A. INTRODUCTION

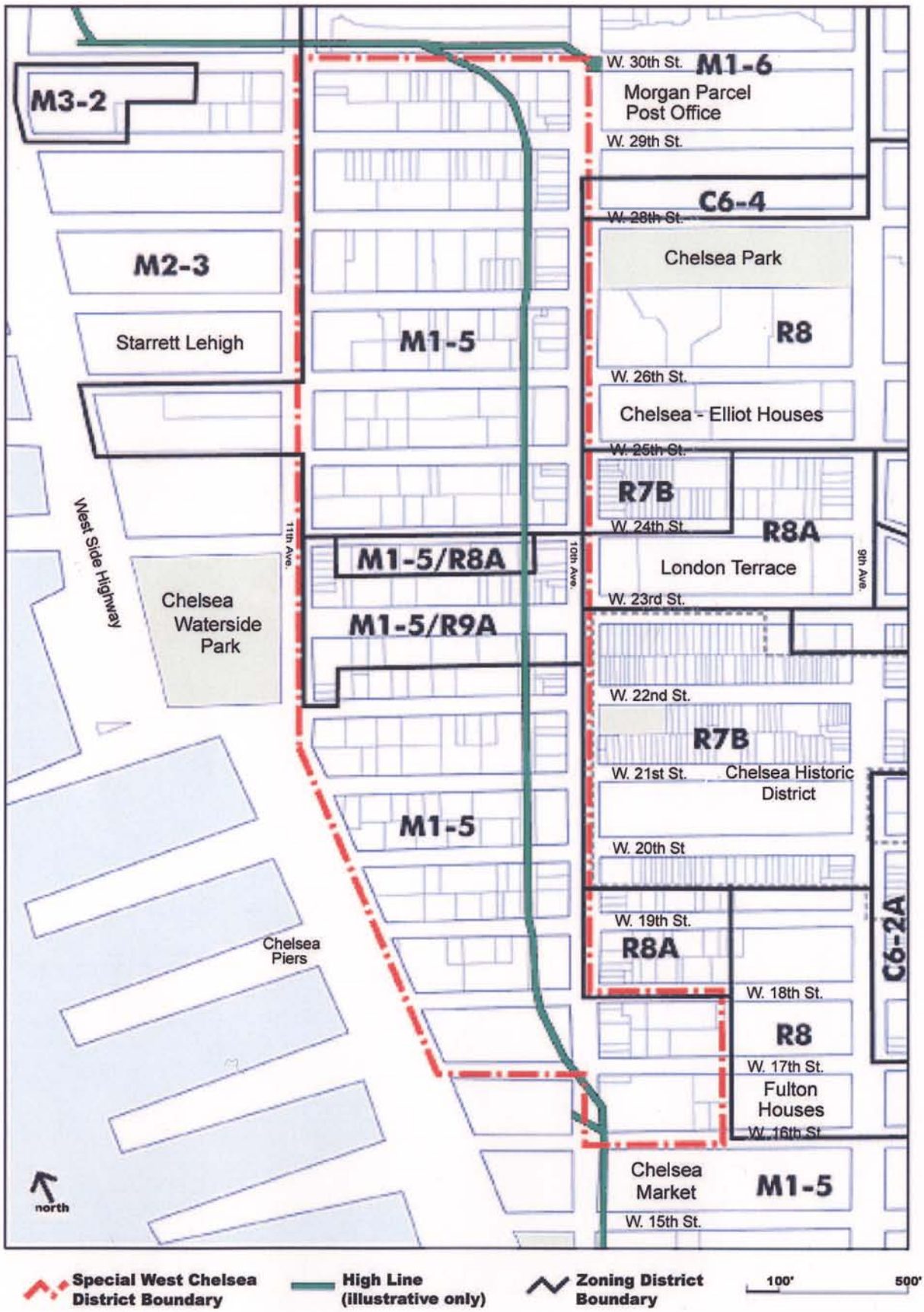
The proposed action analyzed in this Final Environmental Impact Statement (FEIS) consists of applications for both zoning map and text amendments (refer to Appendix A for the proposed text amendments in their entirety) and Acquisition and Site Selection actions to facilitate the proposed High Line publicly accessible open space.

In addition to an analysis of the proposed action, the FEIS also analyzes a range of alternatives to the proposed action. Among the alternatives considered, Alternative F, the *Revised Alternative Housing Alternative*, which is described and analyzed in Chapter 23, "Alternatives," was proposed by the New York City Department of City Planning (DCP) largely in response to public comments received during the land use review process, and is, therefore, under particularly active consideration by the lead agency, the City Planning Commission (CPC). The *Revised Affordable Housing Alternative* is entirely new and replaces the Affordable Housing Alternative contained in the DEIS. Upon completion of the environmental review process, it is possible, in accordance with SEQRA and CEQR, that the CPC will select an alternative, rather than the proposed action. The modified ULURP application [(N 050161(A) ZRM) and (C050162(A) ZMM)] for the zoning map and text amendments (analyzed in Alternative F) were filed by the DCP on March 3, 2005 and are contained in their entirety in Appendix A.1.b.

The ~~New York City Department of City Planning (NYC~~ DCP~~)~~ is proposing to rezone portions of the West Chelsea area in Manhattan Community District 4 (refer to Figure S-1, Existing Zoning). The rezoning area is generally bounded by W. 30th Street, W. 17th Street, Tenth Avenue, and Eleventh Avenue (the rezoning area also includes the east side of Tenth Avenue between W. 16th and W. 18th Streets to a point 400 feet east of Tenth Avenue). The proposed action, discussed in detail below, would change the existing M1-5 zoning district, mapped over much of the rezoning area, to C6-2, C6-3 and C6-4 zoning districts and the existing MX-3 zoning district (M1-5/R8-A and M1–5/R9A mixed-use districts), mapped between W. 22nd and W. 24th Streets, to C6-2A and C6-3A zoning districts. The existing M1-5 district would be retained in the midblocks between W. 20th and W. 22nd Streets and W. 24th and W. 27th Streets. The proposed action also includes zoning text amendments to Article IX (Special Purpose Districts) of the New York City Zoning Resolution (ZR) pertaining to the establishment of the Special West Chelsea District (refer to Appendix A for the proposed text amendments in their entirety). The proposed zoning map and text amendments would require approval by the ~~City Planning Commission (~~CPC~~)~~ and the City Council.

Also included in the proposed action is the acquisition and site selection action of the High Line to facilitate its conversion to a publicly accessible open space. This includes the High Line elevated structure extending from Eleventh Avenue and W. 30th Street to its southern terminus at Gansevoort Street. It also includes the Post Office spur north of W. 30th Street and east of Tenth Avenue. The

Figure S-1
Existing Zoning



entire length of the High Line open space would be publicly accessible. The section of the High Line west of Eleventh Avenue is not part of the proposed action. Accordingly, the proposed action area includes the rezoning area and the portion of the High Line that would be acquired by the City to facilitate its conversion to publicly accessible ~~6.7~~ 5.9-acre open space. Regulations specific to the Special District would include: a mechanism to allow the transfer of floor area from lots occupied by the High Line and immediately to the west, to designated receiving sites for new residential and commercial development; special bulk controls to regulate the height and massing of buildings throughout the Special District; and a floor area bonus in exchange for providing access to and improvement of the High Line open space.

The creation of the proposed High Line publicly accessible open space and the use of zoning bonuses related to improvements of the High Line and the transfer of development rights from the High Line Transfer Corridor, included in the proposed action, are contingent on the City receiving a Certificate of Interim Trail Use (CITU) for the High Line. The CITU is necessary to allow the City to change the High Line to a non-railroad use as the federal government has jurisdiction over railroad corridors used for interstate commerce, including inactive lines such as the High Line [refer to 49 CFR § 1152.29(d)(1)]. In December, 2002, the City filed a request with the Surface Transportation Board (STB) for a CITU for the High Line, which was still pending at the time the EIS was being prepared.

In the event a CITU is not issued, the proposed High Line publicly accessible open space would not be created and the transfer of development rights mechanism and the floor area bonus for High Line Access and Improvement would not be available, as those provisions of the proposed Special District are contingent on the CITU. Therefore, this FEIS considers two scenarios for analysis: one in which the CITU is issued and the High Line is converted to publicly accessible open space; and a second scenario ("Base FAR Scenario") in which the CITU is not issued, the High Line remains in its current state and any zoning bonuses and transfer of development rights associated with the High Line would be unavailable. Both of these scenarios are described in greater detail below.

It should be noted that the proposed High Line open space area was estimated to be 6.7 acres during preliminary project planning, and this was the acreage indicated in the Draft EIS. However, since the issuance of the DEIS, project design efforts, including a survey, have proceeded and a more accurate measurement of 5.9 acres for this area has been identified and is used in the Final EIS. This reflects a correction in the area's measurement, not an alteration in the boundaries of the High Line to be included in the site selection and acquisition actions and conversion to open space. The proposed High Line open space as described in the Draft EIS remains the same, apart from the corrected acreage.

This Final Environmental Impact Statement (FEIS) has been prepared in conformance with applicable laws and regulations, including Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations, and follows the guidance of the *CEQR Technical Manual*, October 2001.

The FEIS includes review and analysis of all impact categories identified in the *CEQR Technical Manual*. The FEIS contains a description and analysis of the proposed action and its environmental

setting; the environmental impacts of the proposed action, including its short and long term effects, and typical associated environmental effects; identification of any significant adverse environmental effects that can be avoided through incorporation of corrective measures into the proposed action; a discussion of alternatives to the proposed action; the identification of any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented; and a description of any necessary mitigation measures proposed to minimize significant adverse environmental impacts.

As the proposed action would rezone a large area encompassing 13 whole and 2 partial blocks, and a ten-year period is typically believed to be the length of time over which a projection can be made on changes due to the rezoning, the analysis considers an Analysis year of 2013.

B. PURPOSE AND NEED FOR PROPOSED ACTION

Long characterized as an area dominated by light manufacturing, storage and auto-related uses, West Chelsea has emerged in the last decade as one of the City's finest art gallery districts. The majority of the galleries are located on the midblocks between W. 20th and W. 27th streets in converted loft buildings and garages. In tandem with these galleries has been an increase in ground floor restaurants, bars and nightclubs, adding to a significant increase in pedestrian activity. Areas adjacent to West Chelsea have also become destination points, including the Chelsea Piers, Chelsea Waterside Park and Hudson River Park to the west, and the retail, eating and drinking establishments of the Gansevoort Market to the south.

Despite this change in use, however, West Chelsea continues to be dominated by underused buildings, auto-related uses and parking lots. This is due primarily to the existing zoning, which permits commercial and manufacturing uses but prohibits residential use. As a result, the vibrant residential core of Chelsea, located to the east of Tenth Avenue, has not been able to move west. The rezoning of W. 23rd Street in West Chelsea in 1999 and the subsequent construction of three residential buildings on this block is testament to the strong housing demand in West Chelsea. The proposed rezoning would allow for new residential and community facility uses in West Chelsea, while encouraging the continued growth of the area's vibrant art gallery district.

A prominent reminder of West Chelsea's industrial history is the High Line elevated rail line, constructed in the 1930s and running generally parallel to Tenth Avenue. Unused since 1980 and now covered with flora, the City, in partnership with the non-profit Friends of the High Line, is developing plans for the reuse of the structure for public open space. The City has applied to the federal STB for a CITU to convert the High Line into public open space. The proposed rezoning would provide mechanisms to facilitate the reuse of the High Line, and ensure compatible development adjacent to the new open space.

In summary, the purpose of the proposed action is to:

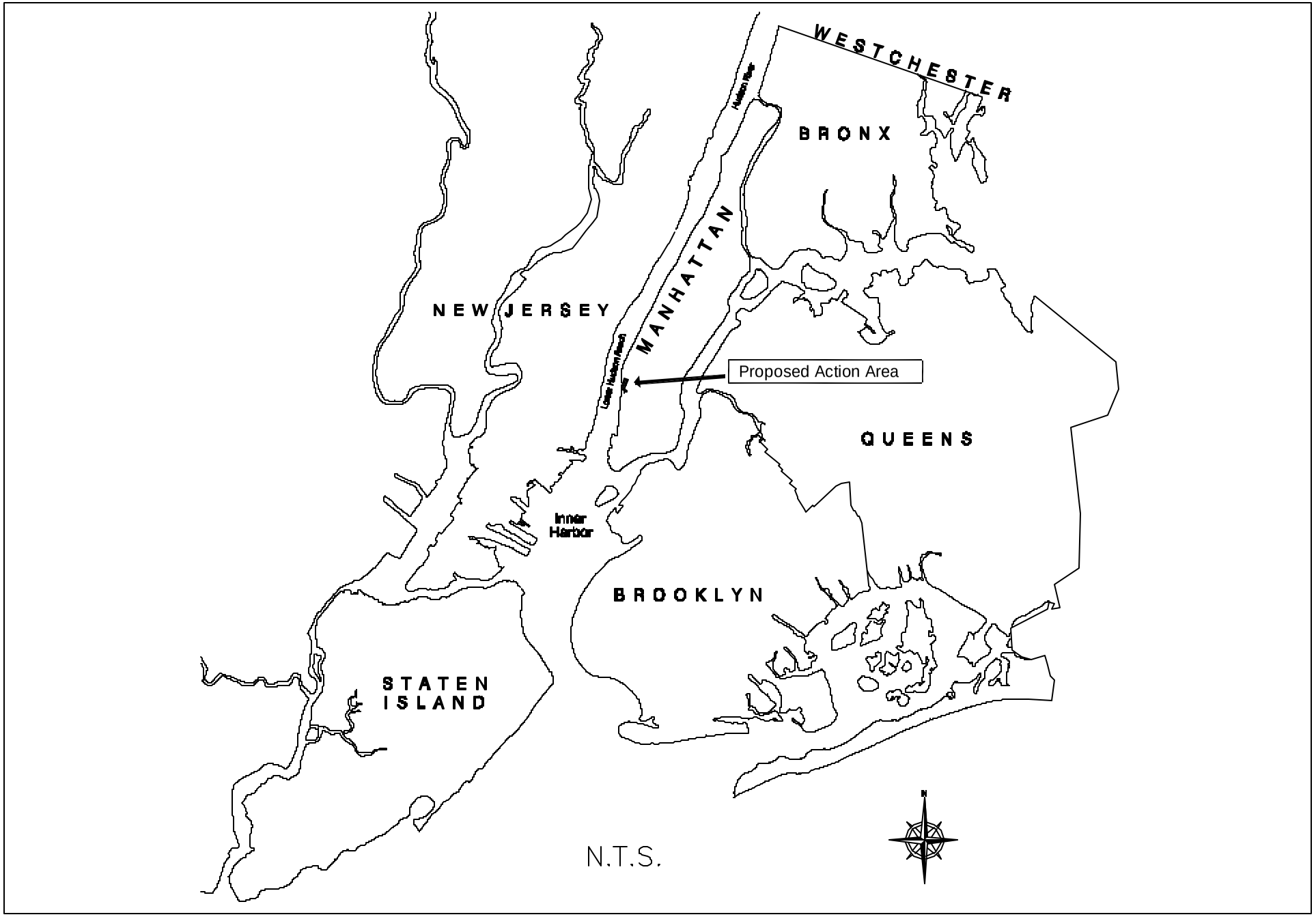
1. Encourage and guide the development of West Chelsea as a dynamic mixed use neighborhood;
2. Encourage the development of residential uses along appropriate avenues and streets;
3. Encourage and support the growth of arts-related uses;
4. Facilitate the restoration and reuse of the High Line elevated rail line as an accessible, public open space;
5. Ensure that the form and use of new buildings relate to and enhance neighborhood character and the High Line open space;
6. Create and provide a transition to the lower-scale Chelsea Historic District to the east and the Hudson Yards area to the north.

The proposed zoning map and text amendments would provide opportunities for new residential development on underutilized and vacant land, formerly used for manufacturing, where there is no longer a concentration of industrial activity and where strong demand for housing exists. It would permit a range of densities and building types that are appropriate to the existing built character both within West Chelsea and along its edges. Generally, the proposed rezoning is divided into areas of lower- and medium-density districts that mandate street wall buildings with maximum building heights, and medium- and higher-density districts that permit a tower-on-a-base form. In addition, special bulk regulations for developments adjacent to the High Line would ensure light, air and views surrounding the structure are protected. The proposed zoning map and text amendments would bring existing non-conforming residential uses into conformance and allow for their enlargement. In addition, it would prohibit residential use in the area's midblock core in order to deter displacement of art galleries and commercial uses. In general, the proposed action would provide the land use controls necessary for appropriate residential development and the continued presence of viable commercial and compatible uses within those areas where such uses are clustered.

C. DESCRIPTION OF THE PROPOSED ACTION

West Chelsea is located on the far west side of Manhattan along the Hudson River, lying between the West Village and the Gansevoort Historic District to the south and the Hudson Yards area to the north. The project area's location within New York City is shown in Figure S-2, Location Map. As its name suggests, it forms the western edge of the Chelsea neighborhood, though in many respects it is distinguished from the rest of Chelsea by its historical land use and the characteristics of its built environment. As noted above, the rezoning area in which the proposed Special West Chelsea District would be established encompasses 13 whole and 2 partial blocks. The rezoning area boundary is shown in Figure S-3.

The proposed action would allow residential and commercial uses along Tenth and Eleventh Avenues and the midblocks between W. 16th and W. 20th Streets, and W. 27th and W. 30th Streets. C6 districts would be mapped within the rezoned areas, permitting residential and a broad range of commercial uses, consistent with the existing mixed use character of West Chelsea.



SPECIAL WEST CHELSEA DISTRICT REZONING AND HIGH LINE OPEN SPACE EIS

Figure S-2
Project Location

Figure S-3

Project Area: Rezoning Area Boundary and High Line Open Space

LEGEND

Rezoning Area

Scale: 1 inch = 900 feet

0 450 900

The zoning changes would permit the lowest density (maximum 6.0 FAR) in the areas closest to the low-scale Chelsea Historic District – along the west side of Tenth Avenue between W. 18th and W. 22nd Streets, the east side of Tenth Avenue between W. 16th and W. 18th streets, and the midblocks between W. 18th and W. 20th Streets. Densities would increase away from the Historic District, to medium density (maximum 7.5 FAR) along Tenth Avenue to the north of W. 24th Street and south of W. 18th Street, Eleventh Avenue, and the midblocks between W. 27th and W. 29th streets. The highest densities (maximum 10.0 and 12.0 FAR) would be permitted along the edges of the Special District, on the full block site bounded by W. 17th and W. 18th Streets, Tenth and Eleventh Avenues, and at the northern edge of the Special District, as West Chelsea transitions to the higher densities proposed in the adjacent Special Hudson Yards District.

The proposed action would ensure that the majority of new development in West Chelsea is consistent with the high street wall loft and walk-up apartment building character of the area. Minimum and maximum streetwall heights and overall building heights would be mandated, with the lowest heights (120 feet) required in the lowest density districts adjacent to the Chelsea Historic District, and slightly higher heights (135 feet and 145 feet) in the medium density districts. Special bulk regulations for developments adjacent to the High Line would ensure that light, air and views are protected, but would also provide for a variety of building forms to allow for a dynamic visual experience along the length of the High Line. A tower-on-a-base form would also be permitted where appropriate – on the sites adjacent to the 25-story Fulton Houses towers between W. 16th and W. 18th Streets, across from Chelsea Piers and the Hudson River waterfront between W. 17th and W. 22nd Streets, and in the areas just south of Hudson Yards.

The proposed acquisition and site selection actions include the portion of the High Line extending from W. 30th Street and Eleventh Avenue on the north to its southern terminus at Gansevoort Street, including the portions of the High Line that intersect 5 blocks south of the rezoning area. The portion proposed to be converted to publicly accessible open space extends from the south side of W. 30th Street to the High Line's southern terminus at Gansevoort Street (refer to Figure S-3).

The Dia Art Foundation recently announced plans to relocate from its existing space on W. 22nd Street to a new facility to be built on property located at 820 Washington Street, at the southern entrance to the High Line. The 820 Washington Street property is presently owned by the City and its disposition to Dia is subject to public review and requires City approval. Dia is considering either selling or leasing its W. 22nd Street buildings if the 820 Washington Street proposal is approved by the City.

Zoning Map Amendments

The proposed action would establish the Special West Chelsea District, a special purpose zoning district designated by the letters WCh. The proposed district would consist of C6-2, C6-2A, C6-3, C6-3A, C6-4, and M1-5 underlying zoning districts and would contain special provisions regarding use and bulk. These special provisions would apply to new developments and enlargements and are discussed below under *Zoning Text Amendments*.

The Special District would include 13 whole and two partial blocks in Manhattan Community District 4. The area would include all of the blocks bounded by W. 30th Street on the north, Tenth Avenue on the east, W. 17th Street on the south, and Eleventh Avenue on the west. It would also include parts of two blocks bounded by W. 18th Street on the north, a line 400 feet east of and parallel to Tenth Avenue on the east, W. 16th Street on the south, and Tenth Avenue on the west.

The proposed action would change the existing M1-5 zoning district, mapped over much of the rezoning area, to C6-2, C6-3 and C6-4 zoning districts. The existing M1-5/R8-A and M1–5/R9A mixed-use districts, mapped between W. 22nd and W. 24th Streets, would be changed to C6-2A and C6-3A zoning districts. The existing M1-5 district would be retained in the midblocks between W. 20th and W. 22nd Streets and W. 24th and W. 27th Streets.

More specifically, the proposed action would rezone portions of the existing M1-5 district, which allows light manufacturing and commercial uses with an FAR of 5.0, to a C6-2 zoning district. The C6-2 district would generally be mapped along the west side of Tenth Avenue, between W. 18th and W. 22nd Streets, the midblock area between W. 18th and W. 20th Streets, and the east side of Tenth Avenue between W. 17th and W. 18th Streets. The C6-2 zoning district allows commercial and residential uses to an FAR of 6.0.

A portion of the M1-5 district would be changed to a C6-3 district, which permits commercial and residential uses built to an FAR of 7.5. The proposed C6-3 zoning district would be mapped along the west side of Tenth Avenue, from W. 24th to W. 28th Streets, the east side of Eleventh Avenue, between W. 18th and W. 28th Streets, the east side of Tenth Avenue, between W. 16th and W. 17th Streets and the midblocks generally between W. 27th and W. 30th Streets.

The remaining portions of the M1-5 district proposed to be rezoned would be changed to a C6-4 zoning district, which allows commercial and residential uses built to an FAR of 10.0. The C6-4 district would be mapped along the south side of W. 30th Street, between Tenth and Eleventh Avenues, the east side of Eleventh Avenue, between W. 28th and W. 30th Streets, the west side of Tenth Avenue, between W. 28th and W. 30th Streets and the full-block bounded by W. 17th and W. 18th Streets and Tenth and Eleventh Avenues. With the exception of the block between W. 17th and W. 18th Streets, the C6-4 District would also allow utilization of the Inclusionary Housing Bonus, which permits an increase from 10.0 to 12.0 FAR.

The MX-3 Special Mixed-Use District, which is comprised of an M1-5/R8A district and an M1-5/R9A district, is currently mapped along W. 23rd Street and the south side of W. 24th Street. Both M1-5/R8A and M1-5/R9A allow commercial and manufacturing uses to a maximum FAR of 5.0. However, the M1-5/R8A district allows residential and community facility uses at 6.02 and 6.50 FAR, respectively, while the M1-5/R9A district allows residential and community facility uses at 7.52 FAR. The proposed action would change the existing MX-3 district to contextual C6-2A and C6-3A zoning districts and incorporate them into the Special West Chelsea District. The existing M1-5/R8A zoning district would be changed to a C6-2A zoning district, which would be mapped over the midblock area along the south side of W. 24th Street. The C6-2A district would allow commercial and residential uses to an FAR of 6.0 and 6.02, respectively. The existing M1-5/R9A

district, generally located along W. 23rd Street, the east side of Eleventh Avenue between W. 22nd and W. 24th Streets and the west side of Tenth Avenue, between W. 22nd and W. 24th Streets, would be changed to a C6-3A zoning district. The C6-3A district allows commercial and residential uses built to an FAR of 7.5 and 7.52, respectively. Both of these districts are contextual zoning districts, which include height and setback requirements intended to maintain compatibility with adjacent buildings and the overall built character of the area.

The existing M1-5 zoning district allows accessory parking at a rate of one space per 4,000 square feet of floor area (or 100 spaces, whichever is less). With the proposed action, the entire Special District would be subject to the parking provisions of the proposed underlying C6-2, C6-2A, C6-3, C6-3A, C6-4 and M1-5 zoning districts. The maximum number of accessory residential parking spaces allowed by the underlying C6 zoning districts is 20 percent of the number of dwelling units (or 200 spaces, whichever is less). For commercial and community facility uses, the maximum number of accessory parking spaces is one space per 4,000 square feet of floor area (or 100 spaces, whichever is less).

Portions of the rezoned areas would have both a base floor area ratio (FAR) and a maximum FAR. Under the proposed Special District regulations, the FAR in these portions could be increased to the maximum through the purchase of development rights from the proposed Special District's High Line Transfer Corridor. In addition, floor area could be increased through bonuses related to access to, improvement, and enhancement of the High Line. The base FAR for a C6-2 district is 5.0 and the maximum FAR is 6.0. The base FAR for a C6-3 district is 5.0 and the maximum FAR is 7.5. The base FAR for a C6-4 district is 7.5 and the maximum FAR is 10.0 The FAR could also increase in the C6-4 districts in the northern blocks of the Special District through use of current Inclusionary Housing Bonus provisions.

(E) Designations

As described in greater detail in subsequent chapters of the FEIS, the proposed zoning map amendments include the placement of an (E) Designation on several tax lots identified as development sites and expected to be redeveloped as a result of the proposed action. An (E) designation would be placed on the amended zoning map to denote certain parcels where the proposed action has the potential to result in significant adverse hazardous materials, air quality, or noise impacts. The (E) designation would ensure that these properties would not be redeveloped unless necessary remedial measures are implemented. Potential Development Sites 46 through 53, currently located in the MX-3 mixed-use district, mapped as part of the Chelsea Rezoning (CEQR No. 99DCP030M), contain noise attenuation requirements mandated by the MX-3 district, pursuant to ZR Section 123-32. As part of the proposed action, the MX-3 district would be eliminated and mapped with underlying contextual C6-2A and C6-3A zoning districts. In order to ensure that the noise attenuation requirements continue to apply to these sites once the MX-3 district is eliminated, these sites have been included in both the future with and future without the proposed action. No incremental development is expected on these sites as a result of the proposed action.

Zoning Text Amendments

The proposed action includes an amendment to Article IX (Special Purpose Districts) of the New York City Zoning Resolution (ZR) pertaining to the establishment of the Special West Chelsea District (refer to Appendix A for the proposed text amendments in their entirety).

The proposed Special West Chelsea District includes modifications to the underlying density, use and bulk regulations to further the goals of the Special District. The Special District would be divided into nine subareas (Subareas A through I) differing from one another in density and bulk. A High Line Transfer Corridor would also be mapped within the Special District, specifying the lots from which floor area could be transferred.

D. REASONABLE WORST-CASE DEVELOPMENT SCENARIO

A reasonable worst-case development scenario (RWCDS) for both "future No-Action" and "future With-Action" conditions will be analyzed for an analysis year, or Build year, of 2013. A ten-year period[1] is typically believed 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 felt.

The future With-Action scenario identifies the amount, type, and location of development that is expected to occur by 2013 as a result of the proposed action. The future without the action (or No-Action) scenario identifies similar development projections for 2013 absent the proposed action. The incremental difference between the With-Action and No-Action scenarios serves as the basis for the impact analyses.

To determine the 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 residential development, several factors have been considered, including known development proposals, current housing market demands, and NYC DCP's standard "soft site" criteria, for identifying likely development sites. In formulating the projections, NYC DCP is aware that there is a large demand for new housing in the area, but that the demand has been constrained by zoning that does not permit such development as-of-right. The first step in establishing the development scenarios was to identify those sites where new development could reasonably be expected to occur.

Demand for new manufacturing space is limited, not only in the proposed rezoning area, but throughout the City. Consistent with current trends in the area, it is expected that there would be very limited development of new manufacturing space as well as minimal expansions of existing industrial businesses.

[1] Substantive work on the environmental analyses herein began in 2003, resulting in an analysis year of 2013. Where appropriate, existing conditions have been updated to reflect current 2004 conditions.

In identifying the RWCDS, a set of criteria were established and all sites that met the criteria were identified.

Future No-Action Conditions

In the future without the proposed action, the existing zoning controls would remain in place. It is expected that the West Chelsea area would experience nominal growth in commercial and light manufacturing uses. Most of the projected growth is expected to include commercial conversions, including the continued development of gallery and office space, as well as hotel development, consistent with existing trends in West Chelsea and the Gansevoort Meat Market area to the south. The No-Action condition includes 101 DUs, ~~271,578~~ 378,913 sf of retail space, ~~976,847~~ 956,947 sf of office space, 131,100 sf of hotel space, ~~40,809~~ 74,818 sf of storage/warehouse space, ~~395,005~~ 302,365 sf of parking and auto-related uses, 28,838 sf of community facility space and ~~25,064~~ 4,080 sf of vacant land. It should be noted that revisions to the No-Action condition were made between the DEIS and the FEIS to reflect changes to existing conditions occurring since original data collection and to make corrections to land use categorizations.

As described above, the proposed action would eliminate the MX-3 Special Mixed-Use District, mapped as part of the Chelsea Rezoning (CEQR No. 99DCP030M), and change it to underlying contextual C6-2A and C6-3A zoning districts. Mixed-use districts require 35 dBA noise attenuation for residential developments. In order to ensure that the appropriate level of noise attenuation is provided for these sites once the mixed-use district is eliminated, Potential Development Sites 46 through 53 have been included in both the future with and the future without the proposed action conditions under the reasonable worst-case development scenario. No incremental development is expected on these sites as a result of the proposed action.

In addition to the development expected on the projected development sites, there are several other actions and projects expected to occur in either the rezoning area or the surrounding areas by the 2013 analysis year. These developments have the potential to affect conditions in the rezoning area and the surrounding study areas analyzed for the various areas of environmental concern considered in this FEIS.

Among these projects is the No. 7 Subway Extension - Hudson Yards Rezoning and Development Program, located north of the rezoning area. This action directly affects an area generally encompassing the blocks bounded by W. 43rd Street on the north, Hudson River Park on the west, W. 28th and W. 30th streets on the south, and Seventh and Eighth Avenues on the east. It involves a number of zoning text and map amendments to permit medium- to high-density development and a broader range of land uses than currently allowed and an extension of the No. 7 subway from its current terminus at Times Square into the Hudson Yards, serving new development including an expanded and modernized Javits Convention Center, a new multi-use sports, exhibition, and entertainment facility, a substantial amount of new open space, and other facilities. These and other No-Action projects are described in Chapter 2, "Land Use, Zoning, and Public Policy" and their effects on environmental conditions, as applicable, are discussed in other chapters in the FEIS.

Future With-Action Conditions

The elimination of most of the existing M1-5 district and mapping of the proposed Special District, with its underlying C6-2, C6-3, and C6-4 regulations, would enable existing manufacturing, storage and auto-related uses to remain, but would also encourage retail and higher density residential development at various locations throughout the rezoning area. Specifically, NYC DCP identified 53 development sites, of which 25 are projected development sites likely to be developed by 2013. The With-Action condition on the 25 projected development sites includes 4,809 DUs, ~~564,254~~ 574,128 sf retail space, 160,000 sf office space, 76,425 sf of accessory parking for off-site government use, and 227,564 sf community facility space. For analysis purposes, it is assumed that these projected development sites would provide the maximum accessory parking allowed as-of-right under the proposed zoning, which is 0.2 spaces per DU and 1 space per 4,000 zsf of commercial and community facility space.

This RWCDS is based on the above soft-site criteria, the large number of available sites within the rezoning area and the assumption that recent trends in the adjacent Chelsea neighborhood to the east would expand into West Chelsea. In addition, most uses on the projected development sites that are expected in the future without the proposed action would be removed, although in a few cases such No-Action uses would remain.

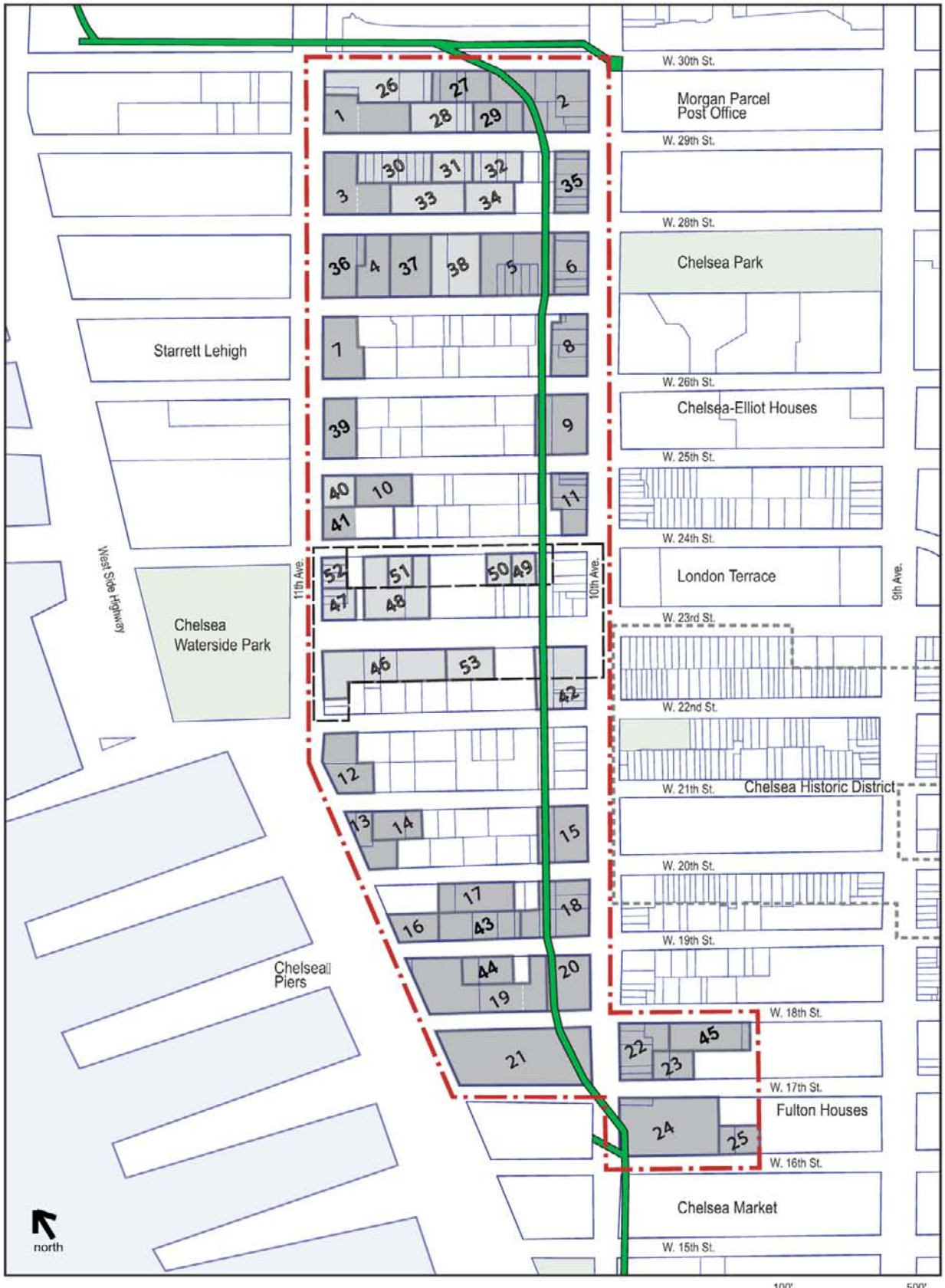
In addition to the 25 projected development sites, there are 28 potential development sites. If development does not occur on the projected development sites, the same overall amount of development could occur instead on some or all of the potential development sites. Although considered possible sites for future development based on the "soft" site criteria, these sites are considered less likely to be developed over the ten year analysis period. Site conditions, location, and market demand are among the factors contributing to the more limited likelihood for redevelopment of potential development sites.

The locations of the projected and potential development sites are shown in Figure S-4.

Incremental Difference between With-Action and No-Action

The proposed action is expected to result in a net increase of approximately 4,708 DUs, ~~219,507~~ 146,411 sf of local retail space, ~~73,169~~ 48,804 sf of destination retail space (together local and destination retail include ~~292,676~~ 195,215 sf of retail space) and 198,726 sf of museum (community facility) space and a net decrease of ~~816,847~~ 796,947 sf of office space, 131,100 sf of hotel space, ~~40,809~~ 74,818 sf of storage/warehouse space, ~~318,580~~ 225,940 sf of parking uses and ~~25,064~~ 4,080 sf of vacant land. The incremental difference provides the basis for the environmental review of the proposed action. Table S-1 below presents the No-Action and With-Action conditions and the incremental difference between the two conditions for the 25 projected development sites in total.

Figure S-4
Projected and Potential Development Sites



Development Sites
Reasonable Worst Case Development Scenario

proposed special distict boundary
11 projected sites
12 potential sites

Table S-1, Summary of Land Uses on the West Chelsea Projected Development Sites Under No-Action, With-Action, and Action Increment

LAND USE TYPE	2013 NO-ACTION	2013 WITH ACTION	ACTION INCREMENT
Residential	101 DUs	4,809 DUs	4,708 DUs
Retail	378,913 sf	574,128 sf	195,215 sf
Office	956,947 sf	160,000 sf	-796,947 sf
Hotel	131,100 sf	0 sf	-131,100 sf
Storage/Manufacturing	74,818 sf	0 sf	-74,818 sf
Parking/Auto (1)	302,365 sf	76,425 sf	-225,940 sf
Community Facility (museum)	28,838 sf	227,564 sf	198,726 sf
Vacant	4,080 sf	0 sf	-4,080 sf

Notes: (1) With Action scenario parking/auto SF listed in this table does not include permitted accessory parking expected to be provided at rate of 0.2 spaces per DU and 1 space per 4,000 sf of commercial and community facility.

In terms of income mix, it is expected that approximately 4,051 DUs of the project-generated units would be market-rate units, occupied by high income households and 657 DUs would be occupied by low- and moderate-income households, consistent with current development patterns in the area. This estimate is based on the assumption that developers would utilize voluntary mechanisms such as 80-20 financing and use of the Inclusionary Housing bonus to generate these units.

Base FAR Scenario

In addition to the With-Action condition for the proposed action described above, the FEIS also considers a Base FAR Scenario. As discussed above, the creation of the proposed High Line publicly accessible open space and the use of zoning bonuses related to improvements of the High Line and the transfer of development rights from the High Line Transfer Corridor, proposed as part of the West Chelsea rezoning, are contingent on the City receiving a CITU for the High Line. The CITU is necessary to allow the City to change the High Line to a non-railroad use as the federal government has jurisdiction over railroad corridors used for interstate commerce, including inactive lines such as the High Line [refer to 49 CFR § 1152.29(d)(1)]. In 2002 the City filed a request with the STB for a CITU for the High Line, which was still pending at the time this FEIS was being prepared.

In the event a CITU is not issued, the proposed High Line publicly accessible open space would not be created and the transfer of development rights mechanism and the floor area bonus for High Line Access and Improvement would not be available, as those provisions of the proposed Special District are contingent on the CITU. While this scenario is considered unlikely, it is possible that, following the adoption of the proposed action, the proposed High Line open space would not be created. As

a result, the maximum permitted FAR would be lower than the FAR allowed under the proposed action because the zoning bonuses and development rights transfers associated with the High Line would be unavailable. While this outcome is unlikely, it is possible, and therefore, this "Base FAR Scenario" is assessed for its potential environmental effects in this FEIS.

While the availability of the proposed FAR bonuses would be contingent on the issuance of the CITU, it should be noted that other proposed zoning regulations intended to create development compatible with the proposed High Line open space, including the various height and setback regulations described above, would still apply. The applicability of these regulations is not contingent on the CITU.

Development assumed under the Base FAR Scenario would occur on the same 25 projected development sites as the proposed action, but would result in somewhat less residential development since zoning bonuses and transfer of development rights associated with the High Line would be unavailable; however, all other land use projections would be identical to those anticipated under the proposed action's RWCDS. The With-Action condition under the Base FAR Scenario includes approximately 3,142 dwelling units.

The net increase in residential development for the Base FAR Scenario is 3,041 dwelling units. The increment for all other land uses is the same as that of the proposed action: an increase of approximately ~~219,507~~ 146,411 sf of local retail space, ~~73,169~~ 48,804 sf of destination retail space (together local and destination retail include ~~292,676~~ 195,215 sf of retail space) and 198,726 sf of museum (community facility) space and a decrease of approximately ~~816,847~~ 796,947 sf of office space, 131,100 sf of hotel space, ~~40,809~~ 74,818 sf of storage/warehouse space, ~~318,580~~ 225,940 sf of parking uses and ~~25,064~~ 4,080 sf of vacant land. Table S-2 provides a summary and comparison of the incremental development generated under both scenarios.

For certain technical areas where impacts are site-specific, the Base FAR Scenario would have the same effects as the proposed action. This includes: Historic Resources; Hazardous Materials; Natural Resources; Waterfront Revitalization Program; Energy; Noise; Construction; and Public Health. For these technical areas, no additional analysis is necessary for the Base FAR Scenario and only explanatory text in each applicable chapter explaining that the effects of the Base FAR Scenario are expected to be the same as the proposed action will be provided.

For technical areas where impacts are density-specific and where the proposed action is not expected to result in significant adverse impacts, detailed analysis of the Base FAR Scenario will not be provided. Instead, each applicable chapter of the FEIS will include a qualitative discussion of the effects of the Base FAR Scenario as compared to the proposed action.

For density-specific technical areas where there are significant adverse impacts resulting from the proposed action, the FEIS will provide an analysis in which detailed analyses are focused on areas where impacts are expected.

Table S-2, Comparison of Proposed Action and Base FAR Scenario			
	PROPOSED ACTION INCREMENT	**BASE FAR SCENARIO INCREMENT**	**DIFFERENCE**
Total DUs	4,708 DUs	3,041 DUs	1,667 DUs
Low-Moderate Income DUs	657 DUs	415 DUs	242 DUs
Retail	195,215 sf	195,215 sf	0
Community Facility	198,726 sf	198,726 sf	0
Office	-796,947 sf	-796,947 sf	0
Hotel	-131,100 sf	-131,100 sf	0
Storage/manufacturing	-74,818 sf	-74,818 sf	0
Parking/Auto Use (1)	-225,940 sf	-225,940 sf	0
Vacant Space	-4,080 sf	-4,080 sf	0

Notes: (1) 76,425 sf of parking to be designated as "off-site accessory government parking" would be retained on Projected Development Site 21.

E. REQUIRED APPROVAL

The following approvals are required for the proposed action:

- NYC City Planning Commission (CPC) approval for an amendment to the zoning map.
- CPC approval for a zoning text amendment.
- CPC approval for Site Selection and Acquisition of the High Line, to facilitate the creation of the a publicly accessible ~~6.7~~ 5.9-acre open space on the High Line.
- As a portion of the area directly affected by the proposed action is located within the designated boundaries of New York City's Coastal Zone, Department of City Planning assessment for compliance of the proposed action with the Local Waterfront Revitalization Program (LWRP) is required.

The proposed rezoning is a discretionary public action which is subject to both the Uniform Land Use Review Procedure (ULURP), as well as City Environmental Quality Review (CEQR). ULURP is a process that allows public review of proposed actions at four levels: the Community Board; the Borough President; the City Planning Commission and, if applicable, the City Council. The procedure mandates time limits for each stage to ensure a maximum review period of seven months. Through CEQR, agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment.

F. FUTURE WITH THE PROPOSED ACTION

Land Use, Zoning, and Public Policy

In the future with proposed action, there would be no significant adverse impacts anticipated for land use, zoning, or public policy in the primary or secondary study areas. The proposed action would change zoning designations within the proposed action area in a manner consistent with existing land use and responsive to expected land use trends.

The proposed action would provide increased opportunities for residential and mixed-use development where there is currently a need for housing. Given West Chelsea's proximity to and compatibility with residential and mixed-use commercial development in the surrounding neighborhoods (including Hudson Yards), the land uses generated by the proposed action are not expected to result in significant adverse land uses impacts.

The planned conversion of the High Line to public open space would create an amenity for residents of and visitors to West Chelsea and the City as a whole. The acquisition and site selection actions would generate approximately ~~6.7~~ 5.9 acres of new open space for residents and visitors. The High Line would integrate West Chelsea's industrial past with an innovative new open space, linking the Clinton and Hudson Yards neighborhoods to the north with the Meat Packing District and the West Village to the south.

The proposed action would facilitate the redevelopment of the High Line as a public open space. The High Line Transfer Corridor would ensure that new development adjacent to the High Line would allow for light and air to penetrate to the new open space resource by creating air rights transfers from lots immediately adjacent to the High Line to other lots that are within the Special District. In addition, bulk regulations would ensure that new development preserves light, air and views along the new open space, while permitting development to connect to and enliven the High Line. The requirements for access easement volumes would also ensure that space is provided for access to the High Line as the open space is developed.

Socioeconomic Conditions

The proposed action is not anticipated to result in significant adverse impacts on socioeconomic conditions related to direct or indirect residential displacement, to direct or indirect business and institutional displacement, or to specific industries.

Residential Displacement

Only a limited amount of direct residential displacement is anticipated, and the effects of such displacement on neighborhood character are not expected to be large or significant. Of the approximately 101 dwelling units in 11 buildings on the projected development sites, only 12 units

in 4 buildings are expected to be displaced over a 10-year period. Three of these buildings are located on W. 27th Street, and the remaining building is located on the west side of Tenth Avenue between W. 25th and W. 24th streets. These buildings have an estimated population of approximately 20 residents, a very small portion of the current and future population of the proposed action area. In summary, the assessment finds that:

- The socioeconomic profile of the displaced residents would be similar to that of the overall area;
- The displaced residents would represent a small percentage of the overall population; and
- The displacement would not result in the substantial loss of a specific component of the population that characterizes the neighborhood.

Base on these findings the proposed action is not likely to result in significant adverse impacts related to direct residential displacement.

Indirect Residential Displacement

A substantial amount of new residential development would be added to the West Chelsea neighborhood, an area already in transition with higher income residents moving into the neighborhood. Based on an analysis of ongoing existing trends and projected income and population trends, the new population introduced by the proposed action, and the housing stock still remaining after the proposed action, the assessment finds that the proposed action would:

- Add a substantial new population, but its socioeconomic character would not differ from that of the current and projected population;
- Not displace uses or properties that have had a "blighting" effect on property values in the area;
- Not displace substantial elements of one or more components of the population so as the alter the socioeconomic composition of the area;
- Introduce substantially more housing into the area, but this new housing would not be more costly compared to the existing housing and the housing forecast in the future without the proposed action;
- Not generate a critical mass of non-residential uses such that the surrounding area becomes more attractive as a residential neighborhood; and
- Not result in new land uses that would offset positive trends in the area or lead to disinvestment.

Base on these findings, the proposed action is not likely to result in significant adverse impacts on indirect residential displacement.

Direct Business and Institutional Displacement

The cumulative displacement effects of the proposed action on businesses and institutions and their employment could include the displacement of up to 81 private businesses and an estimated ~~722~~ 762

private employees plus two government offices with about 301 employees (including the offices of the US Office of Veteran Affairs and the NYC Human Resources Administration).

By 2013, the proposed action could displace businesses in the retail, construction, wholesale, business, legal and professional services, and auto service sectors. The largest portion of the direct displacement would occur in the retail sector (~~35~~ 37 percent of the total) followed by governmental (~~24~~ 28 percent) and construction (9 percent) sectors. No individual business or mix of businesses to be directly displaced represent a substantial economic value to the City. The range of job types of the displaced employment would be similar to the characteristics of the overall existing employment base, indicating that the proposed action would not specifically affect any one type or category of employment.

Additionally, the proposed action is expected to generate over 2,500 jobs in the primary study area as the projected development sites become developed. These developments would be expected to generate approximately 2,616 new jobs, which would expand the primary study area's existing employment base by about 61 percent.

In summary, the assessment of this potential displacement finds that:

- The displaced businesses do not collectively represent substantial economic value to the City and could reasonably be relocated within New York City;
- The majority of displaced businesses would not be those subject to specific public policy to preserve and protect such employment; and
- The displaced businesses do not serve to define the neighborhood character.

Based on these findings, the proposed action is not likely to result in significant adverse impacts on direct business and institutional displacement.

Indirect Business and Institutional Displacement

A substantial amount of new residential development would be added to the West Chelsea area. The proposed action is anticipated to have a strong positive effect on the real estate market in the area. The new residents that would be introduced to the area would form a large new customer base for local retail businesses in both the primary and secondary study areas. In addition, the area would be more attractive, encouraging new businesses to come into the area and improving business conditions. The detailed assessment of existing and future employment and market trends finds that the proposed action area is likely to:

- Introduce new economic activity in the future with the proposed action, but would not eliminate much of the existing employment base and ongoing economic activity;
- Not add to the concentration of any particular sector of the local economy;
- Not displace uses or properties that have had a "blighting" effect on property values in the area;

- Not displace enough existing uses to remove support for businesses in the area or eliminate a customer base for existing and future local businesses;
- Not displace enough existing businesses or residents to eliminate a customer base for existing and future businesses; and
- Not result in new land uses that would offset positive trends in the area or lead to disinvestment.

Based on these findings, the proposed action is not likely to result in significant adverse impacts on indirect business and institutional displacement.

Effects on Specific Industries

Galleries

The commercial art gallery industry has a strong presence in the proposed action area. The proposed action is expected to allow for the growth of arts-related uses, and is not anticipated to directly or indirectly displace a substantial number of commercial art galleries or gallery employees or accelerate the loss of commercial art galleries in the study areas.

Based on the analysis of both projected and potential development sites, the potential gallery job displacement from the proposed action would be small in proportion to the total gallery jobs in the art gallery industry in New York City. The proposed action is also not anticipated to diminish the viability of the art gallery industry in West Chelsea. Most of the larger art galleries, which represent the bulk of the industry are not vulnerable, as they currently pay premium rents, particularly ground floor establishments ($45 to $60 psf). Art galleries are permitted as-of-right within the proposed C6 zoning districts, and would be able to locate within the 564,254 sf of ground and second floor retail spaces anticipated to be developed on the projected development sites, as well as in the existing M1-5 district, which would be preserved along the mid-blocks. The proposed action is not expected to affect significantly business conditions, nor is it expected to substantially reduce or impair economic viability for art galleries citywide.

Night Clubs/Cabarets

The nightclub/cabaret industry is also prevalent within the proposed action area. The proposed action can be expected to have both direct and indirect effects on the area's nightclub/cabaret industry; however, it would not result in significant adverse impacts to the nightclub/cabaret industry.

Based on the analysis of projected development sites, ~~two~~ three large capacity cabarets would be directly displaced by the proposed action. These ~~two~~ three businesses would be able to relocate to other areas of Manhattan and the other boroughs where there a buildings with large floor plates. Cabarets and all other nightlife establishments would also be allowed as-of-right under the proposed C6 zoning.

Residential uses and nightlife establishments, especially large capacity cabarets, can coexist with the proper regulations. In addition, new residents in the primary study area would constitute a new customer base for the cabarets in the area.

The proposed action is not expected to affect significantly business conditions, nor is it expected to substantially reduce or impair economic viability for nightclubs citywide. Rents in the primary study area are expected to increase with or without the proposed action, and this increase is not expected to affect large capacity cabarets since they already pay relatively high rents.

Community Facilities

The proposed action would result in significant adverse impacts on elementary schools in Region 3 of Community School District 2 (CSD 2), on intermediate schools in CSD 2, and publicly funded day care. It would not result in significant adverse impacts on intermediate schools in Region 3, libraries, outpatient health care facilities, fire and police services.

Public Schools

As a result of the proposed action, a shortfall of 1,133 seats, with utilization at 144 percent of capacity, would be created at the public elementary schools in Region 3 of CSD 2. For CSD 2 as a whole, there would be a shortfall of 1,818 seats, with utilization at 112 percent of capacity. For both Region 3 and CSD 2, the proposed action is expected to result in a greater than 5 percent increase in the deficiency of available elementary school seats over No-Action conditions (75 percent and 36 percent, respectively). Therefore, a significant adverse impact on public elementary schools in Region 3 and CSD 2 as a whole is expected.

Under With-Action conditions in 2013, intermediate schools in Region 3 are expected to operate at 105 percent of capacity with a deficit of 40 seats. As there is not expected to be a deficit under No-Action conditions, a percentage increase in deficiency cannot be calculated. However, the deficit in seats at elementary schools in Region 3 under With-Action conditions in 2013 would be relatively small in absolute terms and as a percentage of total capacity. Therefore, the proposed action would not have a significant adverse impact on intermediate schools in Region 3.

As a result of the proposed action, CSD 2 as a whole would operate over capacity, with a utilization rate of 119 percent reflecting a shortfall of 1,265. For CSD 2, the proposed action is expected to result in more than a 5 percent increase in the deficiency of intermediate school seats as compared to No-Action conditions, with a 9 percent increase. Therefore, a significant adverse impact to intermediate schools in CSD 2 is expected to occur as a result of the proposed action.

By 2013, with the addition of 155 new high school students generated by the proposed action within the proposed action area, there would be a shortfall of 2,079 seats in Manhattan high schools, with a utilization rate of 104 percent. This would result in an 8 percent increase in deficiency of high school seats as compared to No-Action conditions; technically more than the 5 percent increase that

could indicate a significant impact. However, since students may choose from high schools throughout the city, and would be expected to be accommodated without constraining overall capacity, no significant adverse impact to high schools in Manhattan is expected to occur as a result of the proposed action.

Mitigation for the identified impacts are discussed below under "Mitigation."

Publicly Funded Day Care

The proposed action does not include the provision of any additional publicly funded day care slots. Up to 79 children under age 12 generated by the proposed action would be eligible for publicly funded day care. As a result, the net unmet demand in the study area, encompassing approximately a 1-mile radius of the proposed action, would increase from121 to 200 slots. According to *CEQR Technical Manual* guidelines, a significant adverse impact could result if the proposed action results in: "(1) a demand for slots greater than remaining capacity of day care center(s), and (2) that demand constitutes an increase of 5 percent or more of the collective capacity of the day care centers serving the area of the proposed action." Demand for slots is greater than remaining capacity under Existing conditions and is expected to worsen under No-Action and even further under With-Action conditions. With-Action conditions would increase demand by 33 percent as a percentage of capacity. As the proposed action would result in an increase of five percent or more over capacity, a significant adverse impact to publicly funded day care service in the study area could occur in 2013. Although less severe in magnitude, this impact could also occur with the Base FAR Scenario. Under the Base FAR Scenario 50 children under age 12 would be eligible for publicly funded day care. As a result, the net unmet demand in the study area would increase from 121 to 171 slots. These conditions would increase demand by 21 percent over capacity.

Libraries

The proposed action would result in a population increase in the Muhlenberg catchment area of 5.4 percent over No-Action conditions. According to the *CEQR Technical Manual*, if a proposed action would increase the study area population by 5 percent or more over No-Action levels, a significant impact could occur if this increase would impair the delivery of library services. Significant impacts would warrant consideration of mitigation. However, as stated in the *No. 7 Subway Extension - Hudson Yards Rezoning and Development Program FGEIS* (November 2004) [CEQR No. 03DCP031M], NYPL has indicated that projected increases in local library population attributed to the Hudson Yards project (through complete build-out in 2025), the West Chelsea rezoning, and other developments in the area could be accommodated by the library system's existing resources.

Health Care

The proposed action would add 1,075 annual visits to study area emergency rooms, a 1.3 percent increase over No-Action conditions. The action-generated increase, which is less than the 5 percent threshold for significance, is not expected to overburden health care facilities in the study area, and no significant adverse impacts on health care services are expected as a result of the proposed action.

Police and Fire Services

It is anticipated that there would be no adverse impacts on police and fire services as a result of the proposed action.

Open Space

The proposed action would add to study area open space resources through the creation of a ~~6.7~~ 5.9-acre publicly accessible open space on the High Line and a 0.23-acre passive recreation space providing public access to the High Line in Subarea G (Projected Development Site 21).

The proposed action would not result in significant adverse open space impacts. However, the Base FAR Scenario, which would generate fewer DUs than the proposed action and would not include the High Line and Subarea G open space as open space resources, would result in an unmitigated significant adverse open space impact.

Under 2013 With-Action conditions the study area open space ratio would be 1.19 acres per 1,000 residents. This would be a decrease of ~~0.04~~ 0.06 acres per 1,000 (~~3~~ 4 percent) compared to the future No-Action ratio. The active open space ratio would be 0.37 acres per 1,000 residents, a decrease of 0.04 acres (11 percent). The passive open space ratio would be 0.82 acres per 1,000 residents, the ~~same ratio as under~~ a decrease of 0.01 acre from No-Action conditions. The additional ~~6.93~~ 6.13 acres of passive open space provided by the proposed action would offset the effects of the proposed action's increased population on the ratio of passive open space to 1,000 residents.

This resource would provide a unique, high quality passive open space which would be complemented by public access and improvements provided by private developments through the High Line Access (floor area) Bonus. Another benefit of this facility is that it would physically link the West Chelsea area to planned Hudson Yards open space resources.

Under 2013 Base FAR Scenario conditions the study area open space ratio would be ~~1.15~~ 1.16 acres per 1,000 residents. This would be a decrease of ~~0.08~~ 0.09 acres (7 percent) compared to the future No-Action ratio. The active open space ratio would be 0.38 acres per 1,000 residents, a decrease of 0.03 acres (7 percent). The passive open space ratio would be ~~0.76~~ 0.77 acres per 1,000 residents, a decrease of ~~0.06~~ 0.05 acres (7 percent). As with the proposed action analyzed above, the study area would continue to be deficient in terms of the overall open space ratio and the active open space ratio, although the passive open space ratio would exceed the City's 0.5-acre planning goal. However, the overall percentage decrease in available acres per 1,000 residents from No-Action conditions would be greater at 7 percent compared to ~~3~~ 4 percent for the proposed action.

The rate of decrease of the total open space ratio would nearly double that of the proposed action, which highlights the important asset that a High Line open space would be for an enlarged West Chelsea residential community. With this substantial decrease in the open space ratio and without the lessening of effects provided by a new open space, the Base FAR Scenario would result in

significant adverse open space impacts. As discussed in Chapter 22, "Mitigation," without the ability to create a new open space on the High Line, this impact is likely to be unmitigatible.

Shadows

The projected and potential development that could result from the proposed action would cast new incremental shadows on a number of publicly accessible open spaces and sunlight sensitive historic resources within the proposed action area, including the Chelsea Historic District, the Church of the Guardian Angel, Chelsea Waterside Park, Chelsea Park, Chelsea Houses Open Space, Clement Clarke Moore Park, Robert S. Fulton Houses Playground, and the planned open spaces on Block 675 and the eastern portion of Caemmerer Yard.

The shadow analyses indicate that, although shadows would be cast on the above resources as a result of the proposed action, they would not affect the utilization of any of the public open spaces, nor would they affect the growth of plants within those spaces. The longest shadows cast by projected/potential development would typically occur on December 21. However, winter shadows, although longest, move the most quickly along their paths (because of the earth's tilt) and do not affect the growing season of outdoor trees and plants. According to the *CEQR Technical Manual*, trees, many plants, and many activities can require a minimum of four to six hours of sunlight, particularly between April and October. As discussed above, for all of the public open space resources analyzed, each would continue to receive a minimum of four hours of sunlight during the growing season. As such, the proposed action would not result in significant adverse shadow impacts on those open space resources. In addition, the proposed action would not have significant adverse impacts on the biotic communities in the Hudson River.

The analyses concluded that the proposed action would result in significant adverse shadow impacts on the Church of the Guardian Angel and the General Theological Seminary (located within the Chelsea Historic District). Incremental shadows would be cast on stained glass windows in both resources. As discussed in Chapter 22, "Mitigation," there are no practicable or feasible means to reduce these impacts. They would remain unmitigated.

As discussed above, the proposed action could potentially cast shadows on twenty historic resources, however, eighteen of these are not dependent on sunlight during the day to the extent that shadows would affect their significance. Therefore, while the proposed action could potentially cast shadows on these structures, such shadow effects would not significantly impact these historic resources.

Historic Resources

Architectural Resources

In order to assess the potential architectural impacts of the proposed action, a study area was defined by drawing a 400-foot radius around the proposed action area. This study area contains ~~32~~ 35

historic architectural resources and four additional resources which are located beyond the 400 foot study area were included because of their historic significance. This includes ~~17~~ 18 resources located within the proposed action area, none of which are listed on the S/NR or LPC designated, but which are eligible for S/NR listing or LPC designation. These include the High Line, which would be directly affected by the proposed action, and ~~eight~~ nine resources located on projected and potential development sites that also could be directly affected by the proposed action. Of the ~~19~~ 21 study area resources located outside the proposed action area, 11 are designated and ~~eight~~ 10 are eligible.

The proposed action would result in significant adverse impacts to eight historic resources, including the demolition of two eligible resources, the E.R. Merrill Spring Company Building (#9) and the Manufacturing Building (#8) from development on Potential Development Sites 38 and 30, respectively, and the conversion of one resource, the Otis Elevator Building (#5), to residential use (Projected Development Site 7). These significant adverse impacts would be unmitigated because development activity on these eligible resources would occur as-of-right.

Inadvertent construction-related damage could potentially occur to five eligible resources including: the Wolf Building and Annex (#13); the Cornell Ironworks (aka Standard Oil Building) (#14); the Reynolds Metal Building (#15); the B&O Terminal (#26); and the Nabisco Complex (Chelsea Market) (#32). These significant adverse impacts would be unmitigated because development activity on these eligible resources would occur as-of-right. With respect to construction-related impacts, the five resources would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites; however, since the resources are not S/NR-listed or NYCLPC-designated, they are not afforded special protections under DOB's *TPPN 10/88.* The resources would be provided a measure of protection from construction as Building Code section 27-166 (C26-112.4), which requires that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the requirements of Building Construction Subchapter 7 and Building Code Subchapters 11 and 19. Additional protective measures afforded under DOB 10/88, which apply to designated historic resources, would not be applicable in this case, unless the eligible resources are designated in the future prior to the initiation of construction. If they are not designated, however, they would not be subject to the above construction protection procedures, and may therefore be adversely impacted by adjacent development resulting from the proposed action.

Archaeological Resources

The proposed action would not result in significant adverse impacts on archaeological historic resources. As some of the projected and potential development sites would involve excavation or other types of in-ground disturbance on sites which may have not been previously excavated, LPC reviewed the sites to determine the potential for effects on archaeological resources. LPC determined that the impact area is not archaeologically sensitive and therefore the proposed action does not have the potential to result in significant adverse archaeological impacts and no further analysis is necessary.

Urban Design and Visual Resources

No significant adverse impacts on urban design would result from the proposed action. Rather, it is expected to result in positive changes to urban design conditions in the proposed action area and enhanced views to visual resources, with the most appreciable changes found in the bulk, use, and type of buildings and the streetscape elements in West Chelsea.

The many parking lots and auto-related uses in West Chelsea would be replaced with predominantly residential buildings with some commercial uses, allowing for development that would coincide with the westward expansion of the mixed residential and commercial community of Chelsea, address the City's need for housing, and accommodate the growing art gallery district.

Enhancement of the pedestrian and streetscape environment would result from the replacement of parking lots and other auto uses with new development and new ground floor retail uses with transparent storefronts along Tenth and Eleventh avenues. The bulk and type of new buildings, while significantly different from the many small scale auto buildings, would compliment other existing, dominant building types in West Chelsea, including high street wall loft buildings, walk-up apartment buildings, and the row houses of the Chelsea Historic District. New tower-on-a-base development would also be permitted along the southern, western and northern edges of the Special District. This built form would provide a transition to the existing high density buildings to the south, the higher density development envisioned for the Hudson Yards area to the north, and provide an appropriate edge to the Hudson River waterfront to the west.

The proposed action would also compliment the urban design of the secondary study area, with new residential development with ground floor retail that would occur along the south side of W. 30th Street enhancing and framing the new public open space, cultural facility and commercial development envisioned for the Eastern Rail Yards in the Hudson Yards area. The High Line open space would connect with the new open space on the Eastern Rail Yards, providing a continuous open space system that links Hudson Yards, West Chelsea, and the Gansevoort/Meat Market District. The High Line open space in the Gansevoort/Meat Market District would also provide a public amenity that compliments the area's vibrant retail activity. The bulk regulations would ensure that the new towers are slender, permitting light and air to reach the areas of lower density and bulk along West Chelsea's midblocks and Tenth Avenue.

New development would also compliment the High Line open space, through the allowance of retail activity on the second floor of some new development, required building setbacks to allow light and air to reach the open space while preserving views of Chelsea and Midtown, and the requirement of landscaped open space along the edge of the High Line for new Tenth avenue developments that would visually extend the open space.

The proposed action would not significantly block views to identified visual resources from publicly accessible locations. The proposed conversion of the High Line to public open space would create new, enhanced views of the Hudson River and Manhattan skyline. The High Line elevated rail line,

an existing historic and visual resource, would be significantly improved through its conversion into a unique public open space.

Neighborhood Character

The proposed action would result in a change in the character of West Chelsea, however, this beneficial change is not expected to result in a significant adverse impact.

A close examination of the future No-Action condition, compared to the analyses of conditions as projected in 2013 resulting from the proposed action, indicates that the action would result in an overall change in the character of the proposed action area with respect to land use, urban design and visual resources, and street-level pedestrian activity. While a number of significant adverse traffic impacts were identified, these impacts occur in locations that would already be congested in 2013 in the absence of the proposed action. It is expected that these transportation impacts would not significantly alter neighborhood character. The neighborhood character of the area would not be impacted by noise increases resulting from the proposed action. In addition, the proposed action would not affect historic resources so as to affect neighborhood character.

Overall, the proposed action would alter neighborhood character in beneficial ways, by creating opportunities for new housing development on underutilized and vacant land formerly used for manufacturing and auto-related uses. It would also facilitate the development of new buildings that respond to the existing built character of West Chelsea and the surrounding neighborhoods

In addition, the site selection and acquisition of the High Line would facilitate the development of a new open space for West Chelsea. The High Line is a defining characteristic of the West Chelsea neighborhood. Currently inaccessible to the public, with the proposed action. The High Line would transformed into an elevated, linear open space unique to the City. The Special District would also include floor area transfer mechanisms and bulk regulations that would preserve light, air and views along the length of the High Line, and regulations that would allow compatible uses.

The proposed action is expected to have many beneficial effects on neighborhood character and significant adverse impacts to overall neighborhood character are not expected.

Hazardous Materials

No significant adverse impacts related to hazardous materials are expected as a result of the proposed action.

Rezoning Area

In accordance with CEQR protocol, a preliminary screening was conducted to assess, based on the prior site use, whether there is a potential for exposure to residual contamination on projected and

potential development sites, as identified by New York City Department of City Planning (DCP). All 143 tax lots on the 53 projected and potential development sites were evaluated pursuant to preliminary screening criteria contained in Title 15, rules of the City of New York, Chapter 24, Section 4, and Hazardous Materials Appendix 5 of the *CEQR Technical Manual* Appendices.

The preliminary screening analysis determined that (E) designations are warranted at all of the lots located on the projected and potential development except those that contain existing residential buildings and that are not expected to be redeveloped under the proposed action. As part of the proposed zoning map amendment, these sites would be mapped with an (E) designation for hazardous materials, ensuring that sampling and remediation take place where contamination may exist.

The (E) designation would require that the fee owner of such a site conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the Department of Environmental Protection (NYCDEP) before the issuance of a building permit by the Department of Buildings (pursuant to Section 11-15 of the Zoning Resolution – Environmental Requirement). The (E) designation also includes a mandatory construction-related health and safety plan which must also be approved by NYCDEP. The (E) designation therefore eliminates the potential for significant adverse hazardous materials impacts. The mapping of (E) designations precludes the potential for significant adverse hazardous materials impacts as a result of the proposed action.

A list of the lots to receive (E) designations is provided in Table S-3.

Table S-3, Proposed Action Hazardous Materials (E) Designation Tax Lots
THIS TABLE HAS BEEN REVISED FOR THE FEIS

Site	Block & Lot #	Site	Block & Lot #	Site	Block & Lot #	Site	Block & Lot #
1	701; 1	14	692; 53, 57	27	701; 52, 55, 56, 58	40	696; 65
2	701; 30, 33, 36-37, 42, 43, 45	15	692; 28, 30	28	701; 16, 22, 23	41	696; 1
3	700; 1	16	691; 11	29	701; 24, 28	42	694; 33, 39, 40
4	699; 5	17	691; 43, 50	30	700; 53-57, 59-61	43	691; 15, 19, 22, 24
5	699; 22-27, 44	18	691; 25, 27, 29, 33, 35	31	700; 48, 49	44	690; 42, 46
6	699; 29, 33	19	690; 12, 20, 54	32	700; 42, 44, 45, 47	45	715; 50, 59
7	698; 1	20	690; 29	33	700; 9	46	694; 58, 60, 61, 65
8	698; 32, 35, 37, 40, 141	21	689; 17	34	700; 18	47	695; 1, 3, 4
9	697; 27, 31	22	715; 2, 3, 60, 63-65	35	700; 32, 34, 36	48	695; 7, 12, 57
10	696; 58	23	715; 5, 7	36	699; 1, 63	49	695; 44
11	696; 32, 33, 35, 37, 38	24	714; 1	37	699; 9	50	695; 47
12	693; 1, 64	25	714; 14, 16	38	699; 14, 49	51	695; 59
13	692; 7, 61, 63	26	701; 59, 62, 68, 70	39	697; 1	52	695; 67-70
						53	694; 47

High Line

A Phase I Environmental Site Assessment (ESA) (updated in 2004) of the elevated structure which comprises the High Line has been prepared. The properties located under the High Line elevated structure were not investigated as part of this update or as part of the original July 2000 Phase I ESA; however, the sites below the High Line in the vicinity of the four potential public access points proposed to be located on City-owned property or in the public right-of-way, were assessed in this FEIS.

The City will continue to coordinate with NYCDEP in the completion of any investigations and in the development of a remediation plan. The City, acting through EDC, has committed to submit a testing protocol to NYCDEP for review and approval during the design phase and to conduct remediation required by NYCDEP. No work on contaminated portions of the High Line structure would be allowed until it is certain that public health is not compromised. Since NYCDEP acceptance of the testing plan and remediation work is required, significant adverse impacts herewith related to the High Line, would not occur.

There would be up to 13 public access points to the High Line provided in the future with the proposed action. Nine of these would be provided through easements on private properties, specifically projected development sites. As these sites would receive (E) designations, the potential for significant adverse hazardous materials impacts would be precluded. Public access easements on these sites cannot be established and access structures constructed until the environmental assessment, and if required remediation, requirements of the (E) designations have been met. Most likely, this would be conducted by the property's fee owner; in the unlikely event the City proceeds with providing public access points at these locations the City has committed to completing Phase II analyses, testing protocols, subject to NYCDEP approval, and the implementation of any required remediation measures prior to construction of access points

For the four access points that would be provided by the City on City-owned properties, (E) designations would not be placed on these locations. However, a similar mechanism (to ensure that further investigative and/or remedial measures, as well as health and safety measures, occur prior to and/or during construction) is currently being developed with regards to both the elevated High Line structure and properties in the vicinity of the four potential access points. The assessment has determined that the potential for hazardous materials contamination does exist. ~~A Phase II ESA will be conducted for these sites and the results presented in the FEIS.~~ The City, acting through EDC, has committed to submit a testing protocol to NYCDEP for review and approval during the design phase and to conduct remediation required by NYCDEP.

Natural Resources

The proposed action would not result in significant adverse impacts to natural resources. The study area does not contain any significant natural resources as the projected and potential development sites and the future High Line open space are located in upland, urbanized areas already occupied

by buildings, structures and paved areas. The assessment of natural resources focuses predominately on the Hudson River, Hudson River Park and land between the river and the proposed action area, as this is the area where the proposed action has the potential to affect natural resources. Possible effects include changes to water quality through discharges of sewage during CSO events and effects on water quality and habitat from shadows; however, these effects would not result in significant adverse impacts to surface waters, EFHs or aquatic biota.

With the increased residential and commercial development, it is expected that the volume of sewage discharged to the combined sewer system would increase and therefore would have the potential to result in an increase in the concentration of sewage discharged to the Hudson River during CSO events.

An assessment of future water quality conditions in 2010 and 2025 was prepared for the *Hudson Yards FGEIS*, to assess the effects of future development in the North River WPCP drainage area, including Hudson Yards related development and West Chelsea development. That analysis concluded that with increased CSO events, CSO volumes, and CSO pollutant loadings, these changes would have no significant adverse impacts on water quality water quality conditions would continue to meet the standards and uses established, where applicable, for Class I waters. Therefore, it is reasonable to conclude that occasional CSO events in this portion of the Lower Hudson River, even if discharging a higher concentration of sewage than under current conditions, would not result in significant adverse impacts to water quality in the Hudson River.

With regard to effluent flows from the North River WPCP, the FGEIS concluded that no significant adverse impacts to water quality in the Hudson River would result in 2010 (and 2025). Projected dissolved oxygen concentrations were predicted to remain above NYSDEC Class I water quality standards. Total coliform was predicted to remain below NYSDEC Class I water quality standards, as were copper, lead and zinc concentrations. While the FGEIS acknowledged increases in concentrations for total nitrogen, total suspended solids and total phosphorus, the increases would be insignificant and would not result in significant adverse impacts to water quality or wildlife. Based on the nature and extent of the of the proposed action, as compared to Hudson Yards, it is reasonable to assume that the proposed action would, likewise, not result in significant adverse impacts to water quality or wildlife.

Waterfront Revitalization Program

The proposed action is intended to provide opportunities for new residential and commercial development and the enhancement and upgrade of the waterfront. The proposed action would foster new housing development on underutilized and vacant properties formerly used for manufacturing and other related uses where there is no longer a concentration of industrial activity and where strong demand for housing exists in Manhattan. The affected area is adjacent to existing residential neighborhoods in Chelsea and West Village and is served by public facilities and infrastructure. In addition, the proposed action would provide a unique new publicly accessible open space that adaptively reuses the High Line, a structure reflecting the industrial heritage of the area. The

proposed action would produce new waterfront development with a pedestrian-friendly streetscape, and a compelling skyline linked by an elevated public open space.

The proposed action and the Base FAR Scenario are consistent with the policies of NYC's Waterfront Revitalization Program. This determination is based on a review using the Consistency Assessment Form and a more detailed assessment of policies identified by the form as having the potential for impacts.

Infrastructure

The proposed action would not result in significant adverse impacts to the City's water supply, wastewater treatment, and stormwater management systems. For CEQR analysis purposes, the City's "infrastructure" comprises the physical systems supporting its population, including water supply, wastewater treatment, and stormwater management. Other infrastructure components, such as solid waste management, energy, and transportation, are addressed separately under CEQR and are assessed in separate chapters of this document.

Demand for water supply on the 25 projected development sites would experience a net increase of ~~1,462,777~~ 1,420,018 gpd (~~1.46~~ 1.42 mgd) as a result of the proposed action by 2013. This relatively small incremental demand is not large enough to significantly impact the ability of the City's water system to deliver water. As such, the proposed action would not result in significant adverse impacts on the City's water supply nor local water pressure. It also should be noted that independent of the proposed action the NYCDEP Trunk Plan is being updated as an overview of the rehabilitation required to the existing, aging trunk water main system in Manhattan (20 inches in diameter and larger) and known areas which would have an anticipated growth in population and employment (such as Hudson Yards and West Chelsea) are accounted for in this plan.

Sewage flows, resulting in increased demand on the North River WPCP would experience a net increase of ~~881,282~~ 858,882 (~~0.88~~ 0.86 mgd) as a result of the proposed action by 2013. The increase in sanitary sewage resulting from the proposed action is not anticipated to adversely impact the North River WPCP nor cause it to exceed its design capacity or SPDES permit flow limit. As such, the proposed action would not result in significant adverse impacts upon the City's sanitary sewage and wastewater management system.

There is not expected to be any significant increase in stormwater volumes in the future with the proposed action as compared to the volumes expected in the future without the proposed action, because the amount of impervious surfaces in the proposed action area would not change substantially. The projected development sites are generally occupied by buildings or pavement under existing, as they would under No-Action and With-Action conditions.

Additionally, when combined with No-Action developments (including the Hudson Yards development), action generated development from the proposed action would not result in significant

adverse cumulative impacts on the City's water supply, nor would it have a significant adverse impact on the wastewater treatment systems.

Solid Waste and Sanitation Services

The proposed action is not anticipated to result in significant adverse impacts to solid waste and sanitation services. Residential solid waste generation would increase by 141,648 pounds (70.8 tons) per week over No-Action conditions. This is equivalent to approximately 1 truck load per day (assuming a seven-day week), as the typical DSNY collection truck for residential refuse carries approximately 12.5 tons of waste material. As the area already is currently served by DOS residential trash and recycling pick-ups and the resulting increase could be accommodated at the future converted West 59th Street MTS, the proposed action would not affect the delivery of these services, or place a significant burden on the City's solid waste management system. Similarly, the Base FAR Scenario, which would generate a net increase of 91,634 pounds (45.8 tons) per week over No-Action conditions would not result in significant adverse solid waste and sanitation services impacts. Commercial and industrial solid waste generation would actually decrease by approximately 75,000 (net) pounds per week and would be serviced by private carters.

Energy

The proposed action is not anticipated to result in significant adverse energy impacts. Consumption of electrical energy on the projected development sites would experience a net increase of approximately ~~441.6~~ 448.7 billion BTUs in annual energy use compared to No-Action conditions. This annual incremental demand on an hourly basis would represent approximately 0.12 percent of the City's forecasted peak summer load of 12,396 MW in 2013, and an infinitesimal amount of the City's forecasted annual energy requirements for 2013. This relatively small incremental demand is not large enough to significantly impact the ability of the City's energy system to deliver electricity. Additional demand for natural gas for home heating and cooking is not expected to adversely affect the energy system. The Base FAR Scenario, which would result in less residential development and therefore less energy consumption, also would not result in significant adverse energy impacts.

Traffic and Parking

No unmitigated significant adverse impacts related to traffic and parking are expected as a result of the proposed action.

The proposed action would generate an estimated ~~370~~ 295, ~~916~~ 634, and ~~727~~ 533 net vehicle trips (in and out combined) in the weekday AM, midday, and PM peak hours, respectively. As the above travel demand forecast demonstrates, the proposed action would have its heaviest demand during the midday and PM peak hours, with a substantially lower increment in the AM peak hour. The

lower AM increment reflects the credit for displaced office and industrial uses, while the approximately ~~292,676~~ 195,215 sf of retail and 198,726 sf of community facility uses added to the study area contribute to the increase in the midday and PM peak hours.

This new demand would result in ~~10~~ 11 intersections with one or more significantly adversely impacted movements in the AM peak hour, 18 intersections in the midday peak hour, and ~~15~~ 16 intersections in the PM peak hour (refer to Table S-4). See "Mitigation" below for proposed mitigation measures.

The Base FAR Scenario would generate ~~198~~ 185 fewer vehicle trips in the AM peak hour, ~~154~~ 84 fewer vehicle trips in the midday and ~~218~~ 191 fewer vehicle trips in the PM. With fewer vehicle trips in each peak hour, the Base FAR Scenario would have a lesser traffic impact than the proposed action, especially in the AM peak hour when the Base FAR Scenario would have less than one-half the traffic increment of the proposed action. It is expected that the Base FAR Scenario would have ~~6~~ 5 impacted intersections in the AM (versus ~~10~~ 11 for the proposed action) and ~~13~~ 14 impacted intersections in the PM (versus ~~15~~ 16 for the proposed action). No changes in the number of impacted locations are expected in the midday peak hour.

Under With-Action conditions there would be a deficit of about ~~1,511~~ 1,529 spaces at midday and ~~506~~ 538 spaces overnight. During the weekday midday, there would be a 144 percent utilization rate, with 119 percent overnight. However, at a ~~119~~ 121 percent overnight utilizations rate, it is anticipated that it would become more economically viable for operators of facilities that are now closed during the overnight to remain open during this period. It is therefore reasonable to assume that some of the facilities now closed during the overnight would remain open during this period as demand increases, thereby reducing the future overnight utilization rate in the study area. With all public parking facilities remaining open overnight over the long-term, the utilization rate in that period would fall to ~~90~~ 91 percent. Although the proposed action would result in a shortfall in the supply of public parking in the vicinity of projected development sites, no significant adverse parking impacts were identified based on *CEQR* criteria.

Table S-4
Summary of Impacted Intersections
THIS TABLE HAS BEEN REVISED FOR THE FEIS

IMPACTED INTERSECTIONS	PEAK PERIOD AM	MD	PM
W. 30th Street (EB) @ 12th Avenue (N-S) (Route 9A)		X	X
W. 24th Street (E-W) @ 12th Avenue (N-S) (Route 9A)		X X	X
W. 34th Street (EB) @ 11th Avenue (SB)			X
W.26th Street (EB) @ 11th Avenue (SB)			X
W.23rd Street (E-W) @ 11th Avenue (N-S)	X		
W.20th Street (WB) @ 11th Avenue (N-S) (Route 9A)		X	X
W. 18th Street (EB) @ 11th Avenue (N-S) (Route 9A)		X	X
W. 17th Street (E-W) @ 11th Avenue (N-S) (Route 9A)	X	X X	X
W.16th Street (EB) 11th Avenue (N-S) (Route 9A)		X	X
W. 15th Street (E-W) @ 11th Avenue (N-S) (Route 9A)	X	X	X
W.14th Street (EB) 11th Avenue (N-S) (Route 9A)		X	

IMPACTED INTERSECTIONS	PEAK PERIOD AM	MD	PM
W.26th Street (EB) @ 10th Avenue (NB)	X	X	
W.25th Street (WB) @ 10th Avenue (NB)		X	X
W.23rd Street (E-W) @ 10th Avenue (NB)		X	X
W.14th Street (E-W) @ 10th Avenue (NB)			X
W.34th Street (EB) @ 9th Avenue (SB)	X	X	X
W.30th Street (EB) @ 9th Avenue (SB)	X		
W.26th Street (EB) @ 9th Avenue (SB)	X	X	
W.24th Street (EB) @ 9th Avenue (SB)	X	X	
W.23rd Street (E-W) @ 9th Avenue (SB)	X	X X	X
W.17th Street (WB) @ 9th Avenue (SB)	X	X	
W.14th Street (E-W) @ 9th Avenue (N-S)	X	X	X
W.23rd Street (E-W) @ 8th Avenue (NB)		X	
W.23rd Street (E-W) @ 8th Avenue (NB)			X

Transit and Pedestrians

No unmitigated significant adverse impacts related to transit and pedestrians are expected as a result of the proposed action.

The proposed action would generate a total net increment of 880, 1,387, and 1,384 ~~946, 672, and 1,611~~ persons trips by subway in the AM, midday, and PM peak hours, respectively. Net new person-trips by local bus would total 130, 641 and 449 ~~203, 690, and 714~~ in the AM, midday, and PM peak hours, respectively, while walk-only trips would total 1,551, 3,789 and 3,570, ~~1,811, 6,801, and 4,418,~~, respectively. The proposed action would result in no significant adverse subway impacts at any stairways or fare arrays. Significant adverse pedestrian impacts are also not expected to occur at sidewalks, corner areas and crosswalks along the principal pedestrian access corridors serving the proposed action area. However, in the 2013 future with the proposed action, the combined M16/M34 local bus route would be significantly adversely impacted in the ~~eastbound~~ westbound direction in the PM peak hour. As standard practice, NYC Transit monitors bus ridership and increases service where operationally warranted and fiscally feasible. As such, the capacity shortfall on the M16/M34 crosstown route would be addressed by NYC Transit, and no action-initiated mitigation is required for the proposed action.

The Base FAR Scenario, would generate fewer subway, bus and walk-only trips than the proposed action. Consequently, there would be no additional significant adverse impacts to analyzed subway and pedestrian facilities under the Base FAR Scenario. In addition, the proposed action's impacts to the combined M16/M34 local bus route in the ~~eastbound~~ westbound direction in the PM peak hour would not occur under this scenario.

Air Quality

The proposed action would not result in significant adverse air quality impacts associated with mobile or stationary sources.

Air quality analyses were conducted, following the procedures outlined in the *CEQR Technical Manual*, to determine whether the proposed action would result in violations of ambient air quality standards or health-related guideline values. These issues were also considered for the action's Base FAR Scenario, which would result in a lower number of action-induced developments and smaller buildings, which would have lower HVAC stack release heights.

Mobile Source Analysis

A microscale modeling analysis was conducted that estimated CO and $PM_{2.5}$ levels near the heavily congested intersections (i.e., analysis sites) in the study area that are anticipated to be affected by the proposed action.

The results of the this analysis is as follows:

* CO levels would not exceed the 8-hour standard at any of the analysis sites. The highest estimated 8-hour concentration (5.0 ppm) would occur near the intersection of Route 9A and W. 14th Street (Analysis Site #1) under the PM peak period.
* The NYCDEP CO de minimis values would not be exceeded at any analysis site, indicating that the proposed action does not have the potential to cause CO impacts that are considered to be significant.

In addition, in accordance with NYCDEP interim guidance procedures, a PM2.5 analysis was conducted. The intersection with the highest estimated projected traffic impacts (i.e., Route 9A and W. 18th Street was selected for this analysis. This analysis site was selected as the "worst-case" location to determine incremental PM2.5 24-hour and annual impacts because it contains the highest number of project-generated vehicles during any peak hour. The CAL3QHCR model was used with the same methodology described above. The result of this analysis is that the proposed action would not cause increases in concentrations above the 24-hour and annual $PM_{2.5}$ significant threshold values (STVs) at any of the analysis sites.

Parking Facilities Analysis

Pollutant concentrations could be affected near the new parking facilities that would be associated with the proposed action. To estimate the potential impacts from the emissions of these facilities, the largest proposed underground parking garage was selected for detailed analysis.

The maximum total 8-hour CO concentration (i.e., including background levels and street traffic contributions) estimated for any of the receptor sites are not estimated to cause or exacerbate the NAAQS of 9.0 ppm.

Analysis of Project-Generated Heating System Emissions

An analysis was conducted to determine whether any of the projected and potential development sites would have the potential to significantly impact air quality levels at any of the other nearby projected and potential development sites (i.e., project-on-project impacts).

The result of this analysis is that with (E) designations, the proposed action would cause no violations of the NAAQS, and would have no significant adverse environmental impacts on air quality.

To preclude the potential for significant adverse air quality impacts, an (E) Designation would be placed on the following projected and potential development sites with the specified requirements:

* Requires a minimum offset distance for the stack locations for either natural gas or No. 2 fuel oil, as specified in Table S-5 (columns two and three):
    * Block 701; Lot 1 (Site 1)
    * Block 699; Lot 5 (Site 4)
    * Block 699; Lots 22 through 27,44 (Site 5)
    * Block 698; Lot 1 (Site 7)

- * Block 696; Lot 58 (Site 10)
- * Block 692; Lot 57 (Site 14)
- * Block 691; Lots 43,50 (Site 17)
- * Block 690; Lot 29 (Site 20)
- * Block 715; Lots 1*,2,3,60,63,64,65 (Site 22)
- * Block 715; Lots 5,7 (Site 23)
- * Block 714; Lots 14,16 (Site 25)
- * Block 701; Lots 52,55,56,58 (Site 27)
- * Block 701; Lots 24,28 (Site 29)
- * Block 700; Lots 53,54,55,56,57,59,60,61 (Site 30)
- * Block 700; Lots 48,49 (Site 31)
- * Block 700; Lots 42,44,45,47 (Site 32)
- * Block 700; Lot 9 (Site 33)
- * Block 699; Lots 14,49 (Site 38)
- * Block 696; Lot 1 (Site 41)
- * Block 691; Lots 15,19,22,24 (Site 43)
- * Block 690; Lots 42,46 (Site 44)

* Requires the exclusive use of natural gas or a minimum offset distance for the stack locations, as specified in Table S-5 (column four):
  - * Block 701, Lots 30,33,35*,37,42,43,45 (Site 2)
  - * Block 697, Lots 27,31 (Site 9)
  - * Block 691, Lots 25,27,29,33,35,37 (Site 18)
  - * Block 690, Lots 12,20,54 (Site 19)
  - * Block 690, Lots 1, 63 (Site 36)

* These lots contain existing residential buildings, expected to remain under With-Action conditions. (E) designations for air quality would not be placed on properties indicated with an asterisk (*).

Cumulative Impacts from HVAC Sources

Four clusters were evaluated to determine the potential impact from the combined effects of the HVAC emissions from buildings on nearby proposed and potential development sites

The results of the analysis indicated that the potential air quality impacts of combined emissions from these HVAC clusters, using either No. 2 fuel oil or natural gas, would not be significant.

Table S-5, Results of HVAC Source Impact Analysis for Projected and Potential Sites Under the Reasonable Worst Case Development Scenario

HVAC Source Identification	CEQR Screening Results for No. 2 Fuel Oil	CEQR Screening Results for Natural Gas	ISC3 Modeling Results for No.2 Fuel Oil[1]	ISC3 Modeling Results for Natural Gas[1]
Site 1	73 feet [1]	49 feet [1]	N/A	N/A
Site 2	Fail [3]	Fail[3]	113 feet [4]	Pass
Site 3 [2]	---	---	---	---
Site 4	62 feet [1]	45 feet [1]	N/A	N/A
Site 5	83 feet [1]	56 feet [1]	N/A	N/A
Site 6	Pass	Pass	---	---
Site 7	82 feet [1]	56 feet [1]	N/A	N/A
Site 8	Pass	Pass	---	---
Site 9	Fail [3]	Pass	90 feet [4]	---
Site 10	48 feet [1]	34 feet [1]	N/A	N/A
Site 11 [2]	---	---	---	---
Site 12 [2]	---	---	---	---
Site 13	Pass	Pass	---	---
Site 14	40 feet [1]	25 feet [1]	N/A	N/A
Site 15	Pass	Pass	---	---
Site 16	Pass	Pass	---	---
Site 17	46 feet [1]	34 feet [1]	N/A	N/A
Site 18	Fail [3]	Pass	80feet [4]	---
Site 19	Fail [3]	Pass	80 feet [4]	---
Site 20	50 feet [1]	34 feet [1]	N/A	N/A
Site 21 [2]	---	---	---	---
Site 22	45 feet [1]	30 feet [1]	N/A	N/A
Site 23	18 feet [1]	13 feet [1]	N/A	N/A
Site 24	Pass	Pass	---	---
Site 25	24 feet [1]	14 feet [1]	N/A	N/A
Site 26 [2]	---	---	---	---
Site 27	64 feet [1]	45 feet [1]	N/A	N/A
Site 28 [2]	---	---	---	---
Site 29	40 feet [1]	25 feet [1]	N/A	N/A
Site 30	55 feet [1]	38 feet [1]	N/A	N/A
Site 31	46 feet [1]	30 feet [1]	N/A	N/A
Site 32	45 feet [1]	30 feet [1]	N/A	N/A
Site 33	57 feet [1]	41 feet [1]	N/A	N/A
Site 34	Pass	Pass	---	---
Site 35 [2]	---	---	---	---
Site 36	Fail [3]	Pass	79 feet [4]	---
Site 37 [2]	---	---	---	---
Site 38	76 feet [1]	50 feet [1]	N/A	N/A
Site 39	Pass	Pass	---	---
Site 40 [2]	---	---	---	---

TABLE 18-10, CONTINUED

HVAC Source Identification	CEQR Screening Results for No. 2 Fuel Oil	CEQR Screening Results for Natural Gas	ISC3 Modeling Results for No.2 Fuel Oil[1]	ISC3 Modeling Results for Natural Gas[1]
Site 41	29 feet [1]	17 feet [1]	N/A	N/A
Site 42 [2]	---	---	---	---
Site 43	45 feet [1]	39 feet [1]	N/A	N/A
Site 44	38 feet [1]	32 feet [1]	N/A	N/A
Site 45	Pass	Pass	---	---

Notes:

1 Some sites are immediately adjacent to each other and the analysis could not be further refined without additional design data; therefore the minimum distance for which the source would pass the CEQR screening procedures was provided for these sites using CEQR monographs. The following (E) designation would be placed on these development sites: Any new development on the property must locate the HVAC stack no closer to the edge of roof than the distance indicated.

2 Building is taller than nearby buildings; no analysis is required.

3 For sites that failed the CEQR screening procedures, a detailed ISC3 modeling analysis was performed.

4 The following (E) designation would be placed on these development sites: Any new development on the property must either locate the HVAC stack no closer to the edge of roof (on the highest tier) as indicated or use natural gas as the type of fuel for the HVAC systems.

* These lots contain existing residential buildings, expected to remain under With-Action conditions. (E) designations for air quality would not be placed on properties indicated with an asterisk (*).

Existing Sources of HVAC Emissions

An analysis was conducted to estimate the potential impacts of the proposed action on existing sources of HVAC emissions. The result of this analysis is that emissions from projected and potential development sites would not significant impact any of the existing developments.

Potentially Significant Existing Combustion Emission Sources

An examination of existing buildings located within 400 feet of any of the projected and potential development sites was made to identify potentially significant combustion sources in the study area. The result of this analysis is that emissions from existing large combustion sources would not significantly impact any of the projected and potential development sites. An additional examination determined that there was no large emission source (e.g., power plant, co-generation facility, etc) located within 1,000 feet of any of the proposed and potential development sites.

Quill Bus Depot

As part of the Hudson Yards Rezoning and Development Program, the Quill Bus Garage, currently located at 525 Eleventh Avenue would be relocated to between West 30th and West 31st Streets and Route 9A and Tenth Avenue. An analysis was conducted for that project that estimated the potential air quality analysis of the garage on nearby land uses, including the buildings associated with this rezoning action.

The results of the modeling analysis indicate that there could be exceedances of the NAAQS for SO_2 (24-hour standard) at two receptors in the proposed West Chelsea rezoning area from the relocated Quill Bus Depot's HVAC emissions. However, one or more of the following measures would be implemented by New York City Transit to avoid any exceedance:

* Operating the facility's HVAC systems with natural gas only (rather than as a dual-fuel natural gas-fuel oil system);
* Reducing the sulfur content of fuel oil used in the HVAC systems (e.g., a reduction of the fuel oil sulfur content from 0.2 percent to 0.05 percent would eliminate the estimated SO_2 NAAQS exceedance); or
* Modifying the HVAC system's operating cycles to reduce the quantity of fuel oil used; or some combination of these measures.

With these measures in place, there would be no exceedances of the NAAQS and, therefore, no significant adverse impact from the HVAC emissions of the relocated Quill Bus Depot.

Analysis of Air Toxics

An analysis was made of the potential impacts of existing toxic emission sources on the future residential development sites and well as sensitive land uses along the elevated high-line structure.

The result of the screening-level air toxic analysis is that no exceedance of an NYSDEC short-term guideline concentration (SGC) or an annual guideline concentration (AGC) acceptable limit was predicted, and that the total hazard index impact of the non-carcinogenic toxics pollutants emitted from all of sources combined is 1.2×10^{-2}, which is well below the level of 1.0 that is considered by EPA to be significant. In addition, no carcinogen pollutants were identified that may impact project-related sensitive analysis sites.

Noise

The proposed action would not result in significant adverse impacts related to noise.

Much of expected development generated by the proposed action is anticipated to be noise-sensitive residential land use, and would be established in areas that do not currently allow residential development on an as-of-right basis. An analysis was therefore prepared to evaluate the potential effect of the proposed action on noise levels at existing and potential future noise sensitive locations. Future noise sensitive locations include areas that may be redeveloped for residential and community facility uses.

The noise analysis addresses the change in noise levels as a result of the proposed action and the location of new sensitive receptors and the degree to which window/wall attenuation would provide acceptable interior noise levels.

In order to assess the potential noise impact, an evaluation that progressively analyzed the changes in noise due to increases in traffic from existing conditions, to future conditions without the proposed action, and to future conditions with the proposed action was undertaken.

Sensitive Receptor Assessment

The proposed action would introduce new sensitive receptors into an area with high existing ambient noise levels. The future noise levels at the majority of the proposed residential sites would exceed 70 dBA. They would be suitable for new residential uses only by providing window-wall attenuation ranging from 30 dBA to 40 dBA for the exterior facade of the affected residences in order to achieve a 45 dBA interior noise level. The closed window condition can be maintained only by providing an alternate means of ventilation for the interior spaces. With the recommended (E) designations for noise these sites would register an acceptable interior noise environment. Details of window insulation are the following:

> Sound attenuation of 30 dBA would be needed for sites where future noise levels would be between 70 and 75 dBA. This can be achieved through installing ¼ inch laminated single glazed window or double-glazed windows with 1/8 inch glass panes with ¼ inch air space between them mounted in a heavy frame.

Sound attenuation of 35 dBA would be required for sites where future noise levels would be between 75 and 80 dBA. This can be achieved through installing double glazed windows on a heavy frame in masonry structures or windows consisting of laminated glass.

Sound attenuation of 40 dBA would be required where future noise levels would be between 80 and 85 dBA. This mitigation requires the use of measures that typically exceed standard practice for new construction. Achieving the 40 dBA attenuation would require the placement of acoustically well-sealed ¼" laminated storm sash 1.5" to 3" from single glazed window on wood or metal frame.

To ensure an interior noise environment of 45 dBA or less, an (E) designation for noise will be placed on projected and potential development sites. For site location details including block and lot numbers see Table S-6 (Projected Development Sites) and S-7 (Potential Development Sites).

The text of the (E) designation would be as follows:

In order to ensure an acceptable interior noise environment, new residential/commercial development must provide a closed window condition with a minimum of 30, 35 or 40 dBA window/wall attenuation on all facades in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

The (E) designation would preclude the potential for significant adverse noise impacts.

Tax lots on the projected and potential development sites indicated with a triple asterisk (***) in Tables S-6 and S-7 are not expected to be redeveloped under the proposed action, as they contain existing residential buildings. Therefore, they would not be mapped with an (E) designation. These lots would transfer air rights to adjacent lots within the development site.

Traffic Noise Assessment

Based on a detailed analysis, significant adverse noise impacts are not predicted to occur.

Table S-6, Required Attenuation Values for Projected developmental sites (the representative monitoring site is shown next to the address)

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Site Number	Address	Block Number	Lot(s) Number	Build Max L_{10} (dBA)	Attenuation Required
1 **	306-310 Eleventh Ave (S1)	701	1	75.7	40 **
2 **	505 W 29 ST (S4)	701	33	79.5	40 **
	329 Tenth Ave (S4)	701	35***	79.5	40 **
	331 Tenth Ave (S4)	701	36	79.5	40 **
	333 Tenth Ave (S4)	701	37	79.5	40 **
	337 Tenth Ave (S4)	701	42	79.5	40 **
	502-504 W 30 ST (S4)	701	43	79.5	40 **
	506 W 30 ST (S4)	701	45	79.5	40 **
	509 W 29 ST (S4)	701	30	79.5	40 **
3 **	282-298 Eleventh Ave (S1)	700	1	75.7	40 **
	282-298 Eleventh Ave (S1)	700	1	75.7	40 **
4	547-559 W 27 ST (S2)	699	5	73.9	30
5	514-520 W 28 ST (S2)	699	44	73.9	30
6	503 W 27 ST (S4)	699	30***	79.5	35
	299 Tenth Ave (S4)	699	31***	79.5	35
	301 Tenth Ave (S4)	699	32***	79.5	35
	303-309 Tenth Ave (S4)	699	33	79.5	35
	311 Tenth Ave (S4)	699	37***	79.5	35
7	246-260 Eleventh Ave (S5)	698	1	76.2	35
8	279 Tenth Ave (S4)	698	32	79.5	35
	285 Tenth Ave (S4)	698	35	79.5	35
	289 Tenth Ave (S4)	698	37	79.5	35
	293 Tenth Ave (S4)	698	40	79.5	35
9	259 Tenth Ave (S4)	697	31	79.5	35
10	550 W 25 St (S2)	696	58	73.9	30
11	239 Tenth Ave (S4)	696	32	79.5	35
	245 Tenth Ave (S4)	696	33	79.5	35
	249 Tenth Ave (S4)	696	35	79.5	35
	253 Tenth Ave (S4)	696	37	79.5	35
	255 Tenth Ave (S4)	696	38	79.5	35
12	144-150 Eleventh Ave (S8)	693	1	82.7	40
	154-160 Eleventh Ave (S8)	693	64	82.7	40
13	130 Eleventh Ave (S8)	692	63	82.7	40
	550 W 21 ST (S8)	692	61	82.7	40
	550 W 21 ST (S8)	692	7	82.7	40
14	542 W 21 ST (S6)	692	57	73.3	30
	540 W 21 ST (S6)	692	53	73.3	30
15	169-183 Tenth Ave (S7)	692	30	75.4	35
	521-527 W 20 ST (S7)	692	28	75.4	35
16	100 Eleventh Ave (S8)	691	11	82.7	40
17	532-534 W 20 ST (S6)	691	50	73.3	30
	516-530 W 20 ST (S6)	691	43	73.3	30
18	153 Tenth Ave (S7)	691	29	75.4	35

Site Number	Address	Block Number	Lot(s) Number	Build Max L_{10} (dBA)	Attenuation Required
	161 Tenth Ave (S7)	691	33	75.4	35
	165 Tenth Ave (S7)	691	35	75.4	35
	510 W 19 ST (S7)	691	25	75.4	35
	505 W 19 ST (S7)	691	27	75.4	35
	504 W 20 ST (S7)	691	37	75.4	35
19	96 Eleventh Ave (S8)	690	12	82.7	40
	80-92 Eleventh Ave (S8)	690	54	82.7	40
	511-525 W 18 ST (S8)	690	20	82.7	40
	511-525 W 18 ST (S8)	690	20	82.7	40
20	131 Tenth Ave (S7)	690	29	75.4	35
	131 Tenth Ave (S7)	690	29	75.4	35
21	99-111 Tenth Ave (S8)	689	17	82.7	40
22	128 Tenth Ave (S7)	715	63	75.4	35
	124 Tenth Ave (S7)	715	64, 65	75.4	35
	118 Tenth Ave (S7)	715	3	75.4	35
	116 Tenth Ave (S7)	715	2	75.4	35
	118 Tenth Ave (S7)	715	1***	75.4	35
	456 W 18 ST (S7)	715	60	75.4	35
23	453 W 17 ST (S9)	715	5	74.9	30
	447 W 17 ST (S9)	715	7	74.9	30
24	112 Tenth Ave (S7)	714	63***	75.4	35
	96 Tenth Ave (S7)	714	1	75.4	35
25	437 W 16 ST (S9)	714	14	74.9	30
	437 W 16 ST (S9)	714	16	74.9	30

** The affect of additional trucks at the Morgan Annex was taken into consideration. Window / wall attenuation requirements were increased by 5 dBA along the assigned routes of Morgan Annex truck traffic.

*** These lots are not expected to be redeveloped under the proposed action, as they contain existing residential buildings.

Table S-7, Required Attenuation Values for potential developmental sites (the representative monitoring site is shown next to the address)
THIS TABLE HAS BEEN REVISED FOR THE FEIS

Site Number	Address	Block Number	Lot(s) Number	Build Max L_{10} (dBA)	Attenuation Required
26	314-316 Eleventh Ave (S1)	701	68	75.7	35
	312 Eleventh Ave (S1)	701	70	75.7	35
	534-538 W 30 ST (S1)	701	62	75.7	35
	532 W 30 ST (S1)	701	59	75.7	35
27 **	530 W 30 ST(S2)	701	58	73.9	35 **
	526-528 W 30 ST(S2)	701	56	73.9	35 **
	524 W 30 ST(S2)	701	55	73.9	35 **
	518-522 W 30 ST(S2)	701	52	73.9	35 **
28 **	529-539 W 29 ST(S2)	701	16	73.9	35 **
	527 W 29 ST(S2)	701	22	73.9	35 **
	525 W 29 ST(S2)	701	23	73.9	35 **
29 **	527 W 29 ST (S2)	701	24	73.9	35 **
	515 W 29 ST (S2)	701	28	73.9	35 **
30 **	550 W 29 ST (S2)	700	61	73.9	35 **
	548 W 29 ST (S2)	700	60	73.9	35 **
	546 W 29 ST (S2)	700	59	73.9	35 **
	542-544 W 29 ST (S2)	700	57	73.9	35 **
	540 W 29 ST (S2)	700	56	73.9	35 **
	538 W 29 ST (S2)	700	55	73.9	35 **
	536 W 29 ST (S2)	700	54	73.9	35 **
	534 W 29 ST (S2)	700	53	73.9	35 **
31 **	526-532 W 29 ST (S2)	700	49	73.9	35 **
	524 W 29 ST (S2)	700	48	73.9	35 **
32 **	522 W 29 ST (S2)	700	47	73.9	35 **
	518 W 29 ST (S2)	700	45	73.9	35 **
	516 W 29 ST (S2)	700	44	73.9	35 **
	512 W 29 ST (S2)	700	42	73.9	35 **
33	529-539 W 28 ST (S2)	700	9	73.9	30
34	517-527 W 28 ST (S2)	700	18	73.9	30
35 **	313 Tenth Ave (S4)	700	29***	79.5	40 **
	315 Tenth Ave (S4)	700	30***	79.5	40 **
	317 Tenth Ave (S4)	700	31***	79.5	40 **
	319-321 Tenth Ave (S4)	700	32	79.5	40 **
	323 Tenth Ave (S4)	700	34	79.5	40 **
	327 Tenth Ave (S4)	700	36	79.5	40 **
36	262-280 Eleventh Ave (S1)	699	1	75.7	35
	554 W 28 ST (S1)	699	63	75.7	35
	526-590 W 28 ST (S1)	699	49	75.7	35
37	537 W 27 ST (S2)	699	9	73.9	30
38	535-538 W 27ST (S2)	699	14	73.9	30
	526-590 W 28 ST (S2)	699	49	73.9	30
39	220-240 Eleventh Ave (S5)	697	1	76.2	35
40	210-216 Eleventh Ave (S4)	696	65	79.5	35

Site Number	Address	Block Number	Lot(s) Number	Build Max L_{10} (dBA)	Attenuation Required
41	202-208 Eleventh Ave (S5)	696	1	76.2	35
42	505 W 22 ST (S4)	694	30***	79.5	35
	203 Tenth Avenue (S4)	694	31***	79.5	35
	205 Tenth Avenue (S4)	694	32***	79.5	35
	207 Tenth Avenue (S4)	694	33	79.5	35
	500 W 23 ST (S4)	694	39	79.5	35
	512 W 23 ST (S4)	694	40	79.5	35
43	527-533 W 19 ST (S6)	691	15	73.3	30
	521-525 W 19 ST (S6)	691	19	73.3	30
	517-519 W 19 ST (S6)	691	22	73.3	30
	515 W 19 ST (S6)	691	24	73.3	30
44	524 W 19 ST (S6)	690	46	73.3	30
	516-522 W 19 ST (S6)	690	42	73.3	30
45	442 W 18 ST (S9)	715	59	74.9	30
	436 W 18 ST (S9)	715	50	74.9	30
46*	536 W 23 ST	694	58	77.5	35
	548 W 23 ST	694	60	77.5	35
	522 W 23 ST	694	61	77.5	35
	170 Eleventh Ave	694	65	77.5	35
47*	182 Eleventh Ave	695	1	77.5	35
	186 Eleventh Ave	695	3	77.5	35
	188 Eleventh Ave	695	4	77.5	35
48*	549 W 23 ST	695	7	77.5	35
	543 W 23 ST	695	12	77.5	35
	536 W 24 ST	695	57	77.5	35
49*	508 W 24 ST	695	44	77.5	35
50*	514 W 24 ST	695	47	77.5	35
51*	540 W 24 ST	695	59	77.5	35
52*	200 Eleventh Ave	695	67	77.5	35
	198 Eleventh Ave	695	68	77.5	35
	196 Eleventh Ave	695	69	77.5	35
	194 Eleventh Ave	695	70	77.5	35
53*	524 W 23 ST	694	47	77.5	35

* Mixed-use development on Potential Development Sites 46 through 53 requires 35 dBA window-wall attenuation, as per the EAS for the *Chelsea Rezoning (CEQR No. 99DCP030M)*. In order to ensure that the 35 dBA noise attenuation is provided once the mixed—use zoning district is eliminated, the Max L10 (77.5 dBA) recorded in the above referenced EAS is used for these potential development sites.

** The affect of additional trucks at the Morgan Annex was taken into consideration. Window / wall attenuation requirements were increased by 5 dBA along the assigned routes of Morgan Annex truck traffic.

*** These lots are not expected to be redeveloped under the proposed action, as they contain existing residential buildings.

Construction

Construction-related activities resulting from the proposed action are not expected to have any significant adverse impacts on natural resources, traffic, air quality, noise, or hazardous materials conditions. Inadvertent construction-related damage could potentially occur to three eligible resources. These significant adverse impacts would be unmitigated because development activity on these eligible resources would occur as-of-right. With respect to construction-related impacts, the three resources would be afforded limited protection under NYC Department of Buildings (DOB) regulations applicable to all buildings located adjacent to construction sites; however, since the resources are not S/NR-listed or NYLPC-designated, they are not afforded special protections under DOB's *TPPN 10/88*. The resources would be provided a measure of protection from construction as Building Code section 27-166 (C26-112.4), which requires that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the requirements of Building Construction Subchapter 7 (Article) and Building Code Subchapters 11 and 19 (Article). Additional protective measures afforded under DOB 10/88, which apply to designated historic resources would not be applicable in this case, unless the eligible resources are designated in the future prior to the initiation of construction. If they are not designated however, they would not be subject to the above construction protection procedures, and may therefore be adversely impacted by adjacent development resulting from the proposed action.

The construction process in New York City is highly regulated to ensure that construction period impacts are eliminated or minimized. The construction process requires consultation and coordination with a number of City and/or State agencies, including NYCDOT, DOB, NYCDEP, and NYCEDC (where applicable), among others.

Public Health

Based on a preliminary screening analysis in accordance with the *CEQR Technical Manual* guidelines, it was determined that a full assessment of the proposed action's potential impacts on public health is not necessary and that no significant adverse impacts are expected as a result of the proposed action.

G. MITIGATION

Community Facilities

<u>Elementary and Intermediate Schools</u>

The proposed action would result in a significant adverse impact on elementary schools in Region 3 of Community School District 2 (CSD 2), and in CSD 2 as a whole. These impacts would also occur under the Base FAR Scenario, although the magnitude of the impacts would be less.

The *No. 7 Subway Extension - Hudson Yards Rezoning and Development Program Final Generic Environmental Impact Statement (FGEIS)* (CEQR No. 03DCP031M) November 2004 discussed the mitigation required for the cumulative school impacts of the West Chelsea and Hudson Yards development programs. As indicated in the Hudson Yards FGEIS, if the proposed action or the Base FAR Scenario (West Chelsea rezoning) is adopted, a new K-8 elementary/intermediate school would be required by 2013 in addition to a school enlargement (by 2010) and an additional school (by 2025) required as a result of the Hudson Yards rezoning itself. NYC Department Education (DOE) would continue to monitor trends in demand for school seats in the area. DOE responses to identified demand could take place in stages and include administrative actions and/or enlargement of existing schools, followed by the later construction or lease of new school facilities at an appropriate time.

The proposed March 2005 amendment to DOE's 2005-2009 Five Year Capital Plan provides funding for two capacity projects in Region 3 of CSD 2 to accommodate the forecasted additional students in the proposed Hudson Yards redevelopment area. In addition to the 110-seat addition for PS 51, a 630-seat PS/IS, for a site near West 37th Street and Tenth Avenue, has been funded in anticipation of the adoption of the West Chelsea rezoning plan. Design work will be funded in the 2005-2009 Five Year Capital Plan; construction of these projects will be funded in the next capital plan (2010-2014 Capital Plan).

~~To eliminate or alleviate this significant adverse impact, the following mitigation measures could be applied:~~

~~* DOE administrative actions such as adjusting school catchment areas (attendance zones) and/or reorganizing grade levels within schools; and/or~~
~~* Creating additional capacity in Region 3 of CSD 2 by constructing a new school, building additional capacity at existing schools, or leasing additional school space.~~

~~These preliminary mitigation options will be further explored between the FEIS and FEIS, and could include consideration of DOE's Five-Year Capital Plan, the primary vehicle for capital planning and funding of new school facilities. In general, the proposed action would allow for the development of community facility space, including new school facilities, within the proposed action area. It should also be noted that any new school facility would be subject to its own separate environmental review.~~

Day Care Centers (Publicly Funded)

The proposed action would result in significant adverse impacts on publicly funded day care. The Base FAR Scenario would also result in a significant adverse impact to publicly funded day care service.

Mitigation for this impact could include adding capacity to existing facilities or providing a new day care facility in or near the proposed action area. At this point, however, it is not possible to know exactly what type of mitigation would be most appropriate and when, because the demand for publicly funded day care depends not only on the amount of residential development in the area, but the proportion of new low-income families eligible for public day care. Therefore, the NYC Administration for Children's Services will monitor development of the proposed action area and respond as appropriate to provide the capacity needed.

~~To eliminate or alleviate this significant adverse impact, the following mitigation measures could be applied:~~

~~* The demand for day care could be partially mitigated by the increasing availability of family day care alternatives and vouchers for private group day care; and~~
~~* Mitigation for this impact could include providing a new day care facility or adding capacity to existing facilities in or near the proposed action area.~~

~~These preliminary mitigation options will be further explored between the FEIS and FEIS.~~

Traffic and Parking

The proposed action would result in significant adverse impacts on 24 different intersections in one or more peak hours over the 2004-2013 period. Of these, 8 intersections were on Route 9A, with 16 intersections spread out in the study area grid. To address this level of new traffic demand, only very modest mitigation measures would be required, consisting entirely of parking regulation changes on cross-streets plus timing or phasing adjustments to study area signals over the next 10 years, gradually increasing the green time allocated to the cross-streets without adversely affecting the avenues. These are essentially traffic management measures, which would be implemented by NYCDOT over time. With these measures in place by 2013, all project traffic significant adverse impacts would be mitigated.

Transit and Pedestrians

The analysis of local bus conditions in the future with the proposed action shows that demand from the proposed action would result in a significant adverse impact on ~~eastbound~~ westbound combined M16/M34 service in the PM peak hour. In the PM peak hour ~~eastbound~~ westbound M16/M34 service would experience a capacity shortfall of ~~2~~ 10 spaces at the maximum peak load point at 34th Street and Fifth Avenue. This compares to a surplus of ~~14~~ 48 spaces in the future without the proposed action (assuming service adjustments to address an anticipated shortfall of 17 spaces).

According to current NYC Transit guidelines, increases in bus load levels to above their maximum capacity at any load point is considered a significant adverse impact as it would necessitate the addition of more bus service along that route. New York City Transit as standard practice routinely

conducts periodic ridership counts and adjusts bus service frequency to meet its service criteria, within fiscal and operating constraints. As such, no action-initiated mitigation is required for the proposed action.

Given the level of new demand generated by the proposed action, one additional ~~eastbound~~ westbound bus per hour during the PM peak hour provided by NYC Transit would be required to mitigate the significant adverse impact to ~~eastbound~~ westbound combined M16/M34 service.

While the proposed action would result in a significant adverse impact, under the Base FAR Scenario, loading on this route would remain below capacity, with ~~four~~ three spaces available ~~eastbound~~ westbound in the PM. The proposed action's significant adverse impact to the combined M16/M34 route in the ~~eastbound~~ westbound direction in the PM peak hour would therefore not occur under the Base FAR Scenario.

H. ALTERNATIVES

This EIS considers six alternatives to the proposed action, to examine reasonable and practicable options that avoid or reduce action-related significant adverse impacts and may still allow for the achievement of the stated goals and objectives of the proposed action. The environmental effects of the alternatives are compared in Table S-8 and discussed below.

No-Action Alternative

The No-Action Alternative assumes that the proposed zoning changes and creation of the High Line publicly accessible open space would not be implemented. Action-generated impacts would not occur under the No-Action Alternative. However, the benefits expected from the proposed action on land use, socioeconomic conditions, urban design, and neighborhood character would not be realized under this alternative. In addition, the No-Action Alternative would fall far short of the objectives of the proposed action in encouraging and guiding the development of West Chelsea as a dynamic mixed use neighborhood anchored by a unique, new open space on the High Line.

No Impacts Alternative

To avoid the potential significant adverse impacts associated with the proposed action and Base FAR Scenario, this alternative would require a reduction in the number of net new dwelling units projected in the West Chelsea proposed action area by approximately 95 percent overall. In addition, the number of affordable housing units would require a reduction in the number of net new dwelling units by approximately 87 percent. Such an alternative would result in a total of 257 total dwelling units on the projected development sites, as compared to the 4,809 units with the proposed action. This alternative would limit development to a net increase of approximately 251 units over No-Action conditions, 4,457 less units than the proposed action's 4,708 unit net increase in

development. As for affordable housing units, under the No Impact Alternative the net number of new affordable housing units would increase by 87 over No-Action conditions, as compared to 657 units under the proposed action.

As this No Impact Alternative would result in much less residential development, it is expected that non-residential changes in development also would be proportionally less. With the limited amount of residential development, far fewer sites would be developed and therefore the amount of ground floor retail also would be less. In addition, the amount of uses to be removed by new uses would be less. Accordingly, for analysis purposes, it is expected that, like residential, other changes (increases and decreases) will also change by 95 percent less under the No Impacts Alternative as compared to the proposed action. The resulting non-residential net incremental development would be as follows: increases of 14,634 sf of retail and 9,936 sf of community facility; decreases of 40,842 sf of office, 6,555 sf of hotel, 2,040 sf of storage/manufacturing, 15,942 sf of parking/auto, and 1,253 sf of vacant space.

However, a rezoning involving such a limited amount of new development for the proposed action area is not considered feasible given the number of projected development sites in the area. Even with lower density zoning permitting residential uses, it is likely that projected development would result in significant adverse impacts. In addition, such an alternative would not address the goals of the proposed action. Therefore, for analysis purposes a No Impacts Alternative is not feasible and is not analyzed in the EIS. The only feasible alternative that would avoid all significant impacts would be the No-Action Alternative described above.

Lesser Density Alternative

With the implementation of the Lesser Density Alternative, development would occur on the same projected development sites as the proposed action, but with lower bulk than permitted under the proposed action. This alternative would also involve the same potential development sites as the proposed action. The Lesser Density Alternative would result in a total of 3,413 dwelling units compared to 4,809 units with the proposed action. Compared to the future without the proposed action, the Lesser Density Alternative would result in a net incremental increase of 3,312 units, compared to 4,708 units with the proposed action (refer to Table S-9). This represents an approximately 30 percent reduction in incremental dwelling units. This alternative would result in net increases of 2,860 market rate units and 452 affordable housing units, compared to 4,051 and 657, respectively. The Lesser Density Alternative is expected to result in the same amount of incremental non-residential development as the proposed action. This would include net increases of retail and community facility space, and net decreases of office, hotel, storage/manufacturing, parking/auto, and vacant space (refer to Table S-9).

Table S-8, Summary of Environmental Effects of Analyzed Alternatives

Projected Impacts by Technical Area	Proposed Action	Base FAR Scenario	ALTERNATIVES				
			No-Action	No Impact	Lesser Density	Revised Community Board 4	Revised Affordable Housing (Alt. F)
Land Use, Zoning, and Public Policy				N/A			
Socioeconomic Conditions				This			
Community Facilities and Services				alternative			
Schools (elementary in R-3 & CSD 2/ intermediate in CSD 2)	X	X		not feasible	X	X	X
Day Care	X	X			X	X	X
Open Space		X					
Shadows	X	X			X	X	X
Historic Resources	X	X			X	X	X
Urban Design/Visual Resources							
Neighborhood Character							
Hazardous Materials							
Natural Resources							
Infrastructure/ Solid Waste/ Energy							
Traffic and Parking	X 11 intersections AM 18 intersections MD 16 intersections PM	X 5 intersections AM 18 intersections MD 14 intersections PM			X 8 intersections AM 18 intersections MD 15 intersections PM	X 10 intersections AM 18 intersections MD 15 intersections PM	X 13 intersections AM 18 intersections MD 16 intersections PM
Transit & Pedestrians (bus)	X					X	X
Air Quality							
Noise							
Construction							
Public Health							

Overall, the Lesser Density Alternative with an approximately 30 percent reduction in the total number of dwelling units would have similar, but proportionally smaller magnitude of effects on the environmental areas analyzed, compared to the proposed action. The lower development density projected under this alternative would avoid a significant adverse bus impact in the study area as a whole, but would not eliminate the significant adverse impacts identified for the proposed action in the areas of community facilities and services, shadows, historic resources, and traffic. The Lesser Density Alternative would meet, albeit to a lesser extent, the objectives of the proposed action in encouraging and guiding the development of West Chelsea as a dynamic mixed use neighborhood anchored by a unique, new open space on the High Line.

The Lesser Density Alternative without the High Line open space would have effects similar to those of the Base FAR Scenario. It would avoid a significant adverse bus impact created by the proposed action, but would not eliminate significant adverse impacts identified for the proposed action in the areas of community facilities and services, shadows, historic resources, and traffic. In addition, it would not eliminate the significant adverse open space impacts identified for the Base FAR Scenario.

Revised Community Board 4 Alternative

The DEIS included an assessment of the Community Board 4 Alternative (CB4 Alternative). Since the issuance of the DEIS, Community Board 4 made refinements to its alternative zoning proposal for West Chelsea. The Revised CB4 Alternative evaluates the modified alternative and replaces the CB4 Alternative analyzed in the DEIS.

This alternative is proposed by Manhattan Community Board 4. The boundaries of this alternative, which would constitute the Special West Chelsea District, are larger than those of the proposed action. However, the additional blocks in an expanded special district would retain their underlying manufacturing zoning and do not contain any projected or potential development sites. In addition, this alternative proposes a slightly smaller area to be rezoned from underlying manufacturing districts to commercial districts, with the midblock area along the south side of W. 20th Street to retain its existing M1-5 zoning, as compared to the proposed action in which that area would be rezoned to C6-2. The intent of retaining additional areas of the M1-5 zoning district is to protect existing galleries and art-related uses from pressure for displacement by competing uses.

Table S-9, Summary of Development Under Each Alternative

	Net Increment (compared to No-Action)								
SCENARIO/ ALTERNATIVE (1)	**Total DUs**	**Low-Mod DUs**	**Retail sf**	**Community Facility sf**	**Office sf**	**Hotel sf**	**Stor./ Mfg. sf**	**Parking/ Auto sf**	**Vacant sf**
Proposed Action	4,708	657	195,215	198,726	-796,947	-131,100	-74,818	-225,940	-4,080
Base FAR Scenario	3,041	415	195,215	198,726	-796,947	-131,100	-74,818	-225,940	-4,080
No-Action	0	0	0	0	0	0	0	0	0
No Impacts (2)	251	87	14,634	9,936	-40,842	-6,555	-2,040	-15,942	-1,253
Lesser Density (3)	3,312	452	195,215	198,726	-796,947	-131,100	-74,818	-225,940	-4,080
Revised Community Board 4	4,363	1,309	177,790	198,726	-792,347	-131,100	-62,598	-176,273	-4,080
Revised Affordable Housing (4)	5,329	768	229,976	198,726	-812,394	-131,100	-136,802	-228,409	-4,080

(1) Revised Affordable Housing Alternative RWCDS includes ~~27~~ 28 projected development sites and ~~28~~ 25 potential development sites. The Revised Community Board 4 Alternative contains the same 25projected and 28 potential development sites, except that there would be no development on Projected Development Site 17. The Lesser Density Alternative RWCDS includes the same 25 projected development sites as the proposed action.

(2) As discussed in Section C below, this alternative does not address the goals of the proposed action ~~is not considered feasible and therefore is not analyzed in detail~~.

(3) Net incremental development would be the same irrespective of the creation of the proposed High Line open space.

(4) In the event the City does not receive a CITU to allow the conversion of the High Line into a publicly accessible open space, the amount of residential development under the Revised Affordable Housing Alternative would be the same as under the Base FAR Scenario.

* The Revised Affordable Housing Alternative also anticipates approximately ~~440~~ 88 affordable housing units would be preserved

For analysis purposes, DCP identified a RWCDS for this alternative. With the different zoning designations discussed above, the Revised Community Board 4 Alternative would result in a total of 4,464 dwelling units, compared to 4,809 units with the proposed action. The Revised Community Board 4 Alternative would result in a net incremental increase of 4,363 units over the No-Action condition, compared to 4,708 units with the proposed action (refer to Table S-9 above). This represents an approximately 7.3 percent reduction in incremental dwelling units. This alternative would result in net increases of 3,054 market rate units and 1,309 affordable housing units, compared to 4,051 and 657, respectively, for the proposed action. Refer to Appendix G, for the RWCDS table for this alternative. The Revised CB4 Alternative would generate 8,281 residents, as compared to 8,287 residents generated by the proposed action.

The Revised Community Board 4 Alternative RWCDS indicates that this alternative would result in some differences in non-residential development as compared to the proposed action for retail, office, and parking/auto uses. Specifically, it would have a net increase of 177,790 sf of retail (compared to 195,215 sf) and net decreases of 792,347 sf of office (compared to 796,947 sf), 62,598 sf of storage/manufacturing (compared to 74,818 sf), and 176,273 sf parking/auto (compared to 225,940 sf). This alternative would have the same amount of incremental development as the proposed action for community facility, hotel, and vacant space uses (refer to Table S-9).

It should be noted that Projected Development Site 17, which would be zoned C6-2 under the proposed action and is expected to have net development consisting of 122 DUs, 18,630 sf of retail, -4,600 sf of office, -61,184 sf of parking/auto use under the proposed action, would retain its existing M1-5 zoning and experience no new development under the Revised Community Board 4 Alternative.

Overall, the Community Board 4 Alternative with an approximately7.3 percent reduction in the incremental number of dwelling units would have similar, but proportionally smaller magnitude of effects on the environmental areas analyzed, compared to the proposed action. The lower development density projected under this alternative would not eliminate the significant adverse impacts identified for the proposed action in the areas of community facilities and services, shadows, historic resources, bus transit, and traffic. The Community Board 4 Alternative would meet, albeit to a lesser extent, the objectives of the proposed action in encouraging and guiding the development of West Chelsea as a dynamic mixed use neighborhood anchored by a unique, new open space on the High Line. Refer to Table S-8.

The Community Board 4 Alternative without the High Line open space would have effects similar to those of the Base FAR Scenario. It would not eliminate significant adverse impacts identified for the proposed action in the areas of community facilities and services, shadows, historic resources, bus transit, and traffic. In addition, it is expected to eliminate the significant adverse open space impacts identified for the Base FAR Scenario, unless the High Line open space is not provided.

Revised Affordable Housing Alternative (Alternative F)

The Affordable Housing Alternative (Alternative F) is a proposal by the Department of City Planning (DCP) that is intended to address comments received during the public review process. The proposal is intended to assess whether an alternative zoning plan for West Chelsea would result in fewer adverse impacts than the proposed action, while still meeting the goals and objectives of the proposed action. This alternative is reflected in ULURP Application Nos. N 050161(A) ZRM and C050162(A) ZMM) (see Appendix A.1.b, "Revised Zoning Map and Text Amendments").

In the DEIS, the Affordable Housing Alternative, also identified as Alternative F, was identical to the proposed action with the exception of an Inclusionary Housing Bonus (IHB). The version of Alternative F analyzed in this FEIS is entirely new, and was derived in large part from comments received during the public review process. Specifically, Alternative F reflects changes made in regard to bulk, density and affordable housing. The analysis presented below evaluates the modified application and replaces the Affordable Housing Alternative analyzed in the DEIS.

Under the proposed action, floor area could be increased from the base to the maximum FAR through the transfer of floor area from the High Line Transfer Corridor (HLTC). The floor area increase would apply to most of the areas rezoned to C6-2, C6-3, and C6-4 (between W. 29th and W. 30th Streets) districts. In Subarea A, floor area could be further increased from 10 to 12 FAR through use of the IHB. Under Alternative F, additional affordable housing could be provided by allowing some of the increment between the base and the maximum FAR in the C6 districts to be obtained in exchange for providing affordable housing.

The reasonable worst-case development scenario for Alternative F represents a net increase of 5,329 DUs, 229,976 sf of retail, 198,726 sf of community facility, and net decreases of 812,394 sf of office, 131,100 sf of hotel, 136,802 sf of storage/manufacturing, 228,409 sf of parking/auto use, and 4,080 sf of vacant space. Under With-Action conditions, this alternative contains 5,430 DUs, 617,389 sf of retail, 227,564 sf of community facility, 164,800 sf of office, and 84,250 sf of parking/auto. This alternative also includes the creation of the 5.9-acre High Line publicly accessible open space, which would remain unused under No-Action conditions.

Of the 5,329 DUs generated under Alternative F, the use of 80/20 financing and changes to the Inclusionary Housing Bonus (IHB) described above would generate between 855 and 1005 affordable DUs. Approximately 606 DUs would be generated through 80/20 financing, with the remainder of the units generated by the IHB. Together, 80/20 financing and use of the IHB are expected to create approximately 768 new units of affordable housing.

While Alternative F contains 53 projected and potential development sites (similar to the proposed action), the reasonable worst-case development scenario does reflect certain changes to the mix of projected and potential development sites, as well as changes to the composition of several development sites.

The reasonable worst-case development scenario for this alternative is provided in Appendix G. Table S-9 summarizes the overall development program for the 28 projected development sites identified under Alternative F, and compares it to the RWCDS for the proposed action analyzed in this FEIS.

As indicated in Table S-9, this alternative would result in greater net residential and retail development, including affordable units, than would be generated under the proposed action. This alternative would have larger credits for removal of office, storage/manufacturing, and parking/auto uses, as compared to the proposed action. This alternative would result in the same net change in community facility, hotel, and vacant space. Finally, the High Line open space would be the same under this alternative and the proposed action.

Alternative F would result in similar effects with respect to site specific effects such as historic resources and hazardous materials as under the proposed action. The significant adverse impacts associated with the proposed action related to historic resources and shadows would also occur under Alternative F. As with the proposed action, these impacts for the alternative would be unmitigable. For density-related impacts, the effects of Alternative F have the potential to be greater in magnitude as this alternative would result in more dwelling units and therefore more residents than the proposed action. As a result, Alternative F is expected to result in greater impacts on public elementary and intermediate school and public day care than would the proposed action. Refer to Table S-8. The mitigation measures identified for these impacts for the proposed action would also be applicable to this alternative; however, a greater magnitude of mitigation would be required to fully address these impacts. This alternative would also exacerbate traffic and bus transit impacts identified for the proposed action. The traffic mitigation measures identified for the proposed action would also mitigate the impacts associated with Alternative F.

Affordable Housing Requirement Alternative

During the public scoping process for the FEIS, NYS Assembly Member Richard Gottfried proposed that low- to moderate-income units be set aside in new development within the Special District. This alternative includes an affordability requirement: a "certain percentage" of units would be set aside for households with incomes equal to or less than 150 percent of area median income.

The amount of affordable housing required would vary depending on the income level, using an income mix sliding scale. Other elements of this alternative would include: the amount of affordable housing required would vary based on on-site or off-site units, rehabilitation, new construction or preservation; total rent, or mortgage payments plus maintenance charges, could not exceed 30 percent of the household's income; if possible, the affordable units would last in perpetuity or, if necessary, for 25 years, matching the term of the State's 421-a tax incentive

Under the proposed alternative, there would be no bonus for the requirement to provide affordable

housing, and no option for a payment in lieu of provision of affordable units.

Although the Affordable Housing Requirement Alternative would result in redevelopment within the proposed action area, it would add substantial uncompensated costs to developments. While combining the affordable housing with public subsidy would be allowed, existing subsidies are not guaranteed. As a consequence, new housing development could fall short of projections, and the established goals and objectives of the proposed action would fall short of being realized.

Because the Affordable Housing Requirement (AHR) Alternative would not fully meet the Purpose and Need of the proposed action, it has not been carried forward for detailed analysis. The AHR Alternative contemplates restrictions on housing development that would tend to decrease the amount of housing developed within the proposed action area. It would impose an unprecedented mix of obligations on new housing development—combining mandatory obligations to provide affordable units, and broad application of the obligations to large, medium and small-sized developments. While developers would be authorized to utilize subsidies in order to satisfy these requirements, the availability of these subsidies is not assured. Therefore, development under the AHR Alternative would be dependent on the willingness of private developers to accept the responsibility of constructing and maintaining the affordable units without compensation or programmatic assistance for the perpetual life of the obligation. A development would need to continue to generate sufficient returns to subsidize affordable units while earning a fair return on investment, through varying market conditions. The end result of this alternative could therefore be to discourage investment in new housing by creating significant economic risks for new housing development that would not exist in other areas. This discouragement of investment would be in opposition to the goals of the proposed action. In addition, in instances where developers do elect to build under these requirements, but do not properly take the financial risks into account, there would be a possibility that the City would have to step in at some future date to provide subsidies to maintain affordable units, diverting the City's finite affordable housing resources.

By discouraging housing development in West Chelsea, the area's many parking lots and auto-related uses could remain. As a consequence, the alternative would not only prevent the production of new housing, but the neighborhood would not receive the additional benefits that derive from new development, including an enhanced streetscape and neighborhood vitality and services. In addition, bulk and use regulations for development adjacent to the High Line have been carefully crafted to enhance the future open space, and bonuses have been created to facilitate access and reuse of the High Line. Without the additional development, the goal of a successful reuse of the High Line may not be achieved.

I. UNAVOIDABLE ADVERSE IMPACTS

Open Space

As discussed above, the proposed action, would not result in significant adverse open space impacts; however, the Base FAR Scenario, which would generate fewer DUs than the proposed action and would not include the High Line as an open space resource, would result in a significant adverse open space impact. In particular, the ratio of total open space per 1,000 residents would decline by 7 percent compared to the future no-action condition. The decline would be ~~more than~~ nearly double that of the proposed action and would not be offset by the ~~6.93~~ 6.13 acres added to the open space inventory that would be added by the proposed action.

Furthermore, additional requirements to create open space resources on the projected development sites are not considered feasible as such measures could tend to decrease the amount of housing developed within the proposed action area, which would be inconsistent with the purpose and need for the proposed action.

Based on *CEQR Technical Manual* guidelines, another way this open space impact could be mitigated is by improving existing open spaces in the study area to increase their utility, safety, and capacity to meet identified needs in the study area.

In this case, such mitigation measures should focus on active open space, given the expected open space ratios which would fall below the City's planning goal and the expected demand for such facilities from the Base FAR Scenario population. However, all of the open space resources with active open space are in good or excellent condition, with 14.40 acres of the existing 20.85 acres of active space in excellent condition. Open space to be added in the future without the proposed action is also expected to be in excellent condition, including the 7.96 acres of active space. As a majority of future No-Action open space is expected to be in excellent condition and no existing open space is in fair condition, mitigating the Base FAR Scenario open space impact by improving existing open space resources does not appear to be a feasible measure.

Shadows

The proposed action would result in significant adverse shadows impacts on the Church of the Guardian Angel and the General Theological Seminary (located within the Chelsea Historic District). Incremental shadows cast by the projected development would be cast on stained glass features of both resources.

The Church of the Guardian Angel would be cast in shadows from Projected Development Sites 15, 18, 19 and 21, and the General Theological Seminary would be cast in shadows from Projected Development Site 15.

Eliminating these sites from the rezoning area would mitigate the significant adverse shadow impacts. However, this is not considered feasible as such measures would decrease the amount of housing developed, which would be inconsistent with the purpose and need for the proposed action.

Another potential mitigation measure for these impacts would be to simulate the sunlit condition with artificial lighting. However, this mitigation is not considered feasible.

Therefore, there are no practicable or feasible means to reduce or eliminate the impacts. They would be unmitigated.

Historic Resources

As discussed above, the proposed action would result in significant adverse impacts to eight historic resources, including the demolition of two eligible resources, the E.R. Merrill Spring Company Building (#9) and the Manufacturing Building (#8) from development on Potential Development Sites 38 and 30, respectively, and the conversion of one resource, the Otis Elevator Building (#5), to residential use (Projected Development Site 7). These significant adverse impacts would be unmitigated because development activity on these eligible resources would occur as-of-right.

Inadvertent construction-related damage could potentially occur to five eligible resources including: the Wolf Building and Annex (#13); the Cornell Ironworks (aka Standard Oil Building) (#14); the Reynolds Metal Building (#15); the B&O Terminal (#26); and the Nabisco Complex (Chelsea Market) (#32). These significant adverse impacts would be unmitigated because development activity on these eligible resources would occur as-of-right. With respect to construction-related impacts, the five resources would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites; however, since the resources are not S/NR-listed or NYLPC-designated, they are not afforded special protections under DOB's *TPPN 10/88.* The resources would be provided a measure of protection from construction as Building Code section 27-166 (C26-112.4), which requires that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the requirements of Building Construction Subchapter 7 and Building Code Subchapters 11 and 19. Additional protective measures afforded under DOB 10/88, which apply to designated historic resources, would not be applicable in this case, unless the eligible resources are designated in the future prior to the initiation of construction. If they are not designated, however, they would not be subject to the above construction protection procedures, and may therefore be adversely impacted by adjacent development resulting from the proposed action.

As described above, significant adverse shadows impacts would occur on two historic resources, Church of the Guardian Angel and the General Theological Seminary.

Eliminating the projected and potential development sites creating the demolition, expansion, construction, and shadows historic resources impacts would mitigate the impacts. However, this is

not considered feasible as such measures would decrease the amount of housing developed, which would be inconsistent with the purpose and need for the proposed action.

J. GROWTH INDUCING ASPECTS OF THE PROPOSED ACTION

The proposed action would result in more intensive land uses (generating new residents, daily workers, and visitors). However, it is not anticipated that it would have significant spillover or secondary effects resulting in substantial new development in nearby areas, as the proposed action has been developed to be responsive to observed and projected land use trends and would result in sufficient available density to meet all projected demands for projected residential, commercial and community facility development in West Chelsea. Moreover, the growth in residential population and new residential developments on available residential zoned sites in the greater Chelsea area is a trend that has been ongoing over the last two decades, resulting in very high utilization of available housing supply and increasing demands for new dwelling units. While the residential population has been growing, the industrial sector in West Chelsea has declined, leaving many large properties vacant or underutilized.

This EIS also considers the environmental effects of the Base FAR Scenario in the event the City does not receive a Certificate of Interim Trail Use (CITU) from the Surface Transportation Board to allow the conversion of the High Line into an open space. Under the Base FAR Scenario, less residential development would occur on the 25 projected development sites as compared to the proposed action as zoning bonuses and transfer of development rights associated with the High Line would be unavailable; however, all other land use projections would be identical to those anticipated under the proposed action's RWCDS. The With-Action condition under the Base FAR Scenario includes approximately 3,142 dwelling units. The environmental effects of this scenario are generally similar to the proposed action, though demand generated by residents would be of lesser magnitude and this scenario would not include the effects and benefits associated with the High Line open space.

By providing a significant new supply of housing and local commercial space in the proposed action area, the proposed action would help stabilize or reduce the pressure for new development and changes in land use in areas adjoining the rezoning area.

K. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Resources, both natural and man-made, would be expended in the construction, renovation, reuse and operation of developments projected to be generated by the proposed action. The approximately 4,809 DUs, ~~564,254~~ 574,128 sf retail, and 227,564 sf community facility on the 25 projected development sites and the approximately ~~6.7~~ 5.9-acre publicly accessible open space on the High

Line that would occur under With-Action conditions would also require the irreversible and irretrievable commitment of energy, construction materials, human effort, and funds. As indicated in Chapter 15, "Energy," it is estimated that the 25 projected development sites would experience a net increase in energy consumption of approximately ~~451.5~~ 448.7 billion BTUs annually due to the proposed action. These are considered irretrievably committed because their reuse for some other purpose would be highly unlikely.

The land use changes associated with the proposed action may also be considered a resource loss. Projected and potential development under the proposed action constitutes a long-term commitment of sites as land resources, thereby rendering land use for other purposes infeasible. Further, funds committed to the design, construction/renovation, and operation of projected or potential developments under the proposed action are not available for other projects.

The public services provided in connection with the projected and potential developments under the proposed action (e.g., police and fire protection and public school seats, as well as the acquisition and development of a new waterfront park) also constitute resource commitments that might otherwise be used for other programs or projects, although the proposed action would also generate tax revenues to provide additional public funds for such activities.