FINAL SCOPE OF WORK FOR THE CROTONA PARK EAST/WEST FARMS REZONING AND RELATED ACTIONS ENVIRONMENTAL IMPACT STATEMENT

CEQR No.: 10DCP017X

Lead Agency: New York City Department of City Planning

Prepared by: Stantec Consulting Services, Inc. and Sandstone Environmental Associates

Crotona Park East/West Farms Project
Environmental Impact Statement ("EIS")
Final Scoping Document

INTRODUCTION

This scope of work outlines the issues to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the proposed Crotona Park East/West Farms rezoning and related actions ("the Proposed Action").

The Proposed Action includes zoning map and zoning text amendments proposed by the project applicant (Industco Holdings, LLC), as well as special permits for a large-scale general development project (LSGD) and the disposition of a City-owned property. The rezoning area is located in the Crotona Park East and West Farms neighborhoods of the Bronx, and is contained within Bronx Community Districts 3 and 6 (see Figure 1-1). The proposed rezoning area is currently zoned primarily as an M1-1 manufacturing district with a small R7-1 residential district, a portion of which is mapped with a C2-4 commercial overlay, lying north of the Cross Bronx Expressway. The proposed zoning map amendment would rezone the area to a mix of R6A, R7A, R7X, and R8X residential districts with selected C2-4 commercial overlays. An amendment to the text of the *NYC Zoning Resolution* (ZR) would establish the Inclusionary Housing program within the proposed rezoning area and grant the City Planning Commission (CPC) the authority, for LSGDs located in Bronx Community District 3, to exclude portions of buildings containing enclosed accessory parking from lot coverage. Also part of the Proposed Action is a request for special permits under ZR Sections 74-743, 74-744 and 74-745 to provide bulk and other waivers for an LSGD to be developed on sites controlled by the applicant on Blocks 3013 and 3014 (Parcels 1 and 2; see Figure 1-1). In addition, the NYC Department of Housing Preservation and Development (HPD) is proposing the disposition of a City-owned property to facilitate the development of a portion of the LSGD. This chapter provides a detailed description of the Proposed Action and required approvals.

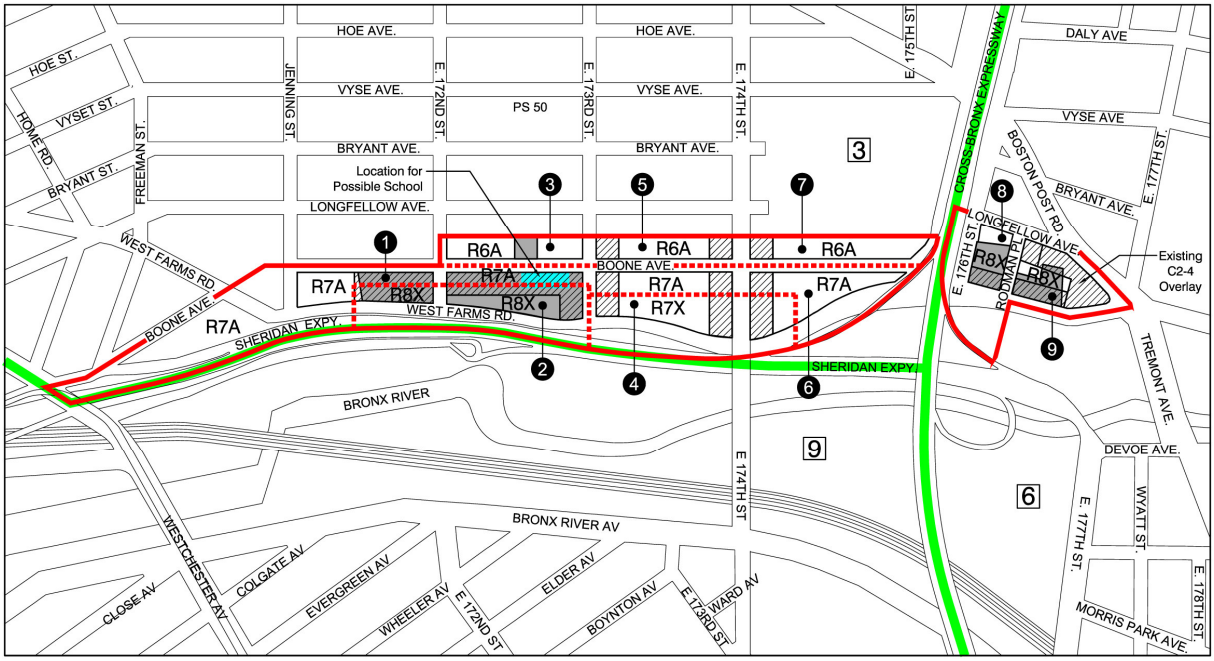
In order to assess the potential environmental impacts of the Proposed Action, a reasonable worst case development scenario (RWCDS) has been identified. The RWCDS projects future conditions with the Proposed Action through an analysis year of 2022. In total, the Proposed Action is expected to result in new development by 2022 of approximately 2,635 dwelling units, 92,941 square feet (sf) of commercial space and 11,888 sf of community facility space compared to the future without the Proposed Action. Of the new development expected under the RWCDS, 1,310 dwelling units and 46,908 sf of commercial space would be located on sites that are not under the applicant's control. The remaining 1,325 dwelling units, 46,033 sf of commercial space and 11,888 sf of community facility space would be contained in ten new buildings that the applicant intends to construct on development sites that are under its control (the "Proposed Project"). Seven of the applicant's proposed buildings would comprise the LSGD on Parcels 1 and 2. The bulk and other waivers granted under the LSGD special permits would allow increased design flexibility to address geographical and topographical constraints on these sites. The applicant's remaining three buildings would be developed on an as-of-right basis on other sites on Parcels 3, 8 and 9. (See Figure 1-1.)

Under the Inclusionary Housing program, affordable housing equal to at least 20 percent of the total floor area of a new development (exclusive of ground floor commercial and community facility floor area) is required to be provided either on-site or off-site (within the same community district or one-half mile of the development site) in order to achieve the maximum permitted floor area. In estimating the number of new dwelling units for non-applicant controlled sites, the RWCDS conservatively

assumes that the developments will contain only residential floor area and calculates the number of units based on an average dwelling unit size of approximately 1,000 sf, reflecting the type of units that are currently being constructed in the area. For developments on non-applicant controlled sites, it is assumed that approximately 20 percent of the floor area will be affordable, resulting in approximately 260 affordable units. The applicant desires to provide affordable housing for the Proposed Project in excess of the minimum 20 percent required for the Proposed Project to achieve the maximum bonus floor area and intends to apply for funding through HPD and HDC to try to achieve this goal. The amount and future availability of this funding is unknown, so the extent of additional affordable housing to be provided as part of the Proposed Project (if any) could vary. Accordingly, for purposes of the analysis set forth in Chapter 2.B, Socioeconomic Conditions, the RWCDS assumes that the Proposed Project will provide only the minimum 20 percent affordable housing (approximately 265 units) required under the Inclusionary Housing program to achieve the maximum bonus, while the analysis in Chapter 2.C, Community Facilities and Services and descriptions of the Proposed Project elsewhere in this EIS, assume that the Proposed Project will provide 50 percent affordable housing (approximately 663 units), reflecting the applicant's goal of providing affordable housing in excess of the minimum contemplated under the Inclusionary Housing program.

Because the applicant anticipates applying for funding from HPD and HDC, both entities are acting as interested agencies in the environmental review for this Proposed Action. The application to the CPC for the Proposed Action also includes the option for an 88,620 sf (approximately 540-seat) elementary school serving grades pre-kindergarten through 5 that may be constructed by the New York City School Construction Authority (SCA) as part of the LSGD on a site currently owned by the applicant at the northwest edge of Parcel 2 near the intersection of Boone Avenue and East 173rd Street. If the SCA elects to construct the school, the LSGD will contain 53 fewer dwelling units.

Figure 1-1
Development Parcels and Proposed Rezoning



1 Parcel Number
Proposed Rezoning Area
Property Controlled by Applicant
C2-4 Overlay*
R8X Proposed Rezoning
Parcel Boundary
9 Community District
Community District Boundary
True North
Project North

*Commercial overlays proposed except where otherwise noted



Location Map

This document provides a description of the Proposed Action and includes task categories for all technical areas to be analyzed in the EIS.

The EIS will be prepared in conformity 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.
- 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 period of ten years for the reasonable worst-case development scenario (RWCDS) for the project (build year 2022), and identify the cumulative impacts of other projects in areas not associated with the Proposed Action. The NYC City Planning Commission (CPC) as lead agency, and as represented by the Department of City Planning (DCP), will coordinate the review of the Proposed Action among the involved and interested agencies and the public.

REQUIRED APPROVALS AND REVIEW PROCEDURES

The Proposed Action would require the following discretionary land use actions:

- **Zoning map amendment** to change approximately 11 blocks currently zoned M1-1, R7-1 and R7-1/C2-4 districts to a mix of R6A, R7A, R7X and R8X residential districts with selected C2-4 commercial overlays. (See Figures 1-2A, 1-2D and 1-2E above.)

- **Zoning text amendment** to:

    - Establish the Inclusionary Housing program within the proposed rezoning area (ZR Section 23-144 and Appendix F); and

    - Grant the CPC the authority, in LSGD's in Community District 3 in the Bronx, to exclude portions of buildings containing enclosed accessory parking from lot coverage (ZR Section 74-743).

- **Special Permits** under ZR Sections 74-743, 74-744 and 74-745 to allow in connection with the LSGD to be developed on Blocks 3013 and 3014:

    - Distribution residential floor area from R7A residential districts on Parcels 1 and 2.
    - Distribution of residential floor area from Parcel 1 to Parcel 2.

- Distribution of residential lot coverage without regard to corner or through lot lines on Parcels 1 and 2. (See Figure 1-12A.)
- Distribution of dwelling units without regard to zoning district boundaries on Parcel 2.
- Modification of street wall location, minimum and maximum base height, maximum building height and minimum setback requirements on Parcels 1 and 2. (See Figures 1-12B - 1-12F.)
- Modification of outer court recess requirements to permit outer court recesses with more than the permitted depth on Parcels 1 and 2. (See Figure 1-12G.)
- Distribution of off-street accessory parking without regard to zoning lot lines on Parcels 1 and 2.
- Modification of lot coverage requirements to permit enclosed accessory parking to be excluded from lot coverage calculations on Parcel 2, pursuant to the proposed text amendment described above.
- Modification of requirements regarding location of commercial uses in mixed buildings. (See Figure 1-12H.)

Disposition, by HPD, of a 13 sf City -owned vacant lot located at 1525 West Farms Road (Block 3014, Lot 45). The lot would be developed as part of the LSGD.

These actions are subject to the City Environmental Quality Review (CEQR) procedures. An Environmental Assessment Statement (EAS) has been submitted by the applicant. DCP, acting as lead agency on behalf of the City Planning Commission, 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.

The above approvals from the CPC would be for the proposed zoning map and text amendments and the LSGD special permits. The applicant also anticipates applying for funding from the NYC Department of Housing Preservation and Development (HPD) and NYC Housing Development Corporation (HDC). Therefore, HPD and HDC will be acting as interested agencies in the environmental review for this Proposed Action.

This final scoping document sets forth the analyses and methodologies proposed for the EIS. The public, interested agencies, Bronx Community Boards 3 and 6 (wherein the proposed rezoning and related actions would be located), and elected officials were invited to comment on the draft scope, either in writing or orally, at a public scoping hearing which was held on March 4, 2010. Comments received during the draft scope's public hearing and written comments received up to 10 days after the hearing were considered and incorporated, as appropriate, into the Draft Environmental Impact Statement (DEIS). This final scope of work will be used as a framework for preparing the 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 Boards 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.

DESCRIPTION OF THE PROPOSED ACTION AND PROPOSED PROJECT

The "Proposed Action" refers to rezoning of the entire 11-block area, the zoning text amendment, the grant of special permits, the disposition of the City-owned property and the potential development that would be expected to occur within the entire rezoning area. The "Proposed Project" refers only to the development the applicant proposes to construct on those properties within the rezoning area that are under its control. The Proposed Project is described in more detail under the narrative section beginning on page 1-14 below entitled "Description of the Proposed Project."

The Proposed Action is primarily intended to provide opportunities for new residential and commercial development in the Crotona Park East / West Farms area of the Bronx. Over the past two decades, this area of the Bronx has been the site of increasing public and private investment in housing, retail and public space, as compared to the substantial disinvestment and population loss experienced during the 1970's and 1980's. The NYC Parks and Recreation Department (DPR) has invested significantly in the adjacent Bronx River Greenway, as well as Rock Garden Park, with a newly refurbished Starlight Park, which began construction in 2010, to be located east of the rezoning area. The New Horizons Retail Center is the location of a successful Pathmark supermarket as well as other supportive local retail businesses. Local churches and non-profits have worked with city and state agencies to invest in improved housing in the local area.

Transit access is excellent in the Crotona Park East / West Farms area, with stops on New York City Transit's 2, 5, and 6 subway lines within walking distance of the entire rezoning area. In addition, multiple bus routes serve the area including the 6, 9, 11, 19, 27, and 36 routes. Crotona Park, the Bronx Zoo and Starlight Park area are all within walking distance of the entire rezoning area as well.

With the population of New York City expected to increase by a million people by the year 2030, new areas are needed to accommodate this growth. Current zoning in the proposed rezoning area encourages uses and densities incompatible with surrounding residential neighborhoods and limits opportunities for investment in the Crotona Park East / West Farms area.

The Proposed Action would effectuate the following land use goals:

- Provide new opportunities for redevelopment and economic growth within the Crotona Park East/ West Farms area;
- Reinforce the adjacent residential neighborhoods;
- Direct new housing and commercial development at higher densities to an area with excellent transit and highway access;
- Encourage new housing production, including new affordable housing, in the Bronx;
- Improve street presence and activity within the rezoning area; and
- Expand the residential neighborhood of Crotona Park East toward the newly refurbished Starlight Park and the Bronx River Greenway.

Description of the Proposed Action

The Proposed Action includes the following four discretionary land use actions by the CPC and the development expected to result from these actions:

- a rezoning of 11 blocks in the Crotona Park East/West Farms area of the Bronx, along the strip of land midway between Longfellow and Boone Avenue on the west to West Farms Road on the east, between Freeman Street on the south, and Boston Post Road on the north;

- a zoning text amendment to establish the Inclusionary Housing program within the proposed rezoning area and to grant the CPC the authority, in LSGDs in Bronx Community District 3, to exclude portions of buildings containing enclosed accessory parking from lot coverage;

- special permits granted pursuant to ZR Sections 74-743, 74-744 and 74-745 to permit modification of bulk regulations, restrictions on the location of commercial uses and the distribution of off-street parking spaces without regard to zoning lot lines for the LSGD to be developed on Parcels 1 and 2; and

- the disposition by HPD of a City-owned 13 sf vacant property on Parcel 2 that would be developed as part of the LSGD.

The Uniform Land Use Review Procedure (ULURP) application and related plans filed with the CPC for the discretionary land use actions, described in more detail below, account for the SCA's option to develop an 88,620 sf (approximately 540-seat) elementary school serving grades pre-k through 5 on a portion of the LSGD site as mitigation for a schools impact of the Proposed Action, as discussed further in Chapter 2.C, Community Facilities and Services, and Chapter 3, Mitigation.

The Rezoning

The 11 blocks proposed to be rezoned have an aggregate area of 730,890 sf (exclusive of City-owned playgrounds or school yards), or approximately 16.8 acres. As shown in Figure 1-1 above, the blocks to be rezoned, starting from the south, include:

- the block bounded by the Sheridan Expressway, West Farms Road and Boone Avenue (Block 3012, Lot 100; now a playground);

- the northeast portion of the block bounded by West Farms Road, Jennings Street, Longfellow Avenue and Freeman Street (portion of Block 3007, Lot 8; now a part of the IS 84 property);

- the entire block bounded West Farms Road, East 172nd Street, Boone Avenue and Jennings Street (Block 3013, the southern half of which is occupied by HS 682 Fannie Lou Hamer Freedom High School (Lot 1) and the northern half of which is part of the Proposed Project (Lots 12, 29, 31, 35, 37 and 46) – designated as **Parcel 1** or **Development Site 1**);

- the entire block bounded by West Farms Road, East 173rd Street, Boone Avenue and East 172nd Street (Block 3014, Lots 9, 15 and 45, which is also part of the Proposed Project – designated as **Parcel 2** or **Development Site 2**)[1];

[1] The applicant is the ground lessee of Block 3014, Lot 9, a portion of which is the subject of a litigation to quiet title brought by the ground lessor (Sedgwick Materials, Inc.) against its predecessor-in-interest in the property.

- the eastern half of the block bounded by Boone Avenue, East 173rd Street, Longfellow Avenue and East 172nd Street (Block 3009, Lots 25, 33, 37, 38, and 44, of which Lot 33 is a part of the Proposed Project – designated as **Parcel 3** or **Development Site 3**);

- the entire block bounded by West Farms Road, East 174th Street, Boone Avenue and East 173rd Street (Block 3015, Lots 1, 3, 5, 17, 18, 19, 25, 26, 29, 31, 34 and 49 – designated as **Parcel 4** or **Development Site 4**);

- the eastern half of the block bounded by Boone Avenue, East 174th Street, Longfellow Avenue and East 173rd Street (Block 3010, Lots 25, 26, 29, 33, 40 and 46 – designated as **Parcel 5** or **Development Site 5**);

- the entire block bounded by West Farms Road, Boone Avenue and East 174th Street (Block 3015, Lots 50, 56, 58, 62, 67, 81, 83, 84, 85, 87, 89, 95, 96, 97 and 110 – designated as **Parcel 6** or **Development Site 6**);

- the eastern portion (100 foot depth) of the block bounded by Boone Avenue, the Cross Bronx Expressway, Vyse Avenue and East 174th Street (Block 2998, Lots 92, 97, 104, 113, 124 and 135 – designated as **Parcel 7** or **Development Site 7**);

- the block bounded by West Farms Road, Rodman Place, Longfellow Avenue and the Cross Bronx Service Road North (Block 3016, Lots 5, 7, 11, 13, and 21, of which Lots 11, 13 and 21 are part of the Proposed Project – designated as **Parcel 8** or **Development Site 8**); and,

- the entire block bounded by West Farms Road, Old Post Road, Longfellow Avenue and Rodman Place (Block 3016, Lots 33, 35, 36, 37, 38, 42, 60, 66 and 71, of which lots 60 and 66 are part of the Proposed Project – designated as **Parcel 9** or **Development Site 9**).

The area to be rezoned is currently primarily zoned as an M1-1 manufacturing district which has a maximum floor area ratio (FAR) of 1.0 for permitted commercial and light manufacturing uses. Portions of Parcels 8 and 9 are zoned as an R7-1 residential district, which has a maximum residential FAR ranging from 0.87 to 3.44 for buildings built pursuant to height factor regulations (depending on the size of the zoning lot, the amount of lot coverage and the building height) or 3.44 or 4.0 for buildings built pursuant to optional Quality Housing regulations (depending on whether the zoning lot fronts a narrow or wide street). There is also an existing C2-4 commercial overlay mapped along the north end of Parcel 9, which has a maximum commercial FAR of 2.0 (see Figures 1-2A - 1-2C).

The area is proposed to be rezoned to a range of medium- to high-density (R6A, R7A, R7X and R8X) residential districts with selected C2-4 commercial overlays (see Figures 1-2A, 1-2D and 1-2E). In addition, the area would be mapped as an Inclusionary Housing Designated Area under ZR Section 23-90, which allows the base maximum residential FARs to be increased by providing affordable housing within the Community District or within ½-mile of the site receiving the FAR bonus. The Parcels west of Boone Avenue and south of the Cross Bronx Expressway (Parcels 3, 5 and 7) would be rezoned as R6A residential districts with a base maximum FAR of 2.7 increasable to 3.6 by providing affordable housing. The Parcels east of Boone Avenue and south of the Cross Bronx Expressway (Parcels 1, 2, 4 and 6) would be rezoned as R7A residential districts, with a base FAR of 3.45 increasable to 4.6, along Boone Avenue and as R7X and R8X residential districts along West Farms Road, with base FARs of 3.75 and 5.4 increasable to 5.0 and 7.2 (see Figure 1-2D). The Parcels north of the Cross Bronx Expressway (Parcels 8 and 9) would be rezoned as R8X residential districts (see Figure 1-2E).

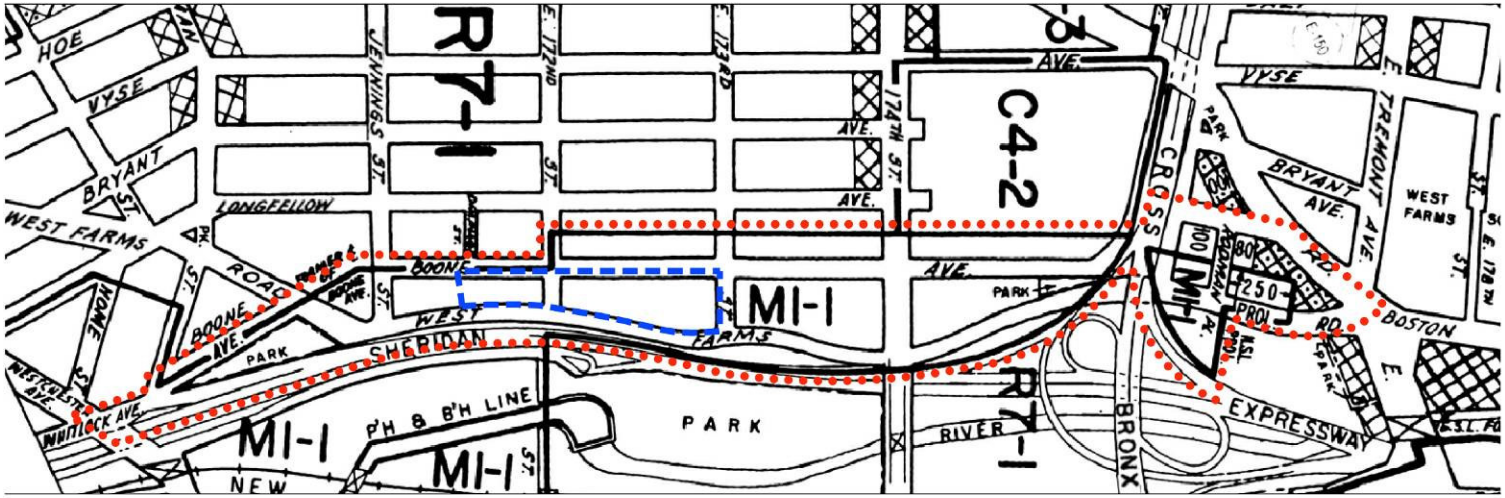
South of the Cross Bronx Expressway, C2-4 commercial overlays would be mapped over the northern half of Block 3013, including all of Parcel 1, to a depth of 350 feet from East 172nd Street, to a depth of 100 feet along Boone Avenue and along East 173rd Street on Parcel 2, and to a depth of 100 feet from East 173rd and 174th Streets on Parcels 4, 5, 6 and 7. North of the Cross Bronx Expressway, C2-4 commercial overlays would be mapped to a depth of 70 feet along West Farms Road on Parcels 8 and 9 and to a depth of 100 feet along Longfellow Avenue on Parcel 9, in both instances connecting to the existing C2-4 overlay along Boston Road on Parcel 9. The overlays would have a maximum commercial FAR of 2.0.

Table 1-1 below summarizes the Blocks and Lots which would be affected by the proposed rezoning.

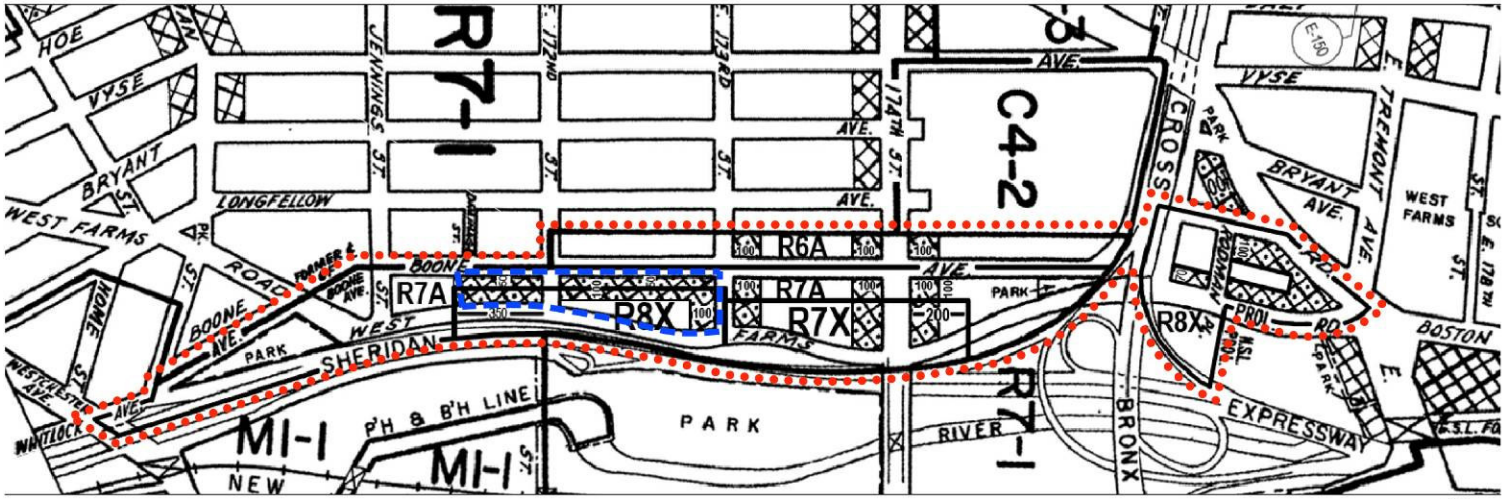
Table 1-1- List of Blocks and Lots Affected by Crotona Park East/West Farms Rezoning

Block	Lot
2998	92, 97, 104, 113, 124,135
3007	8
3009	25, 33, 37, 38, 44
3010	25, 26, 29, 33, 40, 46
3012	100
3013	1, 12, 29, 31, 35, 37, 46
3014	9, 15, 45
3015	1, 3, 5, 17, 18, 19, 25, 26, 29, 31, 34, 49, 50, 56, 58, 62, 67, 81, 83, 84, 85, 87, 89, 95, 96, 97, 110
3016	5, 7, 11, 13, 21, 33, 35, 36, 37, 38, 42, 60, 66, 71

Figure 1-2A
Existing and Proposed Zoning



Existing Zoning Districts



Proposed Zoning Districts

N

Legend

- Zoning District Boundary
- C2-4
- C1-2
- Area to be Rezoned
- Proposed Large-Scale General Development Area

Note: Zoning Diagrams Excerpted from New York City Planning Department Zoning Map 3d

Figure 1-2B
Existing Zoning - South of East 173rd Street

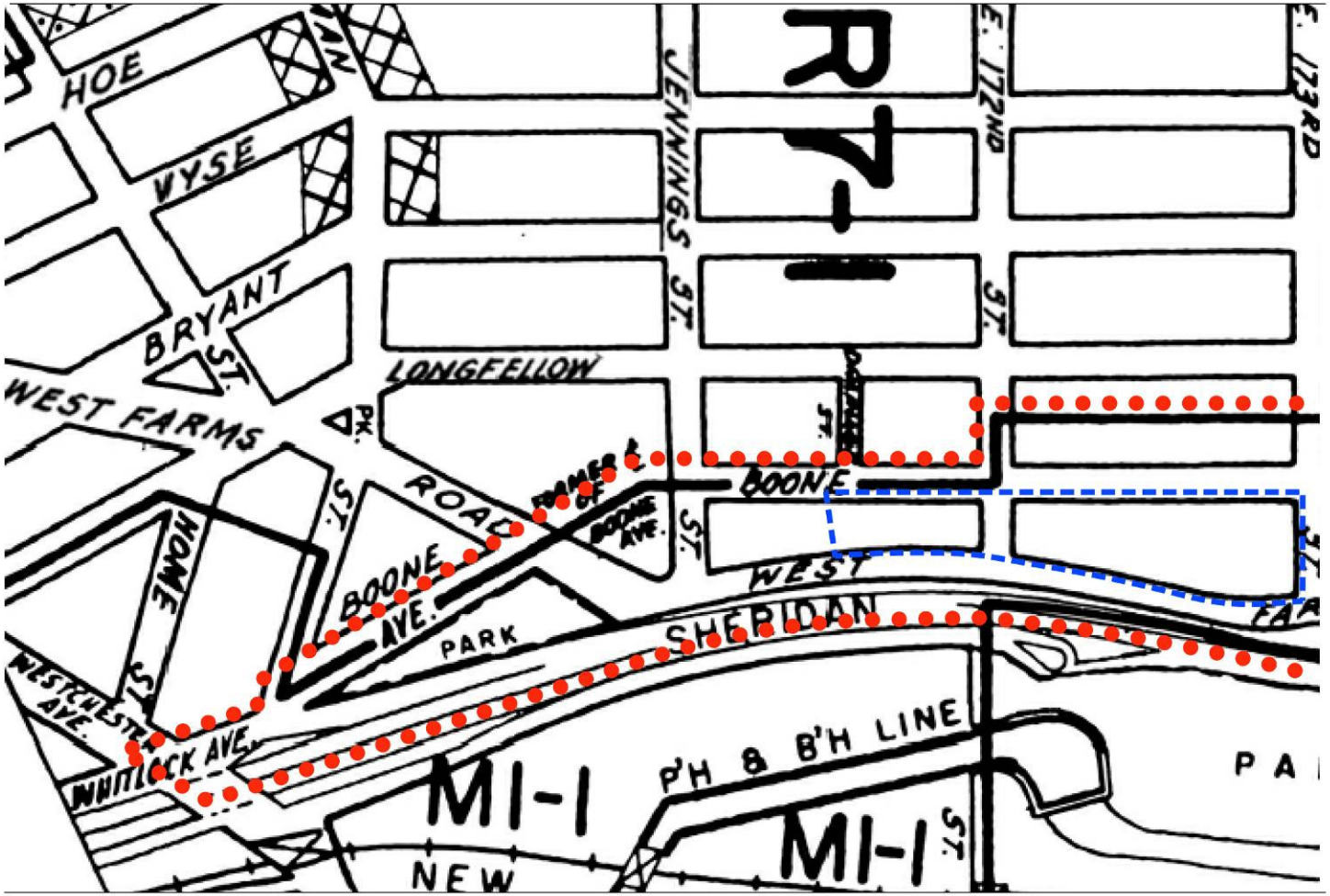


Figure 1-2C
Existing Zoning - North of East 173rd Street

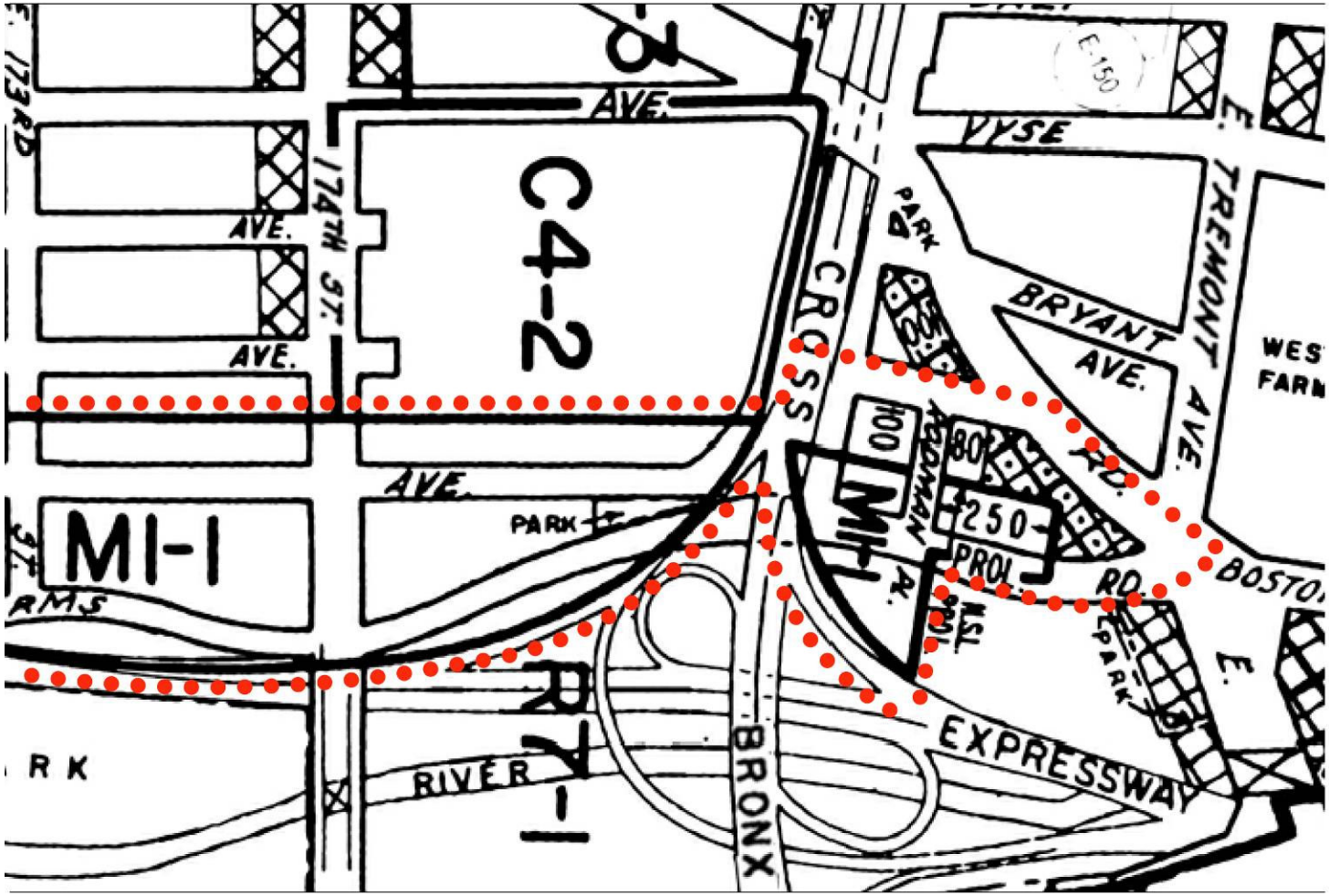


Figure 1-2D
Proposed Zoning - South of East 173rd Street

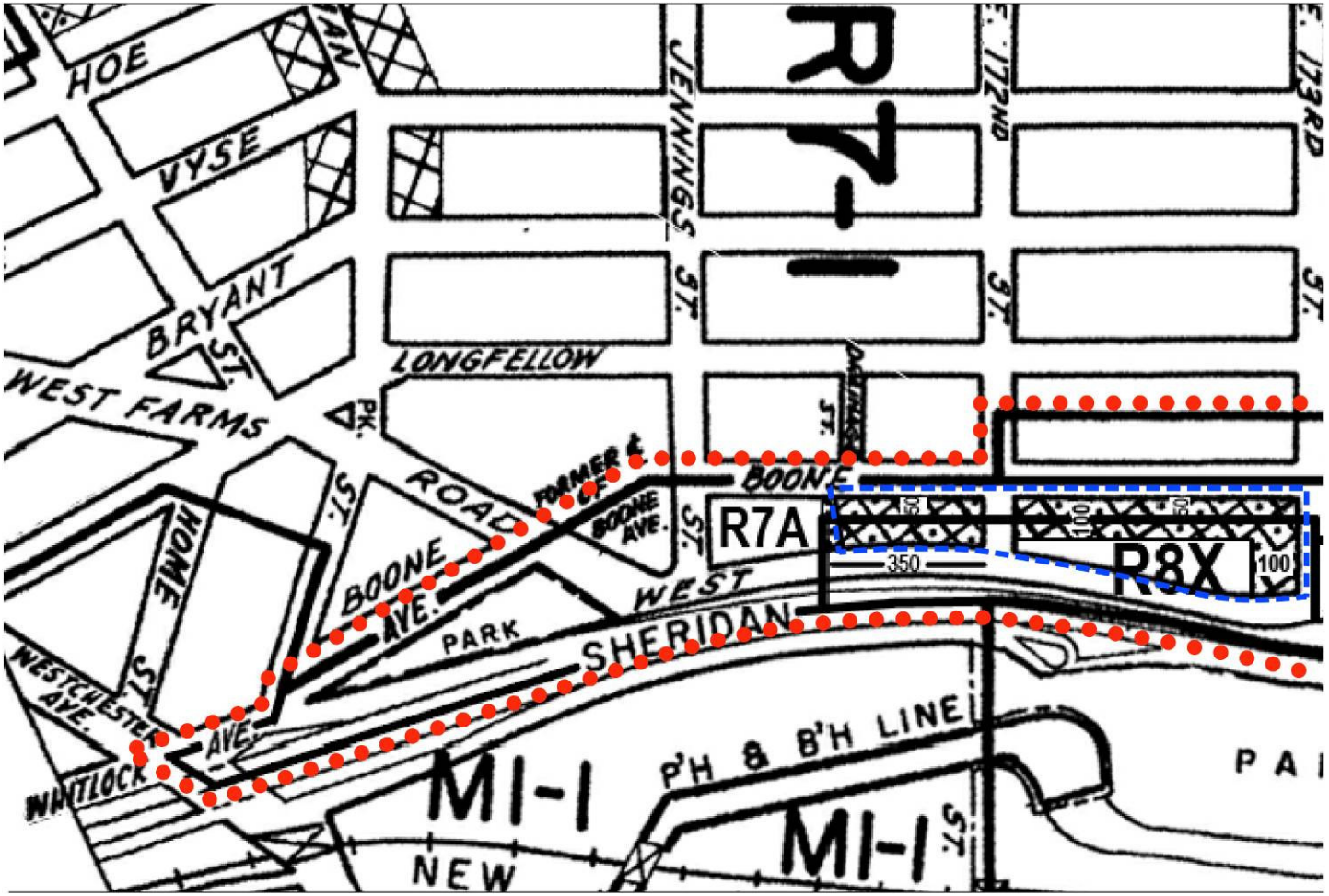
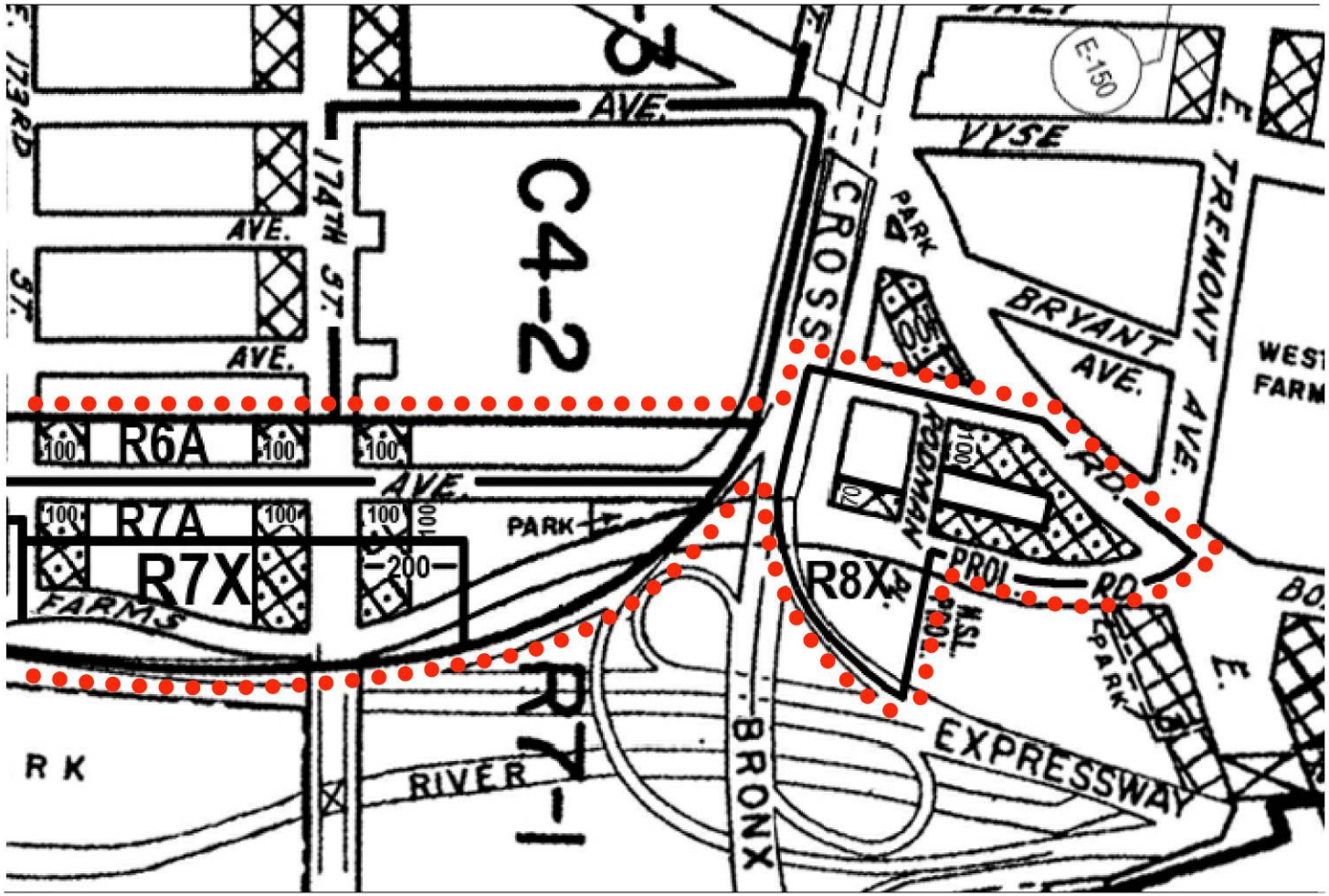


Figure 1-2E
Proposed Zoning - North of East 173rd Street



The Zoning Text Amendment

The proposed zoning text amendment would establish the Inclusionary Housing program within the proposed rezoning area. The base and maximum residential FARs for the proposed R6A, R7A, R7X and R8X residential districts would range from 2.7 to 5.4 and could be increased to up to 3.6 to 7.2 by providing affordable housing. Base FARs apply to new developments or enlargements that do not provide affordable housing. The full bonused FAR is applied to new developments and enlargements that take full advantage of the program by providing at least one fifth of the total new housing floor area as affordable residential floor area in accordance with the Inclusionary Housing program.

The zoning text amendment would also grant the CPC the authority, in an LSGD in Bronx Community District 3, to exclude portions of buildings containing enclosed accessory parking from lot coverage calculations. Developments seeking to use the special permit would need to qualify as an LSGD, meet the additional findings outlined below and go through ULURP. They would also have to perform a project-specific environmental review.

The granting of the special permit would be contingent on the CPC finding that, at minimum, such modification is necessary to accommodate parking spaces in a manner that results in a better site plan and better relationship among buildings than would be possible without the exclusion and that benefits the residents of the LSGD. This special permit would facilitate a proposed design but would not result in any additional floor area. Parking requirements would not change as a result of the text amendment. While lot coverage requirements would change, the findings would ensure that open areas on sites that use the special permit would be useable.

The Special Permits

The Proposed Action includes the grant of three special permits for the LSGD proposed for Parcels 1 and 2 to allow the distribution of residential floor area, lot coverage, dwelling units and off-street accessory parking without regard to lot lines or zoning district boundaries and to allow relief with respect to requirements regarding location of commercial uses, street wall location, base height, building height, setback outer court recess dimensions and lot coverage for enclosed accessory parking. The waivers are depicted on Figures 1-12A - 1-12H beginning on page 1-38 below.

The Disposition

As part of the Proposed Action, HPD is proposing disposition of a City-owned 13 sf property located at 1525 West Farms Road (Block 3014, Lot 45) within the rezoning area. The City-owned property is mapped as an M1-1 district and would be rezoned as part of the Proposed Action to an R8X residential district. The City-owned property is currently vacant. The City-owned property would be assembled with the adjacent tax lot (Block 3014, Lot 9) as part of Parcel 2. The disposition would facilitate the development of a mixed-use residential building with ground floor local retail that would be part of the LSGD (Building 2A, described below).

Purpose and Need of the Proposed Action

Approval of the Proposed Action by the CPC would allow for the revitalization of an underutilized M1-1 manufacturing district to provide affordable work-force housing with retail and community facilities appropriate for the existing and proposed communities. Many of the existing buildings in the rezoning area are vacant or underutilized and therefore detract from surrounding street life and offer few benefits to the surrounding community. Located close to the lower and medium density West

Farms and Crotona Park East neighborhoods, redevelopment in this area would offer an opportunity to accommodate the needs of the area and City for housing, open space and economic growth.

Higher density residential districts (R7X and R8X) along West Farms Road would create a taller and denser urban edge along the Sheridan Expressway and Bronx River and, for the blocks north of the Cross Bronx Expressway, would help reinforce the emerging West Farms neighborhood center. Moderate density R7A residential districts along the east side of Boone Avenue and relatively lower density R6A residential districts along the west side of Boone Avenue would step down and defer to the existing adjoining residential neighborhoods to the west of the Proposed Action area. The text amendments to the Zoning Resolution to map the Proposed Action area as an Inclusionary Housing Designated Area would provide incentives to develop affordable housing.

The zoning lots on which the LSGD would be located are characterized by unique natural conditions that inhibit the ability to locate accessory off-street parking spaces below grade and include a grade change of up to twenty feet between Boone Avenue and West Farms Road, a grade change of nearly six feet along Boone Avenue from the mid-block of Block 3014 to East 173rd Street and the presence of significant rock outcroppings throughout the LSGD site. Due to these natural conditions, the required accessory parking for the LSGD will need to be located above West Farms Road. Depending on the actual extent of the rock outcroppings, which will not be known until the buildings currently located on the LSGD site are vacated so that borings can be taken, a substantial portion of the required parking may also need to be located more than 14 feet above the base plane and therefore would count as lot coverage causing the overall lot coverage on the LSGD to exceed the maximum permitted.

Accordingly, the applicant is proposing an amendment to the text of ZR Section 74-743 (Special Provisions for Bulk Modification) that would grant the CPC the authority to exclude from lot coverage calculations portions of any level of any building containing accessory off-street parking, provided the CPC found that such modification is necessary to accommodate parking spaces in a manner that results in a better site plan and better relationship among buildings than would be possible without the exclusion and that benefits the residents of the LSGD. Similar authority has been granted to the CPC to waive lot coverage regulations in other parts of the City, notably on the waterfront under ZR Section 62-836 (Bulk Modifications on Waterfront Blocks).

The waivers to be granted under special permits for the LSGD, including the waiver described above that would require the text amendment to grant the CPC the authority to permit enclosed accessory parking to be excluded from lot coverage, would allow increased design flexibility to address geographical and topographical constraints on Parcels 1 and 2, which are characterized by their long, narrow shapes (as narrow as 126 feet wide on mid-block on Parcel 1), sizeable bedrock outcroppings and substantial grade differences between Boone Avenue and West Farms Road. Midblock open areas on these Parcels would moderate the scale of the development and provide additional open space and view corridors to Starlight Park and the Bronx River. The waivers would also allow for varied massing of the buildings to create visual interest and enliven streetscapes. Disposition by HPD of the City-owned property on Parcel 2 would allow for a more regular street wall along West Farms Road and would utilize land that would otherwise remain vacant and undeveloped.

Overall, a primary goal and objective of the Proposed Action is to map zoning districts that would facilitate the development of a mix of lower, moderate and higher density residential uses and a significant amount of open space. The residential component would accommodate a portion of the City's current and future housing needs and the retail, community facility, and open space components would provide community benefits to the area's existing and future residents and workers. Open spaces and ground level retail and community facility uses along Boone Avenue and possibly West

Farms Road would improve the streetscape and pedestrian experience adjacent to the Proposed Project and create neighborhood amenities.

Description of the Proposed Project

The Proposed Project would consist of ten new residential buildings that the applicant proposes to develop on sites under its control. Seven of the buildings (Buildings 1A, 1B, 2A, 2B, 3A, 3B and 3C) would comprise the LSGD (the "LSGD Buildings") and would be located on Parcels 1 and 2, south of the Cross Bronx Expressway. The remaining three buildings (Buildings 4 – 6) would be developed on development sites located on Parcel 3, also south of the Cross Bronx Expressway, and Parcels 8 and 9, north of the Cross Bronx Expressway. In total, the Proposed Project would contain up to 1,295,765 sf of residential use (1,325 dwelling units), 46,033 sf of local retail/service uses and 11,888 sf of daycare or other community facility use, as well as off-street accessory parking for approximately 332 vehicles. As mitigation for a adverse impact on schools, Building 3C may contain an 88,620 sf elementary school in lieu of the 11,888 sf daycare facility and approximately 45,360 sf of residential floor area (53 dwelling units).

To realize the maximum permitted floor area, affordable housing equaling at least 20 percent of the Proposed Project's floor area, net of ground floor commercial or community floor area, would have to be provided, which would equal approximately 265 units. The applicant, however, desires to provide affordable housing in excess of the minimum required and intends to seek funding through HPD and HDC to try to achieve this goal. The amount and future availability of such funding is unknown, so the extent of additional affordable housing to be provided as part of the Proposed Project (if any) could vary. In order to provide a conservative analysis with respect to daycare and other impacts, the EIS will generally assume that 50 percent of the floor area (approximately 663 units) in the Proposed Project would be affordable, representing the applicant's goal of providing affordable housing in excess of the minimum contemplated under the Inclusionary Housing program. The analysis of indirect residential displacement in Chapter 2.B, Socioeconomic Conditions, however, will conservatively assume the Proposed Project will provide only the minimum 20 percent affordable housing (approximately 265 units) required under the Inclusionary Housing program to achieve the maximum permitted floor area. Table 1-2 provides detailed information on the program for the Proposed Project by building and Parcel.

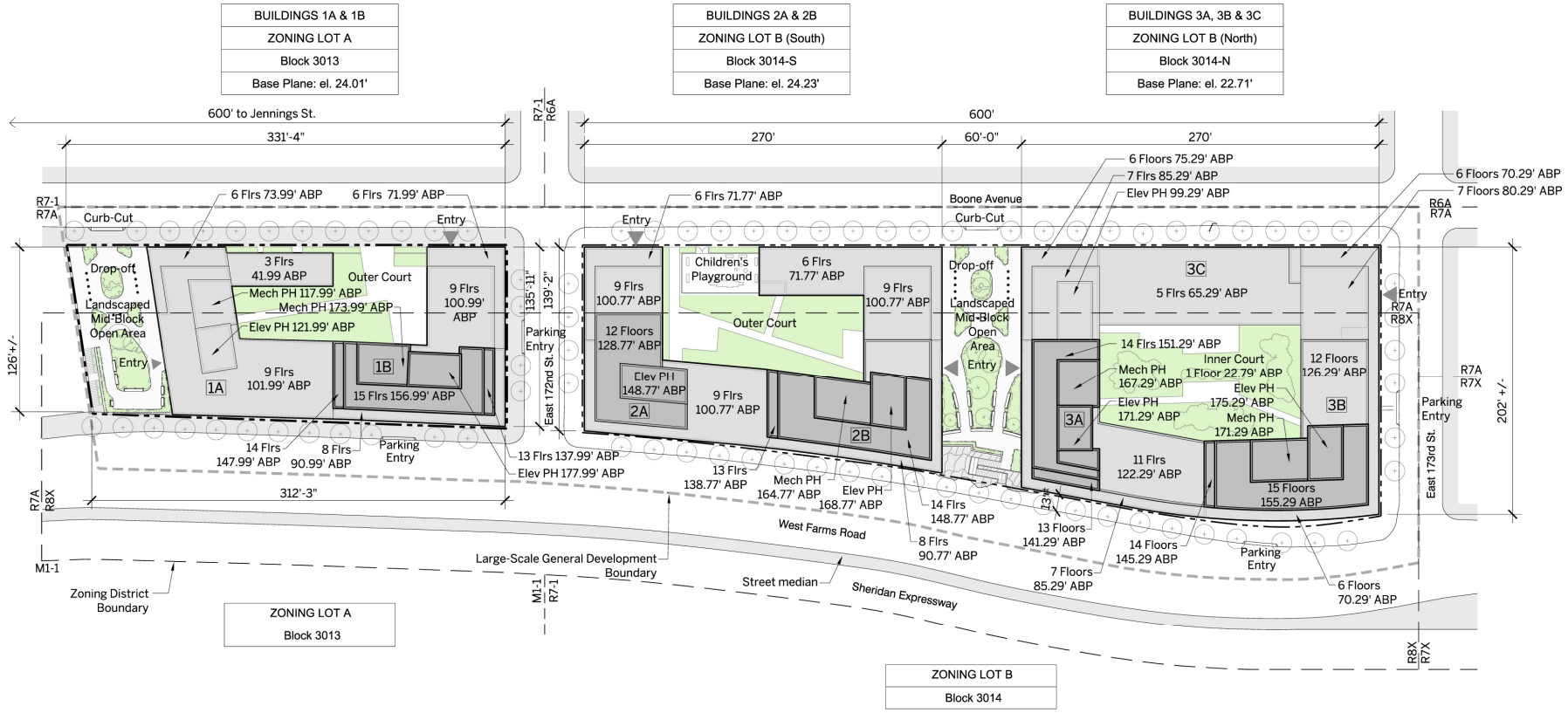
Table 1-2 - Proposed Project: Summary of Proposed Program

	Parcel	Residential (sf)	Dwelling Units		Retail (sf)	Community Facility (sf)	Parking (spaces)	Total (sf)
			Afford-able	Total				
Buildings 1A/1B	1	229,933	119	237	6,000	0	130	235,933
Buildings 2A/2B	2S	281,191	144	288	4,426	0	0	285,617
Buildings 3A/3B/3C	2N	355,390	185	370	8,067	11,888	94	375,345
Building 4	3B	36,000	18	36	0	0	9	36,000
Building 5	8	199,598	100	200	10,040	0	50	199,598
Building 6	9D	193,702	97	194	17,500	0	49	193,702
Total		1,295,814	663	1,325	46,033	11,888	332	1,326,195

For the LSGD Buildings, the special permits would create a zoning envelope within which the maximum permitted floor area could be developed. The maximum zoning envelope for the LSGD is depicted in plan view in Figure 1-3 and in elevation on the illustrative renderings and massing diagrams in Figures 1-4 through 1-6. The renderings of the LSGD Buildings shown in these figures are an illustrative depiction of how the buildings could be built within the envelope. The maximum zoning envelope would regulate the heights, size, and shape of footprints, and location of the LSGD

Buildings, which would be required to fall within the envelopes. By contrast, Buildings 4-6 would be developed on as-of-right basis according to the applicable height and setback and other bulk provisions in the Zoning Resolution. Illustrative plans, renderings and massing diagrams that depict

Figure 1-3
LSGD Buildings - Site Plan



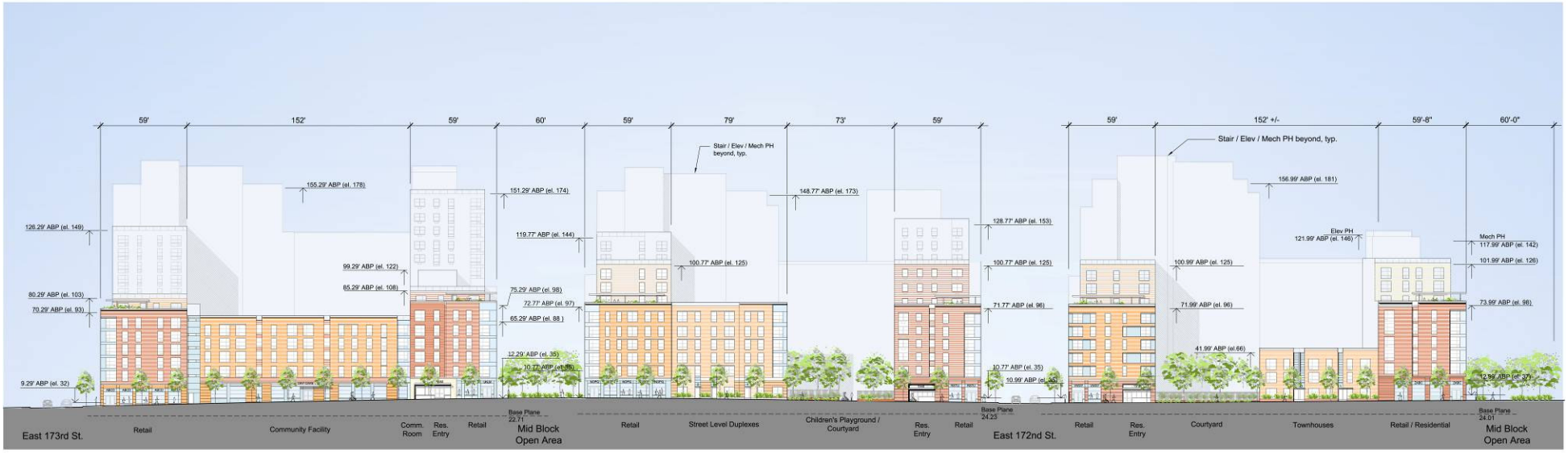
Legend

- General Large-Scale Development
- Zoning Lot Boundary
- Zoning District Boundary

Notes

1. ABP - Above Base Plane
2. Locations of building and parking entrances subject to change.
3. Landscaping subject to change.
4. Locations and sizes of existing curb cuts are approximate.

Figure 1-4A - LSGD Buildings -- Boone Avenue Elevation

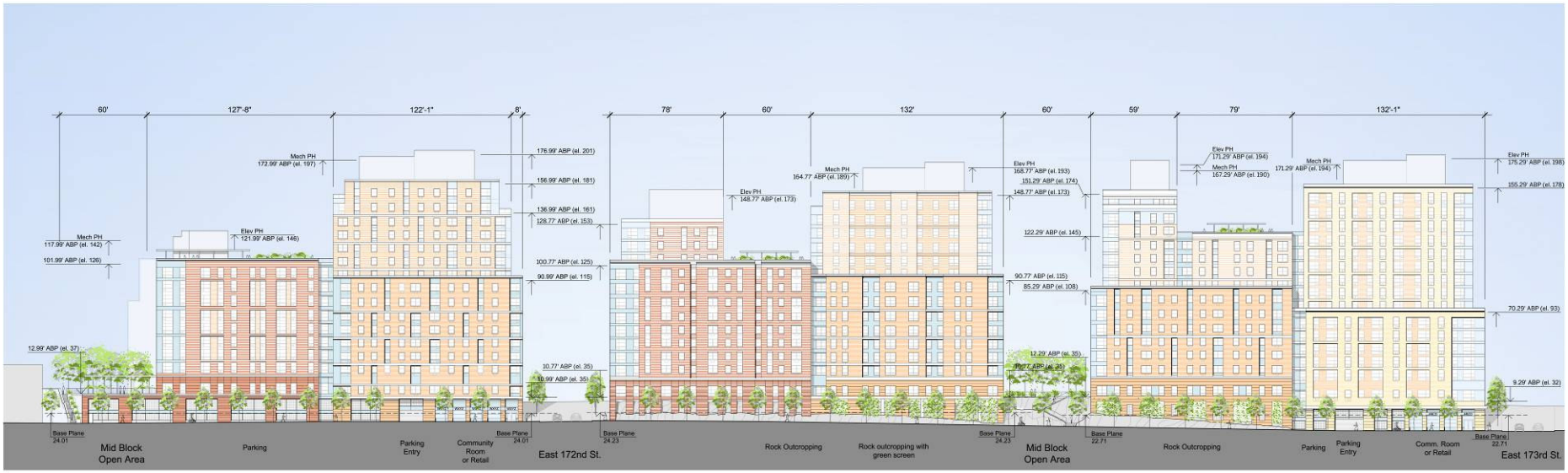


2 Elevation - Boone Avenue

Notes
ABP - Above Base Plane

Note: Façade materials and landscaping are illustrative.

Figure 1-4B
LSGD Buildings -- West Farms Road Elevation

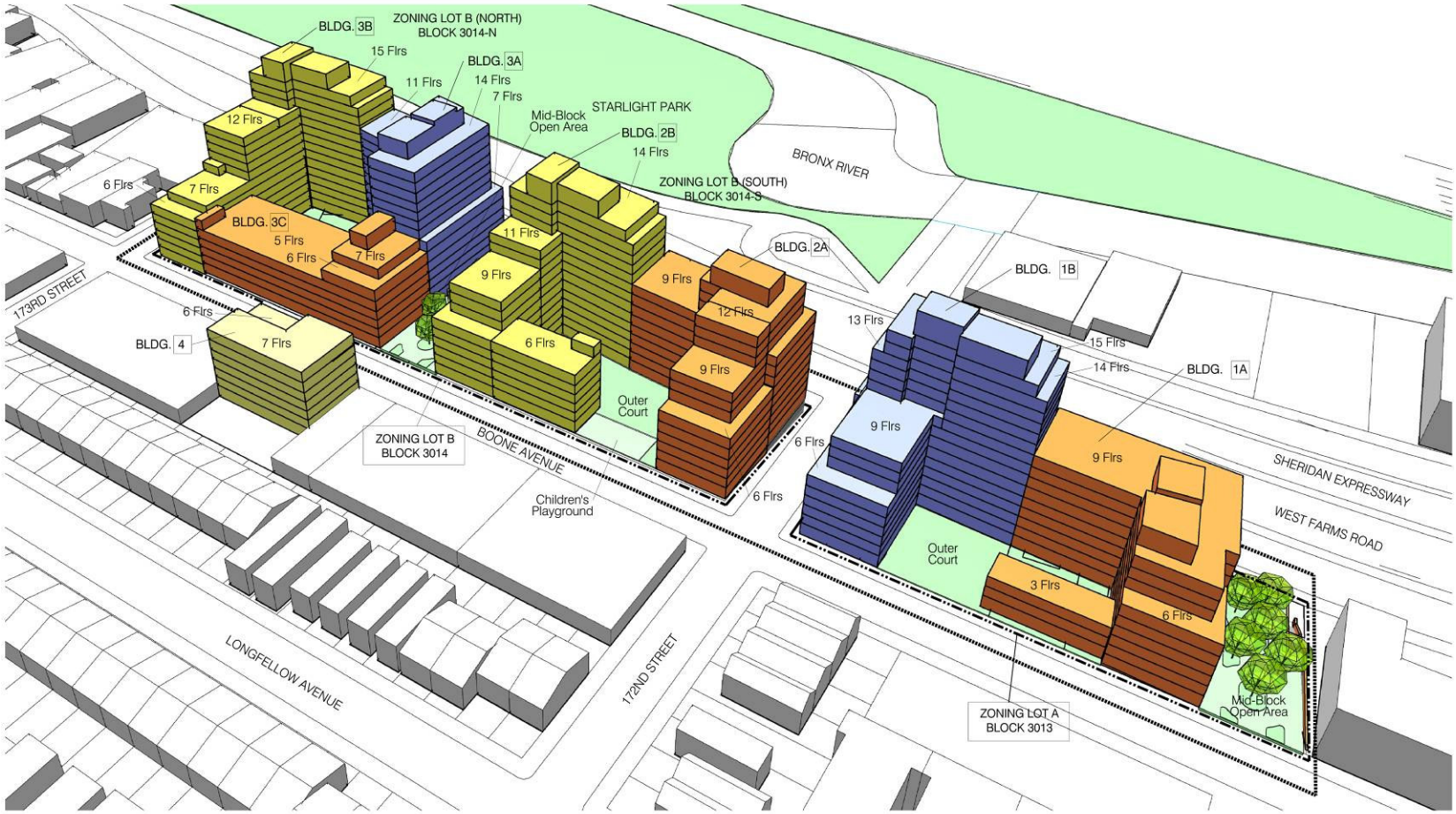


1 **Elevation - West Farms Road**

Notes
ABP - Above Base Plane

Note: Façade materials and landscaping are illustrative.

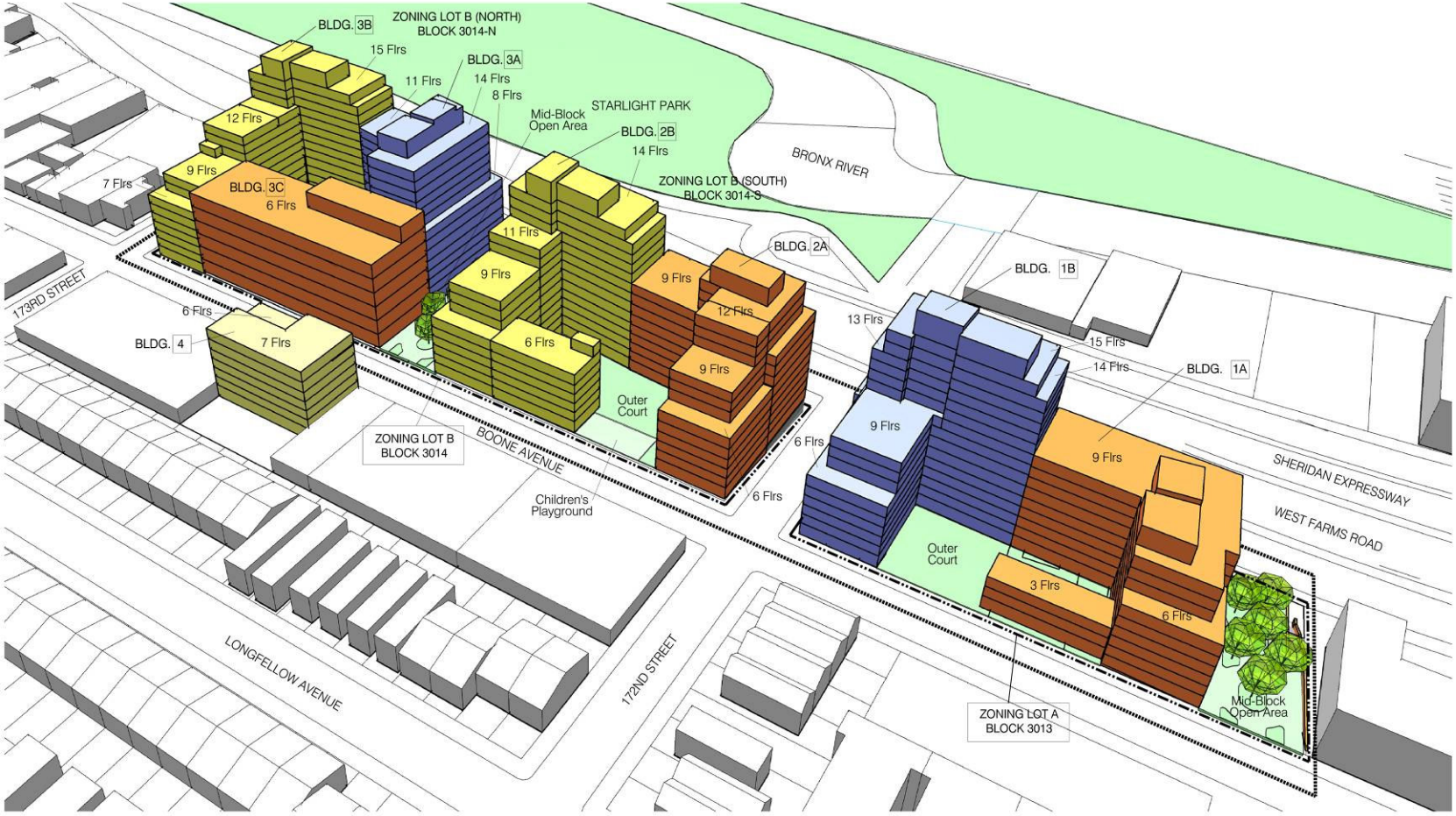
Figure 1-5A
LSGD Buildings and Building 4 - Boone Avenue Massing Diagram



1 **Concept Massing- Boone Avenue -View Looking East**

Note: For illustrative purposes only. Projected development not shown for sites not under control of applicant.

Figure 1-5B
LSGD Buildings and Building 4 - Boone Avenue Massing Diagram (with School)



1 **Concept Massing- Boone Avenue -View Looking East**

Note: For illustrative purposes only. Projected development not shown for sites not under control of applicant.

Figure 1-6A
Buildings 3A, 3B and 3C -- Boone Avenue Rendering (without School)



Note: Façade materials and landscaping are illustrative.

Figure 1-6B
Buildings 3A, 3B and 3C -- Boone Avenue Rendering (with School)



Note: Façade materials and landscaping are illustrative.

Figure 1-6C
Buildings 1A , 1B, 2A and 2B -- West Farms Road Rendering



Note: Façade materials and landscaping are illustrative.

potential as-of-right designs for Buildings 4 - 6 and that comply with applicable height, setback and other bulk provisions are included in Figure 1-5A, above, and Figures 1-7 through 1-9, beginning on page 1-27 below. A detailed description of the proposed bulk and massing for the Proposed Project follows.

Parcel 1 – Buildings 1A and 1B (See Figures 1-3 - 1-5A, 1-6A and 1-6C)

Parcel 1 is proposed to be rezoned primarily to an R8X residential district, except for a 50-foot deep R7A residential district along Boone Avenue. The entire parcel would be mapped with a C2-4 commercial overlay. Buildings 1A and 1B would be constructed on this zoning lot. A 60-foot wide landscaped mid-block open area would separate the buildings from the Fannie Lou Hamer Freedom High School (P.S. 682) to the south. Buildings 1A and 1B would comprise approximately 235,933 sf of floor area of which up to approximately 6,000 sf would be used for commercial retail / service uses and the balance of which would be used for residential apartments (approximately 237 units) and related accessory uses. The buildings would be oriented around a central landscaped courtyard for residents' use with a secured opening, approximately 71 feet wide, along a portion of the mid-block of Boone Avenue. Building entrances would be located on the mid-block open area and on Boone Avenue near the intersection with East 172nd Street. Ground floor retail/service uses would be located at the northwest corner of Building 1B and southwest corner of Building 1A along Boone Avenue and possibly the southeast corner of Building 1B at the intersection of East 172nd Street and West Farms Road. Two levels of accessory off-street parking, containing approximately 130 spaces, would be located beneath the buildings, with entrances on West Farms Road and East 172nd Street.

At the corner of Boone Avenue and East 172nd Street, Building 1B would have a 6-story base with a ninth story set back 15 feet from Boone Avenue and 8 feet from East 172nd Street. Turning onto West Farms Road, the L-shaped building would have an 8-story base and, after setting back 8 feet from both West Farms Road and East 172nd Street, would rise to 15 stories (or 157 feet above base plane ("ABP") plus rooftop mechanical and elevator penthouses. Building 1B would meet Building 1A at the mid-block of West Farms Road. Building 1A would step down to 9 stories along West Farms Road and the mid-block open area. Returning to Boone Avenue, the C-shaped building would have a 6-story base, with a ninth story set back 8 feet from the mid-block open area and 15 feet from Boone Avenue. A wing of 3-story townhouses, set back 5 feet from the street line, along the mid-block of Boone Avenue would comprise the remainder of Building 1A.

Parcel 2 – Buildings 2A and 2B and Buildings 3A, 3B and 3C (See Figures 1-3 - 1-6)

Parcel 2 is proposed to be rezoned to an R8X residential district, except for a 50-foot deep R7A residential district along Boone Avenue. In addition, a 100-foot deep C2-4 commercial overlay would be mapped along Boone Avenue and along East 173rd Street. The 13 sf City-owned property which HPD is proposing to dispose of as part of the Proposed Action is located on the southeast side of Parcel 2. Buildings 2A and 2B would be constructed on this southern portion of this zoning lot, while Buildings 3A, 3B and 3C would be constructed on the northern portion. A 60-foot wide landscaped mid-block open area would separate Buildings 2A and 2B from Buildings 3A, 3B and 3C.

Buildings 2A and 2B would comprise approximately 285,617 sf of floor area, of which up to approximately 4,426 sf would be used for ground floor commercial retail/service uses along Boone Avenue. The remaining floor area would be used for residential apartments (approximately 288 units) and related accessory uses. The buildings would be oriented around a central landscaped courtyard for residents' use with a secured opening, approximately 73 feet wide, along the mid-block of Boone Avenue. An approximately 1,800 sf public children's playground accessible from Boone Avenue would also be located along this opening. Building entrances would be located along Boone Avenue

and the mid-block open area. Due to the presence of substantial rock outcroppings and the possible existence of archaeologically significant resources on this portion of the zoning lot, no parking would be located beneath the buildings. Ground floor retail spaces would be located along Boone Avenue near East 172**nd** Street and near the mid-block open area.

At the corner of Boone Avenue and East 172nd Street, Building 2A would have a 6-story base with a ninth story set back 15 feet from Boone Avenue and 8 feet from East 172nd Street. The L-shaped building would step up towards West Farms Road to a 9-story base, and after setting back 8 feet from both East 172nd Street and West Farms Road, would rise to 12 stories plus rooftop mechanical and elevator penthouses. The building would step down to 9 stories in the midblock along West Farms where it would meet Building 2B. Building 2B would rise to 14 stories (or 149 feet ABP) plus rooftop mechanical and elevator penthouses along West Farms Road. Turing onto the mid-block open area, the C-shaped building would step down to 11 stories, then to 9 stories, dropping to 6 stories at Boone Avenue. A 6-story wing along the mid-block of Boone Avenue would complete Building 2B.

Buildings 3A, 3B and 3C would contain a maximum of 375,345 sf of floor area, of which up to approximately 363,457 sf would be used for residential apartments (370 units), 8,067 sf would be used commercial retail/service uses and 11,888 sf would be used for children's daycare or other community facility use. The buildings would be oriented around an enclosed central landscaped courtyard at grade with Boone Avenue. Building entrances would be located on the mid-block of Boone Avenue, in the mid-block open area and on East 173rd Street. Ground floor retail/service uses would be located at the northwest and southwest corners of the buildings along Boone Avenue and possibly at the northeast corner at the intersection of East 173rd Street and West Farms Road.

As mitigation for a significant adverse impact on elementary schools, the SCA will have the option to construct in Building 3C a 6-story elementary school (plus cellar space and a rooftop play area and mechanical equipment) serving grades pre-kindergarten through 5. If the SCA elects to construct the elementary school, Buildings 3A, 3B and 3C would contain a maximum of 406,717 sf of floor area, of which up to 318,097 sf would be used for residential floor area (317 units), 8,067 sf would be used for commercial retail/service uses and 88,680 sf would be used for Use Group 3 school uses.

The buildings would contain up to approximately 94 accessory parking spaces. Rock outcroppings are present throughout the LSGD Site and may be particularly substantial on Parcel 2-N. The actual extent of the rock outcroppings will not be known until borings and other field work can be conducted, which, because some buildings on the site are currently occupied, will not occur until after the conclusion of the CEQR review period. Depending on the extent of rock outcroppings, parking would be located in one of two alternative configurations. Under the "Below-Grade Parking Configuration", up to 94 accessory parking spaces would be located on two levels beneath the buildings with entrances on West Farms Road and East 173rd Street. If the rock outcroppings are extensive, however, the majority of parking would be provided at grade with Boone Avenue and the interior courtyard would begin at the second residential story. Under the At-Grade Parking Configuration, the total floor area of the buildings would be reduced by up to approximately 12,637 sf. Retail and community facility uses would remain the same as under the Below-Grade Parking Configuration, while residential floor area would be reduced by up to 19,237 sf (approximately 18 units) thereby decreasing required parking by 4 spaces. Approximately 6,870 sf of parking area would be located more than 23 feet above curb level and therefore would count as floor area.

The At-Grade Configuration would require a special permit waiver pursuant to the proposed text amendment previously described that would allow enclosed accessory parking to be excluded from lot coverage calculations. In addition, both parking configurations assume that some required parking for

the portion of the Proposed Project on Parcel 2 will be provided on Parcel 1 via a special permit waiver pursuant to ZR Section 74-745.

At the corner of Boone Avenue and East 173rd Street, Building 3B would have a 6-story base with a seventh story set back 15 feet from Boone Avenue and 8 feet from East 173rd Street. The L-shaped building would retain the 6-story base along East 173rd Street but would step up after an 8-foot setback to 12 stories in the mid-block and 15 stories (or 155 feet ABP) plus mechanical and elevator penthouses at West Farms Road. Building 3B would meet Building 3A in the mid-block of West Farms Road. Along West Farms Road, Building 3A would have a 7-story base with an eleventh story set back 8 feet. Turning onto the mid-block open area, the L-shaped building would rise to 14 stories (plus mechanical and elevator penthouses) while maintaining a 7-story base. Building 3A would meet Building 3C near the center of the mid-block open area. Building 3C would have a 6-story base with a seventh story set back 15 feet from the mid-block open area and Boone Avenue. Building 3C would drop to 5 stories, without set back, in the mid-block along Boone Avenue, where it would meet Building 3B. See Figures 1-5A and 1-6A.

If the SCA elects to construct the elementary school, it would occupy Building 3C. The 6-story school would have 14-foot floor-to-floor heights, resulting in an 84-foot high street wall. See Figure 1-3B. The portion of Building 3B along Boone Avenue would have a 7-story base with a ninth story set back 15 feet from Boone Avenue and 8 feet from East 173rd Street. The base height of the remainder of Building 3B would also increase to 7 stories while the base height of Building 3A would increase to 8 stories. See Figures 1-5B and 1-6B.

Parcel 3 – Building 4 (See Figure 1-5A)

Parcel 3 is proposed to be rezoned to an R6A residential district. The applicant controls only a portion of Parcel 3 consisting of Block 3009, Lot 33, which is located on the west side of Boone Avenue approximately 200 feet south of the intersection with East 173rd Street. Building 4 would be developed on this portion of Parcel 3. The building, which would not be included in the proposed LSGD, is expected to comprise approximately 36,000 sf of residential space and contain 36 dwelling units. Fronting Boone Avenue, the rectangular building would have a six-story base and a seventh floor with a 15-foot setback. Required accessory parking would likely be accommodated partly within the footprint of the ground floor and partly in the rear yard.

Parcels 8 and 9 – Buildings 5 and 6 (See Figures 1-7 - 1-10 below)

Parcels 8 and 9 are proposed to be rezoned to R8X districts with new C2-4 overlays mapped along West Farms Road between the Cross Bronx Expressway Service Road and Rodman Place on Parcel 8 and along West Farms Road and Longfellow Avenue from Rodman Place to the edge of an existing C2-4 overlay on Parcel 9. The applicant controls portions of each Parcel along West Farms Road, comprising 27,722 sf of lot area on Parcel 8 and 26,903 sf on Parcel 9.

Buildings 5 and 6 would have eight- and ten-story bases and, after setting back 10 to 15 feet in conformance with the applicable ZR provisions, would step up to 15 stories (or 150 feet ABP). Both buildings would be organized around central courtyards that would enclose the accessory parking space. The bulk of the buildings would be aligned along West Farms Road, across from a school playground and open space associated with the Cross Bronx – Sheridan Expressway interchange. A wing of the building on Parcel 8 would extend along Rodman Place, oriented away from the Expressway. The two buildings would have complementary massing, reinforcing a street wall along West Farms Road, but would maintain individual architectural identities. Entries to the buildings would be located across the street from each other on Rodman Place, near the corner of West Farms

Road. Commercial spaces would be provided on the ground floor along West Farms Road for neighborhood retail and to reinforce the emerging retail center at West Farms Square.

Building 5 would comprise approximately 199,598 sf of floor area, of which up to 10,040 sf would be used for commercial retail/service uses and the remainder of which would be used for residential apartments (approximately 200 units) and related accessory uses. The building would also contain approximately 17,633 sf of covered accessory parking. Building 6 would comprise approximately 193,702 sf of floor area, of which up to 17,500 sf would be used for commercial retail/service uses and the remainder of which would be used for residential apartments (approximately 194 units) and related accessory uses. It would also contain approximately 15,080 sf of covered accessory parking. The residential entries for both buildings would be located on Rodman Place. Each L-shaped building would have an eight-story base, with floors 9 to 15 set back from West Farms Road and Rodman Place. Two-story dormers would be provided at the ninth and tenth floors. Parking would be accommodated on a single level beneath a raised landscaped courtyard, with an entry on East 176th Street for Building 5 and on Rodman Place for Building 6. Rooftop mechanical penthouses would be located on the 15-story portion of each building.

Figure 1-7 – Buildings 5 and 6 - Illustrative Site Plan



Figure 1-8
Buildings 5 and 6 - West Farms Road Elevation

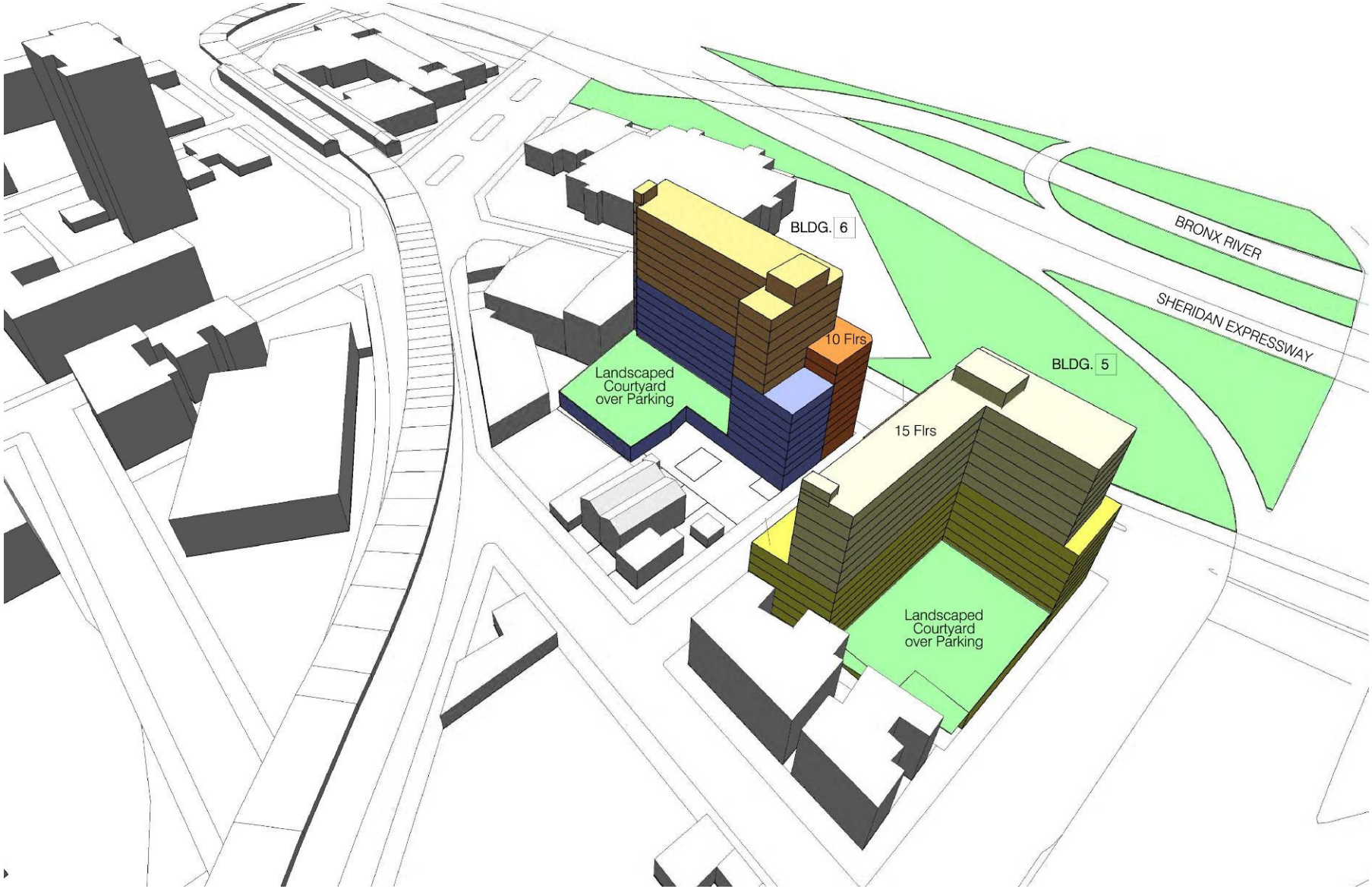


1 Elevation - West Farms Road

Notes
ABP - Above Base Plane

Note: Façade materials and landscaping are illustrative.

Figure 1-9
Buildings 5 and 6 - Conceptual Massing Diagram



Note: For illustrative purposes only. Projected development not shown for sites not under control of applicant.

Figure 1-10
Building 6 - Rendering



Note: Façade materials and landscaping are illustrative.

Expected Sequencing of the Proposed Project

The applicant's expected sequencing of the Proposed Project is shown in Table 1-3, which displays sequencing of sites north and south of the Cross Bronx Expressway, since these sites are relatively remote from one another. Dwelling units per sequence are shown, as is the expected accessory parking associated with each sequence. Figure 1-11 graphically illustrates the proposed sequencing for the Proposed Project.

Table 1-3
Expected Development and Accessory Parking by Sequence[1]

Sequence	Parcel	Building	DU's[2]	Running Total DU's	Accessory Parking	Running Total Parking	Parking % by Sequence	Parking Percent Running Total
South of Cross Bronx Expressway								
1	1	1A/1B	237	237	130	130	55%	55%
2	2	2A/2B	288	525	0	130	0%	25%
3	2	3A/3B/3C	370	895	94	224	0%	25%
4	3	4	36	931	12	236	33%	25%
North of Cross Bronx Expressway								
1	9	6	194	194	50	50	26%	26%
3	8	5	200	394	58	108	29%	27%

Notes:
1) Each Sequence is estimated at approximately two years to complete, each sequence following sequentially from the previous.
2) Assumes below grade parking configuration for Parcel 2.

This expected sequencing will be used for the assessment of impacts during construction, particularly for potential stationary source air quality impacts.

Figure 1-11
Anticipated Construction Sequencing for the Proposed Project

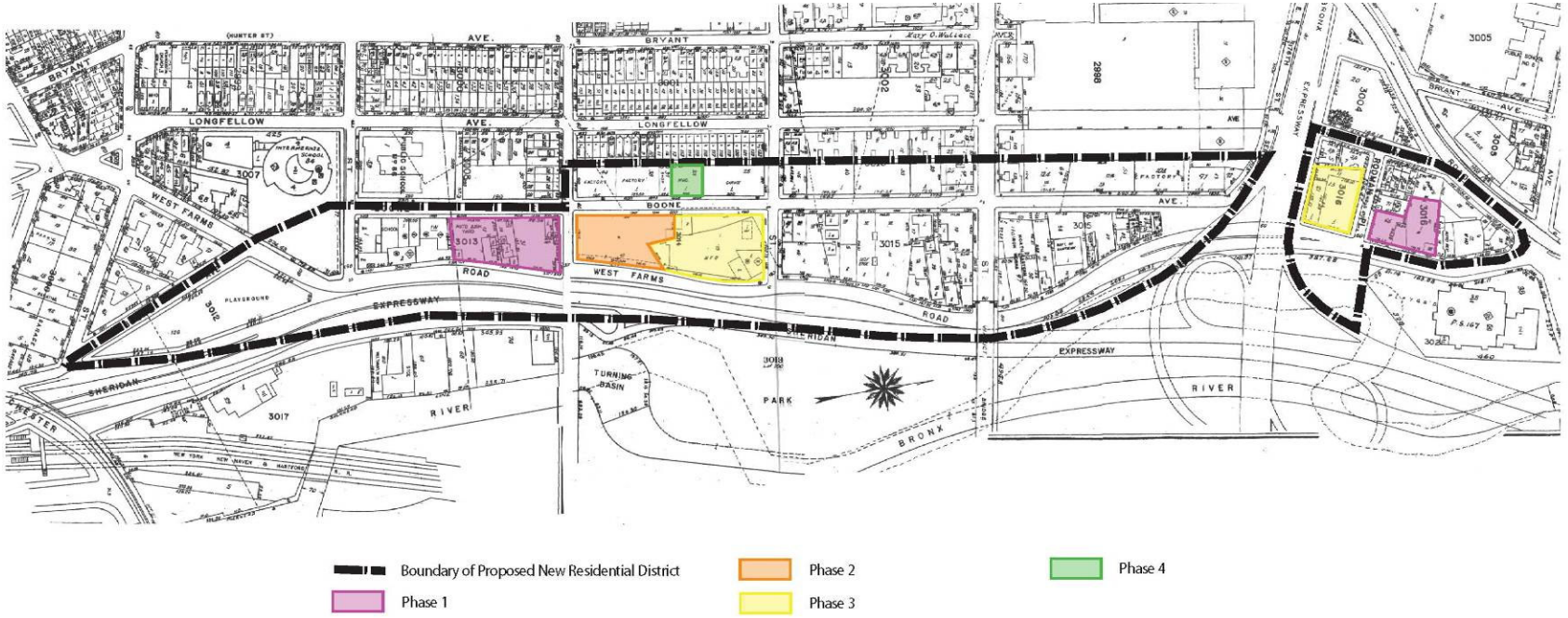


Figure 1-12A
LSGD Buildings - Proposed Lot Coverage Waivers

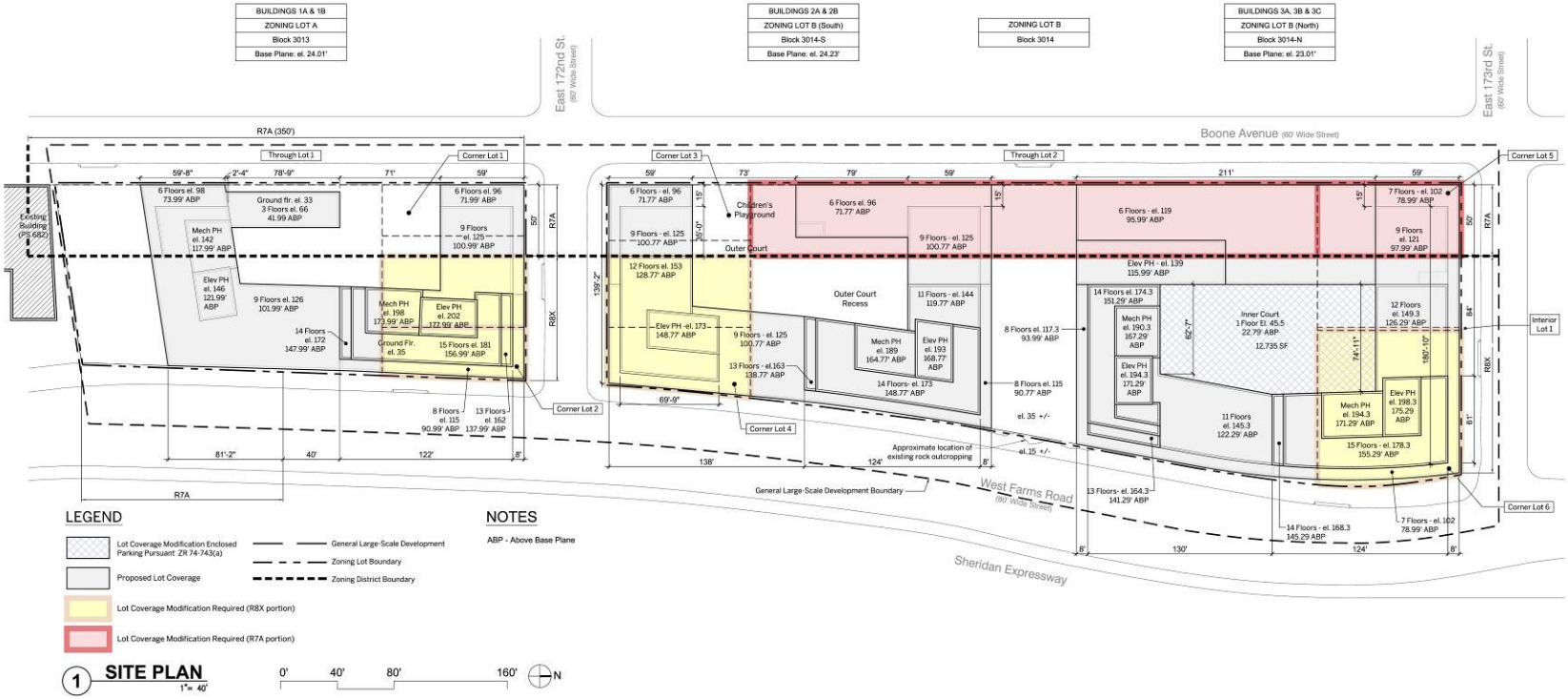


Figure 1-12B
Buildings 1A / 1B - Proposed Height and Setback Waivers (Plan)

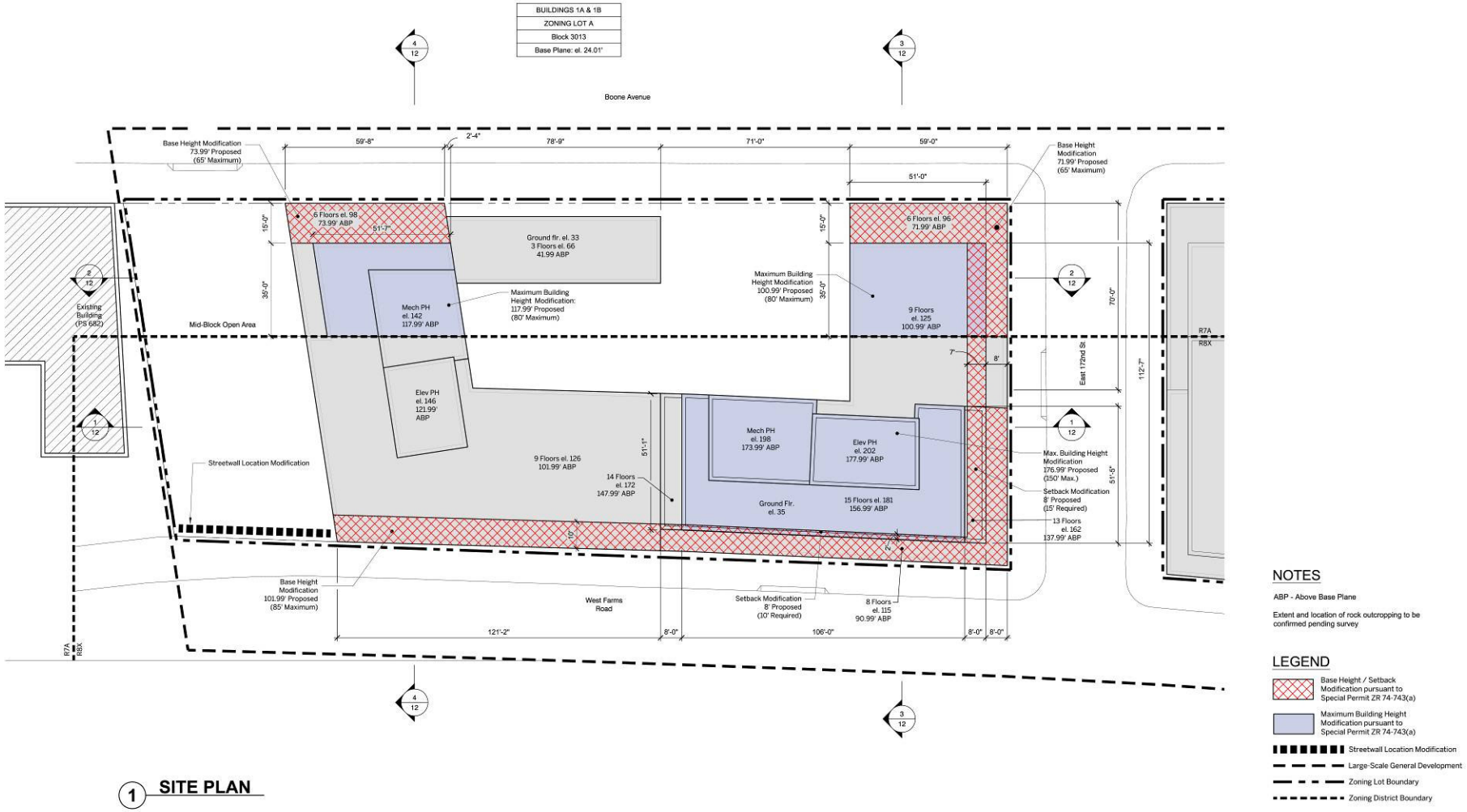
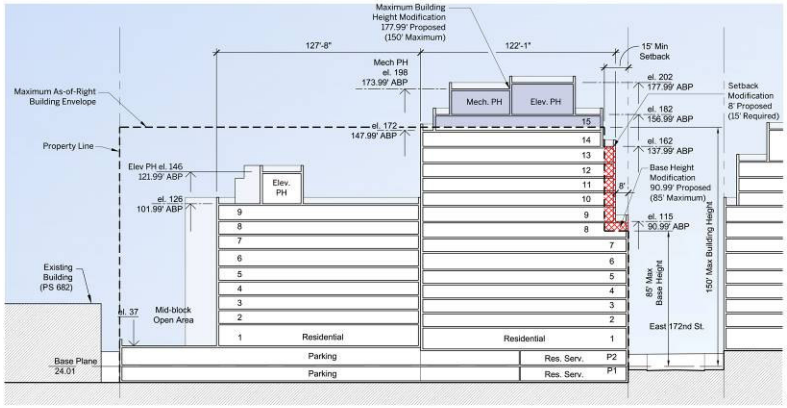
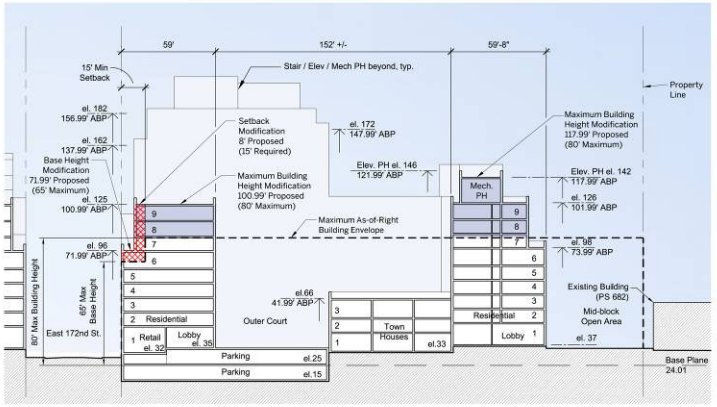


Figure 1-12C
Buildings 1A / 1B - Proposed Height and Setback Waivers (Sections)



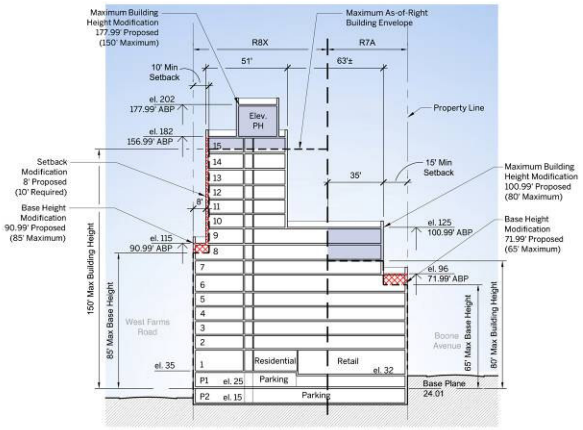
BUILDING 1A & 1B
ZONING LOT A
Block 3013
Base Plane: el. 24.01'

1 SECTION



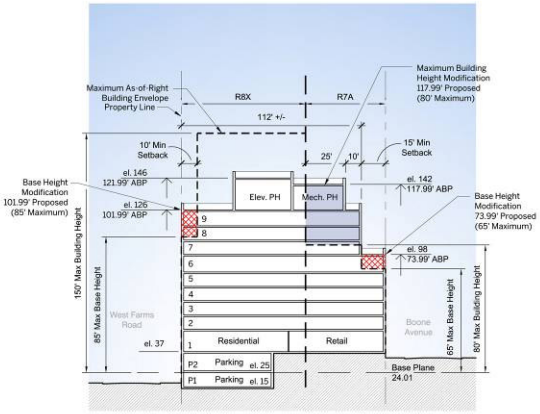
BUILDING 1B & 1A
ZONING LOT A
Block 3013
Base Plane: el. 24.01'

2 SECTION



BUILDING 1B
ZONING LOT A
Block 3013
Base Plane: el. 24.01'

3 SECTION



BUILDING 1A
ZONING LOT A
Block 3013
Base Plane: el. 24.01'

4 SECTION

NOTES

ABP - Above Base Plane

Extent and location of rock outcropping to be confirmed pending survey

LEGEND

- Base Height / Setback Modification pursuant to Special Permit ZR 74-743(a)
- Maximum Building Height Modification pursuant to Special Permit ZR 74-743(a)
- As-of-Right Building Envelope
- As-of-Right Building Envelope
- Zoning District Boundary
- Property Line

Figure 1-12D
Buildings 2A / 2B and 3A / 3B / 3C - Proposed Height and Setback Waivers (Plan)

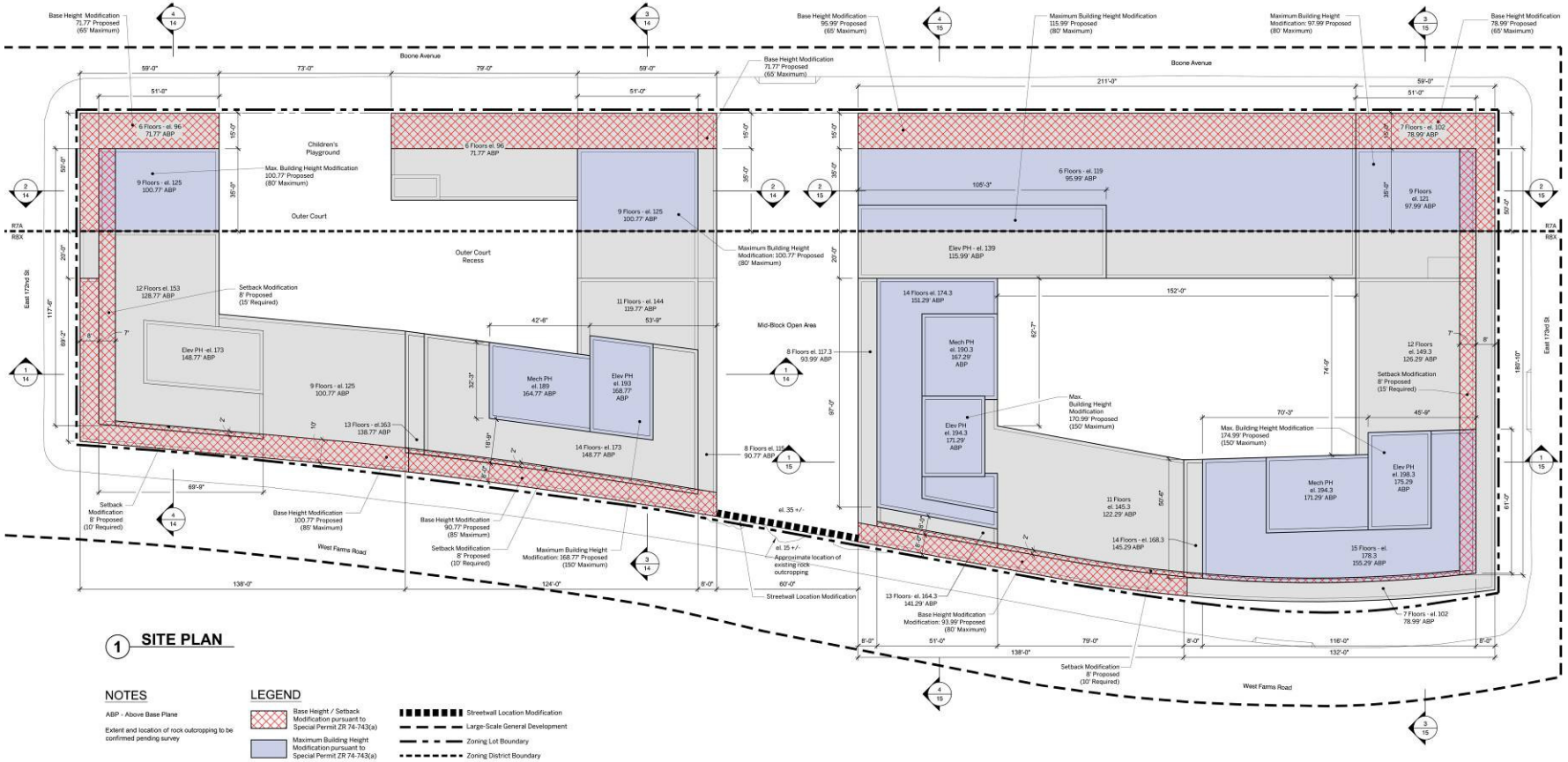


Figure 1-12E
Buildings 2A / 2B - Proposed Height and Setback Waivers (Sections)

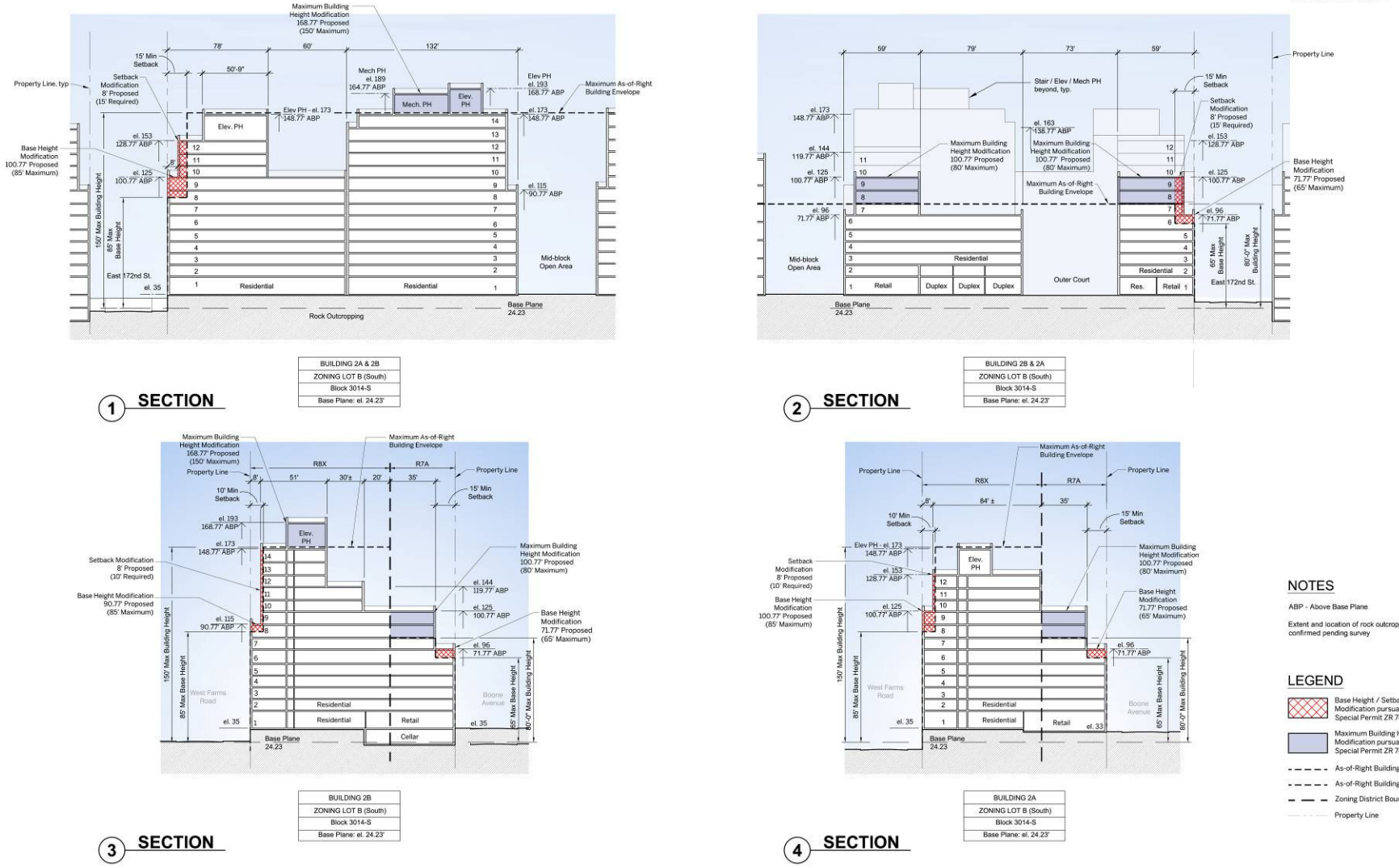
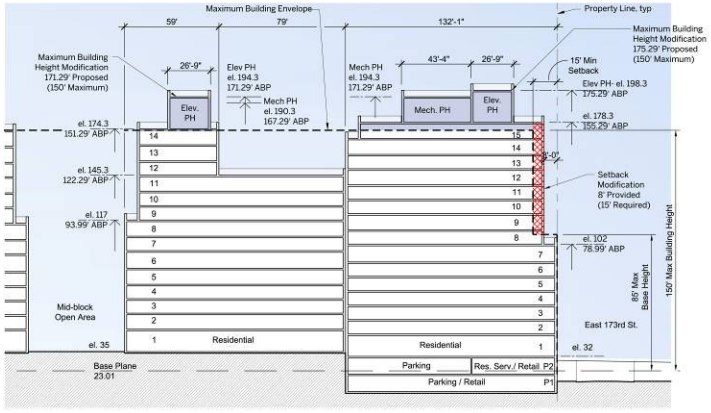
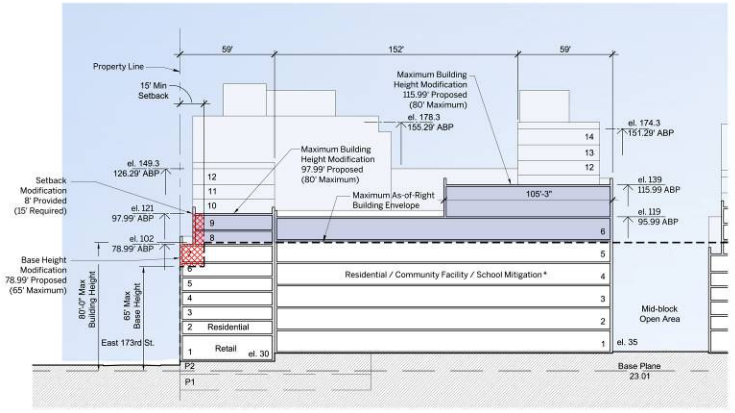


Figure 1-12F
Buildings 3A / 3B / 3C - Proposed Height and Setback Waivers (Sections)



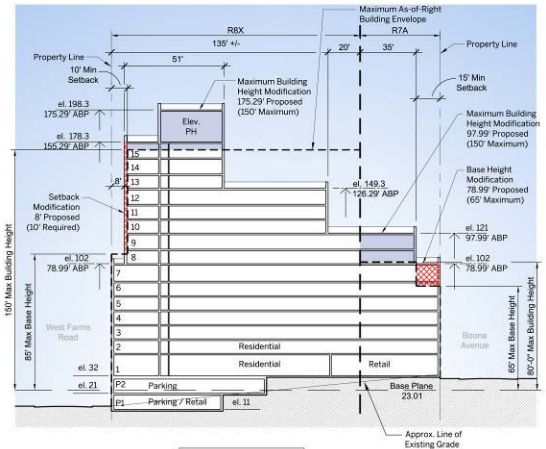
1 SECTION

BUILDING 3A & 3B
ZONING LOT B (North)
Block 3014-N
Base Plane: el. 23.01'



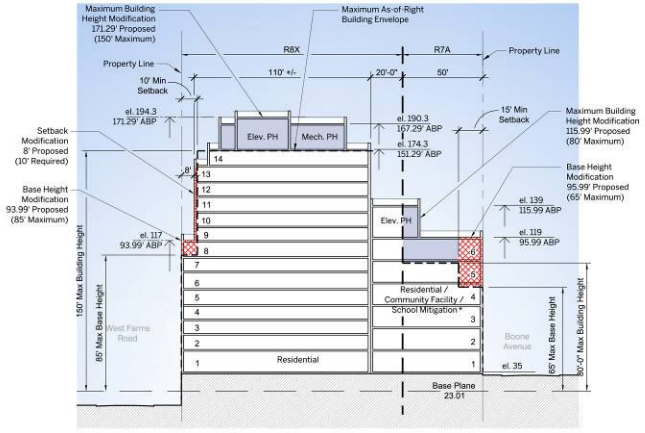
2 SECTION

BUILDING 3B & 3C
ZONING LOT B (North)
Block 3014-N
Base Plane: el. 23.01'



3 SECTION

BUILDING 3B
ZONING LOT B (North)
Block 3014-N
Base Plane: el. 23.01'



4 SECTION

BUILDING 3A & 3C
ZONING LOT B (North)
Block 3014-N
Base Plane: el. 23.01'

NOTES

ABP - Above Base Plane

Extent and location of rock outcropping to be confirmed pending survey

LEGEND

- Base Height / Setback Modification pursuant to Special Permit ZR 74-743(a)
- Maximum Building Height Modification pursuant to Special Permit ZR 74-743(a)
- As-of-Right Building Envelope
- As-of-Right Building Envelope
- Zoning District Boundary
- Property Line

Figure 1-12G
Buildings 1A / 1B and 2A / 2B - Proposed Outer Court Recess Waivers

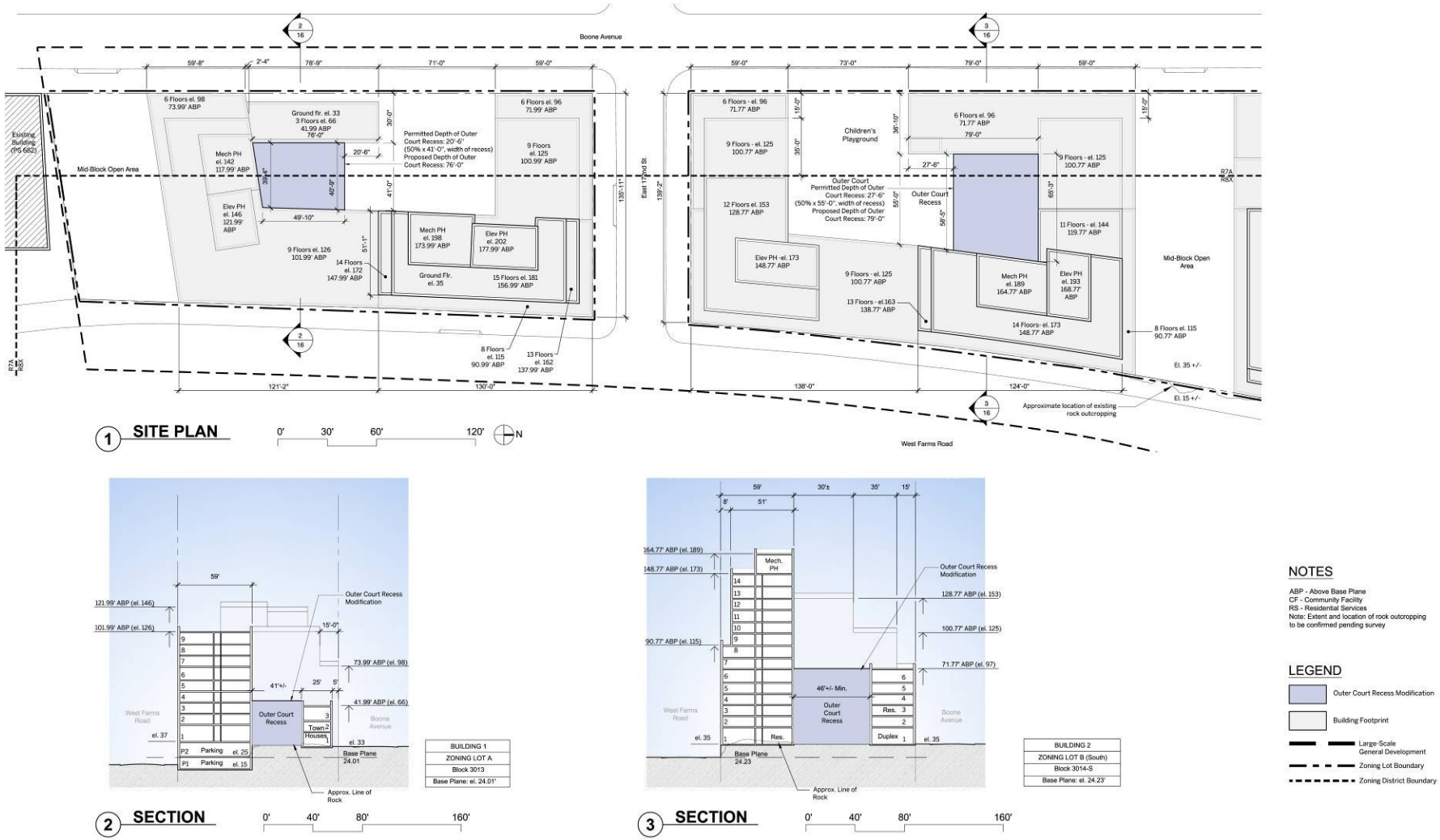
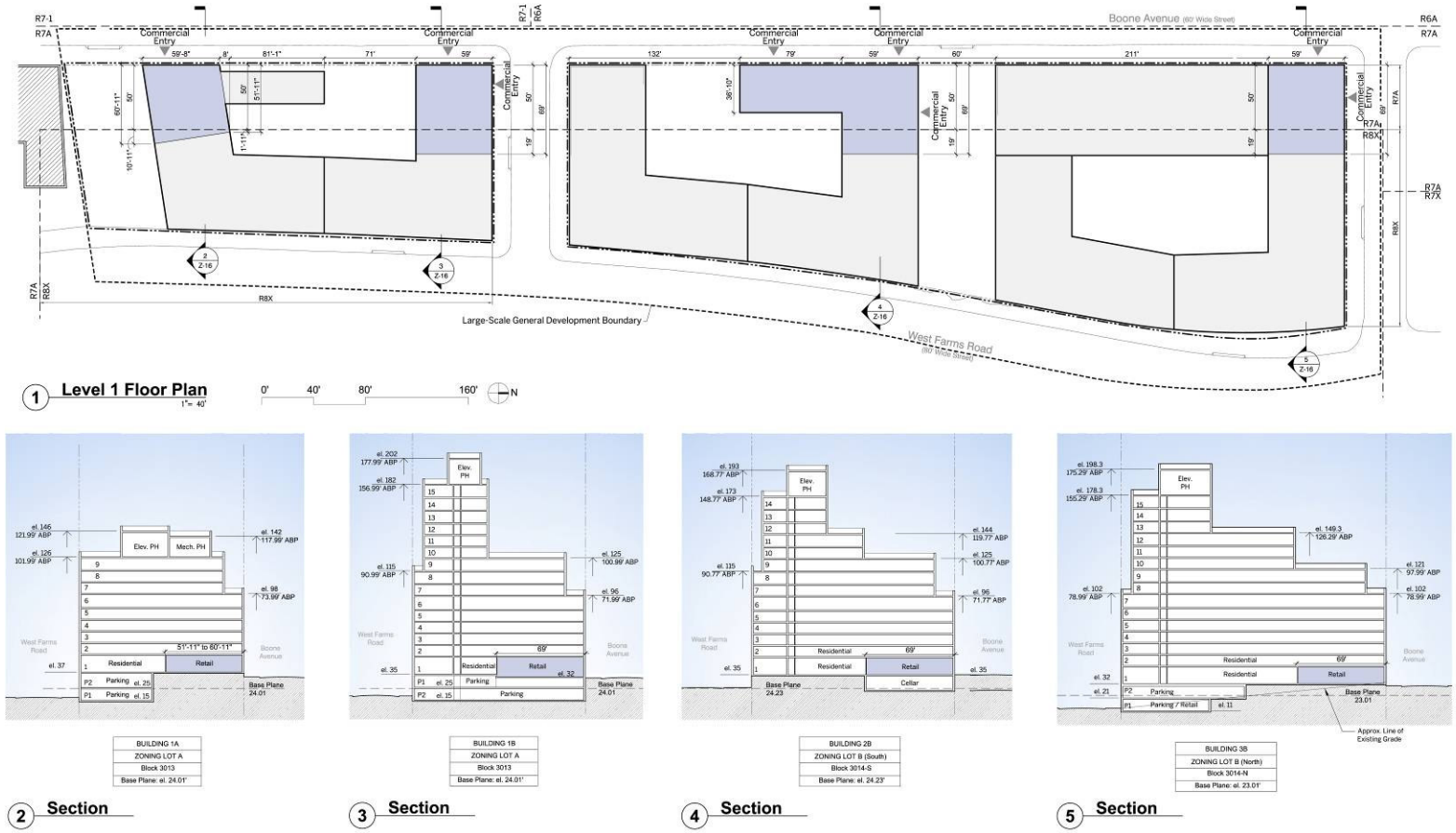


Figure 1-12H
LSGD Buildings - Proposed Waivers regarding Location of Commercial Uses



PROJECTED DEVELOPMENT

CEQR considers the long term and short term effects of a proposed action. For area-wide rezonings not associated with a specific development, the foreseeable future is generally considered to be a ten year build out period. This is assumed to be the length of time over which developers would act on the change in zoning and the effects of the proposed action would be experienced. In this instance, there is both a Proposed Project as well as a more extensive area to be included in the proposed rezoning under the Proposed Action. The time frame expected by the project applicant is also about ten years to complete development on the parcels of land under the applicant's control (the Proposed Project). Hence, a ten year analysis period is viewed as a reasonable build-out period for both the Proposed Project and Proposed Action.

The Future with the Proposed Action scenario therefore identifies the amount, type, and location of development that is expected to occur by 2022 as a result of the Proposed Action. The Future without the Proposed Action scenario identifies similar development projections for 2022 absent the Proposed Action. The incremental difference between the Action and No Action scenarios serves as the basis for the impact analyses.

To determine the development scenarios, standard methodologies have been used following *CEQR Technical Manual* guidelines and employing reasonable, worst-case assumptions. These methodologies have been used to identify the amount and location of future residential, commercial, and community facility growth. In projecting the amount and location of new development, several factors have been considered, including known development proposals, current market demands, past development trends, and DCP's "soft site" criteria, described below, for identifying likely development sites. Generally, for area-wide rezonings, which create a broad range of development opportunities, new development can be expected to occur on selected, rather than all, sites within a rezoning area. The first step in establishing the development scenarios was to identify those sites where new development could reasonably be expected to occur.

In identifying the reasonable worst case development scenario (RWCDS), a general set of criteria was established and all sites that met the criteria were identified. Area specific criteria were also developed to further identify projected and potential development sites.

General Criteria for Development Sites

The following criteria were used to categorize soft sites as **"Projected"** development sites.

- Lots with a total size of 5,000 sf or larger (may include potential assemblages totaling 5,000 sf if assemblage seems probable) occupied by buildings with floor area ratios equal to or less than half the proposed maximum permitted FAR.

- Lots occupied by loft buildings or other buildings that are suitable for residential conversion.

The following criteria were used to further categorize soft sites per the above to distinguish **"Potential"** development sites, which are those sites that could be developed but are assumed to have less development potential than the projected development sites.

- Lots containing active businesses operating within fully-enclosed structures that occupy most of their lot/ building.

- Active businesses that have undergone extensive investment and that provide unique services, or which are prominent and successful neighborhood businesses or organizations less likely to relocate.

- Lots with warehouse buildings that are more than 20 percent vacant or occupied by marginal uses and which are suitable for conversion.

- Highly irregular lots or otherwise encumbered properties that would make development difficult, or lots situated in a less-attractive location for new development.

The following uses and types of buildings that meet these criteria were not included in the development scenario because they are very unlikely to be redeveloped as a result of the proposed rezoning.

- The sites of public schools. The public high school that meets the development site criteria is built to less than half of the permitted floor area of its site under the proposed zoning. It is unlikely that the increment of additional FAR permitted under the proposed zoning would induce redevelopment or expansion of this site.

Additional assumptions made in developing the reasonable worst case development scenario include the following.

- The average dwelling unit size is assumed to be 1,000 sf, reflecting the type of units that are currently being constructed in this area.

- Ground floor commercial totals assume that 100 percent of the ground floor's lot area in the new commercial districts is developed as local retail space, to establish the reasonable worst case.

Reasonable Worst Case Development Scenario (RWCDS)

The Future without the Proposed Action

In the future without the Proposed Action, almost no new development would be expected. The only major development that would be expected would be located at the far northern end of the area to be rezoned, on Block 3016, Lot 38 and 42 (part of Parcel 9). This area is now zoned as R7-1 with a C2-4 commercial overlay. Approximately 134 new dwelling units and about 39,000 sf of new commercial development would be expected on this site. The remainder of the area to be rezoned would be expected to remain as it is under existing conditions (see Table 1-3).

The Future with the Proposed Action

Table 1-3 summarizes maximum potential development that would be expected to result from the Proposed Action, including development expected to occur on sites that are not under the control of the applicant as well as the applicant's Proposed Project. Figure 1-13 provides a graphic depiction of the development sites listed in Table 1-3. Overall, the RWCDS projects that the Proposed Action would result in new development by 2022 of approximately 2,635 dwelling units (including 923 units allocated to affordable housing), 92,941 sf of locally-oriented commercial retail space and 11,888 sf of community facility space compared to the Future without the Proposed Action. Of this development, 1,310 dwelling units (including 260 affordable units) and 46,908 sf of commercial

space would be located on sites that are not under the control of the applicant. The remaining 1,325 dwelling units (including an estimated 663 affordable units), 46,033 sf of commercial space and 11,888 sf of community facility space would comprise the applicant's Proposed Project and would be located on development sites that are under its control. As discussed in Chapter 3, Mitigation, the SCA will have the option to develop an 88,620 sf (approximately 540-seat) elementary school serving grades pre-k through 5 on a portion of the LSGD site as mitigation for a potential schools impact, which would reduce residential floor area by approximately 45,360 sf (53 dwelling units).

The RWCDS assumes that the maximum permitted floor area will be developed on all projected development sites that are not under the control of the applicant. Because the rezoning area would be mapped as an Inclusionary Housing area, 20 percent of the total floor area (net of ground floor commercial and community facility floor area) would need to be allocated to affordable housing in order to maximize residential floor area. Accordingly, the RWCDS assumes that 20 percent of the dwelling units on non-applicant controlled projected development sites will be affordable. As noted above, the average dwelling unit size (for both affordable and market-rate units) is assumed to be 1,000 sf. In C2-4 commercial overlays mapped within R6, R7 and R8 residential districts, commercial uses are not permitted above the ground floor of mixed residential / commercial buildings. In order to maximize floor area, the RWCDS assumes that projected development sites not under the applicant's control will be developed with ground-floor retail (covering 100 percent of the lot area) and residential uses above. (The only exception is the building on Parcel 5A which, due to the location and configuration of the parcel, is expected to be developed as a 2-story commercial building.)

For sites under the applicant's control that are not part of the LSGD (i.e., for Buildings 4 - 6), the RWCDS follows the assumptions above for non-applicant controlled sites with respect to maximizing floor area, providing an average dwelling unit size of 1,000 sf and limiting commercial retail to the ground floor. For the LSGD Buildings, the applicant proposed to construct less floor area than the maximum aggregate permitted under the rezoning. In addition, the applicant anticipates a slightly lower average unit size and a more limited amount of commercial floor area. Because the LSGD will be subject to a restrictive declaration executed in connection with the special permits, and for purposes of the base analysis, the RWCDS for Parcels 1 and 2 follows the applicant's proposed program.

The applicant desires to provide affordable housing for the Proposed Project in excess of the minimum required under the Inclusionary Housing program to achieve the maximum bonus floor area on both the sites to be developed pursuant to the LSGD special permits as well as the as-of-right sites and intends to seek funding through HPD and HDC to try to achieve this goal. The amount and future availability of such funding is unknown, so the extent of additional affordable housing to be provided (if any) could vary. Although no specific programs have been identified, at least one of the more commonly available subsidy programs requires that 50 percent of residential units be set aside for low- to moderate-income households. Accordingly, in order to provide a conservative analysis with respect to daycare and other impacts, the RWCDS generally assumes that 50 percent of the floor area in the Proposed Project (approximately 613 units) would be affordable, reflecting the applicant's goal of providing affordable housing in excess of the minimum contemplated under the Inclusionary Housing program. The analysis of indirect residential displacement however, will conservatively assume only the 20 percent minimum affordable housing (approximately 265 units) required under the Inclusionary Housing program to achieve the maximum bonus. These assumptions may be revised if the actual financing programs and subsidy levels are determined during the course of the preparation of the EIS.

Finally as noted previously, if there are substantial rock outcroppings on Block 3014 (Parcel 2), it would not be financially feasible to provide the required accessory parking below grade. Accordingly, for purposes of the EIS two potential accessory parking configurations for Parcel 2 will be studied. Under the "At-Grade Parking Configuration," a total of 91 accessory parking spaces and 645 dwelling units would be provided on Parcel 2. Under the "Below-Grade Parking Configuration," a total of 94 accessory parking spaces and 658 dwelling units would be provided on the Parcel. The higher number of dwelling units will be assumed in general for all analyses.

There are eight potential development sites within the area to be rezoned. Six of these sites are south of the Cross Bronx Expressway and are currently within M1-1 zoning districts. The remaining two potential development sites are within an existing R7-1 zoning district having a C2-4 commercial overlay. Each of these sites did not meet the criteria (i.e., too small) to be classified as a projected development site or had other traits which made their future development more speculative (such as a recent major investment in the property). The potential development sites are shown in the light green color in both Table 1-3 and Figure 1-13.

Table 1-3 – Summary of Existing Conditions, the Future without the Proposed Action and the Future with the Proposed Action

Projected Development on Sites Controlled by Applicant

Site Information				Existing Conditions									Future No Action					Future Action Condition		
Parcel	Block	Lot		Existing Zoning	Lot Area	Maximum Floor Area Ratio (FAR)	Residential Floor Area	Commercial Floor Area	Community Facility Floor Area	Industrial Floor Area	Dwelling Units	Existing FAR	Residential Floor Area	Commercial Floor Area	Community Facility	Industrial Floor Area	Dwelling Units	Proposed Zoning	Proposed FAR	Subsid U
Applicant Controlled Properties (Projected Development)																				
		12	*		14,630	1.0	0	0	0	1,200	0	0.1	0	0	0	1,200	0	R7A	LSGD	
		29	*		6,212	1.0	0	0	0	6,472	0	1.0	0	0	0	6,472	0	R7A/R8X	LSGD	
		31	*		14,555	1.0	0	0	0	16,357	0	1.1	0	0	0	16,357	0	R7A/R8X	LSGD	
		35	*		1,170	1.0	0	0	0	1,170	0	1.0	0	0	0	1,170	0	R7A	LSGD	
		37	*		284	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R7A	LSGD	
1	3013	46	*	M1-1	3,948	1.0	0	0	0	2,400	0	0.6	0	0	0	2,400	0	R7A	LSGD	
		9	*	M1-1	41,700	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R7A/R8X	LSGD	
2S	3014	45	*		13	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R8X	LSGD	
2N	3014	15	*	M1-1	65,000	1.0	0	0	0	65,850	0	1.0	0	0	0	65,850	0	R7A/R8X	LSGD	
3B	3009	33	*	M1-1	10,000	1.0	0	0	0	10,000	0	1.0	0	0	0	10,000	0	R6A	3.6	
		11	*	R7-1/C2-4	5,293	3.4	0	0	0	0	0	0.0	0	0	0	0	0	R8X	7.2	
		13	*	M1-1	17,500	1.0	0	0	0	16,500	0	0.9	0	0	0	16,500	0	R8X/C2-4	7.2	
8	3016	21	*	M1-1	5,292	1.0	0	0	0	5,292	0	1.0	0	0	0	5,292	0	R8X/C2-4	7.2	
		60	*	M1-1	19,000	1.0	0	0	0	16,000	0	0.8	0	0	0	16,000	0	R8X/C2-4	7.2	
9D	3016	66	*	M1-1	8,415	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R8X/C2-4	7.2	
Subtotal					213,012		0	0	0	141,241	0		0	0	0	141,241	0			

= Applicant owned, subject to Special Permit
= Applicant owned, not subject to Special Permit
= Non Applicant Projected Development Parcels
= Potential Development Parcels

Table 1-3 – Summary of Existing Conditions, the Future without the Proposed Action and the Future with the Proposed Action - Continued

Projected Development on Sites Not Controlled by Applicant

Site Information			Existing Conditions									Future No Action					Future Action Condition				
Parcel	Block	Lot	Existing Zoning	Lot Area	Maximum Floor Area Ratio (FAR)	Residential Floor Area	Commercial Floor Area	Community Facility Floor Area	Industrial Floor Area	Dwelling Units	Existing FAR	Residential Floor Area	Commercial Floor Area	Community Facility	Industrial Floor Area	Dwelling Units	Proposed Zoning	Proposed FAR	Subsidized Units	Total Dwelling Units	Resi Floo
Projected Development Parcels																					
3A	3009	25	M1-1	20,000	1.0	0	0	0	19,700	0	1.0	0	0	0	19,700	0	R6A	3.6	14	72	
3D	3009	38	M1-1	13,750	1.0	0	0	0	13,700	0	1.0	0	0	0	13,700	0	R6A	3.6	10	50	
3E	3009	44	M1-1	12,500	1.0	0	0	0	12,500	0	1.0	0	0	0	12,500	0	R6A	3.6	9	45	
4A	3015	1	M1-1	10,906	1.0	0	0	0	22,371	0	2.1	0	0	0	22,371	0	R7A	4.6	10	50	
		3	M1-1	8,976	1.0	0	0	0	3,505	0	0.4	0	0	0	3,505	0	R7A	4.6	0	0	
4B	3015	5	M1-1	10,658	1.0	0	0	0	16,912	0	1.6	0	0	0	16,912	0	R7A/R7X	4.8	18	92	
		17	M1-1	7,600	1.0	0	0	0	3,700	0	0.5	0	0	0	3,700	0	R7A	4.6			
		18	M1-1	1,047	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R7A	4.6			
		29	M1-1	10,345	1.0	0	0	0	14,170	0	1.4	0	0	0	14,170	0	R7A/R7X	5.0			
4C	3015	31	M1-1	9,723	1.0	0	0	0	6,480	0	0.7	0	0	0	6,480	0	R7A/R7X	5.0	28	140	
5A	3010	26	M1-1	2,500	1.0		0	0	2,500	0	1.0	0	0	0	2,500	0	R6A	3.6	0	0	
5B	3010	29	M1-1	10,000	1.0	0	0	0	10,000	0	1.0	0	0	0	10,000	0	R6A	3.6	7	36	
5C	3010	33	M1-1	17,525	1.0	0	0	0	17,525	0	1.0	0	0	0	17,525	0	R6A	3.6	13	63	
5D	3010	40	M1-1	14,975	1.0	0	0	0	14,975	0	1.0	0	0	0	14,975	0	R6A	3.6	11	54	
5E	3010	46	M1-1	7,500	1.0	0	0	0	15,000	0	2.0	0	0	0	15,000	0	R6A	3.6	5	27	
		50	M1-1	2,276	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R7A	4.6			
		56	M1-1	1,250	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R7A	4.6			
6A	3015	110	M1-1	9,548	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R7A/R7X	4.8	12	62	
		62	M1-1	609	1.0	0	0	0	0	0	0.0	0	0	0	0	0	R7A	4.6			
		87	M1-1	8,823	1.0	0	0	0	1,000	0	0.1	0	0	0	5,960	0	R7A	4.6			
6B	3015	89	M1-1	2,910	1.0	1,880	0	0	0	2	0.0	1,880	0	0	0	2	R7A	4.6	11	57	
		67	M1-1	810	1.0	0	0	0	500	0	0.6	0	0	0	500	0	R7A	4.6			
		83	M1-1	2,955	1.0	0	0	0	1,278	0	0.4	0	0	0	1,278	0	R7A	4.6			
		84	M1-1	1,815	1.0	2,391	0	0	0	3	1.3	2,391	0	0	0	3	R7A	4.6			
6C	3015	85	M1-1	5,537	1.0	0	0	0	3,680	0	0.7	0	0	0	3,680	0	R7A	4.6	10	51	
6E	3015	95	M1-1	11,802	1.0	0	0	0	2,112	0	0.2	0	0	0	2,112	0	R7A/R7X	4.8	11	56	
6G	3015	97	M1-1	12,536	1.0	0	0	0	12,160	0	1.0	0	0	0	12,160	0	R7A/R7X	4.8	12	60	
7A	2998	97	M1-1	10,145	1.0	0	0	0	4,125	0	0.4	0	0	0	4,125	0	R6A	3.6	7	37	
		104	M1-1	16,252	1.0	0	0	0	16,252	0	1.0	0	0	0	16,252	0	R6A	3.6	0	0	
		113	M1-1	19,888	1.0	0	0	0	19,888	0	1.0	0	0	0	19,888	0	R6A	3.6	0	0	
7B	2998	124	M1-1	14,019	1.0	0	0	0	14,019	0	1.0	0	0	0	14,019	0	R6A	3.6	36	181	
		38	R7-1/C2-4	6,678	3.4	0	0	0	0	0	0.0	0	0	0	0	0	R8X/C2-4	7.2			
9C	3016	42	R7-1/C2-4	32,250	3.4	0	15,000	0	40,390	0	1.3	133,912	38928	0	0	134	R8X/C2-4	7.2	56	280	
9E	3016	71	M1-1	5,354	1.0	1,000	0	0	0	1	0.2	1,000	0	0	0	1	R8X	7.2	8	39	
Subtotal				323,462		5,271	15,000	0	288,442	6		139,183	38,928	0	253,012	140			290	1,450	
Projected Development Totals				536,474		5,271	15,000	0	429,683	6		139,183	38,928	0	394,253	140			952	2,775	
No Action to Action Increment																			923	2,635	

= Applicant owned, subject to Special Permit
= Applicant owned, not subject to Special Permit
= Non Applicant Projected Development Parcels
= Potential Development Parcels

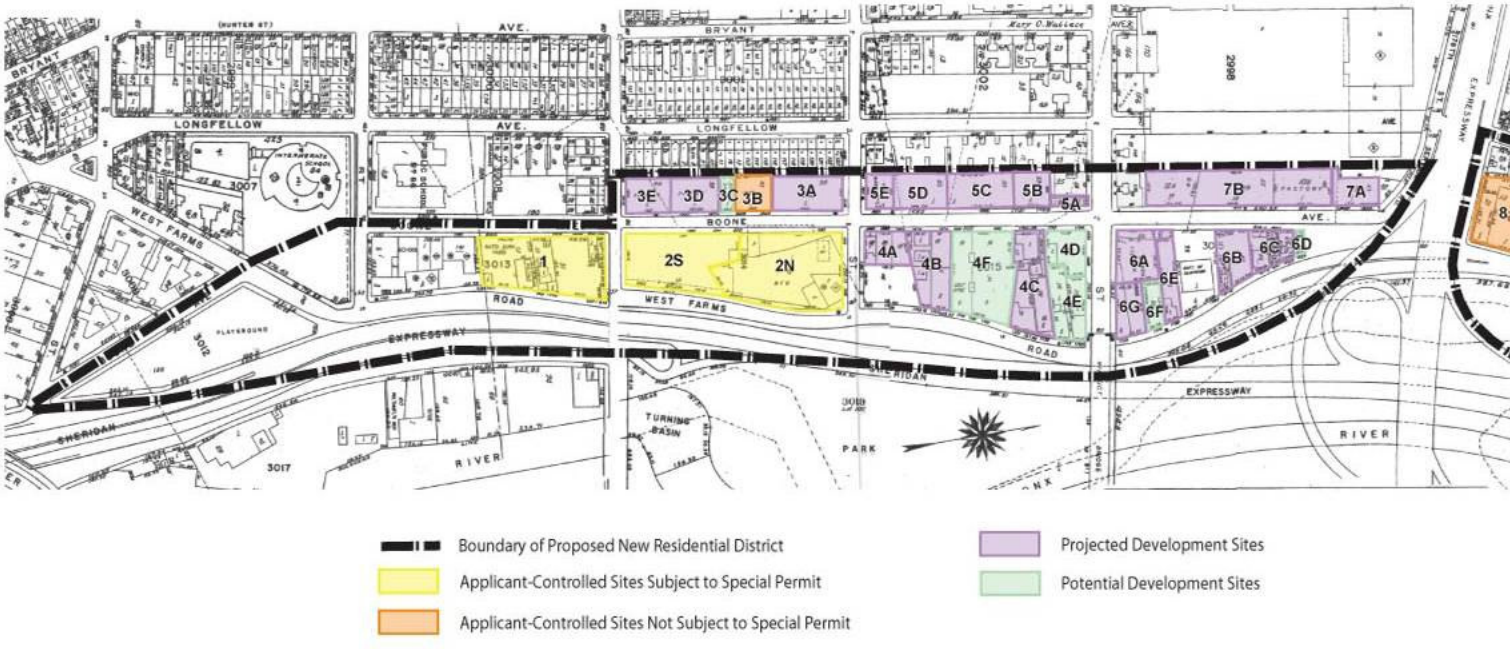
Table 1-3 – Summary of Existing Conditions, the Future without the Proposed Action and the Future with the Proposed Action - Continued

Potential Development on Sites Not Controlled by Applicant

Site Information				Existing Conditions										Future No Action					Future Action Condition		
Parcel	Block	Lot		Existing Zoning	Lot Area	Maximum Floor Area Ratio (FAR)	Residential Floor Area	Commercial Floor Area	Community Facility Floor Area	Industrial Floor Area	Dwelling Units	Existing FAR		Residential Floor Area	Commercial Floor Area	Community Facility	Industrial Floor Area	Dwelling Units	Proposed Zoning	Proposed FAR	Subs
Potential Development Sites																					
3C	3009	37		M1-1	3,750	1.0	0	0	0	3,700	0	1.0		0	0	0	3,700	0	R6A	3.6	
4D	3015	19		M1-1	13,209	1.0	0	4,539	0	0	0	0.0		0	4539	0	0	0	R7A	4.6	
		25		M1-1	7,299	1.0	0	0	0	3,700	0	0.5		0	0	0	3,700	0	R7X	5.0	
4E	3015	26		M1-1	9,482	1.0	0	0	0	11,535	0	1.2		0	0	0	11,535	0	R7A/R7X	5.0	
4F	3015	34		M1-1	27,637	1.0	0	65,324	0	0	0	0.0		0	65324	0	0	0	R7A/R7X	4.8	
6D	3015	81		M1-1	2,304	1.0	2,256	0	0	0	2	0.0		2,256	0	0	0	2	R7A	4.6	
6F	3015	96		M1-1	9,280	1.0	0	0	0	7,518	0	0.8		0	0	0	7,518	0	R7A/R7X	4.8	
		33		R7-1/C2-4	2,945	3.4	2,790	0	0	0	3	0.0		2,790	0	0	0	3	R8X/C2-4	7.2	
9A	3016	35		R7-1/C2-4	2,250	3.4	3,000	0	0	0	3	0.0		3,000	0	0	0	3	R8X/C2-4	7.2	
		36		R7-1/C2-4	3,536	3.4	3,000	0	0	0	3	0.0		3,000	0	0	0	3	R8X/C2-4	7.2	
9B	3016	37		R7-1/C2-4	2,108	3.4	0	0	1,875	0	0	0.0		0	0	1,875	0	0	R8X/C2-4	7.2	

= Applicant owned, subject to Special Permit
= Applicant owned, not subject to Special Permit
= Non Applicant Projected Development Parcels
= Potential Development Parcels

Figure 1-13
Delineation of Projected and Potential Development Sites



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. The EIS will analyze the projected developments for all technical areas of concern and also evaluate the effects of the potential developments for site-specific effects such as traffic, socioeconomic, community facilities, archaeology, shadows, hazardous materials, air quality, and noise.

Because the Proposed Action could result in the addition of more than 2,500 additional dwelling units to the area, it would be classified as a Type 1 action.

SCOPE OF WORK

The following scope of work assumes analysis of one build year for the Proposed Action. Given market conditions and available financing, it is anticipated that the applicant's proposed project would require approximately eight years to complete its full build-out condition. For area-wide rezonings, the foreseeable future is generally considered to be a ten-year build out period, which is only two years longer than the applicant's time table for his proposed project. Therefore as described above, the build year for the rezoning action is therefore assumed to be on a ten-year horizon, or 2022.

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 in a concise and readable format. In addition, it will be written in enough detail to facilitate the drafting of a notice of completion by the lead agency.

Proposed Action and Proposed Project Description

The first chapter of the EIS introduces the reader to the Proposed Action and sets the context in which to assess impacts. The chapter contains an introduction of the Proposed Action (a brief description and location of the Proposed Action); any pertinent background and/or history; a statement of the purpose and need for the Proposed Action; a detailed description of the Proposed Action and the applicant's proposed 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 gives the public and decision-makers a base from which to evaluate the project against both the future with the action and without the action conditions. In addition, the description of future without the action condition will discuss other expected actions and developments that could affect technical categories considered under CEQR.

The description of the Proposed Action will present the rationale for the proposed rezoning. In addition, the chapter will summarize the reasonable worst-case development scenario for analysis in the EIS and present its rationale (refer to "Projected Development Scenario" above).

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.

Land Use, Zoning and Public Policy

Issues

The Proposed Action would allow the redevelopment of a nine block area populated by light industrial, automotive repair and warehouse and storage buildings, many of which are underutilized or vacant, with residential and local retail uses. (As discussed above, no development would be expected to occur on the two southernmost blocks of the 11-block proposed rezoning area.) The industrial area to be rezoned is surrounded by residential, commercial and institutional development. Redevelopment of the industrial area, therefore, would create a more uniform land use pattern, (see Figure 7, Generalized Land Use).

New low- to middle-income, medium to high density residential developments would replace existing, primarily one-story industrial buildings. The proposed project's redevelopment of the existing, under-utilized industrial uses could induce additional residential development elsewhere within the rezoning area. Accordingly, an analysis has been performed to determine where additional redevelopment is likely to occur within the proposed rezoning area, as well as the capacity for induced development at these locations.

Figure 7 – Generalized Land Use



width of map is **1.50 miles**.

- Streets
- Subway Routes
- New York State Parks & Public Land
- Playgrounds
- NYCHA Properties
- Multi-family Residential
- Institutions
- Vacant Lots
- Natural Areas
- Bridges / Overpasses
- NYC Parks (Dept. of Parks & Rec.)
- Open Space (Dept. of City Planning)
- Green Spaces Along Streets
- Schools
- Mixed Use
- Transportation & Parking
- Proposed Rezoning Area
- Subway Stations
- Community Gardens
- Cemeteries
- 1 & 2 Family Residential
- Commercial
- Industrial

Scope

The analysis of land use focuses on two study areas: a primary study area, which is the subject of detailed analyses; and a secondary study area, which examines the more generalized influence of the Proposed Action on the broader neighborhood. The primary study area will extend approximately 800 feet from the boundaries of the area to be rezoned. The secondary study area will extend approximately one-quarter mile from the area to be rezoned, as shown in Figure 8.

Existing Conditions

The primary land use study area will extend approximately 800 feet from the area to be rezoned and includes those areas most likely to be most affected by the Proposed Action. Within this area, a detailed, parcel by parcel land use inventory will be prepared for each parcel in this area. Within the secondary study area, the land uses will be documented at a more generalized level. Within both areas, vacant and underdeveloped tracts where future development is likely ("soft sites") will be identified. Projects now under construction will also be identified and reported in this section. The land use patterns for the primary and secondary study areas will be depicted graphically to aid in the understanding of the land use discussion.

Existing zoning of the area to be rezoned will be described in detail, including use, bulk and parking provisions. Zoning within the remainder of the primary and secondary study areas will be described in a more qualitative fashion.

Public land-use and other policies applicable to the entire study area, including PlaNYC, the Waterfront Revitalization Program (because a small part of the proposed rezoning area is within the Coastal Zone), and the 197-a plan for Community District 6, will be researched and reported in this section.

The Future without the Proposed Action

An analysis will be conducted of future development projects or other anticipated land use changes within the area that may be completed by the build year for the Proposed Action. This task will include outreach to City agencies, including the NYC Economic Development Corporation (EDC), NYC Department of Transportation (DOT), NYC Department of Environmental Protection (DEP), NYC Department of Education (DOE), DPR and DCP, as well as contact with the local Community Boards. The scope of work assumes analysis of one build year for the Proposed Action. Planned zoning actions in the area will be researched and described, as will any other public land use policies for the area.

The Future with the Proposed Action

An analysis of changes in land use patterns or densities will be performed to arrive at an assessment of potential impacts of the Proposed Action. The proposed development's uses will be described in the context of existing land use patterns. Based on this description of proposed development and information provided in the existing conditions and future No-Action description, the following analyses will be conducted for the future Action condition.

1. Considering all general categories of land use, identify the extent to which the proposed uses characterize the study area or would be consistent or inconsistent with existing uses.

2. Determine whether the Proposed Action would create additional non-conformance or non-compliance of existing buildings or uses.

3. Determine whether the proposed development would alter or accelerate existing development patterns.

4. Consider any public policy that would affect the targeted land uses and determine whether any other public policy might affect the potential for land use change. This evaluation will include an assessment of consistency with the 197-a plan for Community Board 3, a consistency review of the WRP policies, including completion of the Coastal Assessment Form (CAF), and consistency with PlaNYC

sustainability policies.

5. Determine whether the Proposed Action would result in the direct displacement of any existing land uses.

For zoning, an assessment of the compatibility of the proposed zoning with that of the zoning in the surrounding areas will be prepared.

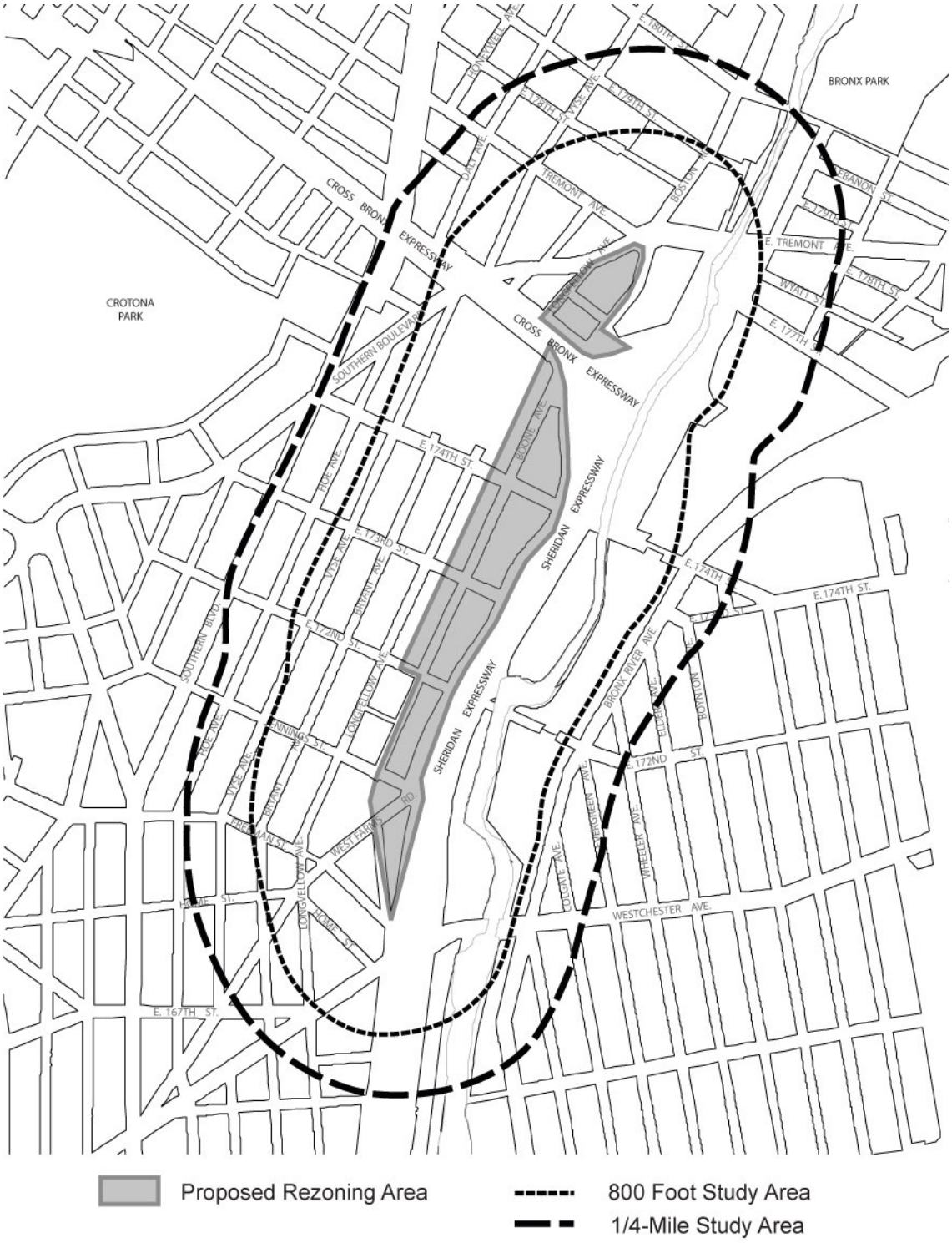
Socioeconomic Conditions

Issues

Residential - A key consideration will be whether the new residents of the Proposed Action could change the socioeconomic character (and therefore neighborhood character) of the surrounding area and potentially lead to secondary displacement of area residents. Given the size of the Proposed Action and the anticipated population increase, a one-half mile study area is proposed, but one that is truncated on its eastern side to respect physical barriers and neighborhood boundaries. Whether such displacement is likely to occur will depend on the extent to which the socioeconomic characteristics of the new inhabitants differ from those of existing inhabitants, the extent to which new inhabitants would comprise a significant portion of the overall area residents, and the extent to which study area households are vulnerable to displacement pressures. Accordingly, the socioeconomic characteristics of both sets of residents will be documented and analyzed.

This portion of the Bronx contains a significant lower income population. The area's median and mean household incomes are substantially lower than those for the borough of the Bronx and for New York City as a whole. In 1999, the eighteen census tracts within the study area had median household incomes approximately 36 percent lower than that for the Bronx as a whole. Because the actual subsidy levels for the proposed project have not yet been determined, it will be necessary to assume a “reasonable worst case”, i.e., the greatest number of additional higher income residents to the area. The analysis will assume that 50 percent of the new residential development within properties controlled by the applicant will be market rate, and 80 percent of the new residential development on properties not controlled by the applicant will be market rate. The new market rate units are likely to be inhabited by middle income households (commensurate with planned rental or sale levels contemplated by the developer, and/or market rates for the area documented through real estate agents working in the area). This assumption may be changed as the project is further developed and subsidy levels become more ascertainable. With a net increase of 2,635 units of residential development projected, the new community will be substantial relative to the size of the existing population, equal to approximately 12 percent of the projected future no-action study area population. The prospect of a secondary socioeconomic impact is therefore an issue meriting detailed study.

Figure 8 - Land Use Study Areas

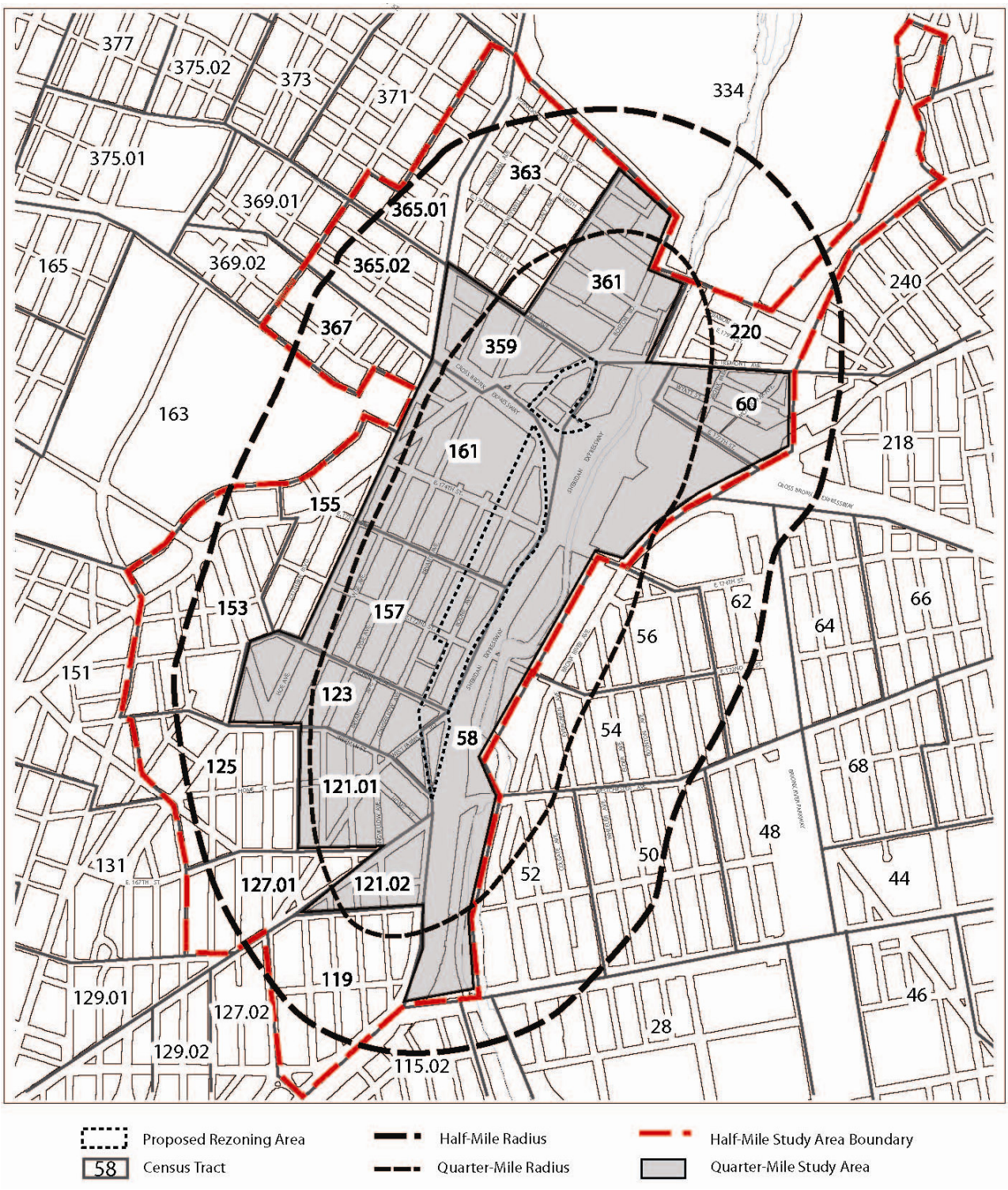


In assessing the potential for secondary displacement, a key consideration is the number of potentially vulnerable households in the area. Owner-occupied housing, public and subsidized housing developments, City-owned housing, and rent-regulated units provide, to varying degrees, protection against the involuntary displacement of their occupants. It will therefore be necessary to ascertain and document the number of protected and unprotected units in the area.

Commercial - Regarding potential commercial socioeconomic impacts, and following the *CEQR Technical Manual* guidelines, the potential for a significant impact to existing retail uses would be considered to exist if more than 200,000 sf of commercial floor space were proposed. Under such circumstances, a detailed commercial socioeconomic analysis would be conducted. However, as described above under the description of the Proposed Action, the projected net increase of retail space resulting from implementation of the Proposed Action will be about 93,000 sf. Therefore the potential for socioeconomic impacts to existing retail businesses will be screened in accordance with *CEQR Technical Manual* guidelines.

Direct Business Displacement –With regard to direct business displacement, the pertinent considerations are whether the businesses to be displaced provide products or services essential to the local economy that would no longer be available to local residents or businesses and whether adopted public plans call for the preservation of such businesses in the area in which they are located (as in the case of a designated in-place industrial park). Neither of these conditions would apply to the businesses on the site of the Proposed Action. It will, however, be necessary to document why the existing businesses do not fall within these categories.

Figure 9 – Socioeconomic Study Area



Scope

The following scope of work follows the guidelines contained in the *CEQR Technical Manual.*

With regard to direct residential displacement, the current population within the proposed rezoning area and the smaller population on projected development sites will be estimated through a land use inventory, New York City Department of Housing Preservation and Development online data about the number of residential units per building, and housing occupancy and average household size statistics from the 2000 census. The current study area population will be estimated through use of the PLUTO database, which provides information on every parcel's location, land use, and, if applicable, number of residential units. The total number for the study area will be multiplied by the occupancy rate from the 2000 census for the study area to determine the number of occupied housing units, and this number will be multiplied by the study area's average household size in 2000 to estimate the population. The number of residents who would be displaced will then be divided by the number of residents in the study area to determine the percentage facing displacement. The result will be compared with the threshold provided in the *CEQR Technical Manual.* This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

With regard to direct business displacement, a survey will be used to identify the occupied and unoccupied commercial, industrial, and automotive space in the proposed rezoning area, the number and type of businesses, and the number of employees. PLUTO data will be used to determine the amount of space occupied by each establishment and located within each vacant building. For those establishments located on the project site or projected redevelopment sites, for each type of business, the number of businesses, the number of employees, and the amount of space occupied will be tabulated. For those businesses of a type that serve the local community, the number of other nearby establishments will be determined from the Census Bureau's Zip Code Business Patterns. The list of Industrial Business Zones in the Bronx will be consulted to determine whether the proposed rezoning area is in one, and statements of land use policy for the area will be consulted to determine whether the proposed rezoning area is within an area designated for the protection of light industrial or automotive uses. This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action. With regard to indirect residential displacement, the number of action-generated new residents will be estimated by multiplying the projected number of new housing units by the occupancy rate and average household size for the study area as of the 2000 census, and this number will be divided by the estimated current study area population. Because the Proposed Action would introduce new market rate housing into a predominantly low and moderate income area, and if the number of new action-generated residents would exceed 5 percent of the existing study area population (as is expected), indicating the potential for changes in demographic and real estate market conditions, a detailed analysis will be performed. Information will be obtained from the 2000 census about the study area demographics, income levels, poverty rate, and labor force participation rate and about housing tenure, contract rents, gross rents, and the percentage of income paid for rent. Realtors will be consulted to determine current market conditions, and online sources will be consulted to determine the number of public housing units, Mitchell-Lama units, affordable housing units managed by not-for-profit organizations, and so forth. In this manner, a profile of existing socioeconomic conditions will be obtained. To determine the likely population increase under the future no-action scenario, information about anticipated new residential development will be obtained from public agencies (as described in the Land Use, Zoning, and Public Policy section) and, for part of the study area, as projected in the EAS for a nearby proposed areawide zoning change. Information will then be presented about residential development under the RWCDS in the future with the Proposed Action. Using Census Bureau and PLUTO data, the number of study area rental households in non-rent-regulated units will be estimated. The next step will be to determine the number of these households that can be considered at risk of involuntary displacement because of their incomes, an analysis performed by comparing the average household income of renter households in small buildings (with four or fewer units) in each census tract with the average income of all renter households in the Bronx. For those tracts with lower than average income populations living in unprotected rental apartments, the age of the housing stock will be considered,

using PLUTO data. Through this sequence of steps, the number of at-risk households will be determined. This number will then be compared to the total number of study area households to determine whether the number is significant relative to the size of the population (that is, whether it exceeds 5 percent). This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

With regard to indirect business displacement, the types of directly affected businesses will be examined to determine whether they have strong linkages to the local community and whether they are likely to relocate to nearby commercial or industrial areas in sufficient number to significantly affect commercial rents. The historical contraction and decline of the industrial enclave within the proposed rezoning area will be examined. Employment characteristics within the study area will be examined using data from the Census Transportation Planning Package for 2000. Because trend data by economic sector are not available at the census tract level, this information will be examined at the zip code level, using the 1998 and 2008 Zip Code Business Patterns. Also, the amount of projected new commercial space within the rezoning area will be compared against the accepted threshold for a detailed market saturation impact study This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Community Facilities and Services

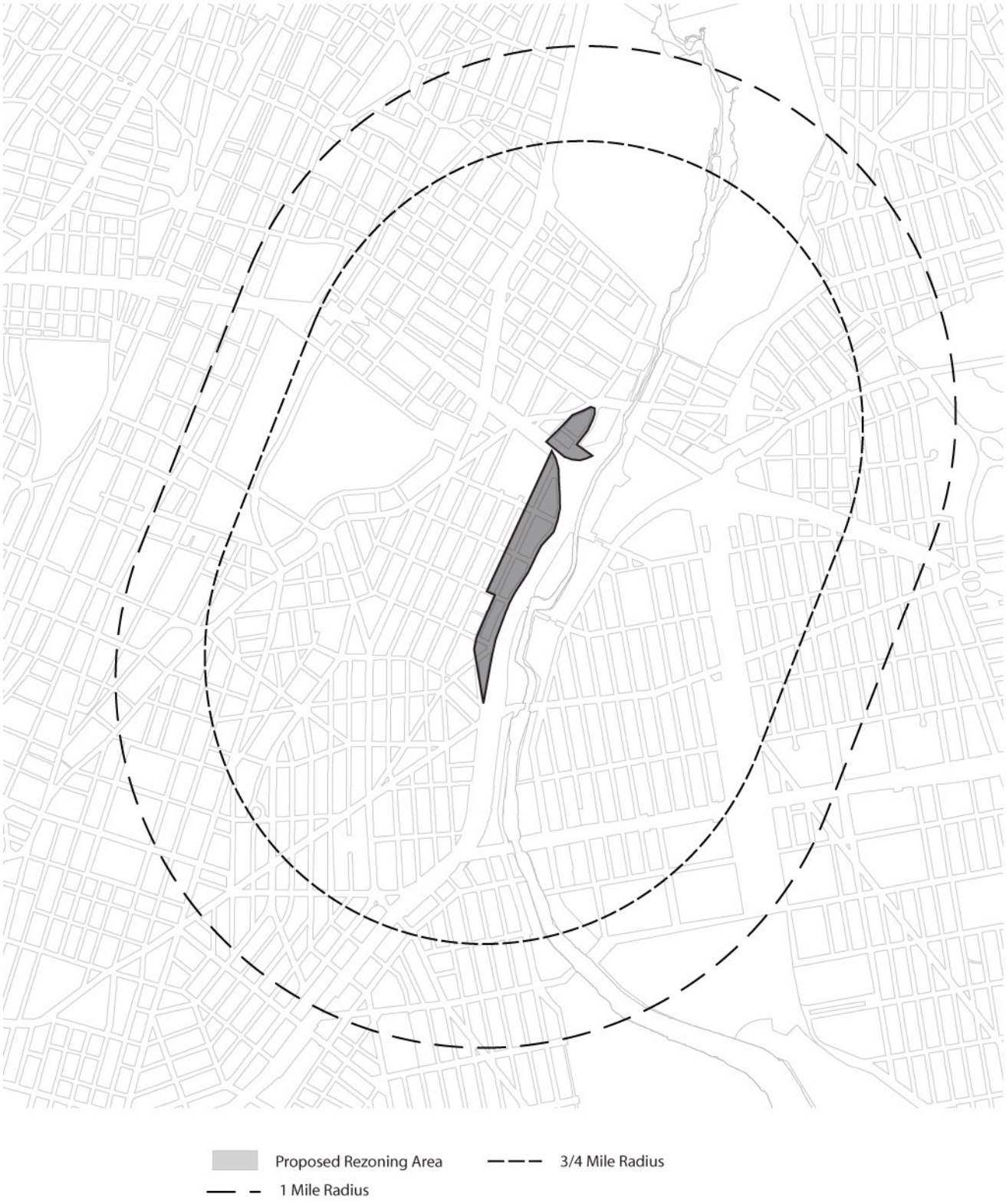
Issues

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 the Open Space and Recreational Resources section below) will be examined in this section.

The propose action is expected to generate a net increase of 2,635 residential units, 1,325 as the result of the proposed project and an additional 1,310 in the remaining portion of the rezoning area. It is anticipated that 912 would be affordable for this analysis (650 from the proposed project and 262 elsewhere in the rezoning area).

Potential impacts on schools may result if there would be insufficient seats available to serve the population. The CEQR threshold for detailed analysis of schools occurs when an action is anticipated to generate 50 or more elementary/middle school students or 150 or more high school students. A detailed review of elementary, intermediate and high schools will be required.

Figure 10 – ¾ and 1 Mile Study Areas*



* See Figure 9 for ½ Mile Study Area

Projects that would produce substantial numbers of subsidized, low- to moderate-income family housing units may generate a sufficient number of eligible children to affect the availability of slots at publicly subsidized child care centers. The Proposed Action is anticipated to generate more than 20 children eligible for publicly funded childcare. Therefore, a detailed analysis of group child care and Head Start facilities is required for the Proposed Action, in accordance with *CEQR Technical Manual* (Table 6-1).

Potential impacts on libraries may result from an increased user population. Based on the screening criteria established in the *CEQR Technical Manual*, the Proposed Action will represent a five percent or greater increase over the average number of dwelling units per library branch in the borough of the Bronx (682 residential units), therefore a detailed analysis of the Proposed Action's effects on library services is required.

Analyses of health care facilities and police and fire protection services are generally conducted only if a proposed action would have a direct effect on one or more such facilities or would introduce a "sizeable new neighborhood" (such as Hunter's Point in Queens). Since the Proposed Action would do neither, analysis of these community facilities categories is not warranted.

Scope

Libraries

According to the *CEQR Technical Manual*, library branch catchment areas are usually three-quarters of a mile, which is the distance that users would be expected to travel for library services. New York Public Library branches within the three-quarters-of-a-mile study area will be identified, and the New York Public Library will be contacted and asked to provide information regarding branch holdings, annual circulation, and services. Study area population will be estimated using data from the 2000 Census of Population and Housing. For this purpose, if at least half of a census tract's area is within the study area, the tract is included for computation purposes. The average population per branch will be calculated, as well as the number of library holdings per resident. These numbers will be recalculated for future conditions by adding the estimated number of residents who would occupy currently anticipated residential developments in the study area and, for future conditions with the Proposed Action, the additional Action-generated development. Finally, the New York Public Library will be consulted regarding the potential impact of the new residents on library services. If the assessment reveals the potential for a significant adverse impact, appropriate mitigation measures will be devised in coordination with the library. This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Public Schools

Separate analyses will be performed for public elementary schools, intermediate schools, and high schools.

The proposed rezoning area lies within Sub-district 2 of CSD 12. In accordance with the guidance in the *CEQR Technical Manual*, the elementary and intermediate school analyses both focus on Sub-district 2 of CSD 12 (the primary study area). In addition, for informational purposes only, an analysis will be made for a local study area extending a fixed radius about the proposed rezoning area, but limited to within CSD 12. Since elementary school children can be expected to walk up to half a mile to and from schools and older intermediate school students can be expected to travel farther, the study area radius extends a half mile for the elementary school assessment and one mile for the intermediate school assessment. Because all intermediate schools in CSD 12 are within a mile of the proposed rezoning area, the one-mile study area is effectively the school district as a whole.

For public elementary and intermediate schools, the assessment is based on the projected enrollments and target capacities in the 2022 analysis year, which are compared with each other to determine (1) the collective utilization rate and (2) either the number of available, unfilled seats or the shortfall of seats in the

schools within the applicable study area. Existing enrollment and capacity will be derived from the most recent available DOE *Utilization Profiles* report (commonly known as the "*Blue Book*") by totaling the enrollment and capacity numbers for the schools in the study area, using the DOE's Enroll % spreadsheet for that school year to adjust the *Utilization Profiles* numbers for schools that combine either elementary and intermediate school or intermediate and high school grade levels, so that only the elementary or intermediate grade level portions of the school's overall enrollment and capacity are included. For either school level and for either study area, enrollment in the future without the Proposed Action will be calculated by taking the district-wide ten-year enrollment projection prepared for the SCA by the Grier Partnership, apportioning the number that would be attending schools in the study area (using SCA-approved percentages for Sub-district 2 and the existing conditions percentage of CSD 12 elementary school students in the half-mile study area), and adding the estimated enrollment from the currently anticipated residential developments in the study area (information that was not available to the demographers who prepared the SCA projections), using multipliers in the *CEQR Technical Manual* to estimate the enrollment from these projects. The additional elementary or intermediate school enrollment that would be generated by development under the Proposed Action will be calculated using the same multipliers in the *CEQR Technical Manual*, and this number will be added to the future no-Action enrollment projection to derive the future with-Action enrollment. School capacity in the future with or without the Proposed Action will be estimated by adjusting the existing conditions capacity (1) to add the seats in any new facility included in the DOE's Adopted 2010-2014 Five-Year Capital Plan, (2) to account for approved Significant Changes in School Utilization posted on the DOE website, and (3) to exclude the capacity of certain temporary facilities, based on SCA input.

The methodology will be similar for high schools, but the study area is the entire Bronx. Also, the number of anticipated new residential units in the future without the Proposed Action will be derived not from research conducted in association with preparation of this EIS but from the SCA's table of Projected New Housing Starts as Used in 2009-2018 Enrollment Projections. This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

If the assessment reveals the potential for a significant adverse impact in CSD 12's Sub-district 2 (per the *CEQR Technical Manual*), appropriate mitigation measures will be devised in coordination with the School Construction Authority.

Child Care Centers

The analysis will focus on publicly funded child care services for children under age 6, and for future developments low and moderate income households will be considered eligible for these services. Information on existing conditions will be obtained from the New York City Administration for Children's Services regarding the location, capacity, current enrollment, and number of available slots at publicly funded group child care and Head Start program facilities within a study area extending 1.5 miles about the proposed rezoning area. The appropriate multiplier from Table 6-1b of the *CEQR Technical Manual* will be applied to the number of low to moderate income housing units in developments anticipated in the future without the Proposed Action and the number of such units that would be built as a result of the Proposed Action to calculate the expected number of children eligible for publicly financed child care services. This number will be compared with the number of available slots in the study area to determine whether the number of additional children generated by the Proposed Action could be accommodated without causing a significant adverse impact. If the assessment reveals the potential for a significant adverse impact, appropriate mitigation measures will be devised in coordination with the Administration for Children's Services. This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action

Health Care Facilities and Police and Fire Protection Services

Detailed analyses of these facilities and services are not warranted, but a brief discussion of existing police and fire protection facilities and services will be presented for informational purposes.

Open Space

Issues

An open space assessment is usually required when a Proposed Action would add 200 or more residents, 500 or more workers or a substantial number of other daytime users, or, in an area that has been deemed to be underserved, 50 or more residents or 125 or more workers. Since much of the proposed rezoning area is underserved, according to maps appended to the *CEQR Technical Manual*, the lower thresholds apply to the Proposed Action. The Proposed Action would add up to 2,635 new households, approximately 93,000 sf of new commercial space, and a new child care center. Total employees associated with the new development would amount to about 416 new employees, but the Proposed Action would also result in the displacement of approximately 274 existing employees, meaning the Proposed Action would result in a net increase of an estimated 142employees in the area. This exceeds the 125 additional employee threshold for a detailed daytime open space analysis. Hence, the open space analysis will focus on both the added residents and added workers to the area. The purpose of the open space analyses will be to determine whether the Proposed Action would elevate the demand for such open space facilities to unacceptable levels due to the increase in area residents and workers.

Open space analysis for residential development is based on a benchmark ratio of at least 1.5 acres per 1,000 residents in an area; if the area contains less than this amount under the no action condition or would contain less as a result of the Proposed Action, then a significant degradation caused by the Proposed Action would be classified as a significant impact. In performing these calculations, the recommended study areas extend a half-mile for the residential assessment.

Open space analysis for non-residential development is based on a benchmark ratio of at least 0.15 acres of passive open space per 1,000 users in an area; if the area contains less than this amount under the no action condition or would contain less as a result of the Proposed Action, then a significant degradation caused by the Proposed Action would be classified as a significant impact. In performing these calculations, the recommended study areas extend a quarter-mile for the non-residential assessment.

Scope

This residential assessment will be conducted in accordance with the *CEQR Technical Manual* for detailed open space analyses. A detailed open space analysis will be conducted as outlined below:

- Using U.S. Census data, calculate the year 2000 total residential population of the open space study areas, which as per CEQR guidelines, would be defined as (1) a residential study 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, and (2) a non-residential study area within a quarter-mile radius from the rezoning area, similarly adjusted for census tract boundaries.
- Using PLUTO data, determine the number of housing units completed since 2000, and multiply this number by the socioeconomic study area's average household size in 2000 to calculate the number of residents added since the 2000 census. Using the Census Transportation Planning Package reverse commute journey to work data, calculate the total worker population of the two study areas.
- Conduct an inventory of existing active and passive open spaces within the residential open space study 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 be 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. A map showing the locations of open spaces keyed to the inventory will be provided.

- Based on the inventory of facilities and study area population, the open space ratios for the user populations will be calculated and compared to City guidelines to assess adequacy. This is expressed as the amount of open space acreage per 1,000 user population. Within the residential study area, open space ratio will be calculated for active and passive open space, as well as the ratio for the aggregate open space. Within the non-residential study area, only the passive open space ratio will be calculated.
- Assess expected changes in future levels of open space supply and demand in the build year, based on other planned development projects within the open space study areas. This analysis will also take account of any new open space and recreational facilities expected in the open space study areas. Open space ratios will be developed for future conditions without the action and compared with open space ratios for future conditions with the action to determine changes in future levels of adequacy.
- In addition to the quantitative analysis, qualitative analysis will be performed to determine whether the induced changes of the Proposed Action would constitute a substantial change (positive or negative) or represent an adverse effect to open space conditions.
- If the results of the impact analysis identify a potential for a significant adverse impact, discuss potential mitigation measures.

This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Shadows

Issues and Scope

Shadow studies are undertaken as a "build" condition analysis. A shadow analysis is generally required if a Proposed Action's building(s) are over 50 feet in height. Of particular importance are new buildings that are close enough to open space, historic or natural resources to cast significant new shadows on them. In this case, the proposed residential buildings in Parcels 1, 2, 4 and 6 are in a location where they could cast shadows on Starlight Park, to the east of West Farms Road. The buildings on Parcels 8 and 9 could cast shadows on the existing P.S. 214 playground along West Farms Road, north of the Cross Bronx Expressway. Therefore, a detailed shadow analysis must be conducted for the Proposed Action following the guidelines in the *CEQR Technical Manual*. For the proposed project (the development of parcels under the control of the applicant), the building forms within the LSGD will be those actually proposed by the applicant. For the parcels not within the LSGD area, the building forms assumed will represent a reasonable worst-case scenario within the proposed zoning envelope. The shadow analysis will be conducted for the winter and summer solstices, the equinox, and May 6, in accordance with those guidelines. New and existing shadow areas will be shown in plan, as will their relationship to the existing open space areas. The diagrams will be used for the impact assessment in accordance with *CEQR Technical Manual* guidelines. In addition, the shadow assessment would be coordinated with the analyses for Open Space and Historic Resources where appropriate.

Historic Resources

Issues and Scope

Historic resources consist of both archaeological resources (artifacts that may be buried beneath the site's surface) and architectural resources (buildings or other structures that have been designated as landmarks by the New York City Landmarks Preservation Commission (LPC), listed on the National or State Register of Historic Places, included within a designated historic district, or deemed eligible for designation or listing). Impacts on historic resources are considered on the affected sites and in the area surrounding identified development sites. 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*.

There are no designated historic landmarks in the vicinity of the areas to be rezoned. But some of the development sites of the Proposed Action are now known to have once contained the Hedger-Edwards (dating from 1769) and Dutch Reform Church (dating from 1845) cemeteries, as well as former residential development from those periods. Because of these characteristics, some portions of the proposed rezoning area are considered to be archaeologically sensitive. Therefore, a Phase 1A documentary report has been prepared and submitted to LPC, along with a recommended protocol for protecting the potential resources. LPC has reviewed the Phase 1A report and the protocol, and has concurred that sampling (and potentially recovery) must be carried out to avoid potential impacts to archaeological resources. Further coordination will occur with the LPC, and, as necessary, a restrictive declaration will recorded against those parcels which are part of the proposed project.

The contents of the correspondence with LPC will be reported in the EIS along with pertinent portions from the Phase 1A report, and any further studies and reports generated at the direction of LPC. Agency correspondence along with the full Phase 1A report will be appended to the document.

This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Urban Design/Visual Resources

Issues

The proposed rezoning would encourage the development of three to fifteen story buildings, mostly along West Farms Road and north of the Cross Bronx Expressway. Most of this new development will not be directly juxtaposed with existing development (except on the west side of Boone Avenue and at the north end of the Proposed Action). The new development on the west side of Boone Avenue would be in R6A districts, which is a lower rise district (typically about six stories) and more contextual to the area to the west. Further, the proposed zoning would place the higher buildings along West Farms Road, which is mostly at a lower elevation because of the steep downward slope of the terrain toward the river. The assessment will focus on whether the Proposed Action's buildings will be of a scale, bulk and mass that is compatible with that of other structures in the surrounding areas. The visual resources assessment will focus on scenic vistas which may be viewed from publicly accessible areas within the rezoning area, and the extent to which important public view corridors from the upland areas to the Bronx River waterfront and Starlight Park are obstructed by the proposed development.

Scope

The urban design analysis will follow the procedures outlined in the *CEQR Technical Manual.* The uses, bulk, density, building arrangement, and circulation patterns will be described for existing conditions, the no action condition, and the future action condition. Photographs and graphic materials will be incorporated to illustrate the points to be made in the text of the document. The urban design/visual resources assessment will focus on the proposed rezoning area and a study area extending 800 feet from the proposed rezoning area, adjusted to include whole City blocks and natural features. The urban design analysis will:

- Describe the urban design and visual resources of the rezoning area and adjacent areas, using photographs and other graphic material as necessary to identify critical features, use, bulk, form, scale, and streetscape features.
- Discuss specific relationships between the proposed rezoning area and adjacent areas regarding light, air, and views.
- Perform a preliminary assessment to determine whether an analysis of pedestrian wind conditions is appropriate, since the construction of large buildings at locations that experience high wind conditions may result in channelization or downwash affects that could affect pedestrian safety.
- Describe the changes expected in the urban design and visual character of the rezoning area resulting from the various projects proposed for development in the study areas in the future without the action.
- Describe the potential changes that could occur in the urban design character of the rezoning area. For the projected and potential development sites, the analysis will focus on general building types for sites that are assumed for development as well as elements such as street wall height, setback, and building envelope. Conceptual massing diagrams, pedestrian-level elevations, and other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources for each study area, including views to resources of visual or historic significance.

This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Natural Resources

No parts of the Proposed Action site would be considered as a significant vegetative or wildlife habitat. Its development would therefore not have an adverse impact on natural resources. Therefore, an impact screening assessment will be conducted and reported in the EIS. Storm water runoff analyses conducted under the water and sewer infrastructure chapter and shadow analyses conducted in the Shadows chapter will be referenced in this chapter.

Hazardous Materials

Issues

The Proposed Action would rezone a manufacturing district to a residential district. City guidelines call for an Environmental Site Assessment Phase 1 (Phase 1) study to be conducted for all properties which will be rezoned from industrial to residential uses. A Phase 1 study has been completed for each of the properties controlled by the applicant (see Figures 1 and 5 for a delineation of these properties). In addition, Phase 2 work has been completed for a number of these properties. The results of these reports and analyses will be summarized in the EIS. For locations which have had a Phase 1 but not Phase 2 activities, those Phase 1 reports will be updated if more than one year has transpired since they were completed.

Phase 1 studies have not been completed for the remaining properties in the rezoning area, which are not controlled by the applicant (see Figure 5). A full Phase 1 study requires a walk through the building as well as other documentary research about the property. Because these properties are not controlled by the applicant, walk-throughs would not be possible. However, with the exception of a less than full environmental lien search as described below, all other required research for Phase 1 study will be conducted for each of these properties and reported in the EIS.

As with historic resources, it may become necessary to develop language for a restrictive declaration for the parcels which are part of the proposed project, subject to DEP approval. For parcels outside control of the applicant, an (E) designation may be appropriate, and language for those parcels will be drafted accordingly.

Scope of Work

For the properties not controlled by the applicant, the scope of work will include a hazardous materials assessment according to the *CEQR Technical Manual* to determine whether an E designation is warranted for hazardous materials. While this assessment would not include on-site examination of exterior and interior conditions or interviews with past and present tenants and owners, the following tasks are anticipated for the scope of work.

- *Historical Land Use Review.* Available historical records (e.g., Sanborn maps, USGS maps, aerial photos) will be reviewed to determine the history of land uses on the affected parcels, adjacent parcels, and parcels within 400 feet the affected parcels. Reviewers will pay close attention to land uses that may have been associated with the use of hazardous materials.

- *Regulatory Agency Database Review.* For the affected parcels, environmental records from applicable regulatory agency databases will be reviewed for information on facilities and incidents of environmental concern within the search radii specified in ASTM E 1527-05.

- *Site and Surrounding Area Reconnaissance*. A site and surrounding area reconnaissance will be undertaken for the affected parcels and an area within a radius of 400 feet of the rezoning area. This reconnaissance will involve inspecting the general physical condition of the affected properties, to the extent readily visible from the sidewalk, to identify potential sources of contamination on site. Any observed evidence of past or present contamination, including evidence of on-site drums, illegally dumped hazardous waste, hazardous materials remaining on site, or other signs of contamination (discolored soils or pavement, petroleum spills, stressed soils), and observed evidence of underground storage tanks, will be documented. A walk-by of land uses within 400 feet of the rezoning area boundaries will be carried out to identify facilities of concern as listed in the *CEQR Technical Manual* appendices.

- *FOIL Inquiries.* In addition, letters of inquiry will also be sent to Freedom of Information Law (FOIL) officers at DEP, NYS Department of Environmental Conservation (NYSDEC), DOHMH, and the NYC Fire Department requesting any available information they may have on the sites.

- *Environmental lien search.* Environmental properties under the control of the applicant previously underwent environmental lien searches. An environmental lien search for the property at 1512 Boone Avenue has also been carried out, as this property may come under the control of the applicant. Applicants not under the control of the applicant will not undergo an environmental lien search.

The results of the previous hazardous materials analyses and the additional Phase 1 studies for the EIS will be summarized. Based on the findings of the Phase I ESAs, and site walk-bys, recommendations will be made for (E) designations on sites not under the control of the applicant, as appropriate.

Water and Sewer Infrastructure

Issues

Under CEQR, public utilities are examined for their ability to accommodate a proposed development. Public utilities include sewer and water, and Water Pollution Control Plants (WPCP). In the case of this Proposed Action, the general environment is one which is highly urbanized and active, and it is quite likely

that the infrastructure is adequate to support the proposed development. Nonetheless, the demand for these services in relation to their capacity, and any particular problem areas, need to be determined as part of the EIS. The adequacy of infrastructure systems will be assessed to determine levels of service and the capability of these systems to support existing and future development.

One important infrastructure issue to be addressed will be the capacity of the WPCP serving the Proposed Action area. The Proposed Action area is within the Hunts Point WPCP drainage area, which is currently operating at levels very close to its SPDES design limits. However, the Proposed Action is likely to be too small to have an impact on the operations of this plant, even if the maximum potential development were realized. This will be assessed in more detail and reported in the EIS.

More importantly, the area to be rezoned is within the drainage basins of the combined sewer outfall designated as HP003 and HP004. The combined sewer flow in these basins are currently conveyed through Pumping Station 15 to Hunts Point Wastewater Pollution Control Plan (WPCP) or as overflow through Regulator HP-10 and Outfall HP-003 into the East River. Outfall HP-003 is a Tier 2 combined sewer outfall, which is the second highest tier for combined sewer overflow (CSO) volumes. HP004 outfalls into the Bronx River; however, this outfall serves only one parcel at the far northern end of the area to be rezoned under the Proposed Action. The project area is also situated within the Bronx River watershed, which is a waterbody of water quality concern; and the Sheridan Expressway, which is under review for renovation/expansion or possibly removal. All of the above information will be confirmed and disclosed in the environmental review documentation. This special CSO analysis is described below under the future with the Proposed Action section.

Scope

Water Supply
A preliminary assessment will be performed to determine whether the Proposed Action –

- Would result in an exceptionally large demand for water (more than one million gallons per day); or

- Is located in an area that experiences low water pressure.

If (as is expected) the Proposed Action does not meet any of these thresholds, no further analysis of water supply will be performed. If it does, a more detailed assessment will be performed. Existing water mains, connections, and levels of service will be identified utilizing information from the DEP's Bureau of Water Supply. Major capital improvement projects to restore deteriorated water mains and connections will be identified if applicable. Estimates of the additional demand will be prepared based on the new or proposed developments in the area which may be implemented by the build year. The adequacy and future level of service of the existing infrastructure will be assessed with respect to demands generated by the development that could result from the Proposed Action, utilizing estimates of floor area space and/or worker population of the Proposed Action to derive service utilization rates.

Water Supply
The water supply demands of existing conditions, the future without the Proposed Action, and the future with the Proposed Action will be estimated utilizing the matrices appended to the *CEQR Technical Manual.* The increment between the No Action and Proposed Action condition will be used to determine the potential for significant impacts.

Wastewater
The design capacity and level of service (average daily flow) of the existing sewers will be determined utilizing information obtained from DEP's Bureau of Sewers, and the Sewer Atlas. The existing flows to the Hunts Point WPCP will be obtained for the latest 12 month period. The maximum and annual dry weather flows will also be identified, and the available capacity at the Hunts Point WPCP will be examined to determine capability of processing existing and future effluent levels. In addition, any recent capital budget expenditures for storm and sanitary sewer restoration will be discussed. For the future without the

Proposed Action, the analysis will consider additional population growth and potential development within the vicinity of the Proposed Action. As necessary, the analysis will identify the effect that water conservation measures will have on the average annual sanitary flow. Approved consumption rates for commercial and residential uses will be applied (based on coordination with DEP). This information will provide the baseline condition for identifying the impacts associated with the Proposed Action. For the future with the Proposed Action, the adequacy and future level of service of the existing infrastructure will be assessed with respect to demands generated by the development that could result from the Proposed Action. Since sanitary flow is assumed to be essentially equal to water consumption levels (less air conditioning water demand, which evaporates rather than adding to the wastewater flow), the analysis will apply a person-demand multiplier to derive average and peak sanitary flow. The additional flow generated within the Proposed Action area on a monthly basis will be estimated for the build year. The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the Hunts Point WPCP.

Stormwater

- The section will analyze the potential impacts of the Proposed Action on the existing wastewater and stormwater collection facilities and drainage systems, including combined sewers and corresponding catchment areas and outfalls (i.e., HP-003 and HO004), and collections' system including regulators . The appropriate related information to the methodology, existing conditions, future conditions without Proposed Action, and future conditions with Proposed Action sections of the chapter will be described.

- An approved DEP matrix will be used to estimate different surface types (i.e., building rooftop, impervious, and pervious areas) and surface areas within the Proposed Action site under existing and Proposed Action conditions, and related runoff coefficients. This information will be used to determine stormwater volumes to the combined sewers using the Rational Method (i.e., Q=CIA) with DEP provided rainfall volumes and durations. Surface area/runoff coefficient and comparison of existing and projected volume tables from the matrix will be included in the EIS.

- An evaluation of whether other recent rezonings or large-scale developments within the affected regulator and CSO catchment areas will be considered for cumulative effects on infrastructure including regulators and will be included.

- Dependent on the matrix results, CSO modeling may be required along with water conservation and stormwater best management practice (BMP) analysis. A water conservation analysis as a separate matrix per CSO matrix results will be presented in the EIS. See below for information about stormwater BMP concept plan.

- The primary discharge point for flows from the site is expected to be to HP-003 to the East River, but due to the proximity to the Bronx River and local topography, it will be confirmed if any overland flow from the Proposed Action area is currently discharging to the Bronx River and if any overland flow will be directed to the Bronx River in the Action condition. (HP004 would discharge to the Bronx River, but, as noted above, only one parcel at the north end of the proposed rezoning area would so discharge.)

- Based on the above results, infrastructure improvements such as stormwater runoff reductions and treatment through the implementation of BMPs will be identified as part of the Proposed Action. Recent City policies, such as the Mayor's PlaNYC 2030 and the Sustainable Stormwater Management Plan published in December 2008, specifically aim to reduce the amount of stormwater entering the City's sewer system and discharging to New York City's water bodies and describe a variety of cost-effective stormwater BMPs that can be implemented with new construction. Stormwater BMPs, such as blue roofs or rooftop detention, green roofs, and subsurface open bottom detention systems can help to achieve DEP's requirements for onsite detention at the time of site connection proposals. A conceptual plan and related information (i.e., types, locations within rezoning area and sizing requirements) for

BMPs to be included as part of the redevelopment of parcels under the control of the applicant) will be provided and required through the proposed project's restrictive declaration, as appropriate.

This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Solid Waste and Sanitation Services

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

- Existing and future New York City solid waste disposal practices will be described.
- Existing and future no-action solid waste generation will be estimated.
- Solid waste generation by the Proposed Action will be projected based on CEQR guidelines.
- The impacts of the Proposed Action's solid waste generation on the City's collection needs and disposal capacity will be assessed.

Energy

According to the *CEQR Technical Manual*, an EIS must include a discussion of the effects of the proposed project on the use and conservation of energy, if applicable and significant. In most cases, a project does not need a detailed energy assessment, but its operational energy is projected. A detailed energy assessment is limited to projects that may significantly affect the transmission or generation of energy. For other projects, in lieu of a detailed assessment, the *CEQR Technical Manual* recommends disclosure of the estimated amount of energy that would be consumed annually as a result of the day-to-day operation of the buildings and uses resulting from an action.

The measure of energy use in this chapter will be British Thermal Units, or BTUs, per square foot of build floor area per year. One BTU is the quantity of heat required to raise one pound of water by one degree Fahrenheit. Operational energy will be calculated in BTUs for each project element. For existing conditions the floor area numbers will be taken from the Department of City Planning's Primary Land Use Tax Lot Output (PLUTO) database and building uses will be verified by field survey and information that the applicant provides about its properties.

The Proposed Action includes the rezoning of an area that is not entirely controlled by the applicant. In addition, information available on the buildings projected for the applicant's parcels is not sufficiently detailed to utilized energy modeling software to project energy use on these properties. Therefore, this chapter will apply the multipliers in the *CEQR Technical Manual*'s Table 15-1 to estimate annual energy consumption.

Transportation

Issues

This section of the EIS will provide an analysis of potential impacts that new traffic, transit and pedestrian trips and parking generated by the Proposed Action will have on the operating conditions of the traffic, transit, pedestrian, and parking facilities in the vicinity of the proposed rezoning area. It will identify potential significant adverse impacts associated with the Proposed

Action that would require mitigation.

The City's environmental analysis guidelines call for a detailed traffic analysis at any intersection where the Proposed Action would add more than 50 vehicles in any given hour. With a maximum of 2,635 net new dwelling units projected, the Proposed Action will require a detailed analysis at a significant number of intersections in the area of the Proposed Action. The most critical intersections will likely be along the major arterials in the area, including West Farms Road, Westchester Avenue, and East Tremont Avenue. As part of the early studies for this project, detailed trip generation analysis and traffic assignment exercises have been completed. Described below are those intersections which would be expected to receive at least 50 additional trips in any given peak hour (AM, Mid-day and PM peak hours). These intersections have already been counted in a traffic count program for the AM, midday and PM peak periods.

The immediate area of the Proposed Action site is accessible to mass transit via the New York City Transit (NYCT) subway and buses. The 2 and 5 subway lines border the area of the Proposed Action to the west and run along Southern Boulevard, providing service at the Freeman Street, 174th Street, and West Farms Square / E. Tremont Avenue stations. The 6 line borders the Proposed Action area to the southeast and runs along Westchester Avenue, providing service via the Whitlock Avenue Station. All four stations are within a reasonable walking distance to the Proposed Action sites. Nine local bus lines operate in the Proposed Action area; the BX36, BX19, BX21, BX11, BX27, BX40, BX42, BX9, and Q44. The BX36 runs east-west along E. 174th Street and north-south along Boston Road; the BX19 provides north-south service along Southern Boulevard to the west of the Proposed Action sites; the BX21 operates along Boston Road, also to the west of the Proposed Action sites; the BX40 and BX42 lines run east-west along E. Tremont Avenue; the BX9 has its southern terminus located at Boston Road and 178th Street and provides service along Boston Road, 180th Street, and Southern Boulevard; and the Q44 provides access for transit riders traveling to and from Queens via the Cross-Bronx Expressway Service Road and the Bronx-Whitestone Bridge. The BxM6, BxM10, and BxM11 express buses run along the eastern border of the study area but do not provide pick-up or drop-off service in the vicinity.

Since a significant portion of the trips generated by the Proposed Action are expected to utilize mass transit, an assessment of the ability of the transit system to accommodate the increased demand will be required. The specific analysis needs would depend on the amount of additional transit trips the Proposed Action is estimated to generate at each of the above transit facilities. Based on the current understanding of the scope of the proposed development, it is expected that detailed analyses will be required at the West Farms Square / E. Tremont Avenue and 174th Street subway stations serving the area. For the purpose of this scope of work, the study elements anticipated to require analysis would include the most highly utilized stairway locations and main control areas at each of the two stations. A quantitative evaluation of the stations' train line-haul conditions during peak periods will also be included. A preliminary assessment of likely bus usage generated by the Proposed Action indicates that fewer than 200 peak hour bus riders per neighborhood would be generated. As per *CEQR Technical Manual* requirements, an analysis of the Proposed Action's impact on buses is not expected to be required. Analysis efforts identified to be necessary after the preliminary assessment or as required by DCP beyond those described will be undertaken.

The applicant proposes to provide parking for a minimum of twenty-five percent of the new dwelling units. It will be necessary to assure that this level of parking does not result in parking impacts in the study area.

<u>Scope</u>

Trip Generation and Modal Split

Trip Generation is needed to determine the estimated number of additional person trips expected to be generated by the Proposed Action. In accordance with the 2010 *CEQR Technical Manual*, a variety of existing information (including rates cited in the Manual) will be used to develop trip generation rates for the various land uses (residential, local retail, light industrial, warehouse, automotive, and daycare) that

would be either displaced or added by the Proposed Action. The rates will then be multiplied by the appropriate existing or anticipated square footages or numbers of dwelling units to project total numbers of daily trips that would be added or eliminated as a result of the Proposed Action. The total weekday daily trips for the development sites will then be broken down into the morning, mid-day, and late afternoon peak hours using a temporal distribution.

The total person trips for the Proposed Action for each period will then be broken down into the various means of available transportation. This distribution of trips by type is known as modal split. For purposes of this assessment, the modes will consist of automobile, taxi, bus, subway and walking.

Traffic

Trip Distribution/Assignment and Traffic Count Program
The peak period vehicular trips (automobile and taxi) will be assigned to the roadway network. Assignment of future vehicle trips generated by the residential component of the development will be based on the most likely travel routes to and from major employment centers, as defined in the U.S. Census journey-to-work statistics. Vehicle trips to and from the retail component will be based upon the distribution of trips generated by similar proximate facilities.

The resulting projected increases in vehicular volumes will be used to identify specific locations where traffic impacts could potentially occur (i.e., those which would experience more than 50 vehicular trips in any given peak hour). Once the key analysis locations are identified, a thorough data collection program will be conducted to establish existing traffic levels, operations and geometric conditions. This program will include manual intersection turning movement and vehicle classification counts performed for two hours at a time during the three daily peak periods, installation of automatic traffic recorders (ATR's) for a one-week period, and inventory of existing geometric conditions and traffic control, as per the guidelines in the *CEQR Technical Manual*. It will also include the simultaneous gathering of speed run and vehicle classification data for the mobile source air quality analyses (see below). Within the traffic study area that extends a half-mile outside the proposed rezoning area, and based on the Preliminary Trip Generation Analysis that has been done, it is anticipated that the following twenty (20) intersections will require detailed traffic analyses, including traffic counts.

Table 4 – Intersections Selected for Detailed Analysis

Intersection Number	Intersection Name
1	East Tremont Avenue at East 177th Street
2	East Tremont Avenue at West Farms Road/Boston Road
3	Rodman Place at West Farms Road
4	East 177th Street at Devoe Avenue and Sheridan Expressway Ramp
5	Cross Bronx Expressway Service Road at West Farms Road
6	Bronx River at East 174th Street
7	East 174th Street at Boone Avenue
8	East 174th Street at Longfellow Avenue
9	East 173rd Street at West Farms Road
10	East 173rd Street at Boone Avenue
11	East 173rd Street at Longfellow Avenue
12	East 172nd Street at West Farms Road
13	East 172nd Street at Boone Avenue
14	Jennings Street at West Farms Road

15	West Farms Road at Boone Avenue
16	Sheridan Expressway Off Ramp at Freeman Street and Boone Avenue
17	Westchester Avenue at Home Street
18	West Farms Road at Home Street and Longfellow Avenue
19	West Farms Road at Freeman Street
20	Westchester Avenue at Sheridan Off Ramp and Sheridan Expressway Service Road

Air Quality-Related Traffic Information

Based on the *CEQR Technical Manual*, there are no air quality hot spots within the immediate area of the proposed rezoning. Detailed air quality analyses would only be required if 170 or more peak hour vehicle trips were estimated to occur at an intersection. As shown in the air quality section of this scope of work, two (2) air quality analysis sites have been allotted to assess detailed mobile source air quality. For these locations, travel time and delay surveys (speed runs) and more detailed vehicle classification counts will be conducted to establish representative existing speeds and vehicle mix for air quality modeling inputs.

Existing Conditions

Based on a review of the site's development potential, and an understanding of the existing travel patterns that characterize the area, a list of traffic count locations has been identified (as shown in Figure 10). Official traffic signal timing and phasing will be obtained from DOT for incorporation into the analyses.

The analysis of existing conditions will include a description of key existing roadways (including designated truck routes) and their operational characteristics. Utilizing the results of the field data collection program, the study area intersections will be analyzed. As per CEQR guidelines, the analysis will be conducted following procedures set forth in the latest approved Highway Capacity Manual (HCM) and using HCS version 4.1f software. Results of the analysis will be tabulated for the three analysis peak hours.

The Future without the Proposed Action

The future conditions without the Proposed Action scenario will include an increase in traffic from background growth, other developments within or proximate to the study area and the effects of any significant planned changes in the transportation system infrastructure, as determined under the land use section described above. In accordance with *CEQR Technical Manual* requirements for areas in the Bronx, a 0.25 percent per year background growth rate will be assumed for the first five years following the existing conditions traffic counts, and a 0.125 percent rate will be assumed for subsequent years. DCP and other agencies noted under the land use section above will be contacted for available information on nearby developments that may affect transportation elements identified within the study area by the anticipated Proposed Action's build year. Information pertaining to possible roadway geometry changes will also be confirmed.

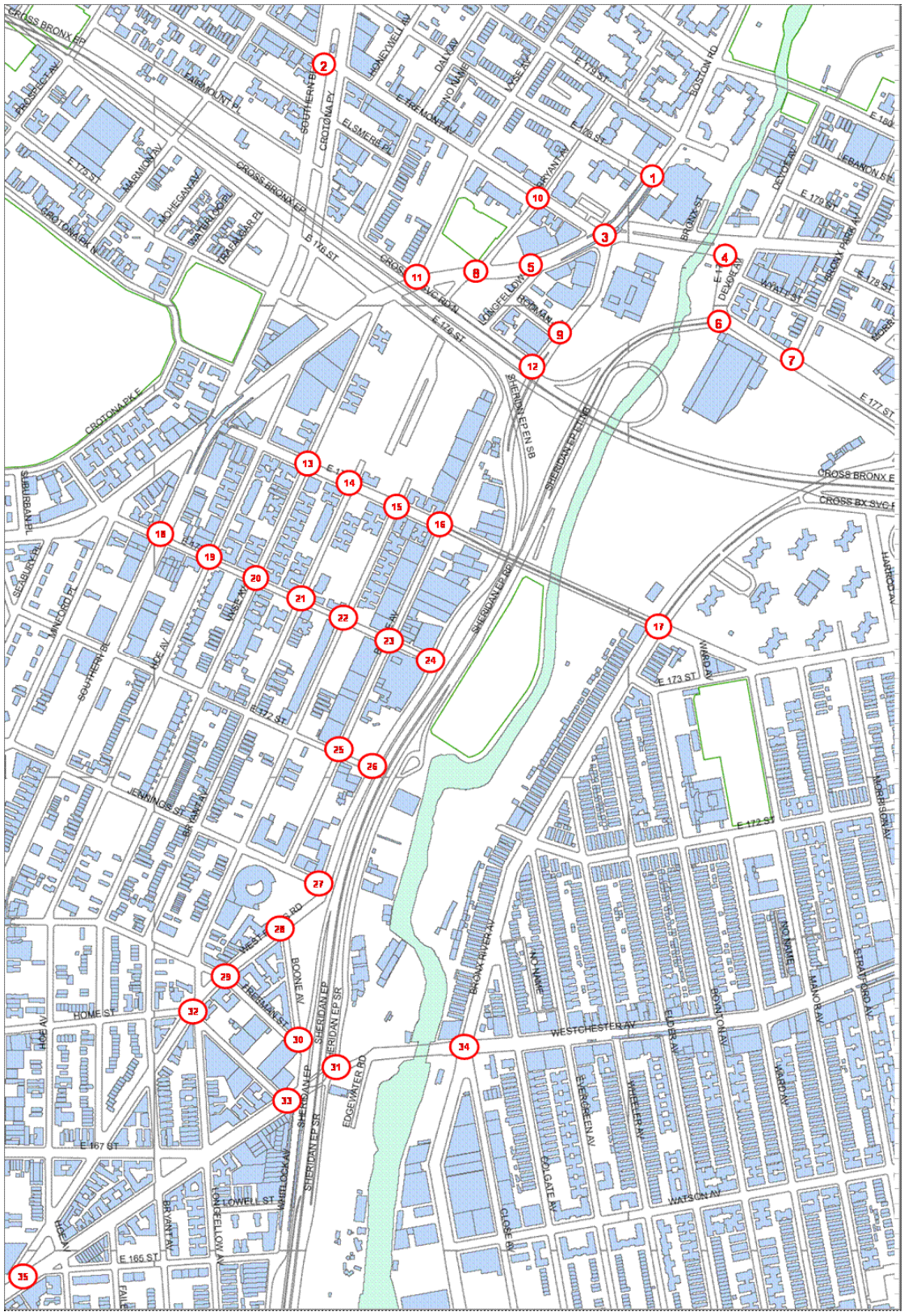


Figure 10
Primary Study Area Intersection Analysis Locations

The Future with the Proposed Action
Utilizing the projected traffic volumes, the study area intersections will be analyzed for capacity and level-of-service. The results of this analysis will be compared with the results of the future No Action analysis to determine the effect of site related traffic volumes in the study area. Significant impacts, as defined by the *CEQR Technical Manual,* will be identified.

Transit

Existing Conditions

The evaluation of existing transit conditions will include a description, including routes, stations/stops, frequency of service and general ridership levels and trends, of the available transit system serving the proposed rezoning area. Relevant transit elements will be examined according to procedures set forth in the *CEQR Technical Manual* and other industry accepted standards. The actual data collection will involve the inventory of station elements, stairway and control area counts, obtaining ridership data from NYCT, stairway queuing observations and potentially train/bus loading counts.

The Future without the Proposed Action
For transit facilities the no action scenario will be assessed to determine the added transit trips. As with the existing conditions analysis, the future No Action assessment for the same critical time periods identified will follow procedures set forth in the Highway Capacity Manual (HCM) per CEQR guidelines. Results established from the No Action condition will be used as the basis for comparison to determine the likelihood of significant impacts from the Proposed Action.

The Future with the Proposed Action
Proposed Action generated transit trips will be assigned to the critical locations identified earlier. These locations will be analyzed quantitatively or qualitatively, as appropriate.

Pedestrians

Analysis Locations
Regardless of the primary travel mode, all trips to and from the Proposed Action site will have a pedestrian component. A quantitative pedestrian analysis will be conducted to assess the ability of the existing pedestrian facilities to accommodate the increased demand. The selection of analysis locations will be based on the identification of key pedestrian routes that could be significantly affected by new trips to the area (walk-in trips as well as walk trips from transit facilities) and on the level of activities anticipated to be generated during peak travel periods.

A preliminary estimate of likely pedestrian trips suggests that during peak hours, at least 200 additional pedestrians would be generated by the proposed development and therefore according to the *CEQR Technical Manual*, assessment of pedestrian activity would be required. The following six (6) intersections located in the immediate vicinity of the proposed development are likely to require detailed study:

- Boston Road @ Southern Boulevard / 174th Street
- East Tremont Avenue @ Boston Road / West Farms Road
- West Farms Road @ Rodman Place
- Boone Avenue @ 172nd Street
- Boone Avenue @ 173rd Street
- Boone Avenue @ 174th Street

- Bryant Avenue @ 174th Street
- Vyse Avenue @ 174th Street
- Hoe Avenue @ 174th Street

The study locations will be finalized with DCP upon completion of the detailed trip generation and assignment process for transit and pedestrian person trips.

Existing Conditions
The evaluation of existing pedestrian conditions will include a description of the overall flow conditions in the immediate vicinity of the Proposed Action. Utilizing data collected at selected locations along these routes, level-of-service analysis will be conducted following procedures set forth in the HCM.

The Future without the Proposed Action
The no action scenario will be assessed to determine the added pedestrian trips. As with the existing condition analyses, the future No Action assessment for the same critical time periods identified will follow procedures set forth in the HCM per CEQR guidelines. Results established from the No Action condition will be used as the basis for comparison to determine the likelihood of significant impacts from the Proposed Action.

The Future with the Proposed Action
Proposed Action generated walk trips will be assigned to the critical locations identified earlier. These locations will be analyzed quantitatively or qualitatively, as appropriate.

Parking

The Proposed Action is expected to provide new parking for twenty-five percent of the dwelling units on the applicant controlled properties within the Proposed Action site. The initial parking analysis will be limited to a projection of the parking demand created by the Proposed Action and a comparison to the planned parking spaces to be provided will be made. If the comparison indicates that the available, proposed on-site parking supply might not be sufficient to accommodate the induced demand, a more extensive parking analysis of a larger coverage area (i.e. ¼ mile from the Proposed Action site) will be included, in accordance with the guidelines in the *CEQR Technical Manual*. Based on the initial assessment, an hour-by-hour parking projection will be conducted to determine the incremental changes in parking demand. Peak demand will be compared with the anticipated parking supply to determine the need for additional on or off-site parking spaces. As necessary, this analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Air Quality

Issues

Since the Proposed Action would introduce new sensitive receptors into an area with existing manufacturing and industrial uses and major freeways, the establishment of baseline air quality conditions and evaluation of future potential impacts is an important issue. Potential sources of air quality impacts include mobile source emissions of CO due to the addition of more than 170 vehicular trips at any given intersection in any peak one-hour period, mobile sources of PM10 and PM2.5 due to the additional vehicular trips, emissions of air toxics from existing facilities, and stationary source emissions from existing and proposed HVAC units on existing and proposed buildings.

Scope

Air quality analyses will be carried out in accordance with the *CEQR Technical Manual*, as well as other relevant guidance and protocols provided by NYSDEC, DEP, and EPA. Pollutants of concern include 1) Proposed Action-generated CO from motor vehicles, 2) emissions of fine particulates (PM10 and PM2.5) from existing and projected diesel-powered vehicles, 3) PM10, SO2, and NO_2 from fuel combustion for boilers associated with existing and proposed uses (project on existing and project on project analysis), and 4) air toxics from existing uses.

Mobile Sources. A screening analysis will first be conducted to determine whether microscale intersection modeling of CO or PM10/PM2.5 will be required. For the Bronx, the CO screen is a Proposed Action-generated increment of 170 vehicles through an intersection during any peak-hour period. For PM2.5, the screen is based on roadway type and the number of project-generated vehicles. DEP's threshold is 12 heavy-duty diesel vehicle (HDDV) vehicles on roads with >5,000 vehicles per day, 19 HDDV vehicles on collectors, or 23 HDDV vehicles on arterials and expressways. The CEQR Technical Manual provides a link to a website that will calculate the equivalent HDDV for a given volume on a particular road type. Additional vehicles on a local road are weighted more heavily than vehicles on more heavily traveled roadways. Although the development will be dispersed over several blocks, and will displace existing industrial uses and parking lots, the number of dwelling units resulting from the Proposed Action will likely cause a project-generated increase in vehicles that will trigger the need for additional modeling of both CO and PM10 and PM2.5.

If the Proposed Action meet the 170-vehicle criterion, then CO modeling using MOBILE6.2 emission factors and the CAL3QHC dispersion model will be carried out for up to two worst-case intersections for one worst-case peak period. Both No Build and Build Conditions will be modeled. The results of the modeling will be added to background concentrations and compared with both the National Ambient Air Quality Standards and the NYC *de minimis* standards for CO.

If modeling of PM2.5 is warranted, up to two worst-case intersections may be selected for modeling of PM10 and PM2.5. Emission factors obtained from MOBILE6.2 will be used in conjunction with the CAL3QHC or CAL3HCR model and 5 years of meteorological data to determine worst-case pollutant concentrations at sensitive receptor points. In addition, one of the applicant's development sites (Parcel 8) is in close proximity to the Cross Bronx Expressway. Therefore, PM2.5 from the roadway will be modeled with CAL3QHC and/or CAL3QHCR. Volumes for the Cross Bronx Expressway will be obtained from NYCDOT data, and vehicular mixes will be obtained from NYSDOTdatabases.

Parking Facilities. Parking lots and garages would be analyzed according the guidelines in the *CEQR Technical Manual Appendices*. One garage on Block 3014 or 3013, whichever would represent the largest garage among the applicant's sites, would be analyzed. Vehicles would be divided into autos and SUVs according to information from the traffic study. Emission factors would be obtained from MOBILE6.2. Analyses would include the highest hourly number of entering vehicles and the highest hourly number of exiting vehicles. Receptor points would be located at the near and far sidewalks and at nearby windows. Line source CO from passing traffic in front of the garage also may be included in the analysis. A persistence factor of 0.7 would be used to convert 1-hour concentrations to 8-hour concentrations.

Stationary HVAC Sources. Analyses will include the Proposed Action's impacts on existing developments as well as project on project impacts. Potential adverse effects due to fuel combustion for heating and hot water are a function of fuel type, stack height, minimum distance from the source to the nearest building of similar or greater height, and square footage of the proposed development. Combustion of natural gas or #2 fuel oil will utilize the screening graphs provided in the *CEQR Technical Manual Appendices*. If the development passes this screening analysis, then no impacts from fuel combustion for HVAC are likely. Otherwise, a more detailed analysis would be carried out as described below.

To determine fuel combustion impacts from surrounding uses, the consultant will identify major pollutant

sources within 1,000 feet of the Proposed Action and minor sources within 400 feet of the Proposed Action as outlined in the *CEQR Technical Manual* and *CEQR Technical Manual Appendices*, On-line sources of information provided by NYSEC will be used to identify sources with state or federal permits. NYCDEP will be contacted for information on registered boilers within 400 feet of the site. Only those existing boilers with at least 2.8 million Btu would be evaluated for potential impacts to the proposed action.

If a more detailed analysis of an HVAC source is warranted, then modeling with EPA's AERMOD dispersion model would be used in conjunction with 5 years of meteorological data. Fuel consumption factors will be obtained from the *CEQR Technical Manual* and EPA sources such as the *Compilation of Air Pollutant Emission Factors (AP-42)*. Estimates of the percentage of sulfur in the fuel will be obtained from the *CEQR Technical Manual*. The analysis would also include the combined impacts of a pollutant from multiple sources. Sources clustered close together and having similar heights may be treated as a single source for modeling purposes, and the combined pollutant concentration(s) determined for receptor points.

Modeled concentrations will be added to background concentrations and compared with the NAAQS and the NYC interim guidelines. The projected or potential buildings that would require restrictions on fuel type of stack location to avoid a potential impact will be noted..

Air Toxics. Where industrial areas are undergoing conversion to residential uses, the industrial operations at existing buildings may emit pollutants that could adversely affect the Proposed Action. A manufacturing survey will be carried out to identify land uses that may emit air toxics. This will include both field work and review of available data from on-line and government sources. The addresses of industrial operations of interest will be cross-referenced with NYCDEP, NYSDEC, and EPA databases to determine whether they have air quality permits.

Where warranted, the emissions information on one or more permits will be evaluated using the Industrial Source Screen to determine the cumulative impacts at the projected or potential development sites. If the Industrial Source Screen shows potential impacts, further modeling with AERMOD and five years of meteorological data will be carried out. Some facilities, such as automotive repair shops, may emit air toxics but not have the required DEP permits. In these cases, additional analysis may be carried out using the industrial source screen or AERMOD to determine the potential for impacts. The modeled results will be compared to the NAAQS, as well as the NYSDEC Annual Guideline Concentrations and Short-Term Guideline Concentrations. This would include existing facilities at potential development sites, but not those at projected development sites.

Any obnoxious odors within 400 feet of the affected parcels will be noted during field work. One potential source of odors, the Ferris Stahl-Meyer meat packing plant at 1560 Boone Avenue, is among the parcels planned for redevelopment to residential uses. DEP would be contacted regarding any other known existing odor-producing facilities.

Greenhouse Gas Emissions

Issues

The City has determined that consideration of greenhouse gas (GHG) emissions is appropriate under CEQR for at least certain projects for several reasons: (1) greenhouse gas emission levels may be directly affected by a project's effect on energy use; (2) the U.S. Supreme Court has upheld the determination that carbon dioxide, one of the main greenhouse gases, is an air pollutant, subject to regulation as defined by the Clean Air Act; and (3) Local Law 22 of 2008 codified PlaNYC's citywide GHG emissions reduction goal of 30 percent below 2005 levels by 2030 (the "GHG reduction goal"). Although the contribution of a proposed project's GHG emissions to global GHG emissions is likely to be considered insignificant when measured

against the scale and magnitude of global climate change, the GHG emissions contribution of a Proposed Action that would result in the development of at least 350,000 square feet of floor area should be analyzed to determine its consistency with the City's citywide GHG reduction goal, which is currently the most appropriate standard by which to analyze a project under CEQR. Because more than 350,000 square feet would be developed under the RWCDS, a GHG emissions assessment will be performed.

Scope

The Proposed Action-induced GHG emissions will be generally be assessed in two steps: estimate the GHG emissions of the proposed project and examine the project in terms of the qualitative goals for reducing GHG emissions. As recommended by the *CEQR TechnicalManual*, the emissions will be estimated with respect to the following main emissions sources: operations emissions (direct and indirect); mobile source emissions (direct and indirect); and, when applicable, construction emissions and emissions from solid waste management. The project would not be expected to fundamentally change the City's solid waste management system; therefore no estimate has been made of emissions from solid waste management.

There are six internationally-recognized greenhouse gases regulated under the Kyoto Protocol: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. All calculations of emissions will be presented in units of metric tons of carbon dioxide equivalent, a common measure that allows gases with different global warming potentials to be added together and compared.

Noise

Issues

Potential noise impacts from the following sources will be analyzed

- Vehicular noise from Proposed Action generated traffic on sensitive receptors in the community,
- Ambient noise from existing local traffic, elevated subway lines, elevated highways, ventilation equipment, aircraft, stationary sources, etc. on proposed residential uses (sensitive receptors), and
- Playground noise on sensitive receptors in adjacent residential units.

Trip generation for the Proposed Action is expected to generate a relatively low level of noise, though increases in noise levels may be more pronounced along Boone Avenue, which is a far less traveled roadway. The greater concern for this section is therefore the impact of existing noise generators on future residents.

Scope

Traffic Noise. Noise level monitoring of motor vehicles for the peak AM, Midday, and PM traffic peaks for periods of 20 minutes using standard field procedures as described in the CEQR Technical Manual will be conducted. Traffic classification counts and aircraft flyovers during the monitoring period will be tabulated. No evening, late night, or Saturday noise monitoring periods are anticipated. Though the actual selection of analysis locations will have to await the completion of the trip generation and assignment process described above under the traffic section, it is expected that the monitoring locations are likely to include:

1. West Farms Road @ Jennings Street,
2. West Farms Road @ E. 172nd Street,
3. West Farms Road @ E. 174th Street,
4. Boone Avenue @ Jennings Street,

5. Boone Avenue @ E. 172nd Street,
6. Boone Avenue @ E. 174th Street,
7. West Farms Road @ Rodman Place, and
8. West Farms Road @ 1927-1933 West Farms Road.

Future traffic noise would be calculated by converting traffic into Passenger Car Equivalents (PCEs) for the future with and without the proposed project scenarios, then using logarithmic calculations to compare the PCEs. This logarithmic approach is appropriate for evaluating relative increases in noise. If necessary and requested by NYDCP, additional modeling with the FHWA's Traffic Noise Model (TNM) may be carried out at selected locations.

Two elevated rail lines are close to the site. The Dyre Avenue (#5) and White Plains Road (#2) lines use the elevated tracks at the northern tip of the project site. The IRT Pelham Line (#6) line runs on an elevated track at the southern tip of the project site. Two noise monitoring locations representing each of these sites would be carried out for one hour during one worst-case peak period. Additional noise monitoring locations may be selected to fully characterize the noise levels and potential impacts from rail noise for various floors on Parcel 9C.

The noise effects of elevated highways (e.g., Boston Post Road on the north and Westchester Avenue on the south) also would be assessed and considered in the selection of noise monitoring sites. Two sites representative of elevated highway noise may be added to the list of noise monitoring sites depending on an assessment of conditions in the field.

Additional noise monitoring sites at mid-block areas throughout the rezoning area will be carried out for the purposes of assisting in the identification of required exterior to interior attenuation to be provided by the proposed buildings' walls and windows. These sites would be monitored for 10 minutes and may be monitored during off-peak periods. The monitored noise levels would be adjusted to reflect peak period conditions by using PCEs. If appropriate, an (E) designation or restrictive declarations would be placed on the development sites.

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 would result in a significant unmitigated adverse impact related to air quality, water quality, hazardous materials, or noise. If such an impact is predicted, 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*. The assessment would follow the following step-by-step process:

STEP ONE: Identifying the extent of potential environmental exposures to the public as a result of the Proposed Action.

STEP TWO: If necessary, identifying potential health impacts as a result of identified exposure pathways.

STEP THREE: If necessary, determining the potential significance of the impact.

STEP FOUR: Recommending steps to reduce and prevent exposures.

Mitigation and Unavoidable Adverse Impacts

EIS requirements include the development of any feasible mitigation measures for potentially significant adverse impacts. The mitigation measures developed within the above described studies will be reported in the "Mitigation" chapter of the EIS and analyzed for their potential to result in new or different significant adverse impacts, as appropriate. CEQR and SEQRA regulations also require the disclosure of any unavoidable adverse impacts, which are potentially significant adverse impacts for which no feasible mitigation measures are found. To the extent such impacts are identified, they will be reported in the "Unavoidable Adverse Impacts" chapter of the EIS.

Neighborhood Character

Issues

Under CEQR, the neighborhood character assessment considers the results of the land use, socioeconomic, urban design, historic, traffic and noise assessments to arrive at a conclusion as to the potential overall effects of the Proposed Action on the character of an area. Neighborhood character issues may be raised for the Proposed Action due to a number of considerations: The Proposed Action would alter the intensity of the land use of the site and could influence the character of the nearby residential areas to the immediate east, west and north of the site; the Proposed Action could add a substantial amount of new traffic to area streets, changing traffic conditions on streets which may now be quiet or carry only a moderate amount of traffic; the increased traffic on these less traveled streets may affect noise conditions in quiet park or residential areas; and the Proposed Action may alter the demographic character of the area. It is expected that of greatest importance will be the residential areas nearest the Proposed Action, and any character change that could result from increased traffic and noise. The analysis will focus on these areas. The neighborhood character analyses will draw from other impact analyses to formulate conclusions, as described in the scope.

Scope

The above issues will be addressed in the neighborhood character assessment, using the results of the other above-described analysis areas. Drawing on other EIS sections, describe the predominant factors that contribute to defining the character of the neighborhood. Summarize the changes that could be expected in the character of the neighborhood in the future without the action based on planned development projects, public policy initiatives, and planned public improvements. The analysis of Proposed Action impacts presented in various EIS sections will serve as the basis for assessing and summarizing the project's impacts on neighborhood character. This analysis will be presented in the format of Existing Conditions, the Future Without the Proposed Action, and the Future With the Proposed Action.

Construction Impacts

Construction impacts, though usually temporary, can include disruptive and noticeable effects of a project. The determination of their significance and, therefore, whether mitigation is required, is generally based on the duration and magnitude of the impact. However, according to the *CEQR Technical Manual*, multi-sited projects with overall construction periods lasting longer than two years and which are near to sensitive receptors should undergo a preliminary impact assessment. This will be undertaken following the guidelines in the *CEQR Technical Manual*. The preliminary assessment will evaluate the duration and severity of the disruption or inconvenience to nearby sensitive receptors. If the preliminary assessments indicate the potential for a significant impact during construction, a detailed construction impact analysis will be undertaken and reported in the EIS in accordance with guidelines contained in the *CEQR Technical Manual*.

Alternatives

Environmental impact regulations require the consideration of Proposed Action alternatives that would tend to reduce project-related impacts. The alternatives are usually defined when the full extent of Proposed Action impacts is identified. Proposed area-wide rezoning actions typically include an as-of-right (i.e., no action), a lesser-density and a no-impact alternative. The first would assume no area-wide rezoning but includes as-of-right development from individual projects proposed by others in the rezoning area. The latter two alternatives are typically conducted as a primarily qualitative analysis, 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.

As the Proposed Action includes a specific proposed development project, other alternatives that may consider include an alternative design or a smaller project on those sites. As above, any additional alternative will be defined and analyzed when the full extent of Proposed Action impacts is identified.

Summary EIS Chapters

EIS requirements include two additional, miscellaneous chapters: Growth Inducing Aspects, and Irreversible and Irretrievable Commitments of Resources. These will each be prepared in accordance with *CEQR Technical Manual* guidelines.