EXECUTIVE SUMMARY

Introduction

This Executive Summary includes 1) a description of the environmental review process, 2) summary of key findings related to significant adverse impacts and mitigation, 3) project description, and 4) a summary of all technical analyses prepared as part of this environmental review process.

ENVIRONMENTAL REVIEW PROCESS

This Draft Environmental Impact Statement ("DEIS") for the proposed Fountain Avenue Land Use Improvement and Residential Project ("project") in Kings County, New York, has been prepared by the New York State Urban Development Corporation d/b/a Empire State Development ("ESD"), pursuant to the New York State Environmental Quality Review Act ("SEQRA"), codified in Article 8 of the Environmental Conservation Law, and its implementing regulations (6 NYCRR Part 617).

Prior to the preparation of this DEIS, the applicant, Fountain Seaview One Housing Development Fund Company, Inc. (as "Fountain Seaview Limited Partnership," an affiliate of The Arker Companies) prepared a SEQRA Full Environmental Assessment Form ("FEAF") Part I, and ESD prepared the New York State Department of State ("NYSDOS") Coastal Management Program Coastal Assessment Form ("CAF") on October 19, 2015. (Please refer to Appendix A of this DEIS for the CAF.) ESD determined the proposed action to be an Unlisted Action per SEQRA, and that it had the potential to result in at least one significant adverse environmental impact, and issued notice of Public Scoping and Intent to Prepare a DEIS for the proposed action on October 23, 2015. ESD held a public scoping session on the Draft Scope of Work ("SOW"), a/k/a, "scope of analysis," to Prepare an Environmental Impact Statement on November 17, 2015. There were no changes made to the scope of analysis as a result of the public scoping session and comments received. The Final SOW is included as Appendix B of this DEIS.

SUMMARY OF KEY FINDINGS: IMPACTS AND MITIGATION

This DEIS concludes that the proposed action could result in significant adverse impacts related to publicly-funded child care facilities, traffic, transit (bus service), and noise affecting Gateway Estates residences during construction (temporary impacts resulting from construction noise); these impacts and the respective mitigation measures identified to reduce or eliminate them are summarized following:

- As described in Chapter 4, "Community Facilities and Services," the proposed action would result in significant adverse indirect impacts to publicly-funded child care facilities. The proposed action would generate approximately 173 children under age six who would be eligible for publicly funded group child care services, and the collective demand for study area child care centers would increase approximately 14.2 percent from approximately 109 percent of capacity in the future without the proposed action to approximately 123.2 percent with the proposed action, excluding potential additional contribution of eligible children that might be generated by the recent East New York Rezoning. Required mitigation measures would comprise consultation with New York City Administration for Children's Services ("NYCACS") to determine appropriate mitigation measures, which could include funding of vouchers for slots in private day care centers and/or providing space that could be used for on-site day care services, the use of which would be determined through consultation with NYCACS. Specifically, the proposed action would include space that could be used for child care facilities within the Parcel B building area designated for commercial use. The Restrictive Declaration governing the use of the project site would require that the developer, prior to the occupancy of Phase 1, consult with NYCACS to determine the appropriate mitigation measures for the impact of eligible children anticipated to be generated by the proposed action, which could include (1) funding a number of vouchers equal to the number of children projected to occupy the project site (or a portion thereof) eligible for day care; and/or (2) providing commercial space within Parcel B to a NYCACS contractor or other day care provider accepting vouchers sufficient to serve the eligible children projected to occupy the project site, or a portion thereof. However, absent certainty as to whether such measures would be practicable, the significant indirect adverse impacts to child care centers may prove to be unavoidable adverse impacts, as described in Chapter 24, "Unavoidable Adverse Impacts."

- As described in Chapter 14, "Transportation," the proposed action would result in significant adverse traffic impacts at four intersections during one or more analyzed peak hours. As described in Chapter 23, "Mitigation Measures," all significant adverse impacts to traffic could be fully mitigated through the modification of traffic signal phasing and/or timing.

- As described in Chapter 14, "Transportation," the proposed action would result in a capacity shortfall on three bus lines in the AM peak hour and one bus line in the PM peak hour; affected bus service lines would include B13, B83, and Q8. These significant adverse impacts on bus service could be fully mitigated by the addition of six standard buses in the AM peak hour and ten standard buses in the PM peak hour. The general policy of New York City Transit ("NYCT") is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

- As described in Chapter 20, "Construction," construction activities associated with the proposed action would be expected to result in significant adverse construction-period impacts related to

noise in neighboring Gateway Estates buildings, though these impacts would be temporary and would be limited through use of best practices. The effects of construction noise on the sensitive receptors would vary depending on the location of the noise source. Further, during most of the construction period for each phase, noise levels would decrease significantly following the completion of pile driving activities, which would occur for up to approximately 12 weeks at the beginning of each of the five phases. The potential for significant adverse impacts related to noise would be minimized to the extent practicable with the proposed action, though not entirely eliminated; there would remain the likely potential for significant adverse construction-period noise impacts during pile driving activities and potentially during other construction activities, but these activities would occur for limited durations. The Restrictive Declaration would require contract specifications requiring (1) contractors to comply with all the requirements and regulations of the New York City Noise Code and United States Environmental Protection Agency ("USEPA") noise emission standards for construction equipment; (2) devices and activities which are subject to the provisions of the New York City Noise Code to be operated, conducted, constructed or manufactured without causing a violation of the code; and (3) all work to be conducted in compliance with the regulations set forth in the code that control noise levels due to construction work. Other mitigation measures and strategies that could reduce noise levels, and which the Restrictive Declaration would require the developer to implement if and when practicable and effective, further include: design considerations and project layout approaches, perimeter noise barriers, alternative construction methods, and use of noise enclosures or noise insulation fabric on compressors, generators, etc.

Project Description

SUMMARY OF PROPOSED ACTION AND DEVELOPMENT PROGRAM

The proposed action would include the disposition of two currently unbuilt parcels (Block 4586, Lot 200 and Lot 500) in Kings County (Brooklyn), New York, from Dormitory Authority of the State of New York ("DASNY") to ESD and sale by ESD to a conditionally designated developer (Fountain Seaview One Housing Development Fund Company, Inc.).

The two parcels comprising the project site are currently part of the former Brooklyn Developmental Center campus ("BDC"). With the sale of the project site, comprising an area totaling +/- 291,852 square feet ("sf") (+/- 6.8 acres), the BDC would be reduced in size from +/- 1,494,548 sf (+/- 34.3 acres) to +/- 1,198,869 (+/- 27.5 acres).

The proposed action would include the adoption and affirmation of a General Project Plan ("GPP") by ESD to facilitate the construction of approximately 1,169 units of affordable housing and up to

approximately 122,500 sf of commercial space. The GPP would require that 100 percent of the units developed as part the proposed action would be targeted to affordability levels at or below 60 percent of area median income ("AMI"), matching the current incomes of neighborhood residents. Two-hundred units would be set aside for seniors, and 20 percent of the total number of units (234 units) would be designated for people with intellectual and developmental disabilities. The supportive housing components introduced with the proposed action would be subject to funding by New York Office for People with Developmental Disabilities ("OPWDD").

Construction would be undertaken in five phases; the first phase would commence in 2017, and the final phase would be complete in 2028. Each phase would entail the construction of up to two connected buildings, up to 95 feet in height; individual buildings would contain between 65 and 267 residential units. Each phase of development would also introduce ground-floor commercial space.

As currently envisioned, the development introduced with the proposed action would for the most part conform to R7-A zoning equivalency (4.0 floor area ratio), with a C2-4 commercial overlay zone (2.0 FAR). Development on the site would as a result be similar, although somewhat higher in density, to the surrounding R6 zoning that has facilitated the Gateway Estates development. The GPP would allow for overrides of certain aspects of the New York City Zoning Resolution ("ZR") with respect to certain bulk regulations, including height, setback, and floor area, including:

- Uses Permitted As of Right (ZR 22-10; ZR 32-10)
- Quality Housing Program (ZR 23-011; 28-01)
- Modification of Parking Requirements for Public, Publicly-Assisted and Government Assisted Housing or for Non-profit Residences for the Elderly (ZR 25-25)
- Open Space and floor area regulations (ZR 23-141)
- Open Area Requirements for Residences (ZR 23-89)
- Maximum Number of Dwelling Units or Rooming Units (ZR 23-22)
- Parking (ZR 25-12; 25-23)
- Height and Setback Regulations (ZR 23-631)

PROPOSED ACTION FUNDING

Funding for the construction that would occur with the proposed action is expected to be from the following:

- New York State Homes and Community Renewal ("NYSHCR").
- New York City Department of Housing Preservation and Development ("NYCHPD").
- New York City Housing Development Corporation ("NYCHDC"), and
- New York City Housing Authority ("NYCHA").

Specifically, it is anticipated that funding for construction that would occur with the proposed action would be from Tax Exempt Bonds, tax credit equity, private financing and below market financing from New York State and New York City. The supportive housing components assumed to be part of the proposed action would be subject to funding by OPWDD.

PURPOSE AND NEED

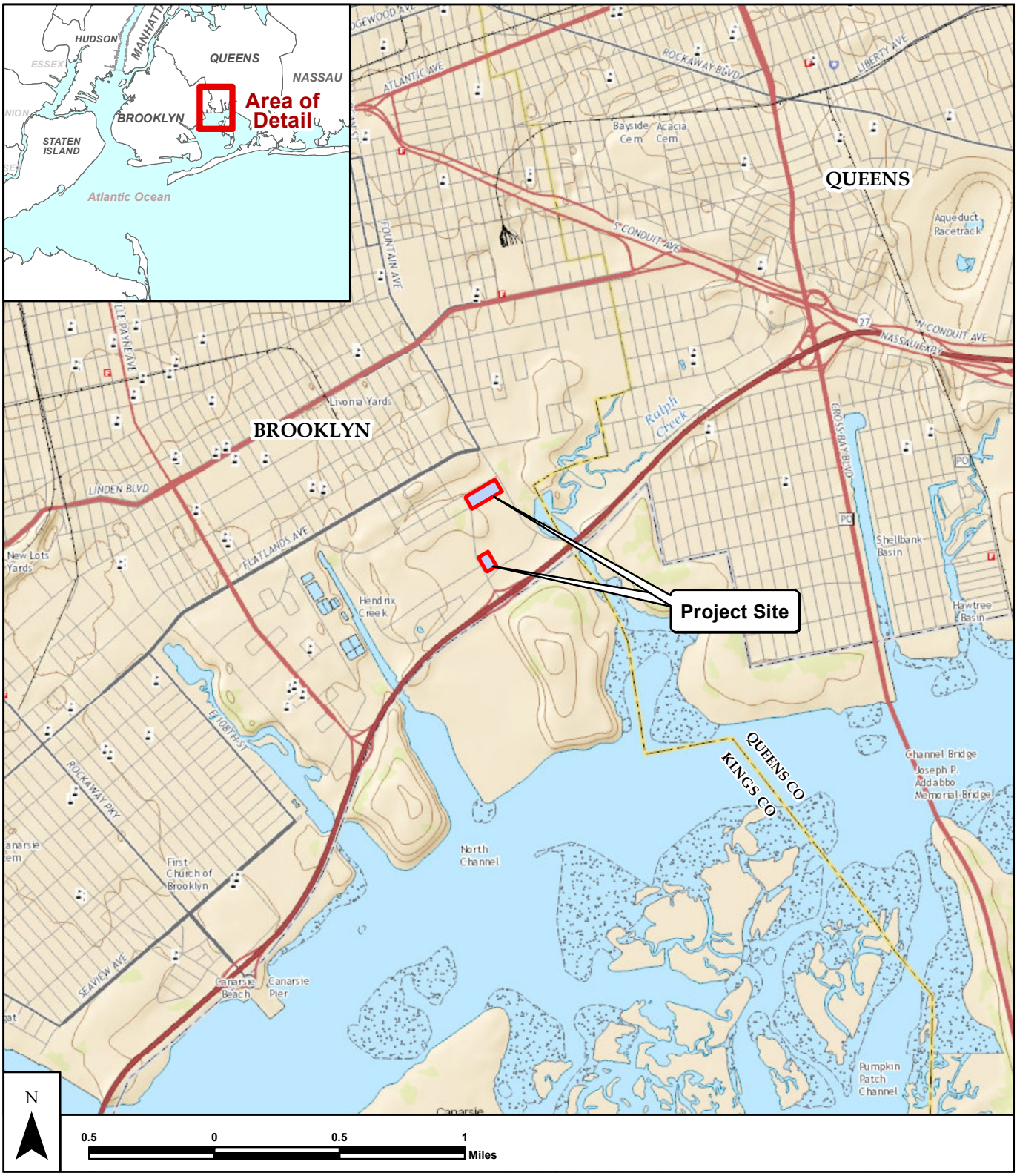
The proposed action facilitates the construction of affordable housing in a significantly underserved portion of Brooklyn, in the area known as East New York. The proposed sale and redevelopment of the project site would allow for the reuse of primarily undeveloped acreage to provide affordable housing for New Yorkers, and would further accommodate people with intellectual and developmental disabilities. The proposed action would achieve the following goals:

- The construction of affordable housing, including affordable senior housing and housing accommodating people with intellectual and developmental disabilities, in a significantly underserved portion of Brooklyn;
- The beneficial reuse of primarily undeveloped acreage; and
- The divestment of surplus State property, and realization of revenue to the State and City through proceeds of the sale and future property taxes.

PROJECT SITE

The project site comprises two non-contiguous parcels, which are currently part of the BDC, located at 888 Fountain Avenue in the Spring Creek neighborhood of the East New York section of Brooklyn (Kings County), New York. (Please refer to Figure ES-1, "Project Location.") The BDC is under the jurisdiction of OPWDD. DASNY, as agent for the People of the State of New York, is the current fee owner of the property.

The irregularly shaped block comprising the BDC (Block 4586) is bounded by Vandalia Avenue to the north, Seaview Avenue to the south, Fountain Avenue to the east, and Erskine Street to the west. The BDC block has approximately 735 linear feet of frontage along Vandalia Avenue (north), 1,300 linear feet along Seaview Avenue (south), 1,230 linear feet along Fountain Avenue (east), and 1,380 linear feet along Erskine Street (west). (Please refer to Figure ES-2, "Tax Map.")



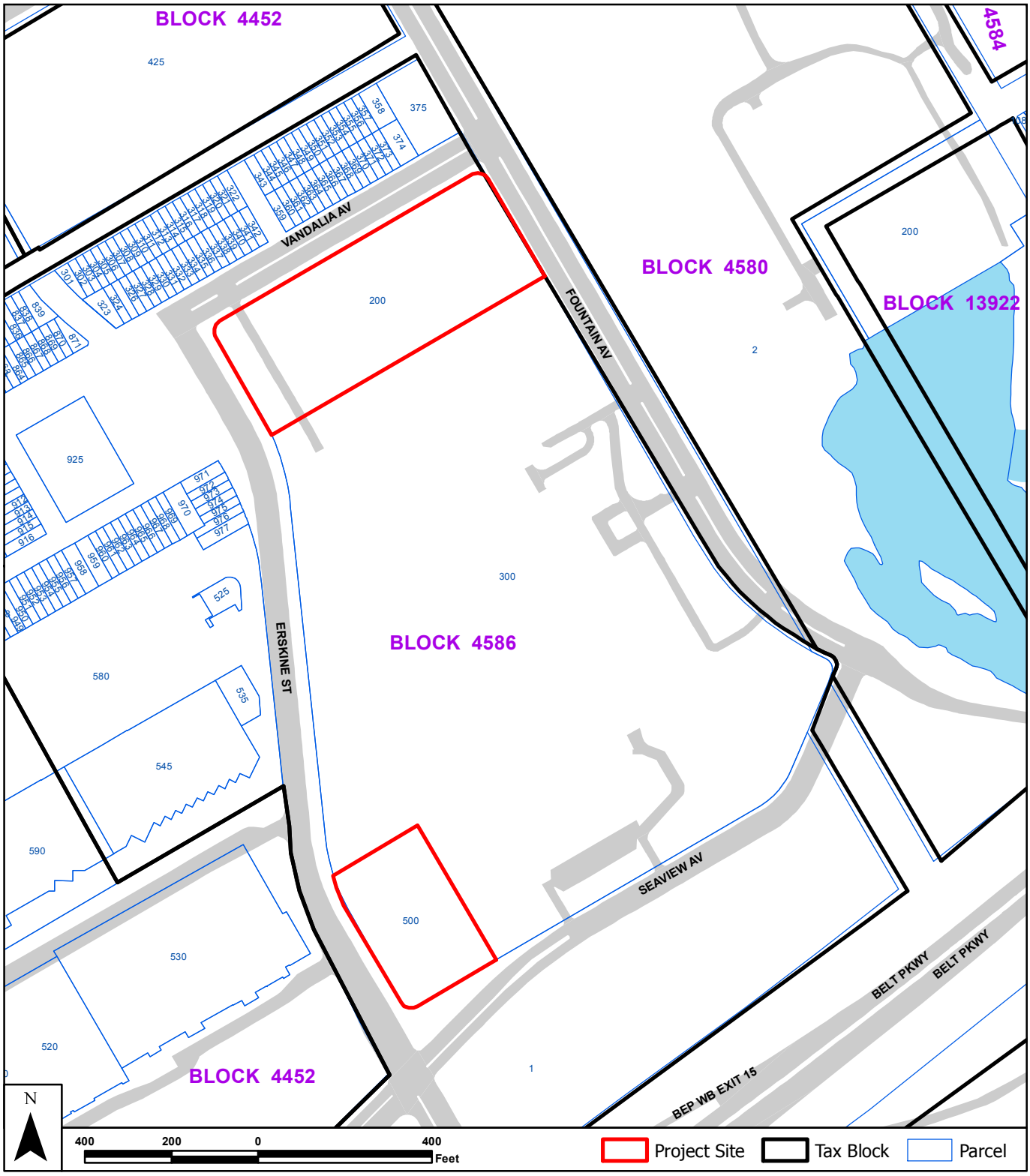
Source: USGA The National Map, 2015; National Boundaries Dataset, National Elevation Dataset, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; U.S. Census Bureau - TIGER/Line; HERE Road Data; STV Incorporated, 2015.

Figure ES-1

PROJECT LOCATION

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development



Source: New York City Department of City Planning, MapPLUTO 15v1, 7/20/215.

Figure ES-2

TAX MAP

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

The BDC is in a low-density R3-2 general residence zoning district and is developed with a series of six one- to two-story concrete and brick institutional buildings, totaling approximately 512,000 square feet. (Please refer to Figure ES-3, "Aerial Photograph of Project Site and Vicinity.") These buildings are centrally located on the BDC campus, and comprised the residential and support areas of BDC. Prior to 2016, these buildings would have been occupied by resident patients. BDC no longer provides on-site treatment and care for patients, and so the BDC buildings are no longer occupied by residents. However, approximately 200 OPWDD staff continue to work at the BDC, performing administrative functions within the BDC buildings.

On-site surface parking lots and maintained lawn area surround the buildings. The entirety of the campus is surrounded by an 8-foot stone-faced concrete wall, and a campus driveway runs along the inside of the perimeter wall. The campus has its main entrance on Fountain Avenue. A secondary gated entrance, also on Fountain Avenue, is located to the south of the main entrance, though it is locked and not used for general access; in addition, a locked service entrance is located on Erskine Street, on the west side of the block, and two locked service entrances are located on Seaview Avenue, on the south side of the block.

Parkland is located across Fountain Avenue to the east and across Seaview Avenue to the south of the campus, with the Belt Parkway along the Jamaica Bay waterfront further to the south. The Starrett City Gateway Center commercial area and the Gateway Estates residential development are to the west and north of the BDC; the commercial development is complete and occupied, and the residential development is partially complete and occupied. This development followed the Fresh Creek Urban Renewal Plan ("FCURP") established by NYCHPD in 1967; the FCURP was amended in 1982, following the 1972 construction of the BDC and surrounding streets, and then amended a second time in 1996, at which point the Gateway Estates development was subject to environmental review, as part of the plan amendment, allowing for the development that is nearing completion. The BDC was not included in the FCURP.

The two parcels comprising the project site (referred to as "Parcel A" and "Parcel B") are located at the northern and southern ends of the block that encompasses the BDC. Both parcels are currently developed with portions of BDC driveways, parking areas, and lawn area. Parcel A (Block 4586, Lot 500), which is +/- 2.0 acres (+/- 87,120 sf), is located at the southwestern corner of the block, and Parcel B (Block 4586, Lot 200), which is +/- 4.8 acres (+/- 208,559 sf) is located at the northern end of the block.

Parcel A has approximately 348 linear feet of frontage on Erskine Street to the west, and 250 linear feet of frontage on Seaview Avenue to the south. Parcel A currently includes an undesignated parking area (approximately 12 spaces) utilized by BDC staff, a small area used by BDC for outdoor storage, and a segment of driveway internal to BDC.

Parcel B has approximately 283 linear feet of frontage on Erskine Street to the west, 735 linear feet of frontage on Vandalia Avenue to the north, and 283 linear feet of frontage on Fountain Avenue to the

east. Parcel B currently contains a 74-space parking area that is accessible to BDC staff, a segment of driveway internal to BDC, and an area utilized by DASNY for a field office and three storage containers.

Source: Esri, DigitalGlobe, GeoEye, i-cubed. Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; STV Incorporated, 2015.

Figure ES-3

AERIAL PHOTOGRAPH OF PROJECT SITE AND VICINITY

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

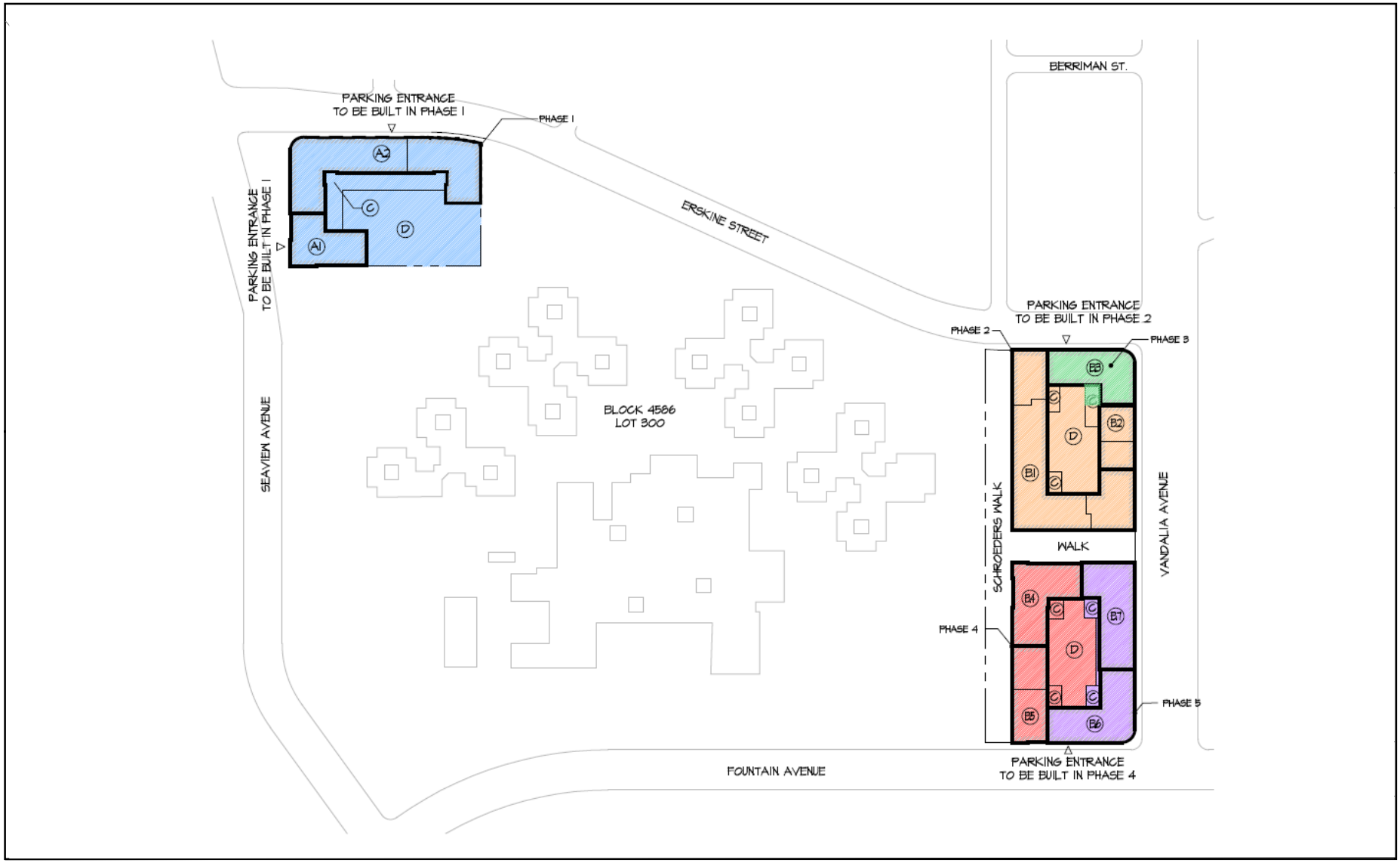
PROPOSED DEVELOPMENT

Program

The proposed action would provide approximately 1,169 units of affordable housing and up to approximately 122,500 sf of commercial space. Specifically, preliminary designs indicate that Parcel A would be developed as a pair of attached buildings, containing a total of approximately 332 residential units (approximately 286,297 sf, total), approximately 44,756 sf of commercial area, and approximately 221 parking spaces, including 118 spaces in a below-grade garage. (Please refer to Figure ES-4, "Site Plan.") Parcel B would be developed as two separate building groups (one comprising three attached buildings, and one comprising four attached buildings), all together containing a total of approximately 837 residential units (approximately 686,490 sf, total), approximately 60,704 sf of commercial area, and approximately 254 parking spaces.

The GPP would require that 100 percent of the units developed as part of the proposed action would be targeted to affordability levels at or below 60 percent AMI, approximately matching the current incomes of neighborhood residents. The GPP also would require that approximately 200 units would be set aside specifically for low-income (60 percent AMI, or less) senior citizens.

In addition, up to 20 percent of the non-senior units would be designated for people with intellectual and developmental disabilities.



Source: The Arker Companies, 2016.

A1	6 Story - 65' High	B2	9 Story - 95' High	B5	7 Story - 75' High	C	Private Open Space
A2	9 Story - 95' High	B3	9 Story - 95' High	B6	9 Story - 95' High	D	Parking
B1	7 Story - 75' High	B4	5 Story - 50' High	B7	7 Story - 75' High	△	Parking Entrance
	Phase 1		Phase 2		Phase 4		
			Phase 3		Phase 5		

Figure ES-4

SITE PLAN

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Design

Site Plan

As shown on previous Figure ES-4, "Site Plan," the proposed action would introduce three series or "groups" of buildings on parcels A and B, each effecting a "ring" of buildings. Each group of buildings would comprise adjacent but discrete buildings with separate entrances. Each building would be served by an elevator and would include a cellar, which would contain space dedicated to a laundry room, bicycle storage area, storage room, a community room, garbage compactor room, meter and mechanical rooms, and an office with toilet facilities. Each building would have one unit set aside for the residence of a full-time building maintenance employee.

Parcel A

The single building group on Parcel A would comprise two buildings with varied masses, and heights of six stories (approximately 65 feet in height), and up to nine stories (approximately 95 feet in height). The building group would be situated approximately at the western and southern lot lines (at the sidewalk of Erskine Street and Seaview Avenue, respectively) with no setback.

As currently envisioned, a total of 332 dwelling units would be developed on Parcel A, with a mix of apartment types including: studio apartments, one-bedroom apartments, two-bedroom apartments, and three-bedroom apartments. Commercial (retail and/or office) space would be developed at the ground-floor level of Parcel A buildings along Erskine Street. Parking would be provided in a below-grade garage (118 spaces) that would extend throughout the central area of the building group, and approximately 2,200 sf of private open space would be developed atop it, accessible to Parcel A residents from the second floor of each building. Drivers would enter and exit this below-grade parking area via a dedicated driveway on Seaview Avenue. Outdoor surface parking (approximately 103 spaces) would be provided at the northeastern corner of Parcel A; drivers would enter this outdoor parking area from an entrance on Erskine Street and would exit onto Seaview Avenue. A decorative privacy fence would be installed along the perimeter of Parcel A, between the proposed parking area and Lot 300.

Parcel B

The two building groups on Parcel B would comprise buildings with varied masses, and heights of five stories (approximately 50 feet in height), and up to nine stories (approximately 95 feet in height). Both Parcel B building groups would be situated approximately at the Vandalia Avenue lot line to the north, and to the respective lot lines to the west and east (at the sidewalk of Erskine Street and Seaview Avenue, respectively) with no setback.

As currently envisioned, a total of 837 dwelling units would be developed on Parcel B, with a mix of apartment types including: studio apartments, one-bedroom apartments, two-bedroom apartments, and three-bedroom apartments. The western building group would include approximately 200 units set aside for seniors. Commercial (retail and/or office) space would be developed at the ground-floor level of all Parcel B buildings, except for the two easternmost buildings of the eastern building groups. In addition, ground-floor covered parking would be developed centrally within each Parcel B building group (about 127 spaces for each Parcel B building group, or 254 spaces total for Parcel B), and a total of approximately 7,700 sf of private open space (atop the ground-floor parking areas) would be located on Parcel B, which would be accessible to residents from the second floor of each adjacent building.

A new publicly accessible landscaped thoroughfare with seating would be constructed along the southern border of Parcel B (e.g., indicated as "Schroeders Walk" on the previous Figure ES-4, "Site Plan"), providing a connection from Erskine Street to the west and Fountain Avenue to the east, as well as between the two building groups, connecting to Vandalia Avenue to the north. The entrance to the enclosed parking of the western building group would be from Erskine Street, and the entrance to the enclosed parking of the eastern building group would be from Fountain Avenue. Schroeders Walk would be separated from Lot 300 by a decorative privacy fence installed along the perimeter lot line (between Lot 300 and Parcel B) as part of the proposed action.

Architectural Design

Based on preliminary elevation renderings, it is anticipated that the exterior façades of the buildings would be finished in a pattern of stucco, brick, metal and glass that may give the appearance of a series of attached buildings, resembling development found elsewhere in the City, including the Gateway Estates development nearby. (Please see Figure ES-5a through Figure ES-5g, "Project Rendering.")

The buildings introduced with the proposed action would be constructed in accordance with Enterprise Green Community standards and are anticipated to achieve Enterprise Green Communities Certification. It is anticipated that the proposed action would incorporate energy efficient appliances wherever possible, water-saving devices, and low-volatile organic compound ("low-VOC") interior finish materials throughout the development. Further, it is expected that the proposed action would incorporate solar panels and/or wind turbines.

Southward View of Project Site and BDC

Artist rendering for illustrative purposes only

Source: The Arker Companies, March 2016; STV Incorporated, 2016.

Figure ES-5a

PROJECT RENDERING

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Parcel A: Southward View

Artist rendering for illustrative purposes only

Source: The Arker Companies, March 2016; STV Incorporated, 2016.

Figure ES-5b

PROJECT RENDERING

Fountain Avenue Land Use
Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Parcel A: Erskine Street Elevation; View Northeast from Erskine Street, at Seaview Avenue

Artist rendering for illustrative purposes only

Source: The Arker Companies, March 2016; STV Incorporated, 2016.

Figure ES-5c

PROJECT RENDERING

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Parcel B: Southward View

Artist rendering for illustrative purposes only

Source: The Arker Companies, March 2016; STV Incorporated, 2016.

Figure ES-5d

PROJECT RENDERING

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Parcel B: View Southwest from Vandalia Avenue and Fountain Avenue, Facing Eastern Build Group

Artist rendering for illustrative purposes only

Source: The Arker Companies, March 2016; STV Incorporated, 2016.

Figure ES-5e

PROJECT RENDERING

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Parcel B:
Schroeders Walk,
Westward View

Artist rendering for illustrative purposes only

Source: The Arker Companies, March 2016; STV Incorporated, 2016.

Figure ES-5f

PROJECT RENDERING

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Parcel B: Schroeders Walk, Westward View toward Western Building Group (at Left)

Artist rendering for illustrative purposes only

Source: The Arker Companies, March 2016; STV Incorporated, 2016.

Figure ES-5g

PROJECT RENDERING

Fountain Avenue Land Use Improvement and Residential Project

NEW YORK STATE OF OPPORTUNITY. Empire State Development

Construction

Schedule

Final design for the proposed action is expected to begin in 2016, pending findings associated with this EIS. The proposed action would be developed in five phases overall, with construction beginning in early 2017 on Parcel A, and with all phases complete and all buildings expected to be occupied by 2028. For the purposes of applicable EIS analyses, the following estimated schedule for construction phasing and occupancy is assumed, based on typical construction timelines:

- Phase 1 would entail the development of Parcel A in its entirety, with construction beginning in early 2017, and with Parcel A buildings fully occupied by the end of 2020.
- Phase 2 would entail development of the two buildings on Parcel B, with construction beginning in early 2019 and the two buildings occupied by the end of 2022. These buildings would include the approximately 200 units of senior housing, which would be constructed as part of the building comprising the frontage on Schroeders Walk. This phase and the remaining phases (Phases 3 through 5) would develop Parcel B, each phase resulting in completion of both residential and commercial components, as well as the ground-floor enclosed parking area (and the private open space areas atop it).
- Phase 3 would construct a single building with frontage on Vandalia Avenue to the north and Erskine Street to the west, thereby completing the western building group on Parcel B. Phase 3 construction would begin early 2021, and the building would be occupied by the end of 2024. Upon completion of Phase 3, the parking for the entire western building group would be accessible.
- Phase 4 would entail development of the first two buildings (southernmost buildings) of the eastern building group on Parcel B, with construction beginning early 2023 and the two buildings occupied by the end of 2026.
- The final phase of the project, Phase 5, would result in two buildings constructed adjacent to the Phase 4 buildings (both with direct frontage on Vandalia Avenue), completing the eastern building group on Parcel B. Phase 5 construction would begin early 2025, and the two buildings would be occupied by the end of 2028. Upon completion of Phase 5, the parking for the entire eastern building group would be accessible.

Phase 1 would result in the complete redevelopment of Parcel A, including all landscaping and provision of on-site open space for residents' use. However, Phases 2 through 5 would result in the ongoing, incremental development of Parcel B, including the publicly accessible open space. The portion of

Schroeders Walk south of the western building group would be completed along with Phase 2; the portion of Schroeders Walk south of the eastern building group would be completed as part of Phase 4; and the portion of Schroeders Walk between the two building groups would be completed as part of Phase 5.

Demolition and Construction

Demolition

Demolition on the project site (parcels A and B) would include both the removal of segments of existing wall (e.g., BDC "perimeter" wall), and also the removal of portions of asphalt-paved surface parking lots and driveway.

Construction Method

The construction method will be finalized by the designated developer when geotechnical information is available (expected in 2016 for Parcel A and later for Parcel B). It is anticipated that the construction system for the proposed new buildings would include a concrete spread footings foundation system with a concrete block and precast plan superstructure. Further, the designated developer anticipates that driven (timber) piles would be required to a depth of approximately 40 feet below surface grade. Including cellar and pile-caps, it is expected that the total depth of construction for buildings and foundation would be approximately 14 feet below grade on Parcel A and approximately 11 feet below grade on Parcel B. (Please refer to Chapter 20, "Construction," for a detailed description of construction activities.)

Commitments Related to the Adjacent BDC Property (Lot 300)

At OPWDD's discretion, the Developer will construct improvements to the perimeter fence and improvements to the internal roadway on the Property.

GENERAL PROJECT PLAN AND ZONING OVERRIDES

As currently envisioned, the development introduced with the proposed action would generally conform to R7-A zoning equivalency (4.0 floor area ratio), with a C2-4 commercial overlay zone (2.0 FAR). Development on the site would be similar to, although slightly higher in density than, the R6 zoning that has facilitated the adjacent Gateway Estates development. As such, development that would occur on the project site would be primarily residential, with some ground-floor commercial space that could accommodate retail or community facilities included in the base of the buildings on both parcels. For the proposed action, a zoning override via a GPP would establish permitted development on the two parcels in lieu of zoning. (Please refer to Appendix C for proposed zoning overrides.)

ANALYSIS FRAMEWORK

Methodology

Because the proposed action would result in development in New York City, this EIS is prepared following the format of the *New York City Environmental Quality Review ("CEQR") Technical Manual,* and EIS analyses are conducted per the guidance of the *CEQR Technical Manual.* In this way, the proposed action may be assessed in a manner that appropriately reflects the urban conditions and setting of the project site.

Alternatives

Project Sites

No alternative site is considered for the proposed action, the primary purpose of which is the sale and redevelopment of the project site (Lots 200 and 500 of Block 4586 in Kings County, New York).

The Future With the Proposed Action ("With Action" Conditions)

The EIS analyses are performed for the analysis year, or "build year," 2028, when the project is anticipated to be complete and fully occupied on the two parcels. The future with the proposed action, or "With Action" conditions, on the project site would be as described previously with regard to the proposed land use improvement and residential project. It is expected that potential direct effects associated with the proposed action, such as changes to land use, primarily would be limited to the project site.

However, as described previously, the Restrictive Declaration would require that certain improvements would be made on Lot 300 if requested by OPWDD, in order to ensure that with the sale of the project site and physical reduction of the BDC as part of the proposed action, the proposed action would not substantially alter the operating conditions of the BDC facility buildings and remaining grounds; thus, potential off-site direct effects that may be associated with the proposed action are expected to be limited to the perimeter areas of the BDC (within Lot 300) and within public right-of-way (sidewalk, roadbed, and below-grade utilities) immediately surrounding the project site to facilitate utility connections and project site access, as appropriate.

The Future Without the Proposed Action ("No Action" Conditions)

As noted previously, EIS analyses for the proposed action are performed for the 2028 build year. The EIS assesses the potential for the proposed action to result in significant adverse impacts by comparing conditions anticipated in 2028 with the proposed action fully constructed and occupied on both parcels

("With Action" conditions or "Build" conditions) to conditions otherwise expected in 2028 without the proposed action ("No Action" conditions or "No Build" conditions).

In the absence of the proposed action, no "as-of-right" development is anticipated on the project site or on the remainder of the block comprising the BDC. There are no plans in place for disposition of the remaining BDC property (Lot 300) or for other use of it. Therefore, this EIS assumes that the physical condition of the project site in 2028 without the proposed action generally will resemble existing conditions (e.g., conditions in 2016).[1]

Accordingly, this EIS does not contemplate the potential impacts of any future reuse and/or sale of the existing BDC facilities or property that would not be part of the parcels A and B; rather, it is focused solely on the potential effects of the proposed action. Any redevelopment of other portions of the BDC that may be proposed in the future would be subject to its own environmental review. This manner of consideration does not constitute impermissible segmentation pursuant to SEQRA, as independent reviews are permissible for a number of reasons:

- First, the proposed action and the future reuse and/or sale of the remaining portion of the BDC are separate, stand-alone activities that are not components of an identifiable overall plan.
- Second, the two actions (i.e., the proposed action and any potential disposition or reuse of the remaining portion of the BDC campus) are functionally independent of each other and approval of the proposed action does not determine whether any such future use and/or sale of the existing facilities would go forward.
- Third, the proposed action is not to be undertaken at the same time as any action on the existing BDC facilities.
- Fourth, the sale and/or reuse of the remaining portion of the BDC is speculative at this time, and no future plans for redevelopment have been created.
- Finally, regardless of how and by whom the remaining portion of the BDC would be used, projects at that location would be subject to separate SEQRA analysis at that time, which analysis would account for the impacts of the proposed action in the No Action conditions. Accordingly, a review deemed segmented would be no less protective of the environment.

Therefore, for the purposes of this EIS the determination of potential impacts associated with the proposed action is made through comparison of the proposed action (proposed development project) to the project site in its current condition, plus additional off-site projects (e.g., not on the same block as

[1] Although the BDC no longer treats or houses patients on-site, approximately two hundred OPWDD administrative staff remain at the BDC in 2016, maintaining ongoing business-related occupancy; for the purpose of analysis, where the presence of staff at the BDC represents a reasonably conservative, or "worst case," scenario (for example, contributing to traffic volumes on surrounding roadways), similar staffing levels at the BDC are assumed in 2028.

the project site) currently identified by the New York Department of City Planning ("NYCDCP") Land Use and CEQR Application Tracking System ("LUCATS"), as relevant to EIS analyses and described in the methodology sections of the respective EIS chapters.

Summary of Technical Analyses

LAND USE, ZONING, AND PUBLIC POLICY

The Fresh Creek Urban Renewal Area ("FCURA") and amended 1996 FCURP that guides development within most of the FCURA are especially pertinent to the proposed action, as these public policies have defined the context within which the proposed action would occur. The proposed action includes zoning overrides and development limited to the project site, and it would result in no direct changes to public policy and no direct off-site changes to land use or zoning. Further, given the implementation of the FCURP and the resultant development context of the project site, there is limited potential for the proposed action to lead, indirectly, to any off-site changes to land use or zoning; the study area consists of the BDC, which is already developed, areas developed or being developed pursuant to the FCURP, and designated parkland.

The proposed action would introduce development similar to surrounding land use types and intensity developed per the FCURP, though the proposed action would result in redevelopment of a substantially smaller area than the FCURP; the project site is approximately 6.8 acres compared to the approximately 227-acre area developed per the FCURP, adjacent to the project site. The zoning overrides that would be part of the proposed action, which would be implemented through a GPP and Restrictive Declaration, would apply to the project site, exclusively, and generally would be equivalent to R7-A zoning; R7-A zoning is a medium-density residential zone that, in terms of development intensity and height and bulk regulations, would be similar to the adjacent R6 zoning in place with the FCURP. The proposed action would be consistent with existing public policy governing the project site and surrounding area, including the FCURA, NYSDOS Coastal Assessment and the New York City Local Waterfront Revitalization Program ("LWRP"), the Jamaica Bay Watershed Protection Plan, the East New York Empire Zone, *OneNYC* and *PlaNYC 2030*, and in particular, the "Housing New York" component of New York State's *Built to Lead* policy, as the proposed action would introduce 1,169 units of affordable housing in the area known as East New York. Therefore, the proposed action would not result in significant adverse impacts, in terms of land use, zoning, or public policy.

SOCIOECONOMIC CONDITIONS

The proposed action would not 1) result in substantial direct changes to existing residential populations, 2) displace employees or businesses, 3) result in new development that differs markedly from the

surrounding neighborhood, 4) create retail concentrations that may draw a substantial amount of sales from existing businesses within the study area, or 5) affect conditions in a specific industry. Therefore, per the guidance of the *CEQR Technical Manual*, no analysis of potential impacts to socioeconomic conditions is warranted.

Based on data collected for the residential area in proximity to the project site, it is estimated that the proposed action would introduce a population of approximately 3,274 residents upon completion and total occupancy of both parcels. The proposed action would meet part of the need for affordable housing in the study area. Further, the Census data indicate that a larger percentage of persons age 65 and older live in the study area (approximately 19 percent of the study area population), than is characteristic of Brooklyn, Queens, and the City (ranging from approximately 12 percent to 13 percent). Therefore, the set aside of 200 affordable housing units specifically for senior citizens, as part of the proposed action, would be expected to support efforts to meet a potential demand for affordable senior housing in the study area.

COMMUNITY FACILITIES AND SERVICES

The proposed action would not result in any significant adverse impacts to police, fire and health care services. The BDC is utilized by OPWDD as office space for administrative functions and is no longer functioning as a residential facility and no longer provides services to patients. Therefore, this change in the physical size of the campus would not affect services provided by OPWDD. There would be no direct impacts to police and fire services and health care facilities serving the project site and surrounding neighborhood. In addition, the analysis of potential impacts to library services indicates that the difference in the volume-to-resident ratio with the proposed action, compared to conditions in the future without the proposed action, would be less than the 5 percent threshold identified by the *CEQR Technical Manual* as a potentially significant increase. Therefore, no significant adverse impact to local library services is expected.

Public Schools

Per the guidance of the *CEQR Technical Manual,* a significant adverse impact to public schools may occur if a proposed action would result in both of the following conditions: (1) a utilization rate of the elementary and/or intermediate schools that is equal to or greater than 100 percent in the future conditions with the proposed action; and (2) an increase of 5 percent or more in the collective utilization rate in the future with the proposed action, compared to conditions without the proposed action. While Community School District ("CSD") 19, Sub-District 3 elementary and intermediate school utilization rates would increase by greater than 5 percent in the future with the proposed action, thereby meeting the second criterion, the utilization rates would not exceed 100 percent. Therefore, per the guidance of the *CEQR Technical Manual,* no significant adverse impact to public schools would occur with the proposed action.

Child Care Centers

The proposed action would result in a significant adverse impact to publicly-funded group child care facilities. The *CEQR Technical Manual* states that mitigation may be warranted if a proposed action would increase the child care center utilization rate in the study area by at least 5 percent and the resulting utilization rate would measure over 100 percent; thus, per the guidance of the *CEQR Technical Manual*, mitigation would be warranted for the potential significant adverse impacts to child care centers that would be attributable to the proposed action.

OPEN SPACE

The project site contains no existing publicly accessible open space, and so no direct impacts to existing open space resources would be expected with the proposed action. Further, other technical analyses conducted for this EIS determined that the proposed action would not cause significant adverse impacts associated with air quality or noise, thus no indirect effects to public open space with regard to use and enjoyment are anticipated.

According to the *CEQR Technical Manual*, indirect impacts to open space may occur when the population generated by a proposed action would overtax the capacity of available open spaces so that their usefulness would be diminished. Per the guidance of the *CEQR Technical Manual*, a significant indirect impact to open space resources may be determined when 1) the proposed action would reduce the open space-to-population ratio to an extent indicating open spaces would be overburdened, or 2) when analysis determines that a pre-existing deficiency in open space would be exacerbated with the proposed action.

The preliminary open space assessment finds that the proposed action would result in a combined open space ratio of 2.84 acres per 1,000 residents in the study area (compared to a combined open space ratio of 3.32 in the future without the proposed action), which would remain above New York City's planning guideline of 2.5 acres of open space per 1,000 residents. At 1.23 acres of passive open space to 1,000 residents in the future with the proposed action (compared to 1.40 acres of passive open space in the future without the proposed action), the passive open space ratio also would exceed the respective planning goal ratio of 0.5 acres of passive open space per 1,000 residents. However, the active open space ratio in the future with the proposed action, which would be 1.61 acres per 1,000 residents (compared to 1.92 acres in the future without the proposed action), would remain less than the planning goal of 2.0 acres of active open space per 1,000 residents.

The balance of active and passive open space, therefore, would not meet New York City planning goals. Rather, it would represent the continuation of an existing condition in the area that currently has a high open space ratio, with more passive than active open space. As is stated in the *CEQR Technical Manual*, the planning goal ratios do not constitute an absolute impact threshold; rather, these ratios are considered in combination with the City's median community district open space ratio of 1.5 acres per

1,000 residents. The proposed action would include approximately 51,300 sf (1.18 acres) of publicly accessible passive open space, known as Schroeders Walk. The proposed action would result in an overall open space ratio of 2.84, which is notably higher than the City's median ratio of 1.5, and even the active open space ratio with the proposed action, at 1.61, would slightly exceed the City median ratio for both active and passive combined. Thus, the unmet goal for active open space would not result in a significant adverse indirect impact to open space, and the proposed action would not result in a significant adverse impact to open space resources

A qualitative consideration of this proposed open space indicates that it may be expected to help offset some of the new, overall demand for open space that may be attributable specifically to the proposed action.

SHADOWS

The proposed action would introduce a series of new buildings on the project site, with heights ranging from approximately 50 feet (five stories) to approximately 95 feet (nine stories), thus meeting the *CEQR Technical Manual* height threshold warranting a shadows assessment. In addition, public open space and natural resources are located within the vicinity of the project site. Moreover, new public open space is anticipated in the vicinity of the project site in the future without the proposed action.

No significant adverse impacts associated with shadows would occur with the proposed action. Shadows cast by the proposed buildings would reach three sunlight-sensitive resources (three parks), but in no case would they result in a significant adverse shadow impact.

Shadows from the proposed buildings on Parcel A would be expected to extend into Spring Creek Park south of the project site primarily during the summer months, with the longest duration of shadow occurring on June 21 (lasting for a maximum of approximately two hours on any area). The greatest extent of shadow coverage, as represented by the longest shadow cast onto the park during any particular day, would be approximately 230 feet on June 21.

Shadows from the proposed buildings on Parcel B would be expected to extend into Spring Creek Park east of the project site throughout the year, with the longest duration of shadow occurring on June 21 (lasting for a maximum of approximately three hours on any area). The greatest extent of shadow coverage, as represented by the longest shadow cast onto the park during any particular day, would be approximately 188 feet on June 21.

The portions of the Spring Creek Park that would be in shadow are not publicly accessible, nor do these portions of Spring Creek Park contain or represent identified natural resources. Moreover, the duration and extent of shadow that would be cast onto these portions of Spring Creek Park would not affect the sustainability of the vegetation coverage in these areas. Therefore, no significant adverse impact from shadows on Spring Creek Park would result with the proposed action.

The third sunlight-sensitive receptor considered in the shadows assessment, in addition to the two portions of Spring Creek Park, is a planned park, currently identified as "Gateway Park," that will be in place west of Parcel B in the future without the proposed action. Shadows from the proposed buildings on Parcel B would be expected to reach only the eastern edge of the planned Gateway Park, likely to comprise a sidewalk area and perimeter landscaping; this small area of shadow would occur only just after sunrise on or about June 21. Thus, the proposed action would not result in shadow coverage over Gateway Park that would affect its use or potential landscaped conditions, and no significant adverse impact from shadow on the planned Gateway Park would result with the proposed action.

Finally, the proposed action would include new open space for residents' use on the project site in the form of pedestrian plazas and courtyard areas, which would be in shadow for some part of the day throughout most of the year. However, per the guidance of the *CEQR Technical Manual*, project-generated open space is not considered a sunlight-sensitive resource, and its assessment for shadow impacts is not required. Therefore, no significant adverse impacts with regard to shadows would occur with the proposed action, either on the project site or in the vicinity.

HISTORIC AND CULTURAL RESOURCES

Architectural Resources

The project site does not contain any State Register- ("SR") and/or National Register- ("NR") listed historic resource, nor any New York City Landmark ("NYCL"), or any built element eligible for such listing. Further, no historic architectural resource has been identified within approximately ½-mile of the project site, nor are any potential historic architectural resources slated for consideration by New York City Landmarks Preservation Commission ("NYCLPC") within that area. As such, the proposed action would not result in any significant adverse impact on historic architectural resources.

Archaeological Resources

The project site is located within an "archaeologically sensitive area," as determined by New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"). OPRHP has determined that, given factors associated with previous disturbance of the project site and depth to ground water, the likelihood of recovering significant pre-contact period archaeological resources on the project site is low. Therefore, OPRHP has determined that the proposed action would have no significant adverse impact on archaeological resources listed or eligible for listing on the State or National Register of Historic Places. As such, the proposed action would not result in any significant adverse impact on archeological resources.

URBAN DESIGN AND VISUAL RESOURCES

Per the guidance of the *CEQR Technical Manual,* a preliminary assessment of urban design and visual resources is warranted for the proposed action because it would result in a change in land use and it would allow for development bulk and height greater than what is currently allowed "as-of-right" in the existing R3-2 zone.

The proposed action would not directly or adversely affect any of the existing landscape components that define the urban design of the area. The proposed action would not introduce changes to the street pattern or hierarchy of streets, nor would it change the form of city blocks. It would result in the redevelopment of the project site in a manner consistent with the urban design of the developed portions of surrounding blocks in the study area. The land uses introduced with the proposed action (residential and commercial) would be consistent with the surrounding land uses; further, the bulk, height, and streetwall associated with the new construction as part of the proposed action would contribute to the form of the residential streetscapes north and west of the project site in a way that resembles other parts of Brooklyn, where apartment buildings appear among relatively uniform residential streets of two- and three-story rowhouses. Therefore, the proposed action would result in improved streetscape conditions on Vandalia Avenue in particular.

Further, it is expected that the combination of ground-floor commercial uses on both parcels A and B, the street tree plantings and concordant sidewalk improvements surrounding the project site (as would be required with the construction of new sidewalks, following on-site construction), and the introduction of public open space (Schroeders Walk) on Parcel B would contribute to the attractiveness of the streetscapes that have already been partly improved through landscaping on surrounding properties as part of FCURP implementation. These positive contributions would result in improved streetscape conditions and pedestrian experience on all streets surrounding the project site.

The proposed action would improve the potential for the pedestrian experience of and appreciation of the visual resources (parks and naturalized open space) that characterize much of the Fountain Avenue and Seaview Avenue streetscapes (as well as eastern portions of the Vandalia Avenue streetscape), surrounding the project site. The proposed action would not affect the views of Spring Creek Park wetlands and naturalized areas enjoyed from the public sidewalks surrounding the project site along Vandalia Avenue, Fountain Avenue, and Seaview Avenue; rather, the mix of commercial uses, residences, and open space introduced with the proposed action would be expected to lead to an increased level of pedestrian activity along both Parcel A- and Parcel B-adjacent sidewalks, thereby contributing to an improved sense of pedestrian connectivity between the existing and planned parks in the study area. Thus, the introduction of new uses and building forms consistent with surrounding development, together with the streetscape improvements and increased levels of pedestrian activity in the vicinity of the project site, would result in an enhanced pedestrian experience in the vicinity of surrounding natural resources. Therefore, the proposed action would not result in any significant adverse impact to urban design or visual resources.

NATURAL RESOURCES

No critical or significant resource is identified on the project site, which primarily comprises maintained lawn, driveways, and surface parking areas. However, Old Mill Creek and associated wetlands are located just east of Fountain Avenue. In addition, the project site is located within the Jamaica Bay Watershed, and there are significant and protected natural resources identified in the vicinity of the project site, including Significant Coastal Fish and Wildlife Habitats ("SCFWH") and low salt marshes (considered Significant Natural Communities of New York State).

In the future without the proposed action, project site conditions are expected to remain unchanged, and conditions of natural resources in the vicinity are anticipated generally to resemble existing conditions. Thus, the proposed action, which is limited to the project site, would not result in direct impacts to natural resources, either during construction or occupancy. Further, the proposed action would provide for appropriate wastewater and stormwater management. As such, the proposed action would be consistent with applicable federal, state, and City policies with regard to the management of wetlands, water bodies, and natural resources, and the proposed action would not result in significant adverse impacts to any natural resources, including water quality, wetlands, aquatic and terrestrial resources, or threatened, endangered, or special concern species.

The proposed action would introduce development on the project site that is consistent with current building code requirements with regard to floodplains. Although buildings have been designed for the most part outside of existing or projected 100-year flood zones, there would be increased potential for flooding to occur in the future on the project site either with the 100-year flood event or with the 500-year flood event. Based on current flood zone mapping, all Parcel A buildings and the eastern building group on Parcel B may be affected by rising flood waters in a 500-year event. The lateral expanse of the 500-year flood zone is projected to increase to include all buildings as of 2020; therefore, all proposed action buildings would be at risk of flood damage during a 500-year flood. Based on 2050 projections of flood zones, the 500-year flood zone is expected to increase to cover more portions of the project site but, as all buildings would be affected as of 2020 projections, the increased expanse would not represent substantial new flooding risk. However, the 2050 flood zone projections indicate that the 100-year flood zone would extend into portions of Parcel A buildings, including the below grade parking area, thereby representing a greater risk of flood occurrence (greater risk of higher flood frequency) on Parcel A.

Therefore, the vulnerability to flood damage on the project site is expected to increase in the future, based on existing flood zone mapping and available projections. However, the vulnerability of the buildings constructed on the project site would be limited to non-residential components of the buildings during the particular flood event, and additional flood-protection measures are not precluded from future incorporation that could limit these vulnerabilities. As such, the proposed action would be consistent with Floodplain Management Criteria for State Projects (6 NYCRR 502), as it would be designed and constructed to minimize flood damage, and to include adequate drainage to reduce

exposure to flood hazards, even assuming that flood zones change in the future as the result of sea level rise. Therefore, the proposed action would not result in any significant adverse impacts related to natural resources, and it would be consistent with all applicable policy related to natural resources.

HAZARDOUS MATERIALS

The proposed action would allow residential uses in an area that is currently developed as part of the BDC but which historically has been both landfilled marshland and part of a municipal refuse disposal area. Therefore, Environmental Site Assessments ("ESAs") have been conducted to determine the potential presence of hazardous materials on the project site, and are reviewed to evaluate whether human exposure to hazardous materials would be expected to occur with the proposed action, and whether potential hazardous materials exposure could affect on-site or surrounding natural resources or the proposed action could exacerbate existing environmental contamination.

The two ESAs (Phase I ESA and Phase II ESA) have revealed the potential for low-level, on-site subsurface contamination, primarily associated with the historic landfill of the project site. Analyses conducted as part of these ESAs indicate the low-level presence of petroleum hydrocarbons in the soils and semi-volatile organic compounds and metals in the groundwater. In addition, low concentrations of methane gas were identified originating from the decomposition of buried organic matter in the fill material over the underlying peat bog soil. Based on the results of the Phase II ESA, there are no recommendations for additional testing, and no significant adverse impacts related to hazardous materials would be expected to occur with the proposed action. The Restrictive Declaration prepared as part of the proposed action, would require that any new building structures have an engineered vapor barrier installed under the foundation slabs in order to prevent any accumulation of methane gas under building structures and to eliminate potential vapor migration into the building structure; specifically, the Restrictive Declaration would require the preparation of a Remedial Action Plan ("RAP"), detailing the installation of building vapor barriers, and a Construction Health and Safety Plan ("CHASP") to prevent human exposure (worker and public) to any unidentified or potential on-site contamination. Elements of the CHASP could include the following:

- A project contact list, describing responsibilities;
- A description of on-site hazardous environmental conditions that may be encountered or may be exposed during construction, such as buried material, historic fill, and methane gas, as well as methods to address these hazardous environmental conditions during construction; and,
- General guidelines to be enforced by the construction manager regarding worksite safety.

Further, a likely stipulation to be included within the CHASP would be that any exported urban fill soils and landfill materials would be handled and disposed in accordance with New York State Department of Environmental Conservation ("NYSDEC") guidelines and recommendations. Once the proposed project

plans are finalized, an *in situ* characterization would be performed for on-site soil to facilitate procurement of excavation bids and identification of soil disposal facilities.

WATER AND SEWER INFRASTRUCTURE

The project site and the surrounding area are located within the Jamaica Bay Watershed, which includes wetlands and other natural resources, though both the project site and the surrounding developed area are properly served by existing water supply and separate sanitary and storm sewers, as documented by New York City Department of Environmental Protection ("NYCDEP"). The proposed action would be developed in compliance with the NYCDEP-approved Master Plan, and, accordingly, provide the structural Stormwater Management Practices ("SMPs") necessary to ensure that the new development would not overburden the existing sanitary and stormwater infrastructure in the Jamaica Bay Watershed. Therefore, the proposed action would not result in any significant adverse impacts on the stormwater management systems during storm events. Further, in addition to the structural SMPs that would be incorporated into the proposed action, pursuant to the Master Plan, the proposed action would include the non-structural elements described previously. Therefore, the proposed action would be consistent with the Jamaica Bay Watershed Protection Plan and would not result in any significant adverse impact to water and sewer infrastructure.

Water

The proposed action would add approximately 316,535 gallons per day ("GPD") of water demand in 2028. The project-generated increment in water demand would be less than 0.02 percent of New York City's average daily demand of 1.2 billion GPD. This demand does not represent an exceptionally large demand for water, and therefore would not result in a significant adverse impact to the water supply system or its ability to adequately deliver water to New York City or Brooklyn.

Sanitary Sewers and Wastewater Treatment

The proposed action would generate approximately 295,706 GPD of sanitary sewage in 2028. This projected increase in wastewater flow would not have a significant adverse impact on the ability of the sewage collection system to convey water to the 26th Ward Wastewater Treatment Plant ("WWTP"), or on treatment performance and the WWTP's projected compliance status upon completing ongoing facility upgrades.

Stormwater and Drainage Management

The proposed action would result in an increase in runoff quantity from the project site when compared to existing conditions. However, a significant adverse impact would be avoided by implementing SMPs and adopting a Stormwater Pollution Prevention Plan ("SWPPP") that would be prepared for the

proposed action in compliance with the standards of NYSDEC. The SMPs would include structural improvements as part of the proposed action, including runoff detention tanks with flowrate control structures to mitigate this increment in flow. Stormwater quality impacts as a result of the anticipated increment in flow would also be addressed as part of the proposed action. Treatment for the calculated Water Quality Volumes ("WQvs") would be provided using non-structural SMPs, which are expected to include green roofs; the open space comprising Schroeders Walk on Parcel B would include planting areas. Therefore, the proposed action would not result in significant adverse impacts on the natural and built stormwater management systems of the region.

SOLID WASTE AND SANITATION SERVICES

The proposed development would generate approximately 41.42 tons per week of solid waste. Approximately 27.83 tons of solid waste would be attributable to the residential development and would be handled by New York City Department of Sanitation ("DSNY"), while approximately 13.59 tons would be attributable to the commercial development and would be handled by private carters. Per the guidance of the *CEQR Technical Manual*, a proposed action that would generate less than 50 tons of solid waste per week would not result in a significant adverse impact. Further, the proposed action would be consistent with the City's solid waste management objectives as stated in the Solid Waste Management Plan ("SWMP"). Therefore, the proposed action would not result in any significant adverse impact on solid waste and sanitation services.

ENERGY

The proposed action would not directly affect the transmission of energy, nor would the proposed residential and commercial uses generate a demand for energy that would overburden energy supply systems. Therefore, no significant adverse impact with regard to energy would occur with the proposed action.

TRANSPORTATION

Traffic

The traffic analysis indicates the potential for significant adverse impacts at four intersections during one or more analyzed peak hours. Significant adverse impacts are identified for one lane group in the weekday AM peak hour, one lane group in the weekday midday peak hour, three lane groups in the weekday PM peak hour, and four lane groups in the Saturday peak hour; mitigation measure are identified that could mitigate these significant adverse impacts.

Transit

In the future with the proposed action, there would be a capacity shortfall of 83 passenger spaces on the northbound B13 service, 131 passenger spaces on the northbound B83 service, and 17 passengers on the eastbound Q8 in the AM peak hour. The PM peak hour would experience a capacity shortfall of 517 passenger spaces on the southbound B83 service. Therefore, the northbound B13 and B83 routes and eastbound Q8 route in the AM peak hour, and the southbound B83 route in the PM peak hour, would be significantly impacted based on *CEQR Technical Manual* criteria. The significant adverse impact to these bus services could be mitigated by increasing the number of buses in the peak hours. The general policy of Metropolitan Transportation Authority – New York City Transit ("MTA-NYCT") is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

Pedestrians

The proposed action is expected to generate a net total of approximately 472 walk trips in the weekday AM peak hour, 2,166 in the midday peak hour, 1,289 in the PM peak hour, and 1,392 in the Saturday midday peak hour. Persons en route to and from bus stops would add approximately 756, 718, 1,001, and 915 additional pedestrian trips to area sidewalks and crosswalks during these same periods, respectively. These pedestrian elements are primarily located at connections from the project site to local bus stops. There are no pedestrian elements that would be significantly adversely impacted by the proposed action, based on *CEQR Technical Manual* criteria.

Vehicle and Pedestrian Safety

During the three-year period between January 1, 2012 and December 31, 2014, a total of 104 reportable and non-reportable crashes, and eleven pedestrian/bicyclist-related injury crashes, occurred at study area intersections. None of the individual study area intersections are high-crash locations.

Parking

A total of 475 parking spaces would be provided on the project site under the proposed action (221 spaces for Parcel A and 254 spaces for Parcel B). Most would be available for residents only, though those in the surface parking lot on Parcel A would also be available for commercial users. The Parcel A residential and commercial parking demand would be accommodated within the Parcel A on-site parking supply. The Parcel B residential and commercial parking demands would result in an on-site parking shortfall of approximately 31 (residential) and 36 (commercial) spaces, which could be accommodated by the on-street parking availability and is not expected to result in significant adverse parking impacts due to the remaining on-street available capacity.

The proposed action would not result in signification adverse impacts to BDC parking. Development of Parcel A would not eliminate any existing BDC parking. The currently closed Erskine Street driveway may be opened to provide access to the northernmost BDC parking lot. Development of Parcel B would eliminate approximately 47 of the existing 386 on-site parking spaces available to BDC staff. Specifically, 47 of the available 74 parking spaces in the northernmost BDC parking lot would be removed. The remaining Lot 300 parking capacity of 331 spaces (386-47) would sufficiently accommodate the on-site parking demand of 231 spaces; therefore, there would be no significant adverse impact to parking at the BDC as a result of the proposed action.

AIR QUALITY

For the proposed action, increases in mobile source emissions of carbon monoxide ("CO"), particulate matter less than 2.5 microns in diameter ("$PM_{2.5}$") and particulate matter less than 10 microns in diameter ("PM_{10}") related to project-induced traffic changes would not result in any exceedances of the National Ambient Air Quality Standards ("NAAQS") or the NYCDEP/NYSDEC *de minimis* impact criteria at existing or future project-related sensitive receptors. In addition, the cumulative effect of emissions from project-induced traffic and parking facilities associated with the proposed action would not result in any significant adverse air quality impacts.

Proposed action pollutant emissions of nitrogen dioxide ("NO_2"), sulfur dioxide ("SO_2"), $PM_{2.5}$ and PM_{10} related to the use of No. 2 fuel oil for heating, ventilation, and air conditioning ("HVAC") systems would not result in any violations of applicable NAAQS or exceed the NYCDEP/NYSDEC *de minimis* impact criteria. For four of the building-on-building analysis scenarios, the default stack locations as described in the stationary source methodology above would result in significant adverse impacts (in the form of exceedances of the NAAQS or *de minimis* criteria) being predicted at a neighboring building. Therefore, to avoid the potential for significant adverse air quality impacts, stack distance restrictions are applied and would be included in the project's Restrictive Declaration. With the observance of the stack distance restrictions set forth above, the results of the analysis indicate that, when using No. 2 fuel oil, emissions from the proposed action would not result in any building-on-building significant adverse air quality impacts.

In addition, existing large scale pollutant sources, in addition to industrial sources that would emit air toxics, would not result in any significant adverse impacts to any of the sensitive land uses as part of the proposed action. Finally, it is not anticipated that malodorous emissions related to the 26th Ward service area would result in significant adverse impacts to the proposed action. Therefore, the proposed action would not result in any air quality impacts.

GREENHOUSE GAS EMISSIONS

The proposed action is estimated to generate approximately 7,578 total metric tons of carbon dioxide equivalents ("CO_2e") emissions on an annual basis resulting from building operations and approximately 5,923 metric tons of CO_2e emissions from mobile sources. As a point of comparison, this estimated annual total of 13,501 metric tons of CO_2e emissions represents approximately 0.03 percent of the 2013 annual total for all of New York City, which is estimated to have been 48.02 million metric tons.

The proposed action would be consistent with the goals of encouraging construction of resource- and energy-efficient buildings and encouraging development that is reliant upon public transit. The proposed action would involve the construction of new resource- and energy-efficient buildings that would partially rely on renewable fuel sources, expected to include on-site solar and/or wind generation to serve each building group on both parcels A and B. In addition, some critical building infrastructure, including boiler rooms, would be located at the rooftop, making it more efficient in operations (compared to cellar locations).

Finally, the proposed action would be consistent with current City policy aimed at reducing greenhouse gas ("GHG") emissions by 2050 through a variety of City initiatives. In particular, the proposed action would support development that relies on sustainable modes of transportation. Specifically, the proposed action would not encourage private automobile ownership; the proposed affordable housing development would provide on-site parking spaces of an amount equal to 35 percent of the proposed dwelling units not set aside for senior housing, compared to the provision of on-site parking for between 80 percent and 100 percent of dwelling units, as would typically be required of R7-A zoning (the equivalent of which would be effectuated by the proposed action). Rather, the proposed action would take advantage of an existing network of public transit that serves the project site. For example, although the project site does not have direct access to New York City subway service, the project site is served directly by four MTA bus routes (which also provide linkage to subways), as well as bicycle paths and pedestrian walkways. Therefore, the proposed action would be consistent with applicable policy associated with GHG emissions and climate change.

NOISE

The proposed action would not result in significant adverse impacts related to mobile or stationary source noise. None of the studied locations would experience perceptible increases to exterior noise levels related to a doubling of traffic volumes. The resulting maximum increase in the With Action noise level compared to the No Action noise level would be only 1.4 A-weighted decibels ("dBA"). In addition, loud stationary noise sources are not identified within the project study area, and all project-related mechanical systems would adhere to the requirements contained within the revised 2005 NYC Noise Code.

As part of the proposed action, the Restrictive Declaration would include project requirements to avoid the potential for significant adverse noise impacts to interior locations along the facades of the proposed development parcels. The proposed action would be required to provide sufficient window attenuation to maintain the CEQR interior noise level requirement of 45 dBA or lower. These proposed window-wall attenuation requirements would be included in the project's Restrictive Declaration. Consequently, these requirements would preclude the potential for the proposed action to result in significant adverse noise impacts.

PUBLIC HEALTH

The *CEQR Technical Manual* states that a public health analysis is not necessary for projects where no significant unmitigated adverse impact is found in other analysis areas, such as air quality, water quality, hazardous materials, or noise. The results of the Phase I and Phase II ESAs support the conclusion that no additional testing or remedial action is recommended for the project site, and that no significant adverse impacts related to hazardous materials would be expected to occur as a result of the proposed action. None of the studied locations would experience perceptible increases to exterior noise levels related to increased traffic volumes. In order to avoid the potential for significant adverse noise impacts, the proposed action would be required to provide sufficient window attenuation to maintain the CEQR interior noise level requirement of 45 dBA or lower. Further, the cumulative effect of emissions from project-induced traffic and parking facilities associated with the proposed action would not result in any significant adverse air quality impacts. Additionally, pollutant emissions related to the use of No. 2 fuel oil for HVAC systems would not result in any violations of applicable NAAQS or exceed NYCDEP/NYSDEC *de minimis* impact criteria. The air toxics analysis concludes that no industrial air toxics facilities are located near the project site with the potential to result in adverse health impacts. There would be no significant adverse impacts to water resources, including groundwater or nearby surface water bodies. The proposed action would result in no significant adverse impacts to the city water supply and sanitary sewer system. Therefore, the proposed action would not result in any significant adverse impact to public health.

NEIGHBORHOOD CHARACTER

The proposed action would result in no unmitigated significant adverse impacts related to key components of neighborhood character, including land use and open space, urban design and visual resources, historic and cultural resources, socioeconomic conditions, pedestrian safety or noise. To the extent that significant adverse traffic impacts may result with the increased delay at certain signalized intersections in the area, such impacts could be mitigated. Thus, the proposed action would not significantly adversely affect neighborhood character, overall. Rather, the proposed action would, in effect, represent a marginal continuation of the physical extent of the recently established residential and commercial neighborhood comprising the FCURA. Further, the proposed action would introduce

needed affordable housing to New York City and would be consistent with the similar goals of the FCURA. Therefore, the proposed action would not result in a significant adverse impact to neighborhood character.

CONSTRUCTION

Construction of the proposed action would be undertaken in five phases, with each phase expected to last up to approximately 36 months; the first phase would commence in 2017, and the final phase would be complete in 2028. Each phase would entail the construction of up to two connected buildings, up to 95 feet in height, containing both housing units and commercial space.

The proposed action would not result in significant adverse construction-related impacts to traffic, transit, pedestrians, parking, or vibration. However, construction activities associated with the proposed action could result in significant adverse impacts related to noise at neighboring Gateway Estates buildings, though these would be temporary and would be limited through use of best practices. Potential significant adverse impacts to interior noise levels in Parcel B project buildings that would be occupied during construction of other buildings on Parcel B would be avoided by a requirement in the Restrictive Declaration that such buildings use double-glazed windows and have an alternate source of ventilation.

The effects of construction noise on sensitive receptors would vary depending on the location of the noise source. Further, during most of the construction period for each phase, noise levels would decrease significantly following the completion of pile driving activities, which would occur for up to approximately 12 weeks at the beginning of each of the three phases constructed while Parcel B is partially occupied.

The Restrictive Declaration would require contract specifications requiring (1) contractors to comply with all the requirements and regulations of the New York City Noise Code and USEPA noise emission standards for construction equipment; (2) devices and activities which are subject to the provisions of the New York City Noise Code to be operated, conducted, constructed or manufactured without causing a violation of the code; (3) all work to be conducted in compliance with the regulations set forth in the code that control noise levels due to construction work.

In addition, the Restrictive Declaration would require the incorporation of construction specifications in the form of control measures to minimize potential construction-related air quality effects. With such control measures in place, the results of the 8-hour CO analysis indicate that the CO concentrations resulting from on-site construction activities would be negligible. For $PM_{2.5}$, the maximum short-term and long-term ambient impact concentrations would be below the NAAQS and the NYC *de minimis* criteria. Predicted concentrations of PM_{10} and NO_2 would be below the NAAQS criteria levels. Therefore, the proposed action would not result in any exceedances of the NAAQS or the NYC *de minimis* criteria during the construction period.

In summary, significant adverse impacts related to noise would occur during certain times of construction activity and with use of certain equipment. With the use of double-glazed windows and provision of alternate ventilation in Parcel B buildings to be occupied during ongoing construction activities, and with the implementation of noise mitigation measures (per the Restrictive Declaration) to reduce noise levels during construction activities, the potential for significant adverse impacts related to noise would be reduced, though not entirely eliminated; there would remain the likely potential for temporary significant adverse construction-period noise impacts on neighboring residential buildings at Gateway Estates. To the extent that mitigation measures proposed as part of the proposed action may not be effective at fully mitigating the construction-period noise impacts, then the proposed action may result in unavoidable adverse impacts related to noise that would be of limited duration but significant in magnitude.

ALTERNATIVES

A No Action Alternative, which assumes none of the proposed discretionary actions would occur and the project site would continue to remain primarily unoccupied, is considered in comparison to the proposed action.

In addition to a comparative impact analysis, the No Action Alternative is assessed to determine the extent to which it would meet the goals and objectives of the proposed action. The No Action Alternative would not meet any of the project goals and objectives:

- The No Action Alternative would not provide for the construction of affordable housing, or affordable senior housing or housing accommodating people with intellectual and developmental disabilities, in a significantly underserved portion of Brooklyn;
- The No Action Alternative would not result in the beneficial reuse of primarily undeveloped acreage; and
- The No Action Alternative would not result in the divestment of surplus State property, or realization of revenue to the State and City through proceeds of the sale and future property taxes.

CUMULATIVE EFFECTS

Cumulative effects may result when effects of one action occur all together or when the effects of an action occur in combination with effects of other recent, ongoing, and reasonably foreseeable future actions. Cumulative effects may be undetectable when considered specifically in the context of one action, and may result from effects that do not, in themselves, constitute significant adverse impacts; however, combined effects may eventually lead to measurable environmental change.

The proposed action does not involve two or more related actions undertaken, funded, or approved by an agency (such as series of projects on various sites). However, per the guidance of the *CEQR Technical Manual*, when applicable and significant, a lead agency (ESD) should analyze and disclose cumulative impacts of a project. The EIS considered those technical areas for which substantial effects, including significant adverse impacts, would be anticipated with the proposed action: transportation, air quality, noise, and community facilities (public elementary and intermediate schools and child care centers). In addition, potential construction-period effects expected with the proposed action are also considered in the context of construction associated with other actions in the vicinity. The EIS evaluates the potential for the effects of the proposed action to combine with other past, present, and reasonably foreseeable future actions that may affect the same environs as the proposed action; specifically, four other development projects or land use proposals are either currently under construction or are expected to be under construction in the future in the vicinity of the project site:

Gateway Estates

The FCURA includes the project site; it extends from Fountain Avenue (the eastern boundary of the project site), west to Schenck Avenue, approximately ½-mile west of the project site, between Flatlands Avenue to the north and Shore Parkway to the south. The Gateway Estates development will culminate the full implementation of the FCURP. It is currently under construction and is expected to be complete by 2018, and portions of the project are currently under construction within the ½-mile study area. The Gateway Estates development is fully considered in the existing conditions and No Action conditions of all technical analyses. It is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses. Further, because it directly affects lands within the proposed action's study areas for land use, zoning, and public policy, socioeconomic conditions, community facilities, and open space, it is specifically considered in the existing and No Action conditions of those analyses.

The only identified construction activity near the project site, and not associated with the proposed action, would be the completion of construction at the Gateway Estates development, in the areas north and northwest of Parcel B. Gateway Estates development construction is expected to be complete by 2018. The proposed action construction would begin in 2017 on Parcel A, which is the portion of the project site located furthest from the Gateway Estates development. As a result, cumulative construction-related impacts due to noise and air quality are unlikely, as on-site construction activities for the two projects would be located far enough away from one another as not to have a significant effect on any sensitive resources, such as residences or schools, which could potentially be occupied at that time. In addition, it is anticipated that by the time construction begins on Parcel B, major construction activities for the Gateway Estates development will have ended. Further, construction activities on the project site are not expected to result in substantial off-site truck activity. Therefore, it

is not anticipated that significant increases in mobile source off-site pollutant emissions or vehicular noise would occur.

The portion of Spring Creek Park to the south of Parcel A may be improved as part of Gateway Estates development; as this park area has not yet been improved in existing conditions, there is the potential that landscaping activities may be occurring as Parcel A is under construction. As the park is expected to be improved with new landscaping, benches, and other park furniture, there would not likely be substantial grading activities or intensive use of on-site equipment, and only minimal construction-related traffic, as necessary, to deliver these materials over the course of a few days. Park redevelopment of this sort would likely be complete in less than one month, given size and existing, relatively even grade of the park. Consequently, the improvement of the park area would not result in substantial air quality, noise or construction effects. Therefore, even with the potential for concurrent construction activity in the vicinity of the Spring Creek Park south of the project site, there is limited potential for the effects of construction-period activities to combine with construction-period effects associated with the Gateway Estates development; given the brevity of concurrent construction that could occur, no significant adverse impact would result.

Therefore, the potential for cumulative effects associated with the Gateway Estates development is fully considered in all technical analyses prepared for this EIS, and to the extent that potential effects to transportation, air quality, noise, and indirect effects to community facilities are predicted in other analyses prepared for this EIS and summarized in this chapter, cumulative effects related to the Gateway Estates development are fully evaluated.

East New York Rezoning Proposal

NYCDCP and NYCHPD have proposed the East New York Rezoning proposal for an approximately 190-block area of East New York, Cypress Hills, and Ocean Hill neighborhoods of Brooklyn, north of the project site; this action has been approved by the New York City Planning Commission and awaits a vote by the New York City Council in spring 2016.

The East New York Rezoning proposal is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses. Located just over one-mile north of the project site, the East New York Rezoning proposal area would not directly or indirectly affect any study areas related to land use, zoning, and public policy, socioeconomic conditions, or open space; however, as described in Chapter 4, "Community Facilities and Services," and in this chapter, the East New York Rezoning proposal could potentially result in significant adverse impacts to child care facilities that serve the project site. Therefore, the potential for cumulative impacts to child care facilities is discussed in that chapter, as well as in Chapter 23, "Mitigation Measures."

Fresh Creek Estates

Fresh Creek Estates is being advanced by NYCDCP and NYCHDC and would involve the rezoning of approximately four blocks in Starrett City, approximately ¾-mile west of the project site. The Fresh Creek Estates project site, currently zoned R3-2, would be rezoned to C4-2 in order to allow for the establishment of a regional retail shopping center and 250 units of mixed income housing; a completion year is not currently available, but it is assumed to be complete by the proposed action analysis year (2028).

Located over ½-mile west of the project site, the Fresh Creek Estates project would not directly or indirectly affect any study areas related to land use, zoning, and public policy, socioeconomic conditions, or open space; however, the Fresh Creek Estates project is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses. Therefore, the potential for cumulative effects associated with the Fresh Creek Estates project is fully considered in all technical analyses prepared for this EIS, and to the extent that potential effects to transportation, air quality, noise are predicted in other analyses prepared for this EIS and summarized in this chapter, cumulative effects related to the Fresh Creek Estates project are fully disclosed.

Stanley Commons

Stanley Commons, as proposed, would consist of 240 residential units and 19,500 sf of community facility uses on the block bordered by Stanley, Schenck, Wortham, and Van Siclen avenues. Located over ½-mile northwest of the project site, the Stanley Commons project would not directly or indirectly affect any study areas related to land use, zoning, and public policy, socioeconomic conditions, or open space; however, the Stanley Commons project is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses. Therefore, the potential for cumulative effects associated with the Stanley Commons project is fully considered in all technical analyses prepared for this EIS, and to the extent that potential effects to transportation, air quality, and noise are predicted in other analyses prepared for this EIS and summarized in this chapter, cumulative effects related to the Stanley Commons project are fully disclosed.

MITIGATION MEASURES

In accordance with the *CEQR Technical Manual*, where significant adverse impacts are identified, mitigation to reduce or eliminate the impacts to the fullest extent practicable is developed and evaluated. Where impacts have been identified – in the areas of transportation (traffic and transit), community facilities (indirect impacts on child care centers), and construction-period noise measures are examined to mitigate the anticipated impacts.

Traffic and Transit (Bus)

The anticipated significant adverse impacts on traffic could be fully mitigated through the modification of traffic signal phasing and/or timing at four intersections, and significant adverse impacts on bus service could be fully mitigated by increasing the number of buses in the peak hours.

Child Care Facilities

Required mitigation measures to address the identified significant adverse indirect impact to publicly funded child care centers would comprise consultation with NYCACS to determine appropriate mitigation measures, which could include funding of vouchers for slots in private day care centers and/or provision of space that could be used for on-site day care services, the use of which would be determined through consultation with NYCACS. Specifically, the proposed action would include space that could be used for child care facilities within the Parcel B building area designated for commercial use. To the extent that the proposed mitigation measures may not be practicable, an unavoidable significant adverse impact could result.

Construction-Period Noise

Construction activities associated with the proposed action could result in significant adverse impacts related to noise at neighboring Gateway Estates buildings, though these would be temporary and would be limited through use of best practices. While significant adverse impacts could occur, the main source of construction noise (pile driving) would migrate throughout the construction areas, such that the effects of construction noise on any particular sensitive receiver would change depending on the location of the noise source and the height of the receiver. Noise control measures that would partially mitigate significant adverse construction noise impacts at neighboring Gateway Estates buildings include contract specifications requiring (1) contractors to comply with all the requirements and regulations of the New York City Noise Code and USEPA noise emission standards for construction equipment; (2) devices and activities which are subject to the provisions of the New York City Noise Code to be operated, conducted, constructed or manufactured without causing a violation of the code; and (3) all work to be conducted in compliance with the regulations set forth in the code that control noise levels due to construction work.

Other mitigation measures and strategies that could reduce noise levels further include:

- Design considerations and project layout approaches, including measures such as construction of temporary noise barriers, placing construction equipment as far as practicable from noise sensitive receptors, constructing walled enclosures/sheds around especially noisy activities, such as pavement breaking, and sequencing operations to combine especially noisy equipment;

- Perimeter noise barriers constructed to the maximum height of 15 feet allowed by the New York City Noise Code;
- Alternative construction methods, such as using special low noise emission level equipment; and
- Use of noise enclosures or noise insulation fabric on compressors, generators, etc.

With mitigation measures and strategies in place to reduce noise levels during construction, the potential for significant adverse impacts related to noise would be mitigated. To the extent that mitigation measures proposed as part of the proposed action may not be effective at fully mitigating the construction-period noise impacts to insignificant levels, then the proposed action may result in unavoidable temporary, but significant, adverse impacts related to noise.

UNAVOIDABLE ADVERSE IMPACTS

According to the *CEQR Technical Manual*, unavoidable significant adverse impacts are significant adverse impacts that would occur with the implementation of a proposed action, regardless of the mitigation employed, or if mitigation were not possible. Significant adverse impacts in the following technical areas have been identified: transportation (traffic and transit), community facilities (indirect impacts on child care centers), and construction-period noise.

To the extent practicable, mitigation measures are proposed in this EIS for the identified significant adverse impacts. All potential significant adverse impacts to transportation (traffic and transit) would be fully mitigated.

Child Care Facilities

Mitigation measures have been outlined to address the significant indirect adverse impacts to child care centers. However, in the eventuality that daycare providers accepting NYCACS vouchers and/or a NYCACS contractor to occupy commercial space on Parcel B are not identified to the extent needed to serve project-generated eligible children in need of publicly funded child care, the significant indirect adverse impacts to child care centers may prove to be unavoidable adverse impacts.

Construction-Period Noise

Mitigation measures also have been outlined to minimize the significant adverse construction-period noise impacts that have been predicted. No practicable mitigation measures are identified that would certainly fully mitigate the construction-period noise effects, though measures are identified to minimize these effects, potentially to less-than-significant levels. With the implementation of noise mitigation measures (per the Restrictive Declaration) to reduce noise levels during construction, the potential for significant adverse impacts related to noise would be minimized to the extent practicable with the proposed action, though not entirely eliminated; there would remain the likely potential for

significant adverse construction-period noise impacts, with the worst-case occurring during pile driving activities, which would occur for a limited duration (approximately 12 weeks during each construction phase). To the extent that mitigation measures proposed as part of the proposed action may not be effective at fully mitigating the construction-period noise impacts, then the proposed action may result in unavoidable adverse impacts related to noise.

GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTION

The project site is located within the FCURA, which with the full implementation of the FCURP (expected to be completed in 2018) will retain no substantial area for new development. Designated parkland exists to the east and south of the project site, and the BDC (Lot 300) between parcels A and B of the project site, is expected to remain under State ownership and control and continue to serve OPWDD administrative functions. Therefore, given that the land surrounding the project site would be fully developed in the future without the proposed action, and that its development is controlled by, alternatively, the state via ownership, designation as parkland, or the FCURP as the means of implementing development in the FCURA, there would be no additional new development induced off-site as a result of the proposed action. Public water and sewer systems already are in place to reach the project site, and the connections provided with the proposed action would facilitate the new development on the project site, specifically. There would be approximately 3,274 new residents introduced to the project site with the proposed action; in addition to the existing regional commercial shopping areas located directly across the street to the west, it is expected that the commercial needs of these residents, and those surrounding the project site, would be met by new local commercial uses that would be introduced to the project site with the proposed action. Therefore, given the proposed action and the context of the project site, the proposed action would not induce new development or substantial changes to existing development in the area surrounding the project site.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

There are several resources, both natural and built, that would be expended in the construction and operation of any development that may result from the proposed action. These resources include the building materials used in the construction of the project; energy in the form of natural gas, petroleum products, and electricity consumed during construction and operation of the residential buildings and commercial space; and the human effort required to develop, construct, and operate various components of any potential development. They are considered irretrievably committed because their reuse for some other purpose would be impossible or highly unlikely.

The proposed action would constitute an irreversible and irretrievable commitment of a potential development site, as a land resource, thereby rendering land use for other purposes infeasible. However, the proposed action would not induce development in the surrounding area.

In addition, building materials and the non-renewable energy that would be utilized for the construction associated with implementing the proposed action, and the non-renewable energy associated with the operations of the residential and commercial spaces introduced with the proposed action, would also constitute an irreversible and irretrievable commitment of resources. However, the new buildings introduced by the proposed action would be required to comply with the New York City Energy Conservation Code, which governs performance requirements of HVAC systems, as well as the exterior building envelope of new buildings, thereby meeting standards for energy conservation, which include requirements relating to energy efficiency and combined thermal transmittance. In addition, the proposed action's buildings would include solar panels and/or wind turbines as part of each building group. Therefore, although land and non-renewable energy resources would be irreversibly and irretrievably committed with the proposed action, the demand for such commitment of non-renewable energy would be lessened with the implementation of alternative energy technology as part of the proposed action.

The irreversible and irretrievable commitment of non-renewable energy would facilitate the provision of needed affordable housing, and the commitment of substantially underutilized State-owned land resources comprising the project site, for the purpose of providing affordable housing in this location, would be in the public interest. Therefore, considered together, the irreversible and irretrievable commitment of resources would not represent a significant adverse impact.