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SCOPE OF WORK FOR AN ENVIRONMENTAL IMPACT STATEMENT
770 ELEVENTH AVENUE MIXED-USE DEVELOPMENT REZONING

CEQR NO. 07DCP071M
ULURP NOS.
080008ZMM, N080009ZRM, 080010ZSM, 080011ZSM, 080012PCM

10 October 2007

A. INTRODUCTION

This draft scope of work outlines the issues to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the 770 Eleventh Avenue Mixed-use Development Rezoning ("the proposed action"). The proposed action includes several discretionary actions proposed by the applicant, Two Trees Management Corp.[1]: zoning map and zoning text amendments, Site Selection for a Public Facility, a special permit from the NYC City Planning Commission (CPC) pursuant to a general large-scale development, special permit from the NYC Board of Standards and Appeals (BSA), and approval of NY State Housing Finance Agency (HFA) financing under its 80/20 affordable housing program. These actions would facilitate a proposed approximately 1.1 million gross square foot (gsf) mixed-use development rising to a maximum of 32 stories, including two mechanical levels above the top residential story, plus two cellar levels on a 94,463 sf project site. It would include the following uses (all approximate): 900 dwelling units (DUs) (on floors 3 through 30), 16,000 gsf of retail, intended to be a food market (on ground floor and mezzanine above it); 31,000 gsf of health club space (on the third floor); 236,000 gsf of automobile sales, preparation, and repairs space (on the ground floor, mezzanine above it, and in two cellar levels); 28,000 gsf of NYPD Mounted Unit facility, including stable and related space (on the ground floor); and 225 accessory parking spaces (on the second floor). Twenty percent of the residential units, approximately 180 DUs, would be affordable housing units. The rezoning area is comprised of Block 1082, Lot 1, occupying a portion of the block bounded by W. 54th Street, Tenth Avenue, W. 53rd Street, and Eleventh Avenue in the Special Clinton District within Manhattan Community District 4. This document provides a description of the proposed action and the projected development scenario, and includes task categories for the technical areas to be analyzed in the EIS.

The EIS will be prepared in conformance with all applicable laws and regulations, including Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations, dated August 24, 1977, and will follow the guidelines of the *CEQR Technical Manual*. The EIS will contain:

- A description of the proposed action and its environmental setting.
- A statement of the environmental impacts of the proposed action, including its short-and long-term effects, and typical associated environmental effects.

[1] Two Trees Management Corp. is the applicant for all actions except the Site Selection which is being sought by the New York City Police Department.

- An identification of any adverse environmental effects that cannot be avoided if the proposed action is implemented.
- A discussion of alternatives to the proposed action.
- A discussion of any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented.
- A description of mitigation measures proposed to minimize adverse environmental impacts.

The environmental analyses in the EIS will assume a development Build year of 2011 for the reasonable worst-case development scenario (RWCDS), and identify the cumulative impacts of other projects in areas affected by the proposed action. The New York City Department of City Planning (DCP), as lead agency, will coordinate the review of the proposed action among the involved and interested agencies and the public.

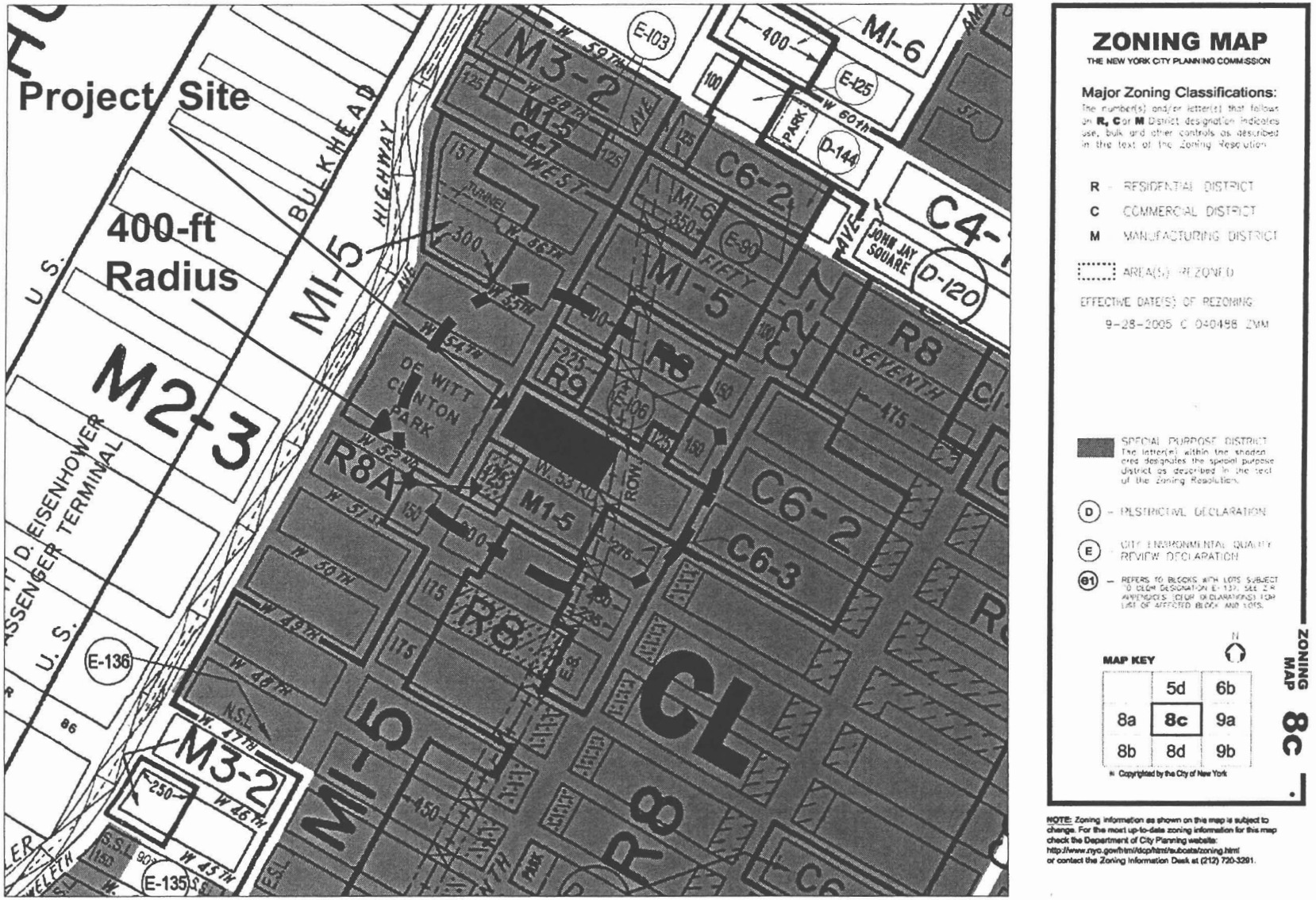
B. REQUIRED APPROVALS AND REVIEW PROCEDURES

The proposed action requires City Planning Commission (CPC) and City Council approvals through the Uniform Land Use Review Procedure (ULURP), and includes the following actions:

- A zoning map amendment to change the zoning of the project site from M1-5 (Special Clinton District) to C6-3X (Special Clinton District). Refer to Figure 1, Existing Zoning Map, and Figure 2, Proposed Zoning Map.
- Two zoning text amendments to the Zoning Resolution. One that would establish an inclusionary housing floor area bonus affecting the rezoning area that would increase permitted residential floor area ratio from 7.0 FAR to 9.0 FAR conditioned upon the provision of at least 20 percent of dwelling units as low-moderate income affordable housing units. A second text amendment would permit Automobile Sales, Preparation, and Repairs, Enclosed and Stables for Horses (both Use Group 16A) within the project site.
- A Site Selection to permit the siting of the proposed NYPD Mounted Unit facility containing stables and related space.
- A Special Permit granted by the CPC pursuant to ZR 74-743 pursuant to a General Large-Scale Development to modify height, setback, location of uses, and signage requirements.
- A Special Permit granted by the BSA pursuant to ZR 73-36 to permit a physical culture or health establishment on the project site, which would facilitate the siting of an approximately 31,000 gsf health club with a swimming pool in the third floor of the proposed development on the project site.

In addition, the proposed mixed-use development is seeking approval of NY State Housing Finance Agency (HFA) bond financing under its 80/20 affordable housing program.

All of these actions are subject to the State Environmental Quality Review (SEQR)/City Environmental Quality Review (CEQR) procedures.



ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

The number(s) and/or letter(s) that follows an **R, C** or **M** District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution

R – RESIDENTIAL DISTRICT

C – COMMERCIAL DISTRICT

M – MANUFACTURING DISTRICT

AREA(S) REZONED

EFFECTIVE DATE(S) OF REZONING

9-28-2005 C 040498 ZMM

SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution

(D) – DISTRICTAL DECLARATION

(E) – CITY ENVIRONMENTAL QUALITY REVIEW DECLARATION

(61) – REFERS TO BLOCKS WITH LOTS SUBJECT TO CEQR DESIGNATION E-137. SEE ZR APPENDIX I (CEQR DECLARATIONS) FOR LIST OF AFFECTED BLOCK AND LOTS.

MAP KEY

	5d	6b
8a	**8c**	9a
8b	8d	9b

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ZONING MAP **8c**

NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map check the Department of City Planning website: http://www.nyc.gov/html/dcp/html/subcats/zoning.html or contact the Zoning Information Desk at (212) 720-3291.

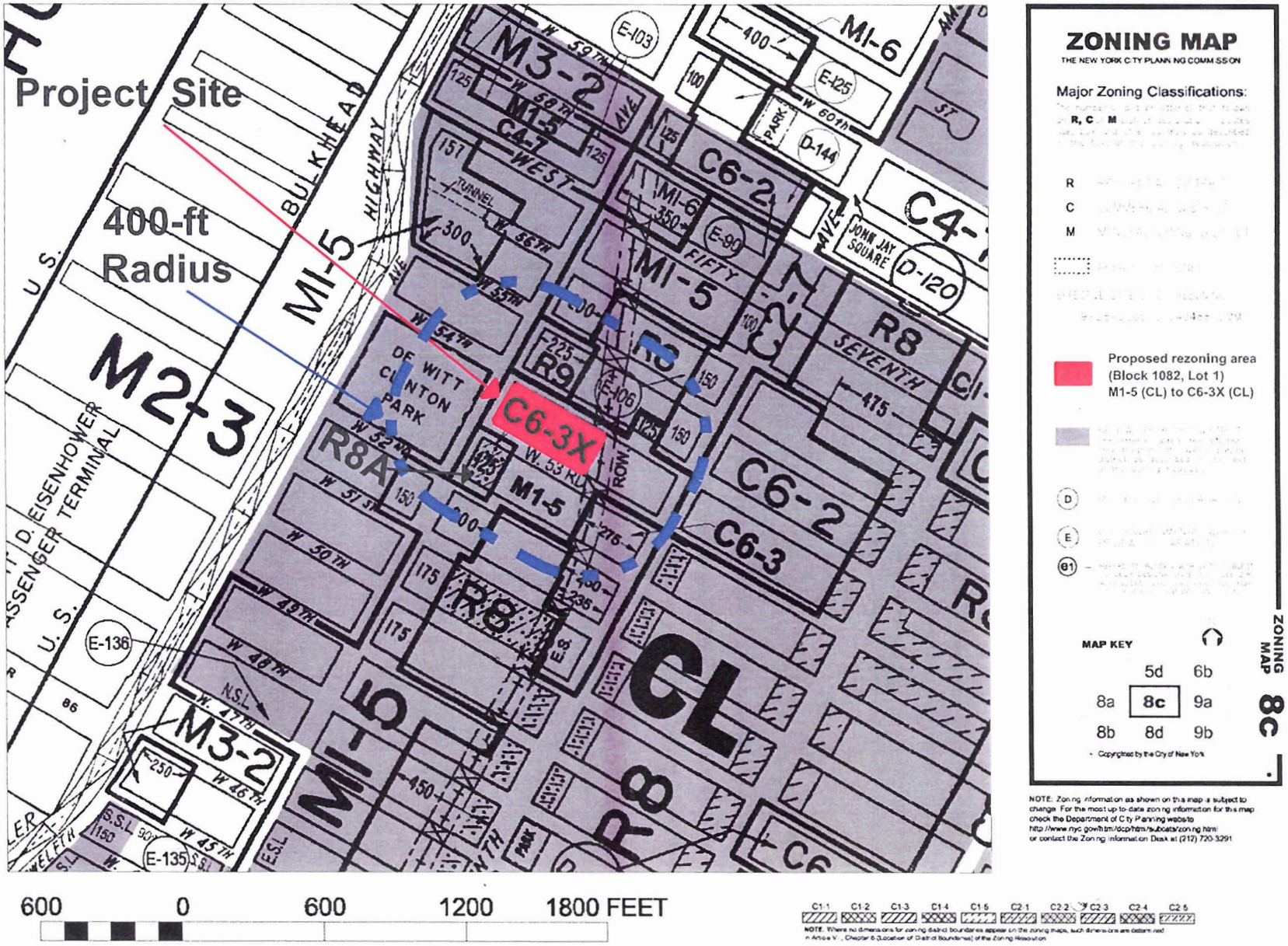
600 0 600 1200 1800 FEET

C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VI, Chapter 8 (Location of District Boundaries) of the Zoning Resolution.

770 Eleventh Avenue Mixed-use Development Rezoning

Figure 1
Existing Zoning


Project Site
400-ft Radius
M2-3
M1-5
M3-2
C6-3X
C6-2
C6-3
R8
R8A
R9
C4-7
C4-7 WEST
M1-6
C6-2A
C4-
CL
R8
R8A
R9
M1-5
M1-6
M3-2
C6-2
C6-3
C4-7
C4-7 WEST

An Environmental Assessment Statement (EAS) was filed on 30 April 2007. DCP, acting as lead agency, has determined that the proposed action would have the potential for significant adverse impacts. Therefore, a detailed assessment of likely effects in those areas of concern must be prepared and disclosed in an EIS. This EIS will be prepared in a coordinated review with HFA.

This draft scoping document sets forth the analyses and methodologies proposed for the EIS. The public, interested agencies, Manhattan Community Board 4, and elected officials are invited to comment on the scope, either in writing or orally, at a public scoping hearing to be held on 15 November 2007 at the New York City Department of City Planning, Spector Hall, 22 Reade Street, New York, NY 10007. Comments received during the draft scope's public hearing, and written comments received up to 10 days after the hearing will be considered and incorporated as appropriate into a final scope of work. The final scope of work will be used as a framework for preparing the Draft EIS (DEIS) for the proposed action.

Once the lead agency (DCP) is satisfied that the DEIS is complete, the document will be made available for public review and comment. The DEIS will accompany the ULURP application through the public hearings at the Community Board and City Planning Commission (CPC). A public hearing will be held on the DEIS in conjunction with the CPC hearing on the ULURP applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for 10 days after the public hearing to allow additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared that will incorporate all substantive comments made on the DEIS, along with any revisions to the technical analysis necessary to respond to those comments. The FEIS will then be used by the decision-makers to evaluate CEQR findings, which address project impacts and proposed mitigation measures, before deciding whether to approve the requested discretionary actions.

C. DESCRIPTION OF THE PROPOSED ACTION

The applicant is proposing a mixed-use development at 770 Eleventh Avenue, a 94,463 sf property bounded by Eleventh Avenue on the west, W. 54th Street on the north, and W. 53rd Street on the south. The project site, comprised of Block 1082, Lot 1, is located in the Clinton section of Manhattan Community District 4. The site is located within the boundary of the Clinton Urban Renewal Area and a portion of it is designated Site 6 of the URA. However, as the site was never acquired by the City, it is only subject to zoning.

In addition, the right-of-way of Amtrak's below-grade Empire Line traverses the northeastern edge of the project site and is covered by a platform. It operates pursuant to an easement. In general, development over the rail tunnel requires coordination from Amtrak's Engineering Department. The applicant is currently in negotiations with Amtrak to permit development within the sub-grade easement area and the consultation process will continue as project plans are finalized.

The following approvals are required for the proposed project: (1) a zoning map amendment; (2) zoning text amendments; (3) Site Selection of a Public Facility; (4) a special permit to be granted by the CPC; (5) a special permit to be granted by the BSA; and (6) approval of NY State Housing Finance Agency (HFA) financing under its 80/20 affordable housing program.

Proposed Zoning Map Amendment

The project site occupies the western portion of Block 1082, extending 470 feet, 4.25 inches from Eleventh Avenue towards Tenth Avenue. The proposed zoning map amendment would rezone the project site from M1-5 (Special Clinton District) to C6-3X (Special Clinton District). As such, residential uses which

currently are not permitted in the rezoning area would become as-of-right while manufacturing uses would no longer be permitted. It should be noted that although the project site is within the Special Clinton District, it is part of an "Excluded Area," in which most of the special district's regulations are not applicable. The residential district equivalent to a C6-3X district is R9X; however, as noted below, the proposed C6-3X district would be modified by related zoning text amendments. This information is summarized in Table 1.

Table 1, Proposed Zoning Map Amendment

PROJECT SITE/REZONING AREA	EXISTING ZONING	PROPOSED ZONING
Manhattan Block 1082, Lot 1	M1-5 ("Excluded Area" of Special Clinton District)	C6-3X ("Excluded Area" of Special Clinton District)

Note: refer to "Proposed Zoning Text Amendment" for discussion of proposed text changes affecting the project site that would modify the Special Clinton District text on the project site.

Proposed Zoning Text Amendments

There would be two zoning text amendments to the Zoning Resolution.

One amendment would establish an inclusionary housing floor area bonus affecting only the rezoning area that would increase permitted residential floor area ratio from 7.0 FAR to 9.0 FAR conditioned upon the provision of at least 20 percent of dwelling units as low-moderate housing units. This would be established pursuant to ZR Section 23-922, Inclusionary Housing Designated Areas, with a new map added to this section of the zoning resolution identifying the project site as an inclusionary housing designated area. Furthermore, an amendment to ZR 23-942, In Inclusionary Housing Designated Areas, would establish the 7.0 base FAR and the 9.0 maximum FAR for R9X districts or equivalents.

A second text amendment would permit Automobile Sales, Preparation, and Repairs, Enclosed, and Stable for Horses (both Use Group 16A), with accessory automobile parking, within the project site below the level of any floor occupied by DUs. This zoning text amendment would be made to ZR Section 96-80, Excluded Areas, and would apply only to C6-3X districts within the "Excluded Area" of the Special Clinton District which is bounded by W. 56th Street, Tenth Avenue, W. 50th Street, and Eleventh Avenue. It should be noted that there are currently no C6-3X districts within this "Excluded Area" nor are there proposals for any other C6-3X districts in said area apart from the zoning map amendment that is part of the proposed action.

Accordingly, both of these zoning text amendments would apply only to the proposed rezoning area, i.e., the project site.

The proposed zoning map and text changes are summarized in Table 2. Refer to EAS Appendix C, "Proposed Zoning Text Amendment."

Proposed CPC Special Permit

The proposed action includes a special permit from the CPC pursuant to ZR Section 74-743, General Large-Scale Development: Special Provisions for Bulk Modification. This would allow modification of height, setback, location of uses, and signage requirements.

Table 2, Comparison of Existing and Proposed Zoning, Manhattan Block 1082, Lot 1

	EXISTING	PROPOSED
	M1-5* (in "Excluded Area" of Special Clinton District)	**C6-3X** (in "Excluded Area" of Special Clinton District) with Zoning Text Amendments**
Maximum Floor Area Ratio		
Residential	N/A	7.00 base (to 9.00 with bonus)
Commercial	5.00	6.00
Manufacturing	5.00	N/A
Community Facility	6.50	9.0
Initial Setback Distance	20 feet [15 feet]	20 feet [15 feet]
Maximum Front Wall / Base Height	85 feet	***
Maximum Building Height	Sky exposure plane or tower regulations	***

[ ] denotes regulations for wide streets

* M1-5 community facility Use Group 4 only and manufacturing Use Group 17 only

** With zoning text amendments, Inclusionary Housing bonus would permit increased residential floor area up to an FAR of 9.0 and Use Group 16A, Automobile Sales, Preparations, and Repairs, Enclosed , and Stables for Horses would be permitted on the project site.

*** While sky exposure plane or tower regulations would apply under the proposed C6-3X zoning, the proposed action also includes a CPC special pursuant to a General Large-scale Development to modify height, setback, location of uses, and signage requirements.

Specifically, there are several proposed height and setback modifications to the standard C6-3X contextual zoning regulations. The eastern portions of the 340-foot tall building would exceed the maximum building height of 160 feet (along W. 53rd and W. 54th Streets). Along a portion of the Eleventh Avenue frontage, the minimum required 105-foot streetwall height (for a wide street) would not be provided as the northern portion of the building along the avenue would step up from a height of approximately 92 feet. Along W. 53rd and W. 54th Streets, for most of the building's width, it would have a streetwall height of approximately 42 feet, less than the minimum required 60-foot streetwall height (for narrow streets). Conversely, at the eastern end of the project site, the residential tower would exceed the maximum permitted streetwall height of 120 feet along W. 53rd and W. 54th Streets and would not provide the required setback, as the building would be approximately 310 feet tall along W. 54th Street and approximately 340 feet tall along W. 53rd Street. Refer to the "Purpose and Need" section below for a description of the rationale for these modifications. It should be noted that with these changes, all commercial uses would be located on floors below the lowest residential floor.

Regarding the proposed sign modifications, the project site is located across Eleventh Avenue from De Witt Clinton Park. As such, the more restrictive sign regulations of a C1 district apply to the Eleventh Avenue frontage. An increase in signage to what would otherwise be permitted in a C6-3 district, a maximum of 500 sf, on this arterial avenue would permit the proposed project to provide the driving public with necessary dealership location and directional signage. The modification would provide for a better site plan and vehicular circulation for the uses on the site.

As discussed below, under "Reasonable Worst Case Development Scenario," the applicant is committed to developing the proposed project pursuant to the restrictive declaration and will enter into a restrictive declaration that would bind it to the terms of the General Large-Scale Development Special Permit.

Proposed BSA Special Permit

The proposed BSA special permit is pursuant to ZR Section 73-36, Physical Culture or Health Establishments. Approval of the special permit by the BSA would facilitate the siting of a 31,000 gsf health club with a swimming pool located on the third floor of the development.

The applicant will file the BSA application for this action and will seek approval during the EIS review process. BSA's approval of the application will take into the account the analysis conducted through the EIS process.

Site Selection for Public Facility

The proposed NYPD Mounted Unit facility is subject to a Site Selection for Public Facility. The "fair share" analysis for this action will be included in the project's ULURP application.

HFA 80/20 Financing

The applicant plans to seek tax-exempt bond financing for the proposed project from HFA under its 80/20 affordable housing program. Along with the proposed zoning text amendment establishing the inclusionary housing bonus, this would facilitate the affordable housing component of the proposed development, involving the creation of approximately 180 low-moderate income DUs.

Table 3 provides a summary of the required approvals, agencies responsible for approval, applicant, and brief explanation of the action and what aspect of the proposed project it would facilitate.

Public Review

The proposed zoning map amendment, zoning text amendments, CPC special permit, and Site Selection for a Public Facility would require approval by the City Planning Commission and the City Council. The zoning map amendment, CPC special permit, and Site Selection actions are subject to ULURP while the zoning text amendments are not ULURP actions but are subject to a similar public review which will occur concurrently with the ULURP process for the proposed project. The proposed BSA special permit is subject to approval by the BSA. The proposed 80/20 financing requires approval by HFA, a state agency.

Proposed Program and Design

Together, these actions would facilitate construction of an approximately 1.1 million gsf mixed-use development rising to a maximum height of 32 stories, including two mechanical levels above the top residential story, plus two cellar levels on the 94,463 sf project site. The design of the proposed project capitalizes on the site's large through-block condition and its unobstructed views to De Witt Clinton Park, located west of the project site across the 100-foot wide Eleventh Avenue, and the Hudson River. In order to keep the project's mass away from the park and setback from the side streets, the proposed development presents a unique design. The overall massing slopes up and away from the park, starting at approximately 92 feet along Eleventh Avenue and climbing to approximately 340 feet at the midblock, near the approximately 457-foot tall AT&T Switching Center tower located immediately to the east of the project site

on Block 1082, Lot 25. The sloped roof line will create a series of stepped outdoor terraces with views to the water and exclusive apartment conditions on each floor. The building moves diagonally across the site, providing maximum light and air for both the apartment units and their neighbors along the narrow side streets.

Table 3, Summary of Proposed Actions

Action	Agency (1)	Applicant	Purpose/Need for Action
Zoning Map Amendment	CPC	TTMC	C6-3X district needed to permit residential use and food market larger than 10,000 sf; permit a 9.0 FAR development
Zoning Text Amendment (ZR 23-922, 23-942)	CPC	TTMC	Needed to facilitate provision of Inclusionary Housing, approximately 180 low-moderate income DUs (consistent with City's goal to increase affordable housing)
Zoning Text Amendment (ZR 96-80)	CPC	TTMC	Needed to facilitate proposed Automobile Sales, Preparation, and Repairs, Enclosed (providing needed dealership space in an area where these businesses are strategically concentrated), and Stable for Horses (providing a needed permanent facility for NYPD Mounted Unit)
CPC Special Permit	CPC	TTMC	Needed to permit modification of height and setback, location of uses, and signage requirements; to allow for better site plan providing light and air to neighboring buildings and park and concentrate bulk toward 457-foot tall windowless AT&T Tower; signage provides visibility for auto dealership, a use common along 11th Ave.
BSA Special Permit	BSA	TTMC	Needed to permit health club (physical culture establishment), a business that would serve area residents
Site Selection	CPC	NYPD	Needed to facilitate the NYPD Mounted Unit facility (providing a needed permanent facility for the NYPD Mounted Unit)
80/20 Tax exempt bond financing	HFA	TTMC	Needed to facilitate provision of Inclusionary Housing, approximately 180 low-moderate income DUs (consistent with City's goal to increase affordable housing)

Notes:
(1) Agency responsible for approval of action.
Abbreviations: BSA = Board of Standards and Appeals; CPC = City Planning Commission; HFA = Housing Finance Agency; NYPD = New York City Police Department; TTMC = Two Trees Management Corp.

The proposed development features a high two-story base fully covering the project site, providing a continuous streetwall apart from vehicle entrances and loading areas. The cellar levels would be occupied by non-residential uses associated with ground floor commercial uses. The base would support non-residential uses, residential lobbies, and residential amenity space. Rising from the base there would be tower structures forming an S-shaped pattern and containing residential units. Along Eleventh Avenue facing De Witt Clinton Park, the residential tower would step up from 7-stories on the north (W. 54th Street) to 10-

stories on the south (W. 53rd Street). On the eastern edge of the site adjacent to the 457-foot tall AT&T Switching Tower, the residential portion would step up from 29-stories on the north to 30 stories plus two mechanical levels on the south. Connecting these two sections would be a tower on a diagonal alignment relative to the street grid, stepping up from the west along W. 53rd Street to W. 54th Street on the east.

The portions of the base structure not covered by the residential towers would have a flat roof predominantly covered by garden terraces for use by building residents and skylights providing natural lighting for the residential lobbies.

Overall, the proposed mixed-use project would include approximately 900 DUs, of which 20 percent of the total, 180 DUs, would be affordable housing units and the remaining 720 DUs would be market rate units; approximately 16,000 gsf of retail intended to be a food market; approximately 236,000 gsf of automobile sales, preparation, and repairs (dealership) space; approximately 31,000 gsf of health club space; approximately 28,000 gsf of NYPD Mounted Unit Facility; and up to 225 accessory parking spaces. The residential units would be located on the third through thirtieth floors. The retail space is expected to be occupied by and is being designed for a food market on the ground floor and mezzanine above it. The auto dealership space would occupy 66,000 gsf of showroom and related space on the ground floor and mezzanine above it, along the Eleventh Avenue frontage. In addition, the dealership use would utilize approximately 170,000 gsf of space for vehicle storage in two below-grade cellar levels, which would be accessible from vehicular entrances on W. 53rd Street and W. 54th Street. The health club would be located on the third floor, but on a lower level than the residential units. The NYPD Mounted Unit facility would include horse stables, offices, and related facilities on the ground floor on the midblock portion of the site on W. 53rd Street. The accessory parking is expected to be located on the second floor. Additional information on these proposed uses is provided in the "Development Scenario" section below.

Until May 2007, the project site was occupied by a Verizon automotive service/vehicle storage facility and now is vacant. The applicant is proceeding with as-of-right demolition of site buildings and excavation during the second half of 2007. Construction of the proposed project would commence in 2008 following these site clearance activities, contingent upon approval of the proposed discretionary actions. The project would be constructed in a single phase over a 3-year period. As is the case with developments of this size, it is possible that temporary certificate(s) of occupancy could be issued for some sections of the building slightly prior to the issuance of the certificate of occupancy for the entire building.

Reasonable Worst Case Development Scenario

As discussed below, the applicant's proposed program and design is considered the RWCDS Build Scenario for the purposes of environmental review of the proposed action. For analysis purposes it is assumed that the development would include 180 DUs for low-income households.

Although the proposed zoning also would permit a new development with a maximum commercial FAR of 6.0, this scenario will not analyzed under the RWCDS Build Scenario in the EIS as it is considered unlikely to occur as a result of the proposed action. The applicant is committed to developing the proposed project described above and will enter into a restrictive declaration that would bind it to the General Large-Scale Development Special Permit. Similarly, the automobile dealership is part of the likely development scenario as opposed to additional residential use as the applicant is seeking the proposed text amendment related to it.

As for building design, the proposed building as described above will be analyzed as the RWCDS Build Scenario design. The design's stepped scaling and symmetry mitigates against substantial alteration. The

dimensions of the proposed building are defined by the terms of the proposed special permit and, as noted above, the applicant is willing to enter into a restrictive declaration binding it to the proposed design and program. Therefore, an analysis of the maximum sized building envelope, which under C6-3X would include a required streetwall and a maximum building height of 160 feet along narrow streets and 170 feet along wide streets, will not be provided for the proposed project.

Although the site could be developed as-of-right under the existing zoning with a maximum FAR of 5.0 for commercial or manufacturing uses or 6.5 for community facility uses, the analysis conservatively assumes that in the future without the proposed action the project site would remain vacant. This will serve as the baseline for comparing the effects of the future without and with the proposed action.

Project Purpose and Need

For many years, Verizon and its predecessors operated an automotive service/vehicle storage facility (Use Group 16) on the project site. However, Verizon is consolidating its operations at other locations and in May 2007 vacated the site, which it sold to the applicant in 2006. The proposed action is intended to provide opportunities for new residential and commercial development on a site which has become vacant and is located in an area that has been undergoing substantial commercial and residential redevelopment in the last several years, including both new market rate and affordable housing units.

The decline of the New York City industrial sector during the past three decades left many properties in this part of Manhattan vacant or underutilized. While the industrial sector has declined, residential demand has increased substantially and is reflected in increasing housing prices, sales volumes, and scarcity of available housing even as new units are added to the City's housing inventory. Given forecasts of continued long term population increases in the City, it is likely that demand for additional housing at various income levels will continue. In addition, with the increased residential development in the area as well as the proposed residential development on the project site, there is a need for residential-oriented neighborhood retail and services. At the same time, the immediate surrounding area contains a number of automobile dealerships and there continues to be demand for such space in the area.

Accordingly, the proposed project, with its mix of market rate and affordable housing units, automobile dealership, and food market uses, would help to address the need for these types of development in the local area and City as a whole. Also, the NYPD Mounted Unit requires a new facility as one of its existing facilities on Pier 76 will be converted to a new use as part of the ongoing development of Hudson River Park.

The proposed CPC special permit, pursuant to a General Large-Scale Development, is needed to provide a better site plan and a better relationship among the proposed development, adjacent streets, surrounding development, and adjacent open areas (particularly De Witt Clinton Park), than would be possible without such distribution and would thus benefit the occupants of the action-generated development, the neighborhood, and the City as a whole. The applicant believes the proposed design would be more appealing than a project developed pursuant to standard C6-3X regulations. Refer to Figure 3, the No-Build Site Plan.

This design takes maximum advantage of this large through block site, moving much of the bulk of the building to the middle of the site allowing maximum light and air to the surrounding side street properties. The design also provides an appropriate scaled streetwall facing DeWitt Clinton Park and places the tallest building elements adjacent to the 457-foot high blank AT&T tower facade. The mid-block diagonal portion of the building provides ample distance from the 39-story residential building across W. 54th Street and the proposed 16-story residential building across W. 53rd Street. Whereas a streetwall building would provide only 60 feet of separation from the neighboring residential buildings on W. 54th Street and W. 53rd Street,

the proposed design provides up to 170 feet on W. 54th Street and up to 160 feet on W. 53rd Street. This distribution of the floor area and location of open areas more accurately responds to the park, adjoining residential buildings and intrusive commercial tower than is possible by strictly adhering to the district regulations. The majority of the bulk has been placed adjacent to the windowless 457-foot tall AT&T tower masking it, to a great extent, from De Witt Clinton Park and providing more architecturally sensitive expression. The two story base provides an appropriate streetwall on the side streets and allows the light and air that the diagonal arrangement of the residential building above creates to reach the street.

Future No-Action Conditions (No-Build Scenario)

As noted above, Verizon has recently vacated the site and it is currently vacant and available for redevelopment. To facilitate future reuse of the project site, the applicant is proceeding with as-of-right demolition of site buildings and excavation during the second half of 2007.

Under as-of-right conditions with the site's existing M1-5 (Special Clinton District) zoning, light manufacturing and most commercial uses are as-of-right with a maximum permitted FAR of 5.0 and certain community facility uses are as-of-right with a maximum permitted FAR of 6.5. Although the site could be redeveloped with such uses, the analysis conservatively assumes that in the future without the proposed action there would be no new uses or buildings on the project site. This will serve as the baseline for comparing the effects of the future without and with the proposed action.

Nevertheless, as noted above, the applicant is conducting as-of-right demolition and excavation of the site and related to this will conduct sample borings and perform any necessary environmental remediation actions and follow requirements for special handling for disposal of demolished structures or excavated soil or debris. This work will occur as-of-right in the future with or without the proposed action, however, as the proposed project requires environmental review, the applicant will consult DEP regarding these activities (refer to "Hazardous Materials").

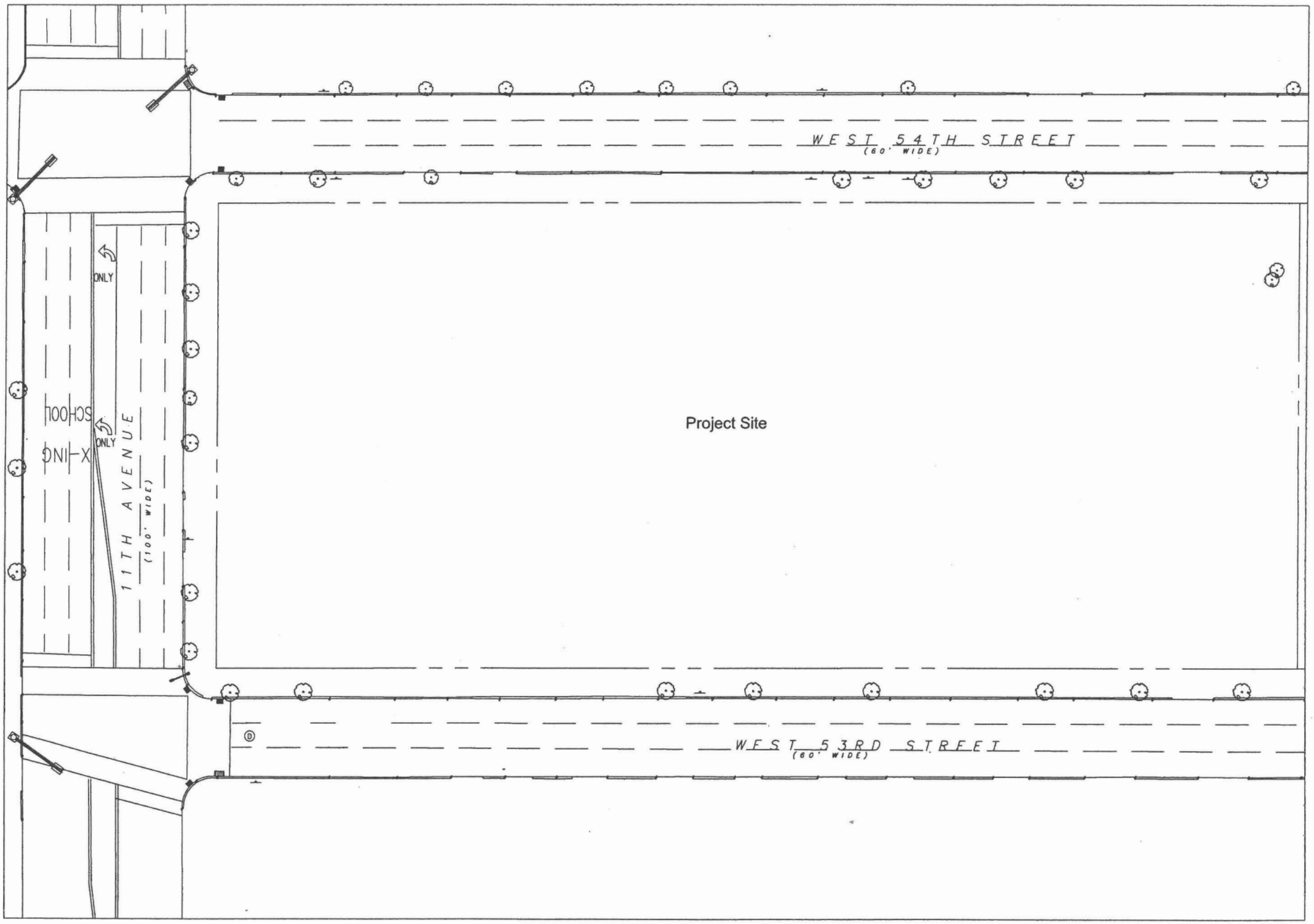
Future With-Action Conditions (Build Scenario)

Program

The proposed action is expected to result in the proposed development by the applicant. As noted above, the program for this development includes: approximately 900 DUs, of which approximately 180, 20 percent of the total, would be affordable housing units; approximately 16,000 gsf of retail, intended to be a food market; approximately 236,000 gsf of automobile sales, preparations, and repair space, including 66,000 gsf of above-grade showroom space and 170,000 gsf of below-grade vehicle storage space; 31,000 gsf of health club space, including a swimming pool; 28,000 gsf of NYPD Mounted Unit facility, including stables, offices, and related space; and up to 225 accessory parking spaces. This program is considered the Build Scenario for the proposed action as it represents a scale of density and scope of height and bulk that is comparable to a generic development scenario. The Build Scenario program is also summarized in Table 4. Information on the location of these proposed uses is provided below under RWCDS.

Reasonable Worst Case Development Scenario (RWCDS)

With the implementation of the Build Scenario occurring as a result of the proposed action, the No-Build Scenario projected to occur in the future without the proposed action would not occur. As the analysis



770 Eleventh Avenue Mixed-use Development Rezoning

Figure 3

Project Site No Action Conditions

assumes that the project site would remain vacant in the 2011 future without the proposed action, the proposed project will serve as the RWCDS. Using the future without the proposed action as a baseline, the analysis identifies the environmental effects of the proposed project for the purposes of making determinations of project impacts.

Table 4, Reasonable Worst Case Development Scenario/Proposed Project (1)

TYPE OF USE	EXISTING	NO-BUILD SCENARIO	BUILD SCENARIO
Residential,			
Market Rate DUs	-	-	720
Affordable Housing DUs	-	-	180
Total Residential DUs	-	-	900
Residential Area (zsf)	-	-	726,494
Retail (gsf) (2)	-	-	16,000
Automobile Dealership			
Above-grade Showroom Space (gsf)	-	-	66,000
Below-grade Storage Space (gsf)	-	-	170,000
Total Automobile Dealership (gsf)	-	-	236,000
Health Club (gsf)	-	-	31,000
NYPD Mounted Unit Stable Facility (gsf)	-	-	28,000
Accessory Parking Spaces (3)	-	-	225

(1) Note: Program numbers are approximate, refer to text for details.
(2) The Build Scenario Retail Space includes approximately 16,000 gsf of retail, intended to be a food market.
(3) The maximum permitted as-of-right accessory parking spaces would be provided. The number shown is indicative and would not be exceeded.

For analysis purposes, it is assumed that the 720 market rate DUs would have an average household size of 1.64, which is the average size for Manhattan Community District 4. This would result in approximately 1,181 residents of the market rate units. For the 180 affordable housing DUs, an average household size of 2.50 is assumed, a rate previously used in the *No. 7 Subway Extension - Hudson Yards Rezoning and Development Program FGEIS* (2004, CEQR #03DCP031M) and *Special West Chelsea District Rezoning and High Line Open Space FEIS* (2005, CEQR #03DCP069M). This would result in approximately 450 low-moderate income residents. In total, the proposed development would have approximately 1,631 residents.

In terms of building height, the maximum building height (including mechanical space at the top) for the proposed project would be approximately 340 feet under Build conditions. However, at the western edge of the site along Eleventh Avenue, the height of the building would be a maximum of approximately 120 feet, as the proposed project would concentrate building height and bulk toward the eastern end of the project site. Refer to Figure 4, Build Site Plan; Figure 5a, Annotated W. 53rd Street Section; Figure 5b, Annotated W. 54th Street Section; Figure 6, Ground Floor Plan; Figures 7a and 7b, Floor Plans; Figure 8, Illustrative Park View; and Figure 9, Illustrative W. 54th Street View.

As shown in these figures, the proposed residential units would be located on the third through thirtieth floors and would be accessed from midblock lobbies on both W. 53rd and W. 54th streets. The proposed automobile dealership would be located on the ground floor, mezzanine above it, and two below-grade cellar levels. Occupying the western portion of the ground level this use would have frontage along W. 54th Street, Eleventh Avenue, and W. 53rd Street and would be accessed via midblock driveways located on W. 53rd and W. 54th Streets. It also would be served by a midblock loading dock located on W. 53rd Street. The food market would be located at the northeastern portion of the site on the ground floor and a mezzanine above it and would be accessed from a midblock lobby on W. 54th Street; the NYPD Mounted Unit facility would be located near the southeastern corner of the site on the ground floor and would be accessed via an entrance and loading area on W. 53rd Street. The accessory parking garage would be located on the second floor and would be accessed via a driveway/ramp located near the southeastern corner of the site on W. 53rd Street.

Environmental Impact Statement

As the RWCDS associated with the proposed action would affect various areas of environmental concern and was found to have the potential for significant adverse impacts, pursuant to the EAS and Positive Declaration, an Environmental Impact Statement pursuant to CEQR will be prepared for the proposed action.

D. SCOPE OF WORK FOR AN EIS

The EIS will include chapters describing the proposed action, analyses of various areas of environmental concern, assess alternatives to the proposed action, and identify whether mitigation measures can be implemented to address significant adverse impacts associated with the proposed action. In the EAS the proposed action was found to not have the potential to result in significant adverse impacts related to certain CEQR technical areas and accordingly further analysis is not warranted in the EIS. These include Waterfront Revitalization Program, Natural Resources, and Energy.

TASK 1. PROJECT DESCRIPTION (INCLUDING PROJECTED DEVELOPMENT SCENARIO)

The first chapter of the EIS introduces the reader to the project and sets the context in which to assess impacts. The chapter contains a project identification (brief description and location of the project); the background and/or history of the project; a statement of the public purpose and need for the project; key planning considerations that have shaped the current proposal; a detailed description of the project; and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the proposed action and its impact, and gives the public and decision-makers a base from which to evaluate the project against both Build and No-Build scenarios.

The project description will present the planning background and rationale for the proposed rezoning. In addition, the project description will summarize the reasonable worst-case development scenario for analysis in the EIS and present its rationale (refer to Section C of this document).

The section on approval procedures will explain the Uniform Land Use Review Procedure (ULURP) process, its timing, and hearings before the Community Board, the Borough President's office, the City Planning Commission (CPC), and the New York City Council. The role of the EIS as a full-disclosure document to aid in decision-making will be identified and its relationship to ULURP and the public hearings described.

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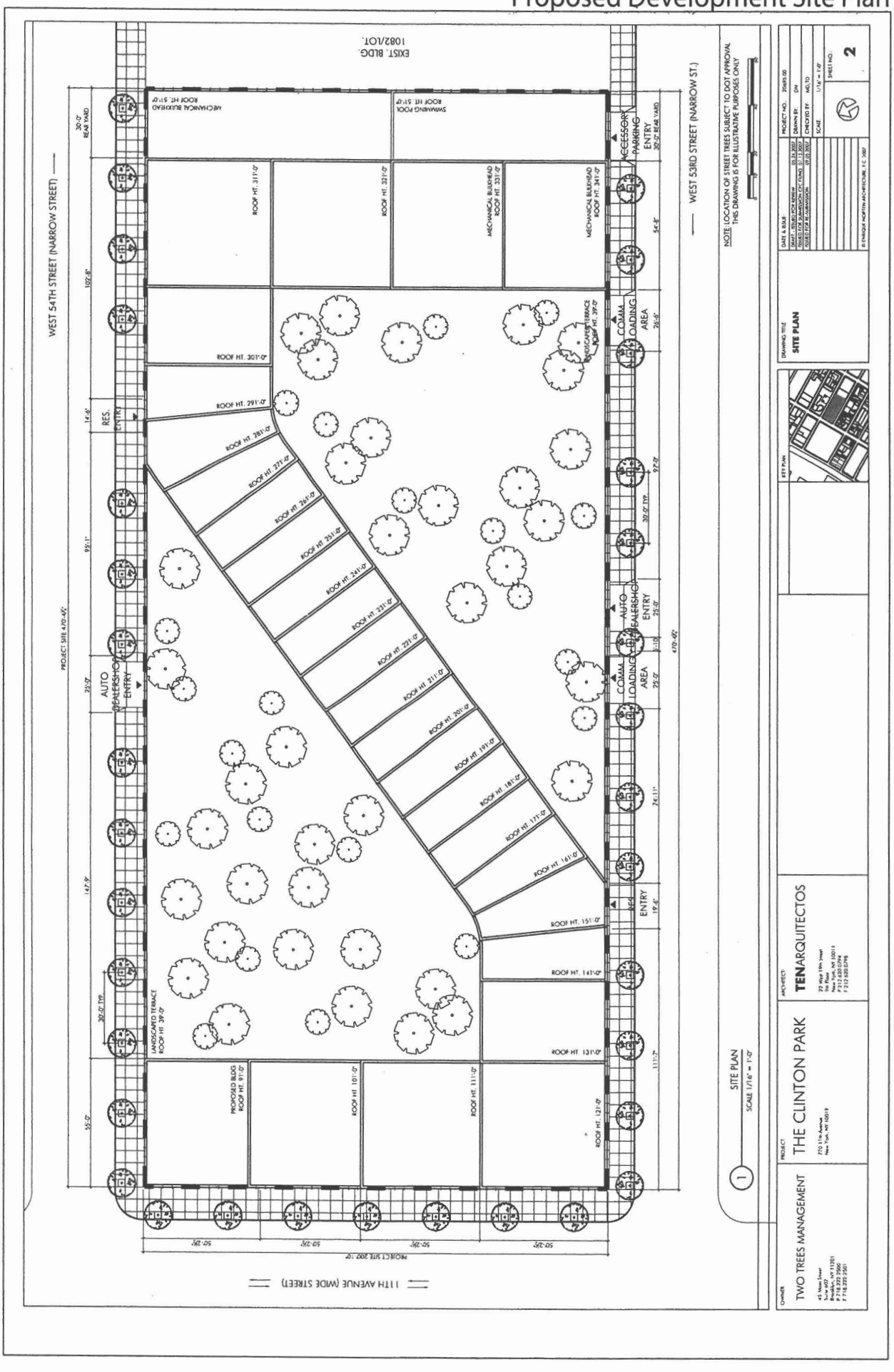
Figure 4

Proposed Development Site Plan



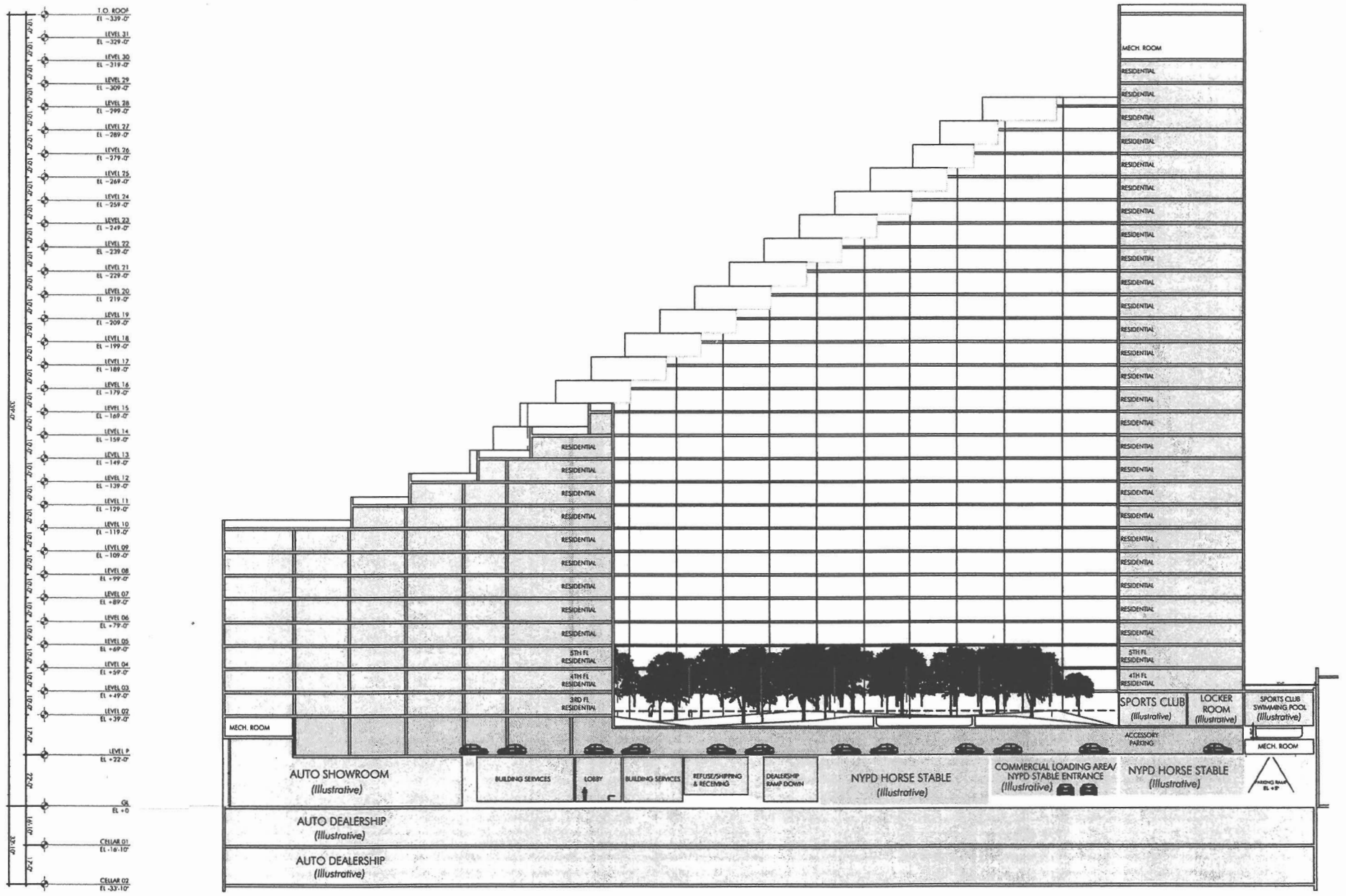


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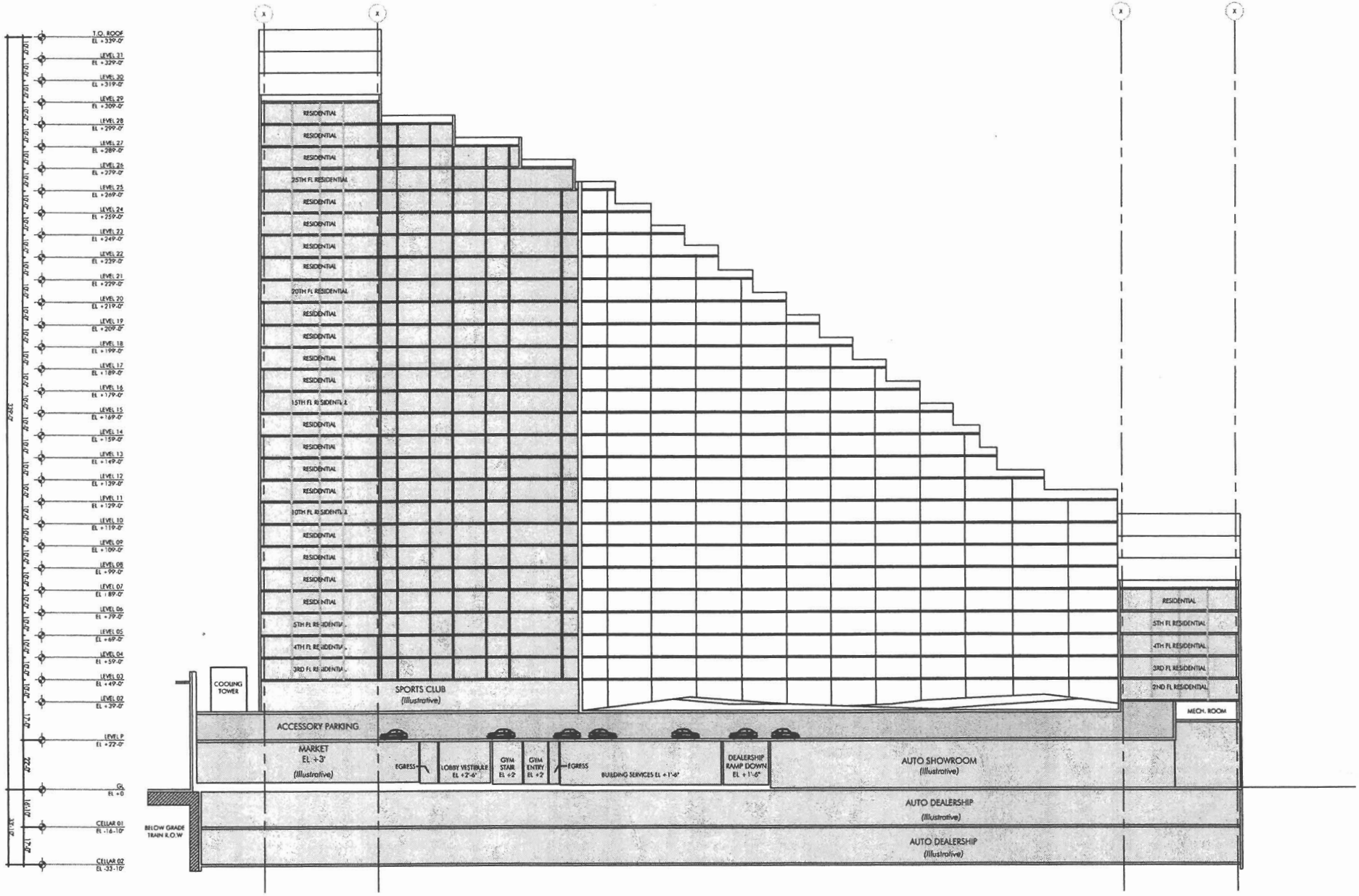
Figure 5a
Proposed Project Annotated Building W. 53rd Street Section



770 Eleventh Avenue Mixed-use Development Rezoning

Figure 5b
Proposed Project Annotated Building W. 54th Street Section

rezoning area, to reflect boundaries of census tracts generally lying within a quarter-mile radius of the rezoning area. Although the *CEQR Technical Manual* recommends that up to a half-mile radius be used for a socioeconomic study area boundary, given the intensity and scale of development of this highly urbanized area of Manhattan, with its high population density and concentration of commercial and industrial businesses, the proposed action is considered unlikely to affect socioeconomic conditions beyond a quarter-mile radius. Subtasks for detailed analysis, if determined to be necessary, include:

Population Characteristics

- Based on the U.S. Census of Population and Housing, describe the 2000 population characteristics of the rezoning area and the study area.
- Discuss population trends in the future without the proposed action.
- Estimate population associated with the proposed rezoning and assess impacts on population, if any.

Housing Characteristics

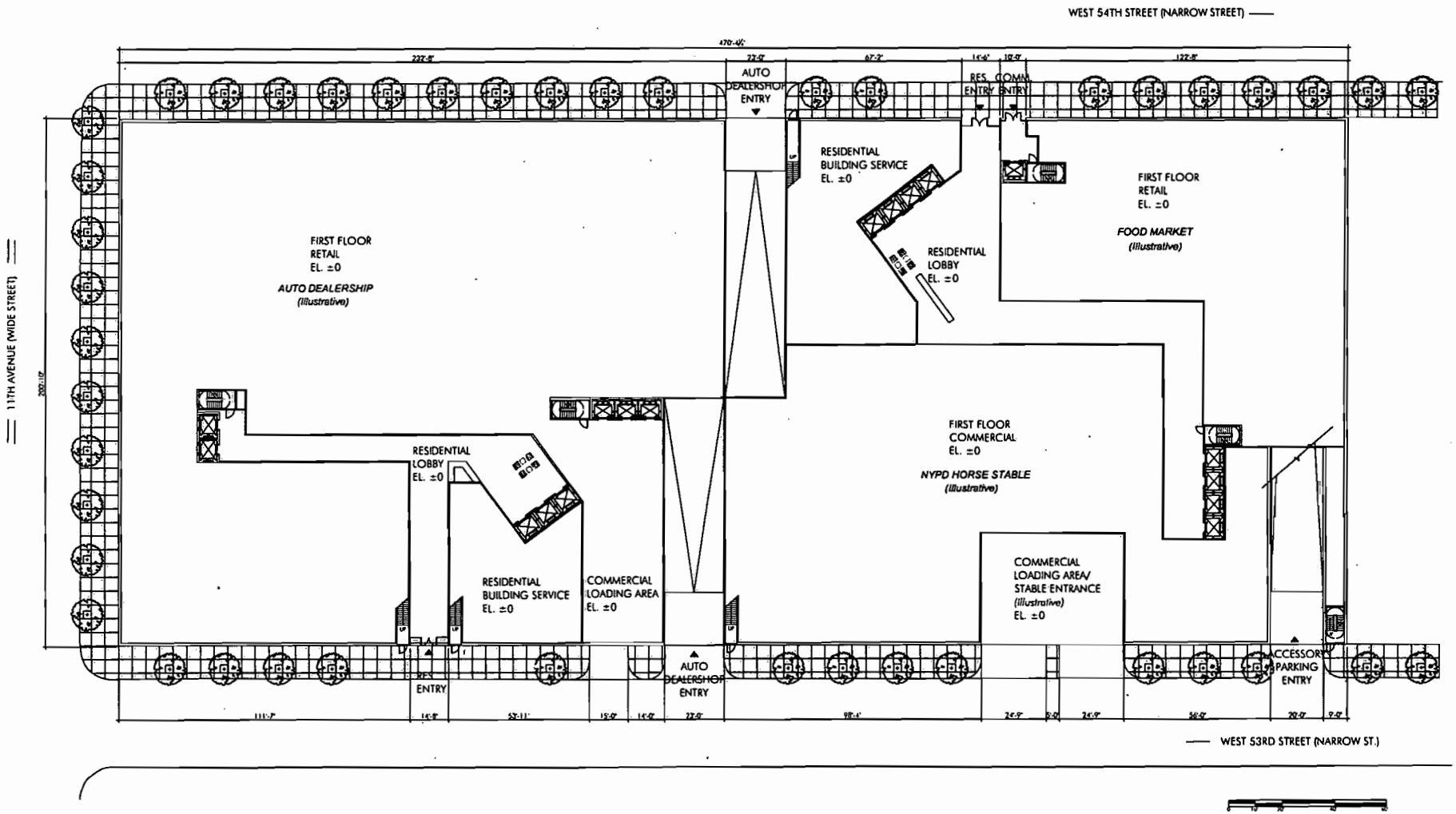
- Using Census data and other information, such as reports on housing value and median rents, describe the 2000 housing characteristics of the rezoning and the study area.
- Assemble and discuss information on housing market conditions, including identification of presence of any unique or predominant population groups or presence of populations particularly vulnerable to economic changes, using Census data and other sources.
- Discuss housing trends in the future without the proposed action.
- Estimate housing changes associated with the proposed rezoning and assess impacts on housing, if any.

Economic Characteristics

- Describe existing economic activity in the rezoning area (using most recently available data), including the number and types of businesses and employment by key sectors.
- Describe the physical characteristics of the existing commercial and manufacturing buildings in the rezoning and surrounding areas, including the general size of the structures, configurations, and condition. Determine the approximate vacancy rate and rent levels for buildings in the study areas. This will be based on visual inspections, discussions with the Borough Office of DCP, and discussions with real estate brokers.
- Describe trends in commercial and manufacturing use in the future without the action.
- Estimate net new employment and other economic activity in the study area under the RWCDS.
- Estimate displacement of commercial and manufacturing businesses and employment based on sites identified for likely development. After accounting for currently vacant properties, configurations and conditions, use a ratio of number of properties converted to total properties to estimate potential displacement.
- Assess the impact of displacement, if any. Identify likely relocation areas nearby, if necessary.

TASK 4. COMMUNITY FACILITIES AND SERVICES

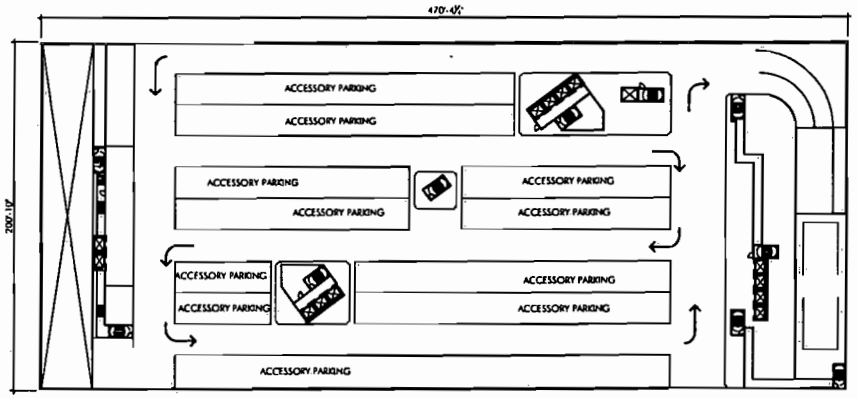
The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the proposed rezoning. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. Community facilities other than open space (see Task 5) will be examined in this section. The CEQR thresholds for detailed analysis of schools is an action anticipated to generate 50 or more elementary/middle school students or 150 high school students. A screening analysis determined that the proposed action would exceed the screening threshold for elementary and middle schools and therefore



770 Eleventh Avenue Mixed-use Development Rezoning

Figure 6
Proposed Ground Floor Plan

2ND FLOOR



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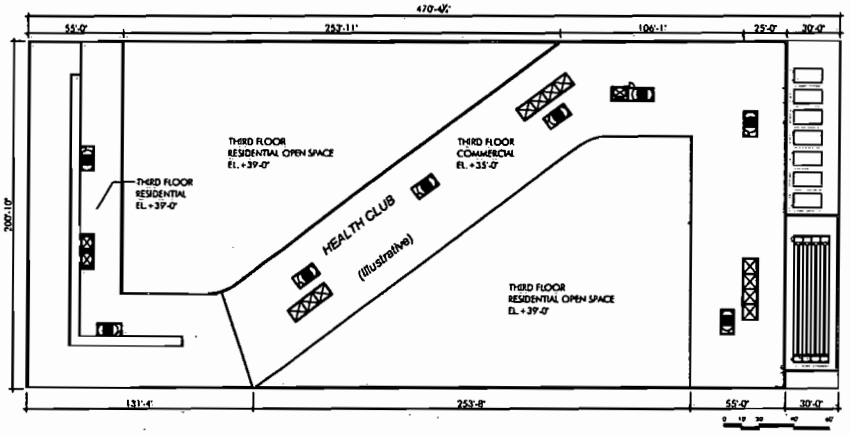
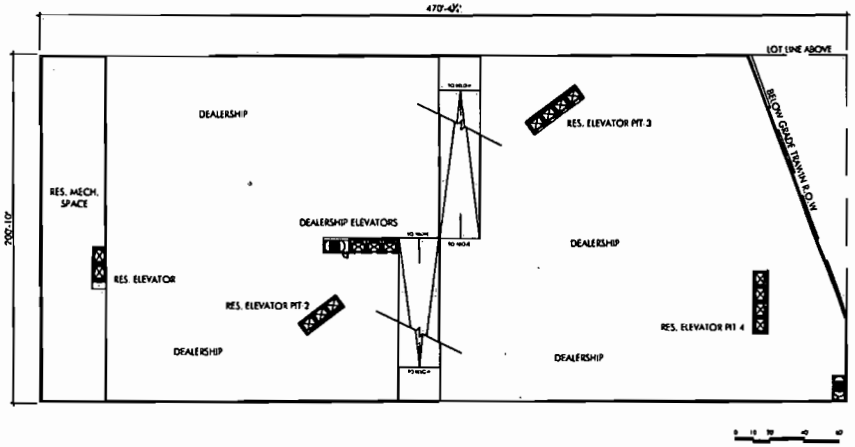


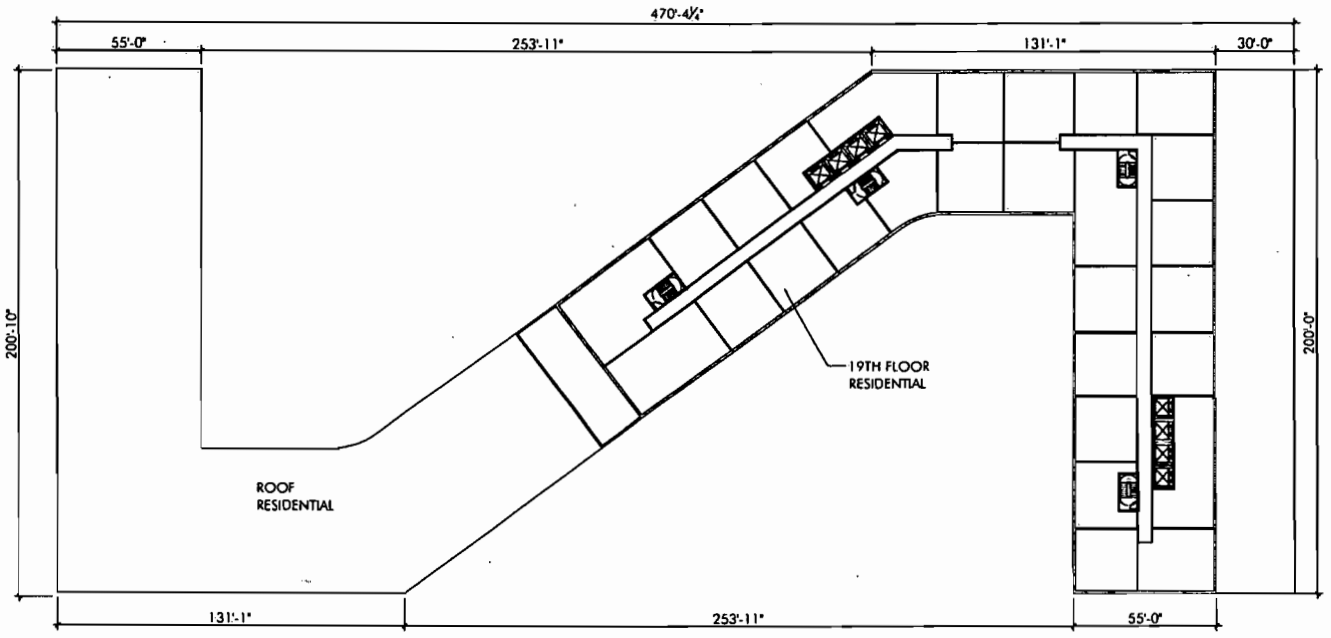
CELLAR



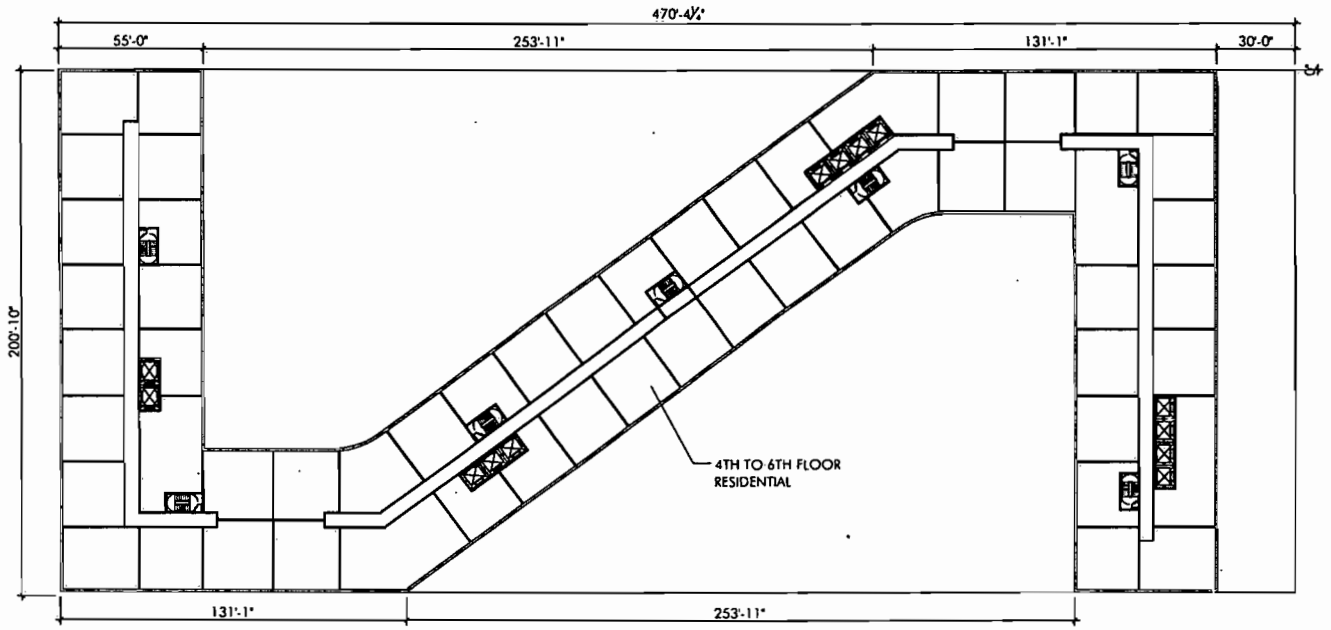
770 Eleventh Avenue Mixed-use Development Rezoning

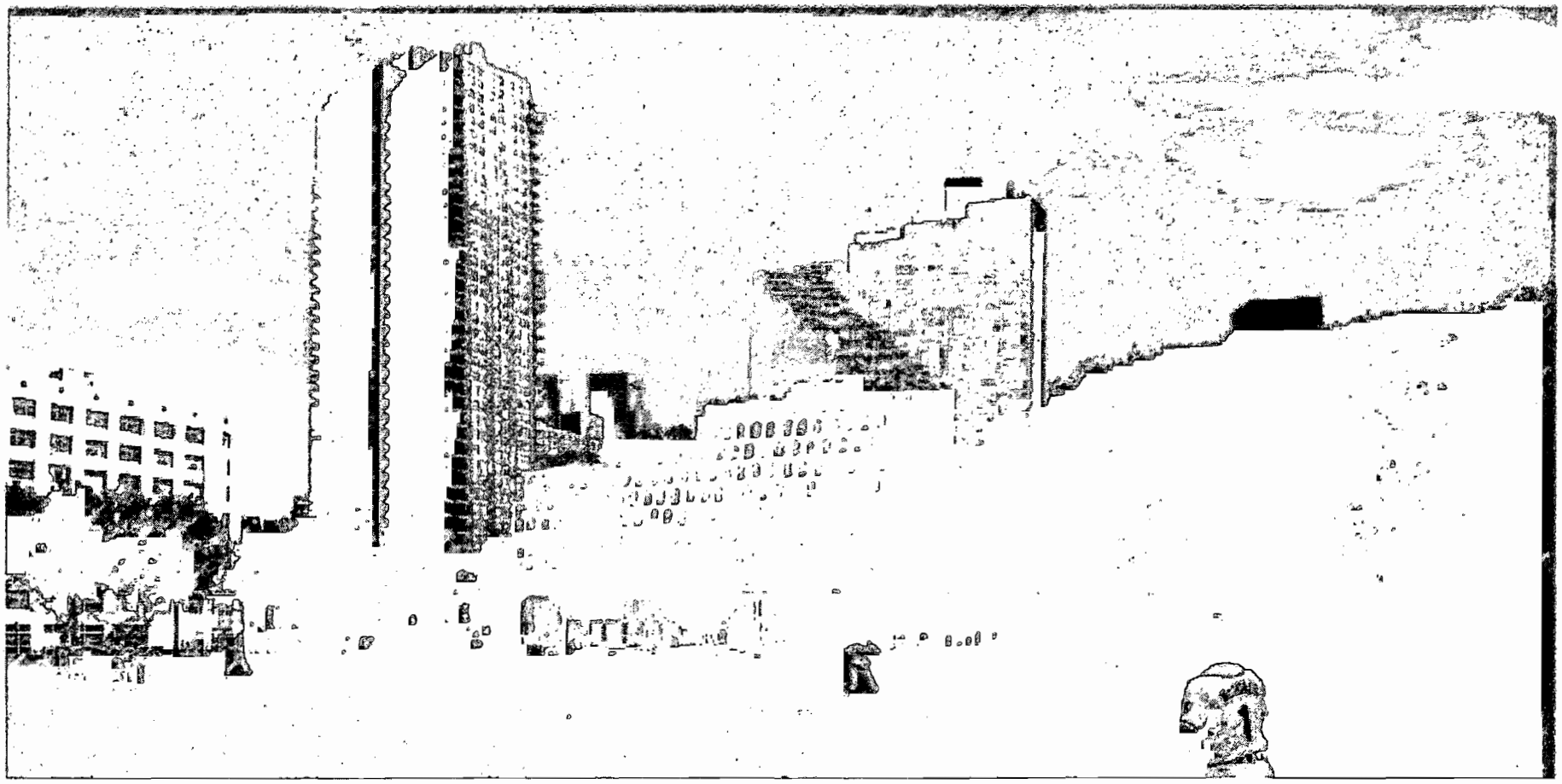
Figure 7a
Floor Plans

19th FLOOR



32nd FLOOR



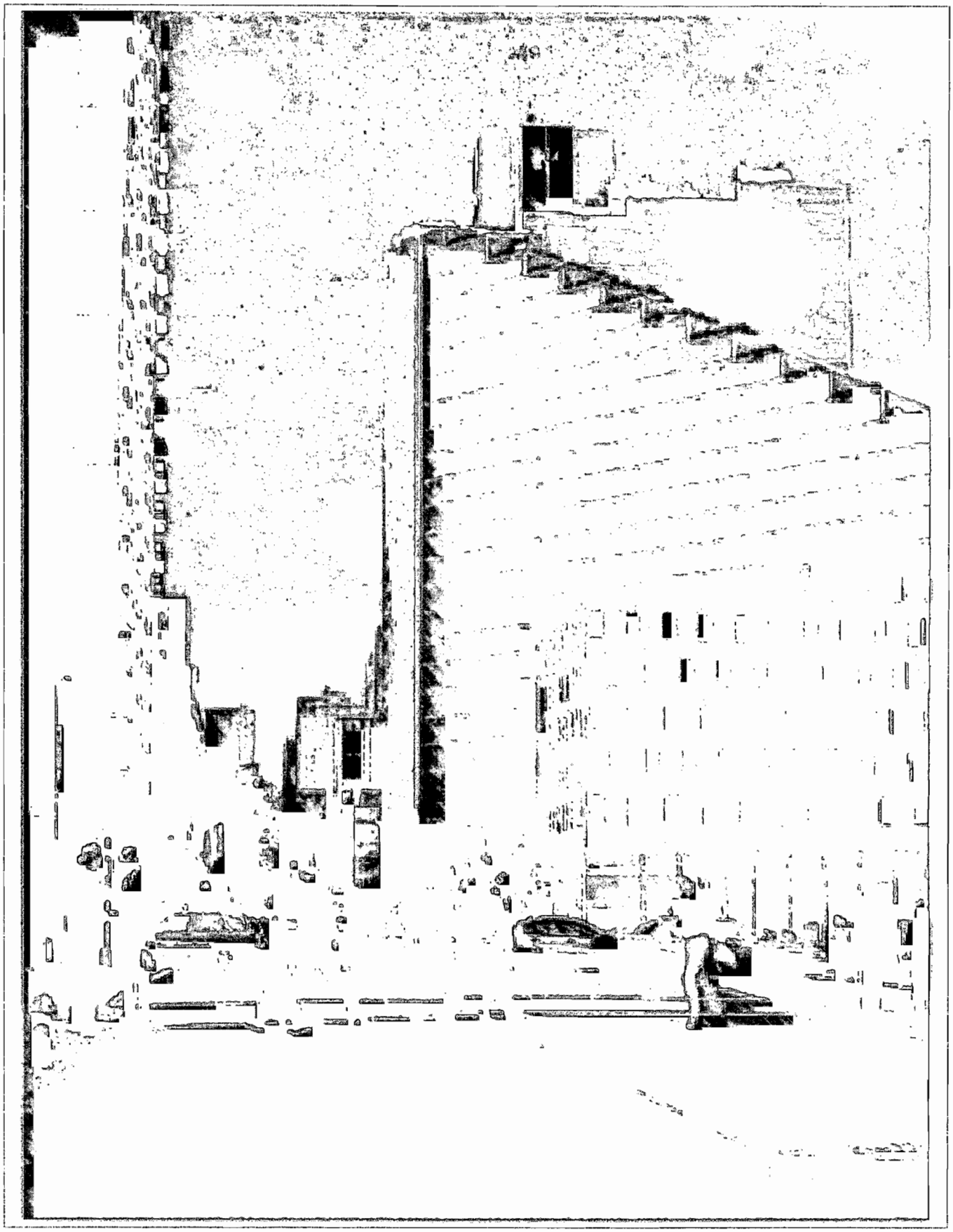


1 PARK VIEW

View from DeWitt Clinton Park towards Proposed Project

770 Eleventh Avenue Mixed-use Development Rezoning

Figure 8
Illustrative Park View



View facing east from intersection of Eleventh Avenue and W. 54th Street towards Proposed Project

770 Eleventh Avenue Mixed-use Development Rezoning

Figure 9
Illustrative W. 54th Street View

TASK 2. LAND USE, ZONING, AND PUBLIC POLICY

This chapter will analyze the potential impacts of the proposed action on land use, zoning, and public policy. The land use study area will consist of the rezoning area, where the potential effects of the proposed action will be straightforward and direct (reflecting the development scenario), and neighboring areas where indirect impacts may be felt (refer to Figure 10). For the purpose of environmental analysis, the study area will extend approximately a quarter-mile from the borders of the rezoning area. Subtasks will:

- Provide a brief development history of the project site and surrounding study area.
- Provide a detailed description of existing land use, zoning, and public policy in the rezoning area. This task will be closely coordinated with Task 3, "Socioeconomic Conditions."
- Based on field surveys and prior studies, identify, describe, and map predominant land use patterns for the balance of the study area. Describe recent land use trends in the study area and identify major factors influencing land use trends.
- Describe and map existing zoning and recent zoning actions or BSA variances in the study area.
- Prepare a list of future development projects in the study area that would be expected to influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area. This would include but not be limited to development associated with the redevelopment of sites within the Clinton Urban Renewal Area. Based on these changes, assess future conditions in land use and zoning without the proposed action.
- Describe and assess the potential land use changes in the rezoning area based on the reasonable worst-case development scenario.
- Assess effects of the proposed action on land use, zoning, and public policy. Project effects related to issues of compatibility with surrounding land use, the consistency with zoning and other public policy, the effect of the loss of manufacturing zoning, and the effect of the project on ongoing development trends and conditions in the area will be discussed.

TASK 3. SOCIOECONOMIC CONDITIONS

This chapter will examine the effects of the action on socioeconomic conditions in the study area, including population characteristics, increase in economic activity, and the potential displacement of businesses and employment from the rezoning area. The analysis will provide a qualitative assessment of potential socioeconomic changes associated with the proposed action, including: direct and indirect displacement of residential population, businesses, or employees; a new development that is markedly different from existing uses and activities within the neighborhood; an adverse effect on conditions in the real estate market in the area; or an adverse effect on socioeconomic conditions in a specific industry. Screening analyses will be conducted pursuant to the *CEQR Technical Manual* methodology. The analysis will present sufficient information regarding the effects of the proposed action to make a preliminary assessment either to rule out the possibility of significant impacts or to determine that more detailed analysis is required to make a determination as to impacts. The preliminary assessment will examine five areas of concern including (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; (5) and adverse effects on specific industries. For each area of concern, if it has been determined that a socioeconomic impact is likely or cannot be ruled out based on the preliminary screening assessment, then a detailed analysis will be conducted.

The Socioeconomic Conditions study area is shown in Figure 11. The study area for socioeconomic conditions will be delineated by adjusting the land use study area boundary, i.e., a quarter-mile radius of the

rezoning area, to reflect boundaries of census tracts generally lying within a quarter-mile radius of the rezoning area. Although the *CEQR Technical Manual* recommends that up to a half-mile radius be used for a socioeconomic study area boundary, given the intensity and scale of development of this highly urbanized area of Manhattan, with its high population density and concentration of commercial and industrial businesses, the proposed action is considered unlikely to affect socioeconomic conditions beyond a quarter-mile radius. Subtasks for detailed analysis, if determined to be necessary, include:

Population Characteristics

- Based on the U.S. Census of Population and Housing, describe the 2000 population characteristics of the rezoning area and the study area.
- Discuss population trends in the future without the proposed action.
- Estimate population associated with the proposed rezoning and assess impacts on population, if any.

Housing Characteristics

- Using Census data and other information, such as reports on housing value and median rents, describe the 2000 housing characteristics of the rezoning and the study area.
- Assemble and discuss information on housing market conditions, including identification of presence of any unique or predominant population groups or presence of populations particularly vulnerable to economic changes, using Census data and other sources.
- Discuss housing trends in the future without the proposed action.
- Estimate housing changes associated with the proposed rezoning and assess impacts on housing, if any.

Economic Characteristics

- Describe existing economic activity in the rezoning area (using most recently available data), including the number and types of businesses and employment by key sectors.
- Describe the physical characteristics of the existing commercial and manufacturing buildings in the rezoning and surrounding areas, including the general size of the structures, configurations, and condition. Determine the approximate vacancy rate and rent levels for buildings in the study areas. This will be based on visual inspections, discussions with the Borough Office of DCP, and discussions with real estate brokers.
- Describe trends in commercial and manufacturing use in the future without the action.
- Estimate net new employment and other economic activity in the study area under the RWCDS.
- Estimate displacement of commercial and manufacturing businesses and employment based on sites identified for likely development. After accounting for currently vacant properties, configurations and conditions, use a ratio of number of properties converted to total properties to estimate potential displacement.
- Assess the impact of displacement, if any. Identify likely relocation areas nearby, if necessary.

TASK 4. COMMUNITY FACILITIES AND SERVICES

The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the proposed rezoning. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. Community facilities other than open space (see Task 5) will be examined in this section. The CEQR thresholds for detailed analysis of schools is an action anticipated to generate 50 or more elementary/middle school students or 150 high school students. A screening analysis determined that the proposed action would exceed the screening threshold for elementary and middle schools and therefore

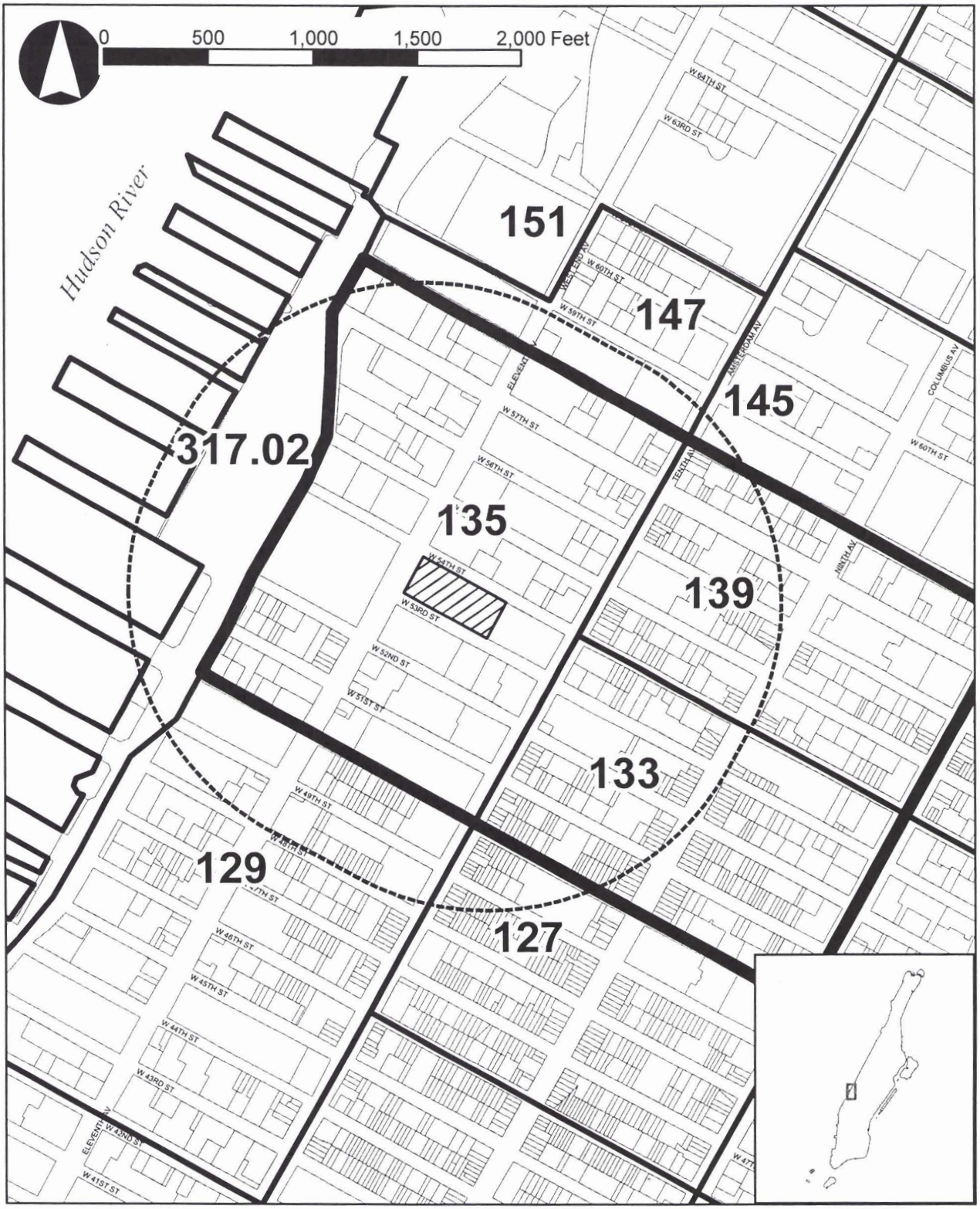
Land Use Study Area - Figure 10



Legend

- Project Site
- Quarter-mile Radius
- 1 & 2 Family Residential
- Multi-Family Walk-Up Residential
- Multi-Family Elevator Residential
- Mixed Use
- Commercial
- Industrial
- Transportation and Utility
- Institutional
- Open Space
- Parking Facilities
- Vacant Land
- Unknown

Socioeconomic Study Area - Figure 11



Legend

- Project Site
- Socioeconomic Conditions Study Area
- 127 Census Tracts
- Quarter Mile Radius

detailed analysis is warranted. The screening threshold is higher for high school students as high school level students can elect to attend schools other than their neighborhood high schools. In addition, as discussed in the EAS, based on the screening criteria established in the *CEQR Technical Manual*, the proposed action would represent a 5 percent or greater increase over the average dwelling units per library branch in the borough of Manhattan, the screening threshold for detailed analysis. Therefore, a detailed analysis of the project's effects on libraries is warranted. Preliminary findings indicate that, as the proposed action is expected to generate approximately 180 affordable housing DUs, it would not be expected to trigger the threshold for detailed analysis of health care facilities (600 or more low-to-moderate income DUs) or day care centers (357 or more low income DUs in Manhattan). The Police and Fire Departments routinely evaluate the need for changes in personnel, equipment, or facilities based on population, response times, crime levels, or other local factors. Therefore a detailed assessment of service delivery is usually conducted only if a proposed action would directly affect the physical operations of a station house or precinct house. Since the proposed action would not directly affect existing facilities, a detailed assessment is not warranted. The proposed study area for community facilities would be located at or close to a half-mile radius of the rezoning area (refer to Figure 12).

- Identify and locate/map all community facilities within the defined study area for general informational purposes, including schools, libraries, health care facilities, police precincts, fire houses, etc.
- Identify and locate public elementary and intermediate schools serving the study area. Assess conditions in terms of enrollment and utilization during the current school year, noting any specific problems with school capacity. Identify conditions that will exist in the future without the action, taking into consideration projected increases in future enrollment, including those associated with other developments in the vicinity of the project area and plans to increase school capacity either through administrative actions on the part of the NYC Department of Education or as a result of the construction of new school space. Analyze future conditions with the proposed action, adding students likely to be generated by the action to the projections for the future without the action. Project impacts will be assessed based on the difference between the Future With Action projections and the Future No Action projections (at the sub-area, region, and school district levels) for enrollment, capacity, and utilization in 2011.
- Identify the local public library branch(es) serving the area. Describe existing population served by the branch(es), using information gathered for socioeconomic conditions assessment, information services provided by branch(es), circulation, level of utilization, and other relevant existing conditions. Details on library operations will be based on publicly available information and/or consultation with library officials. For No-Build conditions, projections of population change in the area and information on any planned changes in library services of facilities will be described and the effects of these changes on conditions will be assessed qualitatively. The effects of the addition of the population resulting from the projected development will be qualitatively assessed in terms of special programs, facilities, and collections, with input from library branch management staff.

TASK 5. OPEN SPACE

New residents and workers generated from the proposed project would place added demands on existing scarce publicly-accessible open space and recreational facilities. The proposed action would generate more than 200 residents, thereby requiring a detailed assessment of open space. New residents generated by the proposed action would increase the utilization of existing local parks and recreational facilities, including the De Witt Clinton Park and Hudson River Park. Therefore, the proposed action needs to be evaluated for

its potential indirect impacts on open space resources within the study area. A detailed open space analysis will be conducted according to the following tasks:

- Using 2000 Census data, calculate the total residential population of the open space study area, which as per CEQR guidelines, would be defined as the area within a half-mile radius from the rezoning area with the study area boundary adjusted to include all census tracts with at least 50 percent of their area within the half-mile radius. The population will be identified pursuant to Table 3D-10 of the *CEQR Technical Manual*. Refer to Figure 13.
- Inventory existing active and passive open spaces within a half-mile radius from the rezoning area. The condition and usage of existing facilities will be described based on the inventory and field visits. Jurisdiction, features, user groups, factors affecting usage, hours of operation, and access will be included in the description of facilities. Also, the potential for facilities to affected by direct impacts, such as from shadows cast by the action induced development, will also be assessed. Acreage of these facilities will be determined and total study area acreage calculated. The percentage of active and passive open space also will be calculated.
- Based on the inventory of facilities and study area population, calculate the open space ratio for the residential population and compare to City guidelines to assess adequacy. This is expressed as the amount of open space acreage per 1,000 user population. Open space ratio will be calculated for active and passive open space, as well as the ratio for the aggregate open space.
- Assess expected changes in future levels of open space supply and demand in the Build year, based on other planned development projects within the study area. Also take account of any new open space and recreational facilities expected in the study area, including any planned openings of new sections of Hudson River Park located within the study area. Open space ratios will be developed for future conditions without the action and compared with existing ratios to determine changes in future levels of adequacy.
- Based on the population added by the proposed action, assess its effects on open space supply and demand. The assessment of project impacts will be based on a comparison of open space ratios with the project and open space ratios in the future without the project. In addition to the quantitative analysis, qualitative analysis will be performed to determine if the changes resulting from the proposed action will result in a substantial change (positive or negative) or an adverse effect to open space conditions.
- If the results of the impact analysis identify a potential for a significant impact, discuss potential mitigation measures.
- A preliminary assessment of the potential for open space demand generated by employees also will be prepared. However, as it is expected that the proposed action would generate a net decrease in employees and therefore not exceed the analysis screening threshold of 500 employees, a detailed assessment will not be required. However, if it is determined that the action would generate 500 or more new non-residents, such as employees or a similar number of other users, there will need to be an additional analysis for the non-residential population, based on a quarter-mile radius from the project area following the methodology in the *CEQR Technical Manual*.

TASK 6. SHADOWS

This chapter will examine the proposed action's potential shadows effects pursuant to *CEQR Technical Manual* criteria. Generally, shadow impacts could occur if an action would result in new structures, or additions to buildings resulting in structures over 50 feet in height that could cast shadows on natural features, publicly accessible open space, or on historic features that are dependent on sunlight. In addition, structures under 50 feet in height may cast shadows of concern when located adjacent or across the street

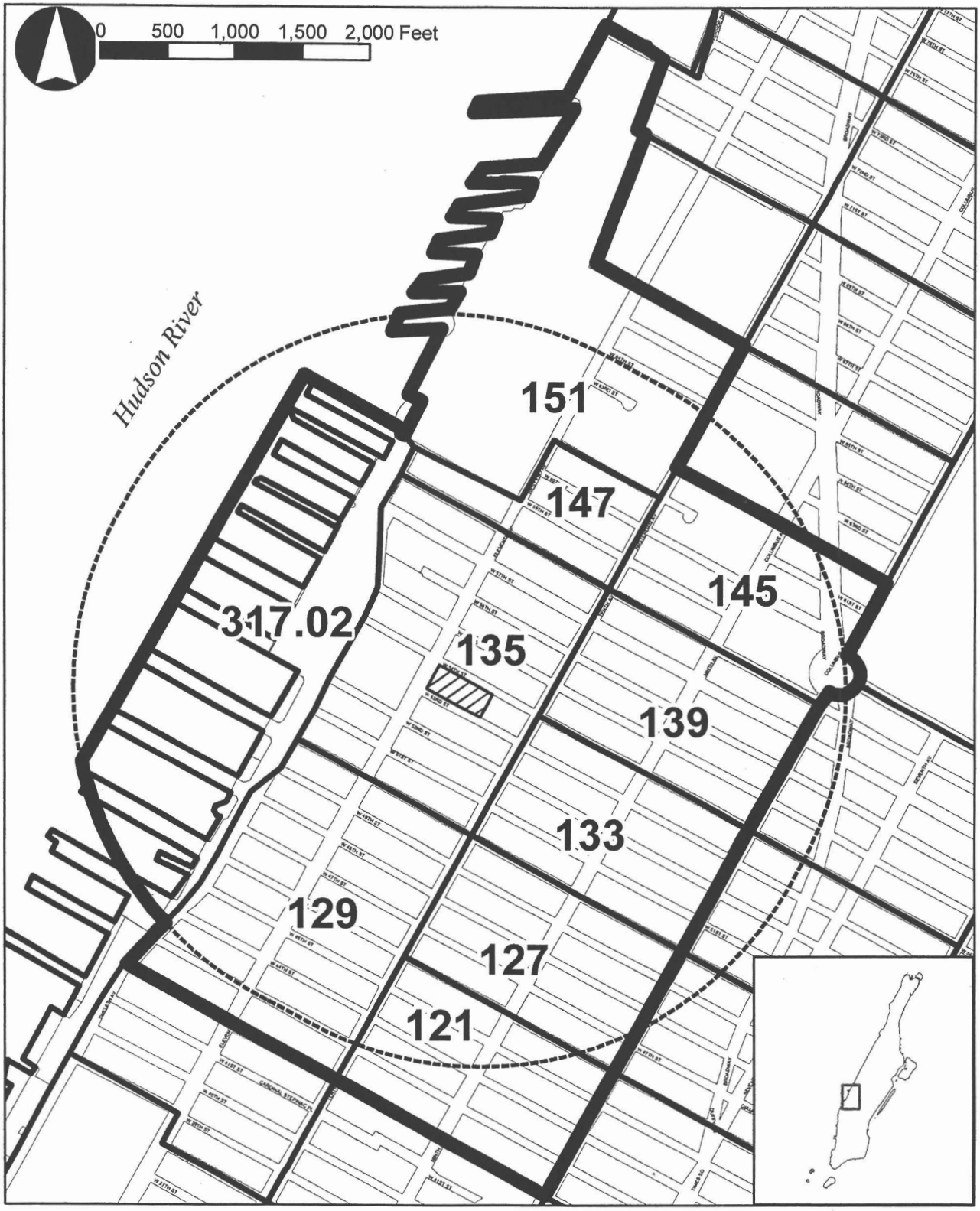
Community Facilities Study Area - Figure 12



Legend

- Project Site
- Community Facilties Study Area (Half Mile Radius)
- Public School
- NYPD Station House
- Library

Open Space Study Area - Figure 13



Legend

- Project Site
- Open Space Study Area
- Half Mile Radius
- 135 Census Tract Boundary and Number

from potentially sunlight-sensitive resources. The proposed action would permit development of buildings of greater than 50 feet in height on a lot across the street from De Witt Clinton Park, and therefore has the potential to result in shadow impacts on resources in the surrounding area. The EIS will assess the proposed project for potential incremental shadowing effects and disclose the range of shadow impacts, if any, which are likely to result from the action. A shadows screening analysis will be performed, using the methodology recommended in the *CEQR Technical Manual.*

- A screening-level analysis will be performed to identify potential shadow impacts. This preliminary analysis will involve the identification of historic resources with sunlight-sensitive features in the area and, in coordination with the open space task, identification of publicly accessible open spaces, including De Witt Clinton Park. The potential for incremental project shadows to fall on such resources will be assessed based on the height, bulk, and location of the proposed project.
- If warranted, describe in shadow diagrams and text the potential effect of shadows resulting from the proposed project on publicly accessible open spaces or sunlight-sensitive historic resources. As per CEQR guidelines, this will include calculating the hours that project shadows will fall on sun-sensitive resources for 21 March, 6 May, 21 June, and 21 December. The duration of the shadow increment on the open space or the historic resource with sunlight-sensitive features will be calculated, and the effects of the incremental shadows will be assessed.

The shadow assessment would be coordinated with Task 5, "Open Space" and Task 7, "Historic Resources," where appropriate.

TASK 7. HISTORIC RESOURCES

The *CEQR Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated NYC Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Register of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing; properties recommended by the NY State Board for listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet their eligibility requirements. Because the proposed action would induce development of a new approximately 1.1 million gsf, 32-story development with two cellar levels, it has the potential to result in impacts to archaeological and architectural resources.

Impacts on historic resources are considered on the affected site and in the area surrounding the project site. The historic resources study area is therefore defined as the area to be rezoned plus a 400-foot radius, as per the guidance provided in the *CEQR Technical Manual* (refer to Figure 14). As necessary, historic resources outside the 400-foot radius will be identified for the Shadows analysis (see Task 6) to identify any historic resources that could be affected by the project's incremental shadows.

Archaeological resources are considered only in those areas where new in-ground disturbance is likely to occur. It should be noted that, as discussed in the EAS, LPC has determined that the project site has no archaeological significance. Accordingly, a detailed analysis of the potential for significant adverse archaeological impacts is not warranted and will not be provided in the EIS.

Subtasks will include:

- Research and describe history of potentially architecturally and archaeologically sensitive locations.

- Identify, map and describe designated historic/architectural resources (New York City Landmarks or pending Landmark designation and properties listed on the State and National Registers of Historic Places) in the study area.
- Submit the proposed action to the New York City Landmarks Preservation Commission (LPC) for its review and determination. (LPC provided an Environmental Review for the project site dated 8 June 2007. Refer to EAS, Appendix B.)
- Submit the proposed action to the New York State Historic Preservation Office (SHPO) for its review and determination. (As NYS HFA, a State Public Benefit Corporation, is an involved for the environmental review of the proposed action, it is required to consult with SHPO when making SEQR determinations.)
- In coordination with the land use task, assess probable impacts of development resulting from the rezoning action on architectural resources in the study area.

TASK 8. URBAN DESIGN/VISUAL RESOURCES

An area's urban design components and visual resources together define the look and character of the neighborhood. The urban design components encompass the characteristics of buildings and streets in the area, including building bulk, use and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. The concept of bulk is created by the size of a building and the way it is massed on the site. Height, length, and width define a building's size; volume, shape, setbacks, lot coverage, and density define its mass. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features.

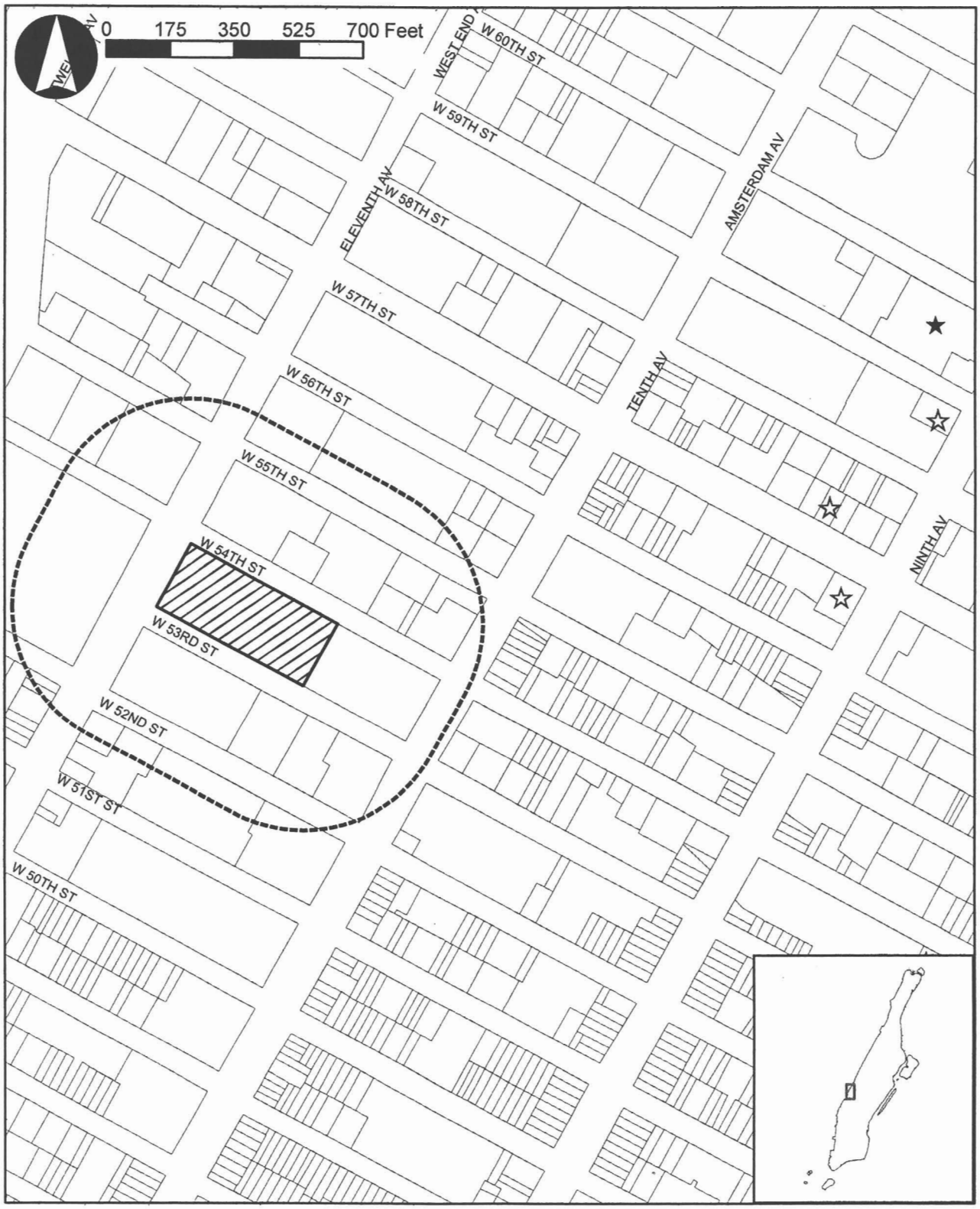
This chapter will assess urban design patterns and visual resources of the study area as defined in Chapter 3G, Section 310 of the *CEQR Technical Manual* and the effects on these of the proposed action. The proposed action would result in the construction of a building type that differs from what is currently permitted in the rezoning area, and therefore has the potential to result in impacts related to urban design and visual resources. A detailed preliminary screening analysis will be undertaken to identify whether the proposed action would exceed any of the thresholds identified in the *CEQR Technical Manual.*

- Describe the urban design and visual resources of each rezoning area and adjacent areas, using photographs and other graphic material as necessary to identify critical features, use, bulk, form, and scale.
- Describe the changes expected in the urban design and visual character of the project areas resulting from the various projects proposed for development in the study area in the future without the action.
- Describe the potential changes that could occur in the urban design character of the study area as a result of the proposed action. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources, including views of/to resources of visual or historic significance (landmark structures, historic districts, parks, etc.).

TASK 9. NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns, noise etc. The area surrounding the project site is composed of residential, mixed-use, commercial, industrial, institutional, and open spaces uses. There is also a notable transportation/utility use, the windowless 457-foot tall AT&T Switching Center building,

Historic Resources Study Area - Figure 14



Legend

- Project Site
- 400-foot Radius
- ★ State/National Register of Historic Places
- ☆ NYC Designated Landmark

located immediately to the east. The area has been experiencing an increase in density in recent years as new development has been taking place on previously underutilized properties.

An amalgam of impact categories, a neighborhood character analysis considers the combined impacts of land use, urban design, visual resources, historic resources, socioeconomics, traffic and noise issues. This chapter of the document will explain those effects in a summary fashion. Since most of these elements will already be covered in other EIS sections, this assessment will essentially represent a summary of the key findings of these other analyses. As suggested by the *CEQR Technical Manual*, the study area for neighborhood character will be coterminous with the quarter mile land use study area.

- Drawing on other EIS sections, describe the predominant factors that contribute to defining the character of the neighborhood.
- Based on planned development projects, public policy initiatives, and planned public improvements, summarize changes that can be expected in the character of the neighborhood in the future without the proposed action.
- The analysis of the proposed action's impacts on various EIS sections will serve as the basis for assessing and summarizing the proposed action's impacts on neighborhood character.

TASK 10. HAZARDOUS MATERIALS

The objective of the hazardous materials assessment is to determine whether the project site may have been adversely affected by current or historical uses at or adjacent to the site. The proposed action would result in new residential development in areas currently zoned for manufacturing, and therefore has the potential to result in significant adverse hazardous materials impacts.

The primary documentation for this task typically includes a Phase I Environmental Site Assessment (ESA) and Health and Safety Plan (HASP) and Subsurface Work Investigation Plan, also referred to as a Phase II testing program. A Phase I ESA is a records search and visual site assessment to determine the likelihood that environmentally hazardous conditions exist on the site. If the Phase I indicates the need for additional research, a Phase II testing program will be required.

A *Phase I Environmental Site Assessment (ESA) Report* was prepared for the project site in June 2006 by EnviroTrac Ltd. Based on the information gathered as a result of the Phase I ESA process, the following recognized environmental conditions, as defined by the American Society of Testing and Materials (ASTM), and areas of environmental concern were identified at that time:

- There were three underground storage tanks (USTs) on the project site.
- NYSDEC Spill Number 05-12738 was assigned to the site due to "leaking containers (and/or abandoned drums) in Verizon parking" on 3 February 2006. The spill remained open as of June 2006. The Phase I ESA recommended that NYSDEC be contacted to determine the status of the spill and what documentation is needed to submit a request for spill closure as there were no leaking drums present on the site at the time of the Phase I ESA walkthrough.
- A small patched area of concrete was observed in the floor in a garage area. Upon further investigation, it was found to be a vehicle service pit. A subsurface soil sample was collected from beneath the south basement concrete flooring adjacent to the base of the vehicle service pit structure. The soil sample was submitted to a New York State certified laboratory for analysis of volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) Based on laboratory results, VOCs and SVOCs were not detected above the method detection limit of the laboratory.

Based on this data, the Phase I ESA states that no further work is warranted for this recognized environmental condition.

- Asbestos containing materials (ACM) were noted on pipe insulation within the basement level. Based on the age of the building, lead based paint may be present. Additionally fluorescent light fixtures could have ballasts that contain polychlorinated biphenyls (PCB) dielectric fluid. An asbestos inspection and lead pain survey were beyond the scope of the Phase I ESA. The Phase I ESA states that prior to any repairs, replacement, or disturbance of these materials, sampling should be performed and the materials must be handled and disposed of properly according to federal and state laws.

Underground Storage Tank Removal

Subsequent to the completion of the Phase I, in June 2007 the USTs were removed from the site under the direction of Verizon, the previous site owner. EnviroTrac's *Underground Storage Tank Removal Report* documenting this work has been submitted to the New York State Department of Environmental Conservation.

Asbestos Removal

All asbestos containing materials were removed from the site in July 2007 under the supervision of Emteque Corporation. Emteque submitted an Asbestos Control Program report documenting this work to DEP.

Phase II *Health and Safety Plan and Subsurface Investigation Work Plan*

In May 2007, Emteque prepared a Phase II *Health and Safety Plan and Subsurface Investigation Work Plan* for the project site as a follow up to the *Phase I ESA*. It proposed soil sample borings to test for the presence of volatile organic compounds, semi-volatile organic compounds, metals, and pesticides.

DEP Consultation

The June 2006 *Phase I ESA* and the May 2007 *HASP and Subsurface Investigation Work Plan* were forwarded to NYC Department of City Planning by the applicant for review by NYC Department of Environmental Protection (DEP). In September 2007, DEP provided recommendations on the location and nature of test borings to be undertaken. Emteque, on behalf of the applicant, is acting to implement DEP's recommended test boring program. The results of these test borings will be provided to DEP. This work will occur concurrent with the applicant's as-of-right excavation of the site occurring from September 2007.

The hazardous materials chapter for the EIS will include a detailed discussion of current environmental conditions on the project site and will examine how the proposed action will affect these conditions. The discussion of current environmental conditions will rely on information provided in the Phase I ESA that has been prepared for the project site. The hazardous materials chapter will include a discussion of the proposed project's potential to result in significant adverse hazardous materials impacts and will include a description of any remedial measures that would be necessary to avoid significant adverse impacts.

TASK 11. INFRASTRUCTURE

For CEQR purposes, the City's "infrastructure" comprises the physical systems supporting its population, including water supply, wastewater treatment, and stormwater management. Other infrastructure components

are addressed separately under CEQR. As described in the *CEQR Technical Manual*, because of the size of the City's water supply system and because the City is committed to maintaining adequate water supply and pressure for all users, few actions would have the potential to result in significant adverse impact on the water supply system. Therefore, although the proposed action would result in increased demand on water supply, generate increase sewage, and may affect stormwater, it is unlikely to create an adverse impact on these services. However, as recommended by the *CEQR Technical Manual*, the project's potential infrastructure demand will be disclosed in the EIS.

The analyses will include the following:

Water Supply

- Based on information obtained from NYCDEP, the existing water supply network and capacity will be described, and any planned changes to the system will be discussed.
- Using water usage rates for typical land uses provided in the *CEQR Technical Manual*, the average and peak water demand for the proposed project will be projected.
- The effects of the incremental demand on the water system will be assessed to determine if there is sufficient capacity to maintain adequate supply and pressure to the service area.

Stormwater

- Describe the existing storm water drainage system on the project site and amount of storm water generated by the site.
- Assess the effects of any changes to the stormwater runoff due to the development of the proposed project and describe how stormwater would be managed in the future with the project.

Sewage

- The existing sewer system serving the development site will be described based on information obtained from NYCDEP. The existing flows to the water pollution control plant (WPCP) that serves the site will be obtained for the latest 12-month period. The average monthly flow rate will be presented.
- Using the water demand determined in the task above, sanitary sewage generation for the project will be estimated.
- The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the WPCP.

TASK 12. SOLID WASTE AND SANITATION SERVICES

The proposed action would induce new development that would require sanitation services. This chapter will provide an estimate of the additional solid waste expected to be generated by the projected development and assess its effects on the City's solid waste and sanitation services.

Solid Waste

- Existing and future New York City sold waste disposal practices will be described, including the collection system and status of landfilling, recycling, and other disposal methods.
- Using solid waste generation rates for typical land uses provided in the *CEQR Technical Manual*, provide an estimate of solid waste demand for the proposed project.
- The impacts of the project's solid waste generation on the City's collection needs and disposal capacity will be assessed to determine whether the City's municipal service can adequately handle the future solid waste demand for the proposed project.

TASK 13. TRANSPORTATION

The traffic and transportation studies identify whether a proposed action would generate significant adverse traffic impacts requiring substantial levels of mitigation, increase public parking demand, or increase the level of subway, bus, and pedestrian use.

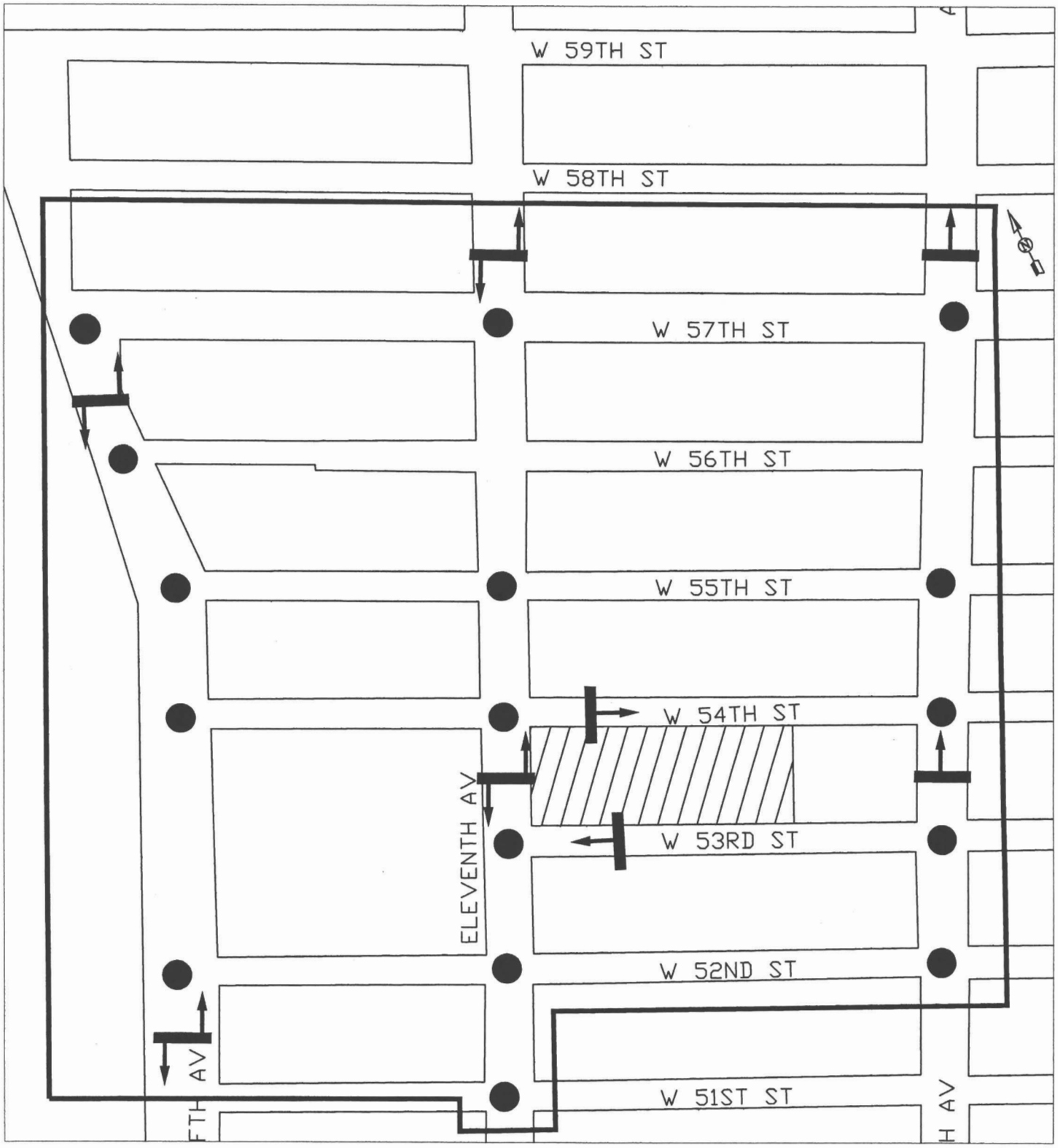
Task 13A: Traffic

Based on preliminary estimates, the proposed action is expected to generate more than 50 additional (net) vehicular trips in the weekday AM, weekday midday, weekday PM, and Saturday midday peak hours. Specifically, under the RWCDS, the preliminary travel demand forecast estimates indicate that there would be an action-generated net incremental of approximately 219, 261, 276, and 218 vehicle trips in the weekday AM, weekday midday, weekday PM, and Saturday midday peak hours, respectively. (Refer to Appendix A, Transportation Planning Assumptions Memorandum.) This exceeds the CEQR screening threshold. Therefore, the EIS will provide a detailed traffic analysis for the weekday AM, weekday midday, weekday PM, and Saturday midday peak hours, focusing on those intersections handling the highest concentrations of action-generated demand. Based on the preliminary travel demand forecast made for the proposed action, it is anticipated that up to approximately 16 intersections would be analyzed in detail for potential traffic impacts (see Figure 15).

The analyses will include the following:

- Define a traffic study area to account for the principal travel corridors to/from the project site. This scope assumes that up to approximately 16 traffic intersections would be analyzed, as illustrated in Figure 15 and listed below:
  - W. 52nd Street at Tenth Avenue
  - W. 53rd Street at Tenth Avenue
  - W. 54th Street at Tenth Avenue
  - W. 55th Street at Tenth Avenue
  - W. 57th Street at Tenth Avenue
  - W. 51st Street at Eleventh Avenue
  - W. 52nd Street at Eleventh Avenue
  - W. 53rd Street at Eleventh Avenue
  - W. 54th Street at Eleventh Avenue
  - W. 55th Street at Eleventh Avenue
  - W. 57th Street at Eleventh Avenue
  - W. 52nd Street at Twelfth Avenue (Route 9A)
  - W. 54th Street at Twelfth Avenue (Route 9A)
  - W. 55th Street at Twelfth Avenue (Route 9A)
  - W. 56th Street at Twelfth Avenue (Route 9A)
  - W. 57th Street at Twelfth Avenue (Route 9A)
- Conduct traffic counts at traffic analysis locations via a mix of automatic traffic recorder (ATR) machine counts and manual intersection turning movement counts. ATRs will provide 24-hour traffic volumes for a full week at selected arterial locations (as shown in Figure 15). Traffic counts will be conducted during the weekday AM, weekday midday, weekday PM, and Saturday midday peak periods. Where applicable, compile available information from both the recent and current studies of the area.
- Conduct travel speed and delay runs and vehicle classification counts along key routes in the study area as support data for air quality and noise analyses. These speed and delay runs and vehicle

Traffic Study Area - Figure 15



Legend

- Potential Traffic Study Area Intersections
- Study Area Boundary
- ATR Locations

classification counts will be conducted in conjunction with the traffic volume counts. Speed and delay run locations are expected to include:

- Eleventh Avenue, W. 51st Street to W. 57th Street (northbound)
- Eleventh Avenue, W. 57th Street to W. 51st Street (southbound)
- W. 53rd Street, Ninth Avenue to Eleventh Avenue (westbound)
- W. 54th Street, Twelfth Avenue to Ninth Avenue (eastbound)

- Vehicle classification count intersections are expected to include:
  - W. 52nd Street at Twelfth Avenue (Route 9A)
  - W. 53rd Street at Tenth Avenue
  - W. 54th Street at Twelfth Avenue (Route 9A)
  - W. 54th Street at Tenth Avenue
  - W. 54th Street at Twelfth Avenue (Route 9A)
  - W. 57th Street at Eleventh Avenue
- Inventory physical data at each of the analysis intersections needed for capacity analyses, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, typical parking regulations, and signal phasing and timing data. The analysis will use official NYC DOT signal timing.
- Determine existing traffic operating characteristics at each analysis intersection including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per traffic movement, per intersection approach, and per overall intersection. The latest approved version of the *Highway Capacity Software* will be used. Allowances for any on-going construction or temporary road closures will be made.
- The future No-Build projects in the area and associated future No-Build traffic volumes will be determined. Traffic volumes will be determined, v/c ratios and levels of service will be calculated, and problem intersections will be identified. The future traffic volumes from these sites will be estimated using EISs, U.S. Census data, and other sources. An annual growth rate of 0.5 percent will be applied in the No-Build condition of the traffic analysis to account for general background growth. Mitigation measures accepted for all No-Build projects and other NYCDOT initiatives will be included in the future No-Build network.
- Using the same transportation planning assumptions as for No-Build conditions, estimate the travel demand characteristics of the projected developments associated with the proposed action and for the net change in uses as defined in the RWCDS No-Build and Build Scenarios.
- Compute future No-Build traffic volumes based on the approved background traffic growth rate for the study area and the volume of traffic expected to be generated for significant development projects anticipated to be in place by the proposed Build year for the rezoning action. Intersection volume-to-capacity (v/c) ratios, delays, and LOS will also be determined.
- Determine the volume of vehicle traffic expected to be generated by the rezoning action, assign that volume of traffic in each analysis period to the approach and departure routes likely to be used, and prepare traffic volume networks for the future Build condition for each analysis period. It is assumed that this traffic assignment process will be completed for the projected development sites in the study area.
- Determine the resulting v/c ratios, delays, and LOS for the future Build condition, and identify significant traffic impacts in accordance with *CEQR Technical Manual* criteria.
- Identify and evaluate traffic improvements needed to mitigate significant traffic impacts. The mitigation analysis will frame the full set of measures required in the EIS development scenario built by 2011.
- Construction period traffic impacts will be assessed by considering any losses in lanes, walkways, and other above and below grade transportation services, and increases in vehicles from construction workers, and analyze potential temporary impacts to these transportation systems. The latter will

include calculating trips generated by both construction employees as well as trucks associated with project construction to determine whether detailed traffic assessment is necessary.

- An assessment of vehicular and pedestrian traffic safety will be provided, pursuant to *CEQR Technical Manual* guidelines. As necessary, the EIS will identify improvement measures to enhance pedestrian safety.

Task 13B: Parking

The parking studies will focus on the amount of accessory parking to be provided as part of the proposed project and its ability to accommodate projected parking demand induced by the proposed action. Area-wide public parking inventories also will be conducted to determine the general area's capacity to accommodate additional parking. In addition, any changes to parking supply and demand in future without the proposed action also will be considered.

As the *CEQR Technical Manual* states that a quarter-mile is typically the distance a person would be willing to walk from a parking facility to a site, the off-street public parking facility study area will be a quarter-mile radius of the project site. However, should the parking spaces available within this distance of the site, along with the proposed accessory parking prove insufficient to accommodate the peak parking demand, the parking study area (both on and off street parking) will be extended to a half-mile of the proposed project.

- Conduct an inventory of the public parking lots and garages in the study area, noting their locations, capacities, and peak weekday AM, weekday midday, weekday PM, weekday overnight, and weekend utilization levels. Conduct an inventory of the number of legal on-street parking spaces along the rezoning area block (both sides of the street) and their general utilization levels on a typical weekday. This information will be used as the basis for determining the ability of existing parking resources to accommodate increased demands in the future.
- Project future parking availability based on an annual background growth rate. Any existing parking facilities expected to be removed or relocated or other changes to parking conditions in the future as a result of the rezoning action will be factored into this assessment.
- Forecast the parking demand generated by the proposed project, including peak demand during the weekday peak and weekday overnight periods and an hourly parking accumulation table for the on-site parking. Based on these assumptions, an assessment will be provided to determine whether there would be excess parking demand, and whether there are a sufficient number of other parking spaces available in the public facilities in the study area to accommodate that excess demand.

Task 13C: Transit and Pedestrians

Subway: The proposed action is expected to generate an increase of more than 200 subway person trips, the threshold for detailed transit analysis, in the AM and PM peak hours. Specifically, the hourly subway trips generated by the proposed action would be 274 and 445 in the weekday AM and PM peak hours, respectively. Refer to Appendix A for details.

As discussed in Appendix A, project-generated subway trips would be dispersed among four subway stations, with no single station estimated to process more than 50 percent of these trips. Accordingly, the number of these peak hour subway trips at any one station would be below 200 trips per hour, except for the 59th Street-Columbus Circle Station in the PM peak hour. In accordance CEQR screening procedures, a detailed analysis is warranted and will be provided in the EIS for this and any other station expected to process 200 or more subway trips in the weekday AM or PM peak hours.

- Conduct pedestrian counts at critical elements of stations expected to process more than 200 project-generated subway trips (based on preliminary forecasts, 59th Street-Columbus Circle Station, served by the IND A, B, C, D, and IRT 1 lines). These counts will be conducted in the weekday peak

periods expected to have 200 or more peak hour trips (based on preliminary forecasts, PM peak period).

- Determine the existing capacities and LOS along or through critical elements of analyzed stations according to *CEQR Technical Manual* and/or NYC Transit design criteria.
- Determine future No-Build and Build volumes at these analysis locations using background ridership growth rates for the stations and project-generated subway riders. Significant impacts will be identified and mitigation measures identified where necessary in coordination with NYC Transit.

Bus: As also discussed in Appendix A, the proposed action is expected to generate 152 and 215 bus person trips in the weekday AM and PM peak hours, respectively. These trips would be distributed primarily between M11 (Tenth and Eleventh Avenues West Side) and the M31 (W. 57th Street crosstown) routes. With project demand dispersed among these two and other nearby bus routes, it is expected that no single bus route would carry more than 200 project-generated bus trips in any peak hour. As the proposed project would generate well below 200 net bus trips, detailed analysis of bus conditions is not warranted and would not be provided in the EIS. However, the EIS will provide a qualitative discussion of bus services and analysis screening assessment.

Pedestrians: The proposed action would result in 668 pedestrian trips during the weekday AM peak hour, 724 pedestrian trips during the midday peak hour, and 971 pedestrian trips during the PM peak hour (including walk only, subway and bus trips). Accordingly, detailed pedestrian analyses will be provided in the EIS.

- Conduct and analyze pedestrian counts at critical locations in the study area. Corners, crosswalks, and adjoining sidewalks will be evaluated at locations receiving the greatest concentration of action-generated pedestrian trips. Pedestrian assignment diagrams will be prepared to assist in identifying these locations. This scope assumes that up to approximately 4 pedestrian intersections would be analyzed and may include the following.
  - W. 53rd Street at Tenth Avenue
  - W. 53rd Street at Eleventh Avenue
  - W. 54th Street at Tenth Avenue
  - W. 54th Street at Eleventh Avenue

TASK 14. AIR QUALITY

The proposed rezoning action would permit residential uses on sites that previously allowed only industrial or commercial uses. In accordance with the *CEQR Technical Manual* screening thresholds, if the project is found to generate 75 or more vehicles through an intersection between Manhattan between 30th and 61st streets, a detailed mobile sources technical analysis will be performed. The analysis will also assess emissions from both on-site parking facilities. Also, the EIS will address the potential for these future residential and commercial land uses to affect existing land uses or be affected by air pollutants emitted from existing nearby industrial or commercial uses. The effects of the building's HVAC systems on sensitive locations also will need to be assessed. A stationary source air quality analysis will therefore be conducted, following the procedures outlined in the *CEQR Technical Manual*, to determine whether these emissions have the potential to cause violations of National Ambient Air Quality Standards or NYSDEC's Annual or Short-Term Guideline Concentrations at the project site or nearby properties.

Mobile Source Analyses

As noted above, mobile source modeling will be performed as the project is expected to generate 219 vph, 261 vph, 276 vph, and 218 vph, in the weekday AM, weekday midday, weekday PM, and Saturday midday

peak hours. The primary air quality issue related to the proposed development is whether the traffic generated with the proposed project during peak traffic periods will cause or exacerbate a violation of the 8-hour ambient air quality standard for carbon monoxide (CO) or the 24-hour standard for particulate matter with diameter of 10 microns or less (PM10); or exceed the NYCDEP *de minimis* criteria for CO or the significant threshold values for particulate matter with diameter of 2.5 microns or less (PM2.5).

The specific work program for the mobile source (traffic-related) air quality studies is as follows:

- Update existing air quality data. Collect and summarize existing ambient air quality data for the study area, i.e., vehicle classification and travel speed and delay counts.
- Based on project-generated volumes from the traffic analysis, determine whether a microscale CO analysis is warranted. In this area of Manhattan, critical intersections to be analyzed would include those with a project increment of 75 or more vehicles.
- Accessory parking facilities would also be analyzed. Sites near these locations would experience the maximum total pollutant concentrations with the proposed action and/or incremental pollution concentrations resulting from the proposed action. Since, for air quality purposes, a sensitive receptor is defined as a location where people are likely to have continuous access, receptor locations may include sidewalks, parks, schools, or other sensitive uses next to or above roadways, pedestrian paths in or near parking facilities, etc. However, the worst-case locations are typically on the sidewalks along each leg of an intersection. It is expected that up to four "worst-case" intersections would be selected for detailed analysis.
- Select model for vehicular emission factors. The latest USEPA emission factor model (currently MOBILE 6.2) will be used. The temperature and other input parameters will be selected in consultation with NYCDEP. Proper credit to account for the State's inspection and maintenance and anti-tampering programs, the recently revised vehicles registration data that includes SUVs, and other inputs will be incorporated.
- Select dispersion model for microscale carbon monoxide analysis. At the receptor sites, the USEPA's mobile source CAL3QHC (Version 2) dispersion model will be used to determine carbon monoxide microscale concentrations.
- Select standard "worst-case" meteorological conditions, including wind speed, stability, class ambient temperature, and persistence factor. Modeling inputs appropriate for the study area will be obtained from NYSDEC and NYCDEP.
- Select appropriate background levels. For the microscale carbon monoxide analysis, appropriate background levels for the study area will be obtained from DEP.
- Determine pollutant levels. At each microscale analysis site, model maximum 1-hour carbon monoxide concentrations for existing conditions, the future without the proposed action, and the future with the proposed action. The 8-hour carbon monoxide levels will be determined by applying a persistence factor of 0.77 to the 1-hour levels.
- Compare with standards and impact criteria. Existing and future carbon monoxide pollutant levels will be compared with National Ambient Air Quality Standards and the City's de minimis criteria, as well as with one another to determine trends and action impacts.
- Assess the consistency of the proposed action with the strategies contained in the State Implementation Plan (SIP) for the area. Consistency with the applicable SIP for the area will be determined. At any receptor sites where violations of the NAAQS are projected as a result of future conditions with the project, determine what mitigation measures will be required to attain standards.
- Examine mitigation measures, as necessary. If warranted, analyses will be carried out to quantify ameliorative traffic measures to minimize any significant adverse impacts of the proposed action.
- Emissions from one worst-case on-site parking facility will be calculated using the procedures described in the *CEQR Technical Manual Appendices*. Emission factors will be obtained from MOBILE6.2. Line source CO from passing traffic in front of the parking facility also may be added to sidewalk CO concentrations from the parking facility.

- In addition, a screening analysis will be conducted following NYCDEP guidelines to determine whether estimated 24-hour PM2.5 and PM10 levels due to the project' traffic volumes would exceed the federal NAAQS or whether the 24-hour and annual incremental PM2.5 concentrations would exceed the NYCDEP's de minimis values. The screen is based on: 1) 21 diesel trucks through an intersection during a peak traffic period, or 2) a volume of project-generated traffic of all vehicular types that is equivalent to 21 diesel trucks. If warranted, one "worst-case" air quality site would be selected for modeling using MOBILE6.2, CAL3QHCR, and 5 years of meteorology data.

Stationary Source (HVAC Systems) Analyses

A stationary source screening analysis will be performed to determine the potential for significant pollutant concentrations from fossil-fueled heating, ventilating, and air conditioning (HVAC) systems. Issues associated with the proposed project relate to the potential for: (1) emissions from the heating systems of the proposed development to significantly impact nearby existing land uses; and (2) emissions from existing nearby large-scale emission sources to significantly impact the proposed development.

Potential impacts of the heating (and hot water) systems of the proposed project on surrounding land uses would be a function of fuel type, stack height, size of development, and location of emission sources relative to nearby buildings. Fuel uses may include natural gas or oil for space heating and hot water. If the fuel types that will supply heat and hot water to the proposed development have not been determined at the time of the analysis, it will be conservatively assumed that #4 fuel oil would be used.

The *CEQR Technical Manual* provides a screening nomographic method to predict whether the heating systems of these development sites have the potential to significantly impact nearby existing land uses. The areas surrounding the project site will be examined to determine whether buildings the same height or taller than the proposed development exist nearby. The nomographic method will be applied to the proposed development to determine whether its heating systems would have the potential to result in a significant adverse impact on a nearby existing building.

If the proposed development fails the screening analysis (i.e., when distances to existing taller buildings are less than the threshold distance, a more detailed analysis would be carried out.

- EPA's AERMOD air quality dispersion model will be used to estimate the pollutant levels at the elevated receptors (windows, terraces, air intakes, etc.) of these buildings. Concentrations of nitrogen dioxide, sulfur dioxide, and fine particulates (PM10 and PM2.5) will be modeled using AERMOD and five years of meteorology data. Fuel consumption rates will be estimated using factors presented in NYCDEP's Report T.S. #12 or other sources recommended by NYCDEP. Emission factors for pollutants will be obtained from EPA's "Compilation of Air Pollutant Factors" (AP-42) or from available air quality permits. Stack parameters (i.e., temperature, stack diameter, exit velocity, etc.) will be obtained using conservative *CEQR Technical Manual* default values or provided by the building engineer. Analyses will be conducted with and without building downwash using five years of meteorological data from La Guardia Airport. Background values for the pollutants of concern will be obtained from monitoring data collected by the NYSDEC.
- Predicted worst-case pollutant concentrations will be compared to the National Ambient Air Quality Standard (NAAQS) and the NYCDEP de minimis criteria to determine the potential for significant impacts both to the project site and from the project site. If violations of standards are predicted, measures to reduce pollutant levels to within standards will be addressed.
- Analyses of any large-scale residential, commercial, or institutional developments located within 400 feet of the project site and which have a stack at or below the height of the proposed project will be conducted.

- In addition, the *CEQR Technical Manual* guidelines also require the consideration of large emission sources located within 1,000 feet of new residential uses. There is a power generating plant located at 850 Twelfth Avenue, approximately 1,000 feet from the project site. A screening assessment based on methods outlined in the *CEQR Technical Manual Appendices* will be conducted to determine if this facility has the potential to cause significant adverse impacts on residential units in the proposed development. It is expected that the screening assessment will be sufficient to demonstrate that this facility would not have the potential to cause pollutant levels at the proposed development to exceeds the NAAQS, and that detailed modeling would not be warranted. However, if a detailed air quality dispersion analysis is warranted it will be carried out using the EPA's AERMOD dispersion model and emission factors from the facility's air quality permit(s).

Air Toxics Analyses

This section will address potential impacts of existing toxic emission sources on the proposed project. These emissions are of concern because the project site is currently zoned M1-5 and would continue to be located adjacent to areas with manufacturing zoning districts. The analysis will be conducted as follows:

- In accordance with the *CEQR Technical Manual*, emissions from industrial/manufacturing or commercial facilities located within 400 feet of the proposed new residential sites (i.e., the air quality study area) will be considered. A survey of manufacturing and industrial uses within a 400-foot radius of the project site will be conducted using site reconnaissance as well as relevant USEPA (Envirofacts), NYSDEC (Air Guide - AG1), and NYCDEP (Bureau of Environmental Compliance) databases to identify facilities with the potential to impact the proposed development.
- Air permits will be acquired and reviewed. Dispersion analyses then will be conducted to determine the potential of the toxic emissions released from the existing permitted emission sources to adversely affect the proposed development. This analysis will be conducted using methods outlined in the *CEQR Technical Manual Appendices* to determine whether the currently operating permitted facilities within the air toxics study area would have the potential to cause significant adverse impacts on the proposed development. Results would be compared to the NAAQS, as well as NYSDEC's Short Term and Annual Guideline Concentrations (SGCs and AGCs) for the pollutants of interest.
- If the methods in the *CEQR Technical Manual Appendices* show potential exceedances of the NAAQS, SGCs, or AGCs, the AERMOD model would be used to carry out a more refined analysis of potential impacts from air toxics. Results would be compared to the NAAQS as well as NYSDEC's short-term guideline concentrations (SGCs) or annual guideline concentrations (AGCs).
- If exceedances of the NAAQS or NYSDEC's AGCs or SGCs are predicted, NYCDEP will be contacted regarding measures to reduce pollutant concentrations from these facilities.

Odor Analysis

This section will provide a detailed microscale air quality analysis of the effects of odors from the NYPD Mounted Unit Stable on residential units or other potentially sensitive receptors. This analysis will be performed using a modeling and analysis methodology identified in consultation with NYCDEP.

TASK 15. NOISE

This chapter will examine potential noise impacts due to mobile and stationary sources on noise sensitive receptors. For the former, the EIS needs to determine whether increased traffic associated with the proposed project would generate impacts to noise levels at noise sensitive land uses in the vicinity of the project site. For the latter, the EIS needs to determine the appropriate level of window wall attenuation necessary to provide acceptable noise levels in the proposed residential units.

Noise Descriptors

Since the human ear does not respond equally to all frequencies, measured sound levels (in decibel units at standard frequency bands) are often adjusted or weighted to respond to the frequency response of human hearing. The weighted sound level is expressed in units called "A"-weighted decibels (dBA) and is measured with a calibrated noise meter. Typical noise level descriptors include the L_{eq}, which is the continuous equivalent sound level. The L_{max} is the highest sound pressure level (SPL) measured during a given period of time, and the L_{min} is the lowest SPL measured during a given period of time. The L_{10} is the SPL exceeded 10 percent of the time. Similar descriptors are the L_{50}, L_{01}, and L_{90}.

Mobile Sources

In general, a significant noise impact occurs when a project results in an increase of 3 dBA or more. From a traffic standpoint this would require the equivalent of a doubling of Passenger Car Equivalents (PCEs) based on projected Build traffic volumes on any street adjacent to surrounding noise sensitive land uses. A screening analysis would be performed to determine whether traffic volumes at intersections within the study area are likely to double. If a doubling of traffic volumes is projected, then a more detailed noise impact analysis based on calculations of PCEs would be carried out to determine the potential for impacts on the project site or other nearby sensitive noise receptors.

Stationary Sources

The proposed rezoning would allow residential and commercial development in what is currently a manufacturing zone. High ambient noise levels from existing land uses may affect the new sensitive uses introduced by the proposed action.

Analysis Methodology

Existing noise levels will be determined by monitoring noise levels at future residential/commercial locations. The sites and peak periods would be selected based on preliminary traffic analysis and field visits. Future traffic noise levels will be estimated based on the proportionate change in traffic volume between existing and future conditions (Future Noise Level (dBA) = Existing Noise Level (dBA) + 10Log (Future PCE/Existing PCE)).

Tasks

Specifically, the noise studies for the proposed project will include the following tasks:

- Select appropriate noise descriptors. Appropriate noise descriptors to describe the noise environment and the impact of the proposed project will be selected based on the *CEQR Technical Manual*. Key descriptors include the L_{10} and the 1-hour equivalent (Leq(1)) noise levels.
- Select representative receptor locations to characterize existing noise levels. An estimated one to four receptor locations would be analyzed.
- Determine existing noise levels. Monitoring would be carried out at each of the selected representative receptor sites to determine existing noise levels. At each site 20-minute measurements will be made during a typical weekday AM, weekday midday, weekday PM, and Saturday midday peak period. Hourly Leq, L1, L10, L50, and (L_{min} and L_{max}) L90 values (indicating "equivalent sound level" and noise levels that are exceeded 1, 10, 50, and 90 percent of the time, respectively) will be

recorded.[2] Traffic classification counts and aircraft flyovers during the monitoring period would be tabulated. Noise monitoring periods would be 20 minutes long as recommended by the *CEQR Technical Manual*. No late-night or 24-hour monitoring is anticipated.

- Determine future traffic noise levels. Using proportional modeling techniques, a screening analysis will be performed to identify locations where project-generated traffic would have the potential to cause a significant noise impact on surrounding sensitive land uses. As described in the *CEQR Technical Manual*, the potential for impacts from mobile sources would be an increase of 3dBA due to the proposed project in an area of ambient 62 dBA or greater, or an increase of up to 5 dBA where existing noise levels are 60 dBA or less.
- Determine the required degree of building attenuation to be provided by construction materials. Compare projected future noise levels at the site with the City's noise exposure guidelines (Table 3R-3 in the *CEQR Technical Manual*), and determine the level of mitigation that is necessary to satisfy CEQR requirements (e.g., the degree of building attenuation).
- Review potential for impacts due to rooftop HVAC sources. Review project site plans to determine whether rooftop HVAC sources have the potential to cause noise levels impacts to existing or proposed uses. If potential impacts are likely, address potential mitigation measures such as relocating the equipment or constructing acoustical enclosures.
- Review construction noise levels. Construction noise is typically addressed in a qualitative manner. Construction-related noise during hours of construction activity will be qualitatively assessed, along with the identification of noise-sensitive uses adjacent to the proposed project area. Where appropriate, recommendations would be made to comply with NYCDEP guidelines and the NYC Noise Control Code.

TASK 16. CONSTRUCTION IMPACTS

The construction schedule for the proposed action will be described, on-site activity will be estimated, and a qualitative analysis of the effects of construction activities will be performed. The analysis will be based on the peak construction period of the project. Technical areas to be analyzed include the following:

- Project Site. This section will assess any physical changes to the project site resulting from the proposed construction. A discussion of construction staging, compliance with building codes and other applicable laws, etc. will be provided.
- Economics. This section will estimate the cost of construction of the project including site preparation costs and economic activity, employment and tax benefits realized by the city and state during construction.
- Transportation. This section will consider any losses in lanes, walkways, and other above and below grade transportation services, and increases in vehicles from construction workers.
- Air Quality. The construction air quality impact section will contain a qualitative discussion of both mobile source emissions from construction equipment and worker and delivery vehicles, and fugitive dust emissions. It will discuss measures to reduce potential impacts, as applicable.
- Noise Impacts. The construction noise impact section will contain a qualitative discussion of noise from construction activity.
- Hazardous Materials. This section will assess the potential for construction workers to be exposed to any potential contaminants during the construction process.

[2] Leq is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by Leq(1), or 24 hours, denoted as Leq(24)), conveys the same sound energy as the actual time-varying sound.

TASK 17. PUBLIC HEALTH

Public health involves the activities that society undertakes to create and maintain conditions in which people can be healthy. Many public health concerns are closely related to air quality, hazardous materials, construction and natural resources. A public health assessment may be warranted if a proposed action results in a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect ground water to be used as a source of drinking water; c) solid waste management practices that could attract vermin and result in an increase in pest populations; d) potentially significant adverse impacts to sensitive receptors from noise and odors; or e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts. Based on the findings of the tasks discussed above, the EIS will provide an assessment of potential public health impacts, following the guidelines presented in the *CEQR Technical Manual*.

TASK 18. MITIGATION

Where significant project impacts have been identified in Tasks 2 through 20, measures to mitigate those impacts will be described. These measures will be developed and coordinated with the responsible City/State agency. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

TASK 19. ALTERNATIVES

The purpose of an alternatives section in an EIS is to examine development options that would tend to reduce project-related impacts. The alternatives are usually defined when the full extent of project impacts are identified, but at this time it is anticipated that they will include: up to three (3) alternatives that will be addressed in the DEIS. These are likely to include (1) the No Action Alternative, which assumes no project site rezoning but includes as-of-right development on the project site; (2) a No Impact Alternative, which considers the magnitude of development that could occur on the projected development sites without resulting in any significant adverse impacts; and (3) a Lesser Density Alternative which assumes a lower density than the proposed action. The alternatives analysis is primarily qualitative, except where impacts of the proposed action have been identified. For technical areas where impacts have been identified, the alternatives analysis will determine whether these impacts would still occur under each alternative.

TASK 20. SUMMARY EIS CHAPTERS

In accordance with CEQR guidelines, the EIS will include the following three summary chapters, where appropriate to the proposed action:

- **Unavoidable Adverse Impacts** - which summarizes any significant adverse impacts that are unavoidable if the rezoning is implemented regardless of the mitigation employed (or if mitigation is impossible).
- **Growth-Inducing Aspects of the proposed action** - which generally refer to "secondary" impacts of a proposed action that trigger further development.
- **Irreversible and Irretrievable Commitments of Resources** - which summarizes the proposed action and its impacts in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

TASK 21. EXECUTIVE SUMMARY

The executive summary will utilize relevant material from the body of the EIS to describe the proposed project, its environmental impacts, measures to mitigate those impacts, and alternatives to the proposed action. The executive summary will be written in enough detail to facilitate the drafting of a notice of completion by the lead agency.

APPENDIX A
TRANSPORTATION PLANNING ASSUMPTIONS MEMORANDUM

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770 Eleventh Avenue Mixed-use Development Rezoning
Transportation Planning Assumptions
[5 October 2007]

A. INTRODUCTION

Project Site

The project site is comprised of Block 1082, Lot 1, occupying a portion of the block bounded by W. 54th Street, Tenth Avenue, W. 53rd Street, and Eleventh Avenue in the Special Clinton District within Manhattan Community District 4. The site has frontage on Eleventh Avenue extending from W. 53rd Street to W. 54th Street, and along W. 53rd Street and W. 54th Street extending 470 feet, 4.25 inches east from Eleventh Avenue. Adjacent to the site on the east is the 457-foot tall AT&T Switching Center building. Until May 2007, the project site was occupied by a Verizon automotive service/vehicle storage facility and now is unoccupied.

Proposed Project

The proposed rezoning and related actions would result in an approximately 1.1 million gross square-foot (gsf) mixed-use development on the project site including the following uses (all approximate): 900 dwelling units (DUs), 16,000 gsf of local retail; 31,000 gsf of health club space; 236,000 gsf of automobile sales, preparation, and repairs space on the ground floor, mezzanine above it, and in two cellar levels; 28,000 gsf of NYPD Mounted Unit facility (stable and related space); and up to 225 accessory parking spaces. Twenty percent of the residential units, approximately 180 DUs, would be affordable housing units and the remaining 720 DUs would be market rate rental units.

It is expected that the proposed project would be completed and fully occupied by 2011. This proposed development represents the Build scenario for the project site.

No-Build Scenario

In the future with or without the proposed action, for analysis purposes it is assumed that the project site would remain unoccupied. This will serve as the baseline for comparing the effects of the future without and with the proposed action.

Reasonable Worst Development Scenario Net Development

In the future with the proposed action, the No-Build development scenario would not occur and the proposed project would be developed in its place. This is the Reasonable Worst Case Development Scenario (RWCDS) associated with the proposed project. This memo discusses the transportation planning assumptions to be used in demand forecasting in the EIS.

Table 1 summarizes the RWCDS development conditions.

Table 1, Reasonable Worst Case Development Scenario/Proposed Project (1)

TYPE OF USE	EXISTING	NO-BUILD SCENARIO	BUILD SCENARIO
Residential,			
Market Rate DUs	-	-	720
Affordable Housing DUs	-	-	180
Total Residential DUs	-	-	900
Residential Area (zsf)	-	-	726,494
Local Retail (gsf) (2)	-	-	16,000
Automobile Dealership			
Above-grade Showroom Space (gsf)	-	-	66,000
Below-grade Storage Space (gsf)	-	-	170,000
Total Automobile Dealership (gsf)	-	-	236,000
Health Club (gsf)	-	-	31,000
NYPD Mounted Unit Stable Facility (gsf)	-	-	28,000
Accessory Parking Spaces (3)	-	-	225

(1) Note: Program numbers are approximate, refer to text for details.
(2) The Build Scenario Retail Space includes approximately 16,000 gsf of retail, assumed to be a food market.
(3) The maximum permitted as-of-right accessory parking spaces would be provided. The number shown is indicative and would not be exceeded.

Proposed Project Access and Circulation

Pedestrian and vehicular access points would be dispersed throughout the proposed project's three street frontages. Based on preliminary project plans, these include the following access points, which would affect traffic and pedestrian circulation to and from the project site:

Eleventh Avenue: The avenue frontage likely would include pedestrian access for the auto dealership use. No vehicular curb cuts would be provided along the avenue.

W. 53rd Street: The southern frontage of the site would include pedestrian access to a residential lobby. Other pedestrian access points would be provided for the NYPD Mounted Unit facility and possibly for the auto dealership. Vehicular access would be provided for the auto dealership via a two-way ramp. There also would be separate two-way ramp providing access to the accessory parking. Also, along W. 53rd Street a curb cut would provide access for horses and horse trailers to the NYPD Mounted Unit facility.

W. 54th Street: The northern frontage of the site would include pedestrian access to a residential lobby. Pedestrian access also would be provided to the retail (food market) and health club uses, and possibly for the auto dealership. A second two-way ramp providing access for the auto dealership use would be located along this frontage.

B. SELECTION OF PEAK HOURS FOR ANALYSIS

On weekdays, the proposed project's residential component, the predominant generator of travel demand under the Build scenario, is expected to generate peak demand during the traditional weekday AM (8-9 AM) and PM (5-6 PM) commuting periods, and to a lesser extent, during the traditional (lunch time) midday (12 noon-1 PM) period. In addition, significant project-generated travel demand is expected during the Saturday midday (12 noon - 1 PM) period. The proposed auto dealership use is expected to experience peak weekday travel demand during the AM, midday, and PM peak hours, based on survey data for a dealership reported in the *West 57th Street Rezoning FEIS*. As for the other proposed Build scenario components which would generate only a small proportion of the project-related demand, local retail demand is expected to peak in the midday period (primarily walk trips) the health club in the PM peak period, and the NYPD Mounted Unit in the AM and PM peak periods. Accordingly, based on these patterns the travel demand forecast and screening analysis will focus on these three weekday peak hours. In addition to being the periods of peak project-generated demand, these typically are also the periods where traffic network volumes are at their highest levels.

Under CEQR, transit (subway and bus) analyses generally examine conditions during the weekday AM and PM peak commuter periods as it is during these times that overall transit demand (and potential for significant adverse impacts) is typically greatest. Therefore, the forecast and screening will focus on these two peak hours for analysis of transit conditions.

C. PROJECT-GENERATED DEMAND

Table 2 shows the transportation planning assumptions used in the forecast for the proposed action in the weekday AM, weekday midday, weekday PM, and Saturday midday peak hours. The table provides the daily generation rates, mode choice, as well as hourly and directional patterns. These transportation planning assumptions were based on standard CEQR criteria, standard professional references, Census data, and studies that have been used in previous EASs and EISs for projects with similar uses and in nearby areas in Clinton and West Midtown.

Sources for these assumptions are provided in Table 2 and key sources are described below.

TABLE 2
TRANSPORTATION PLANNING ASSUMPTIONS
770 11th Ave. Mixed-use Development

	Uses Generated by the Proposed Action				
Land Use:	Residential	Health Club	Retail	Auto Dealership	NYPD Mounted Unit
Size/Units:	900 DUs	31,000 gsf	16,000 gsf	236,000 gsf	28,000 gsf
	(1)	(2)	(1)	(3)	(4)
Trip Generation: WKDY	8.075	44.7	205.0	2.63	8.06
SAT	8.075	29.5	205.0	2.63	8.06
	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
Temporal Distribution:	(1)	(2)	(2)	(3)	(4)
WKDY AM	9.1%	4.8%	3.1%	12.0%	14.6%
WKDY MD	4.7%	5.6%	19.0%	12.0%	1.0%
WKDY PM	10.7%	13.2%	9.6%	9.0%	18.1%
SAT MD	7.0%	9.8%	9.5%	12.0%	1.0%
	(5)	(6)	(6)	(3)	(4)
Modal Splits:	AM/MD/PM	AM/MD/PM	AM/MD/PM	AM/MD/PM	AM/PM
Auto	9.0%	35.0%	35.0%	100.0%	45.0%
Taxi	6.0%	3.0%	3.0%	0.0%	0.0%
Subway	31.0%	41.0%	41.0%	0.0%	0.0%
Bus	20.0%	12.0%	12.0%	0.0%	0.0%
Walk	34.0%	9.0%	9.0%	0.0%	5.0%
Other	0.0%	0.0%	0.0%	0.0%	50.0%
	100.0%	100.0%	100.0%	100.0%	100.0%
	(1)	(2)	(2)	(3)	(4)
In/Out Splits:	In Out	In Out	In Out	In Out	In Out
WKDY AM	15% 85%	41% 59%	15% 85%	67% 33%	92% 8%
WKDY MD	50% 50%	54% 46%	50% 50%	50% 50%	35% 65%
WKDY PM	70% 30%	75% 25%	10% 90%	15% 85%	9% 91%
SAT MD	50% 50%	54% 46%	55% 45%	50% 50%	35% 65%
Vehicle Occupancy:	(5),(2)	(2)	(7)	(3)	(4)
Auto	1.26	1.40	2.0	1.3	1.0
Taxi	1.40	1.40	2.0	1.5	1.0
Truck Trip Generation:	(7)	(2)	(7)	(3)	(4)
WKDY	0.064	0.19	0.14	0.15	0.15
SAT	0.004	0.01	0.018	0.15	0.15
	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
	(7)	(2)	(7)	(3)	(4)
WKDY AM	6.0%	6.0%	7.7%	9.6%	6.0%
WKDY MD	11.0%	11.0%	11.0%	11.0%	11.0%
WKDY PM	1.0%	1.0%	1.0%	1.0%	1.0%
SAT MD	7.9%	7.6%	11.0%	11.0%	11.0%
	(7)	(2)	(7)	(3)	(4)
	In Out	In Out	In Out	In Out	In Out
AM/MD/PM	50% 50%	50% 50%	50% 50%	50% 50%	50% 50%

Sources:

(1) Pushkarev & Zupan, *Urban Space for Pedestrians* (1975).
(2) Coliseum Redevelopment FEIS (1997)
(3) W. 57th Street Rezoning FEIS (2001)
(4) PHA assumptions: 95% of employees and horses work on a typical weekday; 100% of staff drive to/from work; use horses or walk for othe trips; temporal split based on 120th Precinct EAS
(5) 2000 Census for NY County tract 135, Journey to Work data (adjusted to exclude "worked at home")
(6) 2000 Census for NY County tract 135, Reverse Journey to Work data (adjusted to exclude "worked at home")
(7) Clinton Green Mixed Use Development EAS (2004)
Note: Gross floor area numbers are approximate.

Residential

The transportation planning assumptions for the proposed residential use are based on trip generation rates and temporal distributions derived from *Urban Space for Pedestrians* (1975) by Boris Pushkarev and Jeffrey Zupan. The mode choice and auto vehicle occupancy rate were taken from 2000 US Census journey to work data for New York County census tract 135, in which the project site is located.

Health Club

The transportation planning assumptions for the proposed health club are from the *Coliseum Redevelopment EIS* (1997), which studied development scenarios for the New York Coliseum site at Columbus Circle that was subsequently redeveloped into the Time Warner Center. However, to reflect local site conditions, the modal choice rates were taken from 2000 US Census data reverse journey to work data for census tract 135.

Local Retail

The local retail is expected to be a food market, with an area of approximately 16,000 sf. The exact type of food market has not been determined, but this could be a destination market.

To be conservative, the trip generation rate for local retail is derived from the *CEQR Technical Manual* and Pushkarev and Zupan and the temporal distribution assumptions are based on the *Coliseum Redevelopment EIS*. The modal choice rates were taken from 2000 US Census data reverse journey to work data for census tract 135.

Auto Dealership

It should be noted that the proposed auto dealership would sell both new and pre-owned, i.e., used, vehicles. In addition, it would provide basic automobile servicing for owners of its product line vehicles. Automobile parts also would be available for sale. Customers and employees of the auto dealership would be able to utilize the accessory parking spaces provided on the project site, as available.

The transportation planning assumptions for the proposed auto dealership use are taken from the *West 57th Street Rezoning EIS* (2001), which affected the block bounded by W. 58th Street, Eleventh Avenue, W. 57th Street, and Twelfth Avenue. These assumptions were developed based on a survey taken by PHA at a Mercedes-Benz dealership in Manhattan. It is expected that the service department would generate approximately two-thirds of the daily trips generated by the auto dealership. Conversely, it is expected that the sales showroom would generate approximately one-third of the daily trips. Trips generated by the parts department are expected to be less than 5 percent of the total.

NYPD Mounted Unit

The preliminary transportation planning assumptions for the proposed NYPD Mounted Unit facility were developed based on information about the existing facility and from the *120th Precinct Station*

House, Staten Island, NY EAS, 2006 (CEQR #07NYP001R). The proposed facility would replace an existing one currently located on Hudson River Pier 76. Prior to completion of the EIS, surveys of travel demand characteristics of the existing facility will be conducted, contingent on permission of NYPD, to confirm these assumptions or revise as necessary.

D. TRANSPORTATION ANALYSIS

Table 3 provides the overall resulting net trip generation for the three weekday peak hours for person trips for each mode of transportation and for vehicles trips for autos, taxis, and trucks.

Traffic

According to the *CEQR Technical Manual*, a preliminary trip generation analysis for a project generally will be appropriate to determine the volume of vehicular trips expected during the peak hours. In most areas of the City, including the project area, if the proposed action is projected to result in fewer than 50 peak hour vehicular trip ends, traffic impacts would be unlikely, and therefore further traffic analysis would not be necessary.

As indicated in Table 3, a preliminary travel demand forecast indicates that during a typical weekday the project would generate a project increment of approximately 219 vehicle trips per hour (vph) in the weekday AM peak hour, 261 vph in the weekday Midday peak hour, 276 vph in the PM peak hour, and 218vph in the Saturday midday.

As the proposed project would generate more than 50 vph in the weekday AM, weekday Midday, weekday PM, and Saturday Midday peak hours, a detailed analysis of traffic conditions for those peak hours is warranted and will be provided in the EIS.

Traffic Study Area

Vehicle trips generated by the proposed project were assigned to the local street network and study area intersections identified in the draft Scope of Work for the EIS. As noted in the draft Scope, the traffic study area is expected to include up to approximately 16 intersections along the Tenth Avenue, Eleventh Avenue, and Twelfth Avenue (Route 9A) corridors. These study area intersections are located proximate to the project site and are located along the roadways that would provide access to/from the project site. Project-generated traffic is expected to become rapidly less concentrated with increasing distance from the project site as vehicles disperse through the street grid network. The traffic study area therefore focuses on locations where new traffic is expected to be most concentrated and does not include more distant intersections along access corridors. The traffic assignment is based on trip origin or destination as well as the most direct routes to major roadways. As the project site is located one block from Twelfth Avenue (Route 9A), which offers access for northbound and southbound traffic throughout the west side of Manhattan, it is expected that a substantial portion of the project-generated trips would be made via this roadway.

TABLE 3
TRANSPORTATION PLANNING CALCULATIONS
770 11th Ave. Mixed-use Development

		Uses Generated by the Proposed Action										Subtotal,		
Land Use:		Residential		Health Club		Retail		Auto Dealership		NYPD Mounted Unit		Build Scenario		
Size/Units:		900 DUs		31,000 gsf		16,000 gsf		236,000 gsf		28,000 gsf				
Peak Hour Trips:														
WKDAY AM		661		67		102		74		33		937		
WKDY MD		342		78		623		74		2		1,119		
WKDY PM		778		183		315		56		41		1,372		
SAT MD		509		90		312		74		2		987		
Person Trips:														
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
W AM	Auto	9	51	10	14	5	30	50	25	14	1	87	120	208
	Taxi	6	34	1	1	0	3	0	0	0	0	7	37	45
	Subway	31	174	11	16	6	35	0	0	0	0	48	226	274
	Bus	20	112	3	5	2	10	0	0	0	0	25	128	152
	Walk	34	191	2	4	1	8	0	0	2	0	39	203	242
	Other	0	0	0	0	0	0	0	0	15	1	15	1	16
	Total	99	562	27	39	15	86	50	25	30	3	222	715	937
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
W MD	Auto	15	15	15	12	109	109	37	37	0	1	177	175	352
	Taxi	10	10	1	1	9	9	0	0	0	0	21	21	42
	Subway	53	53	17	15	128	128	0	0	0	0	198	195	393
	Bus	34	34	5	4	37	37	0	0	0	0	77	76	152
	Walk	58	58	4	3	28	28	0	0	0	0	90	89	179
	Other	0	0	0	0	0	0	0	0	0	1	0	1	1
	Total	171	171	42	36	312	312	37	37	1	1	562	557	1,119
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
W PM	Auto	49	21	48	16	11	99	8	47	2	17	118	200	318
	Taxi	33	14	4	1	1	9	0	0	0	0	38	24	62
	Subway	169	72	56	19	13	116	0	0	0	0	238	207	445
	Bus	109	47	16	5	4	34	0	0	0	0	129	86	215
	Walk	185	79	12	4	3	26	0	0	0	2	200	111	311
	Other	0	0	0	0	0	0	0	0	2	19	2	19	20
	Total	544	233	137	46	31	283	8	47	4	37	725	647	1,372
												In	Out	Total
S MD	Auto	23	23	17	14	60	49	37	37	0	1	137	124	262
	Taxi	15	15	1	1	5	4	0	0	0	0	22	21	43
	Subway	79	79	20	17	70	57	0	0	0	0	169	153	322
	Bus	51	51	6	5	21	17	0	0	0	0	77	73	150
	Walk	86	86	4	4	15	13	0	0	0	0	106	103	209
	Other	0	0	0	0	0	0	0	0	0	1	0	1	1
	Total	254	254	48	41	171	140	37	37	1	1	512	475	987
Vehicle Trips :														
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
W AM	Auto (Total)	7	40	7	10	3	15	38	19	14	1	69	85	154
	Taxi	4	24	1	1	0	1	0	0	0	0	5	26	31
	Taxi (Bal.)											29	29	58
	Truck	2	2	0	0	0	0	2	2	0	0	4	4	8
	TOTAL											101	118	219
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
W MD	Auto (Total)	12	12	10	9	55	55	29	29	0	1	106	105	211
	Taxi	7	7	1	1	5	5	0	0	0	0	13	13	26
	Taxi (Bal.)											19	19	38
	Truck	3	3	0	0	0	0	2	2	0	0	6	6	12
	TOTAL											131	130	261
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
W PM	Auto (Total)	39	17	34	11	6	50	6	37	2	17	87	131	218
	Taxi	23	10	3	1	0	4	0	0	0	0	27	15	42
	Taxi (Bal.)											29	29	58
	Truck	0	0	0	0	0	0	0	0	0	0	1	1	1
	TOTAL											116	160	276
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
S MD	Auto (Total)	18	18	12	10	30	25	29	29	0	1	89	82	172
	Taxi	11	11	1	1	3	2	0	0	0	0	15	14	28
	Taxi (Bal.)											21	21	42
	Truck	0	0	0	0	0	0	2	2	0	0	2	2	5
	TOTAL											113	106	218

The EIS will analyze these intersections in the weekday AM, Midday, and PM peak hours. The traffic study area and likely intersections to be analyzed are shown in Figure 1. Traffic assignment diagrams for the project increment are presented in Figures 2 through 5.

Parking

The proposed project would provide up to 225 accessory parking spaces, i.e., providing the maximum permitted as-of-right.

Parking demand generated by the proposed residential units typically would peak during the weekday overnight period. A parking demand screening assessment for the proposed project was prepared to identify if the proposed accessory parking spaces would be sufficient to accommodate the project's peak parking demand. Based on 2000 US Census data from the census tract containing the project site, for households with annual incomes of $100,000 (1999 dollars) or above, it is expected that the vehicle ownership rate for the 720 market rate DUs would be approximately 31 percent. In addition, based on Census data for the same area for households with annual incomes below $75,000 (1999 dollars), it is expected that the vehicle ownership rate for the 180 affordable housing DUS would be 22 percent. Accordingly, the peak residential parking demand would be approximately 263. In addition, the NYPD has requested that 12 parking spaces be allocated for its use on an ongoing basis. Although overnight parking demand from commercial tenants and building employees is expected to be very minimal, in any event the peak overnight parking demand is expected to be at or exceed the up to 225 accessory parking spaces provided. As such, the proposed project may have the potential to affect public parking facilities in the surrounding area. Accordingly, the EIS will provide a detailed analysis of public parking conditions during the weekday peak and overnight peak periods within an approximately quarter-mile radius of the project site for existing, No-Build, and Build conditions. However, should the parking spaces available within this distance of the site, along with the proposed accessory parking prove insufficient to accommodate the peak parking demand, the parking study area (both on and off street parking) will be extended to a half-mile of the proposed project.

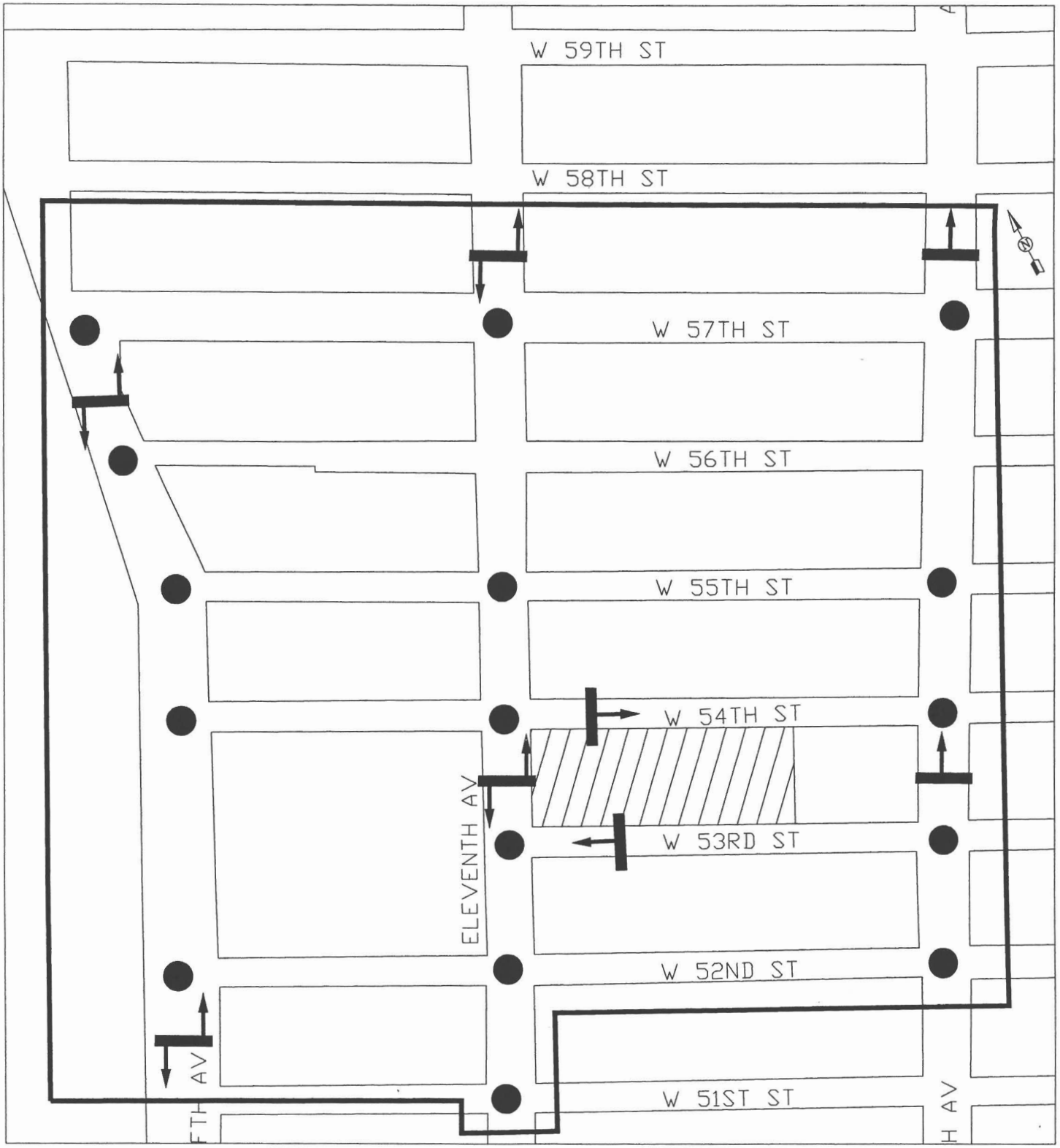
Transit

According to the general thresholds used by the Metropolitan Transportation Authority specified in the *CEQR Technical Manual*, detailed transit analyses are not required if the proposed action is projected to result in less than 200 peak hour rail or bus transit riders, because a proposed development that generates such a low number of transit riders is unlikely to create a significant adverse impact on the current transit facilities.

Subway

As shown in Table 3, the net hourly subway trips generated by the proposed action would be 274 and 445 in the weekday AM and PM peak hours, respectively.

Subway trips generated by the proposed uses likely would be dispersed among four nearby subway stations. These include: (1) 50th Street Station served by the IND C and E lines, at Eighth Avenue; (2) the 59th Street-Columbus Circle Station, served by the IND A, B, C, and D lines and the IRT 1

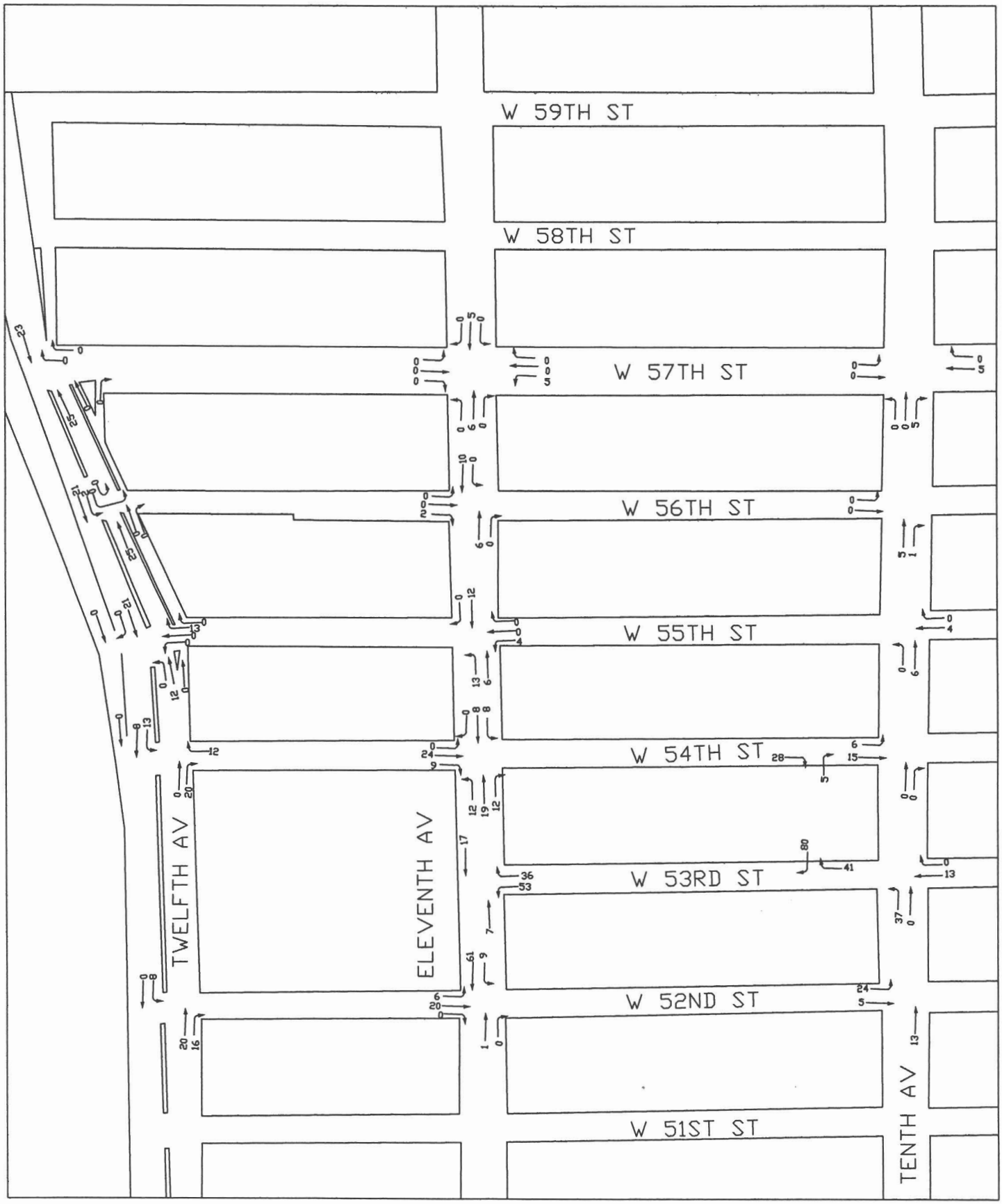


Legend

- Potential Traffic Study Area Intersections
- Study Area Boundary
- ATR Locations

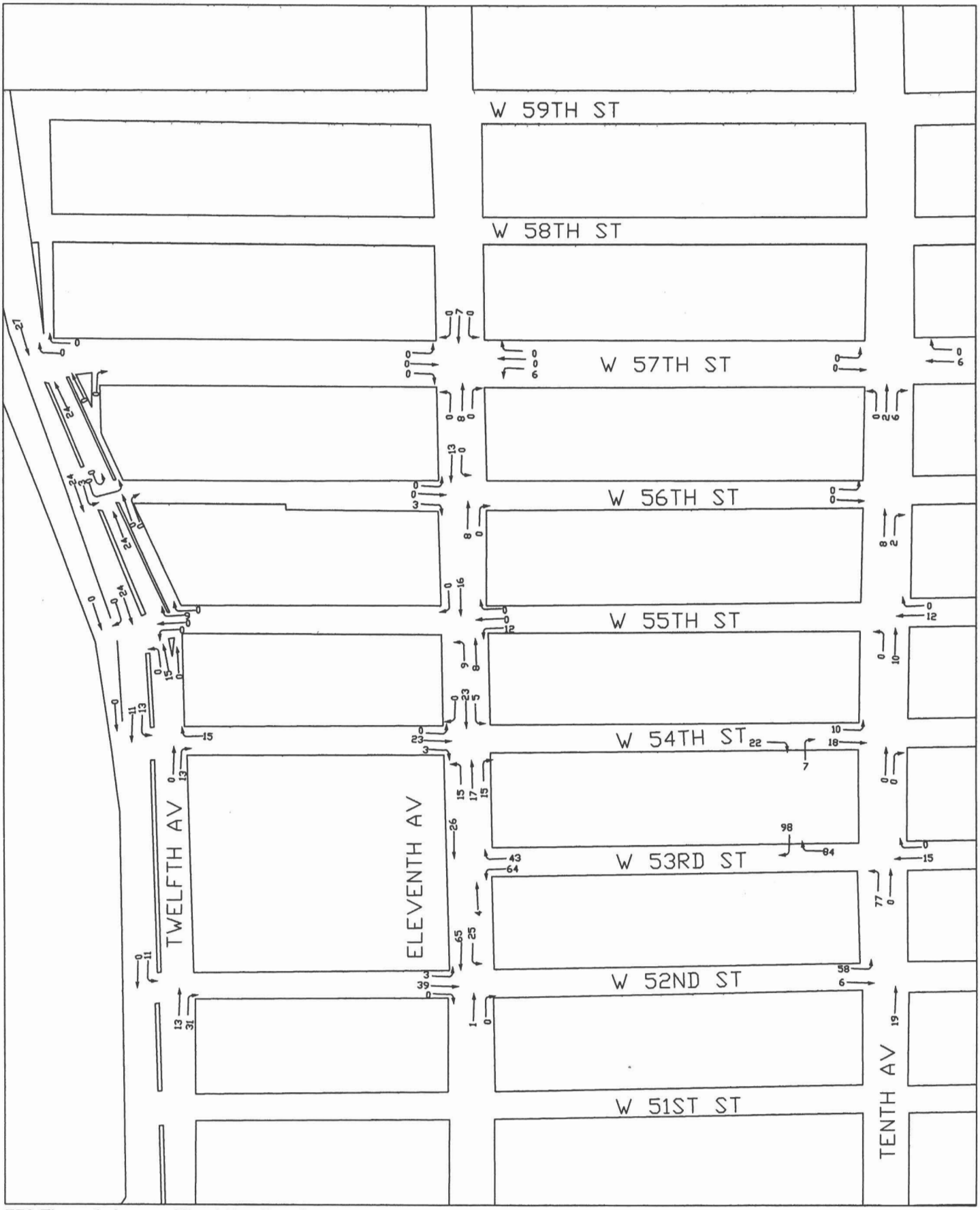
770 Eleventh Avenue Mixed-use Development Rezoning

Figure 1, Traffic Study Area



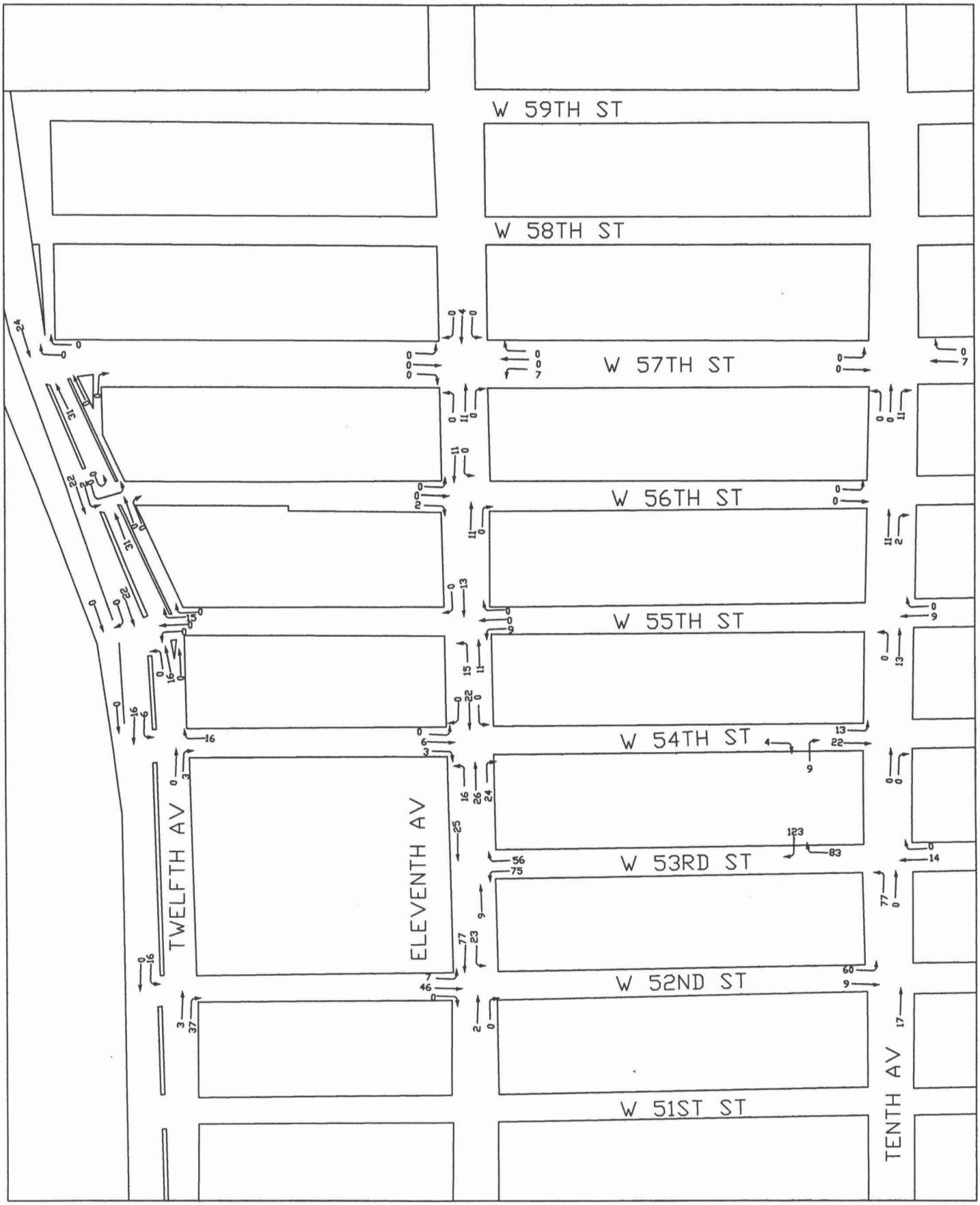
770 Eleventh Avenue Mixed-Use Development

Build Increment AM Traffic Volumes
Figure 2



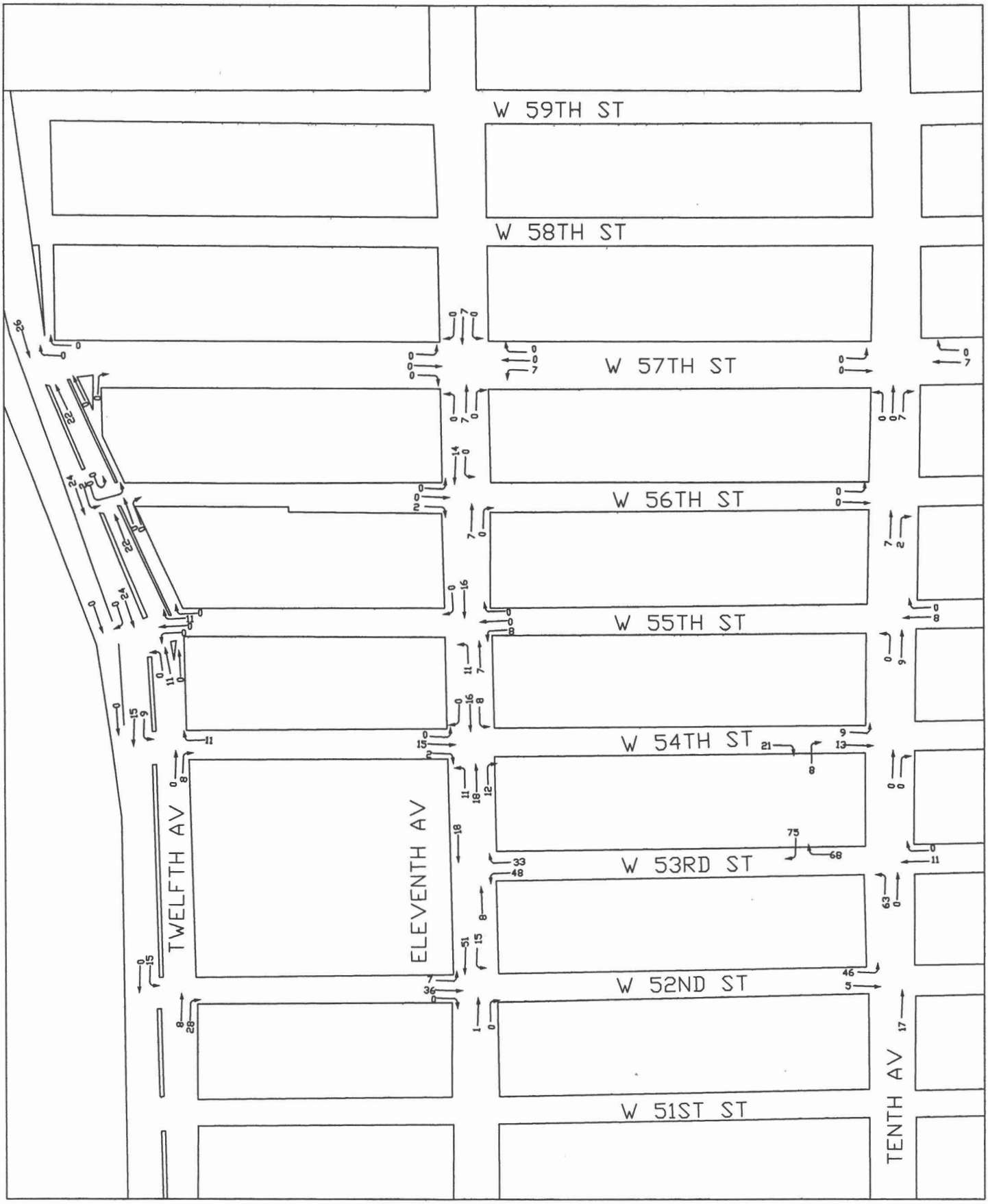
770 Eleventh Avenue Mixed-Use Development

Build Increment MD Traffic Volumes
Figure 3



770 Eleventh Avenue Mixed-Use Development

Build Increment PM Traffic Volumes
Figure 4



770 Eleventh Avenue Mixed-Use Development

Build Increment Sat. MD Traffic Volumes
Figure 5

line, at Eighth Avenue and Broadway, which has entrances at W. 57th Street and Eighth Avenue; (3) 50th Street Station, served by the IRT 1 line, at Broadway; and (4) the Seventh Avenue Station, served by the IND B, D, and E lines, at W. 53rd Street, which has an entrance at W. 53rd Street and Broadway. Based on location of these stations relative to the site, services available, and likely travel patterns, it is expected that roughly 50 percent of project-generated subway trips would be via the 59th Street-Columbus Circle Station, roughly 35 percent would made via the 50 Street Station (IND) at Eighth Avenue, and the remaining roughly 15 percent would be made via the other two stations.

Accordingly, with this distribution of subway trips, the greatest contribution of project-generated peak hour trips at any one station would be roughly 274 and 445 in the AM and PM peak hours, respectively, at 59th Street-Columbus Circle. As the number of peak hour subway trips at the 59th Street-Columbus Circle Station in the PM peak hour generated by the proposed action would be above 200 trips per hour, a detailed analysis at this location in the PM peak hour is warranted and will be provided in the EIS.

Bus

The approximate net hourly bus trips generated by the proposed action would be 152 and 215 in the weekday AM and PM peak hours, respectively. These trips would be distributed primarily between M11 (Tenth and Eleventh Avenues West Side) and the M31 (W. 57th Street crosstown) routes. With project demand dispersed among these two and other nearby bus routes, it is expected that no single bus route would carry more than 200 project-generated bus trips in any peak hour.

As the proposed project would generate well below 200 net peak hour bus trips on any one route, detailed analysis of bus conditions is not warranted and would not be provided in the EIS. However, the EIS will provide a qualitative discussion of bus services and analysis screening assessment.

Pedestrians

Analysis of pedestrian conditions focuses on elements where substantial number of trips are generated by an action. These elements include sidewalks, street corner areas, and crosswalks. The proposed action would generate net new pedestrian demands on these types of elements in the vicinity of the project site.

As shown in Table 3, the proposed project would generate a pedestrian increment of 242 walk only trips in the AM peak hour and 311 walk only trips in the PM peak hour. In addition, the 426 bus and subway trips in the AM peak hour and the 660 bus and subway trips in the PM peak hour would include a walk component to reach/depart the project site. With this level of pedestrian trips generated by the proposed project, detailed pedestrian analyses will be provided in the EIS. The analysis will focus on corners, crosswalks, and adjoining sidewalks adjacent to the project site that would process the greatest concentrations of project-generated pedestrian trips, as determined by a pedestrian assignment. This is expected to include up to four pedestrian intersections.