DEPARTMENT OF CITY PLANNING
CITY OF NEW YORK

ENVIRONMENTAL ASSESSMENT AND REVIEW DIVISION

Amanda M. Burden, AICP, *Director*
Department of City Planning

RECEIVED
JUL 18 2007
OFFICE OF
ENVIRONMENTAL COORDINATION

June 29, 2007

NOTICE OF COMPLETION OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

The Jamaica Plan

Project Identification
CEQR No. 05DCP081Q
ULURP Nos. C 070158 MMQ, C 070314 ZMQ,
N 070315 ZRQ, C 070316 HUQ,
N 070317 HGQ, C 070318 PPQ
C 070322 HDQ and
N 070315(A) ZRQ,
C 070314(A) ZMQ
SEQRA Classification: Type I

Lead Agency
New York City Planning Commission
22 Reade Street, 1W
New York, NY 10007

Contact Person
Robert Dobruskin, Director (212) 720-3423
Environmental Assessment and Review Division
New York City Department of City Planning

Pursuant to City Environmental Quality Review (CEQR), Mayoral Executive Order No. 91 of 1977, CEQR Rules of Procedure of 1991 and the regulations of Article 8 of the State Environmental Conservation Law, State Environmental Quality Review Act (SEQRA) as found in 6 NYCRR Part 617, a Final Environmental Impact Statement (FEIS) has been prepared for the action described below. Copies of the FEIS are available for public inspection at the office of the undersigned. The proposal involves actions by the City Planning Commission and Council of the City of New York pursuant to Uniform Land Use Review Procedures (ULURP). A public hearing on the Draft Environmental Impact Statement (DEIS) was held on May 23, 2007. Written comments on the DEIS were requested and were received by the Lead Agency until the 10th calendar day following the close of the public hearing. The FEIS incorporates responses to the public comments received on the DEIS and additional analysis conducted subsequent to the completion of the DEIS.

Robert Dobruskin, *Director*
James Merani, *Deputy Director*
22 Reade Street, New York, N.Y. 10007-1216 Room 4E (212) 720-3420
FAX (212) 720-3495
rdobrus@planning.nyc.gov

A. INTRODUCTION

The City of New York, with the New York City Planning Commission (CPC) as its lead agency, is proposing a number of actions, including zoning map and text amendments, designation of the Jamaica Gateway Urban Renewal Area (JGURA), a limited street demapping, and disposition of City land, that are collectively referred to in this Final Environmental Impact Statement (FEIS) as the "Jamaica Plan," "proposed actions," or the "proposed project." It is the objective of the Jamaica Plan to create new economic growth and housing through mixed-use, transit-oriented development in Downtown Jamaica, creating a vibrant center of office, retail, entertainment, residential, and community facility uses. This Plan builds upon substantial public investments made in Jamaica to date and would take advantage of Downtown's strategic location with respect to regional transportation access. Designation of the JGURA, street demapping, and disposition of City property would facilitate new development on underutilized blocks in the immediate area of the Jamaica Long Island Rail Road (LIRR)/AirTrain Stations. If approved, the Plan would facilitate the redevelopment of Downtown Jamaica as one of the region's premiere central business districts (CBDs), while protecting existing neighborhoods and recognizing the protection and expansion of industrial uses.

The 368-block planning area lies almost entirely within Queens Community District 12 (341 blocks), and the portion north of Hillside Avenue is within Queens Community District 8 (27 blocks). Bordering this area to the west are Queens Community Districts 9 and 10. The planning area is generally bounded by the Van Wyck Expressway service road to the west; 87th Road and Highland Avenue to the north; 189th, 190th, 191st Streets, and Farmers Boulevard to the east; and Waltham Street, 105th, 108th, 109th, Sayres, and 110th Avenues to the south. Under the proposed actions, the current zoning designations in Downtown Jamaica would be amended to allow a greater mix of uses and densities. In addition, the proposed Special Downtown Jamaica District (SDJD) would be mapped. In the residential neighborhoods to the east and south, e.g., Jamaica, South Jamaica, Hollis, and St. Albans, the proposed zoning changes would map contextual residential zoning districts to protect the scale and character of the existing neighborhoods. In addition, a core center of manufacturing uses would be protected along the rail corridor that runs through the center of the area. The collective actions of the Jamaica Plan are as follows:

- The New York City Department of City Planning (DCP) is proposing zoning map amendments over approximately 778 acres of land (368 blocks);
- DCP is proposing zoning text amendments to establish the SDJD in the CBD (71 blocks);
- The New York City Department of Housing Preservation and Development (HPD) is proposing the JGURA developed in collaboration with EDC and DCP east of the Jamaica LIRR/AirTrain Station (3 blocks);
- JFK Center Associates, LLC, is proposing an amendment to the City map eliminating 148th Street between 94th with 95th Avenues, with acquisition or disposition of real property related thereto; and
- The City's Department of Citywide Administrative Services (DCAS) is proposing disposition to EDC of the City's interest in real property for Block 10209, Lot 115, so that EDC may issue a Request for Proposals (RFP) for the development of this site.

In order to assess the environmental impacts of the proposed actions, DCP developed a reasonable worst-case development scenario (RWCDS) that identified both projected and potential development sites. As defined by DCP, projected development sites are sites more likely to be developed as a result of the proposed actions. DCP identified 186 projected development sites. DCP also identified potential development sites, which are sites that could also be developed, but are assumed to have less development probability. DCP identified 420 potential development sites. The majority of these sites could be developed in the future without the proposed actions (the "No Build" condition) under the current zoning. The net development increment between the No Action and Proposed Actions conditions is as follows: 3,565 housing units; about 3.1 million square feet of commercial space (with 1.8 million square feet of office space, 960,000 square feet of retail space [destination and local retail], and 200,000 square feet of hotel

space [225-rooms]); 245,000 square feet of community facility space; 400,000 square feet of public parking; and a net decrease of 379,752 square feet of industrial space. This FEIS analyzes a Build year of 2015.

The above-described actions are subject to both City Environmental Quality Review (CEQR) and the Uniform Land Use Review Procedures (ULURP). This EIS has been prepared in accordance with the Final Scope of Work for the Jamaica Plan issued on September 19, 2006, Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations, and follows the guidance of the *CEQR Technical Manual* (October, 2001). The Draft Environment Impact Statement (DEIS) and ULURP applications were certified as complete on February 5, 2007. Public hearings were held by the two affected community boards, the Queens Borough President, CPC, and the City Council during the 7-month ULURP review process.

A public hearing on the Draft Environmental Impact Statement (DEIS) was held by the City Planning Commission at the Queens Borough Public Library on May 23, 2007. The public hearing also served as a public hearing with respect to ULURP Application Nos. N 070315 (A) ZRQ and C 070314 (A) ZMQ modified zoning text and map amendment applications proposed by DCP in response to comments received during the public review process.

B. PROJECT DESCRIPTION

BACKGROUND

Downtown Jamaica was a major commercial center in the earlier 20th century. The 1969 *Draft Plan for New York City* described Jamaica as the largest retail center in Queens and the "third largest in the metropolitan region." Through the 1960s, Jamaica's regional importance was based on its transportation access for both the LIRR and subway and bus lines serving Queens. However, by the early 1970s, the region became increasingly auto-oriented and Jamaica's transportation infrastructure no longer ensured its position as a regional center. Jamaica's commercial pull began to erode as rival centers and office centers opened and drew increasingly larger market shares. Employment and commercial and residential investment declined.

Revitalization efforts were in part initiated with the formation of the Greater Jamaica Development Corporation (GJDC), which was founded to spur public and private investments in Jamaica. Major public investments over the past three decades also reflect the City's desire to spur a recovery of the area. These have included the demolition of the Jamaica Avenue "elevated subway," replaced by the Archer Avenue subway extension, and designation of local URAs which have created a new federal office building, new federal and state courthouses, a new campus for York College, and new residential developments. In recent years, additional major investments have included the AirTrain light rail service to JFK International Airport, and the nation's largest and most modern laboratory for the U.S. Food and Drug Administration.

In 2000, GJDC released the *Vision for Jamaica Center*, a report that set forth a planning framework for commercial development and transportation improvements for Downtown Jamaica. The report proposed traffic, transfer, and streetscape improvements to support investment and development of an "airport village" with offices, hotels, and retail linked to JFK Airport. That plan was revisited in 2004 in response to changing market conditions, and the update recognizes an increased potential for the area to attract residential as well as regional retail development in the vicinity of the Jamaica LIRR/AirTrain Station, where underutilization deters investment. Cultural tourism as well as state and federal funding for brownfields redevelopment are also recommended. Despite renewed interest in the area there remain underused and depressed properties near Jamaica Station that continue to deter private investment.

Current zoning in much of Jamaica is outdated and unduly restricts its potential. Zoning densities are low for an area with abundant transportation infrastructure. There are also unrealistically high commercial parking requirements and the blighting influence of depressed properties near the Jamaica LIRR/AirTrain

Station complex. As a result, Downtown Jamaica cannot take advantage of the private development opportunities made possible by public investments to date and the improved transit access. The proposed zoning changes would advance these gains and promote and guide Jamaica's future growth. In addition, the proposed JGURA would further enhance Downtown by removing blight and allowing needed redevelopment central to regional transportation, while creating a critical mass to attract private investment.

In addition, current zoning in residential communities outside of Downtown Jamaica allows development at inappropriate densities that could impact stable, low-density communities and poses a threat to the very qualities that make these communities desirable. Post-1961 amendments to the *Zoning Resolution* have provided new planning tools to address longstanding issues of harmonizing new development to existing context and allowing a broad mix of uses that should be implemented here.

EXISTING ZONING

The rezoning area covers Jamaica's CBD and portions of the adjacent communities of Jamaica, South Jamaica, Hollis, and St. Albans. Certain changes to the zoning map have been instituted through the years to facilitate various projects, but most of the area is currently zoned as it was in 1961.

Medium density commercial zoning districts mapped in Jamaica's CBD include C4-2, C4-5X, C4-6, C6-1, and C6-1A districts. These zones are found in regional centers and allow department stores, theaters, and other regional commercial uses (the "X" suffix requires contextual development). C6 districts allow a wider range of higher-density commercial uses.

C8-1 zoning districts are mapped along portions of Hillside Avenue, Merrick and Queens Boulevards. These districts allow a range of commercial uses, including automotive and other heavy commercial services. Certain community facilities are also permitted. Residential uses are not permitted in this district.

The LIRR right-of-way extends east-west through the rezoning area, providing a physical barrier that limits vehicular and pedestrian connections from north to south. In addition, properties located along the right-of-way are generally zoned for light manufacturing and developed with light to heavy industrial uses, such as manufacturing, warehouses, concrete plants, transfer stations, salvage yards, and auto repair. M1-1 and M1-5 districts are mapped here and also wrap around the southern periphery of Downtown. Typical development in M1-1 districts includes one- and two-story warehouses of light industrial and commercial use, with M1-5 districts allowing greater density. Residential uses are not permitted in manufacturing zones.

Low- to medium-density general residential zones are mapped in and adjacent to the CBD and include R3-2, R4, R5, and R6 districts. R6 is the predominant residential zone in Downtown Jamaica. However, one- and two-family residences are common within the R6 district west of Sutphin Boulevard. East of Sutphin Boulevard, there is a mix of zoning districts, and development consists of a mix of one- and two-family homes, multi-family walk-up apartments, elevator apartment buildings, and institutional uses.

Low-density residential zones are mapped north of the Hillside Avenue business corridor in Community District 8 (R1-2, R3-2, R3A, R4-1, R4A, and R5 districts) and along portions of the eastern edge of the rezoning area in Community District 12 (R2, R3-2, R4, and R5 districts).

DESCRIPTION OF THE PROPOSED ACTIONS

As stated above, DCP is proposing zoning map amendments affecting all or portions of 368 blocks in the study area. DCP is also proposing zoning text amendments to facilitate the creation of the SDJD, which would affect all or portions of 71 blocks in the Downtown Jamaica. In addition, HPD and DCP are proposing the JGURA over three blocks. JFK Center Associates, LLC, is proposing to demap a segment of 148th Street between 94th and 95th Avenues for the purposes of facilitating development in the

JGURA; and DCAS is proposing disposition of City land for the purposes of redevelopment. A more detailed description of these actions follows.

PROPOSED ZONING MAP AMENDMENTS

Under the proposed actions, approximately 778 acres of land currently zoned R2, R3-2, R4, R5, R6, C4-2, C4-6, C6-1, C6-1A, C8-1, M1-1, and M1-5 would be rezoned to R1-2, R3A, R3X, R4, R4-1, R5, R5D, R6A, R7A, R7X, C4-3A, C4-4A, C4-5X, C6-2, C6-3, C6-4, M1-1, M1-2, and M1-4. New C1-4 and C2-4 commercial overlays would be mapped along commercial streets, and existing C1-2 and C2-2 overlays would be changed to C1-4 and C2-4, generally to reflect existing location of commercial uses by reducing the depth of the overlay to 100 feet. New C1-3 and C2-3 commercial overlays would also be mapped along certain commercial streets, generally at a depth of 150 feet.

Overall, the proposed zoning changes would result in an increase in permitted density on approximately 451 acres of land, or 58 percent of the rezoning area. Conversely, the currently permitted density would be reduced on approximately 126 acres, or about 16 percent of the rezoning area. Approximately 199 acres (excluding parkland), or about 26 percent of the rezoning area, would experience no change in permitted density, but would be affected by a change in permitted use and/or height and setback regulations.

The proposed zoning changes would introduce C4-3A, C4-4A, C6-2, C6-3, and C6-4 districts in and near the CBD to encourage compatible land uses at higher densities. Approximately 51 acres of land zoned M1-1 and M1-5 would be changed to C4-4A, C4-5X, C6-2, C6-3, C6-4, R4, R4-1, R5, and R6A. Approximately 28 acres of land zoned C8-1 would be amended to R4-1, C4-3A, R7X, and R6A. These changes would provide new opportunities for mixed-use development and bring residential properties currently located in areas zoned for industrial use into conformance. Approximately 87 acres would be rezoned from M1-1 to M1-2 and M1-4, resulting in an increase in permitted density to accommodate future growth and expansion in these areas. Approximately 189 acres currently zoned R3-2, R4, and R5 would be changed to R3A, R3X, and R4-1, and approximately 108 acres currently zoned R6 would be changed to R4-1 and R5 to reflect the existing contexts in adjacent residential communities where one- and two-family homes are predominant.

The proposed zoning changes would work in conjunction with the proposed SDJD and JGURA and are intended to encourage redevelopment and economic growth within the Jamaica CBD, thereby effectuating the following City land use policies:

- Expand the CBD and encourage redevelopment and economic growth to complement existing building patterns; provide direction and flexibility for growth in industrial areas with long-term potential near the CBD and promote synergy with adjacent institutional, business and residential communities. This includes proposed zoning changes in subareas near the AirTrain facility ("AT"), Jamaica Center ("JC"), and along the Sutphin Boulevard Corridor ("SC"), which are intended to provide for economic growth and redevelopment within the CBD. Additional zoning changes ("LC") are intended to provide direction for future growth in an area that is underdeveloped and underutilized. These subareas are also included in the proposed SDJD (see the discussion below).
- Expand opportunities for new residential and mixed-use development with a mix of development scales appropriate to surrounding building patterns near transit and highway access. Proposed zoning changes in these subareas are intended to provide for new development at higher densities in areas with good access to highways and mass transit. This includes Downtown Jamaica and the area's wide streets, such as 101st, Hillside, Jamaica, and Liberty Avenues, and along Merrick, Guy R. Brewer, and Queens Boulevards.
- Preserve lower-density residential neighborhoods. A significant portion of Jamaica's low-rise communities are located in R6 districts, a medium-density zoning district, or in low-density general residential districts (R3-2, R4, R5) that encourage a wide range of housing types. The proposed

zoning changes would result in a decrease in permitted density and more appropriately reflect and protect the existing context of these areas. Proposed zoning changes at certain properties would allow a slight increase in density, but only if consistent with existing building patterns in low-density areas. Other residential areas, currently zoned C8-1, M1-1, and M1-5, would become conforming uses under the proposed changes.

- Reinforce certain industrial areas and allow for growth. Zoning changes would allow an increase in commercial and industrial density in certain subareas (X, H, and Y), which would facilitate new development and/or expansion of existing industrial and commercial land uses in areas where there would be minimal impact on adjacent residential communities (e.g., traffic, noise). These areas are currently characterized by industrial buildings, warehouses, auto-related businesses, and open industrial uses such as concrete batching plants.

PROPOSED ZONING (E) DESIGNATIONS

The proposed zoning would place (E) designations on projected and potential development sites to avoid the potential for impacts with respect to hazardous materials, air quality (heating systems and industrial sources), and noise. A description of the requirements of those (E) designations and a listing of the affected sites is provided in Appendix C.

ZONING TEXT AMENDMENT

The proposed zoning map and text amendment would establish and map the 71-block SDJD. The proposed SDJD would include special bulk, use, parking, and urban design provisions that would supplement or supersede the underlying zoning district. The objectives of the proposed special district are to achieve a strong visual presence at the transportation hub, establish strong visual and physical connections between Jamaica's transportation hubs, and reinforce street wall and retail continuity along major corridors. Special use restrictions would address parking needs throughout the CBD and would modify use regulations within the industrial-zoned part of the proposed special district to achieve synergy with adjacent institutional, office, and laboratory uses. The proposed special district would be guided by the following goals:

- Strengthen the business center by improving the working and living environments;
- Foster development and provide direction and incentives for further growth where appropriate;
- Expand the retail, entertainment, and commercial character around the transit center and enhance the area's role as a regional transit hub;
- Provide transitions between the Downtown commercial core, the lower-scale residential communities, and the transportation hub;
- Improve the quality of new development through requirements of specified public amenities in appropriate locations;
- Encourage the design of new development in character with the area;
- Enhance the pedestrian environment by relieving sidewalk congestion and providing pedestrian amenities; and
- Promote the most desirable use of land and thus conserve and enhance the value of land and buildings, and enhance the City's tax revenues.

URBAN RENEWAL DESIGNATION AREA AND PLAN

HPD, in collaboration with DCP, proposes the creation of the JGURA, which covers three full blocks adjacent to the new Jamaica LIRR/AirTrain Stations. The proposed JGURA would eliminate blight and encourage mixed-use development containing office, retail, and residential uses, a hotel, new open space, and parking on key development sites adjacent to the Jamaica LIRR/AirTrain Stations. Development of

these sites is intended to be a catalyst for additional private investment, capitalizing upon its regional transportation access and facilitating transit-oriented development. Designation of the JGURA seeks to:

- Redevelop the area in a comprehensive manner, removing blight and maximizing appropriate land use;
- Remove or rehabilitate substandard and unsanitary structures;
- Remove impediments to land assemblage and orderly development;
- Strengthen the City's tax base by encouraging development and employment opportunities;
- Provide new housing of high quality;
- Provide appropriate community facilities, open space and recreational uses, retail, shopping, public and private parking; and
- Provide a stable environment that will not have a blighting influence on surrounding neighborhoods.

The proposed JGURA would have a duration of 40 years. The related actions would potentially facilitate the disposition to EDC of the City's interest in the JGURA properties comprising 44 lots that, under the proposed actions, would become City-owned through an acquisition process. These 44 lots are located within four proposed development sites for which the Plan has established land uses (see Table S-1).

Table S-1
Proposed Land Uses Under the Jamaica Gateway Urban Renewal Plan

Site	Block/Lots*	Proposed Land Use
1	Block 9999, Lots 1,9,10,11,13,15	Commercial (Non-Residential)**
2	Block 9998, Lots 1,2,16,19,22,25,42,43,47,48,144	Commercial**
3	Block 9998, Lots 83,86,87,88,89,90,91,93,94,95, 101,109, 110,119,124,127	Commercial**
4	Block 9993, Lots 1,3,18,20,22,23,24,25,27,28,29	Commercial/Public Open Space**

Note:
* See Figure 1-7.
**Includes commercial, residential, institutional, community facility, open space and other uses permitted in accordance with the *Zoning Resolution*.
Source: New York City Department of Housing Preservation and Development, December, 2006.

PROPOSED AMENDMENT TO THE CITY MAP

An amendment to the City Map is proposed by JFK Center Associates, LLC, to eliminate a one-block segment of 148th Street between 94th and 95th Avenues, thereby allowing the acquisition and disposition of real property, facilitating development of an approximately 1.26 million-square-foot commercial building that would provide 250,000 square feet of retail, 1 million square feet of showrooms and offices, and 700 accessory parking spaces. The project site (within the SDJD) would be rezoned from M1-1 to C6-4 and consists of an entire block (Block 9999), the bed of the portion of 148th Street proposed to be demapped, and a portion of the adjacent block to the east (Block 10000, Lot 1). The additional floor area generated from the demapping is necessary for the development of the proposed project. Under the proposed zoning, future development at a maximum floor area ratio (FAR) of 12 could occur at this site.

PROPOSED DISPOSITION OF CITY-OWNED PROPERTY

Also proposed is disposition of land from the City to EDC for Block 10209, Lot 115 (projected development site 515). This disposition would facilitate site development. It is anticipated that EDC will issue a Request for Proposals (RFP) for redevelopment of this 45,000-square-foot site. Currently on site is a garage structure used by the New York Police Department (NYPD) and the site is zoned M1-5. Under the proposed actions this site would be rezoned to C6-2 (allowing an FAR of 6.0) and is also within the proposed SDJD. The proposed zoning would allow new mixed-use development with 270,000 gross square feet of space. For

analysis purposes, assumed is a mixed-use building with 45,000 square feet of office space, 88,000 square feet of retail, 2,000 square feet for an NYPD training center, 135 residential units, and 223 accessory parking spaces.

REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

CEQR review requires the analysis of impacts from both the long- and short-term effects of proposed actions. Therefore, a "Build" scenario identifies the amount, type, and location of development that is expected to occur by 2015 under the proposed actions. The future without the action, or "No Build" scenario, identifies development projections absent the proposed actions. The incremental difference between the Build and No Build scenarios serves as the basis for the environmental impact analyses presented in this FEIS.

To determine the RWCDS, methodologies were employed following the *CEQR Technical Manual* guidelines, identifying the amount and location of projected and potential future residential, commercial, and community facility development. The methodology includes several factors such as known development proposals, current market demands, past development trends, and DCP's "soft site" criteria. The first step in establishing the RWCDS for the proposed actions was to identify sites where new development is reasonably expected to occur. In addition to general criteria, area-specific criteria were used to identify projected development sites. In some areas, the projected sites were identified on the basis of existing site conditions or site location. These sites were determined to be the most suitable for development in the foreseeable future. In addition, the RWCDS analyzes future development within the JGURA and at the disposition site.

In the future without the proposed actions, it is anticipated that the project area would experience modest growth in commercial, manufacturing, and residential uses. Most of the project growth is expected to include further development of local retail space and residential development in existing low-density residential communities.

In the future with the proposed actions, higher-density commercial and residential development is expected to occur in Downtown Jamaica and along major thoroughfares, shifting development away from the lower-density communities. In addition, the reinforcement of certain industrial areas would allow for growth within the industrial core.

DCP identified 186 projected development sites in the RWCDS and 420 potential development sites where development is considered less likely. Office growth is projected to occur primarily in the proposed JGURA as well as on second floors of buildings in the Downtown. Regional retail is projected in the Downtown and the area immediately to the south within the proposed SDJD. A new hotel is projected in the JGURA and new local retail is projected in South Jamaica and along Hillside Avenue.

Key factors in the anticipated residential development program include increased densities under the proposed zoning and the ability through the new special district to provide for the conversion of vacant pre-1961 office buildings that do not comply with residential bulk regulations. The largest increases in residential growth are expected to occur along Hillside Avenue, as well as in the proposed JGURA and in the CBD. New residential development is also projected along the major corridors in South Jamaica, such as Guy R. Brewer Boulevard and Merrick and Liberty Avenues. Residential growth in these areas is projected to occur in mixed-use buildings.

The development of community facilities is expected throughout the rezoning area, reflecting population growth and a strong market for these facilities. Community facility uses are projected to total approximately 460,000 square feet in 25 to 30 facilities. These facilities could include a museum or art gallery, a nursing home, houses of worship, a club, community centers, medical offices, day care, and not-for-profit institutions.

The RWCDS development projections are summarized below by the proposed zoning subareas (see Table S-2).

Table S-2

Summary of No Build and Build Development on Projected Development Sites

		No Build Condition				With Build Conditions				Incremental			
Subarea	Proposed Zoning District	Commercial (sf)	Industrial (sf)	Community Facilities (sf)	Dwelling Units	Commercial (sf)	Industrial (sf)	Community Facilities (sf)	Dwelling Units	Commercial (sf)	Industrial (sf)	Community Facilities (sf)	Dwelling Units
URA	M1-4, C6-4	41,118	236,498	-	-	2,113,904	-	-	206	2,072,786	(236,498)	-	206
Air Train 2 (AT2)	C6-3	6,020	10,000	0	5	276,000	0	0	180	270,380	(10,000)	0	175
Jamaica Center 1 (JC1)	C6-3	494,209	-	21,067	101	251,960	-	44,988	682	(242,249)	-	23,921	580
Jamaica Center 2 (JC2)	C6-2	124,595	0	-	61	183,490	-	2,000	250	58,895	(224,420)	2,000	188
Jamaica Center 3 (JC3)	C4-5X	291,884	-	64,725	586	783,055	-	55,952	671	491,171	-	(8,773)	85
Liberty Center (LC)	M1-4	48,392	90,953	-	13	273,248	-	23,800	-	224,856	(90,953)	23,800	(13)
Sutphin Corridor (SC)	C4-4A	13,788	-	-	39	13,788	-	-	51	-	-	-	12
A	R5 or C1-4/R5	-	-	-	16	13,430	-	-	9	13,430	-	-	(7)
B	R5	7,000	10,500	-	-	-	-	-	22	(7,000)	(10,500)	-	22
D	R7A, C1-2/R7A, or C2-4/R7A	5,234	-	-	420	21,860	-	-	677	16,626	-	-	257
E	C2-4/R6A	19,821	13,120	-	3	30,357	-	-	77	10,536	(13,120)	-	74
F	R4-1	-	-	-	15	-	-	-	36	-	-	-	21
J	R5	10,911	25,365	-	4	-	-	-	55	(10,911)	(25,365)	-	51
O	C2-3/R6A or C2-4/R6A	3,800	38,895	-	76	122,277	-	44,007	286	118,477	(38,895)	44,007	210
Q	R5D or C1-4/R5D	64,353	-	-	68	107,340	-	24,000	181	42,987	-	24,000	113
R	C1-3/R6A or C2-4/R6A	95,013	-	6,150	26	115,276	-	36,900	293	20,263	-	30,750	267
S	C2-4/R6A	59,100	30,000	-	26	53,100	-	81,000	135	(6,000)	(30,000)	81,000	109
T	C4-3A	50,870	-	29,923	1	52,570	-	30,923	102	1,700	-	1,000	101
U	C2-3/R7X or C2-4/R7X	205,762	-	92,479	314	226,611	-	104,104	1,064	20,849	-	11,625	750
V	C2-4/R7A	92,141	-	-	41	102,309	-	11,850	404	10,168	-	11,850	363
X	M1-2	27,224	40,835	-	-	27,224	108,894	-	-	-	68,059	-	-
Y	M1-4	2,250	4,480	-	-	3,000	12,000	-	-	750	7,520	-	-
Total		**1,663,485**	**500,646**	**214,344**	**1,815**	**4,771,199**	**120,894**	**459,524**	**5,380**	**3,107,714**	**(379,752)**	**245,180**	**3,565**

C. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

LAND USE, ZONING AND PUBLIC POLICY

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidelines for determining impact significance set forth in the *CEQR Technical Manual* (see Section 400, Under Section A, "Land Use, Zoning, and Public Policy," Chapter 3), are anticipated in the future with the proposed actions in the primary and secondary study areas. The proposed actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would they generate land uses that would be incompatible with land uses, zoning, or public policy in the surrounding area. The proposed actions would not create land uses or structures that would be incompatible with the underlying zoning, nor would they cause a substantial number of existing structures to become nonconforming. The proposed actions would not result in land uses that conflict with public policies applicable to the project area or the surrounding area.

The proposed actions would result in new residential development in the vicinity of existing concrete batching facilities in the portion of the SDJD area south of the LIRR tracks; near Sutphin Boulevard just south of Liberty Avenue; and along Liberty Avenue east of Merrick Boulevard. These areas are already

characterized by a mix of residential and industrial uses or by residential blocks in close proximity to industrial areas, and the proposed actions would not result in a significant adverse impact on land use at these locations. The compatibility of these and other industrial uses with residential uses was examined as part of the "Air Quality," and "Noise" analyses (see the discussion below).

The proposed actions would provide a framework that would accommodate existing trends by facilitating the expansion of residential and local and regional commercial land uses while addressing the continuing demand for light industrial use. The proposed zoning would create a framework that is both responsive to the uses present in the proposed action area and compatible with the existing zoning designations in the surrounding areas. Finally, the proposed actions directly address the land use and development goals of revitalizing Downtown Jamaica and creating jobs as set forth in the public policies applicable to the area.

SOCIOECONOMIC CONDITIONS

While the proposed actions would have the beneficial socioeconomic effects of expanding the housing supply to address strong local and citywide housing demand, it could result in significant adverse socioeconomic impacts due to indirect residential displacement in portions of the project area and overall study area. Conclusions relative to the five areas of analysis under the *CEQR Technical Manual* are summarized below.

Direct Residential Displacement: Under the RWCDS, the proposed actions would directly displace 65 residential units, housing an estimated 207 residents. Based on the guidelines in the *CEQR Technical Manual*, the direct displacement of these residents would not result in a significant adverse impact because they do not represent a significant proportion of the project area population, they are not likely to have socioeconomic characteristics that differ markedly from the study area population as a whole, and the proposed actions would not result in the loss of any population group within the neighborhood or alter neighborhood character.

Direct Business Displacement: The proposed actions would directly displace approximately 182 firms and 1,193 employees, with the largest displacement occurring in the retail sector, in particular, businesses providing clothing and accessory products. The preliminary assessment concludes that the proposed actions would not cause a significant adverse direct business displacement impact because the displaced businesses are not found to have substantial economic value to the City or region, are not subject to publicly adopted plans to preserve, enhance, or protect them, and do not, individually or collectively, contribute substantially to neighborhood character.

Indirect Residential Displacement: According to the guidelines of the *CEQR Technical Manual*, the proposed actions have the potential to cause significant indirect residential displacement impacts. The actions would increase the population of the project area and overall study area by more than 5 percent and introduce residents with socioeconomic characteristics that are significantly different from the characteristics of residents in parts of the study area, and the study area contains a population that could be vulnerable to displacement pressures.

The *CEQR Technical Manual* suggests that a population increase of 5 percent or more could be large enough to trigger a socioeconomic change that would negatively affect a population at risk of displacement. The proposed actions would result in a net increase of 11,337 residents in the area, which is approximately 12.3 percent more than anticipated under No Build conditions. This would represent a population increase of 5.2 percent over the future No Build condition in the combined project area and primary and secondary study areas. This increase exceeds the 5 percent threshold laid out in the *CEQR Technical Manual*. However, in recent years, the project area has experienced an increase of new market-rate residential development, attracting residents with higher-income occupations. As a whole, the socioeconomic characteristics of the population living in the project area is already changing and, based on current trends and the RWCDS in the future without the proposed action, is likely to continue to change over the next ten years. Nonetheless, the socioeconomic characteristics of new households introduced under the proposed actions would differ from the characteristics of the population living in a

portion of the unprotected housing units in some parts of the study area. These residents constitute the potentially "vulnerable" population—those who could be subject to indirect displacement under the proposed actions.

In total, it is estimated that approximately 1,835 housing units in the project area could be vulnerable to indirect displacement pressures under the proposed actions. Although the *CEQR Technical Manual* does not suggest thresholds for determining the significance of indirect residential displacement impacts, it does say that an impact could generally be considered significant and adverse if "households or individuals would be displaced by legal means...they would not be likely to receive relocation assistance, and, given the trend created or accelerated by the proposed action, they would not be likely to find comparable replacement housing in their neighborhood." There is the potential for this to be the case for low- and moderate-income residents living in unprotected housing units in the project area—a population estimated to be about 5,400 individuals, according to currently available data and conditions. As described below under "Mitigation," the Affordable Housing Alternative analyzed in Chapter 23, "Alternatives," would partially mitigate the significant adverse impact with respect to indirect residential displacement.

Indirect Business and Institutional Displacement: The proposed actions would not result in significant indirect business and institutional displacement impacts. Within portions of the study area, the development anticipated under the proposed actions would add to the concentration of a particular sector of the local economy in ways that would alter existing economic patterns. And while these changes in economic conditions could result in some limited indirect business displacement, the displacement would not be significantly adverse. The proposed zoning actions are intended to direct economic growth and redevelopment in a manner that takes fuller advantage of the transportation assets and infrastructure within the area. The businesses that would be vulnerable to indirect displacement are not of substantial economic value to the City or region, and their displacement would not adversely affect neighborhood character.

Adverse Effects on a Specific Industry: The proposed actions would not result in significant adverse affects on business conditions in any industry or category of business, nor would the proposed actions indirectly substantially reduce employment or impair the economic viability of any industry or category of business. The businesses that could be directly or indirectly displaced are not essential to the survival of other industries within or outside of the study area and they do not, for example, serve as the sole provider of goods and services to an entire industry or category of business in the city.

COMMUNITY FACILITIES

The following conclusions were made with respect to the potential impacts on community facilities and services:

- With respect to public schools, the proposed actions would result in 607 new elementary, 321 new intermediate, and 143 new high school students. With the proposed actions, utilization rates for elementary and intermediate schools within the study area would be 103 and 77 percent, respectively, and would not cause a greater than five percent deficiency in available seats over the future without the action. Utilization rates for elementary and intermediate schools in CSD 28 are projected to be 109 and 76 percent and 90 and 62 percent in CSD 29. Based on these projections, no significant adverse impact on public schools is expected as a result of the proposed actions. Furthermore, the 1,720 PS/IS school seats planned for CSD 28 and the 630 PS/IS school seats planned for CSD 29 in the New York City Department of Education (DOE) 2005-2009 Five-Year Capital Plan would be expected to ameliorate any projected overcrowding in both the future without the action and the future with the action in the study area. The proposed actions would add 143 high school students to the study area and to the borough. With the proposed actions, the utilization rates for the high schools in the study area and in the borough would increase by only 1 and 2 percent, respectively, in the future without the action. No significant adverse impact on public high schools in Queens is expected

as a result of the proposed action. Furthermore, the DOE 2005-2009 Five-Year Capital Plan provides for the addition of 9,912 new high school seats for Queens, either as new construction or leased projects, or as additions to existing buildings. These new seats would be expected to ameliorate any projected overcrowding in Queens high schools in both the future without the action and the future with the action.

- The proposed actions would increase the study area population by 4.1 percent with respect to the evaluation of library services. This is less than the 5 percent impact threshold identified in the CEQR Technical Manual. Currently, this population is well served by local public library services, which will be enhanced by the planned expansion of the Queens Central Library's collection. For these reasons, no adverse impacts on library services are expected with the proposed actions.
- There would be no direct impact on police or fire protection services (i.e., no direct displacement of facilities or stations) and it is anticipated that the added population and development that is projected under the proposed actions could be adequately served by these City departments. Thus, no significant adverse impacts on police and fire services are expected with the proposed actions.

OPEN SPACE

NON-RESIDENTIAL STUDY AREA

Under the proposed actions, the passive open space ratio for non-residents in the non-residential study area would remain above the DCP planning guideline, but would decline by approximately 15 percent. Because this ratio, at 0.390, would remain well above the planning guideline of 0.15, this decrease is not considered a significant adverse impact. However, the passive open space ratio for the combined non-residential and residential populations in the non-residential study area would remain below planning guidelines and would decrease by 9.2 percent. Because the proposed actions in the combined population analysis would introduce a substantial new demand on passive open space when there is already a shortfall of passive open space, there is a potential for significant adverse impacts. Private recreational spaces created under the Quality Housing Program in contextual districts would be available to residents of those buildings. While this could meet some of the passive open space needs of the resident population, the potential for significant adverse impacts remains because this open space would not be available to the area's non-residential population (e.g., employees). Potential mitigation measures for this significant adverse impact are described below under "Mitigation." As noted below, the impact would remain unmitigated.

RESIDENTIAL STUDY AREA

With the proposed actions, the passive open space ratios for the combined (total) non-residential and residential populations in the residential study area would remain below planning guidelines under the proposed actions and would decrease by 7.1 percent. However, this open space ratio would remain near the guideline (it would be 0.341 and the guideline is 0.415). In addition, recreational space created under the Quality Housing Program in the future with the proposed actions could serve to meet the passive open space needs of the new residential population.

The proposed actions are also not expected to result in significant adverse impacts on passive open space ratios for the residential population (only) in the residential study area. In the future with the proposed actions, the passive open space ratio for residents would decrease from 0.486 to 0.462, a decline of 4.94 percent, and would remain just below the planning goal of 0.5 acres. The active and total open space ratios would decrease by 4.90 and 4.92 percent, respectively. With respect to active open space, there are a number of qualitative factors that serve to alleviate the shortage of open space in the residential study area. Just outside the study area there are open spaces that have the potential to relieve some of the open space inadequacy in the study area. For example, the 53.31-acre Roy Wilkins Southern Queens Park (only a portion of which was included in the quantitative analysis) and 350-acre Cunningham Park are partially

within and just outside the study area. There are also the facilities at York College that are accessible to this student and academic population. Furthermore, much of the development projected in the future with the proposed actions would be in contextual zoning districts where buildings with nine or more dwelling units would be required to include recreational space available to all building residents. For these reasons, impacts on active open space with respect to residents in the residential study area are not concluded to be significant.

The proposed actions could result in a significant adverse qualitative impact on the proposed Atlantic Avenue Extension Park. Incremental shadows from potential development site 286 would reach the Atlantic Avenue Extension Park during the fall, spring, and summer months. These incremental shadows would fall on the park for at most 2 hours and 3 minutes during the morning hours (this maximum shadow coverage would occur on the June analysis day). However, the park would experience sun during the afternoon hours. Since the Atlantic Avenue Extension Park is proposed and not yet programmed, it is therefore possible that the incremental shadows may be cast on sun-sensitive features. Therefore, the proposed actions could result in a significant adverse impact on the proposed Atlantic Avenue Extension Park. Mitigation for this significant adverse impact is discussed below under "Mitigation."

SHADOWS

Under the proposed actions, Rufus King Park would experience incremental shadows in both the morning and evening hours on each of the analysis days. However, the shadow duration would be less than two hours in the morning and evening hours and would not cover any significant passive recreation areas. The proposed actions would also not significantly reduce the amount of sunlight on the park.

The incremental shadows on the P.S. 50 Playground are for a short duration and are limited to the morning hours. The incremental shadows here would not significantly reduce the amount of sunlight the playground receives throughout the day.

Incremental shadows on the Norelli-Hargreaves Triangle would occur over a relatively short duration and would move quickly across the triangle. While the proposed actions would add new shadow on the triangle on each of the four analysis days, they would not remove a significant amount of sun from the vegetation in this park.

Major Mark Park would experience incremental shadows at the beginning and end of the March, May and June analysis days for a total incremental shadow of approximately 4 to 6 hours over the course of the day. However, the park would have full sun during the afternoon hours.

Incremental shadows on the Brinkerhoff Mall would be of short duration, and limited to the afternoon hours. There are no passive uses, such as seating areas, that would be impacted by new shadows. With the proposed actions the mall would remain in sun for the majority of the analysis period during each of the analysis days, and no adverse impacts are expected on the vegetation.

Liberty Park would experience small incremental shadows of short duration on the northwest corner of the park, where the basketball and tennis courts are located. The proposed actions would not add a significant amount of new shadow to this large park and the shadows would fall on active recreational areas.

Incremental shadows on the Atlantic Avenue Extension Park would be of short duration, and limited to the early morning hours. With the proposed actions the park would remain in sun for the majority of the analysis day during the spring, summer, and fall months. There would no incremental shadows on the park during the winter months. However, because this park is not yet designed, it is possible that incremental shadows may be cast on sun-sensitive features (e.g., ornamental plantings). Therefore, it is concluded that the proposed actions could result in a significant adverse impact on this proposed park. Mitigation for this significant adverse impact is discussed below under "Mitigation."

Lastly, the Grace Church (which is a State and City Landmark) would experience incremental shadows on all four analysis days, along the eastern and western facades in the morning and afternoon hours, respectively, that would impact stained-glass windows in the church. The duration of the incremental shadows would last from 1 hour 34 minutes in December to 4 hours and 40 minutes on June 21. Incremental shadows on the eastern façade would occur during the early morning hours of the May and June analysis days before 9:40 AM. Shadows on the western façade could occur during all four analysis days but would not begin until after 1 PM. The church is currently open to the public between 11 AM and 1 PM during the week, and shadows would not occur during these hours. However, incremental shadows could fall on the eastern façade during services (before 10 AM) and the shadows in the stained glass are extensive enough in both coverage and duration that the enjoyment of this historic resource would be diminished. Therefore, it is concluded that the proposed actions would result in a significant adverse shadow impact on this historic resource. Potential mitigation measures for this significant adverse impact are described below under "Mitigation." As discussed below, the impact would remain unmitigated.

HISTORIC RESOURCES

ARCHAEOLOGICAL RESOURCES

Projected development under the proposed actions would not have any significant adverse impacts on archaeological resources. However, four potential development sites could result in significant adverse impacts on archaeological resources. Such impacts would be unavoidable, because there are no mitigation mechanisms available to the City that require private as-of-right development to perform archaeological mitigation.

ARCHITECTURAL RESOURCES

Resources that could experience accidental damage from adjacent construction would be offered some limited protection through New York City Department of Building (DOB) controls governing the protection of adjacent properties from construction activities. Although additional protections could be provided through the implementation of construction protection plans that follow *TPPN #10/88,* there are no mechanisms for requiring the implementation of such plans for private as-of-right development.

It is not anticipated that the proposed actions would have adverse visual or contextual impacts on other architectural resources, because new development pursuant to the proposed actions would not eliminate or screen publicly accessible views of a resource, isolate an architectural resource from its setting or alter its visual relationship with the streetscape, or introduce an incompatible visual element to a resource's setting.

As stated above, the proposed actions would result in a significant adverse shadow impact on the historic Grace Episcopal Church. Potential mitigation measures for this significant adverse impact are described below under "Mitigation."

URBAN DESIGN AND VISUAL CHARACTER

It is not expected that the proposed actions would have significant adverse impacts on the urban design and visual resources of the project area. There would be no changes to topography, natural features, street hierarchy, block shapes, or building arrangements. Although there would be a minor change to the street pattern by demapping a block-long segment of 148th Street, that action would not affect the overall street pattern of the project area and there would be no significant adverse impact to this urban design feature.

The proposed actions and any subsequent development would affect the streetscape and building use, bulk, and type of the project area. In general, it is expected that the streetscape would be improved throughout the project area. New development would replace parking lots, one- and two-story non-descript commercial and industrial buildings, and vacant lots. In the residential neighborhoods, new

development would infill vacant and underutilized lots that would reinforce existing residential streetscape patterns. Similarly, new industrial buildings would conform to the streetscape of existing industrial areas. Within the proposed SDJD, urban design provisions would: create lively, visually transparent ground floors through glazing and use regulations; create consistent street walls that would frame views along major corridors; improve the existing incoherent streetscape of blank ground floors, storefronts, and jumbled signage that characterize many of the major streets; and provide pedestrian amenities in specified locations that would include widened sidewalks, lighting, seating, and street trees. Along the major corridors outside of the SDJD—Hillside Avenue, Guy Brewer Boulevard, and Merrick Boulevard—new mixed-use buildings would enhance the streetscape by mostly replacing low-rise, non-descript retail and automotive-related buildings with new residential buildings that also contain retail and community facility uses.

Although the proposed actions would facilitate the construction of new buildings that would be larger than most surrounding existing buildings, it is not expected that there would be any significant adverse impacts to building bulk, use, and type. The densest development would be limited to the proposed SDJD around the Jamaica Station/AirTrain complex and within the Jamaica Center CDB where there are already some tall and bulky buildings. In addition, new buildings constructed to the maximum FAR of 8.0, 10.0 and 12.0 would be located on the major wide streets—Jamaica and Archer Avenues and Sutphin Boulevard—in the vicinity of the transportation hub and the center of the Jamaica Center CBD. Throughout the area of the proposed SDJD, there exists a range of buildings types, which include monumental courthouses and hospitals, tall and boxy apartment buildings, two-story detached houses, small churches, one-story retail taxpayers, and mid-rise office buildings. Along Hillside Avenue, new apartment buildings of up to 12 stories would alter the urban design of that corridor. However, they would be located on a wide street and there are already a number of tall apartment buildings located along the avenue. Outside of the proposed SDJD, new buildings, while somewhat larger than existing surrounding buildings, would be moderately scaled to reflect the residential and industrial settings in which they would be constructed. Throughout the entire project area, the mix of building types and uses that would likely result from the proposed actions would be in keeping with the diverse array of existing building types and uses that define Downtown Jamaica and the adjacent residential neighborhoods of South Jamaica, Hollis, and St. Albans.

The proposed actions are not expected to have any significant adverse impacts on the visual resources of the project area. New buildings would not block any significant view corridors and views of visual resources or limit access to any visual resources. There would be limited development of modestly-sized buildings in the immediate vicinity of most of the visual resources, which exist in settings composed of a variety of building styles. Therefore, the settings and views of those resources would not be expected to change dramatically. Although the setting of the Jamaica Station/AirTrain complex would change considerably, there would not be any significant adverse impacts to the transportation complex, because it would still be visible in the adjacent view corridors, and the new surrounding mixed-use buildings would improve its setting. Overall, views along the area's major corridors would change, as the corridors could be developed with new buildings of greater bulk than is currently allowed, but views along those corridors would not be blocked, new buildings would frame existing views, which often tend to be of indistinct character, and views throughout the project area would continue to be of mixed-use urban neighborhoods composed of a variety of buildings of various heights, sizes, uses, and styles.

NEIGHBORHOOD CHARACTER

Principal conclusions with respect to neighborhood character are as follows:

- Overall, the proposed actions would alter neighborhood character in a number of beneficial ways, by creating opportunities for new housing and commercial development on underutilized and vacant land. The proposed Downtown mixed-use district would allow greater flexibility for residential and mixed-use development that would encourage transit-oriented development. In addition, the proposed

actions would facilitate the development of a pedestrian-friendly streetscape and a compelling skyline in Downtown Jamaica. Manufacturing zoning would be retained in areas where concentrations of industrial activity exist. New residential development would be directed to appropriate corridors with wide streets and good transportation access. The character of lower-density residential neighborhoods would be protected with zoning that would ensure that any new development would be consistent with the scale of existing buildings.

- The proposed actions would facilitate land use mixes and densities that support the revitalization and expansion of Downtown Jamaica's regional central business district while providing for appropriately scaled development in the neighboring low-rise residential communities in the primary study area. The proposed actions would enhance character of the neighborhood by establishing a distinctive urban fabric with new larger-scale mixed-use development in the SDJD and contextual residential districts in the nearby neighborhoods to ensure that new development integrates appropriately with the existing low-rise character. For these reasons, the proposed actions are expected to have beneficial effects on neighborhood character and significant adverse impacts to overall neighborhood character of the study area are not expected.
- The proposed actions have the potential to cause a significant adverse impact with respect to indirect residential displacement. The population vulnerable to indirect displacement constitutes about 7 percent of the population of the total study area. The potential indirect displacement of this population could alter the socioeconomic character of the neighborhood, potentially reducing the diversity of population and households in the area. Because of this potential socioeconomic impact, an Affordable Housing Alternative was examined (see the discussion below).
- Although the proposed actions would result in a number of significant adverse impacts on traffic, the impacts could be mitigated at most intersections. Unmitigated traffic impacts would occur at intersections that are already characterized by high traffic volumes, and therefore the impacts would not cause a significant adverse impact on neighborhood character. Significant adverse impacts relating to pedestrian congestion would occur at only one intersection and would not substantially change neighborhood pedestrian conditions. Noise increases as a result of the additional traffic that would be generated by the proposed actions would not be perceptible and therefore would not adversely impact neighborhood character.

NATURAL RESOURCES

The RWCDS sites contain no landscaped features or natural resources. Any vegetation on these sites in the existing condition would be typical urban invasive vegetation with no vegetation or wildlife habitat value. There are no streams, ponds, or lakes that would provide any habitat for aquatic-related wildlife and no significant habitat in the project area. Thus, no impacts on natural resources would occur under the proposed actions. In addition, the proposed project would not adversely impact water quality or natural resource conditions of Jamaica Bay.

HAZARDOUS MATERIALS

Under the proposed actions, development could occur on sites that have the potential for adverse impacts due to potential presence of hazardous materials. This could include impacts to the health and safety of workers during construction, the potential for the transport of contaminated soil, or the potential for impact on local residents or employees. Identified hazardous materials adverse impacts on the development site or adjacent site included: current manufacturing uses or zoning; auto-related or "transportation" uses; records of underground storage tanks or leaking underground storage tanks; records of spills of petroleum or chemicals; records of above ground storage tanks; and sites adjacent to major power substations or utilities.

For the sites concluded to be have the potential for adverse impacts due to hazardous materials, an (E) designation is proposed as part of the rezoning to avoid hazardous materials impacts. A listing of all

properties subject to these (E) designations and the applicable requirements is presented in Appendix C. In addition, for City-owned sites, the agencies that control these site would enter into agreements with NYCDEP on the activities that need to be performed prior to and during site construction. Restrictions for City-owned sites are also presented in Appendix C.

WATERFRONT REVITALIZATION PROGRAM

The project area is not located within the coastal zone, and a coastal zone consistency analysis is therefore not required.

INFRASTRUCTURE

The infrastructure analysis concludes the following:

- The incremental additional waste demands due to the proposed actions are expected to total 2.8 mgd. This added demand represents a 0.2 percent increase in the City's water supply. This added demand is not expected to overburden the City's water supply system. In the No Build condition, New York City Department of Environmental Protection (NYCDEP) has proposed a number of capital projects to improve the supply of water to the Jamaica area, as well as replacing local older water mains. It is expected that with these capital projects in place, the incremental demands of the proposed actions would not adversely impact the local (Jamaica area) water supply system of water pressure. In addition, all new developments (both projected and potential) must comply with Local Law No. 29 of 1989 with respect to water conservation measures.
- It is expected that there would be adequate treatment capacity at the Jamaica water pollution control plant (WPCP) to handle the increased sanitary flows from the development anticipated under the RWCDS. In the future without the proposed actions, the NYCDEP projections of wastewater flows to the Jamaica WPCP are expected to be 90 mgd. This projection takes into consideration population and employment growth within the service area of the Jamaica Bay WPCP over the next 10 years (current baseline average dry weather monthly flows are 83 mgd). Conservatively adding the total contribution from the proposed actions would increase the plant sanitary flow to 92.7 mgd, still within the plant's operating capacity. Thus, it is concluded that with the proposed actions no significant adverse impacts would occur on the City's wastewater treatment systems.
- Stormwater runoff from the projected development is expected to be reduced over the No Action conditions, since new development would be required to comply with NYCDEP rules and regulations for detention. This would be an improvement over the uncontrolled runoff that occurs on many of these sites under the current condition. Reduction in runoff from development sites as a result of detention measures such as dry wells or seepage basins would also reduce street flooding.
- NYCDEP is expected to move forward with its drainage plan for the area with the objective of improving the management and conveyance of stormwater and sanitary sewage in the Jamaica area. To ensure adequate sanitary and stormwater service while improvements are being implemented, the appropriate City agencies will coordinate and apply resources to target system upgrades as areas are developed.
- NYCDEP and the New York City Department of Buildings will coordinate in reviewing and approving all building and sewer applications to ensure that there is sufficient system capacity for developments in the rezoning area.

For the reasons above it is concluded that the proposed actions would not result in significant adverse impacts to the local water supply, sanitary wastewater treatment, or stormwater management infrastructure systems.

SOLID WASTE

Development under the RWCDS would occur in an area that is currently served by Department of Sanitation (DSNY) residential trash and recycling pick-ups. The proposed actions would not adversely affect the delivery of these services, or place a significant burden on the City's solid waste management system. The net increase in solid waste to be collected by DSNY under the proposed actions is about 13.5 tons per day, which when compared to the estimated 12,000 tons per day of residential and institutional refuse and recyclables collected by DSNY is a minimal increase. While the commercial waste stream would also increase under the proposed actions, industrial/manufacturing waste would decrease. This waste would have a net increase of about 795,372 pounds per week (57 tons per day) which would be about a 0.5 percent increase for the City. This is a minimal increase that could be handled by the private commercial solid waste management services.

In sum, given that there is an extensive system of solid waste collection and disposal services available in the study area for both residential solid waste services provided by DSNY and commercial/industrial collection provided by private services, and the increases under the proposed actions would be minimal, it is concluded that the proposed actions would not adversely impact solid waste and sanitation services or conflict with the City's solid waste management plan.

ENERGY

The proposed actions would create an increased demand on energy systems, including electricity and gas. However, relative to the capacity of these systems and the current demands within the City, these increases are minor. Electrical and gas connections are readily available in the local streets. Any new development under the proposed actions would be required to comply with the New York State Conservation Construction Code. The need for expansion and upgrades in service is recognized by Con Edison and a number of measures are under consideration to improve that service. For these reasons, the proposed actions are not expected to adversely impact energy systems.

TRAFFIC AND PARKING

The FEIS analyzed the effects of added traffic and parking demand from the projected development sites on the Downtown Jamaica street network during the weekday AM, midday and PM, and Saturday midday peak hours. The results of the analyses show that project demand would create significant traffic impacts at a number of locations (see Table S-3), with the AM peak hour having the most impacts, 31 impacted intersections (30 signalized and one unsignalized), followed by the PM, the Saturday midday and the midday, with 26, 19 and 17 impacted intersections, respectively. The proposed actions would also result in a shortfall in the supply of public parking in the study area during the midday peak period. Mitigation for these impacts is presented below.

Table S-3
Summary of Impacted Intersections

Signalized Intersections		AM	MD	PM	SMD
Hillside Avenue @	Van Wyck Southbound Service Road	X	X	X	X
	Van Wyck Northbound Service Road	X	X	X	X
	Queens Boulevard	X	X	X	X
	Sutphin Boulevard	X	X	X	X
	148th Street—South	X	X		
	150th Street	X	X	X	X
	153rd Street	X		X	
	Parsons Boulevard	X	X	X	X
	161st Street	X		X	
	162nd Street	X	X	X	X
89th Avenue @	Sutphin Boulevard	X			

Table S-3 cont'd
Summary of Impacted Intersections

Signalized Intersections		AM	MD	PM	SMD
Jamaica Avenue @	Van Wyck Southbound Service Road	X		X	
	Van Wyck Northbound Service Road	X	X	X	
	Queens Boulevard	X	X	X	
	Sutphin Boulevard	X	X	X	
	150th Street	X	X	X	X
	Parsons Boulevard	X			X
	160th Street	X			
	Union Hall/162nd Street	X	X		X
	Guy R. Brewer Boulevard/163rd Street	X			
	164th Street	X			
	165th Street	X			
	Merrick Boulevard	X	X	X	
Archer Avenue @	150th Street	X		X	
	160th Street	X		X	
	Guy R. Brewer Boulevard		X	X	X
	165th Street			X	X
	Merrick Boulevard			X	X
Atlantic Avenue @	Van Wyck Southbound Service Road	X		X	
	Van Wyck Northbound Service Road		X		X
Liberty Avenue @	Sutphin Boulevard	X	X	X	X
	150th Street	X		X	X
	Guy R. Brewer Boulevard	X		X	X
	Merrick Boulevard	X	X	X	X
South Road @	Guy R Brewer Boulevard	X			
Unsignalized Intersection		**AM**	**MD**	**PM**	**SMD**
Jamaica Avenue @	178th Street	X			
Notes:	X=Impacts to one or more movements in the peak hour.				

TRANSIT AND PEDESTRIANS

The FEIS analyzed the effects of added project travel demand on subway stations, bus services and pedestrian facilities in the study area. The results of the analyses show that this new demand would not result in any significant adverse impacts to any analyzed subway stairways or fare arrays. New subway demand would not result in any significant adverse line haul impact to any subway line (E, F or J/Z). New bus trips generated by projected development sites would result in significant impacts to New York City Transit's (NYCT) Q30, Q43 and Q54, and MTA Bus' Q6, Q8, Q40, Q41, and Q60 bus routes. The added pedestrian demands would not result any significant adverse crosswalk or sidewalk impacts, but would result in a significant impact to one corner area in the PM peak hour. "Mitigation," below, provides a description of the measures to mitigate transit and pedestrian impacts.

AIR QUALITY

MOBILE SOURCE ANALYSIS

Based on the traffic analysis, air quality modeling of carbon monoxide (CO) concentrations were examined at eight traffic intersections. The results showed that the proposed actions would not cause any violations of the 8-hour CO national ambient air quality standard (NAAQS). In addition, the incremental increase in 8-hour average carbon monoxide (CO) concentrations would not cause a violation of the CEQR *de minimis* CO criteria. Thus, the proposed actions would not result in any significantly CO air quality impacts.

Concentrations of particulate matter (PM) resulting from the proposed actions were also analyzed. With the proposed actions, the annual and daily (24-hour) impacts would be below the interim guidance criteria. Thus, the proposed actions would not result any PM_{10} or $PM_{2.5}$ impacts.

HVAC SOURCE ANALYSES

A screening analysis was performed to determine whether development sites could impact existing or proposed buildings due to heating system (boiler) emissions. A total of 43 development sites failed the screening analysis assuming No. 4 fuel oil as the fuel source. Cleaner burning No. 2 oil was then assumed, but 40 of these sites also failed assuming this fuel. Five of these sites would not have impacts by restricting the fuel to natural gas.

For sites that failed the HVAC screening analysis described above, ISC3 dispersion modeling was performed. The results disclosed that 30 of the 43 sites that failed the screening analysis also failed the refined analysis for No. 2 heating oil. All of the sites would pass the analysis assuming natural gas as the fuel.

In addition to the site analyses, 15 cluster (cumulative) analyses were performed. The results of that analysis found that maximum impacts from 10 of the 15 clusters exceeded the 24-hour NAAQS for sulfur dioxide (SO_2). For the 10 clusters that failed the initial screening analysis, the analysis was re-run assuming that fuel types are restricted to No. 2 oil or natural gas. In this analysis, four of the 11 clusters were predicted to exceed the 24-hour NAAQS for SO_2 assuming No. 2 oil as the fuel type. None of the clusters would have impacts assuming natural gas as the fuel source.

To preclude the potential for significant adverse air quality impacts from the HVAC emissions, an (E) designation would be incorporated into the rezoning proposal for each of the sites that would otherwise be impacted. The (E) designations for these sites are presented in Appendix C.

INDUSTRIAL SOURCE ANALYSIS

A study was conducted to examine the potential for air quality impacts from existing manufacturing and industrial uses within 400 feet of the projected and potential development sites or large sources within 1,000 feet. Based on the modeling, short-term guideline concentrations (SGC) and annual guideline concentrations (AGC) were predicted to be exceeded for a number of pollutants at certain various development sites. To preclude the potential for significant adverse industrial source air quality impacts an (E) designation would be incorporated into the rezoning proposal for the impacted sites (see Appendix C).

Between the DEIS and the FEIS, further analyses were undertaken in coordination with NYCDEP to eliminate (E) designations from potential and projected development sites. In particular, analyses from the DEIS were refined to reflect NYSDEC policy at sites where there were predicted exceedances of a SGC or AGC for a criteria pollutant, but where the NAAQS were met for the same pollutant. Also, NYCDEP conducted site inspections at certain concrete batching plants that provided more accurate information for determining concentrations of particulate matter at development sites. Additional (E) designations were eliminated as a result of site inspections of other facilities (conducted at a metal plating facility and a facility with process ovens) and revising the analyses to reflect existing operations that are in compliance with all applicable legal requirements. NYCDEP confirmed that existing operations are consistent with issued air emission permits. Through sensitivity analyses, it was determined that additional (E) designations could be eliminated if certain industrial sources implemented additional control technologies or increased the height of their emission stacks. Because such measures could only be implemented by the facility on a voluntary basis, (E) designations were not eliminated from the DEIS as a result of these analyses. Finally, since the DEIS, the City was not able to identify any design features or technologies that would reduce or eliminate the impacts that would be avoided by the (E) designation.

NOISE

MOBILE SOURCE ANALYSIS

A screening analysis was performed to determine whether traffic generated by the proposed actions would have the potential to cause a significant noise impact. Based on that screening, with one exception, the incremental change in noise levels due to traffic generated by the proposed actions would result in increases of less than 1 dBA, which is below the significant impact threshold. At that one location, a more detailed analysis was performed which disclosed that here, too, calculated increases in noise levels were less than 1 dBA higher than the No Action condition. Increases of this magnitude are imperceptible. Thus no significant adverse impacts mobile source impacts from the proposed project would occur.

MECHANICAL EQUIPMENT

Since this is an area-wide rezoning no site-specific detailed designs of building mechanical systems (i.e., HVAC) are available. However, it is expected that these systems would be designed to meet all applicable City noise regulations and requirements, and therefore would not produce noise levels that would create significant impacts.

ATTENUATION REQUIREMENTS

The *CEQR Technical Manual* establishes building noise attenuation requirements, based on exterior (ambient) noise levels. These noise attenuation values are designed to achieve interior noise levels of 45 dBA or lower for residential buildings, Based on exterior $L_{10(1)}$ noise levels for the study area attenuation requirement are as follows: to achieve 30 dBA of building attenuation, double-glazed windows with good sealing properties as well as alternate means of ventilation, such as well sealed through-the-wall air conditioning, are necessary; to achieve 35 dBA of building attenuation, double glazed windows with good sealing properties as well as alternate ventilation such as central air conditioning, are necessary; and to achieve 40 dBA of building attenuation, special design features that go beyond the normal double-glazed window and central air conditioning are necessary, which may include using specially designed windows (e.g., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.), and additional building insulation.

To ensure that interior noise levels for future buildings meet the above requirements, an (E) designation would be placed on properties that require this noise attenuation. A listing of all properties subject to these (E) designations and the applicable requirements is presented in Appendix C.

Between the DEIS and the FEIS additional monitoring was undertaken at 25 additional locations in the study area for the purposes of gathering supplemental noise data relative to determining ambient noise conditions and project impacts for the FEIS. This involved supplemental noise monitoring around locations where measured $L_{10(1)}$ values reported in the DEIS indicated that 40 dBA of attenuation would be necessary to satisfy CEQR interior noise requirements. The purpose of these additional measurements and subsequent analyses performed for the FEIS was to identify which development sites and/or facades of those sites would require 40 dB of attenuation and which development sites and/or facades of those sites would require less attenuation. As a result of these efforts, certain sites along higher-level noise corridors in the project area were confirmed to require 40 dB of attenuation (e.g., Jamaica Avenue, Van Wyck Expressway). However, at other locations or facades of buildings, based on the supplemental noise monitoring, it was determined that less than 40 dB of attenuation (i.e., 35 dB of attenuation) would be adequate to satisfy CEQR requirements. Appendix C of this FEIS, "Proposed (E) Designations" has been modified to reflect this additional noise monitoring work.

CONSTRUCTION IMPACTS

Construction-related activities resulting from the proposed actions are not expected to have any exceptional or long-term significant adverse impacts other than those relating to archaeological resources (see the discussion above under "Historic Resources"). These impacts cannot be mitigated because the projected and potential development sites are privately owned and could be redeveloped as of right under the proposed actions. The construction process in New York City is 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 DOB, New York City Department of Transportation (NYCDOT), NYCDEP, and New York State Department of Environmental Conservation (NYSDEC) (where applicable), among others. For these reasons, with the exception of historic resources, no significant adverse impacts are expected with respect to construction.

PUBLIC HEALTH

The *CEQR Technical Manual* states that an EIS public health assessment should provide a thorough consideration of potential public health issues. This EIS considered potential public health impacts due to air quality, hazardous materials, solid waste management, odors, and noise. The proposed actions would not have any significant adverse impacts in any of these areas and would also use (E) designations to avoid impacts associated with hazardous materials, air quality, and noise. Thus, the proposed actions would not have any significant adverse public health impacts.

D. ALTERNATIVES

A number of alternatives to the proposed Jamaica Plan were examined, as follows:

- No Action Alternative, which assumes no areawide rezoning or any elements of the proposed action;
- No Impact Alternative;
- Lesser Density Alternative;
- Affordable Housing Alternative; and
- Community Comment Alternative.

The development scenario for each alternative is summarized in Table S-4. As summarized in the table, the total net number of dwelling units would vary with each of the identified alternatives.

Table S-4
Summary of Development Under Alternatives

Analysis Scenario	Total Projected Development				
	Dwelling Units	Commercial SF	Community Facility SF	Industrial SF	Affordable Housing Units
Proposed Actions	5,380	4,771,199	459,524	120,894	0
No Action Alternative	1,815	1,663,485	214,344	500,646	0
No Impact Alternative	N/A	N/A	N/A	N/A	0
Lesser Density Alternative	4,394	4,771,199	459,524	120,894	0
Affordable Housing Alternative	5,651	4,771,199	459,524	120,894	894
Community Comment Alternative	3,405	4,546,415	372,484	12,000	475

NO ACTION ALTERNATIVE

The No Action Alternative assumes that the proposed zoning changes and other land use actions are not implemented (e.g., zoning, JGURA, disposition). This alternative is discussed and analyzed as "Future Without the Proposed Actions" in each of the technical areas of Chapters 2 through 21 and compares

conditions under the No Action Alternative with conditions with the proposed actions. Conditions under this alternative are summarized below and compared with those of the proposed actions.

Under the No Action Alternative, it is anticipated that the project area would experience modest growth in commercial, manufacturing, and residential uses. Most of this growth is expected to include further development of local retail space and residential development in existing low-density residential communities. It is anticipated that there would be approximately 1,815 residential units, 1,663,485 square feet of commercial space, 214,344 square feet of community facility space, and 500,646 square feet of industrial space on projected development sites. Under this alternative, new housing developed in the proposed action area would not be subject to height limits, and low-density areas could experience development that is not compatible with the existing built context.

The benefits expected to result from the proposed actions—including increased density of commercial and residential uses in Downtown Jamaica, new residential uses directed toward the area's major corridors, transit-oriented development, new development compatible with existing established low-density residential neighborhoods, and the reinforcement of certain industrial areas for industrial growth—would not be realized under this alternative. Thus, there would not be a comprehensive redevelopment and neighborhood preservation plan for the Downtown Jamaica area.

Under the No Action Alternative, it is generally anticipated that existing economic activities on the projected development sites would remain. Absent the proposed actions, it is anticipated that development would occur on some of the 186 projected development sites, resulting in a total of 1,815 dwelling units, 1,633,485 square feet of commercial space, 214,344 square feet of community facility space, and 500,646 square feet of industrial space on projected development sites. However, the area would not see the net growth of 3,565 housing units, 3,107,714 square feet (sf) of commercial space, and 245,180 sf of community facility space as under the proposed actions. Similarly, the proposed actions' net decrease of 579,752 sf of industrial space would not occur under this alternative.

The project's goals of expanding the CBD and encouraging redevelopment and economic growth to complement existing building patterns would not be met under this alternative. The increase in residential and employee populations under the proposed actions would not occur, and therefore a substantial new customer base would not be created. The area's economic development potential stemming from its proximity to mass transit and JFK Airport would not be realized. The No Action Alternative also would not realize benefits from creating or retaining a significant number of jobs in New York City and State during construction and operations associated with the projected development sites.

Based on the guidelines of the *CEQR Technical Manual* guidelines, the proposed actions have the potential to result in indirect displacement pressures on residents in certain census tracts in the study area. This impact would not occur under the No Action Alternative. Therefore, under the No Action Alternative, the significant adverse impacts with respect to indirect displacement expected under the proposed actions would not occur. However, the No Action Alternative would not further the City's goals of providing opportunities for new residential and commercial development in one of the major downtown regional centers.

Under the No Action Alternative, there would be an increase in the residential population, though this increase would be less than under the proposed actions. Like the proposed actions, the No Action Alternative would not have any significant adverse impacts on community facilities. In addition, fewer residents and employees would be introduced to the study area. The No Action Alternative would not result in the significant adverse impacts on passive open space ratios that would occur under the proposed actions, nor would it result in the proposed actions' significant adverse shadow impact on the Atlantic Avenue Extension Park.

In the Jamaica Center area and along growth corridors, buildings constructed under the No Action Alternative would be smaller than those under the proposed actions and would therefore cast shadows of shorter length and duration. Unlike the proposed actions, the No Action Alternative would not have

significant adverse shadow impacts on the Atlantic Avenue Extension Park. No new shadows would be cast on the proposed Atlantic Avenue Extension Park under this alternative. Shadows on Grace Episcopal Church would be of shorter duration but would fall on the historic church and its windows.

Of the sites that are expected to be redeveloped with the No Action Alternative, eight are potentially sensitive for archaeological resources, and development of these sites would likely disturb or destroy any archaeological resources located on them. Thus, these impacts would occur with or without the proposed actions.

Projects planned or under construction in the project area under the No Action Alternative could affect architectural resources in the future without the proposed actions. For example, the Jamaica Transportation Center Intermodal Enhancements and Atlantic Avenue Extension project includes the redesign of Archer Avenue between 144th Place and 148th Street adjacent to the State/National Register (S/NR)-eligible LIRR Station and the LIRR auxiliary building, a potential historic resource. Like the proposed actions, the No Action Alternative would cast shadows on the Grace Episcopal Church and its windows.

Under the No Action Alternative, development projected absent the proposed actions is not expected to substantially alter the existing urban design character of the project area. However, zoning in low-density neighborhoods that allows buildings out of scale with the existing built character would continue. No protective contextual zoning would be applied in these areas under this alternative. Under the No Action Alternative, the streetscape enhancements associated with the SDJD would not occur, nor would much of the new development that would replace vacant lots and auto repair shops with a more attractive and enlivened streetscape as under the proposed actions.

This alternative would not result in the benefits to neighborhood character associated with the proposed actions, nor would it increase traffic or the demand on local open spaces. Under this alternative, the land use and urban design improvements associated with new development and streetscape improvements would not occur, in particular those associated with the SDJD.

Under the No Action Alternative, construction of as-of-right buildings under the current zoning may occur without regulatory oversight such that environmental conditions on these sites are not addressed, and residual contamination could be encountered by construction workers or the general public. It is assumed that all construction and required removal or handling of hazardous materials would be conducted in accordance with applicable state and federal requirements, thereby minimizing the potential for exposure. However, there would not be the testing and remediation requirements of the (E) designations.

Under this alternative, the increased demands on infrastructure, solid waste, and energy systems would be smaller than those under the proposed actions, but neither this alternative nor the proposed actions would cause increases extensive enough that there would be significant adverse impacts on these utilities or services.

In the No Action Alternative, traffic and parking demand levels in the study area would increase general background growth and future developments in the area. Under the No Action Alternative, of the 53 signalized intersections, 34 intersections would experience congestion (i.e., would operate at LOS E or F or a v/c ratio of 0.90 or above for a signalized lane grouping) on one or more movements in the AM peak hour, 10 intersections in the midday peak hour, 25 intersections in the PM peak hour, and 15 intersections in the Saturday midday peak hour. The proposed actions, by comparison, would increase traffic congestions and would cause significant adverse impacts (i.e., deterioration of level of service from LOS A, B or C in the No Action condition to marginally acceptable mid-LOS D or unacceptable LOS E or F in the With Action condition) at 31 intersections (30 signalized and one unsignalized) in the AM peak hour, 17 in the midday peak hour, 26 in the PM peak hour, and 19 in the Saturday midday peak hour.

Under the No Action Alternative, it is anticipated that demand for off-street parking would increase due to new development and general background growth and about 1,351 public parking spaces would be

displaced. The proposed actions would result in a significant shortfall in the supply of public parking within the study area during the weekday midday peak periods.

Under the No Action Alternative, transit and pedestrian facilities in the project area would experience an increase in demand as a result of background growth and future developments anticipated throughout the study area.

In the Future Without the Proposed Actions, almost all analyzed stairways and fare arrays at the six subway stations serving the study area would operate at acceptable LOS C or better in both the AM and PM peak hours, with the exception of an escalator at the Jamaica Center station which would operate at LOS F in the PM peak hour. All stairways and fare arrays would remain at their existing levels of service in the 2015 No Action condition.

In both peak hours, F trains would continue to have available capacity under the No Action Alternative. Demand on Manhattan-bound E trains, without service adjustments, would exceed capacity by approximately 14 percent, with E trains operating at a v/c ratio of 1.14 compared with 1.02 under existing conditions. In the PM peak hour, Queens-bound E trains would continue to operate within capacity. The J/Z trains would also continue to operate within capacity in both peak hours in the No Action Alternative. Likewise, the proposed actions would add passengers, but would not result in significant adverse impacts on subway line haul.

Under the No Action Alternative, 10 bus routes would operate above capacity in the peak direction at their maximum load points, whereas the proposed actions would further increase bus ridership and cause significant adverse impacts on bus service. New bus trips generated by projected development sites would result in significant adverse impacts to NYCT's Q30, Q43 and Q54, and MTA Bus's Q6, Q8, Q40, Q41 and Q60 bus routes, NYCT would continue to monitor ridership and add bus service accordingly.

Under the No Action Alternative, it is anticipated that demand at analyzed sidewalks, corner areas and crosswalks would also increase as a result of new development and general background growth (estimated at 1 percent per year). It is also anticipated that, sidewalks, corner areas and crosswalks would be enhanced and improved along Archer Avenue in the vicinity of Sutphin Boulevard. All analyzed sidewalks would continue to operate at LOS B or better in all peak hours in the 2015 future without the proposed actions. Under this alternative, the proposed actions' significant adverse impacts at one corner during the PM peak hour would not occur.

No violations of the NAAQS are predicted to occur either under the No Action Alternative or under the proposed actions, and both alternatives would be consistent with the New York State Implementation Plan (SIP). Under the proposed actions, no impacts are expected to occur from mobile sources, parking facilities, or HVAC systems. Concentrations of air toxics exceeding DEC short-term and/or annual guideline concentrations (AGCs and SGCs, respectively) are expected to occur at certain development sites due to existing industrial air emission sources in the area. Under the proposed actions, theses impacts require (E) designations on the development sites. Under the No Action Alternative, neither these impacts nor the need for an (E) designation would occur.

Noise levels in the No Action Alternative would increase slightly over existing levels. However, there would not be the noise attenuation requirements or the proposed (E) designations required under the proposed actions. Therefore, new development under this alternative could result in noise impacts due to high ambient noise levels. The additional traffic from the proposed actions was analyzed and found not to result in any significant adverse noise impacts. Thus, neither the No Action Alternative nor the proposed actions would cause any significant adverse noise impacts from mobile sources. Likewise, under both the proposed actions and this alternative there would not be any stationary source impacts from mechanical equipment.

Under the proposed actions, noise attenuation is required for a number of sites due to exterior noise levels. The noise attenuation requirements are necessary to maintain interior noise levels of 45 dBA or lower (for residences). Under the proposed actions, an (E) designation would be placed on these

properties to ensure that these requirements are met. Under this alternative, such (E) designations would not be necessary.

Because less construction occurs under this alternative, it would not generate the level of temporary construction disruption anticipated under the proposed actions. However, neither this alternative nor the proposed actions would result in significant adverse impacts during construction. Neither the proposed actions nor this alternative would result in significant adverse public health impacts.

NO IMPACT ALTERNATIVE

It is the City's practice to examine, whenever feasible, a "No Impact" alternative that avoids the significant environmental impacts of the proposed actions. The proposed actions are concluded to result in significant adverse impacts in the following technical areas: socioeconomic conditions (indirect residential displacement), open space (passive space for employees), archaeology (disturbance of potential features), traffic and transportation (for impacted intersections and on one corner), and, in addition, (E) designations would avoid impacts with respect to hazardous materials, noise and air quality. To avoid all the potential significant adverse impacts, the development resulting from the proposed actions would need to be reduced to approximately 660 additional residential units at three separate sites with one 59,000 square feet site for office space. Each residential site could have not more than 220 dwelling units. Thus, in the No Impact Alternative, the total incremental residential development would be reduced by at least 80 percent and the total incremental commercial development would be reduced by approximately 98 percent. In addition, no sites identified as potentially sensitive for archaeological remains could be considered. Sites that would affect the Grace Episcopal Church with shadow (sites 118, 199, and 122) would have to be reduced in height to 50–100 feet in order to not cast shadows on the church windows. (The No Impact building heights were determined by modeling shadows for potential development sites 118, 119, and 122—the sources of the shadow impact—and incrementally diminishing the heights of the buildings until no shadow would fall upon the east or west facades of Grace Episcopal Church and no impact would occur. Based on that analysis, the heights of the three buildings would need to be as follows: 100 feet at Site 118, 50 feet at Site 119, and 75 feet at Site 122.)

While the No Impact Alternative would avoid the proposed actions' significant adverse impacts, it would not meet the goals and objectives of the proposed actions. By significantly reducing the number of sites to be developed and the overall level of development, particularly in the Jamaica CBD area and along the proposed residential growth corridors, this alternative would not: expand the CBD and encourage redevelopment and economic growth that complements existing building patterns; expand opportunities for new residential and mixed use development at a range of scales appropriate to surrounding building patterns near transit and highway access; promote synergy with adjacent institutional, business and residential communities; or reinforce certain industrial areas and allow for growth.

LESSER DENSITY ALTERNATIVE

This alternative is intended to assess whether development at a lower density would result in impacts substantially different from those of the proposed actions. This alternative is similar to the proposed actions with the following exceptions: under this alternative, a C6-2 zoning district, with a maximum FAR of 6.0, would be mapped along Jamaica and Archer Avenues between 146th Street and 164th Street (subarea JC1); an R7A zoning district, with a maximum FAR of 4.0, would be mapped along Hillside Avenue between 139th Street and 180th Street (subarea U). Under this alternative, development would occur on the same projected and potential development sites as the proposed action, but with lower bulk than permitted under the proposed action.

With the different zoning designations discussed above, the Lesser Density Alternative would result in a reduction of 986 dwelling units compared to the proposed action. Under this alternative, there would be a total of 4,394 dwelling units compared to 5,380 units under the proposed actions. Compared to future No Build conditions, the Lesser Density Alternative would result in a net increment over the No Build of

approximately 2,579 units, compared to a net increment of 3,565 units under the proposed actions, an approximate 27 percent reduction. This alternative is expected to have the same amount of nonresidential development (e.g., commercial, industrial, and community facility).

For CEQR technical areas affected by density-related potential impacts (e.g., community facilities, open space, traffic, etc.), the effects of the Lesser Density Alternative would be smaller in magnitude with the fewer dwelling units and residents than under the proposed action. However, the projected and potential development sites would be the same as under the proposed actions, site-specific potential impacts (e.g., hazardous materials, archaeology, stationary source air quality, stationary source noise) would be the same under the proposed actions.

The overall effect of this alternative on land use, zoning, and public policy would generally be comparable to that of the proposed actions. The benefits expected to result from the proposed actions—including increased density of commercial and residential uses in the Downtown Jamaica Center CBD, new residential uses directed toward the area's major corridors, transit-oriented development, development compatible with existing established low-density residential neighborhoods, and reinforced industrial areas—would be realized under this alternative, though to a lesser degree, as this alternative would produce of fewer housing units compared with the proposed action.

The Lesser Density Alternative would result in similar impacts in the following areas: socioeconomic impacts with 983 (15 percent) fewer housing units than under the proposed actions (thus, the beneficial socioeconomic effects of an increased housing supply would be less); the projected population increase would be lower than under the proposed actions, and would place less of demand on community facilities and services (compared to the proposed actions, this alternative would generate 168 fewer elementary, 89 fewer middle, and 40 fewer high school students, but neither has an impact); the overall effect of this alternative on open space resources would generally be similar to the proposed actions (e.g., 8,082 new residents compared with 11,158 under the proposed actions, the number of new workers introduced would be similar), but both would have impacts on the passive open space ratio in the non-residential study primarily due to the large number of new workers. Development on sites casting shadows on the Atlantic Avenue Extension Park would be the same under this alternative as under the proposed actions. Development on sites near Grace Episcopal Church would be reduced compared to the proposed actions but would still cast shadows on the stained glass windows on the east and west façades. Both this alternative and the proposed actions would result in a significant adverse impact on the proposed Atlantic Avenue Extension Park due to shadows.

The maximum allowable building heights would be the same for most sites as under the proposed actions thus the shadow impacts would be the same. Both this alternative and the proposed actions would result in significant adverse shadow impacts on the proposed Atlantic Avenue Extension Park and on Grace Episcopal Church, a historic resource. Impacts related to construction would be similar as would changes in neighborhood character.

This alternative would allow a maximum FAR of 6.0 along Jamaica and Archer Avenues between 146th Street and 164th Street (as compared with 8.0 FAR under the proposed actions) and a maximum FAR of 4.0 along Hillside Avenue between 139th Street and 180th Street (as opposed to 5.0 FAR under the proposed actions). Development would occur on the same sites as under the proposed actions. Like the proposed actions, the Lesser Density Alternative would include urban design provisions in the SDJD to create a lively and attractive streetscape. As under the proposed actions, the denser development and larger buildings would be in the CBD area and along major transportation corridors. No view corridors or views of visual resources would be blocked or impacted in either scenario. Therefore, neither this alternative nor the proposed actions would result in significant adverse impacts on urban design and visual resources.

The Lesser Density Alternative would generate up to 8 percent fewer person trips than the proposed actions due to the reduced units and would therefore decrease transportation demand by approximately 8 percent. As this alternative would generate fewer vehicular trips, it would have similar, but less, traffic impacts than the proposed action. However, this alternative would not eliminate any of the identified

significant traffic impacts under with the proposed actions. In addition, all transit and pedestrian impacts would be similar.

Under both this alternative and the proposed actions, no violations of NAAQS standards are predicted to occur with respect to mobile sources and parking. Both the proposed actions and this alternative would be consistent with the New York State Implementation Plan (SIP). Impacts related to stationary sources (boilers from buildings and industrial sources) would be similar to the proposed actions and would require (E) designations to avoid impacts.

In addition, less development would mean the demand on the City's water and sewer infrastructure, solid waste and sanitation, and energy services would be marginally reduced. However, the proposed actions would not have a significant impact in these areas. Neither the proposed actions nor this alternative would impact natural resources or water quality.

AFFORDABLE HOUSING ALTERNATIVE

An RWCDS for this alternative was developed by DCP which projects a total of 5,651 projected housing units in the proposed action area and reflects maximum utilization of the inclusionary housing bonus mechanism on projected development sites. The square footage of the industrial, community facility, and commercial uses in this alternative would be the same as the proposed actions. The incremental difference between the No Build and the Build scenarios under the Affordable Housing Alternative would be 3,835 dwelling units, compared to 3,565 under the proposed actions. Therefore, this alternative would generate more residential development, than would be generated under the proposed actions, but with affordable housing (see Table S-5).

On April 23, 2007, DCP filed its Affordable Housing Alternative Zoning Text amendment that expands the proposed Special Downtown Jamaica District and builds upon the original zoning text application. This proposed Alternative Zoning Text fulfills DCP's promise to implement important incentives for the provision of affordable housing, and it also includes elements that have been developed in response to useful feedback from the Community Boards and elected officials representing the Jamaica community.

The Alternative Zoning Text application (N 070315(A) ZRQ) builds upon the original zoning text application by adding the following four elements:

- Establishing one of the City's largest Inclusionary zoning programs that will make incentives for affordable housing available to developments located on 70 blocks in Downtown Jamaica as well as along Hillside Avenue from 139th to 191st Streets. In the areas where Inclusionary Zoning is proposed, a zoning bonus will allow increased floor area for residential developments in exchange for the provision of housing that will remain permanently affordable for low- and moderate-income families. The additional floor area must be accommodated within the defined height and setback provisions of the underlying zoning districts. The proposed Special Downtown Jamaica District text would allow off-site affordable housing units to be located anywhere in the Special District (in addition to standard inclusionary housing options of elsewhere in the same Community Board as the new development or in an adjacent Community Board within a ½ mile radius).
- Creating an innovative zoning requirement for a "Building Transition Rule" to reduce the scale of new apartment houses on Hillside Avenue, Jamaica Avenue and Merrick Boulevard in the portion of the zoning lot that is within a 25-foot area adjacent to lower density districts characterized primarily by single and two-family homes. In these locations, new developments will be required to provide an 8-foot wide open area between the wall of a new building and the lot line that abuts a lower density district. Furthermore, within a 25-foot wide transition area abutting a lower density district, the maximum building height will be capped at 35 feet, the same height as that permitted in most of the adjoining lower density districts. In order to be able to implement the Inclusionary Zoning program as well as the "building transition rule" requirements, the boundaries of the Special Downtown

Jamaica District are proposed to be expanded to include portions along Hillside Avenue, Jamaica Avenue and Merrick Boulevard.

- Strengthening off-street parking requirements and reducing parking waivers for commercial and residential developments, while providing more flexible ways for new developments to meet those increased requirements. This alternative zoning text would not allow subdivision of lots within the Special District to reduce or eliminate parking requirements. The allowed residential parking waiver has been reduced to a maximum of 5 spaces (in contrast, the residential waiver under the original proposal is 15 spaces). The allowed commercial parking waiver has been reduced to a maximum of 15 spaces (in contrast, the commercial waiver under the original proposal is 40 spaces). This zoning text for the proposed SDJD would establish a consistent residential parking requirement (parking spaces for of 50% of dwelling units, regardless of lot size; under the original proposal the requirement was reduced to 30% on lots less then 10,000 sf). Also, these new provisions of the SDJD would allow accessory parking to be located off-site within 1500 feet of the development (in contrast, under the original proposal off-site parking would have been limited to 1000 feet away from the development).
- Fine-tuning the rules for new buildings in the Special District. In the C4-5X portion of the Special District north of Jamaica Avenue, the originally proposed street wall base height of 40' – 60' would be increased to 40' – 85' to provide more flexibility for new construction to reflect the range of street wall heights of existing buildings in this area.

Also, the proposed SDJD zoning text was changed to require a streetwall along the northern edge of the Public Place on Archer Avenue proposed as part of the Station Area Improvement project. There would not be a required setback in this streetwall (consistent with the originally proposed provisions for developments on adjacent blocks), however, the locations of doors and windows in building wall abutting a concession or subway entrance would be restricted to avoid pedestrian conflicts.

In addition, under this alternative, an Inclusionary Housing Program would be established throughout the SDJD. This Inclusionary Housing Program would offer a floor-area bonus for new developments providing permanently affordable housing units; establishing a base and maximum FAR; and requiring the provisions of permanent affordable housing in order to achieve the maximum FAR. In addition, the proposed SDJD boundaries would be extended to include subareas U and V along Hillside Avenue, and certain height and setback regulations would be modified to accommodate the increase in the maximum FAR for affordable housing. A comparison of FAR by zoning district is provided in Table S-6.

This alternative is intended to create an incentive for new developments to provide permanently affordable housing units in addition to market-rate apartments by offering a floor area bonus. The additional floor area would be required to be accommodated within the applicable height and setback provisions of the underlying zoning district, as modified under this alternative.

Table S-5
Summary of RWCDS for Affordable Housing Alternative to Proposed Action—Projected Development Sites

	No Build		Build		Increment		
Use	Proposed Action	Affordable Housing Alt.	Proposed Action	Affordable Housing Alt.	Proposed Action	Affordable Housing Alt.	Difference
Commercial (sf)	1,663,485	1,663,485	4,771,199	4,771,199	3,107,714	3,107,714	0
Industrial (sf)	500,646	500,646	120,894	120,894	(379,752)	(379,752)	0
Community Facilities (sf)	214,344	214,344	459,524	459,524	245,180	245,180	0
Total Dwelling Units (DU)	1,815	1,815	5,380	5,479	3,565	3,835	270
Affordable DUs		0	0	894	0	894	894

Source: NYCDCP, May 2007.

Table S-6
Comparison of Permitted FAR Under Affordable Housing Alternative and Proposed Action

District	Proposed Action	Affordable Housing Alternative	
	Max FAR	Base FAR	Max FAR (with Bonus)
R7A, C4-4A	4.0	3.45	4.6
R7X, C4-5X	5.0	3.75	5.0
C6-2	6.0	5.4	7.2
C6-3	8.0	6.0	8.0
C6-4	10.0	9.0	12.0
Source: NYCDCP, December 2006.			

To earn the Inclusionary Housing Program floor area bonus, new developments would be required to provide an amount of affordable housing, on- or off-site equaling 20 percent of the floor area developed on the zoning lot. Affordable housing is defined as affordable for families at or below 80 percent of Area Median Income.

LAND USE, ZONING AND PUBLIC POLICY

The Affordable Housing Alternative would not result in any significant adverse impacts on land use, zoning, or public policy.

Land use changes under this alternative would be similar to the proposed project as would zoning, with the exception of the expanded SDJD which would occur under this alternative. However, neither the proposed action nor this alternative would cause any adverse impacts on land use or zoning. Unlike the proposed actions, this alternative would advance the City's public policy objectives of developing more affordable housing.

SOCIOECONOMIC CONDITIONS

Compared to the proposed actions, the Affordable Housing Alternative would not result in any new significant adverse impacts on socioeconomic conditions. Instead, as described below, this alternative would provide partial mitigation for the significant adverse impact with respect to indirect residential displacement that could occur under the proposed actions.

By encouraging the development of affordable housing in the project area, the Affordable Housing Alternative would serve to reduce and partially mitigate potential significant indirect residential displacement impacts. Other socioeconomic effects would be similar to those anticipated under the proposed actions, although the greater number of residential units would generate somewhat more new development with the accompanying additional employment. The additional housing units would provide additional supply to meet the increasing housing demands in New York City.

The proposed actions could result in the indirect displacement of an estimated 5,400 low- and moderate-income residents living in units without rent control or rent regulation in the project area. Although the Affordable Housing Alternative could result in similar levels of indirect residential displacement, it would include zoning-based mechanisms which, in combination with programmatic affordable housing incentives, would facilitate the development of affordable housing within the proposed action area. With the use of incentive packages, the Affordable Housing Alternative would provide approximately 894 affordable housing units, which would be available to households with annual incomes at or below 80 percent of AMI, as

determined by HUD. Based on the 2006 AMI of $70,900 for the New York metropolitan area, households considered to be eligible for the affordable units would earn up to $56,720 in Federal Fiscal Year 2006.

Under HPD's community preference policy, eligible residents of Queens Community District 12 would receive preference for half of the affordable units in any given development within that Community District, if built under city-sponsored programs, and most of the displaced residents would likely qualify for the affordable units. Likewise, for development sites in Community District 8, eligible residents of that district would receive preference for half of the affordable units in any given development in that district. However, the population of potentially displaced residents is expected to comprise only a portion of the households selected for the affordable units, and not all of the potentially displaced population is expected to be able to rent these units. Therefore significant adverse impacts resulting from indirect residential displacement are only partially mitigated under this alternative.

The beneficial socioeconomic effects that an increased housing supply could produce would be augmented under the Affordable Housing Alternative compared to the proposed actions. With more residential units, the market would be more likely to meet the long-term demand for new housing in the area, and with an affordable housing component, the Affordable Housing Alternative would allow the study area to retain a number of households that may otherwise be indirectly displaced due to increases in rental rates, thereby reducing and partially mitigating the potential for an indirect residential displacement impact. The effects of the Affordable Housing Alternative on direct residential displacement, direct and indirect business displacement, and specific industries would be the same as described for the proposed actions (i.e., no significant adverse impacts). In sum, the Affordable Housing Alternative would result in no significant adverse impacts associated with direct displacement or indirect business displacement, and would partially mitigate significant adverse socioeconomic impacts related to indirect residential displacement.

COMMUNITY FACILITIES

Unlike the proposed actions, the Affordable Housing Alternative would result in significant adverse impacts on public elementary schools and day care facilities. As discussed below, these impacts can be fully mitigated. Like the proposed actions, this alternative would not result in significant adverse impacts on health care, police services, or fire services.

The Affordable Housing Alternative would generate a total of approximately 661 elementary (54 more than under the proposed actions), 354 intermediate (33 more than under the proposed actions), and 162 high school students (19 more than under the proposed actions).

Under this alternative, within the ½-mile study area, elementary schools would operate at 103 percent of as compared to 102.6 percent of capacity under the proposed actions. Under this alternative, the elementary school utilization within CSD 28 would increase from 106 percent to 109 percent, and there would be a shortfall of 1,502 elementary school seats within this district. Within CSD 29, elementary schools would be at 90 percent of capacity with a surplus of 1,864 seats.

For middle schools within the ½-mile study area, middle schools under this alternative would operate at 77 percent of capacity with a surplus of 1,086 seats. The utilization of middle schools within CSD 28 would increase to 77 percent, and there would be a surplus of 1,502 middle school seats within this district (compared to surplus of 1,769 seats under the proposed actions). Within CSD 29, middle schools would be at 62 percent of capacity with a surplus of 2,720 seats.

The shortfall of elementary school seats under the Affordable Housing Alternative would be only slightly larger than under the proposed actions (377 elementary school seats in the ½-mile study area as compared to 323 under the proposed actions). Elementary schools in the half mile study area under this alternative would collectively operate approximately 3 percent above capacity. In contrast to the proposed actions, this alternative would cause an increase of 5 percent in the deficiency in available seats in elementary schools in the ½-mile study area. This would constitute a significant adverse impact on public elementary schools in the ½-mile study area. As described below under "Mitigation," this impact could be mitigated. Neither this

alternative, nor the proposed actions, would cause middle schools to be over capacity. Therefore, like the proposed actions, this alternative would not result in a significant adverse impact on public middle schools. In both scenarios, study area high schools would operate at 94 percent of capacity.

However, unlike the proposed actions, the Affordable Housing Alternative could result in a significant adverse impact on publicly funded or partially publicly funded day care facilities in the study area, and would require mitigation measures for this impact. Possible mitigation measures include adding capacity to existing facilities or providing a new daycare facility within or near the project area. At this time, however, it is not possible to know exactly which type of mitigation is 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 residents who are children of low-income families. Therefore, as is standard practice, the Administration for Children's Services (ACS) is expected to monitor development of the proposed actions and respond to provide the capacity when needed. The mitigation required for this impact is discussed below.

While this alternative would generate additional demands on local health cares services, it is not expected to result in a significant adverse impact on outpatient health care services. Like the proposed actions, this alternative would not be expected to adversely impact NYPD or FDNY services. Neither this alternative nor the proposed actions would result in a significant adverse impact on libraries.

OPEN SPACE

Like the proposed actions, the Affordable Housing Alternative would result in significant adverse impacts on passive open spaces in the non-residential and residential study areas. Compared to the proposed actions, these impacts would be slightly increased due to the larger number of new residents that would be introduced into the area under the Affordable Housing Alternative.

With respect to open space, under the Affordable Housing Alternative, the decrease in the total passive open space ratio in the non-residential study area would be slightly larger than under the proposed actions. This alternative would result in a decrease of 9.92 percent in this open space ratio, whereas under the proposed actions, this decrease would be 9.16 percent. The decrease in the non-residential passive open space ratio would be the same as under the proposed actions because this alternative would not add any more workers than the proposed actions. Thus, both the Affordable Housing Alternative and the proposed actions would result in impacts passive open spaces in the non-residential study area due to added employees.

For the residential study area, under the Affordable Housing Alternative, the decreases in all open space ratios in the residential study area would be slightly larger than under the proposed actions. These open space ratios would remain below DCP guidelines under this alternative, as they would under the proposed actions. The active, passive, and total open space ratios for residents would decline by approximately 5.24, 5.14, and 5.30 percent, respectively. The passive open space ratio for the total population, including residents and non-residents, would decrease by approximately 7.36 percent. Thus, like the proposed actions, the Affordable Housing Alternative is not expected to result in significant adverse impacts on passive open space ratios for the residential population (only) in the residential study area. In the future with this alternative, the passive open space ratio for residents would decrease to 0.461, a decline of 5.14 percent, and would remain just below the planning goal of 0.5 acres. The active and total open space ratio percent decreases are only slightly greater than under the proposed actions. As under the proposed actions, the City would make a number of improvements to public open spaces in the area to help address the shortage of open space. Under the Affordable Housing Alternative, these would be the same as the measures described for the proposed actions in Chapter 22, "Mitigation." However, as under the proposed actions, the significant adverse impact on open space could not be mitigated.

As with the proposed actions, there are a number of qualitative factors that serve to alleviate the shortfall of active open space in the residential study area. Just outside the study area there are open spaces that have the potential to relieve some of the open space inadequacy in the open space study area, including the 53 acre Roy

Wilkins Southern Queens Park and the 350-acre Cunningham Park, both partially within the open space study area. There are also the facilities at York College that are accessible to this student and academic population. In addition, much of the residential development in the future with the proposed actions would be in contextual zoning districts where buildings with nine or more dwelling units would be required to include recreational space available to all building residents. These requirements would also apply to this alternative. For these reasons, the residential study area is not concluded to be significantly impacted in either scenario.

SHADOWS

Like the proposed actions, this alternative would also result in a significant adverse impact on the proposed Atlantic Avenue Extension Park and on Grace Episcopal Church due to shadows. The extent and duration of shadows on Grace Episcopal Church and the Atlantic Avenue Extension Park would be the same as under the proposed actions. As under the proposed actions, the significant adverse shadow impact on Grace Episcopal Church could not be mitigated. The impact under this alternative on the Atlantic Avenue Extension Park could be mitigated, as under the proposed actions.

HISTORIC RESOURCES

The effects of the Affordable Housing Alternative on historic and archaeological resources would be the same as with the proposed actions since the projected and potential sites are identical. This alternative, although allowing somewhat greater floor area at certain locations, would not have any adverse visual or contextual impacts on other architectural resources. Both the proposed actions and the Affordable Housing Alternative could result in significant adverse impacts on potential archaeological resources. These impacts could not be mitigated. Like the proposed actions, this alternative would result in a significant adverse impact on Grace Episcopal Church due to shadows.

URBAN DESIGN AND VISUAL RESOURCES

Neither the proposed actions nor the Affordable Housing Alternative would result in significant adverse impacts on urban design and visual resources.

As with the proposed actions, it is expected that under the Affordable Housing Alternative, the streetscape would be improved throughout the project area by new development that would replace parking lots, one- and two-story non-descript commercial and industrial buildings, and vacant lots. In the residential neighborhoods throughout the project area, most new development would be infill buildings that would reinforce existing residential streetscape patterns. Like the proposed actions, this alternative would include the urban design provisions in the SDJD to create a lively and attractive streetscape (the SDJD would also be expanded). In contrast to the proposed actions, the Affordable Housing Alternative would include slightly larger buildings in the SDJD area and on surrounding blocks as well as along Hillside Avenue. Under this alternative, the maximum permitted building height in the C6-4 district of the AT1 subarea would be 290 feet, as compared with 250 feet under the proposed actions. For buildings developed under the Inclusionary Housing Program within the JC3 subarea (proposed C4-5X zoning), the minimum required streetwall height would be 60 feet (as opposed to 40 feet under the proposed actions) and the maximum streetwall height would be 85 feet (compared to 60 feet under the proposed actions). As under the proposed actions, the densest development and larger buildings would be in the CBD and along major transportation corridors, and neither view corridors nor views of any significant visual resource would be blocked. Therefore, neither this alternative nor the proposed actions would result in significant adverse impacts on urban design and visual resources. As with the proposed actions, under this alternative, the streetscape would be improved throughout the project area, with new development replacing parking lots, one- and two-story non-descript commercial and industrial buildings, and vacant lots. As with the proposed actions, in the existing residential neighborhoods, contextual development would infill vacant lots reinforcing existing residential streetscape patterns. Like the proposed actions, this alternative would include urban design provisions in the SDJD to create a lively and attractive

streetscape. The Affordable Housing Alternative would allow slightly larger buildings in the SDJD area and on surrounding blocks as well as along Hillside Avenue. However, as under the proposed actions, the densest development and larger buildings would be in the CBD area and along major transportation corridors. Neither view corridors nor views of visual resources would be adversely impacted. Therefore, neither this alternative nor the proposed actions would result in significant adverse impacts on urban design and visual resources.

NEIGHBORHOOD CHARACTER

Neither the proposed actions nor the Affordable Housing Alternative would result in significant adverse impacts on neighborhood character.

Effects on neighborhood character under this alternative would be similar to those of the proposed actions, although the provision of affordable housing would have reduce the potential impact on secondary displacement by establishing provisions to create a more diverse and affordable housing inventory. As under the proposed actions, the increased activity in the area and the changes in socioeconomic conditions under this alternative would be expected to further enhance the beneficial effects on neighborhood character.

NATURAL RESOURCES

Neither the Affordable Housing Alternative nor the proposed actions would result in significant adverse impacts on natural resources or water quality.

HAZARDOUS MATERIALS

Under this alternative, the mapping of (E) designations for all projected and potential development sites would be the same as under the proposed actions.

WATERFRONT REVITALIZATION PROGRAM

The project area is not located within the coastal zone, and therefore a coastal zone consistency analysis is therefore not required under this alternative or the proposed actions.

INFRASTRUCTURE

Under this alternative, development would occur at a slightly higher density than under the proposed actions. While the demand on the City's water and sewer infrastructure would therefore be somewhat greater than that under the proposed actions, neither scenario is expected to result in significant adverse impacts.

SOLID WASTE AND SANITATION SERVICES

Under this alternative, development would occur at a slightly higher density than under the proposed actions. While the demand on solid waste and sanitation services would therefore be somewhat greater than under the proposed actions, neither is expected to result in significant adverse impacts.

ENERGY

Under this alternative, development would occur at a slightly higher density than under the proposed actions. While the demand on the City's energy systems would therefore be somewhat greater than under the proposed action, neither is expected to result in significant adverse impacts.

TRAFFIC AND PARKING

Both the proposed actions and the Affordable Housing Alternative would result in significant adverse impacts on traffic and parking. The Affordable Housing Alternative would result in a significant adverse traffic impact at one additional intersection compared to the proposed actions. The parking impact under the Affordable Housing Alternative would be reduced compared to the proposed actions.

The increase in the net number of dwelling units by 270 overall would also increase transportation demand in the area compared to the proposed action. The additional development and vehicle trips under the Affordable Housing Alternative would somewhat worsen local traffic conditions from that under the proposed actions. However, there would be no additional intersections with unmitigated impacts under the Affordable Housing Alternative as compared to the proposed action. All 36 intersections impacted by the proposed actions would be impacted under this alternative, with some impacts slightly exacerbated. There would be one intersection with a new impact in an additional peak hour under the Affordable Housing Alternative (Hillside Avenue and the Van Wyck Northbound Service Road in the midday peak hour) and there would be additional lane groups at intersections impacted under the proposed actions. The same mitigation measures identified for the proposed action would also be required to mitigate the impacts under this alternative, with some minor adjustments.

Under the Affordable Housing Alternative there would be an overall deficit of 1,416 off-street public parking spaces in the midday peak period with a resulting 122 percent utilization, which is less than the midday deficit of 2,165 off-street public parking spaces under the proposed action. In the AM and overnight periods, overall off-street public parking demand would continue to be below capacity. However, localized deficits would occur in all peak periods, such as in areas where no off-street public parking currently exists or is anticipated. The on-street midday parking supply is assumed to remain unchanged in the future with the Affordable Housing Alternative. As under the proposed action, the 1,255 metered spaces would remain at capacity.

TRANSIT AND PEDESTRIANS

Both the proposed actions and the Affordable Housing Alternative would result in significant adverse impacts on transit and pedestrians. The Affordable Housing Alternative would generate more transit trips than the proposed actions. Based on an assessment of this increase in demand, it is expected that transit and pedestrian conditions would marginally decline from the conditions under the proposed actions. There would be no new subway impacts, but one additional bus route (Q40 northbound in the AM peak hour) and one additional pedestrian intersection would be impacted, the northeast corner of the intersection of Jamaica Avenue and 160th Street.

AIR QUALITY

Neither the proposed actions nor the Affordable Housing Alternative would result in any significant adverse air quality impacts with respect to mobile sources or parking facilities. (E) designations for industrial sources would be the same under this alternative as under the proposed actions.

The (E) designations for HVAC systems would essentially be the same as under the proposed actions. However, because certain buildings in the SDJD would be taller, including Sites 299, 300 and 302, a refined air quality analysis was undertaken to determine if these sites could be impacted by off-site HVAC emissions from nearby buildings. Based on this analysis, it was determined that under the Affordable Housing Alternative, an (E) designation would need to be incorporated into the rezoning proposal for Sites 293, 294, 301 and 337, to preclude the potential for significant adverse air quality impacts on other projected developments from the HVAC emissions. The (E) designation would provide restrictions regarding the location of the HVAC exhaust stacks and/or require the use of natural gas for fossil-fuel fired HVAC equipment.

With respect to air quality, with this alternative as under proposed actions, no violations of the National Ambient Air Quality Standards (NAAQS) are predicted to occur and both the alternative and the proposed action would be consistent with the SIP. Under the proposed actions, no impacts are expected to occur from mobile sources or parking facilities. While there would be additional traffic and accessory parking associated with this alternative, air modeling has shown that the recorded concentrations for CO in the area are low enough such that the projected increases in traffic at each analyzed intersection would not result in any exceedances of standards or the City's de minimis criteria or violations of air quality standards.

NOISE

Like the proposed actions, the additional increases in traffic under the Affordable Housing Alternative are not expected to result in any significant increases in local ambient noise or a doubling of traffic at any roadway or intersection such that a significant adverse impact would occur. With respect to the need for noise attenuation, the (E) designations would be the same under this alternative as under the proposed actions (see Appendix C).

CONSTRUCTION

Neither the proposed actions nor the Affordable Housing Alternative would result in significant adverse impacts related to construction with the exception of potential impacts on archaeological resources as described above under "Historic Resources," where the extent of the impacts would be the same under this alternative as under the proposed actions.

Construction activities under the Affordable Housing Alternative would be similar to those under the proposed actions. The inclusionary housing bonus would allow slightly larger buildings in subareas D, U, and V. Therefore, construction-related activity in these areas would be somewhat greater. However, like the proposed actions, construction-related activities under this alternative would not result in any significant adverse impacts.

PUBLIC HEALTH

Neither the proposed actions nor the Affordable Housing Alternative nor the proposed actions would result in a significant adverse impact on public health. The Affordable Housing Alternative would result in similar effects on public health compared to the proposed actions. Like the proposed actions, no activities are proposed under the Affordable Housing Alternative that would exceed accepted City, state, or federal standards with respect to public health.

SUMMARY OF SIGNIFICANT ADVERSE IMPACTS

As described above, the Affordable Housing Alternative would result in significant adverse impacts on socioeconomic conditions, community facilities (day care), open space, historic resources, hazardous materials, traffic and parking, transit and pedestrians, air quality, and noise. As under the proposed actions, the historic resources impacts would remain unmitigated. Mitigation measures for the open space, hazardous materials, air quality, and noise impacts under this alternative would be the same as under the proposed actions.

Overall, the Affordable Housing Alternative would partially mitigate the socioeconomic impact (indirect residential displacement) of the proposed actions. At the same time, the Affordable Housing Alternative would result in new significant adverse impacts with respect to schools and day care facilities. As discussed below, these additional significant adverse impacts could be mitigated. For all other CEQR impact categories, significant adverse impacts for this alternative would be the same as under the proposed actions.

MITIGATION MEASURES REQUIRED FOR THE AFFORDABLE HOUSING ALTERNATIVE

As described above, the Affordable Housing Alternative would result in significant adverse impacts on socioeconomic conditions, community facilities (day care), open space, historic resources, and traffic and parking, transit and pedestrians. These impacts requiring mitigation are similar to the proposed project with the exception of schools and day care. Mitigation measures for the open space and shadows impacts under this alternative would be the same as under the proposed actions.

With respect to socioeconomic conditions, unlike the proposed actions, the Affordable Housing Alternative would address the significant adverse socioeconomic impact (indirect residential displacement) of the proposed actions. However, the Affordable Housing Alternative would result in new significant adverse impacts with respect to schools and day care facilities because of the greater number of students and day care needs associated with affordable housing. As discussed below, these additional significant adverse impacts could be mitigated.

Unlike the proposed action, the Affordable Housing Alternative would increase the utilization level of public elementary schools within the ½-mile study area by 5 percent, which is a significant impact requiring mitigation. Possible measures to mitigate a significant impact that results in school overcrowding under this alternative include: relocating administrative functions to another site, thereby freeing up space for classrooms; making space within the buildings associated with the proposed action or elsewhere in the school study area available to the Department of Education; restructuring or reprogramming existing school space within a district; and adjusting school service area boundaries (provided that does not redistribute students to an even more crowded district).

Unlike the proposed action, the Affordable Housing Alternative could result in a significant adverse impact on publicly funded or partially publicly funded day care facilities in the study area, thus requiring mitigation measures not necessary under the proposed actions. Possible mitigation measures include adding capacity to existing facilities or providing a new daycare facility within or near the proposed action area. At this point however, it is not possible to know exactly which type of mitigation is appropriate and 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 residents who are children of low-income families. Furthermore, several factors may limit the number of children in need of publicly funded day care slots. For example, families in the 1-mile study area could make use of alternatives to publicly funded day care facilities. There are slots at homes licensed to provide family day care that families of eligible children could elect to use instead of public center day care. Parents of eligible children may use Administration for Children's Services (ACS) vouchers to finance care at private day care centers in the study area. Additionally, parents of eligible children are not restricted to enrolling their children in day care facilities in a specific geographical area. Therefore, they could use the ACS voucher system to make use of public and private day care providers beyond the 1-mile study area. Therefore, as is standard practice, the ACS is expected to monitor development of the proposed action area and respond as appropriate to provide the capacity needed.

In addition, minor adjustments to the mitigation measures for the proposed actions would be necessary under the Affordable Housing Alternative. These adjustments include the transfer of additional green time at 7 impacted intersections. In this alternative, the four additional movements that would be impacted under the Affordable Housing Alternative, but not under the proposed actions, would be mitigated with minor signal timing adjustments. Thus, while the proposed actions would result in 11 unmitigable impacts, the Affordable Housing Alternative would result in 11 unmitigable impacts, plus one additional unmitigable impact in the AM peak hour at the intersection of Jamaica Avenue at Parsons Boulevard on the eastbound left turn lane.

Mitigation relative to open space would be the same as under the proposed actions.

COMMUNITY COMMENT ALTERNATIVE[1]

To assist with its review of the Jamaica Plan, Community Board 12 created the Ad Hoc Committee to study the proposal and advise the board with its recommendations. Eventually, the Ad Hoc Committee proposed an alternate plan to prevent negative effects – increased traffic, additional on-street parking demand and exacerbated strains on infrastructure and services – that the committee contended would result from allowing new residential development on major corridors such as Hillside Avenue, Jamaica Avenue and Merrick Boulevard at densities proposed in the Jamaica Plan. The alternate plan wholly incorporated the Special Downtown Jamaica District outlined in the proposed actions. It differs from the proposed actions outside of the downtown area where it recommends lesser or no increase in densities on the major corridors, and recommends more restrictive lower density zoning in the surrounding residential neighborhoods. Also, unlike the original proposal, the alternate plan does not include an increase in allowed commercial and manufacturing densities within an existing manufacturing district between Jamaica Avenue and Liberty Avenue.

The Community Comment Alternative (CCA) was developed in response to the alternate plan presented by Community Board 12's Ad Hoc Committee and incorporates elements of the zoning recommendations included in that plan. The Special Hillside District recommended by Councilman James Gennaro is substantially the same as the plan presented by Community Board 12's Ad Hoc Committee except that the Community Board 12's Ad Hoc Committee proposes a lower density R3-2 district along the south side of Hillside Avenue for 11 block fronts in the eastern portion of the study area, and results in nine fewer development sites on those blocks. Therefore, the Community Board 12's Ad Hoc Committee is slightly more conservative and has been considered in this alternative. Under this alternative, there are 141 projected and 292 potential development sites. The projected sites would produce a total of 3,405 total housing units, including 475 affordable housing units. In this alternative the incremental difference between the No Build and Build scenarios would include 2,300 units, 3,060,071 square feet of commercial development, 438,813 square feet of manufacturing development and 233,330 square feet of community facility development.

Community Board 12's Ad Hoc Committee alternate plan provides limited new development opportunities on certain major corridors such as Hillside Avenue, Merrick Boulevard and a portion of Jamaica Avenue. The limited increase in development potential would ensure that new development would generally not exceed the existing built context of these corridors, or would be lower in height and have less density than existing multi-family buildings, especially on Hillside Avenue east of 179th Street. This alternative generally would allow only medium density development on blocks that contain, or are adjacent to existing medium density development. In addition, Community Board 12's Ad Hoc Committee alternate plan recommends zoning changes that would primarily only allow new development of a detached houses in residential neighborhoods surrounding Downtown Jamaica. In addition, this alternative plan limits new opportunities for residential development around King Park or new commercial or manufacturing developments between Jamaica and Liberty Avenues.

As discussed in Chapter 27, "Response to Comments on the DEIS," Community Board 12's Ad Hoc Committee recommended changes to the Affordable Housing Program which are not consistent with city policy and are not considered in this alternative. However, as under the Affordable Housing Alternative, this alternative would include an Inclusionary Housing Program consistent with city policy and other Inclusionary Housing Programs in the city. The Inclusionary Housing Program would combine a zoning floor area bonus with a variety of housing subsidy programs to create powerful incentives for the development and preservation of affordable housing. Developments taking advantage of the full bonus in the program must devote at least 20 percent of their residential floor area, or its offsite equivalent, to housing that will remain permanently affordable to lower-income households. Additionally, as with the Affordable Housing Alternative, the proposed SDJD boundaries would be expanded to include a portion

[1] The Community Comment Alternative is new to the FEIS.

of subarea U along Hillside Avenue, and certain height and setback regulations would be modified to accommodate the increase in the maximum FAR for affordable housing. The Community Comment Alternative provides fewer affordable housing units than the Affordable Housing Alternative since the Community Comment Alternative includes lower densities, at which the incentives would not be feasible. As analyzed in the RWCDS, only 475 affordable units would be provided compared to 894 under the Affordable Housing Alternative.

The RWCDS for this alternative includes a total of 3,405 projected housing units in the proposed action area, which reflects maximum utilization of the inclusionary housing bonus mechanism on projected development sites. The incremental difference between the No Build and the Build scenarios under the Community Comment Alternative would be 2,300 dwelling units, compared to 3,565 under the proposed actions. The Community Comment Alternative would result in a net increase of 3,060,071 square feet of commercial space and 233,330 square feet of community facility space as well as a net decrease in manufacturing space of 438,813 square feet.

This alternative would result in a smaller net amount residential development than would be generated under the proposed actions, but unlike under the proposed actions, this alternative would result in 475 affordable housing units. See Table S-7 for a summary of projected development sites for the Community Comment Alternative as compared to the proposed actions.

Table S-7
Summary of RWCDS for Community Comment Alternative to Proposed Action—Projected Development Sites

	No Build		Build		Increment		
Use	Proposed Action	Community Comment Alt.	Proposed Action	Community Comment Alt.	Proposed Action	Community Comment Alt.	Difference
Commercial (sf)	1,663,485	1,486,344	4,771,199	4,546,415	3,107,714	3,060,071	47,643
Industrial (sf)	500,646	450,813	120,894	12,000	(379,752)	(438,813)	(59,061)
Community Facilities (sf)	214,344	151,454	459,524	372,484	245,180	233,330	11,850
Total Dwelling Units (DU)	1,815	1,104	5,380	3,405	3,565	2,300	1,265
Affordable DUs			0	475	0	475	475

Source: NYCDCP, June 2007

Approximately 475 of the 2,300 net increment in projected residential units under this alternative would be affordable units, which would be available to households with annual incomes at or below 80 percent of Area Median Income (AMI).

Because many areas would be zoned with lower density districts under this alternative as compared with the proposed actions, many of the projected and potential sites in the RWCDS for the proposed action are no longer projected or potential sites under this alternative.

Several of the residential areas surrounding Downtown Jamaica would also be zoned with lower density districts more restrictive than the lower density zones included in the proposed actions. Instead of R5 zoning, under this alternative R5A districts, which restrict development to 1- and 2-family detached buildings, would be mapped between Jamaica Avenue and the LIRR tracks from 168th Place to 179th Place; to the north and south of Jamaica Avenue between Sutphin Boulevard and the Van Wyck Expressway; and south of the LIRR tracks between Sutphin Boulevard and the Van Wyck Expressway. The portion of the rezoning area between Hillside and Jamaica avenues located east of the 172nd Street as well as the South Jamaica area south of the LIRR tracks and east of Merrick Boulevard would be rezoned R3A under this alternative, rather than R4-1 as under the proposed actions. Under this alternative, R3A districts would also be mapped where no change from existing R4 zoning is included in the proposed actions between Guy R. Brewer Boulevard and Merrick Boulevard or where R4-1 zoning is included in

the proposed actions north of 108th Avenue and east of Sutphin Boulevard. A summary comparison of zoning districts under the proposed actions and the Community Comment Alternative is presented in Table S-8.

Table S-8
Comparison of Proposed Zoning District: Proposed Action and Community Comment Alternative.

Proposed Action		Community Comment Alternative	
Subarea	**Proposed Zoning District**	**Subarea**	**Proposed Zoning District**
JC3	C4-5X	JC3-1	C4-5X
		JC3-2	R7A/C2-4
E	C2-4/R6A	E1	R6A/C2-4
		E2	R5D/C2-4
J	R5	J	R5A
R	C1-3/R6A and C2-4/R6A	R1	R5D/C1-3 and R5D/C2-4
		R2	R5B/C2-4
U	C2-3/R7X and C2-4/R7X	U1	R5D/C2-4
		U2	R7A/C2-4
		U3	R5D/C2-4
		U4	R6B/C2-4
		U5	R7A/C2-4
		U6	R5D/C2-4
		U7	R6B/C2-4
		U8	R7A and R7A/C2-4
V	C2-4/R7A	V1	R5D/C2-4
		V2	R3-2/C2-4
		V3	R2/C2-4 and R2/C2-4
C	R5	C	R5A
D	R7A	D	R6A
F	R4-1	F	R3A
K	R4	K	R4B
M	R4-1	M	R3A
N2	R4-1	N2	R3A
X	M1-2	X	M1-1

Note: See zoning map in Chapter 23, "Alternatives," Figure 23-13.
Source: NYCDCP.

The land use impacts of the Community Comment Alternative would be similar to those under the proposed actions and affordable housing alternative, although less extensive. For example, under this alternative there are 141 projected and 292 potential development sites as compared to 186 projected and 420 potential development sites under the proposed actions. In addition, although the overall concept of downtown commercial growth and a greater mix of uses is similar under this alternative and the proposed actions. The residential density of that development is about 60 percent (based on an incremental increase of 2,300 residential units under the Community Comment Alternative and 3,835 under the Affordable Housing Alternative). As compared with the Affordable Housing Alternative, the zoning for this alternative would incorporate a density bonus in exchange for the construction of affordable housing. However, the permitted density and height under this alternative would be less than under the proposed actions along, with lesser density Hillside Avenue, Merrick Boulevard, the eastern part of Jamaica Avenue, and around Rufus King Park. Additionally, compared to the proposed actions, the permitted residential densities in the lower density residential neighborhoods surrounding Downtown Jamaica would be further decreased. Unlike under the proposed actions, the industrial area in the eastern part of the project area between Jamaica and Liberty Avenues would remain M1-1 rather than being rezoned to M1-2.

Like the proposed actions, this alternative would increase the supply of housing available in New York City, though to a lesser extent. However, the Community Comment Alternative, unlike the proposed

actions, would support citywide policies aimed at increasing the supply of housing that is affordable to low- to moderate-income residents. It is similar to the Affordable Housing Alternative in this respect, but of a lesser density. Neither this alternative nor the proposed actions would result in a significant adverse impact on land use, zoning, and public policy.

By encouraging the development of affordable housing in the project area, the Community Comment Alternative would serve to reduce and partially mitigate potential significant indirect residential displacement impacts. However, under this alternative about 475 affordable housing units are projected. None would occur under the proposed actions and 894 would occur under the Affordable Housing Alternative. Other socioeconomic effects would be similar to those anticipated under the proposed actions, although the greater number of residential units would generate somewhat more new development with the accompanying additional employment. The additional housing units would provide additional supply to meet the increasing housing needs of in New York City.

As described in Chapter 3, "Socioeconomic Conditions," there are an estimated 5,400 low- and moderate-income residents living in units without rent control or rent regulation in the project area that are vulnerable for secondary displacement. Although the Community Comment Alternative could also result in indirect residential displacement, it would include zoning-based mechanisms which, in combination with programmatic affordable housing incentives, would facilitate the development of affordable housing within the proposed action area. With the use of incentive packages, the Community Comment Alternative would provide approximately 475 affordable housing units, which would be available to households with annual incomes at or below 80 percent of AMI, as determined by HUD. Based on the 2006 AMI of $70,900 for the New York metropolitan area, households considered to be eligible for the affordable units would earn up to $56,720 in Federal Fiscal Year 2006.

Under HPD's community preference policy, eligible residents of Queens Community District 12 would receive preference for half of the affordable units in any given development within that Community District, if built under city-sponsored programs, and most of the displaced residents would likely qualify for the affordable units. Likewise, for development sites in Community District 8, eligible residents of that district would receive preference for half of the affordable units in any given development in that district. However, the population of potentially displaced residents is expected to comprise only a portion of the households selected for the affordable units, and not all of the potentially displaced population are expected to be able to rent these units. Therefore significant adverse impacts resulting from indirect residential displacement are only partially mitigated under this alternative.

The beneficial socioeconomic effects that an increased housing supply could produce would be slightly less than under the Community Comment Alternative compared to the proposed actions, as the amount of new housing units produced would be less. However, with an affordable housing component, the Community Comment Alternative would allow the study area to retain a number of households that may otherwise be indirectly displaced due to increases in rental rates, thereby reducing and partially mitigating the potential for an indirect residential displacement impact. The effects of the Community Comment Alternative on direct residential displacement, direct and indirect business displacement, and specific industries would be the same as described for the proposed actions (i.e., no significant adverse impacts). In sum, the Community Comment Alternative would result in no significant adverse impacts associated with direct displacement or indirect business displacement, and would partially mitigate significant adverse socioeconomic impacts related to indirect residential displacement.

As noted above, the Community Comment Alternative would generate an estimated 2,300 housing units of which 475 are assumed to be for low- to moderate-income households and 1,815 would be market rate. The increment of 2,300 total units generated under this alternative is 1,535 fewer units than under the proposed actions. In contrast to this alternative, all units generated under the proposed actions are assumed to be market rate.

Based on the guidelines of the CEQR Technical Manual, low, moderate, and, middle-income residential units have the potential to generate a greater number of public school students than market rate units.

Therefore, under this alternative, the low- to moderate-income rates for student generation from Table 3C-2 of the CEQR Technical Manual were applied to the 475 affordable units and the moderate- to high-income rates were applied to the 1,815 market rate units. Accordingly, the Community Comment Alternative would generate a total of approximately 394 elementary school students and 211 intermediate school students by the year 2015 within the entire ½-mile study area, with 97 high school students.

Compared to the proposed actions, the Community Comment Alternative would generate approximately 213 fewer elementary school students, 110 fewer intermediate school students, and 46 fewer high school students. The shortfall of elementary school seats under the Community Comment Alternative would be smaller than under the proposed actions (110 elementary school seats in the ½-mile study area as compared to 323 under the proposed actions). Elementary schools in the half-mile study area under this alternative would collectively operate approximately 1 percent above capacity. Like the proposed actions, this alternative would not cause an increase of 5 percent in the deficiency in available seats in elementary schools in the ½-mile study area or in CSD 28. However, neither this alternative, nor the proposed actions, would cause middle schools to be over capacity.

Under the Community Comment Alternative, high schools in the study area would operate at 93 percent of capacity with a surplus of 596 seats and high schools throughout Queens are expected have of a surplus of 2,315 seats under this alternative. Therefore, as under the proposed actions, high schools citywide would be operating at approximately 97 percent of capacity.

This alternative would introduce a slightly larger population to the library study area than would the proposed actions. As described above, approximately 7,199 net new residents would be added to the project area under the Community Comment Alternative by 2015. This would result in a population of 282,160 in the library study area, an increase the study area population by approximately 2.6 percent as compared to the future without the proposed actions. As a result, the volumes to resident ratio would be approximately 3.9 volumes per resident under this alternative, roughly the same as under the proposed actions. Neither the Community Comment Alternative nor the proposed actions would result in a greater than 5 percent increase in population over No Action conditions, and therefore neither would have a significant adverse impact on libraries.

Unlike the proposed actions, the Community Comment Alternative could result in a significant adverse impact on publicly funded or partially publicly funded day care facilities in the study area, and would require mitigation measures for this impact which would not be required under the proposed actions. Possible mitigation measures include adding capacity to existing facilities or providing a new daycare facility within or near the proposed action area. At this point, however, it is not possible to know exactly which 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 residents who are children of low-income families. Therefore, as is standard practice, the Administration for Children's Services (ACS) is expected to monitor development of the proposed action area and respond to provide the capacity when needed. The mitigation required for this impact is discussed below.

Like the proposed actions, the Community Comment Alternative does not trigger an analysis of local outpatient public health care facilities in the study area. The CEQR Technical Manual requires an analysis of public outpatient health care facilities if a proposed action would include more than 600 low- to moderate-income housing units. This alternative is expected to introduce approximately 475 low- to moderate-income units. Therefore, it is not expected that this alternative would result in significant adverse impacts on public outpatient health care facilities and no further analysis is required.

As under the proposed actions, the net new residential population and new development introduced by the Community Comment Alternative would increase the demand for police and fire protection services. However, neither this alternative nor the proposed actions is expected to result in a significant adverse impact on police or fire protection services. As with the proposed actions, the NYPD would determine deployment of additional personnel after assessment of crime trends, population, and the volume of 911 calls that are received in an area. While the additional development that would occur as a result of either

the proposed actions or the Community Comment Alternative is expected to require additional NYPD services, the NYPD is expected to be able to allocate resources as necessary along with the pace of development.

Likewise, FDNY regularly conducts reviews of call volumes throughout the City, and the FDNY would continue to evaluate area operations over time, typically on a semi-annual or annual basis. As such, it is anticipated that additional fire and EMS units would be allocated as necessary to serve the new developments introduced by either the proposed actions or the Community Comment Alternative.

This alternative would introduce approximately 7,237 new residents and 10,090 workers to the study area, resulting in a residential population density slightly lower than that under the proposed actions. Compared with the proposed actions, this represents a decrease of 3,912 residents.

Under the Community Comment Alternative, the decreases in the total passive open space ratio in the non-residential study area would be slightly larger than under the proposed actions. This alternative would result in a decrease of 7.69 percent in this open space ratio compared to the future without the proposed actions, whereas under the proposed actions, this decrease is 9.38 percent. The decrease in the non-residential passive open space ratio would be the same as under the proposed actions because this alternative would have similar employment. Thus, both this Community Comment Alternative and the proposed actions would result in a significant adverse impact on passive open spaces (residents and non-residents).

Under the Community Comment Alternative, the decrease in all open space ratios in the residential study area would be smaller than under the proposed actions. All open space ratios would remain below DCP guidelines under this alternative, as they would under the proposed actions. The active, passive, and total open space ratios for residents would decline by approximately 3.09, 3.26, and 3.32 percent, respectively, compared to the future without the proposed actions, where the declines would be 4.83, 4.93, and 4.89. The passive open space ratio for the total population, including residents and non-residents, would decrease by approximately 5.93 percent, as compared with 6.81 percent under the proposed actions.

As described in Chapter 5, "Open Space," there are a number of qualitative factors that serve to alleviate the shortfall of active open space in the residential study area. Just outside the study area there are two large open spaces that have the potential to relieve some of the open space deficiency. For example, the 53.31-acre Roy Wilkins Southern Queens Park (only a portion of which was included in the quantitative analysis) and 350-acre Cunningham Park are partially within and just outside the study area. There are also the facilities at York College that are accessible to this student and academic population. Furthermore, much of the projected residential development in both scenarios would occur in contextual zoning districts where buildings with nine or more dwelling units would be required to provide recreational space available to all building residents. For these reasons, impacts on active open space with respect to residents in the residential study area are not concluded to be significant.

Under the Community Comment Alternative, shadows on King Park, Brinkerhoff Mall, and Liberty Park would be reduced compared to the proposed actions because buildings on the nearby projected and potential development sites would be shorter in height. Several potential development sites surrounding King Park under the proposed actions are no longer potential development sites under the Community Comment Alternative due to the reduced density of the zoning proposed for that area. Additionally, the sites surrounding the P.S. 50 playground under the proposed actions would no longer be potential development sites under this alternative due to the reduced density of the proposed zoning. Therefore, under this alternative, no shadows would be cast on the P.S. 50 playground.

Like the proposed actions, the Community Comment Alternative would result in significant adverse shadow impacts on Grace Church and the Atlantic Avenue Extension Park. The development that would cast shadows on these historic and open space resources would be the same as under the proposed actions, and therefore the shadows would be of the same extent and duration as under the proposed actions.

The effects of the Community Comment Alternative on historic resources would be similar to those with the proposed actions but slightly reduced due to the smaller scale of development. Under this alternative, the number and location of projected and potential sites would be smaller than under the proposed actions. As under the proposed actions, projected development under this alternative would not have any significant adverse impacts on archaeological resources. However, the four potential development sites are assumed to result in significant adverse impacts on potential archaeological resources. These impacts are unavoidable since there are no mechanisms to require private as-of-right development to undertake archaeological field tests to or provide excavation or data recovery, if necessary.

With respect to architectural resources, like the proposed actions, it is not anticipated that this alternative would have any adverse visual or contextual impacts on architectural resources. Like the proposed actions, development under the Community Comment Alternative could have adverse construction-related impacts on architectural resources (see "Construction" below). However, because of the reduced number of projected and potential development sites, there would be several architectural resources that would not potentially experience adverse construction-related impacts under this alternative. These are the Jamaica Post Office, La Casina, the old Jamaica high school, and the Presentation of the Blessed Virgin Mary R.C. Church Complex.

As with the proposed actions, it is expected that under the Community Comment Alternative, the streetscape would be improved throughout the project area due to projected and potential development. For the most part, new development would replace parking lots, one- and two-story non-descript commercial and industrial buildings, and vacant lots. In the residential neighborhoods throughout the project area, most new development would be infill buildings that would reinforce existing residential streetscape patterns. Similarly, new industrial buildings would conform to the streetscape of existing industrial areas. Like the proposed actions, this alternative would include urban design provisions in the SDJD to create a lively and attractive streetscape. As under the proposed actions, the densest development and larger buildings would be in the CBD area and along major transportation corridors, and neither view corridors nor views of visual resources would be blocked. Because of the inclusionary zoning incentives incorporated into the Community Comment Alternative, certain buildings within the SDJD could be approximately 4 stories taller than under the proposed actions. Compared with the proposed actions, the Community Comment Alternative would result in a reduced amount of development along the Hillside Avenue, Merrick Boulevard, and Jamaica Avenue corridors and in the area surrounding Rufus King Park. Additionally, under this alternative, several of the residential areas surrounding Downtown Jamaica would also be zoned with lower density districts more restrictive than the lower density zones included in the proposed actions. Overall, it is concluded that neither this alternative nor the proposed actions would result in significant adverse impacts on urban design and visual resources.

Effects on neighborhood character under this alternative would be similar to those of the proposed actions, although the provision of affordable housing would have less of an adverse socioeconomic impact by creating a more diverse housing inventory in the study area and minimizing the potential for indirect displacement of residents that would occur under the proposed actions. As under the proposed actions, the increase in activity that would be introduced to the area and the changes in socioeconomic conditions under this alternative would be expected to support the local neighborhoods. As with the proposed actions, the Community Comment Alternative would allow a mix of use and densities that also supports the revitalization and expansion of the Downtown Jamaica CBD while protecting the low-density character of the neighboring low-rise residential communities in the primary study area. This alternative would also enhance the character of the local neighborhoods by establishing an urban fabric comprised of larger-scale mixed-use development in the SDJD balanced by contextual development in the nearby residential districts to ensure that new development transitions to and integrates appropriately with the existing low-rise neighborhood character. For these reasons, neither the Community Comment Alternative nor the proposed actions would have a significant adverse impact on neighborhood character of the study area.

Neither the Community Comment Alternative nor the proposed actions would result in significant adverse impacts on natural resources or water quality.

Under this alternative, the mapping of (E) designations for projected and potential development sites would occur. However, the (E) designations would be fewer than under the proposed actions due to the reduced number of projected and potential development sites.

The project area is not located within the coastal zone, and therefore a coastal zone consistency analysis is therefore not required under this alternative or the proposed actions.

Under this alternative, development would occur at a lower density than under the proposed actions. While the demand on the City's water and sewer infrastructure would therefore be somewhat greater than that under the proposed actions, neither scenario is expected to result in significant adverse impacts.

Under this alternative, development would occur at a lower density than under the proposed actions. While the demand on solid waste and sanitation services would therefore be somewhat greater than under the proposed actions, neither is expected to result in significant adverse impacts.

Under this alternative, development would occur at a lower density than under the proposed actions. While the demand on the City's energy systems would therefore be somewhat greater than under the proposed action, neither is expected to result in significant adverse impacts.

The change in program due to the Community Comment Alternative would decrease transportation demand in the area compared to the proposed action. The Community Comment Alternative is estimated to generate a net of 1,771 vehicle trips in the AM peak hour, 1,054 vehicle trips in the midday peak hour, 2,310 vehicle trips in the PM peak hour, and 1,337 vehicle trips in the Saturday midday peak hour, or between 12 and 15 percent less than the traffic generated by the proposed action. Based on an assessment of this decrease in demand, it is expected that future With-Action conditions would somewhat improve with the Community Comment Alternative. All intersections impacted by the proposed action would remain for this alternative except for one intersection. The intersection of South Road and Guy R. Brewer Boulevard would no longer be impacted under this Community Comment Alternative. Conditions at other impacted locations would be slightly improved compared to the proposed action.

The mitigation plan proposed under the proposed action in Chapter 22, "Mitigation," would fully mitigate the mitigated intersections impacted under the Community Comment Alternative. The same six intersections that would remain unmitigated under the proposed action would also remain unmitigated under the Community Comment Alternative. Intersections that would be unmitigated under the proposed action would become mitigated under the Community Comment Alternative in some peak hours.

The intersection of Hillside Avenue and the Van Wyck Expressway Northbound Service Road would have unmitigated impacts to its eastbound left turn, westbound right turn and northbound approach in the AM peak hour, and its northbound approach in the PM hour under the proposed action. Under the Community Comment Alternative, this intersection would be fully mitigated during the PM peak hour but the impacts would remain unmitigated in the AM peak hour.

The intersection of Hillside Avenue and Sutphin Boulevard would have unmitigated impacts during all peak hours under the proposed action, however, under the Community Comment Alternative, the proposed mitigation plan would fully mitigate all impacts at the intersection in the midday and Saturday midday peak hours.

The Community Comment Alternative would change the program compared to the proposed action. A total of approximately 730 cars in the AM period would not be accommodated in accessory parking facilities versus 1,062 cars under the proposed action and would seek parking in public facilities. In the midday period there would be 2,648 cars that would not be accommodated in accessory parking facilities versus 2,881 cars under the proposed action, and in the overnight period approximately 345 cars would not be accommodated in accessory parking facilities versus 786 cars under the proposed action.

Under the Community Comment Alternative there would be an overall deficit of about 1,931 spaces in the midday compared with a 2,165-space deficit under the proposed action. During the AM period there would be a 60 percent utilization rate (65 percent under the proposed action), a utilization rate of 130 percent in the midday (133 percent under the proposed action, and a utilization rate of 43 percent overnight (52 percent under the proposed action). Localized deficits would continue to occur in the AM period in the Hillside Avenue (East) corridor with a deficit of 132 spaces, and continue to occur where no off-street public parking exist or are anticipated in the future under the Ad Hoc Committee Alternative in all hours.

As with the proposed action, there would be significant parking impacts in the midday period, however no parking mitigation is proposed, and this midday shortfall at off-street public parking facilities would remain. Generally, no nearby off-street public parking exists outside of the area affected by the proposed actions, therefore, the unsatisfied demand for parking spaces at the midday period would result in vehicles parking on-street at non-metered curbside spaces regulated by street cleaning rules and motorists walking greater distances to their destinations.

The on-street midday supply is assumed to remain unchanged in the future with Community Comment Alternative. As with the proposed action, the 1,255 metered spaces would be expected to be at capacity.

The Community Comment Alternative would generate a net of 1,559 new subway trips in the AM peak hour, 1,805 new subway trips in the midday peak hour, 2,486 new subway trips in the PM peak hour, and 2,343 new subway trips in the Saturday midday peak hour (compared to 1,961, 2,024, 2,973, and 2,696 trips, respectively, with the proposed action). The Community Comment Alternative would also generate a net of 1,429, 1,932, 2,576, and 2,609 bus trips in the AM, midday, PM and Saturday midday peak hours, respectively (compared to 1,661, 2,070, 2,868, and 2,817 bus trips with the proposed action). Under the Community Comment Alternative the net increase in walk, subway, LIRR and bus trips would be 4,491 trips in the AM peak hour, 11,429 trips in the midday peak hour, 8,438 trips in the PM peak hour, and 8,379 trips in the Saturday midday peak hour (compared to 5,242, 11,870, 9,326, and 9,000 trips, respectively, with the proposed action). Based on an assessment of this decrease in demand, it is expected that transit and pedestrian conditions would improve under this alternative. There would continue to be no subway impacts due to this alternative. Impacts would remain to the same bus routes as under the proposed action, except for one route in one direction in one peak hour. The same location that would experience pedestrian impacts under the proposed action would also be impacted under the Community Comment Alternative.

As with the proposed action, most bus routes would operate with available capacity under the Community Comment Alternative. There would continue to be impacts to eight routes under this alternative (NYCT's Q30, Q43 and Q54, and MTA Bus' Q6, Q8, Q40, Q41 and Q60), similar to the With-Action condition, however NYCT's Q54 route westbound in the PM peak hour would no longer be impacted under the Community Comment Alternative.

As a standard practice, the bus operating agencies routinely conduct ridership counts and adjusts service frequency to meet its service criteria, within fiscal and operating constraints. As such, the capacity shortfalls would be addressed by MTA Bus and NYCT, and no action-initiated mitigation is required for the Community Comment Alternative.

Under the Community Comment Alternative, pedestrian traffic would decrease compared to the proposed action. Under the proposed action, the vast majority of the analyzed pedestrian facilities would operate at acceptable levels of service, and there would be one impacted location, the northwest corner at the intersection of Jamaica Avenue and Merrick Boulevard. This location would also would be impacted under the Community Comment Alternative in the PM peak hour. The same mitigation proposed as part of the proposed action would mitigate the corner.

Under this alternative and the proposed actions, no violations of the National Ambient Air Quality Standards (NAAQS) are predicted to occur with respect to mobile sources and parking facilities. Since the

Community Comment Alternative would result in fewer housing units, it is not expected that the traffic from these housing units would result in air quality impacts or violations of air quality standards given that conditions under the proposed actions are well below the standard. Mobile source air modeling for the proposed actions has shown that the predicted CO concentrations are low enough such that the increases in traffic at each analyzed receptor would not be expected to result in any exceedances of standards or the City's de minimis criteria or violations of air quality standards.

In addition, while there would be a slight increase in the accessory parking spaces that would be required under this alternative as a result of the increased density, this increase would be limited. Therefore, as with the proposed actions, no significant adverse impacts from those parking facilities are expected under this Community Comment Alternative.

The (E) designations for HVAC systems would be similar to the proposed actions, though some development sites would be eliminated and certain buildings in the SDJD could be taller and therefore could have fewer stationary source impacts. Like the proposed actions, significant adverse impacts are predicted to occur at certain development sites due to existing industrial air emission sources in the area. Under the Community Comment Alternative, fewer development sites would be impacted as compared to the proposed actions. Under the Community Comment Alternative, it is expected that these sites would need an (E) designation due to these existing sources.

The increases in traffic under the Community Comment Alternative would be smaller than those under the proposed action and are not expected to result in any significant increases in local ambient noise or a doubling of traffic at any roadway or intersection such that a significant adverse impact would occur. With respect to the need for noise attenuation, the proposed (E) designations would be fewer than under the proposed actions due to the decreased number of projected and potential development sites under this alternative.

Construction activities under the Community Comment Alternative would be similar to those under the proposed actions. Overall, the amount of construction under this alternative would be reduced compared to the proposed actions, and therefore the overall affect of construction activity would be less. As under the proposed actions, construction-related activities resulting from this alternative could result in significant adverse impacts relating to archaeological and architectural resources due to excavations for foundations and footings of new buildings on sites where such resources may be present. However, the expanded construction program under this alternative is not expected to result in additional significant adverse impacts.

The Community Comment Alternative would result in similar effects on public health compared to the proposed actions. Like the proposed actions, no activities are proposed under the Community Comment Alternative that would exceed accepted City, state, or federal standards with respect to public health. Neither the proposed actions nor the Community Comment Alternative nor the proposed actions would result in a significant adverse impact on public health. Similar (E) designations would be required to protect public health.

As described above, the Community Comment Alternative would result in significant adverse impacts similar to the proposed actions with the exception of a limited impact on socioeconomic conditions (secondary displacement). Impacts on open space, shadows, historic resources (archaeology and shadows), traffic and parking, and pedestrians, would be reduced. Thus, mitigation measures for these impacts under this alternative would be similar to that for the proposed actions. Under this alternative, the socioeconomic impact with respect to indirect residential displacement would be reduced through the Inclusionary Housing Program.

Unlike the proposed action, the Community Comment Alternative could result in a significant adverse impact on publicly funded or partially publicly funded day care facilities in the study area and would require mitigation measures not necessary under the proposed actions. Possible mitigation measures include adding capacity to existing facilities or providing a new daycare facility within or near the

proposed action area. At this point however, it is not possible to know exactly which type of mitigation is appropriate and 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 residents who are children of low-income families. Furthermore, several factors may limit the number of children in need of publicly funded day care slots. For example, families in the 1-mile study area could make use of alternatives to publicly funded day care facilities. There are slots at homes licensed to provide family day care that families of eligible children could elect to use instead of public center day care. Parents of eligible children may use Administration for Children's Services (ACS) vouchers to finance care at private day care centers in the study area. Additionally, parents of eligible children are not restricted to enrolling their children in day care facilities in a specific geographical area. Therefore, they could use the ACS voucher system to make use of public and private day care providers beyond the 1-mile study area. Therefore, as is standard practice, the ACS is expected to monitor development of the proposed action area and respond as appropriate to provide the capacity needed.

Like the proposed actions, this alternative is expected to have unavoidable adverse impacts on open space, shadows, historic resources (archaeology and shadows), and traffic and parking.

E. MITIGATION

SOCIOECONOMIC CONDITIONS

As discussed above, the proposed actions have the potential to cause significant indirect residential displacement impacts because they would increase the population of the proposed action area by more than 5 percent and introduce residents with socioeconomic characteristics that are significantly different from the characteristics of residents in parts of the study area, which already contains a population that is vulnerable to displacement pressures.

It is estimated that the vulnerable population of the study area is approximately 5,400 persons who could be subject to indirect displacement pressures with an estimated 1,835 housing units in the project area. This potentially vulnerable population represents approximately 7 percent of the total study area population and 3 percent of the population living in the primary and secondary study areas based on the 2000 census data.

Mitigation proposed from this impact involves the use of inclusionary zoning policies and existing City housing programs to preserve existing affordable units and increase the affordable housing supply available to displaced residents (see the description of the Affordable Housing Alternative). This mitigation has to the potential to partially mitigate displacement impacts caused by the proposed actions.

OPEN SPACE

As described in Chapter 5, "Open Space," the proposed actions would result in a significant adverse impact with respect to passive open space due primarily to the large population of new employees that would be introduced to the Jamaica Center CBD as a result of the proposed actions. As described in Chapter 3D, Section 500 of the *CEQR Technical Manual*, measures to mitigate open space impacts can include: 1) creation of new public space of the type needed to serve the proposed action's new population either on the project site or in the study area; 2) improving existing open spaces in the study area; and, 3) in the case of alienation or conversion of parkland, replacement of the parkland. Only the first and second potential mitigation measures apply in the case of the proposed actions since no alienation of parkland is proposed. Only the first and second potential measures apply in the case of the proposed actions since no alienation of parkland is proposed.

Between the Draft EIS and Final EIS potential measures to mitigate the significant adverse impact on passive open space resources were explored. As noted in the DEIS, there is limited City-owned vacant property that is available and suitable for open space creation, so options explored included improvements to existing open spaces, such as Rufus King Park, other City-owned properties, and open space in the proposed URA.

No practicable or feasible mitigation measures for the significant adverse impact on passive open space resources were identified between the Draft EIS and Final EIS. Measures which could improve overall open space conditions were identified, but these would not constitute mitigation for the significant adverse impact. Such measures include:

- City commitment to funding improvements to two school yard open spaces in the rezoning area, P.S. 118 and P.S. 160, through the City's Schoolyards to Playground initiative.
- Continued efforts by the New York City Department of Parks and Recreation (DPR) and DCP to identify sites for long term opportunities for open space improvements in the Jamaica area.
- Continued efforts by DPR to work with other City agencies to identify unused and unprogrammed space in the rezoning area for open space use.
- DPR will continue to seek funding in FY 2009 for its school yard program.

DPR will continue to coordinate with the New York City Department of Education (DOE) in implementing its program that allows school yards to be improved and opened to the general public after school, and on weekends and in the summer.

SHADOWS

OPEN SPACE

The proposed actions have the potential to result in a significant adverse impact due to shadows on the proposed Atlantic Avenue Extension Park. Because a programmed design for this open space has not been developed, it is possible that the incremental shadows from the proposed actions could diminish the usability of the open space and therefore result in a significant adverse impact. As mitigation to avoid such an impact, DCP, DPR, and the New York City Economic Development Corporation (EDC) will coordinate on the design of this park to minimize any adverse shadow effects on this open space. For example, park designers would locate sun-sensitive features in areas where they would be least affected by shadows and choose shade tolerant species for vegetation to be planted in areas that would be in shadow. With such measures, the potential significant adverse shadow impacts on the Atlantic Avenue Extension Park could be fully mitigated.

HISTORIC RESOURCES

The proposed actions would also result in a significant adverse shadow impact on Grace Episcopal Church, a historic resource. In accordance with the *CEQR Technical Manual*, a number of mitigation options were explored to eliminate or reduce for the potential this impact. For shadow mitigation, the range of mitigation measures are limited particularly in an areawide rezoning where site specific designs are not available. Shadow modeling has shown that any buildings of 50 feet (Potential Development Site 119, 100 feet (Potential Development Site 118) or 75 feet (Potential Development Site 122) in height would result in shadows over these windows. Limiting the building heights to 50-100 feet would not be a reasonable or feasible solution for these sites, all of which are located in Downtown Jamaica. Such limitations would be contrary to the objectives of the proposed actions and would conflict with the zoning and urban design objectives for redevelopment of the project area. Therefore, another measure that was explored is lighting of the resource.

The windows of the Grace Episcopal Church could potentially be lit by a new light source mounted on the easterly façade of Potential Development Site 119. This light could approximate sunlight conditions for the west window, without indirect light spillover to adjacent areas. However, such mitigation options are not feasible for the eastern façade due the orientation of the development sites with respect to the resource and the presence of intervening buildings. Lighting of the east facing windows could only be achieved through the use of fixtures on neighboring properties that are not a projected or potential development site or installation of such lighting fixtures on the site of the resource.

Such lighting mitigation would need to be substantial and could have significant adverse impacts on the surrounding community because of its intensity. In addition, there is no implementation technique available to the City that is reasonable or practical.

Based on the above, there are no reasonable means to avoid or mitigate shadow impacts on the Grace Episcopal Church. Therefore, this shadow impact would be an unavoidable significant adverse impact of the proposed actions.

TRAFFIC AND PARKING

TRAFFIC

The proposed actions would result in significant adverse impacts at 35 signalized intersections and one unsignalized intersection in one or more peak hours. A traffic mitigation plan was developed to address these impacts.

Mitigation measures that were examined included signal timing adjustments, a prohibition on parking to provide for additional travel lanes, and installation of a new signal. Based on that analysis, mitigation proposed for the Hillside Avenue corridor would implement No Standing regulations from 7 AM to 10 AM along the westbound (north) curb lane to provide an additional travel lane in the AM peak period between 161st Street and Sutphin Boulevard. Similarly, to accommodate the westbound AM period demand on Jamaica Avenue, No Standing from 7 AM to 10 AM is proposed for the westbound (north) curb lane on Jamaica Avenue from 168th Street to Parsons Boulevard to provide an additional travel lane. A more restrictive No Standing regulation would help to open the lane to moving traffic. Proposed signal timing adjustments would also be incorporated into the mitigation at most of the other impacted intersections. A new signal is proposed at the unsignalized intersection of Jamaica Avenue and 178th Street to accommodate the traffic volume increase.

The proposed measures would mitigate the majority of the traffic impacts, including 27 of the 31 intersections with impacts during the AM peak hour, 16 of the 17 intersections with impacts during the midday peak hour, 22 of the 26 intersections with impacts in the PM peak hour, and 17 of the 19 intersections with impacts in the Saturday midday peak hour. The remaining intersections would have impacts that are unavoidable.

PARKING

The increase in parking demand generated by the proposed actions would result in an overall shortfall of 2,165 off-street public parking spaces in the midday analysis period. No mitigation is available for this impact.

BUS SERVICE

The increase in bus ridership would result in capacity shortfalls on three NYCT routes and five New York Metropolitan Transportation Authority (MTA) Bus routes. As standard practice, the bus operating agencies routinely conduct ridership counts and adjust bus service frequency to meet its service criteria, within fiscal and operational constraints. As such, the capacity shortfalls would be addressed by NYCT and MTA Bus.

PEDESTRIANS

Pedestrian demand generated by the proposed action would significantly impact the northwest corner of Jamaica Avenue and Merrick Boulevard in the PM peak hour. To address this impact, it is proposed to bulb-out the corner by one foot along Merrick Boulevard on the west side to gain more pedestrian space.

F. UNAVOIDBALE ADVERSE IMPACTS

According to the *CEQR Technical Manual*, unavoidable adverse impacts are disclosed when a proposed action is expected to result in significant adverse impacts for which there are no reasonable or practical mitigation measures.

As stated above, with the large population of new employees that would be introduced to the Jamaica Center CBD as a result of the proposed actions and the shortfall of publicly owned vacant land available for the creation of new passive open space, this significant adverse impact on open space would be an unavoidable adverse impact of the proposed action. There are no practicable or feasible measures to improve usability of existing open spaces in the directly affected area. It should be noted, as discussed in Chapter 22, Mitigation, the Department of Parks and Recreation (DPR) will continue to explore options for expanding passive and active open space for recreational opportunities in the Jamaica area.

The proposed project also has the potential to result in indirect shadow impacts on the Grace Episcopal Church. There is no feasible mitigation for this impact.

Historic archaeology impacts on four potential development sites include lots that are determined to be sensitive for 19th century archaeological resources.

Proposed traffic mitigation measures would not mitigate impacts at 4 intersections in AM peak hour, one intersection in the weekday midday peak hour, 4 intersections in the PM peak hour, and 2 intersections in the Saturday midday peak hour. At these locations, the range of mitigation measures that are available to the City, including signal timing changes, changes in on-street parking regulations to create additional travel lanes, and the installation of a new traffic signal, could not fully mitigate the anticipated impacts of the proposed actions. There would also be an unmitigated parking impact in the midday of 2,165 spaces.

G. GROWTH INDUCING IMPACTS

As described in the *CEQR Technical Manual*, growth-inducing aspects of a proposed action generally refer to "secondary" impacts that may trigger further development. Proposals that add substantial new land use, new residents, or new employment could induce additional development of a similar kind or of support uses (e.g., goods and services for stores to serve new residential uses). The proposed actions would result in more intensive land uses in the areas around the transportation centers, such as Downtown Jamaica. However, it is not anticipated that it would cause significant spillover or secondary effects resulting in substantial new development in nearby areas since the RWCDS already anticipates substantial new growth in Downtown and along major corridors. Moreover, the growth in the residential population of New York City is a trend that has been ongoing over the last two decades, resulting in a housing shortfall and increasing demands for new dwelling units. It is the objective of the proposed actions to, in part, address that housing need through these proposed zoning changes as well as provide for new transit-oriented development in Downtown Jamaica. In sum, the development that is expected to be induced by these actions has been examined in this FEIS.

H. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Resources, both natural and man-made, would be expended in the construction, renovation, reuse, and operation of developments anticipated under the proposed actions including use of the land, building materials and energy (gas and electricity) and public funding. These resources are considered irretrievably committed, but the added demands are not significant. Given the generally underutilized nature of land in the project area and that redevelopment is part of an overall City strategy for redevelopment of Downtown Jamaica, these commitments are considered positive.

Robert Dobruskin

Robert Dobruskin, Director
Environmental Assessment and Review Division
New York City Department of City Planning

Cc: Amanda M. Burden, A.I.C.P.
City Planning Commissioners
Hon. Helen Marshall, Queens Borough President
Richard Barth

Medhi Amjadi	Pat Bussey
Deborah Carney	Barry Dinerstein
Maurico Garcia	Robert Holbrook
Sandy Hornick	Jennifer Jensen
David Karnovsky	Eric Kober
Betty Mackintosh	Alison McCabe
James Merani	Laurence Parnes
Glen A. Price III	Malinda Rachel
Nicole Rodriguez	Phil Sperling
Sam Voyages	Sarah Whitham
Susan Wong	Robert Kulikowski, NYCOEC
Gail Benjamin, City Council	Abas Braimah, DSNY
Peter Cafiero, NYCT	Salvatore Cassano, FDNY
Randal Fong, NYC DCAS	Cheryl Hood Francis, NYC DoEd
Alexander B. Grannis, NYSDEC	Michael Griffith, NYCDOT
John Gerrish, NYPD	Gary Heath, NYCDEP
Edward Helenius, MTA	Tom Kunkel, NYSDEC
Joshua Laird, NYC DPR	Angela Licata, NYCDEP
Larry Malsam, NY MTC	Thomas McKnight, NYCEDC
Judith McClain, NYCT	Elissa Picca, LIRR
Doug Rice, NYCEDC	Naim Rasheed, NYCDOT
Gina Santucci, NYCLPC	Norman Silverman, MTA
Walter Roberts, NYCHPD	Robert Tierney, NYCLPC
Sherry Schuh, NYCHA	Kay Zias, NYCEDC
Lou Venech, PANYNJ	
Community Board 8, Chairperson	Community Board 8, District Manager
Community Board 12, Chairperson	Community Board 12, District Manager