

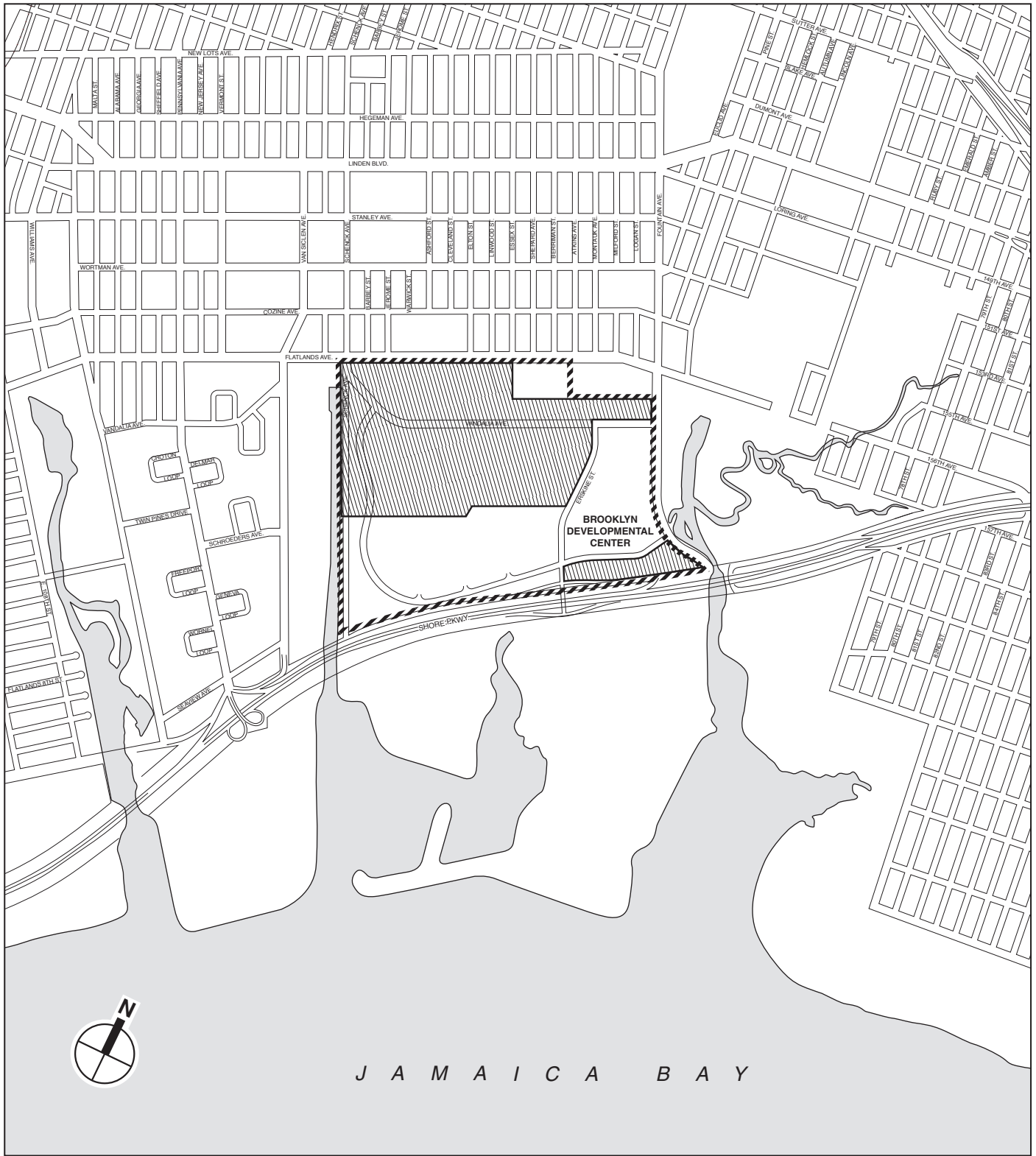
A. PROJECT DESCRIPTION

The New York City Department of Housing Preservation and Development (HPD), Gateway Center Properties Phase II, LLC, and Nehemiah Housing Development Fund Co., Inc. (“the applicant”) propose a series of actions to facilitate the modification and continued development of a previously approved mixed-use plan, including an expansion of an existing retail center in the 227-acre Fresh Creek Urban Renewal Area (FCURA) in the Spring Creek section of Brooklyn (see Figure S-1).

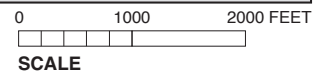
The project would facilitate the redevelopment of the FCURA with 2,385 units of affordable housing, a 630,000-square-foot shopping center, up to 68,000 square feet of local retail space, a new public school for intermediate and high school grade levels, 46,000 square feet of community and public facility uses, and 36.5 acres of parkland (collectively, the “Proposed Project”). The Proposed Project, described in further detail below, includes modifications to the previously approved Fresh Creek Urban Renewal Plan (FCURP), Urban Development Action Area Project (UDAAP) designation, disposition of City-owned property, zoning map amendments, City map amendments (including proposed street name changes), and special permits.

In connection with the development of housing in the FCURA, the City of New York will provide for the construction of new streets, parks, water supply, stormwater, and wastewater infrastructure, an intermediate/high school and transit (bus layover) facilities. The aforementioned elements of the Proposed Project would be constructed and/or maintained by the New York City Department of Transportation (NYCDOT), New York City Department of Parks and Recreation (DPR), New York City Department of Environmental Protection (NYCDEP), and New York City Department of Education (DOE). The new intermediate/high school would be constructed by the New York City School Construction Authority (SCA); however maintenance of the school would fall under the jurisdiction of DOE. The bus layover facility would be constructed by Gateway Center Properties Phase II, LLC and would be maintained by New York City Transit (NYCT).

The Proposed Project is subject to environmental review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City’s Executive Order 91 of 1977 and its amendments establishing New York City Environmental Quality Review (CEQR). HPD, as lead agency in this process, determined that a Draft Environmental Impact Statement (DEIS) be prepared to examine and disclose the potential environmental impacts of the Proposed Project. A Notice of Completion for the DEIS was approved by HPD on September 3, 2008, which commenced public review of the DEIS in coordination with public review for the City’s Uniform Land Use Review Procedure (ULURP). A joint DEIS and ULURP hearing was held at the New York City Department of City Planning on January 7, 2009, and public comments on the DEIS were accepted by HPD until January 20, 2009. This Final Environmental Impact Statement (FEIS) examines the potential impacts of the Proposed Action and responds to pertinent public comments on the DEIS.



-  Project Site
-  Fresh Creek Urban Renewal Area Boundary



HISTORY OF THE FRESH CREEK URBAN RENEWAL AREA

In 1967, the City established the FCURA pursuant to Article 15, Section 504 (“the Urban Renewal Law”) of the General Municipal Law, and HPD was charged with implementing the provisions of the FCURA Plan, which seeks to:

- Eliminate blight and maximize appropriate land use;
- Strengthen the tax base of the city by encouraging development and employment opportunities in the area;
- Provide new housing exhibiting good design in terms of privacy, light, air, and open space;
- Provide convenient community facilities, parks and recreational uses, local and regional commercial uses, and parking; and
- Redevelop the area in a comprehensive manner, removing blight and establishing both a residential and regional commercial character for the area, with appropriate support facilities.

Subsequent to approval of the 1967 FCURP, there was limited development within the FCURA. In 1972, the Brooklyn Developmental Center (Block 4586, p/o Lot 300) and its adjacent streets were constructed on the eastern portion of the FCURA, but the balance of the site remained vacant. In 1982, the FCURP was amended to remove Block 4452, Lot 425. By the mid-1990s the 7.7-acre Thomas Jefferson Athletic Field (Block 4451, Lot 1) and certain streets were constructed, but the remainder the FCURA remained vacant.

In 1996, HPD issued the second amended FCURP along with the *Gateway Estates Final Environmental Impact Statement* (“1996 FEIS”). The purpose of the second amended FCURP was to implement the land use plan conceived in 1967 when the FCURA was established and specified development controls in terms of use, density, and bulk. Accordingly, the City mapped streets and public parklands within the FCURA consistent with the second amended FCURP, and approved the following development program (“1996 Plan”):

- 2,385 residential units;
- a 640,000 square-foot-shopping center;
- 15,000 sf of neighborhood-oriented retail;
- 30,000 sf of community facility space;
- an elementary school and an intermediate school;
- 10,000 sf of professional office space;
- 45.2 acres of open space; and
- New and improved infrastructure, including water mains, sewage disposal, stormwater drainage, new streets, and a Shore Parkway interchange.

Presently, approximately 100 acres of the 227-acre FCURA have been developed. Existing development within the FCURA includes:

- The Brooklyn Developmental Center;
- The 7.7-acre Thomas Jefferson Athletic Field;
- Gateway Center, a 640,000-square-foot shopping center and its associated parking lot;
- A 9.7-acre portion of the perimeter park;
- The Erskine Street interchange from the Shore Parkway, certain streets, and utility lines; and

- 378 housing units being constructed by Nehemiah Housing Development Fund Co., Inc. (of the 378 units, 184 have been constructed and are in the process of being occupied, and 194 are in the advanced planning stage).

The remaining 127 acres of the FCURA are vacant or unimproved.

THE PROPOSED PROJECT

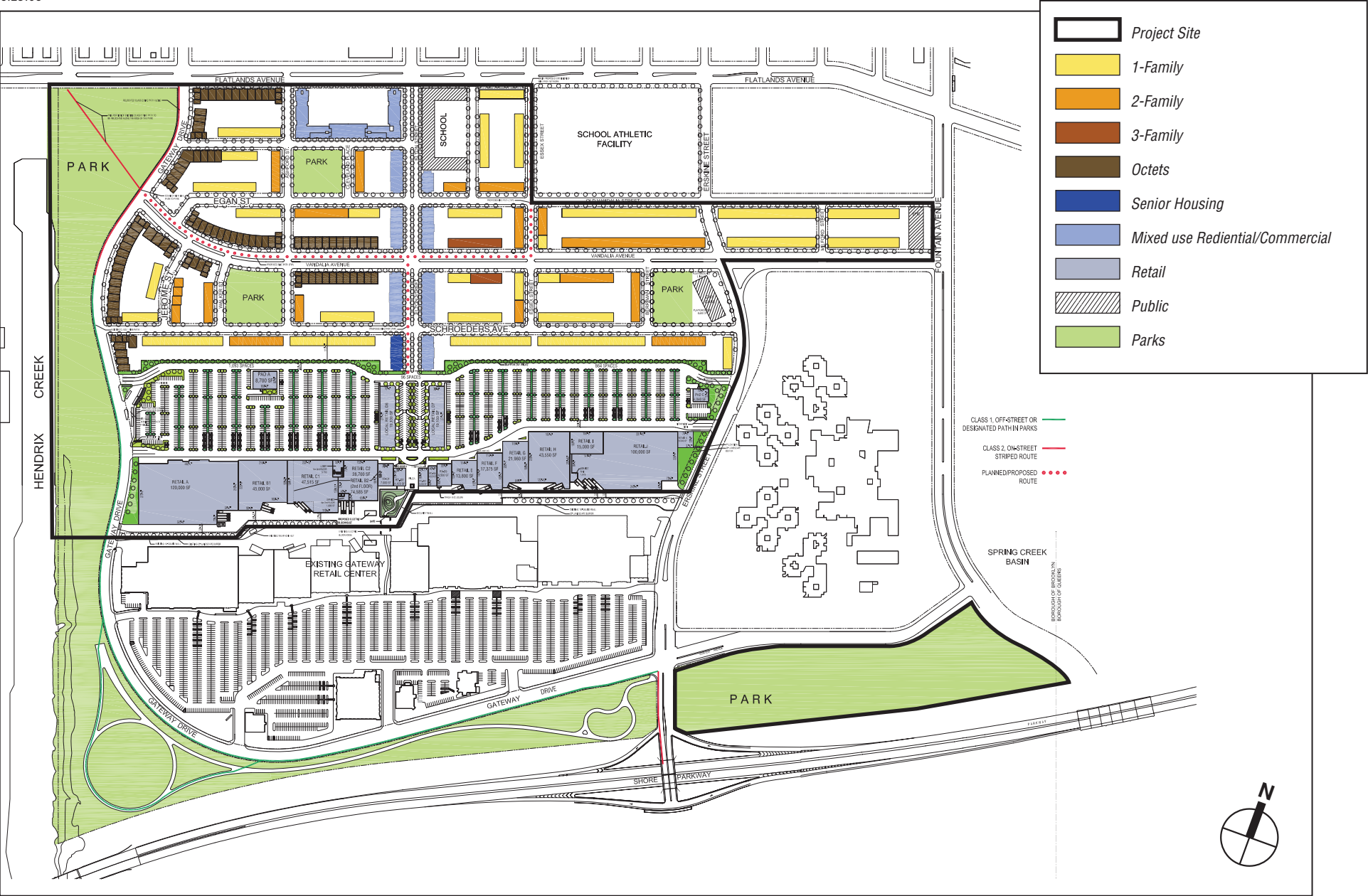
The applicant proposes to implement a revised plan for the undeveloped portions of the FCURA as well as the area that will be developed as Nehemiah at Spring Creek (collectively, “Project Site”). Like the 1996 Plan, the Proposed Project would result in mixed-use development within the FCURA, including residential, community facility, and retail uses, public parkland, and new streets and infrastructure. The Proposed Project would provide social and economic benefits for the Spring Creek community, the Borough of Brooklyn, and the city as a whole. The site plan would allow up to 2,385 units of affordable housing on the Project Site. This housing would add much-needed affordable units to the City’s housing supply. As part of the proposal, land would be set aside for community facilities, including an intermediate/high school and a day care facility. The Proposed Project would relocate the mapped but un-built interior parks within the project area to provide a better site plan and allow the development of unbuilt portions of perimeter parkland, which were previously approved but have not yet been constructed. The revised site plan would also relocate proposed residential and commercial uses within the FCURA.

In addition to revising the site plan, the Proposed Project would allow for the expansion of the existing retail center and for new local retail along Elton Street and Flatlands Avenue. This would generate a substantial number of new jobs and would provide for tax revenues.

DEVELOPMENT PROGRAM

Figure S-2 shows the proposed site plan, the elements of which are as follows.

- **Residential:** Up to 2,385 residential units, which include the units that have been constructed and those in the advanced planning stages. All of the housing would qualify as affordable units pursuant to public, private, and not-for-profit financing programs.
- **Retail:** Up to 630,000 sf of shopping center with 2,067 accessory parking spaces and up to 68,000-square-feet of local retail. These new retail uses would be in addition to the 640,000-square-foot shopping center that already exists within the FCURA.
- **Community Facilities:** The Proposed Project would include an intermediate/high school with 490 intermediate seats and 736 high school seats, a 16,000 sf day care facility, and 30,000 sf of an undetermined community/public facility use.
- **Open Space:** 36.5 acres of open space, including 33.2 acres of perimeter park and 3.3 acres of interior parks. With the Proposed Action, two interior parks would be demapped and would be remapped at new locations within the Project Site, and the third park would be developed at the same location identified in the 1996 Plan. The open space would be in addition to the 9.7-acre portion of perimeter park that has already been completed.
- **Infrastructure:** The Proposed Project would include new streets and utilities in the undeveloped portions of the FCURA as well as space within for a new bus turnaround and taxi/transportation stand.



Gateway Estates II

- Supportive Housing:** It is anticipated that approximately 70 mentally handicapped individuals would reside within the multiple dwellings proposed for the Elton Street corridor. A not-for-profit organization would be selected by the NYS Office of Mental Health (OMH) to provide appropriate support services, and rental stipends would be provided via OMH funding. Support services would be geared toward placing individuals in specific housing units, provision of case management services and community resources as needed in order to ease integration into permanent housing. It is anticipated that the tenants would reside in units scattered throughout the corridor and would not be concentrated in any particular location.

COMPARISON TO THE 1996 PLAN

Compared to the 1996 Plan, the Proposed Project would contain the same number of housing units and a slightly higher acreage of parkland (see Table S-1). Both plans also have a day care and an undetermined community/public facility use; however, the 1996 Plan included an elementary and an intermediate school while the Proposed Project would include an intermediate/high school. Both plans also include new streets and utilities within the FCURA.

Table S-1
1996 FEIS Development Plan and the Proposed Project

Use	1996 Plan	Proposed Project	Change in Use (Proposed Project vs. 1996 Plan)
Residential ⁵	Up to 2,385 DU	Up to 2,385 DU ⁴	0 DU
Retail			
Destination Retail ⁵	640,000 SF	Up to 1,270,000 SF ¹	+ 630,000 SF
Local Retail ⁵	15,000 SF	Up to 68,000 SF	+ 53,000 SF
Total Retail ⁵	655,000 SF	Up to 1,338,000 SF	+ 683,000 SF
Office ⁵	10,000 SF	0 SF	- 10,000 SF
Community/Public Facilities			
Elementary School	1,200 Seats	0 Seats	No change in programming of day care but an increase in size. No change in programming of community/public facility; land was set aside for two schools in the 1996 Plan, but one school building (with intermediate and high school programs) is now proposed
Intermediate School	900 Seats	490 Seats ²	
High School	0 Seats	736 Seats ²	
Day Care ⁵	4,000 SF	16,000 SF ²	
Community Facility ⁵	30,000 SF	30,000 SF ²	
Open Space	45.2 Acres	46.2 Acres ³	+ 1 Acres
Parking	2,685 Spaces	Approximately 5,767 Spaces	3,082 Spaces
Notes: <ol style="list-style-type: none"> 1. Includes 640,000 sf of retail that has already been completed. 2. Land will be set aside for the proposed community/public facility, <u>intermediate</u>/high school, and day care center. 3. Includes approximately 9.7 acres of perimeter park that have already been completed. 4. Includes approximately 378 units that are under construction or are in the advanced planning stages. 5. Approximate. 			

The Proposed Project would result in more retail than was proposed in the 1996 Plan. The 1996 Plan included a 640,000-square-foot shopping center and 15,000 sf of local retail space. As noted above, the shopping center was opened in 2002, but the local retail was not developed. Under the Proposed Project, the existing shopping center would be expanded from 640,000 sf to approximately 1,270,000 sf. The Proposed Project also includes up to 68,000 sf of local retail use. Therefore, with implementation of the Proposed Project, the FCURA would have a total of up to 1,338,000 sf of retail use compared to 655,000 sf of retail use under the 1996 Plan.

One element of the 1996 Plan, 10,000 sf of professional office space, has not been explicitly programmed in the Proposed Project. However, professional offices (i.e., doctor and dentist offices, real estate and insurances agents, etc.) may occupy a portion of the local retail space. Two elements of

the Proposed Project, a bus turnaround and a taxi/transportation stand, were not included in the 1996 Plan.

The Proposed Project would result in the same number of residential units as the 1996 Plan, but would include a large shopping center and parking lot in areas dedicated to residential use. This would be accomplished because zoning changes would increase allowable residential density along Elton Street and on the parcels south of Flatlands Avenue between Ashford and Elton Streets. Under the Proposed Project, Elton Street would be developed with six- to eight-story apartment buildings; under the 1996 Plan, Elton Street would be developed with four-story buildings. The parcel along Flatlands Avenue would also be developed with a six- to eight-story apartment building under the Proposed Plan. In addition, octets (8-family dwellings) would be constructed in the western portions of the FCURA along Gateway Drive, Vandalia Avenue, and Flatlands Avenue under the Proposed Project.

GREEN DESIGN

The Proposed Project would include several green design elements. The parking lot for the expanded shopping center would comply with the New York City Department of City Planning's (DCP) green design standards for parking lots. As part of this compliance, the shopping center and parking lot would include a stormwater management system utilizing on-site stormwater best management practices (BMPs) to remove pollutants, sediments and floatables. Stormwater BMPs being considered include pretreatment measures such as vegetated swales and rain gardens to allow some infiltration of stormwater, temporary on-site stormwater storage to detain the runoff and control the rate it is discharged to the storm sewer, catch basins fitted with hydrodynamic devices to remove oil and grit, and hoods to remove floatables. The shopping center may also have a white roof to reduce cooling costs, and techniques designed to minimize air pollution and noise would be used during construction of the Proposed Project.

CIRCULATION PLAN

Like the 1996 Plan, the Proposed Project would result in the reconfiguration or extension of existing streets and the creation of new streets within the undeveloped portions of the FCURA. Gateway Drive and Erskine Street would be extended north from Vandalia Avenue to Flatlands Avenue and Elton Street would be fully constructed between Flatlands Avenue and the new shopping center. An existing section of Vandalia Avenue between Gateway Drive and Schenck Avenue would be eliminated. Locke Street, Egan Street, and Schroeders Avenue would be built and would provide east-west access through the Project Site. The new north-south streets would include Jerome Street, Walker Street, Ashford Street, Cleveland Street, Linwood Street, Essex Street, Berriman Street, and Milford Street.

Gateway Drive, Erskine Street, and the Erskine Street interchange from the Shore Parkway would serve as the main points of entry to the FCURA for vehicles accessing the shopping center since these streets would serve the parking lot. Elton Street is envisioned as the spine of the development for its new residents and would provide pedestrian access between Flatlands Avenue and the shopping center. Delivery vehicles would approach the site from designated New York City Department of Transportation (NYCDOT) truck routes.

The Proposed Project includes an accessory parking lot for the expanded retail center. There would also be on-street and rear yard parking for the residential buildings, on-street parking for the retail uses that line Elton Street, interior garages for the residential and retail uses on Elton

Street, and a surface parking lot on the parcel bounded by Ashford Street, Flatlands Avenue, Elton Street, and Locke Street.

The Proposed Project would also include a bus layover and turnaround facility within the parking lot of the expanded shopping center, adjacent to Gateway Drive. The facility would provide space for up to six buses to layover concurrently, and would include a canopy to shelter bus passengers while loading and unloading. This facility would allow New York City Transit (NYCT) to provide direct and increased bus service within the FCURA.

PROPOSED ACTIONS

Uniform Land Use Review Procedure Actions

The following discretionary actions, which are subject to New York City's Uniform Land Use Review Procedure (ULURP), are being requested to facilitate the Proposed Project.

- **City Map Amendment:** The applicant is seeking an amendment to the current City Map to eliminate, map, realign, extend, and rename certain streets, and to relocate parklands.
- **Zoning Map Amendment:** The applicant is requesting a zoning map amendment to allow for greater density for certain residential buildings and to provide for a new shopping center. Generally, the zoning map amendments propose to change various parcels from R6 and R6 with a C2-4 overlay to a mix of R7A with a C2-4 overlay or to C4-2 (see Figure S-3).
- **New York City Planning Commission (CPC) Special Permits:** The establishment of a General Large Scale Development is required for the regional retail center. The applicant will seek a special permit for modification of sign regulations pursuant to the *Zoning Resolution of the City of New York* (ZR) Section 74-744(c).
- **Fresh Creek Urban Renewal Plan (FCURP):** The applicant is proposing amendments to the FCURP to change parcel sizes, permitted uses, density, and height limits to reflect the Proposed Project.
- **Urban Development Action Area Project (UDAAP) Designation:** The applicant seeks a UDAAP designation for the undeveloped portions of the FCURA north of the proposed shopping center in conjunction with the disposition of the City-owned property to the Nehemiah Housing Development Fund Co., Inc. and to Gateway Center Properties Phase II, LLC for the construction of up to 2,385 units of affordable housing.
- **Disposition of Property:** The applicant seeks the disposition of State- and City-owned land for conveyance to Gateway Center Properties, Phase II, LLC and Nehemiah Housing Development Fund Co., Inc.

Other Approvals

- **Coastal Zone Consistency Determination:** The Project Site is within the boundaries of the Coastal Zone and will require a DCP determination of consistency with New York City's Local Waterfront Revitalization Program (LWRP).
- **Financing:** The implementation of the Proposed Action would include applications for financing from various public agencies. Sources may include: the New York City Housing Development Corporation (HDC) Low-Income Marketplace Program that uses corporate reserves, low-income tax credits, and other subsidies to produce housing that is affordable for families earning less than 60 percent of New York City's median income; the New York State Department of Environmental Conservation (NYSDEC) Brownfields Cleanup Program

that provides liability relief and funding for brownfields remediation; and from the New York State Empire State Development Corporation (ESDC). The applicant would also seek tax assistance from the New York City Industrial Agency (IDA) and the following exemptions from ESDC: (1) mortgage recording tax; and (2) sales tax for construction materials. As such, ESDC is an involved agency for the project's environmental review.

- **Permits:** The project also requires NYSDEC State Pollution Discharge Elimination System (SPDES) permits for stormwater discharges associated with construction activities.
- **School Site Plan Approval:** Development of the proposed school would require site plan approval by the Mayor and City Council pursuant to the requirements of the New York City School Construction Authority Act. The SCA would be responsible for the design and construction of the proposed school on Block 4449, Lot 1. Under the terms of its enabling legislation, SCA must comply with SEQRA. Therefore, SCA would undertake appropriate measures to avoid impacts related to hazardous materials, air quality, and noise on the proposed school. For hazardous materials, SCA would undertake additional site-specific investigations to determine the specific measures and engineering controls that would be implemented to avoid hazardous materials impacts.

B. ENVIRONMENTAL ANALYSIS FRAMEWORK

This Environmental Impact Statement (EIS) has been prepared in conformance with all applicable laws and regulations, including Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations (dated August 24, 1977). It follows the methodology set forth in the project's Final Scope and uses the guidance of the *CEQR Technical Manual* (2001).

EXISTING CONDITIONS

The existing conditions analysis for this EIS is generally based on field surveys and data collected in the fall of 2006 and spring of 2007. To date, approximately 100 acres of the FCURA have been developed. Existing uses on the site include:

- The Brooklyn Developmental Center;
- The 7.7-acre Thomas Jefferson Athletic Field;
- Gateway Center, a 640,000-square-foot shopping center and its associated parking lot;
- Nehemiah at Spring Creek, which includes a total of 378 housing units under construction or in the advanced planning stages (subsequent to publication of the Draft Environmental Impact Statement, 184 units of Nehemiah housing have been constructed and are in the process of being occupied);
- A 9.7-acre portion of perimeter park;
- Paved streets (Gateway Drive, Erskine Street, Fountain Avenue, Vandalia Avenue, and p/o Elton Street, Linwood Street, Old Vandalia Street, Essex Street, and Erskine Place); and
- The Erskine Street interchange from the Shore Parkway; and
- Subgrade water, sewer, and utility lines.

NO BUILD AND BUILD CONDITIONS

The future conditions analysis for the EIS considers two build years—2011 and 2013. The EIS compares the effects of the Proposed Project (also known as the “Build condition”) to a future No

Gateway Estates II

Build condition. The future No Build condition accounts for the portions of the 1996 Plan that have not yet been completed but would be absent the Proposed Action.

2011 ANALYSIS YEAR

Table S-2 compares the proposed uses for the 2011 No Build and Build conditions. The 2011 No Build condition includes the 378 residential units that are constructed or will soon be under construction on the Project Site as well as the existing uses described above. In the 2011 No Build condition, the remainder of the FCURA would continue to be unimproved. The 2011 Build condition includes the 378 residential units that have been constructed or soon will be under construction as well as the proposed 649 residential units along Elton Street and Flatlands Avenue. In total, the 2011 Build condition includes 1,027 residential units. The 2011 Build condition also includes the 630,000-square-foot expansion of the retail center and 68,000 square feet of local retail uses within the bases of buildings along Elton Street and Flatlands Avenue.

Table S-2
FCURA Development Programs—2011

	No Build (1996 Plan)	Build (Proposed Project)	Increment
Housing (units)*	378 DU	1,027 DU	649 DU
Shopping Center*	0 SF	630,000 SF	630,000 SF
Local Retail	0 SF	68,000 SF	68,000 SF
Office (SF)	0 SF	0 SF	0 SF
Community/Public Facilities			
Elementary School	0 Seats	0 Seats	0 seats
Intermediate School	0 Seats	0 Seats	0 seats
High School	0 Seats	0 Seats	0 Seats
Day care	0 SF	0 SF	0 SF
Community Facility	0 SF	0 SF	0 SF
Open Space*	0 SF	0 SF	0 SF
Notes: * Approximate			

2013 ANALYSIS YEAR

For the 2013 No Build condition, the EIS accounts for all of the elements of the 1996 Plan that were not implemented to date (housing units, local retail space, professional office space, community/public facilities, and the as yet undeveloped open space). For the 2013 Build condition, the EIS includes full implementation of the Proposed Project. Table S-3 shows the development programs for the FCURA that have been assessed for the 2013 No Build and Build conditions.

Table S-3
FCURA Development Programs—2013

	No Build (1996 Plan)	Build (Proposed Project)	Increment
Housing (units)*	2,385 DU	2,385 DU	0 DU
Shopping Center**	0 SF	630,000 SF	630,000 SF
Local Retail	15,000 SF	68,000 SF	53,000 SF
Office (SF)	10,000 SF	0 SF	(10,000 SF)
Community/Public Facilities			
Elementary School	1,200 seats	0 Seats	(1,200 Seats)
Intermediate School	900 seats	490 Seats	(510 Seats)
High School	0 Seats	736 seats	736 seats
Day care	4,000 SF	16,000 SF	12,000 SF
Community Facility	30,000 SF	30,000 SF	0 SF
Open Space*	35.5 Acres	36.5 Acres	1 Acre
Note: * Approximate			

C. PROBABLE IMPACTS OF THE PROPOSED ACTION

LAND USE, ZONING, AND PUBLIC POLICY

LAND USE

The implementation of the Proposed Project would improve the FCURA and would not result in significant adverse impacts to land use in the FCURA. The Proposed Project would add a total of up to 2,385 housing units (the same as in the 2013 future without the Proposed Action), a public intermediate/high school, a 630,000 square foot shopping center, a day care facility and other unspecified community/public facility uses, and an additional 36.5 acres of publicly accessible open space. Like the 1996 Plan, the full implementation of the Proposed Project would complete the transformation of the FCURA from its current underutilized state to a vibrant, mixed-use neighborhood with affordable housing, senior housing, a new shopping center, a town center, community/public facilities, streets, landscaping, and parks. This would constitute a substantial land use change. The Proposed Project would strengthen the neighborhood by providing much needed school, day care, community facility, and open space uses to meet the needs of the existing and new residents. The residential development north of the shopping center would be buffered from the proposed shopping center by the parking lot and associated landscaping. All uses would be sited to be compatible with uses in the surrounding area, and overall, the full build out of the Proposed Project in 2013 would have positive land use effects on the Project Site.

The implementation of the Proposed Project would be consistent with land uses in the primary and secondary study areas (defined as approximately ¼-mile and ½-mile from the Project Site, respectively). There is an ongoing trend toward residential development in the area with which the Proposed Project is consistent. In addition, the Proposed Project would provide retail that would complement the existing local retail. No significant adverse impacts on land use in the surrounding study areas would result from the implementation of the Proposed Project.

ZONING

The implementation of the Proposed Project would require zoning changes in order to extend the existing C4-2 zoning district to facilitate the development of the new retail center. Zoning changes would also be required to increase residential density and allow neighborhood retail uses in other areas of the FCURA. The parking lot of the proposed shopping center would be built to conform to DCP's new green design standards for commercial and community facility parking lots. In addition, the C2-4 commercial district overlay along Elton Street would be extended and a portion of the site would be rezoned from R6 to R7A. The proposed rezoning of the site would not create any nonconforming uses in the new R7A zone, and would not result in significant adverse impacts.

The changes in zoning resulting from the Proposed Action would be consistent with the zoning for residential, commercial, and manufacturing uses in the primary and secondary study areas. The primary study area already has large residential towers that far exceed the height allowed by the proposed change in zoning with the Proposed Project. The expansion of the two commercial zoning districts in the FCURA would allow for more commercial development. In addition, the Proposed Action would allow the use and scale associated with the proposed shopping center in areas of the FCURA where regional/destination retail centers are not currently allowed under zoning. However, as discussed elsewhere, the use and bulk of the proposed shopping center would be consistent with the existing retail center. In addition, the proposed residential development north of the shopping center would be buffered from the proposed shopping center

by the parking lot and associated landscaping. Therefore, the zoning changes included as part of the Proposed Action would not result in significant adverse impacts and would be consistent with zoning mapped in the primary and secondary study areas.

PUBLIC POLICY

Implementation of the Proposed Project would require amendments to the FCURP's land use regulations to change parcel sizes, permitted uses, density, and height limits. By allowing development of the maximum thresholds allowed by the FCURP, these changes would allow the implementation of a plan that would continue to meet the goals of the FCURP. Furthermore, the Proposed Project is consistent with New York City initiatives for affordable housing, economic development, and redevelopment of underused sites. In addition, the Proposed Project would include several green design elements, consistent with PlaNYC. Therefore, no significant adverse impacts to public policy would result from the implementation of the Proposed Project.

SOCIOECONOMIC CONDITIONS

The implementation of the Proposed Project would not significantly alter the socioeconomic profile of the neighborhood. Because the Project Site is vacant, the Proposed Project would not result in the direct displacement of any residents or businesses.

The Proposed Project would not result in indirect residential displacement, as it would not result in any of the following direct effects which can lead to indirect residential displacement:

- The Proposed Project would not add a substantial new population with different socioeconomic characteristics compared to the size and character of the existing population;
- It would not directly displace uses or properties that have had a "blighting" effect on property values in the area; it would not directly displace one or more components of the population to alter the socioeconomic composition of the study area;
- It would not introduce a substantial amount of a more costly type of housing compared to existing housing and housing expected to be built in the study area by the time the Proposed Project is completed;
- It would not introduce a "critical mass" of non-residential uses such that the surrounding area becomes more attractive as a residential neighborhood complex; and lastly,
- The Proposed Project would not introduce a "critical mass" of non-residential uses such that the surrounding area becomes more attractive as a residential neighborhood.

The Proposed Project would replace vacant land with affordable housing units, community facility space and retail uses. As discussed in the EIS, the largely vacant condition of the FCURA has not had a blighting effect on the value of surrounding residential property, and the affordable units that would be developed would not introduce substantial new population with different socioeconomic characteristics compared to the existing population of the surrounding area or the development that was approved as part of the 1996 Plan.

The Proposed Project would not result in indirect business displacement, as it would not result in any of the following direct effects which can lead to indirect business displacement:

- The Proposed Project would not introduce enough of a new economic activity to alter existing economic patterns.

- The Proposed Project would not add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing patterns.
- The Proposed Project would not displace uses or properties that have had a “blighting” effect on commercial property values in the area, leading to rises in commercial rents.
- The Proposed Project would not directly displace uses of any type that directly support businesses in the study area or bring people to the area that form a customer base for local businesses.
- The Proposed Project would not directly or indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the study area.
- The Proposed Project would not introduce a land use that could have a similar indirect effect, through the lowering of property values if it is large enough or prominent enough, or combines with other like uses to create a critical mass large enough to offset positive trends in the study area, to impede efforts to attract investment to the area, or to create a climate for disinvestment.

The retail development envisioned under the Proposed Project would not be a new economic activity in the study area and would reflect an existing trend towards the development of retail uses. Nearby industrial businesses would not be vulnerable to indirect displacement pressures due to increased rents because of the underlying manufacturing zoning and the IBZ designation of the area. Furthermore, the Proposed Project would not significantly affect competitive stores within the Primary Trade Area, defined as the area within approximately 5 miles from the Project Site, or jeopardize the viability of local shopping areas near the Project Site. Therefore, the Proposed Project would not result in significant adverse impacts due to indirect business displacement.

Overall, the socioeconomic analysis concludes that the Proposed Project would not result in significant adverse impacts due to direct or indirect residential or business displacement.

COMMUNITY FACILITIES AND SERVICES

SCHOOLS

The Proposed Project would introduce an estimated 669 elementary, 277 intermediate, and 323 high school students into Zone 3 and CSD 19 by 2013, which would be 35 elementary, 15 intermediate, and 17 high school students more than the 1996 Plan, due to the lower number of senior housing units with the Proposed Action. Elementary schools within Zone 3 would operate near full capacity, but would be below capacity within CSD 19 as a whole. There would continue to be adequate capacity in intermediate schools within Zone 3 and CSD 19. The Proposed Project would result in development of a new intermediate/high school within the FCURA, and overall, there would continue to be adequate capacity for high school seats in Brooklyn. Therefore, enrollment attributable to the Proposed Project would not result in significant adverse impacts on public schools.

LIBRARIES

Upon completion, the Proposed Project would introduce the same number of housing units as the 1996 Plan, and there would be no increase in the library study area population. Furthermore, no changes to study area libraries are proposed. The population is well-served by existing library

services and would continue to be well-served in the future with the Proposed Project. Therefore, there would be no significant adverse impact on library services.

HEALTH CARE FACILITIES

When compared to the 2013 future without the Proposed Action, the Proposed Project would not add new residents to the health care facilities study area. As with the No Build scenario, a total of 7,737 low- to moderate-income residents would generate approximately 1,950 additional emergency visits in 2013 with the Proposed Project, representing an increase in the total emergency room visits of less than 1 percent. Therefore, there would be no significant adverse impact on the provision of health care services.

DAY CARE CENTERS

Compared to the 2013 Future without the Proposed Action, the Proposed Project would result in a small increase in the number of day care eligible children in the study area. While the day care facilities would be operating above capacity, the Proposed Project would have no significant adverse impact when compared to the future conditions without the Proposed Action. Furthermore, the Proposed Project includes a day care facility, which would provide new capacity for childcare service in the study area.

OPEN SPACE

With the Proposed Project, 36.5 acres of open space would be developed on the Project Site in addition to the 9.7 acres that have already been completed, resulting in a total of 46.2 acres of open space within the FCURA. The 1996 Plan proposed one acre less open space for a total of 45.2 acres.

By 2013, the ¼-mile study area would experience declines greater than 5 percent in the passive open space ratios for both workers and the combined group of workers and residents. However, there would still be over 6 acres of passive open space for every 1,000 employees, and over 2 acres for combined employees and residents—an amount that is above any recommended guideline for open space adequacy in New York City. Within the ½-mile study area, there would be no change in the total open space ratio and the passive open space ratio, while the active open space ratio would increase by 1 percent and the passive open space ratio for the combined worker and resident population would decrease by 3 percent. Therefore, overall, the Proposed Project would not result in significant adverse impacts on open space.

SHADOWS

Most of the Proposed Project's buildings would be less than 50 feet tall, and none of them would be taller than 75 feet. The incremental shadow they would cast on adjacent sunlight-sensitive resources would be of limited extent and short duration throughout the year, and shadows would not be cast on the wetlands adjacent to Hendrix Creek. In both 2011 and 2013, incremental shadow cast by the proposed buildings on the Thomas Jefferson High School Athletic Field would be very small and would not occur at all on one of the four analysis days. The perimeter parkland and the three new interior parks would receive small areas of shadow for generally short durations at the beginning and/or the end of each of the four analysis days. These limited periods of shadow would not result in significant adverse impacts on sunlight-sensitive resources.

HISTORIC RESOURCES

A Phase IA archaeological assessment conducted for the 1996 FEIS concluded that a portion of the Project Site may host precontact and historic period archaeological resources beneath a layer of modern fill. This area of potential archaeological sensitivity is an approximately two-block area near the mapped locations of Ashford and Elton Streets, south of Flatlands Avenue. Construction of the intermediate/high school, the mixed-use buildings on Elton Street between Flatlands Avenue and Vandalia Avenue, the park bounded by Cleveland Street, Egan Street, Locke Street, and Ashford Street, and the Nehemiah housing on the blocks bounded by Elton Street, Vandalia Avenue, Ashford Street, and Egan Street would involve disturbance in this area of previously determined to have archaeological sensitivity. As per LPC correspondence dated November 29, 2007 (see Appendix B, "Historic Resources"), archaeological field testing (Phase 1B testing) was conducted in this area in order to determine the presence or absence of archaeological resources. Testing consisted of the excavation of a series of 8 large rectangular trenches in order to remove 10-12 feet of modern fill currently covering the original ground surface. Natural soils were exposed by hand at the bottom of each trench and 1-2 small test pits were hand excavated to sample for prehistoric artifacts and to examine site stratigraphy. Testing recovered a small number of historic and modern artifacts mixed together, which is an indication of disturbed soil. A single piece of quartzite, which is believed to be naturally occurring, was also uncovered. Disturbed remnants of the original ground surface were recovered in some of the trenches while in others the original ground surface has been removed and the modern fills extend to glacial tills. The area has been determined to have been extensively disturbed in the past, and therefore, the Proposed Action would not result in significant adverse impacts to archaeological resources. LPC has concurred that further testing is not required.

There are no known or potential architectural resources in the study area; therefore, there would no significant adverse impacts to architectural resources with the Proposed Project.

URBAN DESIGN AND VISUAL RESOURCES

The full implementation of the Proposed Project would transform the FCURA from a vacant site to a vibrant, mixed-use area with new residential uses, a new shopping center, a town center and plaza, community facilities, streets, landscaping, and parks. Elton Street, which would be extended through the Project Site, would be developed as a mixed-use residential and commercial corridor and would connect the existing retail development in the southern half of the FCURA to the surrounding area. Elton Street would terminate at a town center containing small retail spaces, outdoor cafe areas, and landscaping. Development on Elton Street would direct pedestrian activity to the area and increase the use and vitality of the FCURA. Additional retail and residential uses, as well as planned open spaces, would greatly improve the appearance of the FCURA. The proposed school would be approximately 4 stories in height (or 70 feet) and would be consistent with height of the mixed-use buildings located along Elton Street.

While the Proposed Project would be visible in views north and east from the existing parkland within the FCURA and in views from the Shore Parkway, it would not create any unusually large or tall structures and would not detract from the visual appreciation of these resources. The residential development north of the shopping center would be buffered from the proposed shopping center by the parking lot and associated landscaping, and all uses would be sited to be compatible with uses in the surrounding area.

The proposed signs for Gateway Center Phase II would be located on Gateway Drive and Erskine Street, north of the existing shopping center. The Gateway Drive pylon sign would be

located 65 feet from the nearest residential building and the structure would extend to a height of approximately 60 feet above curb level. The top of the sign itself would be at 56 feet, 6 inches. This sign would face the side façade of a building whose primary windows would be located in the front and rear of the building. The Erskine Street pylon sign would be 133 feet tall and perpendicular to the buildings within the Brooklyn Developmental Center and 310 feet away from the nearest residential building to the north. The signage would be similar to the signage that already exists at Gateway Center Phase I and would not result in a significant adverse impact on the surrounding neighborhood.

Overall, the Proposed Project, like the 1996 Plan, would have a beneficial effect on the urban design and visual resources of the FCURA and the surrounding area.

NEIGHBORHOOD CHARACTER

Implementation of the Proposed Project would transform the FCURA from a vacant site to a vibrant, mixed-use area with new residential uses, a new shopping center, local retail, community facilities, and open space. The new development would alter the Project Site's land use and urban design and result in increased vehicular traffic and transit activity and slight increases in noise levels on adjacent streets. However, these changes would not result in a significant adverse impact on the combined elements that define the neighborhood character of the study area.

NATURAL RESOURCES

The Proposed Project would not result in construction within the 100-year or 500-year floodplains, nor would it alter the tidal wetlands of Hendrix Creek or the freshwater wetlands within the Project Site. The amount of impervious cover within the Project Site would be greater than in the No Build condition, but stormwater management practices would control the quality and rate (quantity) of discharge of stormwater to Hendrix Creek and to Spring Creek Basin and would minimize potential impacts on their tidal wetlands, floodplains, aquatic biota, and water quality. The Proposed Project would discharge to separate sanitary and storm sewers and, therefore, storm flows from the Project Site would not have an effect on combined sewer overflow (CSO) events at the 26th Ward Water Pollution Control Plan (WPCP). However, the sanitary sewage generated by the Proposed Project would increase the flow at the 26th Ward WPCP and could contribute to CSO events during wet weather. According to the stormwater modeling prepared for the *Jamaica Plan Final Environmental Impact Statement* (New York City Department of City Planning, 2007), the 26th Ward WPCP would process an annual flow of approximately 21,900 MG in 2015 (the year for which the analysis was performed) and would have an annual CSO flow of 645.86 MG or approximately 2.9 percent of its total flow. The Proposed Project would add 920,556 GPD of sanitary sewage, or about 336 million gallons (MG) per year at the 26th Ward WPCP. If 2.9 percent of this sewage flow was discharged as CSO, the Proposed Project would add 9.6 MG, or 1.5 percent, to the annual CSO of the 26th Ward WPCP. Therefore, the Proposed Project is not anticipated to substantially increase CSO discharges from the 26th Ward WPCP to Hendrix Creek, and overall, the Proposed Project would not result in significant adverse impacts on floodplains, wetlands, water quality, and aquatic resources.

The Proposed Project would impact terrestrial resources, and the existing plant and wildlife communities within Project Site would be lost. However, the species that occur within this area are generally common to urban settings. Therefore, while the construction of the Proposed Project would adversely affect vegetation and some wildlife individuals currently present within

the Project Site, the loss of this flora and fauna would not result in significant adverse impacts to these terrestrial resources on a regional scale since the Project Site does not provide habitat critical to maintaining populations of these species within the region.

The Proposed Project would not result in significant adverse impacts to wetlands, plant communities, wildlife, water quality, or the aquatic biota of Jamaica Bay. Therefore, the Proposed Project would not significantly affect the resources of Jamaica Bay responsible for its designation as a Significant Coastal Fish and Wildlife Habitat.

HAZARDOUS MATERIALS

Subsurface investigations have confirmed that historic and current uses of the Project Site and adjacent and surrounding properties have resulted in soil, groundwater, and methane impacts. Therefore, the entire Project Site has some potential for the presence of subsurface hazardous materials. The fill has levels of metals, SVOCs, and VOCs consistent with urban historic fill. The proposed construction (of buildings, roads, utilities) would disturb and remove some of this fill. Because of the depth of groundwater, dewatering is not anticipated for the construction of the building; however, dewatering may be necessary during installation of infrastructure, such as new sewer lines. If dewatering is necessary for construction in any area, the discharge water would meet the NYCDEP criteria for effluent to municipal sewers in accordance with a NYCDEP Bureau of Wastewater Treatment (BWT) Wastewater Quality Control Permit. Groundwater would be tested for sewer discharge criteria and pre-treated, if necessary, prior to discharge to the city's sanitary sewer system. Any remaining fill would be isolated by the slabs/foundations of the proposed buildings, roads, sidewalks or other paved areas. In areas where impervious cover is not proposed and there is not currently two feet of clean cover material, then at least two feet of clean cover material would be provided. In addition, soil gas sampling identified methane at locations within the Project Site. Therefore, the Proposed Project would have the potential to result in significant adverse impacts associated with hazardous materials. These impacts would be mitigated by the provisions of a Remedial Action Plan (RAP) and a Health and Safety Plan (HASP), which are described below.

MITIGATION

In order to prevent potential risks and thereby avoid the potential for significant adverse impacts related to hazardous materials, the Proposed Project would include appropriate health and safety and remedial measures (conducted in compliance with all applicable laws and regulations and conforming to appropriate engineering practice) that would govern both soil disturbance activities and subsequent construction at the site.

These measures would include the development of a Remedial Action Plan (RAP) and environmental HASP for soil disturbance that would include detailed procedures for managing both known contamination issues (e.g., fill) and any unexpectedly encountered contamination issues. When the project design has progressed sufficiently to determine the areas of proposed soil disturbance and details of foundation construction (with sufficient additional soil, soil gas and/or groundwater testing both to characterize the materials that would be disturbed and to design the required methane gas venting systems), the RAP and HASP would be sent to NYCDEP for review and approval. The HASP would include procedures for avoiding the generation of dust that could affect the surrounding community as well as any monitoring necessary to ensure that no such impacts would occur. The RAP would include design and installation of methane gas venting systems in all new buildings and would ensure that in areas

not otherwise capped by buildings, pavements, or other impervious materials that surface soil (at least two feet deep) meets applicable guideline requirements for their respective commercial or residential uses. All work would be performed in accordance with applicable city, state, and federal requirements.

Prior to site excavation, a construction-specific HASP would be prepared to address both the known contamination issues (based on the previous studies) and contingency items (e.g., finding unexpected petroleum storage tanks or petroleum-contaminated soil). The HASP would describe in detail the health and safety procedures to minimize exposure of hazardous materials to workers and the public. The hazards across the Project Site would be evaluated by determining the subsurface contaminants of concern and their chemical and physical characteristics. Health hazards would be considered within the potential exposure associated with the work to be performed. The HASP would be developed in accordance with United States Occupational Safety and Health Administration (OSHA) regulations and guidelines and is expected to include the elements described below:

- Appropriate personnel would be designated to ensure that all requirements of the HASP are implemented, including an on-site Site Safety Officer (SSO). The SSO would be responsible for coordinating and reporting all health and safety activities and would have completed a 40-hour training course, supervisory training, and updated annual refresher courses that meet OSHA requirements codified in 29 Code of Federal Regulations (CFR) Part 1910. The SSO would have stop-work authorization, which they would execute on their determination of an imminent safety hazard, emergency situation, or other potentially dangerous situation. If the SSO were to be absent from the site, they would designate a suitably qualified replacement familiar with the HASP.
- The HASP would require that on-site personnel are qualified and have received the required training. All those entering the work area while intrusive activities were being performed would receive mandatory instruction regarding the potential hazards to health and safety. Any construction worker in a hazardous materials area would be required to be 40-hour OSHA trained. All construction personnel upon entering the site would attend a mandatory training meeting to:
 - Inform workers of the potential hazards they may encounter;
 - Provide the knowledge and skills necessary for workers to perform the work with minimal risk to health and safety;
 - Inform workers of the purpose and limitations of safety equipment; and,
 - Ensure that workers can safely avoid or escape from emergencies.

Each member of the construction crew would be instructed in these objectives before they would go onto the site. The SSO or other suitably trained individuals would be responsible for conducting the training program. Others who enter the site would have to be accompanied by a suitably trained construction worker.

- The HASP would include contingency response plans. All excavation would be continuously monitored for the presence of buried tanks, drums or other containers; along with sludges or soil that show evidence of potential contamination, such as discoloration, staining, or odors. The HASP would include a table of action levels for the particular monitoring equipment (photoionization) detector and particulate monitor) and contingencies if these action levels are exceeded. If any of these are detected, excavation in the area would be halted, and appropriate personnel would be notified, including the SSO. The affected area

would be cordoned off and no further work would be performed at that location until the appropriate contingency response plan described in the HASP was implemented. All contingency response actions would be carried out in accordance with special contingency health and safety procedures.

- To prevent the potential off-site transport of dust, dust control measures would be implemented during all earth-disturbing operations. Water would be available on-site for sprinkling/wetting to suppress dust in dry weather or as necessary. Water would also be available to suppress dust on haul roads, to wet equipment and excavation faces, and would be sprayed on buckets during excavation and dumping. All haul trucks would have tarp covers, and dust or mud would be removed from tires before leaving the site. Vehicle speeds would be limited on the Project Site.

Soil gas sampling identified methane at many locations within the Project Site. As such, all project components would include precautionary measures (such as sub-slab and active venting) which would be in place during building construction and would be operational prior to occupancy.

The LDA between HPD and Gateway Center Properties Phase II, LLC and Nehemiah Housing Development Fund Co., Inc. would include provisions related to hazardous materials mitigation. In connection with the disposition of City-owned property to the developers, a restrictive declaration would be recorded to restrict future use and/or development to a manner which is consistent with the hazardous materials mitigation systems. The provisions of the restrictive declaration would be designed to control land use and ensure long term maintenance and operations of engineering controls, which are part of the hazardous material mitigation systems. The restrictive declaration is a covenant, which binds the present owners, and all successors, and serves as notice to any future owner of the conditions and restrictions that are continuously binding on the land.

The SCA is an Involved Agency and would be responsible for the design and construction of the school facility on Block 4449. Under the terms of its enabling legislation, the SCA must comply with the requirements of SEQRA. Therefore, the SCA would conduct a Phase II Environmental Site Investigation to confirm subsurface conditions. Based on the findings of the Phase II Environmental Site Investigation, the SCA would develop management plans (e.g., soil management plan, groundwater management plan, construction HASP, etc.) to address any hazardous materials that may be encountered during construction of the school. The management plans prepared by the SCA would be separate from the RAP and HASP described above, but would include equally stringent requirements. At a minimum, the design of the new school would include a vapor barrier and an active sub-slab depressurization system (SSDS) to prevent potential migration of organic vapors and methane into the proposed school building. Additionally, for areas of the school where exposed soils may exist (i.e., landscaped areas), a twenty-four (24) inch thick layer of certified-clean fill would be placed over the soils.

WATERFRONT REVITALIZATION PLAN

The Project Site is located in the coastal zone designated by New York State and City and is subject to coastal zone management policies. A consistency assessment was undertaken, and it was determined that Proposed Action would be consistent with the city's LWRP.

INFRASTRUCTURE

WATER SUPPLY

Upon completion, the Proposed Project would increase water demand by approximately 1,050,106 gallons per day (GPD). This total demand would be an insignificant portion of New York City's average daily demand of 1.2 billion GPD and would not have a significant adverse impact on the City's ability to adequately deliver water to Brooklyn or New York City.

SANITARY SEWAGE

The Proposed Project would generate approximately 907,836 GPD of sanitary sewage in 2013. The sewage from the Project Site and FCURA would be treated at the 26th Ward WPCP. The 26th Ward WPCP has a permitted capacity of 85 MGD, and is estimated to be treating approximately 58 MGD on average. The total sewage from the Proposed Project would represent about 1.0 percent of the 26th Ward WPCP's permitted capacity.

The Proposed Project would discharge to separate sanitary and storm sewers and, therefore, storm flows from the Project Site would not have an effect on CSO events at the 26th Ward WPCP. However, the sanitary sewage generated by the Proposed Project would increase the flow at the 26th Ward WPCP and could contribute to CSO events during wet weather. According to stormwater modeling prepared for the *Jamaica Plan Final Environmental Impact Statement* (New York City Department of City Planning, 2007), the 26th Ward WPCP would process an annual flow of approximately 21,900 MG in 2015 (the year for which the analysis was performed) and would have an annual CSO flow of 645.86 MG or approximately 2.9 percent of its total flow. The Proposed Project would add 907,836 GPD of sanitary sewage, or about 331 million gallons (MG) per year at the 26th Ward WPCP. If 2.9 percent of this sewage flow was discharged as CSO, the Proposed Project would add 9.6 MG, or 1.5 percent, to the annual CSO of the 26th Ward WPCP. Therefore, the Proposed Project is not anticipated to substantially increase CSO discharges from the 26th Ward WPCP to Hendrix Creek.

Overall, the Proposed Project would not result in significant adverse impacts on sanitary sewage disposal or treatment.

STORMWATER

The Proposed Project would produce stormwater runoff and, therefore, discharges to Hendrix Creek and Spring Creek through its dedicated stormwater drainage system. A Stormwater Pollution Prevention Plan (SWPPP) for controlling runoff and pollutants from the Project Site both during and post-construction will be developed in association with the Project elements. Within the shopping center, these measures would include on-site stormwater Best Management Practices (BMPs) to remove pollutants, sediments and floatables. BMPs being considered include pretreatment measures such as vegetated swales and rain gardens to allow some infiltration of stormwater, temporary on-site stormwater storage to detain the runoff and control the rate it is discharged to the storm sewer, catch basins fitted with hydrodynamic devices to remove oil and grit, and hoods to remove floatables.

The stormwater drainage plan for the Project Site would be consistent with the stormwater management strategies identified in NYCDEP's Jamaica Bay Watershed Protection Plan. The strategies include:

- Promote low-impact development and BMPs for new and existing development;

- Reduce the imperviousness of new and existing development; and
- Expand water conservation programs to achieve a greater reduction in water use.

Therefore, the Proposed Project would not result in significant adverse impacts on the stormwater management system.

SOLID WASTE

By 2013, the Proposed Project would generate 108 tons per week of solid waste. Of this amount, private carters would handle approximately 112,970 pounds per week and the New York City Department of Sanitation (DSNY) would handle 102,597 pounds per week. The projected solid waste generated at the Project Site would not overburden the waste collection system and would not result in a significant adverse impact on waste collection in Brooklyn or New York City.

ENERGY

It is conservatively estimated that the Proposed Project would generate a demand of approximately 403 billion British thermal units (BTUs) per year by 2013. This energy demand would be a small portion of the demand in Brooklyn and New York City and would not constitute a significant adverse impact.

TRAFFIC AND PARKING

The traffic and parking analysis assessed potential impacts on 46 intersections within a primary and secondary study area. The analysis included 37 existing intersections and nine new intersections created by the Proposed Project. The locations analyzed in the study area currently operate at levels of service ranging from extremely favorable (LOS A) to poor (LOS F). Five peak hours were analyzed: the weekday AM (8AM to 9AM); midday (12:45PM to 1:45PM); and PM (4:45PM to 5:45PM); Saturday midday (1PM to 2PM); and Saturday PM (4PM to 5PM).

In addition, the Shore Parkway was analyzed because of its importance to regional travel and proximity to the Project Site. The analysis included six key mainline segments along the eastbound and westbound Shore Parkway within the influence of the on-ramp merges and off-ramp diverges approaching and leaving the Erskine Street interchange.

A parking analysis was undertaken to determine whether the parking to be provided would be sufficient to accommodate the Proposed Project's parking needs. A detailed parking inventory identified on- and off-street parking lots and spaces within a ½-mile radius of the Project Site.

2011

Roadway Network

New streets and intersections would be created within the Project Site to provide access to the residential uses, local retail, school and community facilities, and allow for mobility within the site. Some existing intersections would also be modified to accommodate the new street network. Overall, six intersections—all along Flatlands Avenue—would be modified, and nine new intersections would be created. Three modified intersections and four of the new intersections would satisfy a signal warrant and would be signalized in the 2011 Build condition.

Gateway Estates II

Travel Demand Estimates and Generated Volumes

By 2011, 1,027 residential dwelling units, up to 630,000 square feet of destination retail space, and up to 68,000 square feet of local retail space would be developed. These elements of the Proposed Project would generate 1,152 vehicles per hour (vph), 2,086 vph, 2,379 vph, 2,971 vph, and 3,771 vph during the weekday AM, midday, PM, Saturday midday, and Saturday PM peak hours, respectively.

Intersection Level of Service Analysis

The 2011 Build year traffic volumes were developed by adding the project-generated volumes to the 2011 No Build volumes. The 2011 Build levels of service were then compared to the 2011 No Build condition to assess potential significant traffic impacts of the Proposed Project. Table S-4 provides an overview of the levels of service and significant adverse impacts that are expected to characterize the traffic study area during the peak hours. Overall, significant adverse impacts would result at 10 intersections in the weekday AM peak, 10 intersections in the weekday midday peak, 12 intersections in the weekday PM peak, 14 intersections in the Saturday midday peak, and 16 intersections in the Saturday PM peak. Mitigation measures for significantly-impacted locations are discussed in the “Mitigation” under the 2013 Build condition section below.

Table S-4

2011 No Build and Build Intersection Level of Service Summary

Level of Service	2011 No Build					2011 Build				
	Weekday			Saturday		Weekday			Saturday	
	AM	Midday	PM	Midday	PM	AM	Midday	PM	Midday	PM
Signalized Intersections (27 Total in No Build and 33 Total in Build)										
Overall Intersection LOS A/B	13	12	11	11	<u>9</u>	<u>18</u>	16	15	<u>11</u>	<u>9</u>
Overall Intersection LOS C	4	<u>9</u>	8	7	<u>6</u>	5	<u>8</u>	6	10	<u>8</u>
Overall Intersection LOS D*	6	<u>3</u>	5	<u>4</u>	<u>5</u>	6	4	6	5	<u>3</u>
Overall Intersection LOS E/F	4	3	3	<u>5</u>	<u>7</u>	4	5	6	7	<u>13</u>
Number of Signalized Intersection Movements at LOS E or F (of approximately 181 total in No Build and 214 total in Build)	35	23	43	40	<u>49</u>	37	28	53	49	<u>59</u>
Number of Signalized Intersections with Significant Impacts	—	—	—	—	—	<u>10</u>	10	11	13	<u>15</u>
Unsignalized Intersections (15 Total in No Build and 13 Total in Build)										
Overall Intersection LOS A/B	15	15	15	15	<u>13</u>	<u>13</u>	<u>13</u>	<u>12</u>	<u>12</u>	<u>11</u>
Overall Intersection LOS C	0	0	0	0	<u>2</u>	0	0	1	1	<u>2</u>
Overall Intersection LOS D*	0	0	0	0	<u>0</u>	0	0	0	0	<u>0</u>
Overall Intersection LOS E/F	0	0	0	0	<u>0</u>	0	0	0	0	<u>0</u>
Number of Unsignalized Intersection Movements at LOS E or F (of approximately 50 total in No Build and 31 total in Build)	0	0	3	5	<u>8</u>	1	0	2	2	<u>5</u>
Number of Unsignalized Intersections with Significant Impacts	—	—	—	—	—	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>1</u>
Notes:										
* This table shows intersections that operate at acceptable and unacceptable levels of service. Only intersections that operate at unacceptable levels of service are discussed in detail.										
<u>Three</u> intersections analyzed as unsignalized in the 2011 No Build condition would be signalized in the Build condition. Three new signalized intersections and one new unsignalized intersection were added to the 2011 Build analysis.										

Highway Analysis

In the 2011 Build condition, the Shore Parkway would experience volume increases due to the background growth in traffic and volumes expected to be generated by the No Build developments as well as the traffic generated by the development of the Proposed Project. The development of the Proposed Project would increase traffic on the Shore Parkway and the Erskine Street interchange on and off-ramps by approximately 75 to 415 vph during the

weekday and weekend peak hours for the 2011 Build condition. These volumes were added to the 2011 No Build volumes to establish the 2011 Build volumes.

In general, traffic levels of service in 2011 No Build and Build conditions would be similar. None of the Shore Parkway sections would be significantly impacted during the weekday AM, midday, and Saturday midday peak hours. One Shore Parkway segment would be significantly impacted during the weekday PM peak hour. This impact would occur on the eastbound Shore Parkway section after the Erskine Street on-ramp. During the Saturday PM peak hour, three sections of the Shore Parkway—the eastbound segment before the off-ramp diverge, the eastbound segment after the on-ramp merge, and the westbound segment before the off-ramp diverge—would be significantly impacted. Although these sections would be significantly impacted, the reduction in speeds would range from 0.5 to 2.8 mph, which would generally not be noticeable to motorists.

Parking

The new shopping center's parking lot would have a capacity of approximately 2,067 spaces. The total amount of available off-street parking would amount to approximately 4,752 spaces to accommodate the existing shopping center and the proposed expansion. During peak hours, the new parking lot would range from approximately 13 percent occupancy (weekday AM peak hour) to 68 percent occupancy (Saturday midday peak hour). When the existing and proposed parking lots are considered cumulatively, the peak weekday occupancy would be 49 percent, while the peak Saturday occupancy would be 72 percent. In addition, the new roadway network and residential parking areas would provide 1,460 parking spaces, which would accommodate the parking needs of the local retail and residential units.

2013

Roadway Network

The 2013 Build condition roadway network would include all of the intersections and intersection controls implemented in 2011 with the Proposed Project (six modified intersections and nine new intersections). All six modified intersections are either already signalized or would satisfy a signal warrant in the 2013 Build condition. Five of the nine new intersections would satisfy a signal warrant and would be signalized in the 2013 Build condition.

Travel Demand Estimates and Generated Volumes

The Proposed Project would generate a total of 2,684 vph, 2,542 vph, 3,424 vph, 3,727 vph, and 4,441 vph during the weekday AM, midday, PM, Saturday midday, and Saturday PM peak hours, respectively.

Intersection Level of Service Analysis

The 2013 Build year traffic volumes were developed by adding the project-generated volumes to the 2013 No Build volumes. The 2013 Build levels of service were then compared to the 2013 No Build condition to assess potential significant traffic impacts of the Proposed Project. Table S-5 provides an overview of the levels of service and significant adverse impacts that are expected to characterize the traffic study area during the peak hours. Overall, significant adverse impacts would result at 12 intersections in the weekday AM peak, 10 intersections in the weekday midday peak, 14 intersections in the weekday PM peak, 15 in the Saturday midday peak, and 19 in the Saturday PM peak. Mitigation measures for significantly-impacted locations are discussed in the "Mitigation" section below.

Table S-5

2013 No Build and Build Intersection Level of Service Summary

Level of Service	2013 No Build					2013 Build				
	Weekday			Saturday		Weekday			Saturday	
	AM	Midday	PM	Midday	PM	AM	Midday	PM	Midday	PM
Signalized Intersections (31 Total in No Build and 37 Total in Build)										
Overall Intersection LOS A/B	<u>12</u>	14	<u>11</u>	<u>11</u>	<u>11</u>	17	18	<u>18</u>	<u>14</u>	<u>11</u>
Overall Intersection LOS C	7	<u>11</u>	10	9	<u>9</u>	7	8	<u>7</u>	<u>9</u>	<u>5</u>
Overall Intersection LOS D*	6	3	4	4	<u>4</u>	5	5	5	5	<u>8</u>
Overall Intersection LOS E/F	6	3	6	7	<u>7</u>	8	6	7	9	<u>13</u>
Number of Signalized Intersection Movements at LOS E or F (of approximately <u>200</u> total in No Build and <u>230</u> total in Build)	<u>40</u>	<u>23</u>	<u>48</u>	<u>39</u>	<u>47</u>	48	32	61	54	<u>67</u>
Number of Signalized Intersections with Significant Impacts	—	—	—	—	—	<u>12</u>	10	13	14	<u>18</u>
Unsignalized Intersections (11 Total in No Build and 9 Total in Build)										
Overall Intersection LOS A/B	<u>10</u>	<u>11</u>	<u>10</u>	<u>11</u>	<u>11</u>	9	9	7	8	<u>6</u>
Overall Intersection LOS C	0	0	1	0	<u>0</u>	0	0	2	1	<u>2</u>
Overall Intersection LOS D*	0	0	0	0	<u>0</u>	0	0	0	0	<u>1</u>
Overall Intersection LOS E/F	1	0	0	0	<u>0</u>	0	0	0	0	<u>0</u>
Number of Unsignalized Intersection Movements at LOS E or F (of approximately <u>34</u> total in No Build and <u>28</u> total in Build)	6	0	3	2	<u>4</u>	3	1	4	4	<u>4</u>
Number of Unsignalized Intersections with Significant Impacts	—	—	—	—	—	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>1</u>
Notes:										
* This table shows intersections that operate at acceptable and unacceptable levels of service. Only intersections that operate at unacceptable levels of service are discussed in detail.										
<u>Three</u> intersections analyzed as unsignalized in the 2013 No Build condition would be signalized in the Build condition. Three new signalized intersections and one new unsignalized intersection were added to the 2013 Build analysis.										

Highway Analysis

In the 2013 Build condition, the Shore Parkway would experience volume increases due to the background growth, No Build developments, and traffic generated by the development of the Proposed Project. The Proposed Action would result in increasing traffic on the Shore Parkway and Erskine Street interchange on and off-ramps by approximately 35 to 390 vph during the peak hours for the 2013 Build condition. These volumes were added to the 2013 No Build volumes to establish the 2013 Build volumes.

With the Proposed Project, none of the Shore Parkway sections would be significantly impacted during the weekday AM, midday and Saturday midday peak hours. During the weekday PM peak hour, two Shore Parkway segments would be significantly impacted. These impacts would occur on the eastbound Shore Parkway section before the Erskine Street off-ramp, and the section between the Erskine Street off-ramp and on-ramp. During the Saturday PM peak hour, all sections except the westbound Shore Parkway between the on-ramp and off-ramp would be impacted. Similar to the 2011 Build condition, the reduction in speeds for these impacted sections would range from 0.9 to 3.7 mph, which would generally not be noticeable to motorists.

Parking

In 2013, the combined existing and new parking lots serving the shopping center would have adequate capacity to meet projected demand. The parking lots would have a maximum weekday accumulation of 50 percent from 1PM to 2PM; on Saturdays, the maximum accumulation would be 73 percent from 3PM to 4PM. The new roadway network and residential parking areas would provide 2,100 parking spaces. These spaces would suffice for all proposed land uses.

MITIGATION

A detailed evaluation of mitigation measures indicated that significant adverse impacts would be fully mitigated at all but six locations (three to four locations per time period) by standard traffic engineering improvements such as installation of traffic signals, signal phasing and timing modifications, parking prohibitions, and lane restriping. These modifications represent standard traffic capacity improvements that have been proposed and implemented to mitigate anticipated traffic impacts for numerous projects in New York City.

During certain peak hours, the intersections of Flatlands Avenue and Pennsylvania Avenue, Linden Boulevard and Pennsylvania Avenue, Flatlands Avenue and Rockaway Parkway, Linden Boulevard and Rockaway Avenue, and Linden Boulevard and Kings Highway and Remsen Avenue would be only partially mitigated. Partial mitigation occurs when some, but not all, of the significantly impacted movements in a time period are mitigated. In addition, three of these five intersections would not be mitigated at all during certain peak hours. Also, the intersection of Pennsylvania Avenue and Atlantic Avenue would not be mitigated for all peak hours analyzed.

Three Shore Parkway segments would experience significant impacts in the 2011 Build condition during certain peak hours. All segments except the westbound Shore Parkway between the on-ramp and off-ramp would experience significant impacts in the 2013 Build condition during certain peak hours. Although these impacts would not be mitigated, the reduction of speeds for the significantly impacted segments would be in the range of 0.2 mph to 3.7 mph and would generally be unnoticeable to motorists.

Implementation of the traffic engineering improvements described above would require the approval of NYCDOT. Coordination would be undertaken with NYCDOT to implement these proposed mitigation measures.

TRANSIT AND PEDESTRIANS

The assessment of potential impacts on transit service examined subway station operations at three stations—Canarsie-Rockaway Parkway Station (L), the New Lots Station (3, 4) and the Euclid Avenue Station (A, C)—and on four bus routes—B6 Limited, B13, B83, and the Q8. The analysis concludes that the Proposed Project would not result in impacts at these subway stations, but it would result in significant adverse line-haul impacts for these bus routes. Mitigation measures for the significant adverse bus line-haul impacts are presented below under “Mitigation.”

The new sidewalks, corners, and crosswalks within the FCURA would be designed to accommodate project-generated pedestrian trips, and new crosswalks at the periphery of the site would be designed to meet NYCDOT standards. The analysis concluded that crosswalks on and near the Project Site would operate acceptably.

Data on traffic accidents for the intersections in the vicinity of the Proposed Project were compiled from New York State Department of Transportation (NYSDOT) records for the period from October 2003 through October 2006. Based on this information, no fatalities were reported in the study area, but the intersection of Pennsylvania Avenue at Liberty Avenue is considered a high vehicle/pedestrian accident location. With the Proposed Project, the intersection of Pennsylvania Avenue and Liberty Avenue would experience increases in vehicular traffic. Nonetheless, safety improvement measures were considered to enhance safety at this location.

There were 16 reportable accidents during the study period of which nine involved pedestrians. For four of the nine vehicular-pedestrian accidents, the pedestrian crossed against the signal or outside the designated crosswalk. Six of the nine vehicular-pedestrian accidents occurred on Pennsylvania Avenue (as indicated by the vehicles' direction of travel—either northbound or southbound). Although six of the nine accidents occurred within a six month period in 2004, indicating the temporary circumstances (i.e., street construction) resulting in less safe conditions for a limited time period, the intersection was assessed to determine what pedestrian safety enhancements could be implemented. The field inspection revealed that none of the four intersection approaches has stop bars and the striping on all four crosswalks is faded.

Because the accident descriptions indicate that 44-percent of pedestrian/bicycle-related accidents during the study period involved pedestrians/cyclists crossing against the signal or outside the crosswalk, pedestrian safety at this intersection could be improved by the installation of clearly marked high-visibility crosswalks. Other recommendations include adding stop bars to all intersection approaches as well as signs warning turning motorists to yield to pedestrians and signs warning pedestrians to wait for the walk indication before crossing.

The Proposed Project would include a new intermediate/high school on the Project Site. Consistent with standard operating practices and procedures of the SCA, pedestrian improvements, such as high-visibility crosswalks and signage would be incorporated as part of the school's design.

MITIGATION

The bus line-haul impacts would be fully mitigated with increased peak hour service on the routes that serve the Project Site. Table S-6 shows the required number of bus runs to fully mitigate the impacts of the Proposed Project in the 2011 and 2013 build years.

A component of the Proposed Project is a proposed bus layover facility, to be located in the parking area of the shopping center on the western side of the Project Site, adjacent to Gateway Drive. The facility would provide space for up to six buses to layover concurrently, and would include a canopy to shelter bus passengers while loading and unloading. NYCT is considering extending existing bus service and providing new routes to this facility. It is anticipated that increases in service to the Project Site would result in improved operating conditions and reduced loads on the B6 and B13 bus routes.

Implementation of the bus service improvements described above would require the approval of NYCT. Coordination would be undertaken with NYCT to implement these proposed mitigation measures.

Table S-6

2011 and 2013 Build and Build with Mitigation Conditions: Bus Line Haul at NYCT
Maximum Load Points

Analysis Year	Route	Peak Period	Direction	Build without Mitigation		Build with Mitigation		
				Buses Per Hour	Passengers per Bus	Buses per Hour	Passengers per Bus	Additional Buses
2011	B6 LTD	AM	Eastbound	9	40	NA	NA	NA
			Westbound	17	(65)	21	53	4
		PM	Eastbound	13	(63)	15	54	2
			Westbound	8	(62)	10	50	2
	B13	AM	Northbound	7	(65)	9	51	2
			Southbound	4	52	NA	NA	NA
		PM	Northbound	5	49	NA	NA	NA
			Southbound	6	(74)	9	49	3
	B83	AM	Northbound	11	(61)	13	52	2
			Southbound	6	47	NA	NA	NA
		PM	Northbound	6	46	NA	NA	NA
			Southbound	14	48	NA	NA	NA
	Q8	AM	Northbound	5	36	NA	NA	NA
			Southbound	5	10	NA	NA	NA
		PM	Northbound	5	23	NA	NA	NA
			Southbound	5	34	NA	NA	NA
2013	B6 LTD	AM	Eastbound	12	(56)	13	52	1
			Westbound	19	(71)	25	54	6
		PM	Eastbound	16	(69)	21	53	5
			Westbound	10	(72)	14	51	4
	B13	AM	Northbound	11	(73)	15	54	4
			Southbound	7	(66)	9	51	2
		PM	Northbound	6	(63)	7	54	1
			Southbound	10	(81)	15	54	5
	B83	AM	Northbound	13	(66)	16	54	3
			Southbound	9	(64)	11	52	2
		PM	Northbound	6	(56)	7	48	1
			Southbound	14	54	NA	NA	NA
	Q8	AM	Northbound	6	(59)	7	51	1
			Southbound	5	34	NA	NA	NA
		PM	Northbound	5	42	NA	NA	NA
			Southbound	6	(58)	7	49	1
Note: The B6 Local service does not operate in the vicinity of the Project Site. AP = average passengers per bus; maximum load ridership data provided by NYCT, March 2006. (#) = exceeds NYCT guideline capacity; denotes significant adverse impact								

AIR QUALITY

MOBILE SOURCES

In the future with the Proposed Project, there would be no significant adverse mobile source air quality impacts in both 2011 and 2013. As shown in Table S-7, maximum predicted CO concentrations would not exceed the *de minimis* criteria used to assess the significance of the incremental increase in CO concentrations that would result from the Proposed Project. Further, the daily (24-hour) and annual PM_{2.5} increments are predicted to be below NYCDEP's interim guidance criteria at the analyzed receptor locations with the Proposed Project.

Table S-7

2013 Build Maximum Predicted 8-Hour CO Concentrations (parts per million)

Location	Time Period	Project Build 8-Hour Concentration (ppm)	Not-To-Exceed <i>De minimis</i> Criteria (ppm)
Flatlands Avenue and Pennsylvania Avenue	Weekday MD	4.0	6.3
	Weekday PM	4.4	6.6
	Saturday MD	4.2	6.3
	Saturday PM	4.5	6.5
Flatlands Avenue and Jerome Street	Weekday MD	3.5	6.4
	Weekday PM	3.6	6.6
	Saturday MD	3.9	6.7
	Saturday PM	4.2	6.7
Flatlands Avenue and Elton Street	Weekday MD	2.6	5.8
	Weekday PM	2.7	5.8
	Saturday MD	3.0	5.9
	Saturday PM	3.0	6.0
Gateway Drive and Erskine Street	Weekday MD	3.5	6.1
	Weekday PM	3.9	6.2
	Saturday MD	4.1	6.2
	Saturday PM	4.7	6.3
Notes: 8-hour CO standard is 9 ppm. An adjusted ambient background concentration of 2.0 ppm is included in the project Build values presented above.			

The Project Site would include a large parking lot to serve the retail developments. Emissions from vehicles using the parking facility could potentially affect ambient levels of CO at adjacent receptors as well as nearby project intersections analyzed in the future Build conditions. However, the analysis finds that the predicted CO concentrations at receptors near the parking lot would be below the applicable standard of 9 parts per million (ppm) and no significant adverse impacts would result.

The proposed traffic mitigation measures described above would alter traffic conditions when compared to the future with the Proposed Project without mitigation. An assessment of localized air quality was performed using the traffic mitigation measures to determine whether the above-described findings would be changed. The assessment concludes that no significant air quality impacts would occur as a result of the proposed traffic mitigation measures.

STATIONARY SOURCES

Overall, the Proposed Project would not result in any significant adverse stationary source air quality impacts. The proposed retail buildings would not result in significant adverse impacts because the nearest receptor buildings of similar or greater height would be more than 400 feet away. In addition, the combined impacts of all residential parcels would be in compliance with the National Ambient Air Quality Standards (NAAQS) for nitrogen dioxide (NO₂) at ground level and elevated receptors placed both within and outside the project boundaries.

Because the Project Site is proximate to an area zoned for industrial use, nearby existing industrial facilities were examined for potential adverse impacts on future residents of the Proposed Project. Based on the data available on the surrounding industrial uses, the Proposed Project would not experience significant air quality impacts from these facilities.

The 1996 FEIS analyzed the potential levels of hydrogen sulfide (H₂S) at the Project Site attributable to emissions from the 26th Ward WPCP, which is the primary stationary source of concern from an odor standpoint, and qualitatively analyzed other nearby sources of odors. The 1996 FEIS found that exceedances of the CEQR odor criteria and the New York State standard and NAAQS for H₂S may occur on the Project Site, but that these would be natural occurrences of adverse odors that could not be prevented or mitigated. Although the Proposed Project would result in a different site layout as compared to the 1996 Plan, the Proposed Project would not increase the frequency or severity of these occurrences.

NOISE

The Proposed Project would change traffic volumes in the vicinity of the Project Site, but the noise analysis concludes that the traffic generated by the Proposed Project would not produce significant increases in noise levels at any location within and/or adjacent to the Project Site.

The Proposed Project would place sensitive land uses (receptors) in areas with relatively high levels of ambient noise, which would result in significant adverse noise impacts. The *CEQR Technical Manual* noise attenuation requirements for buildings, which are based on exterior L₁₀₍₁₎ noise levels, are designed to maintain interior noise levels of 45 dBA or lower for residential, day care, schools, and similar noise-sensitive uses and 50 dBA or lower for commercial use.

Table S-8 shows the highest calculated L₁₀₍₁₎ noise levels at each of the undeveloped parcels in the FCURA and the attenuation required to achieve acceptable interior noise levels. The highest level of attenuation required for the Proposed Project's commercial uses would be 25 dBA, and the level of attenuation for residential and community facility uses would range from 20 to 35 dBA. Measures to mitigate significant adverse noise impacts are identified below.

MITIGATION

The Proposed Project would place sensitive land uses (receptors) in areas with relatively high levels of ambient noise, which would result in significant adverse noise impacts. Window-wall attenuation is required for the Proposed Project's residential, commercial, and community facility uses. Window-wall attenuation measures, including alternate means of ventilation, would be incorporated into the LDA between HPD and Gateway Center Properties Phase II, LLC and Nehemiah Housing Development Fund Co., Inc. in order to ensure that the required level of attenuation is provided. To achieve up to 25 dBA of building attenuation, double glazed windows with good sealing properties as well as an alternate means of ventilation such as well-sealed window air conditioning, would be provided. 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, would be provided; and to achieve 35 dBA of building attenuation, double glazed windows with good sealing properties as well as alternate ventilation such as central air conditioning, would be provided. With respect to commercial uses, 25 dBA of window-wall attenuation is typically provided as part of standard construction materials.

Table S-8

Minimum Building Attenuation Required to Comply with CEQR

Parcel	Proposed Land Use	Governing Noise Site	L ₁₀₍₁₎ (dBA)	Required Building Attenuation (dBA)
3a	Residential	7	65.8	25
3b	Residential	4	61.5	20
3c	Residential	4	61.5	20
3d	Residential	4	61.5	20
3e	Residential	4	61.5	20
3f	Residential	3	78.0	35
4 a/b	Residential	3	78.0	35
6a	Residential	4	61.5	20
6b	Residential/Commercial	2	68.1	25
7a	Residential	4	61.5	20
7b	Residential/Commercial	2	68.1	25
7c	Residential	4	61.5	20
8a	Residential	7	65.8	25
8b	Residential	4	61.5	20
8c	Residential	4	61.5	20
8d	Residential	4	61.5	20
8e	Residential	7	65.8	30*
8f	Residential	4	61.5	30*
10	Residential	4	61.5	30*
12a	Residential	4	61.5	20
12b	Residential/Commercial	2	68.1	25
12c	Residential	4	61.5	20
12d	Residential/Commercial	2	68.1	30*
12e	Residential	4	61.5	20
14a	School	6	71.9	30
14b	Residential/Commercial	4	61.5	20
14c	Residential	2	68.1	25
15	Residential	6	71.9	30
16a	Residential/Commercial	4	61.5	20
16b	Residential	4	61.5	20
16c	Residential	2	68.1	25
18a	Residential	1	73.5	30
18b	Residential	1	73.5	30
19a	Residential	4	61.5	20
19b	Residential/Commercial	2	68.1	25
19c	Residential	4	61.5	20
20a	Residential/Commercial	2	68.1	30*
20b	Residential	4	61.5	30*
21	Residential	4	61.5	20
22a	Residential	4	61.5	20
22b	Residential	4	61.5	20
24	Residential	4	61.5	30*
26a	Day Care	1	73.5	30
27	Residential	4	61.5	30*
28	Residential	1	73.5	30*
29/30	Residential	5	67.6	25
31/32	Residential	5	67.6	25
33	Community/Public Facility	5	67.6	25

Note:

* Parcels along the proposed parking lot would be provided with 30 dBA attenuation to account for parking lot operational noise.

The SCA is an Involved Agency and would be responsible for the design and construction of the school facility on Block 4449. Under the terms of its enabling legislation, the SCA must comply with the requirements of SEQRA. Therefore, the SCA would incorporate the necessary level of attenuation into the design of the school facility. The SCA would install double glazed windows

with good sealing properties, and ventilation would be provided through ducted systems. These window-wall attenuation measures would achieve between 30 and 35 dBA of attenuation.

CONSTRUCTION

The Proposed Project would result in substantial construction activities within the Project Site. However, it is a large, unimproved site and would accommodate most construction staging and construction worker parking. Furthermore, although the development would cover a large area, construction of individual structures would be short in duration and would have limited effect on adjacent uses. Nevertheless, construction activities have the potential to result in temporary adverse effects on traffic, air quality, and noise, and the historic use of this site has resulted in the presence of contaminated soils and the potential for archeological sensitivity.

Construction activities would comply with the New York City Noise Code, which regulates the hours of construction and times when noisy equipment can be used. The developers would implement emission reduction technologies and dust control measures as well as use ultra low sulfur diesel fuel for construction equipment to minimize effects on air quality. Construction activities would also be undertaken in accordance with an approved HASP for soil disturbance that would include detailed procedures for managing both known contamination issues (e.g., fill) and any unexpectedly encountered contamination issues. Lastly, sediment and erosion control procedures will be identified in the SWPPP and implemented during the construction activities to control runoff and pollutants from entering the stormwater management system.

Vehicles generated by construction activities were assigned to the street network to determine the location of critical intersections. The 6-7 AM and 3-4 PM peak hours were analyzed at six critical locations: Erskine Street and Gateway Drive; Flatlands Avenue and Fountain Avenue; Flatlands Avenue and Jerome Street; Flatlands Avenue and Pennsylvania Avenue; Linden Boulevard and Fountain Avenue; and Linden Boulevard and Pennsylvania Avenue. Under future conditions with construction, significant adverse impacts would occur at two of these six locations in the 6-7 AM peak hour and at four locations in the 3-4 PM peak hour. One of the two significantly impacted locations in the 6-7 AM peak hour, and all four significantly impacted locations in the 3-4 PM peak hour could be mitigated using measures similar to those recommended under Build conditions. The location of Flatlands and Pennsylvania Avenues would be unmitigatable in the 6-7 AM peak hour.

PUBLIC HEALTH

No activities are proposed that would exceed accepted city, state, or federal standards with respect to public health; therefore, no significant adverse impacts on public health are expected as a result of the Proposed Project.

UNAVOIDABLE ADVERSE IMPACTS

Most of the locations that would be significantly impacted could be mitigated using standard traffic engineering improvements such as installation of traffic signals, signal phasing and timing modifications, parking prohibitions, and lane restriping.

With the Proposed Project, five intersections—Erskine Street and Gateway Drive, Flatlands Avenue and Pennsylvania Avenue, Linden Boulevard and Pennsylvania Avenue, Flatlands Avenue and Rockaway Parkway, and Pennsylvania Avenue and Atlantic Avenue—would experience unmitigated impacts for at least one peak analysis hour in the 2011 and 2013 Build

Gateway Estates II

conditions. In addition, at Flatlands Avenue and Pennsylvania Avenue, Linden Boulevard and Pennsylvania Avenue, and Linden Boulevard and Rockaway Avenue significant impacts during other peak hours would only be partially mitigated

Other unmitigated significant adverse impacts for each Build condition were identified along the Shore Parkway near the Erskine Street interchange. However, the reduction of speeds for these segments would be in the range of 0.2 mph to 3.7 mph and would generally be unnoticeable to motorists.

ALTERNATIVES

Two alternatives were assessed to determine whether they would substantively meet the stated goals and objectives of the Proposed Project while reducing or eliminating its adverse impacts:

- The No Action Alternative, which assumes that the 1996 Plan would be implemented and that the amendments to the FCURP and associated City Map changes, zoning changes, and special permits would not occur.
- The Lesser Impacts Alternative, which would reduce the development density to result in no unavoidable adverse traffic impacts.

NO ACTION ALTERNATIVE

The No Action Alternative would result in the implementation of the previously approved 1996 Plan for the FCURA. Table S-9 outlines the components of the No Action Alternative and compares it to the Proposed Project. The No Action Alternative would also incorporate the mitigation commitments of the 1996 FEIS.

Table S-9
Comparison of Proposed Project and the No Action Alternative

Use	Proposed Project	No Action Alternative
Housing (units)	2,385 DU	2,385 DU
Shopping Center*	630,000 SF	0 SF
Local Retail	68,000 SF	15,000 SF
Office (SF)	0 SF	10,000 SF
Community/Public Facilities		
Elementary School	0 Seats	1,200 Seats
Intermediate School	490 Seats	900 Seats
High School	736 Seats	0 Seats
Day care	16,000 SF	4,000 SF
Community Facility	30,000 SF	30,000 SF
Open Space*	36.5 Acres	35.5 Acres
Note:	*The existing 640,000-square-foot shopping center and 9.7 acres of perimeter park within the FCURA are included as part of the existing conditions analysis.	

Like the Proposed Project, this alternative would adversely affect traffic operations, but in general, the No Action Alternative would result in fewer traffic impacts as compared to the Proposed Project. Both the Proposed Project and the No Action Alternative also would require increased bus service to meet projected demand. However, the No Action Alternative would not include a bus turnaround facility, which could preclude NYCT's ability to enhance bus operations at the Project Site.

Construction of the Proposed Project and the No Action Alternative has the potential to result in adverse effects from exposure to hazardous materials and emissions from construction

equipment. With respect to hazardous materials, the measures to minimize or avoid impacts would be the same for both. The Proposed Project has committed to the use of emission reduction technologies and ultra low sulfur diesel fuel for construction equipment. It is expected that developers of the No Action Alternative would make similar commitments.

As compared to the Proposed Project, the No Action Alternative would result in lower density development and the potential for fewer adverse impacts. However, this type of development would be less dense than is typical of an urban setting. It would not provide for a town center and plaza space at the foot of Elton Street and would provide for less linkage between the existing shopping center and the new residential neighborhood to its north. The No Action Alternative would also result in one less acre of interior parkland as compared to the Proposed Project.

LESSER IMPACTS ALTERNATIVE

The Proposed Project would result in significant adverse traffic impacts at some intersections that cannot be mitigated. The Lesser Impacts Alternative envisions a project where all of these impacts could be fully mitigated. This alternative has the same number of residential units as the Proposed Project, but would have 93 percent less retail square footage. Table S-10 compares the development programs for the Proposed Project and the Lesser Impacts Alternative.

Table S-10

Comparison of Proposed Project and the Lesser Impacts Alternative

Use	Proposed Project	Lesser Impacts Alternative
Housing (units)	2,385 DU	2,385 DU
Shopping Center*	630,000 SF	44,00 SF
Local Retail	68,000 SF	5,000 SF
Office (SF)	0 SF	0 SF
Community/Public Facilities		
Elementary School	0 Seats	0 Seats
Intermediate School	490 Seats	490 Seats
High School	736 Seats	736 Seats
Day care	16,000 SF	16,000 SF
Community Facility	30,000 SF	30,000 SF
Open Space*	36.5 Acres	36.5 Acres
Note: *The existing 640,000-square-foot shopping center and 9.7 acres of perimeter park within the FCURA are included as part of the existing conditions analysis.		

The Lesser Impacts Alternative, like the Proposed Project, would result in significant adverse impacts on traffic and bus operations. However, the Lesser Impacts Alternative would result in fewer adverse traffic impacts and all impacts would be mitigated.

Like the Proposed Project, the Lesser Impacts Alternative would result in potential construction impacts from exposure to hazardous materials within the Project Site, and the measures to mitigate these effects would be the same for both. Both the Lesser Impacts Alternative and the Proposed Project would also generate emissions from construction equipment. The Proposed Project has committed to the use of emission reduction technologies and ultra low sulfur diesel fuel for construction equipment. It is expected that developers of the Lesser Impacts Alternative would make similar commitments.

Like the Proposed Project, the Lesser Impacts Alternative would enliven the vacant parcel by bringing new uses to the site, which would improve the appearance of the FCURA. The Lesser Impacts Alternative would result in a smaller shopping center and possibly a smaller parking lot, which may provide for more buffer space between the retail center and the surrounding streets

and alleys. However, because the Lesser Impacts Alternative would result in substantially less commercial space than the Proposed Project, it would offer fewer economic benefits. Whereas the Proposed Project would create approximately 1,737 new jobs by 2013, the Lesser Impacts Alternative would create only 488 jobs. The combination of new employment and retail activities with the Proposed Project would generate greater tax revenues than would be realized with the Lesser Impacts Alternative. Furthermore, under the Proposed Project, the disposition of property to the retail developer would provide funds for the development of affordable housing and infrastructure within the FCURA. A smaller retail development, as would be the case under the Lesser Impacts Alternative, would presumably generate fewer funds and provide fewer subsidies to fund necessary improvements within the FCURA—such as streets, infrastructure, and parklands—and have fewer long-term public benefits from income and sales tax revenues.

GROWTH INDUCING ASPECTS OF THE PROPOSED ACTION

The Proposed Project would enable the development of 2,385 dwelling units, 698,000 sf of retail space, 46,000 sf of community and public facilities, an intermediate/high school, and public open space in the Fresh Creek Urban Renewal Area (FCURA). The Proposed Project would result in the full buildout of the FCURA, which would realize the Fresh Creek Urban Renewal Plan's goals of replacing vacant land and underused land with new residential, commercial, and community facility and public facility uses; and enhancing the area's residential character by providing new affordable housing. These uses would be compatible with the surrounding area and would contribute to the broader revitalization of the Spring Creek section of Brooklyn. No major new development is expected to be induced in the surrounding area as a result of the Proposed Project.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

There are a number of resources, both natural and built, that would be expended in the construction and operation of the Proposed Project that would occur as a result of the Proposed Action. These resources include the building materials used in construction of the buildings; energy in the form of gas and electricity consumed during construction and operation of the buildings; and the human effort (time and labor) required to develop, construct, and operate various components of these developments. They are considered irretrievably committed because their reuse for some other purpose would not be possible. *