 PM | 60% / 100% |
| Robert Moses Playground | 10:00 AM | 4:29 PM | 60% / 60% ⁴ | 11:15 AM | 6:00 PM | 60% / 65% ⁴ | 11:45 AM | 6:00 PM | 50% / 55 ⁴ | 8:51 AM | 2:53 PM | 60% / 95% |
| Trygve Lie Plaza ⁵ | 9:30 AM | 1:00 PM | 100% / 100% | 11:00 AM | 1:00 PM | 60% / 60% ⁴ | 11:45 AM | 12:45 PM | 25% / 25% ⁴ | 8:51 AM | 1:30 PM | 100% / 100% |
| Ford Foundation | — | — | — | — | — | — | — | — | — | 9:30 AM | 1:00 PM | 50% / 50% |
| Tudor City Green (South)/ Tudor Grove Playground ⁵ | 9:15 AM 12:30 PM | 11:15 AM 1:30 PM | 40% / 90% ⁴ | 11:15 AM | 11:30 AM | 5% / 30% ⁴ | — | — | — | 8:51 AM 11:30 AM | 9:45 AM 2:00 PM | 40% / 100% |
| Tudor City Green (North)/ Mary O'Connor Playground ⁵ | — | — | — | — | — | — | — | — | — | 9:45 AM | 2:00 PM | 75% / 85% ⁴ |
| Tudor City Open Spaces | 9:15 AM 12:30 PM | 11:15 AM 1:30 PM | 20% / 70% ⁴ | 11:00 AM | 11:30 AM | 2% / 30% ⁴ | — | — | — | 8:51 AM | 2:00 PM | 60% / 85% |
| Ralph J. Bunche Park | 11:15 AM | 1:00 PM | 75% / 75% ⁴ | — | — | — | — | — | — | 10:30 AM | 1:30 PM | 100% / 100% |
| U.N. Park | — | — | — | — | — | — | — | — | — | 1:15 PM | 2:53 PM | 40% / 80% |
| Glick Esplanade | 2:45 PM | 4:29 PM | 60% / 95% | 3:15 PM | 6:18 PM | 50% / 50% | 3:15 PM | 7:01 PM | 50% / 50% | — | — | — |

Notes:
 1 September 21 corresponds to March 21, but one hour later.
 2 May 6 corresponds to August 6.
 3 Max %—The first number gives an estimate of the highest percentage of the open space that could be covered by new shadows from the Mixed-Use Development Program, the second number is an estimate of the highest percentage of the open space that could be covered by existing and new shadows.
 4 Open space is covered 100% at some time but not at the time when the Mixed-Use Development Program shadows cover the highest percentage.
 5 Duration and coverage of shadow lesser in 2007 than 2011.
 EST—Eastern Standard Time
 EDT—Eastern Daylight Time
 March Analysis Period – 7:36 AM – 4:29 PM EST
 May Analysis Period – 7:27 AM – 6:18 PM EDT
 June Analysis Period – 6:57 AM – 7:01 PM EDT
 December Analysis Period – 8:51 AM – 2:53 PM EST

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May 6 (Analysis Period 7:27 AM EDT to 6:18 PM EDT) (Figures 6-38 to 6-42)

616 First Avenue would cast the same shadows as it would in the Residential Development Program, as described above: on Rivergate and St. Vartan Park from 7:27 AM until 9:15 AM and 12 PM, respectively; and on Manhattan Place from 11:45 AM to 2:30 PM. In 2011, the southern Waterside building would cast shadow on the Corinthian from 7:27 AM until 10:15 AM and on St. Vartan Park until 12:15 PM.

Shadows from 708 First Avenue would fall on Robert Moses Playground from 11:15 AM until 6 PM and on Trygve Lie Plaza from 11:15 AM until 1 PM. The duration on Trygve Lie Plaza would be 15 minutes longer than with the Residential Development Program. The Mixed-Use Development Program would cast any shadows on the Tudor City south open spaces from 11 AM to 11:30 AM reaching a maximum coverage of 5 percent. Shadows from 616 First Avenue would reach the Glick Esplanade from 3:15 PM to the end of the analysis period at 6:18 PM, similar to the Residential Development Program.

As in March, development program buildings would cast new shadows on development program open spaces through the day with the least shadow around noon.

June 21 (Analysis Period 6:57 AM EDT to 7:01 PM EDT) (Figures 6-43 to 6-46)

The Mixed-Use Development Program shadows in June would be similar to those of the Residential Development Program falling on fewer open spaces than in May: Rivergate, St. Vartan Park, Manhattan Place, the Corinthian, Robert Moses Playground, Trygve Lie Plaza, and the Glick Esplanade. The Mixed-Use Program shadow durations on all the open spaces would be the same as in the Residential Development Program.

The building at 616 First Avenue would cast morning shadows on Rivergate from 6:57 AM until 9:45 AM, on St. Vartan Park from 8:15 AM to noon, and on Manhattan Place from 12:15 PM to 1:45 PM. The southern Waterside building would cast new shadows on the Corinthian from 6:57 AM until 10:45 AM and on St. Vartan Park from 6:57 AM until 8:45 AM.

Shadows from 708 First Avenue would fall on Robert Moses Playground from 11:45 AM to 6 PM. In the later part of the day, shadows from 616 First Avenue would fall on the Glick Esplanade from 3:15 PM until the end of the analysis period at 7:01 PM.

Development program open spaces would be in shadow from program buildings at all times of the day. Spaces to the west of program buildings would be in shadow from buildings to the east in the morning, while open spaces to the east of buildings would be in shadow in the afternoon. Spaces to the north of program buildings would be in shadow around noon. However, in the summer, shadows would be shortest and would be most likely to be appreciated.

December 21 (Analysis Period—8:51 AM EST to 2:53 PM EST) (Figures 6-47 to 6-51)

The Mixed-Use Development Program would cast shadows on all of the same open spaces as the Residential Development Program.

New shadows from 616 First Avenue would be the same as in the Residential Development Program, falling on St. Vartan Park from 8:51 AM until 10:15 AM, on Manhattan Place from 9:15 AM to 12:15 PM, and on the Corinthian from 10:30 AM to 12:30 PM. New shadows from 708 First Avenue would fall on Robert Moses Playground during the entire analysis period (8:51 AM to 2:53

PM), on Trygve Lie Plaza from 8:51 AM until 1:30 PM, and on Ralph J. Bunche Park from 10:30 AM to 1:30 PM, again similar to the Residential Development Program.

Mixed-Use Development buildings at 685 First Avenue and 708 First Avenue would cast shadow on the Tudor City open spaces somewhat differently, remaining on the south open spaces 45 minutes longer (from the beginning of the analysis period at 8:51 AM to 2 PM) and falling on the north open spaces from 9:45 AM to 2 PM. Project shadows would also reach the Ford Foundation slightly longer from 9:30 AM to 1 PM (as compared to 9:30 AM to 12:30 PM with the Residential Development).

Program shadows would again fall on portions of the on-site open spaces throughout the analysis period, and they would be longer on this analysis day than at other times of the year.

EFFECTS ON SENSITIVE RECEPTORS

Rivergate, St. Vartan Park, The Corinthian, Manhattan Place, Glick Esplanade

The building projected for 616 First Avenue in the Mixed-Use Development would be the same as that projected with the Residential Development. Thus, the same shadows would be cast by this building on Rivergate, St. Vartan Park, the Corinthian, Manhattan Place, and the Glick Esplanade. The Corinthian and St. Vartan Park are also in shadow from the southern building at Waterside. While the southern Waterside building is different in the Mixed-Use Program from the Residential Program, the path of its shadow is partially blocked by intervening buildings making its shadow on the Corinthian and St. Vartan Park the same in both cases. Therefore, the shadow effects on each of these open spaces is the same in the Mixed-Use Program as the Residential Program.

Robert Moses Playground

At 708 First Avenue, the one 680-foot-tall building in the Mixed-Use Program would cast a different shadow than the two 660-foot-tall buildings in the Residential Program. Specifically, the slot of sunlight that would shine between the two residential towers around 12:30 PM in March, 2 PM in May, 1 PM in June, and 12:45 in December would be eliminated. Therefore, the Mixed-Use Program would cause greater shadow coverage than the Residential Program.

Tudor City Greens, Tudor Grove Playground, Mary O'Connor Playground

Since the Mixed-Use Program has a shorter (540-foot-tall) and wider (square) building at 685 First Avenue than the taller (770-foot-tall), more slender tower of the Residential Program, the shadows cast by 685 First Avenue in the Mixed-Use Program would be shorter but wider. On March 21, the shadow increment would be on the southern Tudor City open spaces 45 minutes less, and the maximum overall coverage would be 20 percent rather than 35 percent (see Figure 6-35). In May, the shadows of the Mixed-Use Program would reach the south Tudor City open spaces for about 30 minutes similar to the Residential Program. In December, the shadows of the Mixed-Use Program fall on the south Tudor City open spaces for 30 minutes longer, and cover a maximum of 60 percent as compared to 45 percent. They would reach the north Tudor City open spaces for 15 minutes longer and cover a maximum of 75 percent as compared to 65 percent. The Mixed-Use Development Program, similar to the Residential Development Program, would remove the last of the sunlight on the Tudor City open spaces at some times in December (see Figures 6-47 and 6-48).

Ford Foundation

Similar to the Residential Development Program, the Mixed-Use Development Program would only cast shadows on the Ford Foundation in December. Shadows would fall on part or all of the south and east facades and the roof of the building for slightly longer (30 minutes) and slightly later in the midday, 1 PM. Again, since the atrium (NYCL) is on the southeast corner of the building, which is closest to 685 First Avenue, it would receive less sunlight during this period. However, it would still receive light from all the office floors of the building, which have glass walls overlooking the atrium and which, even after dark, keep the atrium well lit. Since the atrium is a climate-controlled interior space, and December is not the growing season, the loss of sunlight would not adversely affect the vegetation. The atrium is no longer open to the public and there are no benches in the space, so the loss of sunlight is unlikely to affect use or users.

Trygve Lie Plaza and Ralph J. Bunche Park

Shadows cast on these two open spaces would be similar to those cast by buildings under the Residential Program.

U.N. Park

Shadows would be cast on the U.N. Park only in December and for the Mixed-Use Program the duration would be 15 minutes less, but the maximum coverage would be 40 rather than 30 percent.

On-Site Open Spaces

Since the new development program open spaces would be sited adjacent to new tall buildings and in an area of Manhattan that already has tall buildings, it would be impossible to avoid shadows on these open spaces. The new open space projected for development at 708 First Avenue would be on the southeast portion of the site, and the open space at 616 First Avenue would be on the west end of the site. While there would be morning, midday, and afternoon shadows on these open spaces, their locations ensure direct sunlight for a large portion of the day.

The additional on-site open space provided at Waterside by 2011 would be generally north and west of the new buildings on Waterside, with a small amount of open, space east of new buildings. Some portion of this on-site open space would be cast into shadow through the day. The new buildings at Waterside would also cast shadows on the 708 First Avenue open space in the midday.

MIXED-USE DEVELOPMENT PROGRAM WITH OFFICE ON 708 FIRST AVENUE

This development program is exactly the same as the Mixed-Use Development Program except that the office building on 708 First Avenue would have a large square, 850-foot tall tower at the corner of East 41st Street and First Avenue, rather than have a rectangular building 680 feet tall at this location. Specifically, the tall western tower at 708 First Avenue would create additional shadows on the Tudor City Parks, especially in the March and May analysis periods, and on Ralph J. Bunche Park. Trygve Lie Plaza and Robert Moses Playground would have increases or minor decreases in shadow throughout the year (see Table 6-5).

**Table 6-5
Potential Extent and Duration of New Shadows:
Mixed-Use with Office on 708 Development Program**

| Open Space Name | March 21 (all times EST) ¹ | | | May 6 (all times EDT) ² | | | June 21 (all times EDT) | | | December 21 (all times EST) | | |
|--------------------------------------------------------------------|---------------------------------------|---------------------|------------------------|------------------------------------|----------|------------------------|-------------------------|----------|------------------------|-----------------------------|--------------------|------------------------|
| | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ | Enters | Exits | Max % ³ |
| Rivergate (Joseph Slifka Park) | — | — | — | 7:27 AM | 9:15 AM | 10% / 100% | 6:57 AM | 9:45 AM | 40% / 100% | — | — | — |
| St. Vartan Park ⁵ | 7:36 AM | 11:00 AM | 85% / 85% | 7:27 AM | 12:00 PM | 40% / 40% | 8:15 AM | 12:00 PM | 25% / 25% ⁴ | 8:51 AM | 10:15 AM | 20% / 95% |
| Manhattan Place | 10:30 AM | 1:30 PM | 95% / 100% | 11:45 AM | 2:00 PM | 95% / 100% | 12:15 PM | 1:45 PM | 55% / 60% ⁴ | 9:15 AM | 12:15 PM | 95% / 100% |
| Corinthian ⁵ | 7:36 AM 11:15 AM | 8:30 AM 12:15 PM | 30% / 100% | 7:27 AM | 10:15 AM | 55% / 100% | 6:57 AM | 10:45 AM | 95% / 100% | 10:30 AM | 12:30 PM | 60% / 100% |
| Robert Moses Playground | 9:30 AM | 4:29 PM | 65% / 100% | 11:15 AM | 5:45 PM | 65% / 70% ⁴ | 12:00 PM | 6:00 PM | 60% / 65% ⁴ | 8:51 AM | 2:53 PM | 60% / 100% |
| Trygve Lie Plaza ⁵ | 9:15 AM | 12:45 PM | 100% / 100% | 11:15 AM | 1:15 PM | 100% / 100% | 11:45 AM | 1:00 PM | 40% / 40% ⁴ | 8:51 AM | 1:30 PM | 100% / 100% |
| Ford Foundation | — | — | — | — | — | — | — | — | — | 9:30 AM | 12:30 PM | 50% / 50% ⁴ |
| Tudor City Green (South)/ Tudor Grove Playground ⁵ | 9:15 AM | 1:00 PM | 50% / 100% | 11:00 AM | 12:30 PM | 30% / 35% ⁴ | — | — | — | 8:51 AM 11:30 AM | 9:45 AM 1:15 PM | 30% / 100% |
| Tudor City Green (North)/ Mary O'Connor Playground ⁵ | 11:00 AM | 12:15 PM | 45% / 60% ⁴ | — | — | — | — | — | — | 9:30 AM | 1:30 PM | 45% / 100% |
| Tudor City Open Spaces | 9:15 AM | 1:00 PM | 70% / 80% ⁴ | 11:00 AM | 12:30 PM | 15% / 25% ⁴ | — | — | — | 8:51 AM | 1:30 PM | 44% / 100% |
| Ralph J. Bunche Park | 11:30 AM | 1:00 PM | 100% / 100% | — | — | — | — | — | — | 10:15 AM | 2:00 PM | 100% / 100% |
| U.N. Park | — | — | — | — | — | — | — | — | — | 1:30 PM | 2:53 PM | 40% / 70% |
| Glick Esplanade | 2:45 PM | 4:29 PM | 70% / 95% ⁴ | 3:15 PM | 6:18 PM | 50% / 80% | 3:15 PM | 7:01 PM | 50% / 50% | — | — | — |

Notes:
 1 September 21 corresponds to March 21, but one hour later.
 2 May 6 corresponds to August 6.
 3 Max %—The first number gives an estimate of the highest percentage of the open space that could be covered by new shadows from the Mixed-Use Program with Office on 708 First Avenue, the second number is an estimate of the highest percentage of the open space that could be covered by existing and new shadows.
 4 Open space is covered 100% at some time but not at the time when the Mixed-Use Program with Office on 708 First Avenue shadows cover the highest percentage.
 5 Duration and coverage of shadow lesser in 2007 than 2011.
 EST—Eastern Standard Time
 EDT—Eastern Daylight Time
 March Analysis Period – 7:36 AM – 4:29 PM EST
 May Analysis Period – 7:27 AM – 6:18 PM EDT
 June Analysis Period – 6:57 AM – 7:01 PM EDT
 December Analysis Period – 8:51 AM – 2:53 PM EST

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SHADOWS BY SEASON

March 21 (Analysis Period—7:36 AM EST to 4:29 PM EST) (Figures 6-52 to 6-54)

In March, the largest change occurs in the north Tudor City open spaces, where the 708 First Avenue office building would cast a shadow for 75 minutes beginning at 11 AM compared to the Mixed-Use Program and the Residential Program, which would not cast any shadow on the open spaces north of 42nd Street. The Tudor City south open space would also receive more shadow. The duration of the shadows from the Waterside site on the Corinthian plaza would be 15 minutes longer. Trygve Lie Plaza would receive the same amount of shadow just 15 minutes earlier and Ralph J. Bunche Park receive more shadow for a shorter duration.

May 6 (Analysis Period—7:27 AM DST to 6:18 PM DST) (Figures 6-55 to 6-57)

In May, the southern Tudor City open spaces would receive an additional 60 minutes of shadow, with a greater extent of the park covered due to the increased height of the 708 First Avenue building. The shadow would now last from 11:00 AM through 12:30 PM, but, for the most part, would stay within the southern half of Tudor City Greens.

Shadows on Robert Moses would last 15 minutes less but would have somewhat greater coverage. Shadows on Trygve Lie would last the same amount of time, but the maximum coverage would be 75 percent rather than 60 percent. Shadows on the Corinthian from the south building on the Waterside site would be the same as those of the Mixed-Use Development Program.

June 21 (Analysis Period—6:57 AM EST to 7:01 PM EST) (Figures 6-58 to 6-59)

The duration of the shadow on Robert Moses Playground would be 15 minutes less, but the coverage would be 60 percent rather than 50 percent due to different massing configurations on 708 First Avenue. The Program shadow would also be on Trygve Lie 15 minutes longer reaching a maximum coverage of 40 percent rather than 25 percent. The coverage on the Corinthian open space from the south Waterside building would also be greater 95 percent rather than 75 percent.

December 21 (Analysis Period—8:51 AM EST to 2:53 PM EST) (Figures 6-60 to 6-62)

In December, Ralph J. Bunche Park and the U.N. Park would receive an additional 45 minutes of shadows. Other shadow durations would be shorter, as follows: Robert Moses Playground 40 fewer minutes; Tudor City open spaces south of 42nd Street 45 fewer minutes; Tudor City open spaces north of 42nd Street 15 fewer minutes; the Ford Foundation 30 fewer minutes; and the U.N. Park 15 fewer minutes.

EFFECTS ON SENSITIVE RECEPTORS

The primary effects would be the increases in shadow on the Tudor City open spaces in March and May.

ANALYSIS SUMMARY AND CONCLUSIONS

The *CEQR Technical Manual* identifies the following as situations when a significant shadow impact may occur:

- Substantial reduction in sunlight where a sensitive use is already subject to substandard sunlight (i.e., less than the minimum time necessary for survival);

- Reduction in sunlight available to a sensitive use from more to less than the minimum time necessary for its survival;
- Substantial reduction in sunlight to a sun-sensitive use or feature; and
- Substantial reduction in the usability of the open space.

The following summarizes the increments by sensitive receptor comparing the effects of the alternative development programs and considering the criteria above.

SENSITIVE RECEPTORS

Rivergate (Joseph Slifka Park)

In all development programs, 616 First Avenue would cast shadows to the southwest on the Rivergate open space at the beginning of the analysis period on June 21 and May 6. In June, the duration would be up to 2.75 hours with a maximum coverage of 45 percent at 6:57 AM, the beginning of the analysis period. In May, the duration and coverage would be less. Given the brief duration at the beginning of the analysis period on only the two longest analysis days, the increment would not meet any of the four impact criteria. Therefore, there would be no significant shadow impact on this sensitive receptor due to any of the development programs.

St. Vartan Park

In all the development programs, 616 First Avenue would cast shadows on St. Vartan Park in the morning during all seasons. However, since the buildings south of the park are relatively short (5 and 6 stories), the park would still receive ample sunlight for the remainder of the day. Therefore, the increases in shadow on St. Vartan Park would not meet the first two impact criteria.

In the rezoning development programs, the 616 First Avenue building would be the same and cast the same shadows. The as-of-right building would be shorter but closer to the park. The southern Waterside building (in 2011) would cast shadow on the western end of the park briefly at the beginning of the analysis period in May and June in the rezoning development programs. The west end of the Park is paved and used for active recreation. Therefore, the incremental shadow would not meet the last two criteria and no significant adverse impacts would occur. The Waterside increment is not considered to have a significant effect. The As-of-Right Development Program does not include a building on the south end of the Waterside site, avoiding this shadow increase.

On March 21, the 616 First Avenue shadow would fall on the park in the morning until 11:00 AM with the three rezoning developments. It would reach across the entire park in the early morning. The increment on the western end is not considered significant because this part of the park is paved, used for active recreation, and has only a few benches. The 9:45 AM (10:45 AM EDT) shadow would only fall on about half eastern portion of the park that includes the children's play area, benches, picnic tables, and a seasonal water element in publicly accessible space. By 10 AM (11 AM EDT), the shadow would be partially off the area of the water element and shade only the benches and tables on the north side; by 10:15 AM (11:15 AM EDT), the shadow would be completely off the water element; and at 11 AM (12 PM EDT), the last of the project shadow would fall on the park. Overall, the period when this shadow would fall on the park would occur early in the day when the park is least used and mostly before the water element is expected to be turned on at 10 AM (in September, but not in March). Although the duration is longer and the coverage greater in this season than other seasons, the park is largely in sunlight the remainder of the day and the program

shadow would not represent a substantial reduction in sunlight to a sun sensitive use/feature or a substantial reduction in the usability of the open space. The As-of-Right Development shadow would be less wide and not reach as far. Overall its coverage would be far less.

On May 6, the 616 First Avenue shadow increment with the rezoning programs would fall on the park until noon, covering a maximum of 40 percent at 10:30 AM. At 9:45 AM, it would cover about the southern half the eastern two-thirds of the park, including parts of the paved ball field, the children's play area, and the inaccessible lawn. The shadow would be much shorter by 11 AM, but would still reach to the water element. It would move northeast and off the sprinkler area during the next half hour. The sprinkler and the park would be largely in sunlight for the rest of the day. While the enjoyment of the children's play area and the seating there may be diminished, especially between 9:45 AM and 11 AM, this does not represent a substantial reduction in sunlight to a sun-sensitive use/feature or a substantial reduction in the usability of this open space. Again the shadow of the As-of-Right Program would have far less coverage.

On June 21, the 616 First Avenue shadow would fall on the park from 8:15 AM until 12 noon. The shadow coverage would reach a maximum of 25 percent between 9:30 AM and 11:30 AM, falling primarily on the inaccessible lawn area. Even with the brief increment of shadow from Waterside, the shadows of the development programs would not meet the impact criteria. The shadow of the As-of-Right Program would only cover a maximum of 5 percent from 8:30 AM to 10:30 PM.

On December 21, the 616 First Avenue shadow would only fall on the northeastern corner of the park from 8:51 AM to 10:15 AM. The maximum coverage would be 20 percent at the beginning of the analysis period and decrease after that. Due to the relatively short duration, the early morning occurrence, the minimal coverage, and the weather being the least conducive to park use in the winter, the program shadows are not expected to meet the impact criteria. The coverage of the As-of-Right shadow would be the same, but true duration would be 15 minutes less.

Manhattan Place

Since Manhattan Place is immediately to its north, any development of 616 First Avenue would cast new shadows on the plaza in the midday or morning on all analysis days. The As-of-Right Program building, due to its location further west on the site, would cast shadows on this open space for a longer period on each analysis day; and since the plaza is so close to the development site the shorter height of the as-of-right building would reduce the coverage when shadows are shortest in May and June.

On March 21, the Residential and Mixed-Use Program building at 616 First Avenue would cast shadows on the plaza area for three hours beginning at 10:30 AM and reaching a maximum coverage of 95 percent around noon. For a brief time (11:45 AM to 12 noon) the plaza would be completely in shade. By 12:30 PM, the shadow would be beginning to move off the fountain area near the corner of First Avenue and 37th Street. The As-of-Right shadow duration would be 2 hours longer and the coverage would be 90 percent. On May 6, the rezoning program shadow duration would be 2 hours and 45 minutes starting at 11:45 AM. The maximum coverage from the illustrative building would be 95 percent. From 11:45 AM to 12 noon, the plaza would be completely in shadow (95 percent incremental shadow, 5 percent existing). At 1 PM, the shadow would have already moved off the western edge of the plaza. The As-of-Right building would cast shadow on the plaza for 3.5 hours, but the maximum coverage would only be 10 percent. On June 21, the duration would be 1.5 hours from 12:15 PM. The maximum coverage would reach 55 percent briefly; and at 1 PM the

shadow would be off the western edge of the plaza. The As-of-Right shadow duration would be only one hour and maximum coverage would only be 5 percent.

Since the Manhattan Place building casts shadow on the plaza in the morning, the new shadow would not change the character of the open space. Although in the heat of noontime in the summer shadow might be appreciated, the plaza would be less attractive to users seeking sunlight in these seasons, especially at lunch time. However, on these spring, summer, and fall analysis days, the plaza would be in sunlight for the remainder of the day. Therefore, the shadow increments would not meet the criteria for significant impact due to the continued usability of the space and the limited duration of maximum shadow coverage. Overall this would not be a significant adverse impact.

On December 21, the plaza is again in shadow from the 616 First Avenue building with the rezoning programs for three hours beginning at 9:15 AM. From 10:15 AM to 12:15 PM the plaza would be completely in shadow with up to 95 percent program-generated by the illustrative design. However, the plaza would be out of the shadow at 12:15 PM and noontime users would have sunlight. The As-of-Right shadow duration would be 2 hours and 45 minutes starting at 9:30 AM and the maximum coverage would be 95 percent. Since the fewest users are anticipated in this season, and the fountain is turned off, and there would be full sunlight starting at 12:30 PM, this is not considered a significant adverse impact based on the four criteria.

The Corinthian

With rezoning, shadows from the development on 616 First Avenue in 2007 would reach the Corinthian open space in March and December, and in 2011 shadows from the southern Waterside building would fall on the plaza at the beginning of the analysis period in March, May, and June. Shadows from the as-of-right building at 616 First Avenue building would only reach this open space in December; and the As-of-Right Program does not include a building on the south end of the Waterside parcel. Shadows from the rezoning programs are discussed below. They are similar for each rezoning program because the 616 First Avenue building is the same and the southern Waterside building is on the southeast corner of the Waterside parcel in all three programs.

On March 21, the Waterside shadows would fall on the north edge of the Corinthian plaza briefly from 7:36 AM to 8:15 AM. Shadows from 616 First Avenue would fall on the plaza for an hour starting at 11:15 AM, only reaching a maximum coverage of 25 percent. Both these shadows are of short duration and fall on limited areas of the plaza. Further, there are few users in this plaza in March. Overall, this increase in shadows does not meet any of the criteria of significance.

On May 6, Waterside shadows would fall on a portion of the Corinthian plaza from 7:27 AM to 10:15 AM. The maximum coverage of 70 percent would be of limited duration; but, the total coverage including existing shadows would reach 100 percent from 7:27 AM to 8:30 AM. Users seeking a place to sit in the sunlight before 10:15 AM would find the plaza less attractive at this time. On the other hand, shadows from 616 First Avenue would not reach the Corinthian in this season; and most of this plaza is in sunlight for most of the rest of the day since the Queens-Midtown Tunnel entrance is in the block to the south. No adverse impacts on the vegetation are anticipated. This would not meet the first three significance criteria and since the analysis period is nearly 11 hours long on this date and the shadow only falls on the open space for less than the first three hours when users are likely to be fewest, this does not meet the criteria of a substantial reduction in the usability of the open space.

On June 21, Waterside shadows would fall on a portion of the Corinthian plaza from 6:57 AM to 10:45 AM. The maximum coverage would reach 90 percent with the Residential Program but would be of limited duration in the early morning. From 6:57 AM to 8:45 AM the entire open space would be in shadow from the combination of Residential Program shadow and existing shadow. The maximum coverage from the Mixed-Use Program would reach 75 percent also in the early morning. Overall coverage (including existing shadow) would reach 100 percent from 6:57 AM to 8:15 AM. After 11 AM, the plaza would largely be in sunlight the rest of the day. Given the limited duration and its early occurrence, this would not meet any of the criteria for significance.

In the December analysis period, shadows from 616 First Avenue would reach the Corinthian plaza for two hours from 10:30 AM to 12:30 PM and would cover 60 percent of the space at their greatest extent. Since shadows are longest in this season, shadows from other buildings already cover much of the plaza. The project increment would bring the total coverage to 100 percent from 11:15 AM to 11:45 AM. However, there are the few, if any, users in the winter, and the fountain is turned off. Further, from 12:30 PM to the end of the analysis period the plaza would largely be in sunlight. Therefore, this increment does not meet any of the criteria of significance.

Robert Moses Playground

708 First Avenue would cast additional shadows on Robert Moses Playground in all seasons of the year as it would occupy the block south of this playground.

On March 21, 708 First Avenue shadows would fall on Robert Moses Playground from 9:30 AM or 9:45 AM to the end of the analysis period at 4:29 PM with the maximum coverage reaching 95 percent with the Mixed-Use Program with Office on 708 First Avenue (60 percent with the Mixed-Use Program and 45 percent with the Residential Program). Shadows of the As-of-Right Program would fall on this playground from 10:30 AM to 4 PM with a maximum coverage of 35 percent. On May 6, shadows would fall on the playground from 11:15 AM to 6 PM with the Residential Program reaching a maximum coverage of 75 percent. Shadows of the As-of-Right Program would fall on this open space from 1 PM to 6 PM with a maximum coverage of only 5 percent. On June 21, shadows would fall on the playground from 11:45 AM or noon to 6 PM with the maximum coverage of 60 percent in the Mixed-Use Program with Office on 708 First Avenue and 50 percent with the other two rezoning programs. Shadows on the As-of-Right Program would fall on the playground from 2 PM to 6 PM with a maximum coverage of only 5 percent. On December 21, shadows would fall on the playground from 8:51 AM or 9 AM to the end of the analysis period at 2:53 PM with the maximum coverage reaching 60 percent. Shadows of the As-of-Right Program would fall on this open space from 9:30 AM to 2:53 PM with a maximum coverage reaching 70 percent.

As described at the beginning of this chapter, Robert Moses Playground is largely a place of active recreation, with a large, open, paved area with a baseball backstop (frequently used for roller hockey), handball and basketball courts, and a dog run. Currently many of its activities occur in shade, given the Queens-Midtown Tunnel vent structure in the midst of the open space and the surrounding buildings that cast shadows on the space during much of the day. The dog run where owners often sit on benches is already generally in shadow as it is immediately north of the vent structure. Even though it would experience a large amount of new shadow with any of the three rezoning development programs as compared to the No Build condition, this does not meet any of the four significance criteria.

Trygve Lie Plaza

708 First Avenue would also cast shadows on Trygve Lie Plaza on the west side of First Avenue between 41st and 42nd Streets in all seasons. May and June shadows from the rezoning programs are between one and two hours in the midday and reach a maximum coverage of 75 percent in May with the Residential Program and the Mixed-Use Program with Office on 708 First Avenue. The shadow of the As-of-Right building would not reach this plaza on these days. On March 21 shadow of the rezoning programs would fall on Trygve Lie Plaza from 9:15 AM or 9:30 AM to 12:45 PM or 1 PM reaching a maximum coverage of 100 percent for about 30 minutes (from 10:45 AM to 11:15 AM) with the Mixed-Use Program and 75 minutes (from 10:30 AM to 11:45 AM) with the Residential Program. Shadows of the As-of-Right Program would fall on this open space from 10:15 AM to 11:45 AM with a maximum coverage of 25 percent. On December 21, program shadow would fall on this plaza from 8:51 AM to 1:30 PM reaching a maximum coverage of 100 percent with the Residential Program between 9:30 AM and 1 PM and 100 percent with the Mixed-Use Program between 10 AM and 1 PM. Shadows of the As-of-Right Program would fall on this plaza from 8:51 AM to 12:45 PM with a maximum coverage of 100 percent between 10:30 AM and 11:45 AM.

With the rezoning programs, the short shadow durations on the May and June analysis days do not meet any of the criteria for significant impact. The March 21 duration of 3.5 hours and the December duration of 4.5 hours and the coverage reaching 100 percent coverage indicate a greater effect. However, given the character of this open space (a very narrow pedestrian strip sandwiched between a major traffic thoroughfare and a high blank wall), its lack of plantings, its lack of users, and its general unattractiveness, this would not be considered a significant adverse impact under any of the criteria.

Tudor City Greens/Tudor Grove Playground/Mary O'Connor Playground

The buildings at 708 First Avenue and 685 First Avenue would cast shadows on the open spaces at Tudor City on the March, May, and December analysis days. On June 21 when shadows are shortest, neither the Residential program nor either of the Mixed-Use Programs would cast shadows on the Tudor City open spaces. On May 6, program shadow would reach the south Tudor City open spaces with either the Residential Program or the Mixed-Use Program, the duration would be about a half hour and the coverage would be a maximum of 10 percent. This would not be a significant impact. With the Mixed-Use Program with Office on 708 First Avenue the duration and coverage would be greater, 1.5 hours and 30 percent, respectively.

Shadows from the As-of-Right Program would not reach these open spaces on June 21 or May 6 or March 21.

On March 21, the Residential Program shadow would reach the southern portion of the open spaces from 9:15 AM to 1 PM, with a maximum coverage of 35 percent of the overall open space (see Figures 6-63 and 6-64). The Mixed-Use Program shadows would fall on the south open spaces differently from 9:15 AM to 11:15 AM and 12:30 PM to 1:30 PM with a maximum coverage of 20 percent on the overall open space (see Figures 6-65 and 6-66). At these times, Tudor City Greens north and Mary O'Connor Playground would be in sunlight and a park user seeking sunlight could easily walk to the north side. Nevertheless, the portions of Tudor City Greens south and Tudor Grove Playground that would receive new shadow from the program buildings would be less attractive to sun-seeking passive users in the spring and fall. Shadows from the Mixed-Use Program with Office on 708 First Avenue would fall on the Tudor City south open spaces from 9:15 AM to 1 PM and reach the Tudor City north open spaces from 11 AM to 12:15 PM with a maximum

coverage of 70 percent on the overall open spaces. Nevertheless, some of the open spaces would be in sunlight (see Figures 6-53, above 6-67 and 6-68), and park users could move to those areas. Again, the portions of the Tudor City open spaces in the shadow of the Mixed-Use Program with Office on 708 First Avenue would be less attractive to sun-seeking users. It would not meet the first two criteria and it would not constitute a substantial reduction in sunlight or usability due to its brief duration. Given the proximity of open space not in shadow, it would not be a significant adverse impact.

On December 21, the weather is most likely not be conducive to park use, but sunlight would be most appreciated. The Residential and both Mixed-Use Program shadows would reach the north Greens and Mary O'Connor Playground, but As-of-Right shadows would only reach the south open spaces for less than an hour and with a maximum coverage of 5 percent. Residential Program shadows would fall on the south open spaces from 8:51 AM to 9:30 AM and from 11:30 AM to 1:15 PM, and on the north open spaces from 9:30 AM to 1:30 PM, reaching a maximum overall coverage of 45 percent (see Figures 6-69 and 6-70). The project increment would remove all or most of the existing sunlight from 9:45 AM to 12:30 PM. The total coverage would be between 95 and 100 percent during this time. At 12:45 PM, project coverage would be down to about 44 percent and overall coverage would be about 90 percent. At 1 PM, the project coverage would be 35 percent and the total coverage would be 68 percent, and at 1:15 PM the project coverage would be 16 percent and the total coverage would be 48 percent. The last of the project increment would fall on the Tudor City open spaces at 1:30 PM. The Mixed-Use Program shadows would fall on the south open spaces from 8:51 AM to 9:45 AM and from 11:30 AM to 2 PM, and the north open spaces from 9:45 AM to 2:00 PM, reaching a maximum overall coverage of 60 percent (see Figures 6-71 and 6-72). Total shadow coverage would be 100 percent from 10:15 AM to 12:45 PM. At 1 PM, the project increment would be 63 percent and the overall coverage would be about 96 percent; but by 1:45 PM the project increment would be reduced to 4 percent and the overall coverage reduced to 66 percent. Shadows from the Mixed-Use Program with Office on 708 First Avenue would fall on the Tudor City south open spaces from 8:51 AM to 9:45 AM and 11:30 AM to 1:15 PM and on the Tudor City north open spaces from 9:30 AM to 1:30 PM reaching a maximum overall coverage of 44 percent (see Figures 6-73 and 6-74). The last of the project increment would fall on the Tudor City open spaces at 1:30 PM. Because the shadow increment from either the Residential Program or from either Mixed-Use Program would represent a substantial reduction in the amount of sunlight to sun sensitive use, the increase in shadow on this open space from 8:51 AM to 1:30 or 2 PM in the winter, is considered a significant adverse impact.

Ford Foundation

The As-of-Right Program shadows would never reach the Ford Foundation. With the rezoning programs, shadows from 685 First Avenue would reach the Ford Foundation only in December when shadows are longest. They would fall on some portion of the south or east facade or the roof from 9:30 AM to 1 PM and the atrium (an NYCL) would receive less sunlight during this period. However, it would still receive light from all the office floors of the building. Since the atrium is a climate-controlled interior space and December is not the growing season, the loss of sunlight would not adversely affect the vegetation. The atrium is no longer open to the public and there are no benches in the space, so the loss of sunlight is unlikely to affect use or users. Therefore, this loss of sunlight in this single season does not meet any of the impact criteria and is not considered a significant adverse impact.

Ralph J. Bunche Park

Shadows from all three rezoning programs would not reach Ralph J. Bunche Park in May or June, but they would reach it in March and December. Shadows from the As-of-Right Program would be less and would only reach Ralph J. Bunche Park in December.

On March 21, shadows would reach this open space from 11:15 AM (11:30 AM with the Mixed-Use Program with Office on 708 First Avenue) to 1 PM with the rezoning programs, with a maximum coverage of 100 percent from 12:15 PM to 12:45 PM in the Mixed-Use Program with Office on 708 First Avenue (75 percent with the Mixed-Use Program and 60 percent with the Residential Program). On December 21, the park would be in project shadow from 10:15 AM or 10:30 AM to 1:30 PM or 2 PM, reaching a maximum coverage of 100 percent with the Residential Program from 11:15 AM to 1:15 PM, with the Mixed-Use Program from 11:45 AM to 1:30 PM, and with the Mixed-Use Program with Office on 708 First Avenue from 11 AM to 1 PM.

Although wider than Trygve Lie Plaza to the south, this park is a linear open space between a major traffic thoroughfare and high blank wall. It does have benches, a monument to Ralph J. Bunche, and stairs directly up to Tudor City above the high blank wall, but it is little used except for gatherings of protestors in the midday usually during the work week. Considering the park's character and use, the March shadows would not be considered a significant adverse impact. Although the December coverage and duration are greater, all these factors would again indicate that this does not meet the criteria and is not a significant adverse impact.

U.N. Park

Shadow from 708 First Avenue would reach the U.N. Park on December 21 from 1 PM with the Residential Program (1:15 PM with the Mixed-Use Program and 1:30 PM with the Mixed-Use Program with Office on 708 First Avenue) to 2:53 PM reaching a maximum coverage of 40 percent with either Mixed-Use Program (30 percent with the Residential Program). Given that the season is not conducive to park use, the vegetation is dormant, the coverage is low, and the shadow moves quickly across the park, this would not meet any of the criteria and would not be considered a significant adverse impact. The As-of-Right Program would not cast any shadow on this open space.

Glick Esplanade

Located east of 616 First Avenue, the Glick Esplanade would have new shadows cast on it during the mid- to late afternoon/early evening except in the winter. In the May and June analysis periods, when the esplanade would be expected to be most heavily used, these shadows would last from 3:15 PM to the end of the analysis period (either 6:18 PM in May or 7:01 PM in June) and they would cover half of the esplanade at their greatest extent. In the March analysis period, new shadows would be cast on the esplanade from 2:45 PM to 4:29 PM and would cast the remaining portion of the esplanade into shadow from 3:30 PM to 4:29 PM. It should also be noted that the analysis is very conservative in that the UDS data only includes buildings and does not include the elevated FDR exit ramp in this area. This ramp is immediately adjacent to the esplanade and carries one lane of traffic to 42nd Street. In this location it already puts the esplanade in shadow in the late afternoon when project shadows would fall on the esplanade. Thus the shadow diagrams and the tables overstate the impact of the development programs. The East River Esplanade south of East 81st Street is lined by tall buildings seeking river views and by the FDR Drive which contains elevated portions. Further, much of the adjacent properties is at a higher elevation on a bluff over the river. All of these factors contribute to afternoon shadows on the esplanade. On the other hand, because

the Disposition Parcels are to the west, the esplanade receives ample sun in the morning and midday. Therefore, this increment is not considered a significant change from existing conditions on the esplanade. The As-of-Right Program would cast shadow on the esplanade on the same days but for less time.

On-Site Open Spaces

Since the new development program open spaces would be adjacent to new tall buildings and in an area of Manhattan that currently contains tall buildings, it would be impossible to avoid shadows. Given that they would be created as part of the development programs and that they would be located to ensure that direct sunlight for some of the day, program shadows would not have a significant adverse impact.

OTHER BUILDING CONFIGURATIONS

All four development programs presented above are hypothetical; none is actually proposed at this time. In the event the actual plan differs from the illustrative scenarios, the conclusions respecting shadow impacts may be different. To account for further variations in possible development scenarios, and the shadows that such development would produce, other building configurations were qualitatively considered.

The comparison is made first by building form and then by location of the buildings on the site. There could be a variation of building shapes and forms, ranging from very tall narrow towers set in plazas to fuller coverage buildings with higher street walls. Tall point buildings would tend to cast longer, narrower shadows reaching farther but staying on any given point for less time. Streetwall buildings would increase duration and coverage on closer resources, but not reach resources further away. The combination of street wall building and slab tower would reduce coverage and possibly duration on closer resources but increase the number of resources reached by the shadow of a slab tower. While a slab tower would reach fewer resources than the point tower, it would have a longer duration and greater coverage on the resources that it does reach.

In terms of location of the buildings on the site, when the bulk is concentrated along the outside of the parcels, shadows on neighboring resources would be increased in duration and coverage. For example, if 616 First Avenue were located closer to First Avenue, it would have more effects on St. Vartan Park, Manhattan Place, and the Corinthian. Further, the program open space would be enclosed in walls which cast shadow on it all day. If the bulk were concentrated on the interior of the site, less shadow would fall on the neighboring open spaces and more of the shadow would fall on the program open space which surrounds the buildings, but at any given time some portion of the open space would be on the sunny side of the parcel. If the bulk were concentrated along the FDR Drive, there would be less shadow on resources to the west and northwest such as St. Vartan Park, the Corinthian, Manhattan Place, the Ford Foundation, Tudor City, Trygve Lie Plaza, and Ralph Bunche Park. The project open space located west of the buildings would receive much of the shadow in the morning and in the afternoon there would be more shadow on the Esplanade. In the early morning (except in December) 616 First Avenue would also cast more shadow on the Riverside open space. Types of mitigation for shadow impacts are discussed in Chapter 18. ❖

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30 July 2002

Urban Design and Visual Resources (DGEIS Section 8)

-- by Land Use Committee

The CEQRA Manual says that urban design components and visual resources comprise an area's "look". It lists the urban design components as:

- Building bulk, use, and type
- Building arrangement
- Block form and street pattern
- Streetscape elements
- Street hierarchy
- Natural features

And the visual resources as:

- Public view corridors
- Public vistas
- Natural features
- Built features

Generally, these are the elements of the City's public space. They either are the spaces, in that First Avenue is a public visual corridor or St Vartan's Park is a natural and built feature, or they shape the spaces, in that the pattern of streets and blocks separates public space from private and the arrangement and bulk of buildings locates the facades that are the walls of the public space. Urban design has more to do with voids than with solids. It has to do with the spaces that are shaped by our buildings. It has to do with the forest more than the trees.

The primary public spaces proximate to the Con Ed properties are:

- The East River, including the esplanade and the FDR Drive
- First Avenue
- 42 and 34 Streets
- St Vartan's Park and the block just to its north containing the tunnel approaches
- The grounds of the United Nations and Robert Moses Park
- 35 through 41 Streets
- Tudor City Place and the Tudor City Parks and Playgrounds

These are organized as a regular, rectangular grid of streets and blocks in which most of the blocks are filled with buildings but some are parks or other open space. Most of the buildings provide the context, or walls, of the public space. Others, specifically the Secretariat, are objects in open space.

Among the area's visual resources are:

- View corridors along 34 through 42 Streets toward the East River, First Avenue north and south, and Tudor City Place toward the south
- Vistas from the esplanade north, east and south across the East River and vistas from Long Island City and Greenpoint west across the East River to the Midtown Manhattan skyline
- Natural features such as the East River and the two-block open space of St Vartan's Park and the Queens Midtown Tunnel access

- Built features such as the Secretariat as viewed from across the East River and from the south along the esplanade, Tudor City as experienced approaching or leaving the area from the northwest, and the historic elements of the Waterside Generating Station

The public experiences the urban design of the neighborhood and its visual resources from the perspective of moving through or being in its public spaces or from vantage points such as the East River or its eastern shore.

Although the DGEIS approaches urban design and visual resources in a particulate rather than a comprehensive fashion, its inventory is not inconsistent with those items listed above. However, because it looks more at the trees than the forest, the DGEIS either omits or mistakes some characteristics of the neighborhood.

- 34 through 42 Streets are all visual corridors to, and from, the East River. All are obstructed by the FDR Drive to an elevation of 30 or more feet. 39 and 40 Streets are further obstructed by Con Ed equipment and gates. That they are demapped is not a visual matter. The character of each of these streets, between 34 and 42 Streets inclusive, is that they are open to the East River. The DGEIS mischaracterizes 39 and 40 Streets as part of a superblock. Although demapped between First Avenue and the FDR Drive they exist and, though obstructed, are part of the neighborhood's built urban fabric.
- The DGEIS describes the United Nations campus as open space containing several buildings. However, it does not identify the uniqueness of the Secretariat as an object building or that the character of the UN grounds as open space depends on its contrast with the adjacent built blocks and the facades that bound the grounds.
- The DGEIS mischaracterizes "... the predominant urban design of First Avenue... [as] one of modern residential buildings set behind plazas..." (page 8-2, paragraph 2, lines 18 & 19) In fact, between 34 and 42 Street, First Avenue is shaped by 16 block faces. Of these only three are plazas backed by residential towers. Three are public open space (Saint Vartan's Park, the landscaped area containing the access to the Queens Midtown Tunnel, and Robert Moses Park). Two blocks are undeveloped (616 and 685). The remaining eight blocks are street walls, generally 120 to 150 feet high.
- The DGEIS notes the heights of most of the taller buildings in the neighborhood but does not characterize their significance in the skyline. The locations and relative heights of buildings produce a built topography in which the tallest buildings mark the Midtown central business district. The surrounding residential areas are generally lower. This, plus the perspective of viewing the skyline from a distance at ground level, gives the Secretariat prominence when viewed from the east side of the river or from the south along the FDR Drive.

The proposed development of the Con Ed properties shows buildings that are 700 and 800 feet tall, which in some locations rise without setback from streets, and some of which are located along the east edge of the property. The buildings are generally sheer towers in open space rather than street wall buildings or towers-on-bases. The

proposals treat the three blocks of Waterside and 708 as a superblock. The plans do not show buildings in the alignments of 39 and 40 Streets but do not preclude them.

The impacts of such development include:

- Tall buildings without setbacks would obstruct the visual corridors along 39 and 40 Streets.
- Building within the alignment of 39 and 40 Streets would change the neighborhood's characteristic regular pattern of streets and blocks and block the visual corridors.
- Buildings along the east edge of the property would block views of the Secretariat from the south.
- Buildings east of First Avenue taller than approximately 400 feet would compete with the Secretariat and obstruct views of the existing skyline of Midtown.
- Towers in open space would compete with the Secretariat, denying its specialness, rather than contrasting as the existing buildings do.
- The proposed buildings would change the characteristic street wall and scale of First Avenue.
- Tall buildings on 708 and 685 would be visible from within Tudor City Parks over the tops of the large Tudor City apartment buildings.
- The proposed plans would eliminate the historic portions of Waterside 1 and 2, which are two of the built features that are among the neighborhood's visual resources.
- An indirect impact of the proposed development is the future construction of additional buildings above the Queens Midtown Tunnel approaches and the consequent loss of open space and a visual resource.

The DGEIS does not identify any of these impacts and therefore does not discuss ways of dealing with them. Alternatives and mitigation that might address these impacts include:

- Mapping 39 and 40 Streets east of First Avenue as streets. This would ensure that adjacent buildings would not encroach on the streets or the setback areas above them. It would also maintain the existing regular pattern of blocks and streets.
- Mapping the block between 36 and 37 Streets west of First Avenue, which contains the Queens Midtown Tunnel approaches, as park. This would retain this block as open space and as a natural feature which serves as a visual resource.

- Requiring the proposed buildings to be set back from the east edge of the properties so as to maintain views of the Secretariat from the south.
- Limiting the height of new buildings to a height consistent with the tallest residential towers east of First Avenue and differentially shorter than the Secretariat – say, 400 feet. This would retain the deserved prominence of the Secretariat as the symbol of the United Nations and not obscure the Midtown skyline. This would also avoid the new buildings being visible from the Tudor City Parks over the tops of the Tudor City buildings.
- Requiring the new buildings to be consistent with the current tower-on-a-base zoning regulations. This would encourage characteristic street walls along First Avenue. This would also encourage contextual buildings maintaining the contrast with the Secretariat as an object in open space.
- Requiring objective and open-minded consideration of reusing the historic portions of the Waterside Generating Station. If successful, this would retain built features that serve as visual resources. This would also maintain some of the characteristic street walls along First Avenue.
- Establishing an interim esplanade between 38 and 42 Streets. This would demonstrate the feasibility of this portion of the East River esplanade and encourage planning for its permanent configuration. It would also enhance opportunities for views of the East River, Long Island, and the Secretariat.
- Requiring pedestrian access across the FDR Drive between 39 and 40 Streets and the esplanade. This would provide access to the waterfront that ought to be typical of every street.

Some of these issues may be best dealt with after the property has been disposed of from Con Ed to a developer, during the ULURP application and the next round of environmental review; however, some are best dealt with now. Among the items that are best dealt with now are:

- the mapping of 39 and 40 Streets as streets,
- consideration of the reuse of the historic portions of Waterside 1 and 2 before they are decommissioned and demolished according to the current contract between Con Ed and TRC,
- mapping of the Queens Midtown Tunnel approach block as park,
- provision of an interim esplanade between 38 and 42 Streets, and
- pedestrian access across the FDR Drive at 39 and 40 Streets.

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The primary public spaces proximate to the Con Ed properties are:

- The East River, including the esplanade and the FDR Drive
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These are organized as a regular, rectangular grid of streets and blocks in which most of the blocks are filled with buildings but some are parks or other open space. Most of the buildings provide the context, or walls, of the public space. Others, specifically the Secretariat, are objects in open space.

Among the area's visual resources are:

- View corridors along 34 through 42 Streets toward the East River, First Avenue north and south, and Tudor City Place toward the south
- Vistas from the esplanade north, east and south across the East River and vistas from Long Island City and Greenpoint west across the East River to the Midtown Manhattan skyline
- Natural features such as the East River and the two-block open space of St Vartan's Park and the Queens Midtown Tunnel access

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- The DGEIS describes the United Nations campus as open space containing several buildings. However, it does not identify the uniqueness of the Secretariat as an object building or that the character of the UN grounds as open space depends on its contrast with the adjacent built blocks and the facades that bound the grounds.
- The DGEIS mischaracterizes "... the predominant urban design of First Avenue... [as] one of modern residential buildings set behind plazas..." (page 8-2, paragraph 2, lines 18 & 19) In fact, between 34 and 42 Street, First Avenue is shaped by 16 block faces. Of these only three are plazas backed by residential towers. Three are public open space (Saint Vartan's Park, the landscaped area containing the access to the Queens Midtown Tunnel, and Robert Moses Park). Two blocks are undeveloped (616 and 685). The remaining eight blocks are street walls, generally 120 to 150 feet high.
- The DGEIS notes the heights of most of the taller buildings in the neighborhood but does not characterize their significance in the skyline. The locations and relative heights of buildings produce a built topography in which the tallest buildings mark the Midtown central business district. The surrounding residential areas are generally lower. This, plus the perspective of viewing the skyline from a distance at ground level, gives the Secretariat prominence when viewed from the east side of the river or from the south along the FDR Drive.

The proposed development of the Con Ed properties shows buildings that are 700 and 800 feet tall, which in some locations rise without setback from streets, and some of which are located along the east edge of the property. The buildings are generally sheer towers in open space rather than street wall buildings or towers-on-bases. The

proposals treat the three blocks of Waterside and 708 as a superblock. The plans do not show buildings in the alignments of 39 and 40 Streets but do not preclude them.

The impacts of such development include:

- Tall buildings without setbacks would obstruct the visual corridors along 39 and 40 Streets.
- Building within the alignment of 39 and 40 Streets would change the neighborhood's characteristic regular pattern of streets and blocks and block the visual corridors.
- Buildings along the east edge of the property would block views of the Secretariat from the south.
- Buildings east of First Avenue taller than approximately 400 feet would compete with the Secretariat and obstruct views of the existing skyline of Midtown.
- Towers in open space would compete with the Secretariat, denying its specialness, rather than contrasting as the existing buildings do.
- The proposed buildings would change the characteristic street wall and scale of First Avenue.
- Tall buildings on 708 and 685 would be visible from within Tudor City Parks over the tops of the large Tudor City apartment buildings.
- The proposed plans would eliminate the historic portions of Waterside 1 and 2, which are two of the built features that are among the neighborhood's visual resources.
- An indirect impact of the proposed development is the future construction of additional buildings above the Queens Midtown Tunnel approaches and the consequent loss of open space and a visual resource.

The DGEIS does not identify any of these impacts and therefore does not discuss ways of dealing with them. Alternatives and mitigation that might address these impacts include:

- Mapping 39 and 40 Streets east of First Avenue as streets. This would ensure that adjacent buildings would not encroach on the streets or the setback areas above them. It would also maintain the existing regular pattern of blocks and streets.
- Mapping the block between 36 and 37 Streets west of First Avenue, which contains the Queens Midtown Tunnel approaches, as park. This would retain this block as open space and as a natural feature which serves as a visual resource.

- Requiring the proposed buildings to be set back from the east edge of the properties so as to maintain views of the Secretariat from the south.
- Limiting the height of new buildings to a height consistent with the tallest residential towers east of First Avenue and deferentially shorter than the Secretariat – say, 400 feet. This would retain the deserved prominence of the Secretariat as the symbol of the United Nations and not obscure the Midtown skyline. This would also avoid the new buildings being visible from the Tudor City Parks over the tops of the Tudor City buildings.
- Requiring the new buildings to be consistent with the current tower-on-a-base zoning regulations. This would encourage characteristic street walls along First Avenue. This would also encourage contextual buildings maintaining the contrast with the Secretariat as an object in open space.
- Requiring objective and open-minded consideration of reusing the historic portions of the Waterside Generating Station. If successful, this would retain built features that serve as visual resources. This would also maintain some of the characteristic street walls along First Avenue.
- Establishing an interim esplanade between 38 and 42 Streets. This would demonstrate the feasibility of this portion of the East River esplanade and encourage planning for its permanent configuration. It would also enhance opportunities for views of the East River, Long Island, and the Secretariat.
- Requiring pedestrian access across the FDR Drive between 39 and 40 Streets and the esplanade. This would provide access to the waterfront that ought to be typical of every street.

Some of these issues may be best dealt with after the property has been disposed of from Con Ed to a developer, during the ULURP application and the next round of environmental review; however, some are best dealt with now. Among the items that are best dealt with now are:

- the mapping of 39 and 40 Streets as streets,
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- provision of an interim esplanade between 38 and 42 Streets, and
- pedestrian access across the FDR Drive at 39 and 40 Streets.

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PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

September 2002

Hazardous Material (DGEIS Section 10)

WHEREAS, the Draft Generic Environmental Impact Statement (DGEIS) Section 10 deals with the potential for the presence of hazardous materials in soil and/or groundwater and/or existing site structures and with impacts associated with the demolition of the existing structures and excavation/redevelopment of the four Disposition Parcels; and

WHEREAS, while the DGEIS describes the history of use and existing hazardous materials present of the Dispositions Parcels, it does not give conclusions as to “whether the proposed action could lead to increased exposure of people or the environment to hazardous materials and whether the increased exposure would result in significant public health impacts or environmental damage” as required by the CEQR Manual Section J; and

WHEREAS, the CEQR Manual further requires that once the site has been determined to having hazardous materials present under Phase I Environmental Site Assessment (ESA) then a Phase II ESA is conducted using the American Society for Testing and Material (ASTM) E 1903-97 standard guide; and

WHEREAS, Con Edison has engaged TRC Companies, Inc. (TRC), an environmental remediation firm, to undertake investigation and remedial activities and associated demolition activities on the four Disposition Parcels under the direction of New York State Department of Environmental Conservation (NYSDEC); and

WHEREAS, although there have been eleven (11) environmental investigation and remediation activities at the 685 First Avenue site as stated in the DGEIS Appendix B: (STATUS OF REMEDIATION ACTIVITY OF THE DISPOSITION PARCELS), the DGEIS does not contain a final Interim Remedial Measures (IRM) Report and Operations, Maintenance, and Monitoring (OM&M) Work Plan and, in addition, Phase II of Environmental Site Assessment seems not to be complete; and

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WHEREAS, 616 First Avenue, also known as the Kips Bay Fuel Terminal, contains two storage tanks: a 265-gallon aboveground storage tank containing fire suppression foam located in the Foam Tank Building and a 255,000-gallon underground fuel storage tank is located beneath the fuel oil pump house. The pumping house is presently used to supply fuel to the Waterside Plant 1 and 2. Some environmental investigation and remediation activities were conducted on this site, Phase II Environmental Site Assessment is not complete; and

WHEREAS, in 1890 through 1923 708 First Avenue used to be a manufactured gas plant with five aboveground storage tanks with more than 300,000 cubic feet capacity, two coal houses, two crude oil tanks, two naphtha tanks and storage building. Although, Phase I and II ESA have been conducted, more remediation might be needed as indicated in the DGEIS Appendix B, page B-27, paragraph 3; and

WHEREAS, the Waterside Generating Station is located on 700 First Avenue, contains generating units, boilers, oil and gas tanks, fuel pipe lines, acid lead batteries on metal racks, PCB liquid cooled transformers, oil filled equipment, asbestos-covered pipes and oil static filled high voltage conduits which are all sources of hazardous materials; and

WHEREAS, While the (DGEIS) Section 10 and its Appendix B identifies, as required under Phase I ESA, numerous hazardous materials such as but not limited to the following:

1. Polychlorinated biphenyls (PCBs)
2. Polycyclic aromatic hydrocarbons (PAHs)
3. Lead
4. Asbestos

some of these materials show “exceedances of the applicable DEC guidance criteria that were indicative of historic urban fill” (page B-32, next to last paragraph). However, it is not clear as to the probable nature and degree of environmental contamination of Waterside I and Waterside II structures, foundations and soil under these structures; and

WHEREAS, the DGEIS does not contain a Remediation Work Plan (RWP) for the Waterside Generating Station as called for under Phase II EAS; and

WHEREAS, Appendix B states that “[t]he borings on the eastern portion of the Waterside site indicate slight exceedances of the applicable DEC guidance criteria that were indicative of historic urban fill. This analytical information was consistent with the information from boring logs in those areas that showed the presence of cinder, brick, concrete, and other fill material that would generate similar analytical results.”

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WHEREAS, the DGEIS section 19, F: Adaptive Waterside Reuse Alternative seems to indicate that Waterside 1 and Waterside 2 foundation and soil under these structures are severely contaminated (page 19-38, paragraph 4) which is inconsistent with Appendix B: Status of Remediation Activity of the Disposition Parcel, page B-35, which states “Similar to the soil observation, the available field reports and boring logs did not indicate the presence of contamination indicators or the presence of contamination sources in weathered rock or in the competent rock.”; now

Therefore, be it

RESOLVED, that the DGEIS should include a complete Phase I and II Environmental Site Assessment, which should include the following as required by the CEQR Manual:

1. A complete work plan containing:
 - a. A survey and analytical plan, addressing the types of surveys to be undertaken, the rationale for the approach, the various sampling locations, and the investigative, and laboratory analysis methods to be used.
 - b. A health and safety plan for personnel undertaking the work.
 - c. A quality assurance and quality control plan for the acquisition, handling, and analysis of samples taken.
2. A more extensive Survey and Analytical Plan than the DGEIS presented.
3. More extensive subsurface excavations and test pits to detect hazardous materials.
4. An analysis of the potential for significant impacts which should answer two questions:
 - a. Is there the potential for human exposure to contaminants? This includes present and future on-site occupants, off-site occupants, and construction workers.
 - b. Is there the potential for environmental exposure to the contaminants? This includes contaminants entering on-site or surrounding areas.

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5. A complete Mitigation plan which has the following elements:
 - a. Actions designed to eliminate, reduce to acceptable levels, or control sources of significant impact of hazardous materials.
 - b. A “risk-based” approach in determining the proper course of mitigation at the Disposition Parcels which consider the following:
 - i. Which of the available remedial technologies will accomplish the remedial goal for the site?
 - ii. What are the short-term risks?
 - iii. What are the long-term risks?
 - iv. What are the risk-based benefits of their remedial plan?
 - v. Will implementation create potential new or additional risks to the surrounding public?
 - vi. Will implementation result in hazardous materials being left on the site such that a Deed Restriction, discussed in CEQR Manual Section 560, would be needed?

And be it further

RESOLVED that the DGEIS should include what additional measures are necessary to ensure that future clean up action would not be needed. As an example, the recent announcement on August 15, 2002 of New York State Department of Environmental Conservation (DEC) Commissioner Erin M. Crotty of an agreement with Consolidated Edison Company of New York, Inc. for the company to investigate and, if necessary, clean up 45 former manufactured gas plant (MGP) and gas storage holder sites in the Bronx, Queens, New York and Westchester counties. Five locations have been identified in Community Board Six area; and be it further

RESOLVED, that DGEIS should explain the inconsistency of hazardous materials impacts stated in Section 10 (Hazardous Material), Appendix B and Section 19, F (Adaptive Waterside Reuse Alternative) and report accurately and scientifically the probable nature and degree of environmental contamination of Waterside I and Waterside II.

DRAFT

PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

September 2002

INFRASTRUCTURE-ENERGY (Section 11)**MAGNETIC FIELD MEASUREMENT ASSESSMENT FOR EAST 40TH STREET
SUBSTATION (DGEIS Appendix C)**

WHEREAS, one of the Consolidated Edison Company of New York, Inc. properties that is being developed is located at 685 First Avenue, adjacent to an electric power substation on 40th Street. The property site is located the east side of First Avenue between East 39th Street and 40th Street. Con Edison would retain a 48 foot-10 inch easement along the eastern portion of the property (between the substation and the parking lot) for underground electric feeder routing and access to the substation. In addition, Con Edison would retain a 10-foot clearance above the substation for maintenance and access to its substation equipment. The developer could choose to cantilever portions of its high rise apartment building over the easement at an elevation of 83 feet; and

WHEREAS, electromagnetic fields measurements were performed, by Eneritech Consultants, at the property site. Reads were taken at 10-feet and 83-feet in height along the property/easement boundary above the eastern substation wall; and

WHEREAS, in recent years, concerns have been raised about the biological effects of exposure of electromagnetic fields at extremely low frequencies, particularly those associated with the distribution and utilization of electrical power; and

WHEREAS, even though the DGEIS states that "there is not enough relevant scientific data to establish whether common exposure to power-frequency fields should be considered a health hazard", however, after examination of relevant research reports published during the last ten years, Institute of Electrical and Electronics Engineers (IEEE) & Engineering in Medicine and Biology Society (EMBS) Committee on Man and Radiation (COMAR), in its Technical Information Statement on Possible Health Hazards From Exposure to Power-Frequency Electric and Magnetic Fields (dated June 10, 1999), concludes that it is highly unlikely that health problems can be associated with average 24-hour field exposure to power frequency magnetic fields of less than 1 μ T (Tesla) or (10 mG). Good laboratory evidence shows that magnetic fields 100 to 10,000 times higher than this level can induce a variety of biological effects; and

WHEREAS, the strength of the magnetic fields depends on the current (higher currents create higher magnetic fields) and since, current is associated with power, therefore, the more power generated, the stronger magnetic fields created; and

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WHEREAS, electromagnetic fields measurements were performed on August 13, 2001, by Eneritech Consultants using an EMIDEX II Magnetic Field Digital Exposure Meter with the following reading from Table 2 in section 4.3 MEASUREMENT RESULTS, page 7 from Draft Generic Environmental Impact Statement:

| East 40 th Street Substation | - | Magnetic Field Range (mG) at 1-Meter Height |
|-----------------------------------------|---|---------------------------------------------|
| Inside Redevelopment Property | - | 1.0 – 15.7 mG |
| Along Easement Boundary | - | 2.2 – 15.7 mG |
| Inside Easement Area | - | 2.2 – 34.7 mG |

The time that this measurement on August 31, 2001 was taken is between 7:14PM and 7:16PM as indicated in section 4.3, Figure 10 page 15; and

WHEREAS, the electromagnetic fields measurements performed on August 13, 2001 at 7:14PM were not during peak substation loading operation, which is about 2:00PM in addition being the start of the Labor Day week end when the load on the 40th street Substation would be much lower than a normal working day; and

WHEREAS, electromagnetic field levels could increase proportionately for a summer independent peak loading condition by about 22%. Therefore, the average area magnetic field level inside the redevelopment property could increase as follows:

| East 40 th Street Substation | - | Magnetic Field Range (mG) at 1-Meter Height |
|-----------------------------------------|---|---------------------------------------------|
| Inside Redevelopment Property | - | 1.0 – 15.7 could increase to 1.2 – 19.2 mG |
| Along Easement Boundary | - | 2.2 – 15.7 could increase to 2.7 – 19.2 mG |
| Inside Easement Area | - | 2.2 – 34.7 could increase to 2.7 – 42.3 mG |

These measurements do not include possible load increases due to the Proposed Action; and

WHEREAS: according to Table 11.42 (Energy Consumption Maxtrix) on page 11-34 in Infrastructure, Solid Waste, and Energy section peak load could under 2011 build out year Mix-use Proposed Action could add 43 MW to the existing load on the East 40th Street Substation; and

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WHEREAS, the Proposed Action under 2011 build out year for Mixed-use development could increase the electro-magnetic field by as much as 21.5%. Therefore electro-magnetic fields could be increased as follows:

| East 40 th Street Substation | - | Magnetic Field Range (mG) at 1-Meter Height |
|-----------------------------------------|---|----------------------------------------------|
| Inside Redevelopment Property | - | 1.2 – 19.2 could increase to 1.45 – 23.32mG |
| Along Easement Boundary | - | 2.7– 19.2 could increase to 3.28 – 23.32 mG |
| Inside Easement Area | - | 2.7 – 42.3 could increase to 3.28 – 51.39 mG |

The above percentage is based on the 21.5 percentage increase in power during peak time according to Table 4 in section 4.4 SUBSTATION LOAD VARIATION at 2:30PM at which time Load Bank 1 is 199.8 MW; and

WHEREAS, a number of governmental and professional organizations have developed exposure guidelines of electro-magnetic fields, the most generally relevant are the following:

1. UK National Radiation Protection Board (NRPB), which has guidelines for general public and occupational exposure of magnetic field of 13.3 G.
2. International Commission on Non-Ionizing Radiation Protection (ICNIRP), which has guidelines for exposure to magnetic field for the general public .84 G and for occupational workers, of 4.2 G.
3. American Conference of Governmental Industrial Hygienists (ACGIH) had a guideline for occupational exposure of magnetic field of 10 G.
4. However, a more recent guideline has been put forward by IEEE EMBS Committee on Man and Radiation that put the limit of an average of 24-hours field exposure to less than the 1 μ T (10 mG); now therefore, be it

RESOLVED, that the electromagnetic fields measurements that was performed on August 13, 2001 in DGEIS should have been a reading over a 24 hour period, giving a range and medium of electromagnetic fields readings, of an average working day; be it further

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RESOLVED, the Public Service Commission should require that any Proposed Action in the DGEIS should have development far enough away from any electromagnetic field exposure as a policy of prudent avoidance as proposed by Granger Morgan, head of the department of engineering and public policy at Carnegie Mellon University (this policy of prudent avoidance has gained wide acceptance from the Science and Health communities); and be it further

RESOLVED, that the DGEIS should err on the side of being conservative in its analyses and minimizing impacts to the people in the immediate vicinity (especially any residents on the Disposition Parcel); and be it further

RESOLVED, that a 24 hour period, giving a range and medium of electromagnetic fields measurements report for the Kips Bay Substation located between 37th and 36th streets just across the 616 First Avenue one of the Disposition Parcels should be included in the DGEIS.

RESOLUTION: Community Board 6 (M), Transportation Committee's Sections, 12 (Traffic and Parking) and 13 (Transit and Pedestrians) Draft Generic Environmental Impact Statement (DGEIS). Page 1 of 2

Whereas traffic, parking, public and private transportation and pedestrian movement are major components of the urban impacts of a major planned community development, and

Whereas, CB6 Transportation Committee has reviewed the relevant portions of the Draft Generic Environmental Impact Statement (DGEIS) with regard to parking, pedestrian, traffic and (public and private) transportation requirements and the impacts of, and on, the development site, the immediate neighborhood, the broader adjacent community, and public transit serving the impact(ed) area(s), now

therefore be it

Resolved, parking is a critical factor in the decision of a mode for a trip to a location, fewer parking places may be more in keeping with the public policy goal of reducing private car use in Manhattan, and it may be that the DGEIS has underestimated the trips generated, and, perhaps, the surest way to reduce the traffic and transportation impacts is to reduce the size of the development, and

be it further

Resolved, parking should be held to minimum number of spaces possible, the DGEIS should evaluate the parking with a view that in no circumstance should accessory parking exceed 20 percent of the number of apartments and there no transient parking, and

be it further

Resolved, the DGEIS should be oriented toward pedestrian use and the impact of new pedestrian activity, and (postulated) increases of the size in the DGEIS are dismissed as not being "typically noticeable" (13-8), and

be it further

Resolved, some intersections are recognized in the DGEIS, with the advent of the Long Island Railroad East Side Access program, as needing remediation, and this should include an examination of First Avenue underpass(s) at suitable location(s), and

be it further

Resolved, given the highly interdependent nature of traffic movement in and around the portals of the Queens-Midtown Tunnel, the development of large scale buildings in the immediate neighborhood, traffic study, and perhaps the State Environmental Quality Review Area (SEQRA), appears to be too small and the DGEIS is too limited, and

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be it further

Resolved, traffic in the Primary Study Area (Third Avenue to and including the Franklin D. Roosevelt Drive and 34th and 42nd Streets) found a substantial number of intersections which, at various times, have unsatisfactory traffic conditions, mitigations offered were changes to signal phasing and timing ("tweaking"), parking rules changes (removing some parking to gain a lane), channelization, pavement marking and signage modification and strict enforcement of posted traffic and parking rules, no substantial remediation was offered, and

and be it further

Resolved, several substantial apartment developments in the same area offer the same "tweaking" mitigations, the question for the DGEIS arises: At what point do these adjustments begin to work at cross purposes with each other? and

and be it further

Resolved, one omitted area of review would be out of traffic lane loading and unloading for cars and enclosed (internal) locations for delivery (i.e. moving vans), service and maintenance vehicles, and

and be it further

Resolved, none of these steps has been implemented by NYC Department of Transportation (DoT) to address the existing unsatisfactory (rushhour) traffic, what is the likelihood of these, or any steps out of the developer's control, being acted on, and what of the maintenance of effort required in the out years?, and

and be it further

Resolved, public and private buses offer the most immediate practical alternative to cars, primary attention was paid to east - west bus movement (the M42 and M104 especially) but insufficient recognition was given to the north-south M-15 (a.m. south in particular) trips likely to be generated, and the destination of-start-of-workday including the Financial District, until the completion of the Second Avenue subway, is decidedly undervalued in the DGEIS, and

and be it further

Resolved, current plans are for New York City Transit (NYCT) to substitute higher capacity (articulated) buses at a ratio of four (4) in replacement for five (5) of the present RTS buses, the DGEIS analyze a substitution ratio of 1 "artic" for 1 RTS on the M15, and

be it further

Resolved that the DGEIS be revisited to address the issues raised on the issues of Traffic, Parking, Transit and Pedestrian mobility within Community Board 6, Manhattan, with regard to the sale of 616, 685, 700 and 708 First Avenue by Con Ed to FSM East River Associates Transportation.

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PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

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AIR QUALITY (DGEIS Section 14)

WHEREAS, Con Edison Company seeks the consent of the New York State Public Service Commission pursuant to Public Service Law section 70 to sell four parcels of property to FSM East River Associates LLC. The parcels are located along First Avenue between East 35th Street to East 41st Street in midtown Manhattan. The specific addresses are 616 First Avenue, 685 First Avenue, 700 First Avenue, and 708 First Avenue. The third parcel, 700 First Avenue, is the site of the Waterside Generating Station; and

WHEREAS, under the State Environmental Quality Review Act (SEQRA) Environmental Conservation Law, Article 8, the "lead agency," New York State Public Service Commission as declared on May 10, 2001 is responsible for conducting the environmental review of different scenarios of development of the Con Edison sites; and

WHEREAS, on June 18, 2002, issued the long awaited Draft Generic Environmental Impact Statement by Consolidated Edison Company of New York, Inc. and FSM East River Associates LLC as Joint Petitioners; and

WHEREAS, SEQRA requires the lead agency to take a "hard look" at the environmental impacts of a proposed action and, to the maximum extent practical, avoid or mitigate potentially significant adverse impacts on the environment, consistent with social, economic, and other essential considerations; and

WHEREAS, Buckhurst Fish & Jacquement, Inc. has reviewed the Draft Generic Environmental Impact Statement on behalf of The East Midtown Coalition for Sensible Development which is composed of many community associations around the Disposition Parcels; and

WHEREAS, Air Quality is largely a function of vehicular traffic and Buckhurst Fish & Jacquement, Inc. has found numerous and troubling inconsistencies in the Draft Generic Environmental Impact Statement, which understate the magnitude of vehicular traffic increases during AM, Midday and PM peak hours under the "Mixed-Use" Proposed Action; and

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WHEREAS, the New York City Environmental Quality Review (CEQA) Manual recommends for the Traffic and Parking analysis an annual growth rate for Manhattan of 0.5 percent, which is in addition to increases of traffic as a result of the developer's Proposed Action; and

WHEREAS, the Draft Generic Environmental Impact Statement states that as a result of the Proposed Action in year 2011 the Residential Program or Mixed-Use Program would generate an increase in traffic volumes of 5 to 6 percent at midday and PM peak hours; and

WHEREAS, the CEQR Manual recommended annual growth rate of traffic of 0.5 percent plus the increase for the Residential or Mixed-Use Program, would increase the total traffic volume by about 11 percent in 2011; and

WHEREAS, according to the CEQR Manual, because approximately 80 to 90 percent of CO emissions are from motor vehicles, and elevated concentrations of CO are usually limited to locations near congested intersection of CO are usually limited to locations near congested intersections and along heavily traveled and congested roadways "CO concentrations must be predicated on a localized or microscale basis"; and

WHEREAS, the Draft Generic Environmental Impact Statement contained microscale analyses of the following intersections:

42nd Street and Third Avenue
42nd Street and Second Avenue
42nd Street and First Avenue
40th Street and First Avenue
34th Street and First Avenue; and

WHEREAS, no microscale analyses were undertaken for the following intersections and roadways, which are heavily traveled and congested during AM, Midday and PM peak hours:

36th Street between Second and Third Avenues
Second Avenue between 35th and 41st Streets
37th Street between First and Second Avenues; and

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WHEREAS, the National and New York State Ambient Air Quality Standards in Table 3Q-1 of the CEQR Manual and Table 14-1 of the DGEIS allow a maximum concentration of Carbon Monoxide (CO) 9 parts per million for eight hours; and

WHEREAS, based on an 11 percent (which includes natural growth) increase in traffic volume, Future (2011) Maximum Predicted 8-Hour Average Carbon Monoxide Concentration could increase from between 4.7 and 6.7 parts per million for the Residential alternative to between 4.7 and 7.7 parts per million, for Mixed-Use alternative the Carbon Monoxide Concentration could increase from between 4.8 and 6.7 parts per million to between 5.0 and 7.7 parts per million and for Mixed-Use with Office on 708 First Avenue alternative the Carbon Monoxide Concentration could increase from between 4.7 and 6.7 parts per million to between 4.7 and 7.7 parts per million as stated on Table 14-11 of the Draft Generic Environmental Impact Statement; and

WHEREAS, since traffic mitigation measures and the traffic increases conclusions stated in the Draft Generic Environmental Impact Statement have been questioned in the Buckhurst Fish & Jacquement, Inc review, and there are serious concerns that the Future (2011) Maximum Predicted 8-Hour Average Carbon Monoxide Concentration stated on Table 14-11 of the Draft Generic Environmental Impact Statement could be in excess of those stated; and

WHEREAS, since traffic mitigation measures and the traffic increases conclusions stated in the Draft Generic Environmental Impact Statement have been questioned in the Buckhurst Fish & Jacquement, Inc review, the Future (2011) Maximum Predicted 8-Hour Average Carbon Monoxide Concentration stated with mitigation conclusions on Tables 18-14, 18-15 and 18-16 of the Draft Generic Environmental Impact Statement (DGEIS) may not be valid for consideration by the New York State Public Service Commission when they review this DGEIS; and

WHEREAS, the Draft Generic Environmental Impact Statement fails to explain how pedestrian mitigations described in Table 18-10 can be accomplished. Therefore, these mitigation measures should not be considered by the New York State Public Service Commission when they review this DGEIS; and

PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

WHEREAS, the Draft Generic Environmental Impact Statement page 14-26, does not explain how locating the HVAC systems of development at 708 First Avenue and Waterside Disposition Parcels on the east towers would have no impact on the air quality of the development at 685 First Avenue, although it notes that since final designs of buildings and their mechanical systems is not yet available, potential for impacts cannot be ruled out. The Final Generic Environmental Impact Statement (FGEIS) should explain, in sufficient detail to make it clear to the reader, the potential for impacts and the mitigation measures that would be utilized to address such impacts; now

Therefore, be it

RESOLVED, that the Draft Generic Environmental Impact Statement should include how traffic mitigation measures could be accomplished, that could reduce vehicular source Carbon Monoxide Concentration, which the developer has no control of, such as:

Stricter enforcement of posted traffic and parking regulation
Modifying of traffic timing signal
Closer coordination of traffic agents
Pavements markings and signage modifications
Channelization improvements; and be it further

RESOLVED, since one study conducted by Buckhurst Fish & Jacquement, Inc. suggests that the worst-case scenario contained in the Draft Generic Environmental Impact Statement (of a high development density of FAR of 12, especially if it includes 39th and 40th streets as part of its FAR of 12 calculation) cannot be adequately mitigated in terms of traffic congestion which would cause high degree of Carbon Monoxide Concentration; and be it further

RESOLVED that, because our community can not sustain environmentally sustain such high density development in terms of traffic and air quality impacts on its residents; and be it further

RESOLVED that the Public Service Commission should take a "hard look" at the environmental impacts for our community in terms of Air Quality impacts of the Proposed Action and consider smaller density development of the Disposition Parcels as a condition of the sale of the Con Edison properties.

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PUBLIC SAFETY, ENVIRONMENT AND HUMAN RIGHTS COMMITTEE

September 2002

NOISE (DGEIS Section 15)

WHEREAS, there is great concern that individuals could be mentally and physiologically affected by traffic noise; and

WHEREAS, laboratory studies have found that noise can induce aggressive behavior in individuals; and

WHEREAS, most traffic noise levels may not cause hearing loss but can cause stress-related illnesses, disrupt sleep, and interrupt individual activities requiring concentration; and

WHEREAS, since the human ear is more sensitive to high frequencies and middle-frequency than low tones, many agencies use A-weighted decibels dBA as a unit of noise measurement. The "A" indicates that the sound has been filtered to reduce the strength of very low and very high frequency sounds, much as the human ear perceives should; and

WHEREAS, generally, in human sound perception is such that a change of 3 dBA or less is barely noticeable, a change in 5 dBA is clearly noticeable, and a change in 10 dBA is perceived as a doubling or halving of sound level; and

WHEREAS, the U. S. Environmental Protection Agency (EPA) criterion regarding hearing conservation states that in order to protect the entire population against hearing loss, the average sound level should not be greater than 70 dBA during a 24-hour day. Equivalently, it should not be greater than 75 dBA for an 8-hour working day, provided that for the rest of the day the level is kept considerably below that figure; and

WHEREAS, the EPA also address the issues of annoyance and interference with individual activities by setting limits to the average outdoors noise level should be not greater than 55 dBA in the daytime and 45 dBA at night. Indoors, the recommended limits are 45 dBA in the daytime and 35 dBA at night; and

WHEREAS, a far stricter criterion comes from the International Standards Organization (IOS), which states hearing loss has occurred when the auditory threshold rises only 5 dB, instead of 25 dB; and

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WHEREAS, the CEQR Technical Manual section 211 (Vehicular Traffic Noise) states that, "if a proposed action would generate or reroute vehicular traffic, a noise assessment may be appropriate. Additionally, if the action would be located near a heavily trafficked thoroughfare, noise assessment may be appropriate; and

WHEREAS, the CEQR Technical Manual section 321.1 (Vehicular Traffic Sources) further states that "[t]he study area for potential noise impacts from vehicular sources includes the locations of receptors along traffic routes to and from the site, along which project vehicular trips would be assigned, and the proposed sites itself, if a receptor is proposed to be located there. Of particular importance are routes where traffic levels without the proposed actions would be light and made up of lighter vehicles, and where the proposed action would result in a significant number of new trips. Typically, the selection of sensitive noise receptors for analysis goes hand in hand with the traffic and transportation trip generation and assignment process. Once the vehicular trips have been assigned to roadway network, the potential locations where significant noise impacts could occur can be identified. Typically, this is done by driving the routes to and from the site to identify noise receptors along the routes"; and

WHEREAS, the CEQR Technical Manual section 123.1 (Sound Weighting) permit the use of L_{eq} as the most widely recognized as the descriptor of choice for most environmental noise assessments. L_{eq} is the continuous equivalent sound level, defined as the single sound pressure level (SPL) that, if constant over the stated measured period; and

WHEREAS, the Draft Generic Environmental Impact Statement in section 15.F (Selection of Noise Receptor Locations) on page 15-8, selected ten locations which are located adjacent to the Disposition Parcels and are location that would have maximum noise impact from program-generated traffic; and

WHEREAS, since no noise measurements were conducted at heavily trafficked roadway along the routs from the Disposition Parcels such as the following:

36th Street between Second and Third Avenues
Second Avenue between 35th and 42nd Streets
37th Street between First and Third Avenues
34th Street between FDR Drive and Third Avenue

The Draft Generic Environmental Impact Statement conclusion that no significant impacts from increased traffic may not be valid for consideration by the New York State Public Service Commission when they review this DGEIS; and

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WHEREAS, Buckhurst Fish & Jacquement, Inc. has reviewed the Draft Generic Environmental Impact Statement on behalf of Community Board Six and East Midtown Coalition for Sensible Development; and

WHEREAS, Buckhurst Fish & Jacquement, Inc. has found numerous and troubling inconsistencies in the Draft Generic Environmental Impact Statement understating the magnitudes of vehicular traffic increases during AM, Midday and PM peak hours under "Mixed-Use" alternative of development, which will be addressed in further detail in subsequent Resolutions; and

WHEREAS, CEQR Technical Manual recommends for the Traffic and Parking analysis an annual growth rate for Manhattan of .5 percent, which is in addition to that increases of traffic as a result Proposed Action of the developer; and

WHEREAS, based on an 11 percent (which includes background growth) increase in traffic volume, the future noise level change in the 2011 Mix-Use with Office on 708 First Avenue could double the rate change as indicated in Section H (Probable impacts of the Proposed Action), Table 15-10, page 15-13. Therefore, L_{eq} reading could be as high as 83.8 instead of 82.2, stated the Table 15-10 for location 9 during Mid-day hours. This noise level represents an increase of 3.2dBA. Therefore, such calculations in Table 15-8, 15-9 and 15-10 Statement may not be valid for consideration by the New York State Public Service Commission when they review this Draft Generic Environmental Impact Statement DGEIS

WHEREAS, in the DGEIS Appendix F (NOISE TECHNICAL ANALYSES) for locations 8 (East 38th Street between FDR and First Avenue) and location 10 (East 41st Street between FDR Drive and First Avenue) the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) was used for noise calculation. As part of such calculation the following assumptions were made:

1 Auto = 32.3 dBA
1 Mid. Truck = 43.5 dBA
1 Bus = 44.9 dBA
1 Heavy Truck = 49 dBA
speed = 25 mph
distance away from roadway = 30 feet; and

WHEREAS, the CEQR Technical Manual recommends for vehicular speeds of below 25 mph, the TNM model should run to develop project-specific screening values; and

WHEREAS, that there is no justification for Draft Generic Environmental Impact Statement Appendix F (NOISE TECHNICAL ANALYSES) for locations 8 and 10 to assume that future vehicular speeds would be 25 mph; and

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WHEREAS, the DGIES states that seven of the ten locations (adjacent to the Disposition Parcels) studied, in accordance with CEQR Noise Exposure Guidelines, would be “marginally unacceptable.” The remainder of three studies locations would have noise level increases that be “clearly unacceptable”; and

WHEREAS, the DGIES recognizes the need to for mitigation at all ten of its study locations, in order to comply with the CEQR noise attenuation requirements. Such mitigation would require between 35 dBA to 40 dBA attenuations; and

WHEREAS, although, the DGIES states a number of mitigation techniques to achieve the require attenuations between 35 dBA to 40 dBA, no mitigation was suggested for existing building that could be subjected to such unacceptable noise; now

Therefore, be it

RESOLVED, that Draft Generic Environmental Impact Statement should include how such traffic mitigation measures, that could reduce vehicular congestion, a primary source of unacceptable noise levels, which the developer has no control of, such as:

- Stricter enforcement of posted traffic and parking regulation
- Modifying of traffic timing signal
- Closer coordination of traffic agents
- Pavements markings and signage modifications
- Channelization improvement; and be it further

RESOLVED, since one study, conducted by Buckhurst Fish & Jacquement, Inc, suggests that the worst-case scenario contained in the Draft Generic Environmental Impact Statement (of a high development density of FAR of 12, especially if it includes 39th and 40th streets as part of its FAR of 12 calculation) cannot be adequately mitigated in terms of traffic congestion which would cause such unacceptable noise level; and be it further

RESOLVED, that our community can not sustain environmentally sustain such high density development in terms of NOISE IMPACTS of its people; and be it further

RESOLVED, that the Public Service Commission should take a “hard look” at the environmental impacts, in terms of Noise Pollution to our community, of the proposed action and, to consider smaller density development of the Disposition Parcels as a condition of the sale of the Con Edison properties.

Community Board Six, Manhattan,
The Transportation and
Parks, Landmarks, Recreation and Cultural Affairs Committees

Coastal Zone Management, Draft Generic Environmental Impact Statement,
616, 685, 700 & 708 First Av from Con Ed to FSM East River Associates
Page 1 of 2

Whereas, the Federal Coastal Zone Management Act of 1972 sets national standards for reviewing proposed coastline development so as to avoid deterioration and inappropriate use of the waterfront, and

Whereas, the New York State's Coastal Management Program is, assertedly, designed to balance economic development and preservation by promoting revitalization, water-dependent uses, protecting fish and wildlife, open spaces, scenic areas and public access while minimizing erosion, flood hazards and adverse changes to the ecology, and

Whereas, New York City is required to take the State goals in shoreline use decisions. The DGEIS says the program is administered by the (NYS) Department of State [accurate?] (16-1) and (NYC) Department of City Planning. (The State responsibility actually seems to be in the Department of Environmental Conservation (NYS/DEC)), and

Whereas, according to the DGEIS, the four parcels that comprise the disposition properties are not directly on the waterfront and are insulated from the shoreline by the Franklin D. Roosevelt Drive and associated roadways and no part of these sites have direct waterfront

Whereas, the property is in the NYC Coastal Zone Management Program (CZMP), in this instance, the Local Waterfront Revitalization Program (LWRP) and to the 1993 NYC Comprehensive Waterfront Plan and/or 1996 East River Bikeway and Esplanade Master Plan Report of the Economic Development Corporation. (CB6 the park/pedestrian/bikeway 5.5 mile Greenway (a/k/a Green Necklace or Greenbelt) in development, now therefore be it

Resolved, when Con Ed relinquishes its riverfront parking lot, 38th to 41st Streets, it will be possible to complete an interim esplanade and bikeway between 34th and 42nd Streets. The impending state replacement of the 34th Street viaduct and changes to the Franklin D. Roosevelt Drive, would make possible a deck or bridges spanning the road at 39th and 40th Streets, and so argues for their return to public ownership, an important subject to DGEIS review, and

be it further

Resolved, enhancement of significant historical and cultural site is included (OP23/NP10) and the DGEIS should address enhancement of the vista of the Secretariat Building from the south (708 First Avenue), and so should also be included in the DGEIS review, and

more

c.b.6: allothers.coptors.qbbatf * con ed site and transportation p.10

Coastal Zone Management, Draft Generic Environmental Impact Statement.
Proposed sale 616, 685, 700 & 708 First Av from Con Ed to FSM East
River Associates. Page 2 of 2

access and development "would not preclude waterborne transportation (ferry) uses in this area" and encourage commercial boating etc.) and this should be affirmatively evaluated as part of the DGEIS.

be it further

Resolved, existing and expanded ferry service at 34th Street, and possibly, eventually, at 42nd Street would serve as a transportation mitigation by helping to relieve the need for private passenger cars and would offer a viable alternative for those working in the vicinity of Wall Street and access to rail transit from Hunters Point, Queens. This option (mitigation) was not included in traffic or transit (Sections 12 and 13) or in Mitigations (Section 18). This omission from the DGEIS ought to be corrected, and

be it further

Resolved, acknowledging the site is located near water the DGEIS sees potential in expanded recreational fishing and that increased access be investigated, rather than seeking aggressive expansion of recreation to use "protect, maintain and increase the level and types of access to water-related recreation resources," and

be it further

Resolved, FSM, as part of its planning process allows that it will "investigate" but appears to see the "development of more than three acres of publicly accessible open space on the disposition parcels," as sufficient. Anything beyond that will depend on "future rezoning and other approvals that would be undertaken subsequent to the proposed action" (the sale). (See paragraph below.) and

be it further

Resolved,, In other words, there is no firm commitment to riverfront park or open space other than on the upland, First Avenue, frontage. It is the river which makes these parcels attractive, and a failure to press for park and recreational expansion would be unforgivable. In fact New York City Policy H calls for "ongoing maintenance of all waterfront parks and beaches to promote full use..." While the planned park is not yet fully developed at this location, the Glick Park (36th to 38th Streets) has been in place for a number of years and an aggressive commitment should be made to the full development of the Green Necklace, and in fact, takes a passive attitude toward the NYC New Waterfront Revitalization Policy call for "encourage non-industrial development that enlivens the waterfront and attracts the public." The DGEIS repeats the hedge language. (See paragraph above).

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4 September 2002

Alternatives – 6 FAR (DGEIS Section 19)

-- by Land Use Committee

The DGEIS offers several alternatives to the proposed set of actions. These include a no action alternative in which the PSC does not approve the disposition of the Con Edison Properties and a partial disposition alternative in which the PSC approves the disposition of the Con Edison properties except for the two blocks occupied by the two Waterside Generating Stations. More interestingly it includes two half size alternatives -- a 6 FAR residential alternative and a 6 FAR mixed use alternative -- and an Adaptive Waterside Reuse Alternative in which the buildings on the two blocks of the Waterside Generating Stations are reused rather than demolished.

The 6 FAR alternatives are a disappointment to the community. Although the community has not advocated that the project be half as large, it was hoping that the half size alternatives would explore how the project could reduce impacts if it were smaller. It was assumed that comparing 6 FAR alternatives with the 12 FAR proposals would provide an adequate bracket to interpolate the impacts of intermediately sized projects.

Unfortunately, the 6 FAR alternatives were contrived to maximize their impacts. Among the community they are described as "half as many buildings but just as tall." While not entirely accurate it is a reasonable characterization.

Consider some of the opportunities that the DGEIS did not take to explore how a smaller project might have less negative impacts and fit better in the community:

Community Facilities and Services:

Most services -- police, fire, public day care, hospitals, and libraries -- are found to not be impacted at either 6 or 12 FAR because it is assumed the service would be expanded to serve the development. In neither case does the DGEIS quantify the additional services.

On the other hand, a need for additional spaces for primary school students is identified and is quantified showing that half as many spaces are needed for the 6 FAR alternatives as for the 12 FAR proposals.

One might reasonably expect the other services -- and their incremental costs -- to also be proportional to the size of the project. Schools seem to be treated differently because the increased demand exceeds existing capacity and requires a capital expenditure rather than an operating expenditure.

Open Space and Recreational Facilities:

Here the DGEIS takes a truly perverse approach. It assumes that public open space is to be provided only if the development chooses to use the bonus provisions of the Zoning Resolution. It does not accept that public open space is to be provided to mitigate the consequences of changing the zoning from low density M districts which allow uses with small populations of workers to mid to high density R and C districts which allow uses with large populations of residents, workers, and visitors.

If one assumes that the portion of the site not occupied by buildings can be public open space, a half size alternative could either have half as many buildings, in which case there could be twice as much open space and half as many people, or there could be the same number of buildings but half as tall. In which case there would be the same amount of public open space but half as many people. In either case the half size alternative would provide a higher ratio of open space to population.

The DGEIS assumes that the 12 FAR proposals provide as much open space as is necessary to earn a 2 FAR bonus and that the 6 FAR alternatives provide no public open space. It therefore concludes that the 12 FAR proposals do not have a negative impact on open space but that the 6 FAR alternatives do. This simply is not the way it is done. The PSC would be misled if it accepted this premise.

Shadows:

The half size alternatives could easily have buildings short enough to avoid most of the shadow impacts and still have buildings with excellent light, air, and views. The 6 FAR alternatives in the DGEIS insist on keeping the buildings tall enough to cast shadows that cause impacts similar to the 12 FAR proposals.

Urban Design and Visual Resources:

An aspect of urban design is the size, shape, and scale of the buildings. The 6 FAR alternatives have fewer buildings than the 12 FAR proposals but they are almost as tall and are treated as free-standing towers. There is considerable variety of size, shape, and scale among the existing buildings in the area but there are very few free-standing towers and none so tall. The buildings in the DGEIS look like they are from another planet. Incredibly, the DGEIS finds that such buildings are consistent with the urban design of the area and do not constitute impacts.

Assuming, for the sake of discussion, that the DGEIS were to find that such buildings would have a significant negative impact on urban design, the half size alternative would be a vehicle for exploring the contrasting impacts of shorter buildings that maintain established street walls. Simply described, this would be a 6 FAR alternative in which the buildings are half as tall rather than half as many. Such a scheme could easily emulate the size, shape, and scale of neighboring buildings, maintain and extend established street walls, and remain below 400 feet in order to be differentially shorter than the Secretariat.

Neighborhood Character:

The DGEIS claims that because the 6 FAR alternatives would be less dense than the 12 FAR proposals and because there would be no bonused open space and therefore no public open space, the 6 FAR alternatives would be less in character with the neighborhood than the 12 FAR proposals. An alternative point of view is that the 6 FAR alternatives could be much more in keeping with the character of the neighborhood if they made less effort to emulate the impacts of the 12 FAR proposals.

Traffic and Parking:

The 6 FAR alternatives generate less than half as much traffic as the 12 FAR proposals but the traffic impacts almost as many locations and has the same number of unmitigated impacts.

On its face, it is counterintuitive for the impacts to be so similar with only half the increase in traffic. Could it be that the circulation system is already filled so close to capacity that almost any increase in traffic causes it to fail?

Air Quality:

The DGEIS finds that the 12 FAR proposals would have no unmitigatable impacts on the quality of the air. Consequently it also finds that the 6 FAR alternatives would also not result in any significant adverse impacts.

Air Quality for this kind of project is primarily a function of vehicular traffic. The 6 FAR alternatives would generate less than half as much traffic as the 12 FAR proposals and, depending on the parking assumptions, might do even better. Therefore, the quality of the air would be better with a smaller project and it would be useful for the DGEIS to disclose how much better.

Noise:

Traffic noise in the area, particularly on the FDR Drive and First Avenue, is already excessive. As a result the DGEIS finds only small increases in noise would be generated by either the 12 FAR proposals or the 6 FAR alternatives. Nevertheless, there would be increases and it might be useful for the DGEIS to disclose how much less the increases might be for a smaller project.

The purpose of the 6 FAR alternatives is not to argue that the proposed development should be limited to half its proposed size. The purpose is to explore how a somewhat smaller project might minimize its negative impacts and create a better environment for the entire community – those who are here now and those who will come in the future.

To achieve this purpose, the 6 FAR – or half size – alternatives need to explore ways of fitting better into the neighborhood. It is not helpful for them to try to try to achieve as many of the impacts of the proposed development as possible. Instead of half-as-many-buildings-just-as-tall the DGEIS should examine the same-number-of-buildings-half-as-tall.

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4 September 2002

Alternatives – Adaptive Waterside Reuse (DGEIS Section 19 F)

-- by Land Use Committee

The DGEIS offers several alternatives to the proposed set of actions. These include a no action alternative in which the PSC does not approve the disposition of the Con Edison Properties and a partial disposition alternative in which the PSC approves the disposition of the Con Edison properties except for the two blocks occupied by the two Waterside Generating Stations. More interestingly it includes two half size alternatives and an Adaptive Waterside Reuse Alternative in which the buildings on the two blocks of the Waterside Generating Stations are reused rather than demolished.

The Adaptive Waterside Reuse alternative is a disappointment. Instead of seriously and fairly exploring how the reuse of the buildings might benefit the project and the community in which it is to be built, the DGEIS seems to simply argue that it is too difficult, too expensive, and too constraining to retain the historic portions of Waterside 1 and 2.

Consider the following opportunities to discover possible benefits that the DGEIS has missed:

Land Use, Zoning, and Public Policy:

The DGEIS does not mention that the development of the Horizon, on the east side of First Avenue between 37 and 38 Streets, preserved several buildings on the block, including the historic but unlisted former brewery on First Avenue. This might be viewed as a public policy precedent for the adaptive reuse of Waterside.

Open Space and Recreational Facilities:

The proposed development has its major public open space on the western portion of the block occupied by Waterside 2, the northern, red brick, power station. Therefore, the DGEIS concludes that the Adaptive Reuse alternative would have less public open space – perhaps half as much – than the proposed development.

However, the northern third of Waterside 2 is a machinery hall that could become an interior public open space. It would be smaller than the proposed park but it would be useable all year round. Perhaps the adaptive reuse alternative's public open space could hold its own with that of the proposed development.

Urban Design and Visual Resources:

The zoning bulk controls for R10 and equivalent districts have been changed to produce buildings that are a tower on a base rather than a tower in a plaza. Although it was built under the earlier regulations, the Horizon appears similar to a tower on a base because it retained the former brewery along First Avenue.

The redevelopment of Waterside 1 could achieve a similar integration with its surroundings by using the façade of Waterside 1 as its base. As at 931 First Avenue, originally a public school, Waterside 1 might be demolished except for its façade, allowing the residential tower to rise on the footprint of the historic building.

The DGEIS notes that "the reuse of the buildings substantially interferes with the freedom to develop a site plan which offers an appropriate balance of building coverage with open space, with the opportunity to explore the full range of architectural and design solutions for the buildings to be developed, and with the creation of a physical and visual link between the upland and the East River waterfront." Sadly, the directions indicated by the diagrams in the DGEIS suggest that some constraints might be a good thing.

Neighborhood Character:

The DGEIS fails to discuss how retaining the historic portions of Waterside 1 and 2 would help keep the established built scale and reminders of the history of the neighborhood. Although the buildings are not listed landmarks, they are handsome, well-proportioned structures with much of their original materials and details intact. They, like the former brewery to the south, are reminders of the area's industrial past. Reusing them could provide an architectural and historical transition to the future development.

Hazardous Materials:

The historic buildings are currently scheduled to be demolished according to the contract between Con Ed and TRC in order to remove all hazardous materials from the site. The DGEIS states that if Waterside 1 and 2 were retained the remediation of the site would be more expensive and take longer.

For several reasons the additional money and time are ill defined:

- No drawings have been prepared for any of the ways in which the buildings might be reused. As a result, it is unknown how much of the buildings would be reused or how extensive the modifications of the retained portions would be.
- There is no exploration of how the reuse might be financed. For example, could the buildings qualify for historic investment tax credits?
- The amount of necessary remediation is unclear. Appendix B of the DGEIS seems to be saying that hazardous materials are relatively contained but Section 19F, discussing the reuse of the buildings, is rather more alarming.

There may be a premium for reusing the historic buildings but it may be justified.

Noise:

Traffic noise in the area, particularly along the FDR Drive and First Avenue, is excessively loud. Most locations are well above 70 to 75 dBA, "the level at which speech interference occurs outdoors." (CEQR Manual, page 3R-18) Suppose Waterside 2 were reused in a way that included an interior public open space. Being an enclosed space would mitigate the excessive noise levels.

The purpose of the adaptive reuse alternative is to explore whether the challenges of reusing the historic parts of the Waterside power plant might be justified by the results. Unfortunately, the DGEIS seems to see only the problems and none of the opportunities. It does not provide a balanced and objective look at the issue.

The Public Service Commission should require that a serious and fair analysis of the reuse of the historic parts of Waterside 1 and 2 be done before the buildings are demolished.