A. INTRODUCTION

This technical memorandum was prepared to determine whether the previously approved development of two residential buildings in the upland area of Pier 6 of the Brooklyn Bridge Park Project, as modified by certain changes as described hereafter (the "Pier 6 project" or "proposed project") would have the potential for any significant adverse environmental impacts not previously identified in the Final Environmental Impact Statement (the "FEIS") for the Brooklyn Bridge Park Project. Implementation of these changes and construction of the proposed project would require the approval of a lease for the residential sites by the Brooklyn Bridge Park Corporation (BBP) Board of Directors and the adoption by Empire State Development (ESD) and by Brooklyn Bridge Park Development Corporation (BBPDC), a subsidiary of ESD, of any potential associated modifications of the Brooklyn Bridge Park General Project Plan (GPP). ESD is the lead agency for this review.

As detailed hereafter, this technical memorandum concludes that the proposed project, considering relevant changes in background conditions and any relevant changes in City Environmental Quality Review (CEQR) 2014 *Technical Manual* methodologies, would not result in any significant adverse environmental impacts not previously identified in the FEIS for the Brooklyn Bridge Park Project.

BACKGROUND

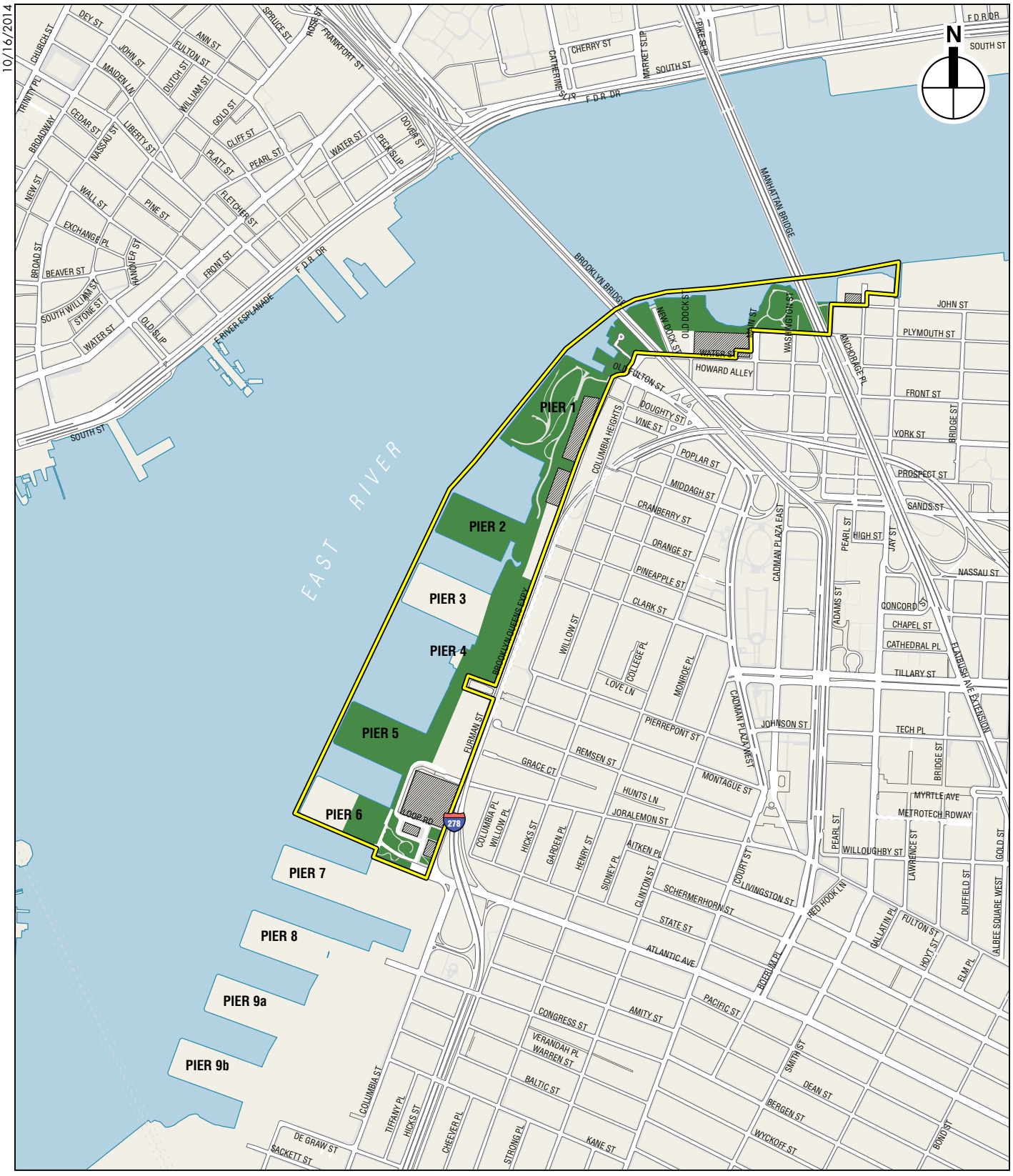
The Brooklyn Bridge Park Project was analyzed in the December 2005 *Brooklyn Bridge Park Project Final Environmental Impact Statement* (2005 FEIS). ESD served as the lead agency for the environmental review of the Brooklyn Bridge Park Project. The 2005 FEIS was certified by ESD on December 15, 2005, the State Environmental Quality Review Act (SEQRA) findings were adopted on January 18, 2006, and the GPP was adopted at that time (it has subsequently been amended).

The Brooklyn Bridge Park Plan analyzed in the 2005 FEIS comprised 85 acres, along approximately 1.3 miles of Brooklyn's East River waterfront from Jay Street in the north to Atlantic Avenue in the south (see **Figure 1**). In addition to public recreational facilities and landscaped areas, the project analyzed in the FEIS provided for various development components within the project area, as discussed below.

PARK COMPONENTS

Construction of the park commenced in January 2009 and is now more than 70 percent complete or under construction. The development of the Brooklyn Bridge Park Project is being carried out by BBP, a not-for-profit corporation that in July 2010 took over the responsibilities of the planning, design, construction, and maintenance of Brooklyn Bridge Park from BBPDC.

At the northern end of the project area, the John Street open space is under construction. Main Street Park, between the Manhattan and Brooklyn Bridges, now includes a playground and a dog run. The DEP Building and the Main Street Reconstruction are under construction in this portion of the project area, and are expected to be completed in 2015. South of Main Street Park, Empire-Fulton Ferry State Park has



Brooklyn Bridge Park Project Boundary

Brooklyn Bridge Park Components Completed to Date

Development Sites

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Project Site Location
Figure 1

been renovated with an upgraded lawn, landscaping, and a picnic area, and historic Jane's Carousel has been installed on the waterfront.

Pier 1, completed in 2010, includes lawns, waterfront promenade, and a playground. The Squibb Park Bridge, completed in 2012, links Squibb Park at the Brooklyn Heights Promenade to the upland of Pier 1. The upland area between Piers 1 and 2 contains a temporary pool and concession area. Pier 2, completed in 2014, includes basketball, handball, bocce and shuffleboard courts, a multi-use turf, fitness and play equipment, a roller rink, and picnic tables. The Pier 2 upland and Pier 3 have been funded, though no completion date has been determined.

The Pier 4 beach and Bird Island nature preserve were completed in 2014. Pier 5, completed in 2012, includes multi-use turf fields, promenade and seating. The upland of Pier 5 includes the completed Picnic Peninsula; the remainder of the upland areas is slated to be completed in 2016 and will include lawns, pathways, a boat house and a maintenance facility.

Completed portions of Pier 6 include volleyball courts and a concession area, as well as a destination playground, dog run, pathways and seating on the Pier 6 upland. The Pier 6 outboard is under construction, and will include a rain garden and play lawns

DEVELOPMENT COMPONENTS

Construction began in mid-2014 on the John Street development site in the northern end of the project area, and is expected to be completed in late 2015. The development will be primarily residential, with ground floor retail and cultural space.

South of the John Street development site and Main Street Park, construction began in 2014 on the Empire Stores, a row of historic warehouses containing approximately 400,000 square feet. This site will be redeveloped with a mix of commercial, retail and office uses. Construction is expected to be completed in late 2015. The Tobacco Warehouse next to the Empire Stores will be adaptively reused as a cultural facility and performance space, and is currently under construction.

South of the Brooklyn Bridge, the upland of Pier 1, near the Old Fulton Street entrance to the park, includes two development parcels. In 2012, BBP selected a developer to develop the sites with hotel, residential, restaurant, retail and other uses, as well as parking. Construction began in spring 2013 and is expected to be completed by late 2015.

Just south of Joralemon Street, between Piers 5 and 6, 360 Furman Street is a residential condominium in a converted warehouse building. The project was completed in 2008 and includes more than 440 residential units, as well as ground floor retail and a parking garage. The Pier 6 upland includes two development parcels near the south end of the park that are the subject of this technical memorandum (see **Figure 2**). Each parcel is approximately 130 feet by 76 feet, with a footprint of approximately 9,800 square feet. Parcel A is bounded by the park Loop Road and sits just south of 360 Furman Street. Parcel B is to its east along Furman Street and just south of the dog run. The GPP provides for up to 430 residential units at the Pier 6 upland, including a building of up to 315 feet on Parcel A, with up to 290 residential units, and a building of up to 155 feet with 140 residential units and ground floor retail on Parcel B. The GPP also includes up to 72 parking spaces total for both sites.

PIER 6 UPLAND—PROPOSED DEVELOPMENT

On May 13, 2014 BBP issued an RFP for development of the Pier 6 upland development parcels; responses are currently under consideration. Consistent with the 2005 FEIS and in conformance with the GPP, the proposed project would involve the redevelopment of the project site with two buildings

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Project Site

Brooklyn Bridge Park Project Boundary

Park Components Completed to Date

Area of Potential Loop Road Elbow Closure

Development Sites

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Project Site
Figure 2

containing up to 430 residential units. The buildings would occupy the same footprint and be subject to the same height restrictions contained in the GPP and analyzed in the FEIS. As part of the RFP process, BBP is considering several modifications to the buildings analyzed in the 2005 FEIS and associated clarifications or modifications to the GPP's land use controls. First, a portion of the proposed project's residential program would now include up to approximately 190 units dedicated to residents who earn no more than 165 percent of Area Median Income (AMI), of which up to 50 units could be affordable to residents who earn no more than 80 percent of AMI.[1] Second, the number of residential units on Parcel B may increase above the 140 units analyzed in the 2005 FEIS provided that the overall unit count for both parcels would still not exceed the 430 units established by the GPP. Third, the proposed project would also include up to 5,000 sf of neighborhood-oriented retail or non-fast food restaurant space on Parcel A, up to 10,000 sf of community facility use on the ground floor and second floor, divided between Parcel A and Parcel B, and up to 72 parking spaces. The community facility use could include any combination of a pool, a universal pre-K (accommodating up to 75 students), non-profit office or art gallery space, public game room or meeting rooms. It is possible that the total amount of community facility square footage could be higher than 10,000 sf; in this case there would also be a reduction in the amount of neighborhood-oriented retail or restaurant space. Finally, a portion of the vehicular park road that lies between Parcel A and open space uses to the south and west, known as the Loop Road "elbow," may be closed to traffic.

PROPOSED ACTIONS

The proposed actions are the BBP Board's authorization to enter into a lease with the developer of the project site and any associated potential modifications by ESD and BBPDC of the GPP approved in 2005 and subsequently amended. The potential modifications could include the following:

- While the GPP currently specifies a maximum of 140 units on Parcel B, the number of residential units on this parcel may increase. There would be a corresponding and equivalent reduction in the number of units on Parcel A, such that the overall unit count for both parcels would still not exceed the 430 units established in the GPP.
- Community facility uses would be permitted on the ground floor and second floor of both parcels, and retail would be allowed on the ground floor of parcel A.
- The GPP would confirm that residential uses may include affordable units as well as market rate units.
- The Loop Road "elbow," a portion of the vehicular park road that lies between Parcel A and open space uses to the south and west, may be closed.

ANALYSIS FRAMEWORK

Because specific designs for the proposed buildings have not yet been determined, this analysis conservatively assumes the maximum building height and bulk for the two parcels. The program assumed for the development parcels in this technical memorandum is described above under "Pier 6 Upland—Proposed Development." These assumptions allow for a conservative analysis reflecting the range of

[1] The AMI is set annually for metropolitan areas and non-metropolitan counties by the U.S. Department of Housing and Urban Development (HUD), and varies according to family size. Median income for the New York, NY HUD Metro Fair Market Rent (FMR) Area for FY 2014 was $62,500 (not accounting for family size).

development being considered for the site. The analysis accounts for completion and occupancy of the Pier 6 development by 2018. The analysis accounts for changes in background conditions in the area subsequent to completion of the FEIS as well as changes to CEQR methodologies where relevant.

B. CHANGES IN ENVIRONMENTAL CONDITIONS AND CONSIDERATION OF POTENTIAL IMPACTS

B.1 LAND USE, ZONING, AND PUBLIC POLICY

The overall program analyzed in the 2005 FEIS included public open space, a marina, residential units—including two residential buildings on the Pier 6 upland area—a hotel, retail space and restaurants, a mix of education, office and other commercial uses, and a 1,000 seat multi-use theater. A detailed discussion of potential impacts to land use, zoning, and public policy—including consistency with the City's waterfront policies—was included in the 2005 FEIS. The 2005 FEIS concluded that the development of the Brooklyn Bridge Park Project in place of vacant and underutilized land was compatible with and in support of the surrounding neighborhoods and would not result in any significant adverse impacts on land use, zoning, or public policy.

This analysis describes land uses and development trends in the area that have changed since the 2005 FEIS, and determines whether the proposed project is compatible with those conditions. The analysis also considers the project's compliance with, and effect on, the area's zoning and other applicable public policies, including the most recent policies of the New York City Waterfront Revitalization Program (WRP). Consistent with the 2005 FEIS, this analysis examines a roughly 2,000-foot study area, representing those areas most sensitive to potential land use impacts due to the proposed project (see **Figure B.1-1**).

EXISTING CONDITIONS

Land Use

The project site is located in the upland area of Pier 6 in the Brooklyn Bridge Park Project area, at the foot of Atlantic Avenue (see **Figure B.1-1**). Parcel A is bounded by the park's Loop Road on all four sides, and Parcel B is located on a block bounded by Furman Street to the east and Loop Road to the west, with the Pier 6 dog run directly adjacent to the north, and park open space to the south. Both portions of the project site are currently vacant and surrounded by fencing. Parcel A contains a small temporary structure.

The study area is bounded by Clark Street to the north, Sackett Street to the south, Cadman Plaza West and Court Street to the east, and the East River to the west (see **Figure B.1-1**). The study area contains portions of the Brooklyn Heights, Columbia Street Waterfront, Cobble Hill, and Boerum Hill neighborhoods.

The area immediately surrounding the project site includes Pier 6 and its upland areas. Since the 2005 FEIS, the maintenance garage and storage sheds on the Pier 6 upland area have been demolished. The area directly north of Parcel B has been developed with a dog run, and the areas west of Parcel B and south of Parcel A contain play areas, including water jets, jungle gyms, and a sandbox. Since the 2005 FEIS, the vacant piershed on Pier 6 has been demolished, and the pier now contains a restaurant with rooftop seating areas and ground floor public restrooms, as well as sand volleyball courts and lawn areas. The southern edge of the pier includes a ferry dock providing limited service to Governors Island. North of the project site is the 16-story 360 Furman Street residential condominium building. The building is a

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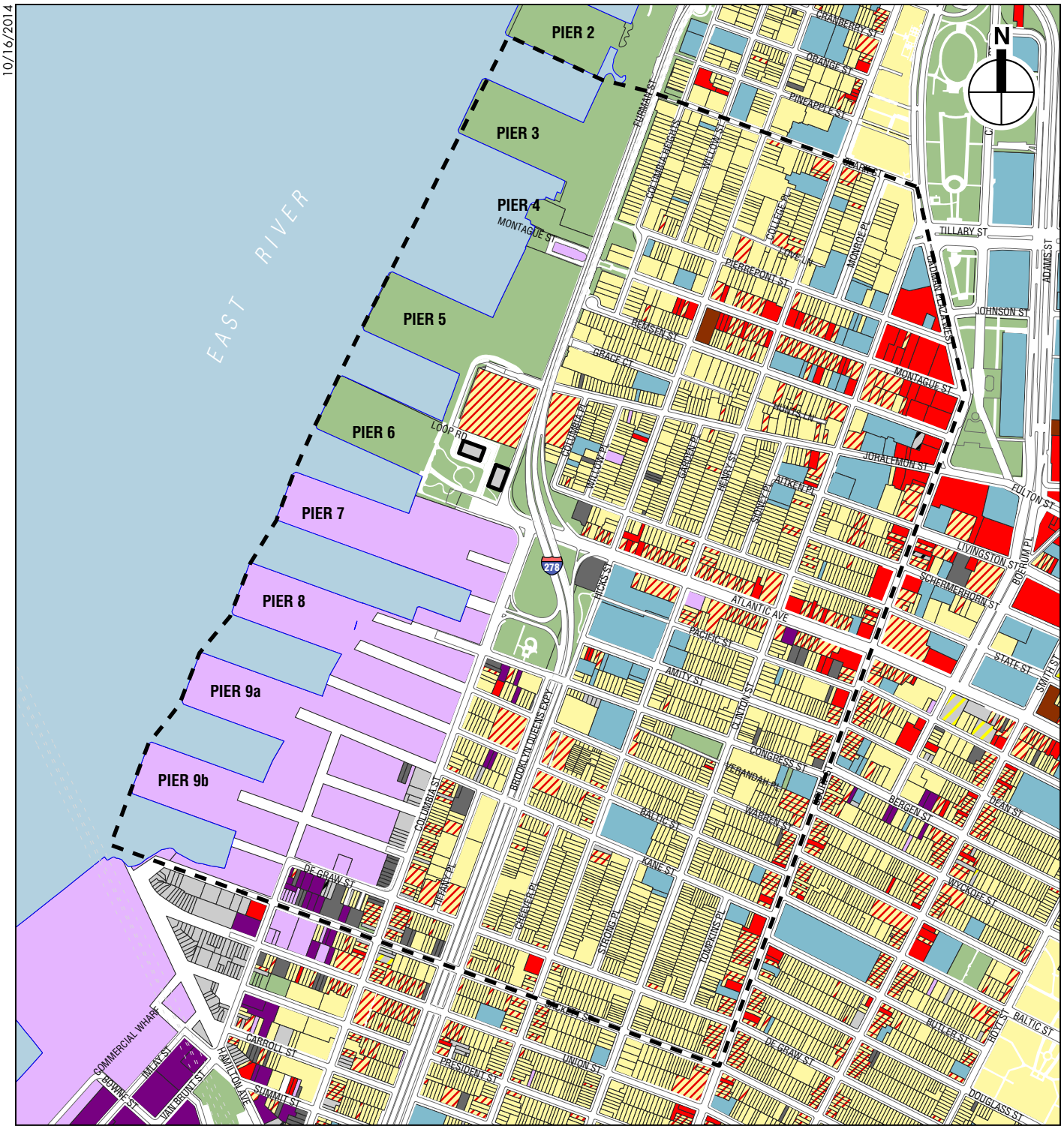

Project Site
Study Area
Commercial and Office Buildings
Hotels
Industrial and Manufacturing
Open Space and Outdoor Recreation
Parking Facilities
Public Facilities and Institutions
Residential
Residential with Commercial Below
Transportation and Utility
Vacant Land
Vacant Building
Under Construction

0 1,000 FEET

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Land Use
B.1-1

former warehouse that was converted in 2008 and includes 438 residential units, approximately 80,000 square feet of ground floor retail, and over 500 parking spaces.

The Brooklyn-Queens Expressway runs north-south through the study area. North of Atlantic Avenue, it runs above grade, separating waterfront uses from residential uses in Brooklyn Heights. South of Atlantic Avenue, it runs below grade, separating the Columbia Street Waterfront and Cobble Hill neighborhoods.

Land use along the waterfront has changed dramatically since the 2005 FEIS, with active warehousing, storage, and commercial uses redeveloped into open space and recreation uses. Land use trends identified in the 2005 FEIS in the southern portion of the study area have continued, with residential and commercial growth in the Columbia Street Waterfront neighborhood. While some working waterfront and warehousing uses remain, many of the light industrial uses have been converted to residential use along Hicks Street and the east-west side streets, and mixed-use along Columbia Street.

The remainder of the study area has remained largely similar to conditions described in the 2005 FEIS. The Cobble Hill neighborhood remains an established residential area, protected in part by its New York City historic landmark designation. Atlantic Avenue and Court Street remain the major commercial corridors, and institutional uses are scattered throughout. Similarly, north of Atlantic Avenue, the Brooklyn Heights neighborhood and landmarked historic district contains a well-established mix of residential, office, retail, and institutional uses. The neighborhood is characterized by 19th century brick and brownstone residential rowhouses, as well as a number of larger apartment buildings that date from the first half of the 20th century. The eastern portion of the Brooklyn Heights neighborhood, along Court Street and along Cadman Plaza West, transitions to the institutional, commercial and office use in Downtown Brooklyn.

Zoning

Since the 2005 FEIS, the southern portion of the study area was rezoned as part of the Carroll Gardens/Columbia Street Rezoning, adopted by City Council on October 28, 2009. Previously zoned entirely R6, the area was rezoned with R6A, R6B, and R7A contextual zoning districts, with C2-4 commercial overlay districts in some areas (see **Figure B.1-2**). R6A zoning districts are mapped along Congress Street between Hicks and Columbia Streets, and along Columbia Street from Kane south beyond the study area. R6B districts are mapped along a portion of Warren Street west of Hicks Street, and along Columbia Street between Baltic and Kane Streets. South of Degraw Street, the study area is also mapped in R6A districts generally along the north-south Streets, and R6B districts on the east-west midblocks. R7A zoning districts are mapped on Hicks Street between Warren and Baltic Streets, and between Kane and Degraw Streets. The rezoning aimed to preserve the neighborhood characters and scale with height limits that better reflect the existing, predominantly row house character; prevent out of scale development while still allowing for building upgrades, improvements and modest expansions; reduce the depths of commercial districts to reflect existing development patterns and preclude commercial intrusions into residential side streets; and to promote vibrant, mixed-use corridors on certain local commercial thoroughfares.

Public Policy

PlaNYC

In 2007, the Mayor's Office of Long Term Planning and Sustainability (OLTPS) released *PlaNYC: A Greener, Greater New York*. In 2011, OLTPS released an update to the plan. It includes policies to address three key challenges the city faces over the next 20 years, including population growth, aging infrastructure, and global climate change. Elements of the plan are organized into six categories—land, water, transportation, energy, air quality, and climate change—with corresponding goals and objectives

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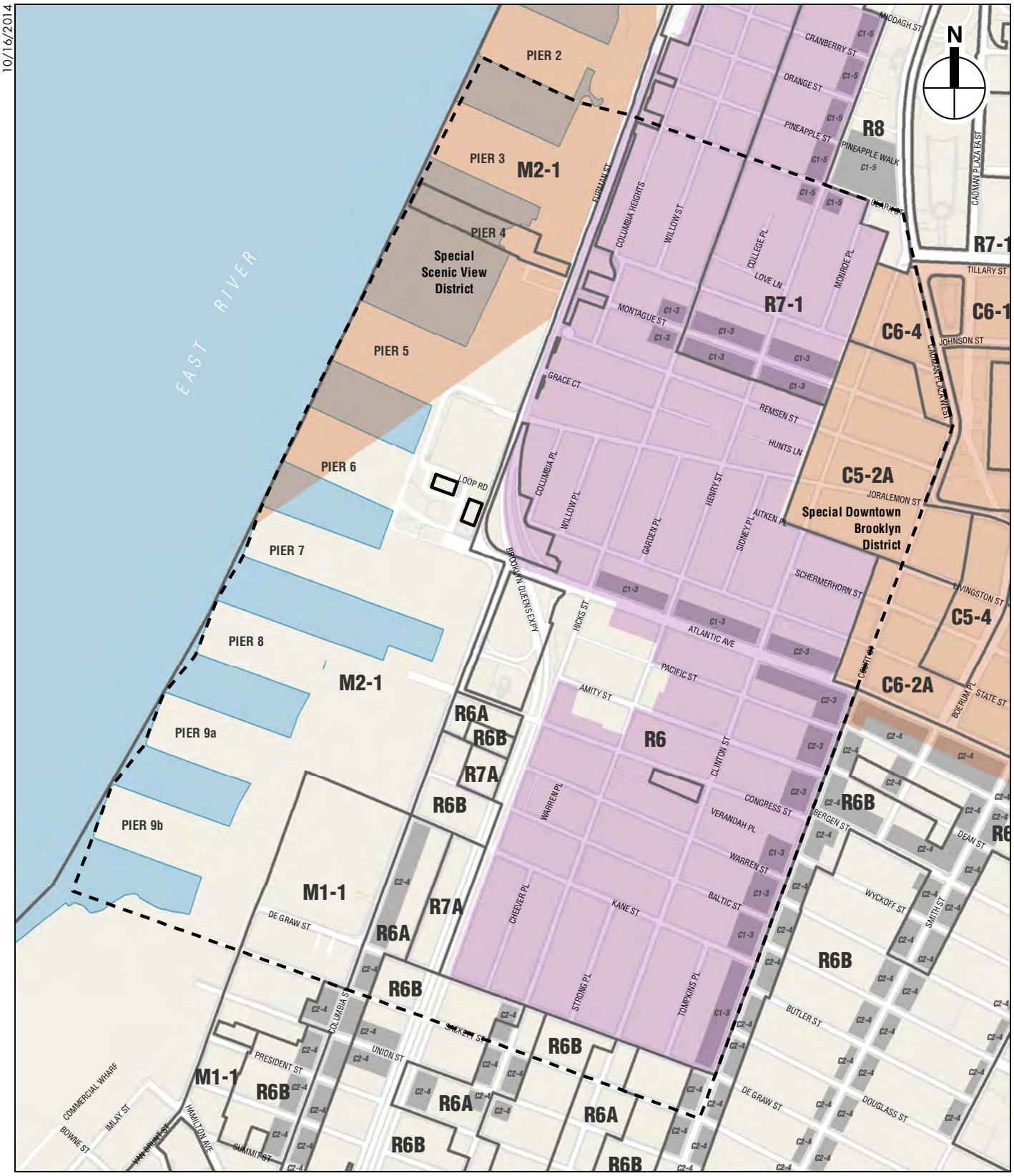

Project Site
Study Area
Zoning Districts
Limited Height District
Special Purpose District
Commercial Overlay Districts

0 1,000 FEET

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Zoning
Figure B.1-2

for each. An assessment of a project's consistency with PlaNYC is not required under CEQR, except in cases of large-scale public projects. As the proposed actions would not constitute a large-scale public project, pursuant to the *CEQR Technical Manual* they would not warrant a review of consistency with PlaNYC.

Waterfront Revitalization Program

The 2005 FEIS analyzed the Brooklyn Bridge Park Project's consistency with coastal zone policies, specifically the New York City Waterfront Revitalization Program (WRP). The development of the Brooklyn Bridge Park Project was found to be consistent with the 10 WRP policies. Since the publication of the 2005 FEIS, revisions to the WRP were approved by the City Council on October 30, 2013. The revisions are intended to reflect policy elements included in DCP's 2011 *Vision 2020* comprehensive waterfront plan, including incorporation of climate change and sea level rise considerations to increase the resiliency of the waterfront area, promotion of waterfront industrial development and both commercial and recreational water-borne activities, increased restoration of ecologically significant areas, and design of best practices for waterfront open spaces.

The changes still must undergo review and approval by the New York State Department of State (NYSDOS) and the U.S. Department of Commerce. The proposed project's consistency with the WRP has been assessed using the 2013 revisions. This is described below, and a NYSDOS Coastal Management Program Coastal Assessment Form has also been prepared (see Attachment A).

THE FUTURE WITHOUT THE PROPOSED PROJECT

Within the present land use study area for the proposed project, the 2005 FEIS only identified one development project anticipated for completion by the Brooklyn Bridge Park Project's 2012 analysis year—360 Furman Street, which has since been completed. As detailed in **Table B.1-1** and **Figure B.1-3**, since the 2005 FEIS, development has continued in the study area, and there are several projects anticipated for completion by the 2018 analysis year. Notable planned projects include the redevelopment of the Long Island College Hospital campus, the program for which is undetermined; the redevelopment of the Brooklyn Heights branch of the Brooklyn Public Library at 280 Cadman Plaza West with a new library space, residential and retail use; and the redevelopment of the Bossert Hotel building at 98 Montague Street, which will include 280 rooms. Three additional projects will add between 60 and 75 residential units each on Remsen Street, Montague Street, and Boerum Place. There are also several single-family unit projects planned throughout the study area. The no build projects are consistent with land use trends described in the 2005 FEIS for this area, which anticipated additional residential uses in the surrounding area and mixed-use development in the Columbia Street Waterfront neighborhood.

PROBABLE IMPACTS OF THE PROPOSED PROJECT

Land Use

The proposed actions would not alter the maximum amount of residential use on the site compared to the analysis in the 2005 FEIS. While the proposed actions would allow more residential units on Parcel B, there would be a corresponding and equivalent reduction in the number of units on Parcel A. In addition to the ground floor retail uses on Parcel B analyzed in the 2005 FEIS, the proposed actions would also allow community facility uses on the ground and second floors of both Parcels A and B, and ground floor retail use on Parcel A. The additional retail use would be compatible with retail use on the ground floor of 360 Furman Street, and the community facility use would complement the surrounding residential and park uses. The proposed project would be compatible with land use trends that have continued in the Columbia Street Waterfront neighborhood, and planned projects in the study area. The potential closure

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Project Site

Study Area

1 *No Build Projects*

0 1,000 FEET

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

No Build Projects
Figure B.1-3

the Loop Road elbow would not affect land use in a way that could cause significant adverse impacts. Therefore, the proposed actions would not result in any significant adverse impacts on land use not previously identified in the 2005 FEIS.

Table B.1-1
Development Projects Planned in the Study Area by 2018

Ref. no.[1]	Project/ Location	Potential Program	Status / Build Year
1	161 Columbia Street	4-story, 5,434 zsf residential use (4 units)	TBD
2	110-118 Congress Street	9, 4-story single-family residential units	Under Construction
3	84 Congress Street	5-story, 6,720-zsf residential use (4 units)	Under Construction / 2015
4	153 Remsen Street	19-story, 75,124-zsf residential use (60 units); 4,576-zsf restaurant and retail use	Under Construction
5	295-299 Hicks Street	3, 4-story single-family residential units	Parking lot
6	158 Kane Street	2-story single-family residence	Under Construction
7	435 Henry Street	4-story single-family residence	Under Construction / 2015
8	96-98 Degraw Street	2, 3-story single-family residential units	Vacant
9	172 Montague Street	19 stories; 134,632 zsf residential (62 units); 13,673 zsf retail	Under construction / 2015
10	Long Island College Hospital (LICH) 339 Hicks Street	800,000 sf of residential use, 135,000 sf of healthcare use	TBD
11	Bossert Hotel 98 Montague Street	Conversion into a 280-room hotel	Under Construction / 2015
12	177 Montague Street	Conversion into a 12-unit residential building	Under Construction
13	Brooklyn Public Library (280 Cadman Plaza West)	20-story building; redevelopment of 21,000-sf library; 132 market rate units; small retail space[2]	2019
14	112 Atlantic Avenue	4-story, 17,355 sf residential use (8 units); 6,000 sf of retail	TBD

Note: 1. See Figure B.1-3 for project locations.
2. The project would also include 114 off-site affordable units, but the exact location is not yet known.
Sources: New York City Department of Buildings; media coverage; field visits in August 2014.

Zoning and Public Policy

Waterfront Revitalization Program

The following policies are new and relevant to the proposed project:

Policy 1.4: In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.

The proposed Pier 6 upland developments are near the Red Hook Significant Maritime Industrial Area (SMIA). The City's six SMIAs were designated in the 1992 Comprehensive Waterfront Plan and encourage concentrated waterfront uses. The Red Hook SMIA begins on the southern border of Atlantic Avenue and encompasses an area along the waterfront southwest to Wolcott Street. The proposed developments would have the buffer of Brooklyn Bridge Park and/or Atlantic Avenue between the buildings and the nearest possible industrial activity. Moreover, the technical analysis for noise, air, and traffic did not indicate the potential for any significant adverse impacts. Further, in accordance with Policy 1.4, the lease for the proposed development would require that the developer disclose to potential residents that the development is located within one block of the Red Hook SMIA and that active

industrial uses are present in the SMIA consistent with City policy. For these reasons, the proposed project would be consistent with this policy.

Policy 1.5: Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published by the NPCC, or any successor thereof) into the planning and design of projects in the city's Coastal Zone.

The New York City Panel on Climate Change (NPCC) projects that by the 2080s, sea levels would likely be between 18 and 39 inches higher than they are today (based on mid-range projections) and may increase by as much as 58 inches (90th percentile projections). As noted in the 2005 FEIS, the design and construction of the Pier 6 upland residential buildings would include measures to minimize potential floodplain impacts and losses due to flooding. The project's design would take into account potential sea level rise due to climate change and would include measures to address resiliency.

In evaluating a building's resiliency for future sea level rise, it is important to understand the resiliency measures incorporated into the New York City Building Code. The Building Code has a long history of leadership in the field of flood resiliency. Starting in 1983, the City adopted standards into the Building Code to ensure that buildings in New York would incorporate nationally recognized flood-resistant construction methodologies. The City, State and Federal standards for flood resiliency are incorporated into Appendix G of the Building Code, which outlines the flood-resilient construction techniques that are required for buildings in the 100-year floodplain (the area which would potentially flood with a probability of 1 percent in any given year). These requirements include dry flood-proofing to ensure watertight structures, wet flood-proofing, to allow for flood drainage, and elevating structures above the 100-year flood plain level.

More recently, the City has updated the Building Code in response to Hurricane Sandy to improve the resiliency of all new buildings in flood zones. Specifically, an emergency rule was issued in January 2013 adopting the New York State Building Codes elevation standards, which exceed those required by the National Flood Insurance Program (NFIP) by requiring minimum base flood elevations to exceed the current 100-year floodplain elevations. The City also adopted the new preliminary FEMA flood maps, with flood elevations raised due to the most recent reevaluation of current conditions. The project is located in an area with a current 100-year flood elevation of 11 feet NAVD88. Lastly, in response to the recommendations issued by the City's Building Resiliency Task Force and Special Initiative for Rebuilding and Resiliency, the City adopted a series of technical measure in several Local Laws, including elevating critical systems, to further strengthen the New York City Building Code's flood resiliency to current flood conditions.

The lease for the proposed developments on the Pier 6 upland will require the buildings to comply with the New York City Building Code and thus incorporate the Building Code's many resiliency measures. The proposed buildings would include preemptive design decisions to not only be responsive to the risk of flooding due to current storm flood levels, but also to future storm flood levels when accounting for future sea level rise. These preemptive measures include either raising all utility infrastructure to, at minimum, the second floor, and/or enclosing systems below 16 feet NAVD88 (the 100-year flood level projected for 2080), that could not be raised, in a watertight enclosure as appropriate. These utilities would include:

- Electrical service;

- Incoming telephone and data connection and distribution rooms and other related building technology spaces;
- Chilled water plant;
- Hot water boiler plant;
- Domestic hot water heaters;
- Building heating systems; and
- Fuel oil storage tank.

The buildings would have backup generators, likely located on the buildings' roofs.

There would not be any residential units located on the ground floor of either building—since the ground floor is required to be elevated one foot above current 100-year flood level, second floor residential units would all be above the 16 feet NAVD88 (the 100-year flood level projected for 2080). These preemptive measures are all either required by the NYC Building Code or will be enforceable through the lease for the proposed developments. If rising sea levels require additional modifications, such as flood proofing the outer perimeter of the ground floor, these modifications would be possible at a later date and are not inhibited by any of the proposed project designs. Therefore, the proposed project would be consistent with these policies.

Policy 5.5: Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.

While the proposed project is not expected to implement grey-water strategies (e.g., capacity increases at wastewater treatment plants or the construction of new detention facilities and pumping stations), the 2005 FEIS committed to implementation of a Stormwater Pollution Prevention Plan (SWPPP) during construction and operation and stormwater management to minimize impacts on water quality and aquatic biota from discharge of stormwater during construction and operation of the park. These commitments have been executed, as needed, with the development of portions of the Brooklyn Bridge Park Project.

The following policy has not been revised since the FEIS, but is relevant to the proposed project in light of changed background conditions (specifically Hurricane Sandy).

Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.

As described above, the proposed buildings would comply with Building Code, which has been updated to improve the resiliency of all new buildings in flood zones. In addition, the proposed buildings would include preemptive design decisions to be responsive to the risk of flooding due to current and future storm flood levels, as detailed above. If rising sea levels require additional modifications, such as flood proofing the outer perimeter of the ground floor, these modifications could be made at a later date and are not inhibited by any of the proposed project designs. Therefore, the modified proposed project would be consistent with this policy.

B.2 SOCIOECONOMIC CONDITIONS

The proposed project continues to be located on a portion of the Brooklyn Bridge Park Project area that does not contain any residents and the maintenance garage and storage sheds formerly located on the site have been demolished. Therefore, as analyzed in the 2005 FEIS, there would be no adverse impacts due to direct residential or business displacement. The proposed project would also not increase the number of residential units analyzed in the 2005 FEIS. Residential development has continued in the study area,

generally consistent with trends identified in the 2005 FEIS. As predicted in the FEIS, relative to the study area as a whole, there has been less new development in Brooklyn Heights, which is an historic and largely built-out neighborhood. However, at the time of the FEIS, there were no planned projects in the Columbia Street Waterfront District. As discussed above, since the 2005 FEIS, residential development has increased in that area, and it has become more mixed use in character. Overall, trends since the 2005 FEIS indicate increasing residential development throughout the study area, which is compatible with the proposed project. In addition, the proposed project would add affordable housing to the study area, which would help ensure housing opportunities for lower-income residents and would help maintain a more diverse demographic composition within the study area. Therefore there would be no potential for the proposed actions to alter the conclusions of the 2005 FEIS with respect to indirect residential displacement due to increased property values or rents. The small proposed retail and community facility space would not be expected to substantially increase the number of employees on the project site, nor would these uses introduce trends that could change socioeconomic character of the study area. Therefore, the proposed project would not result in any new significant adverse socioeconomic impacts not disclosed in the 2005 FEIS.

B.3 COMMUNITY FACILITIES AND SERVICES

The program analyzed in the 2005 FEIS did not exceed the *CEQR Technical Manual* thresholds warranting an analysis of libraries, health care facilities, police and fire, or day care facilities; however, it did warrant an analysis of elementary and intermediate schools. The FEIS concluded that because the Brooklyn Bridge Park Project would increase utilization of elementary schools to only 75 percent and intermediate schools to only 69 percent in Region 2 of Community School District (CSD) 13, the Brooklyn Bridge Park Project would not result in significant adverse impacts to elementary schools or intermediate schools.

The proposed project would not physically displace or alter any existing community facilities, and would therefore not result in any direct effects on community facilities. However, since the 2005 FEIS, the residential population in the area has grown, increasing demand for community facilities and services, and warranting a reassessment of community facility impacts. The proposed project would not exceed the *CEQR Technical Manual* thresholds for Brooklyn for the following community facilities: public child care services (threshold is 110 low- to moderate-income residential units), libraries (threshold is 734 residential units), health care facilities (threshold is the introduction of a sizable new neighborhood), fire and police protection services (threshold is the introduction of a sizable new neighborhood), or public high schools (threshold is 1,068 residential units). However, the proposed project would exceed the *CEQR Technical Manual* threshold warranting an analysis of potential impacts on public elementary and intermediate schools. Therefore, an assessment was conducted to determine whether the proposed project, considering relevant changes in background conditions, would result in any significant adverse impacts to public schools not previously identified in the 2005 FEIS.

PUBLIC SCHOOLS

Following the methodologies in the *CEQR Technical Manual*, the study area for the analysis of elementary and intermediate schools is the school districts' "sub-district" (also known as "regions" or "school planning zones") in which the project is located. The project site is located in Sub-district 2 of Community School District (CSD) 13. According to the most recent enrollment/capacity/utilization data (for the 2013-2014 school year), there are eight elementary schools with 3,279 students and seven intermediate schools with 1,849 students in Sub-district 2/CSD 13. Elementary schools are operating at 98.14 percent utilization with a surplus of 62 seats and intermediate schools are operating at 62.83 percent utilization with a surplus of 1,094 seats.

Future conditions are predicted based on School Construction Authority (SCA) enrollment projections and data obtained from SCA's Capital Planning Division on the number of new housing units and students expected at the sub-district level. The future utilization rate for school facilities is calculated by adding the estimated enrollment from proposed residential projects in the schools' study area to Department of Education's (DOE's) projected enrollment, and then comparing that number with projected school capacity. In accordance with the *CEQR Technical Manual*, projected school capacity does not include temporary classroom buildings or charter school seats. Elementary school utilization is projected to grow in Sub-district 2/CSD 13, from 3,279 students under existing conditions to 4,697 students by 2018 (140.59 percent utilization). Intermediate school utilization is also projected to grow, from 1,849 students under existing conditions to 2,359 students by 2018 (80.16 percent utilization).

According to *CEQR Technical Manual* methodologies, new capacity from new school projects identified in the DOE Five-Year Capital Plan are included if construction has begun or if deemed appropriate to include in the analysis by the lead agency and the SCA. One new intermediate school is identified for the sub-district in the current capital plan. I.S. 611, located at 60 Water Street, is expected to open in 2016 and provide 333 new seats. Additionally, the Proposed 2014-2019 Capital Plan for new school construction designates funding for 757 seats for an elementary and intermediate school facility in District 13. However, as a conservative measure, this additional capacity is not included in the quantitative analysis. If this additional capacity were taken into consideration, utilization rates could be somewhat lower in the future with or without the proposed project.

Based on the proposed development of approximately 430 incremental residential units and the student generation rates provided in the *CEQR Technical Manual* (0.29 elementary and 0.12 intermediate students per housing unit in Brooklyn), the proposed project would generate approximately 125 elementary school students and 52 intermediate school students.

While the new elementary school students would add to the predicted shortfall in 2018, it would not be to a degree considered significant following the guidance of the *CEQR Technical Manual*. According to the *CEQR Technical Manual*, a project may result in a significant adverse impact to schools if it would result in both a collective utilization rate of the elementary or intermediate schools of 100 percent or more in the future with the proposed project and an increase of five percent or more in the collective utilization rate as a result of the proposed project. Enrollment for elementary schools would increase by 3.74 percent (from 140.59 to 144.33 percent utilization) in the future with the proposed project. Intermediate school utilization would increase by 1.77 percent in the future with the proposed project, but would remain below 100 percent (from 80.16 to 81.92 percent). While utilization would be above 100 percent for elementary schools, the percentage point increases for both elementary and intermediate schools would be below the 5 percentage point change that is considered a significant adverse impact. Therefore, the proposed project is not expected to result in any significant adverse impacts to public schools.

B.4 OPEN SPACE

The Brooklyn Bridge Park Project analyzed in the 2005 FEIS would provide a net increase of 68.8 acres of open space for passive and active recreational use. The 2005 FEIS concluded that the development of the Brooklyn Bridge Park Project would result in substantial beneficial effects to open space conditions and would not result in any significant adverse impacts on open space.

While the proposed project would not result in an increase in residential population as compared to the project analyzed in the 2005 FEIS, demand for and supply of open space has changed since the FEIS. The residential population in the study area has grown, and new open spaces have been developed, primarily in the park. Due to changed background conditions since the 2005 FEIS, a preliminary assessment was conducted to examine the effects of the added population on the active and passive public open spaces in

the study area and to determine whether the population increase would significantly impact the local open spaces. According to *CEQR Technical Manual* methodology, a preliminary assessment is used to determine the need for a more detailed open space analysis. If the preliminary assessment indicates the need for further analysis, then a detailed analysis of open space is performed. Since the proposed development would result in a nominal increase in commercial space, an assessment of potential impacts on the non-residential (worker) population is not warranted.

PRELIMINARY ASSESSMENT

A preliminary assessment of open space consists of calculating total residential and worker population, tallying the open space acreage within the ½-mile study area, and comparing the open space ratios for the future without and with the proposed project with the City's acceptable open space ratios.

As detailed in **Table B.4-1**, the study area contains eight open spaces that provide approximately 36.38 acres of open space.

Table B.4-1
Existing Open Space Resources Within the Residential Study Area

Name/Address	Owner/Agency	Features	Total Acres	Active Acres	Passive Acres
Brooklyn Bridge Park	BBP				
Pier 6 Upland		Sand volleyball courts, paths, seating, promenade, seating, playground area including water play, tot lot, and active play area	7.00	2.80	4.20
Pier 5		Multi-use recreation fields, play area, promenade, paths, seating	5.30	4.77	0.53
Pier 2-4 Upland		BBP Greenway, granite terrace, sculpture, lawn areas, seating	6.20	1.55	4.65
Pier 2		In-line and ice skating rink, handball, basketball, basketball, and bocce courts, play equipment, exercise equipment, paths, seating	4.60	4.14	0.46
Pier 4 Beach		Beach and tidal pool	1.30	0.00	1.30
Brooklyn Heights Promenade	DPR	Esplanade with vistas, playgrounds, sitting areas, trees, plants	2.56	1.02	1.54
111 Livingston Street		Seating	0.13	0.00	0.13
Adam Yauch Park	DPR	Benches, playground equipment, game tables, fitness equipment, dog run, comfort station, spray showers, sculpture, trees, plantings, basketball courts, community garden	1.36	0.68	0.68
Van Vorhees Park	DPR	Tennis, handball, and basketball courts, asphalt play area, play equipments, swings, comfort station, spray showers, sculpture, benches, flowers and trees	5.74	2.88	2.88
LICH Open Spaces	LICH	Playgrounds, seating	0.93	0.39	0.54
Cobble Hill Park	DPR	Play equipment, landscaping, trees, benches, tables	0.59	0.13	0.46
P.S. 29 Playground	DOE	Mostly paved play area, play equipment	0.67	0.67	0.00
		Total Existing Open Space, Residential Study Area	**36.38**	**19.03**	**17.37**

Sources: Brooklyn Bridge Park Development Corporation; New York City Department of Parks and Recreation; 2005 *Brooklyn Bridge Park Project Final Environmental Impact Statement (FEIS)*; field visits August 2014.

As shown in **Table B.4-2**, the study area also contains approximately 25,835 residents. With the proposed development, there would be approximately 801 new residents. The total open space ratio between the No Action and With Action conditions would be reduced from 1.91 to 1.86 acres per 1,000 residents. According to the *CEQR Technical Manual*, if a potential decrease in an open space ratio does not exceed

5 percent, it is generally not considered to be a substantial change warranting a detailed analysis. As shown in the table, the total open space ratio, and the active and passive open space ratios would all decrease by approximately 2.76 percent. Additionally, the open space ratio in the With Action condition would remain above the citywide average of 1.5 acres per 1,000 residents. Therefore, a detailed open space assessment is not warranted, and the proposed development would not result in any significant adverse impacts on open space resources.

Table B.4-2
Adequacy of Public Open Space Resources in the Study Area

	Existing Condition	No Action	With Action
Study Area Population[1,2]			
Residents	25,835	28,285	29,086
Open Space Acreage[3]			
Total	36.38	53.98	53.98
Passive	17.37	26.51	26.51
Active	19.03	27.49	27.49
Open Space Ratios (acres per 1,000 residents)			
Total/Residents	1.41	1.91	1.86
Passive/Residents	0.67	0.94	0.91
Active/Residents	0.74	0.97	0.94
Percent Change, No Action to With Action			
Total/Residents			-2.76%
Passive/Residents			-2.76%
Active/Residents			-2.76%

Notes: Planning Goal Ratios: 2.5 total acres/1,000 residents; 0.5 passive acres/1,000 residents; 2.0 active acres/1,000 residents

City-wide Average Opens Space for Residents: 1.5 total acres/1,000 residents

1. Existing residential totals based on 2010 U.S. Census populations for Census Tracts 3.01, 5.01, 5.02, 7, 9, 45, 47, and 49.

2. The residential population in the future without the proposed project was estimated by applying the weighted average household size for the study area (1.86 persons per household) to the number of new dwelling units expected to be added by developments in the study area.

3. See Table B.4-1.

Sources: Brooklyn Bridge Park Development Corporation; New York City Department of Parks and Recreation; 2005 *Brooklyn Bridge Park Project Final Environmental Impact Statement (FEIS)*; field visits August 2014.

B.5-SHADOWS

The proposed buildings would fall within the maximum building envelope analyzed in the 2005 FEIS and the heights of the two buildings would not increase from what was analyzed in the 2005 FEIS. Since the issuance of the FEIS, no sunlight-sensitive resources have been added to the area beyond those considered in the FEIS. Therefore, the proposed actions would not result in any new significant adverse shadows impacts not disclosed in the 2005 FEIS.

B.6 HISTORIC AND CULTURAL RESOURCES

As described above, the proposed project would not change the building heights or overall building envelopes analyzed in the 2005 FEIS. The proposed project would not result in any additional ground

disturbance that could affect archaeological resources. Therefore, the proposed actions would not result in any additional adverse impacts to historic and cultural resources beyond those previously disclosed in the 2005 FEIS. Changed background conditions would not affect the potential for the proposed project to result in significant adverse impacts to historic or cultural resources. Therefore, the proposed actions would not result in any new significant adverse impacts to historic and cultural resources not disclosed in the 2005 FEIS. For the same reason, the proposed project would not require modifications to the commitments contained in a Letter of Resolution (LOR) among the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), the Empire State Development Corporation (ESDC), and BBPDC executed in January 2006 pursuant to Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law, and amended in 2009 and 2010, committing to further testing, and if appropriate, development of mitigation measures in consultation with OPRHP.

B.7 URBAN DESIGN AND VISUAL RESOURCES

The proposed buildings would fall within the same building envelope analyzed in the 2005 FEIS. Since the issuance of the FEIS, the urban design of the area has been improved with the development of the project area, and new visual resources have been added as the park project has been developed. These changes are in line with the analysis presented in the FEIS. Therefore, the proposed actions would not result in any new significant adverse impacts to urban design and visual resources not disclosed in the 2005 FEIS.

B.8 NATURAL RESOURCES

Compared to what was analyzed in the 2005 FEIS, the proposed actions would not increase the amount of impervious surface on the Pier 6 upland area, and therefore would not affect flooding in or near the Brooklyn Bridge Park Project area or increase the amount of surface runoff. The construction of the two proposed buildings would comply with all relevant stormwater management commitments and permitting requirements. Since the issuance of the FEIS, no changes in background conditions have occurred that would affect the proposed project's potential to result in significant adverse impacts on natural resources. The proposed development would not displace any natural habitats or affect any threatened and endangered species, and would have no potential impacts on natural resources. Therefore, the proposed actions would not result in any new significant adverse impacts to natural resources not disclosed in the 2005 FEIS.

B.9 HAZARDOUS MATERIALS

No additional subsurface disturbance would result from the proposed actions beyond what was considered in the 2005 FEIS. Changed background conditions would not affect the potential for the proposed project to result in significant adverse impacts due to hazardous materials. Construction and any soil disruption activity for the proposed buildings would follow all relevant remediation commitments outlined in the 2005 FEIS and the September 2013 Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP). Therefore, the proposed actions would not result in any new significant adverse impacts due to hazardous materials not disclosed in the 2005 FEIS.

B.10 WATER AND SEWER INFRASTRUCTURE

The proposed actions would not increase the number of residential units analyzed in the 2005 FEIS, and would therefore not substantially increase infrastructure demand beyond what was analyzed in the 2005 FEIS. The construction of the proposed buildings would comply with all relevant permitting requirements and stormwater management commitments, such as the Stormwater Pollution Prevention Plan (SWPPP).

While new development in the area since the FEIS has increased demand for water supply, sanitary and stormwater sewers and sewage treatment, capacity for these services is still adequate (based on data from the New York City Department of Environmental Protection, the Red Hook Wastewater Treatment Plant operates at less than half of its permitted capacity, with estimated dry weather flows of 28 million gallons per day and a capacity of 60 million gallons per day). Therefore, the proposed actions would not result in any new significant adverse impacts on infrastructure services not disclosed in the 2005 FEIS.

B.11 SOLID WASTE AND SANITATION SERVICES

The proposed actions would not increase the number of residential units analyzed in the 2005 FEIS, and therefore the proposed project would not result in a substantial increase in the amount of solid waste generated by the proposed buildings. Solid waste and sanitation services have not changed substantially since the FEIS and, as indicated in the 2014 *CEQR Technical Manual*, the capacity of the New York City Department of Sanitation (DSNY) to serve New York City is sufficiently flexible to accommodate increased demand for waste and recyclables collection generated by most proposed projects as needed. Therefore, the proposed actions would not result in any new significant adverse impacts on solid waste and sanitation services not disclosed in the 2005 FEIS.

B.12 ENERGY

The proposed actions would not increase the number of residential units analyzed in the 2005 FEIS, and therefore the proposed project would not result in a substantial increase to energy consumption beyond what was analyzed in the 2005 FEIS. Energy infrastructure has not changed substantially since the FEIS, and, as indicated in the 2014 *CEQR Technical Manual*, a detailed assessment of energy impacts would be limited to projects that may significantly affect the transmission or generation of energy. Therefore, the proposed actions would not result in any new significant adverse impacts on infrastructure services not disclosed in the 2005 FEIS.

B.13 TRANSPORTATION

As discussed above, consistent with the previous approvals for the Brooklyn Bridge Park Project, the proposed Pier 6 upland project would involve the redevelopment of the two development parcels on the project site. Together, they would include up to 430 residential units, community facility and commercial uses, and up to 72 parking spaces. Based on trip generation estimates, a restaurant would generate higher vehicle trips and comparable person trips when compared to local retail, and a universal pre-K would generate higher vehicle and person trips than other types of community facility uses. Therefore, for the purposes of the transportation analysis, the community facility and commercial uses are conservatively assumed to be a 5,000 sf restaurant, and a 10,000 sf universal pre-K accommodating up to 75 students.

CEQR SCREENING METHODOLOGY AND ANALYSES

The 2014 *CEQR Technical Manual* identifies procedures for evaluating a proposed project's potential impacts on traffic, parking, transit, and pedestrian conditions. This methodology begins with the preparation of a trip generation analysis to determine the volume of trips associated with the proposed project. The results are then compared to *CEQR Technical Manual*-specified thresholds (Level 1 screening analysis) to determine whether additional quantified analyses are warranted. If the proposed project would result in 50 or more peak hour vehicle trips or 200 or more peak hour transit or pedestrian trips, a Level 2 screening analysis would be undertaken.

For a Level 2 screening assessment, project-generated trips are assigned to specific intersections, transit routes, and pedestrian elements. If the result of this analysis determines that the proposed project would

generate 50 or more peak hour vehicle trips per intersection, 50 or more peak hour bus riders on a bus route in a single direction, 200 or more peak hour subway passengers per station, or 200 or more peak hour pedestrian trips per pedestrian element, further quantitative analyses may be warranted to assess the potential impacts on transportation conditions.

TRIP GENERATION ANALYSIS

Travel demand factors for the proposed project were based on information provided in the *CEQR Technical Manual*, the U.S. Census, the 2005 *Brooklyn Bridge Park Project FEIS*, and other established sources and approved studies, as presented in **Table B.13-1**. According to the *CEQR Technical Manual*, transportation analyses of potential impacts associated with residential uses are conducted for weekday peak hours, as presented below. In addition, taking into account the full program for analysis, which includes a pre-K component, the overall number of incremental trips would be highest on weekdays.

Table B.13-1
Travel Demand Factors

Use	Residential			Restaurant			School - Staff			School - Student			School - Parent		
Total Daily Person Trip	(1) Weekday 8.075 Trips / DU			(2) Weekday 173.0 Trips / KSF			(1) Weekday 2.0 Trips / Staff			(1) Weekday 2.0 Trips / Student			(1)(6) Weekday 4.0 Trips / Parent		
Trip Linkage	0%			0%			0%			0%			0%		
Net Daily Person trip	Weekday 8.075 Trips / DU			Weekday 173.0 Trips / KSF			Weekday 2.0 Trips / Staff			Weekday 2.0 Trips / Student			Weekday 4.00 Trips / Parent		
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**
Temporal	(1)			(2)			(1)			(1)			(1)(6)		
	10%	5%	11%	1.0%	13.7%	7.7%	40%	0%	40%	49.5%	0.0%	49.5%	49.5%	0.0%	49.5%
Direction	(2)			(2)			(4)			(4)			(4)		
In	16%	50%	67%	94%	65%	65%	100%	50%	0%	100%	50%	0%	50%	50%	50%
Out	84%	50%	33%	6%	35%	35%	0%	50%	100%	0%	50%	100%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(3)			(2)			(5)			(4)			(4)		
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**
Auto	9.0%	9.0%	9.0%	30.0%	30.0%	30.0%	33.0%	33.0%	33.0%	19.0%	19.0%	19.0%	0.0%	0.0%	0.0%
Taxi	2.0%	2.0%	2.0%	5.0%	5.0%	5.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Subway	70.0%	70.0%	70.0%	5.0%	5.0%	5.0%	40.0%	40.0%	40.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%
Bus	2.0%	2.0%	2.0%	5.0%	5.0%	5.0%	14.0%	14.0%	14.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%
School Bus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%
Walk	17.0%	17.0%	17.0%	55.0%	55.0%	55.0%	12.0%	12.0%	12.0%	71.0%	71.0%	71.0%	100.0%	100.0%	100.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(2)(3) Weekday			(2) Weekday			(5) Weekday			(4) Weekday					
Auto	1.17			2.20			1.10			1.75					
Taxi	1.40			2.30			1.10			1.75					
School Bus	N/A			N/A			N/A			7.0					
Daily Delivery Trip Generation Rate	(1) Weekday 0.06 Delivery Trips / DU			(2) Weekday 3.60 Delivery Trips / KSF						(4) Weekday 0.03 Delivery Trips / Student					
	AM	**MD**	**PM**	**AM**	**MD**	**PM**				**AM**	**MD**	**PM**			
Delivery Temporal	(1)			(2)						(4)					
	12%	9%	2%	6.0%	6.0%	1.0%				9.6%	11.0%	1.0%			
Delivery Direction	(1)			(2)						(4)					
In	50%	50%	50%	50%	50%	50%				50%	50%	50%			
Out	50%	50%	50%	50%	50%	50%				50%	50%	50%			
Total	100%	100%	100%	100%	100%	100%				100%	100%	100%			

Sources:
(1) 2014 *CEQR Technical Manual*
(2) *Brooklyn Bridge Park Project FEIS (*2005)
(3) U.S. Census Bureau, ACS 2008-2012 Five-Year Estimates - Journey-to-Work (JTW) Data
(4) Based on data from *Atlantic Yards Arena and Redevelopment Project FSEIS*, 2014
(5) U.S. Census Bureau, ACS 2006-2010 Five-Year Estimates - Reverse Journey-to-Work (RJTW) Data
(6) Assumes 1 parent for every 2 students walking to school and the same temporal distribution as students.

As summarized in **Table B.13-2,** the proposed project is forecast to generate approximately 487, 294, and 582 person trips and 61, 43, and 70 vehicle trips during the weekday AM, midday, and PM peak hours, respectively.

Table B.13-2
Trip Generation Summary: Proposed Project

Peak Hour	In/Out	Person Trip							Vehicle Trip				
		Auto	Taxi	Subway	Bus	School Bus	Walk	Total	Auto	Taxi	School Bus	Delivery	Total
AM	In	23	1	46	4	0	94	168	15	5	0	3	23
	Out	26	6	204	6	0	77	319	30	5	0	3	38
	Total	49	7	250	10	0	171	487	45	10	0	6	61
Midday	In	31	6	65	6	0	57	165	17	5	0	2	24
	Out	20	4	63	4	0	38	129	12	5	0	2	19
	Total	51	10	128	10	0	95	294	29	10	0	4	43
PM	In	36	7	181	7	0	95	326	34	7	0	0	41
	Out	34	4	96	7	0	115	256	22	7	0	0	29
	Total	70	11	277	14	0	210	582	56	14	0	0	70

LEVEL 1 SCREENING

Traffic

As summarized in **Table B.13-2**, the incremental vehicle trips generated by the proposed project would be 61, 43, and 70 during the weekday AM, midday, and PM peak hours, respectively. Since the incremental vehicle trips would be greater than 50 vehicles during the weekday AM and PM peak hours, a Level 2 screening assessment (presented in the section below) was conducted to determine if there is a need for additional quantified traffic analyses.

Transit

The proposed project is located in the vicinity of multiple transit options including the Court Street Station (R train), Borough Hall Station (No. 2, 3, 4, and 5 trains), Jay Street/MetroTech Station (A, C, F, and R trains), and Bergen Street Station (F and G trains), as well as New York City Transit (NYCT) B61 and B63 local bus routes (See **Figure B.13-1)**. As detailed in **Table B.13-2**, the incremental transit trips generated by the proposed project would be 250, 128, and 277 person trips by subway during the weekday AM, midday, and PM peak hours, respectively. The subway trips would be dispersed onto the area's multiple subway stations/lines such that no single subway station/line would exceed the *CEQR Technical Manual* analysis threshold of 200 or more peak hour subway trips per station. Therefore, a detailed analysis of subway facilities is not warranted and the proposed project is not expected to result in any significant adverse subway impacts.

The proposed project is estimated to generate 10, 10, and 14 incremental bus trips and 55, 28, and 61 incremental subway-to-bus transfer trips in the weekday AM, midday, and PM peak hours, respectively. The incremental bus trips and subway-to-bus trips would be dispersed onto the B61 and B63 bus routes such that no single bus route would exceed the *CEQR Technical Manual* analysis threshold of 50 or more peak hour bus riders in a single direction. Therefore, a detailed bus line-haul analysis is also not warranted and the proposed project is not expected to result in any significant adverse bus line-haul impacts.

Pedestrians

As summarized in **Table B.13-2**, the estimated incremental pedestrian trips are 487, 294, and 582 in the weekday AM, midday, and PM peak hours, respectively. Because the incremental pedestrian trips would be greater than 200 during all peak hours, a Level 2 screening assessment (presented in the section below) was conducted to determine if there is a need for additional quantified pedestrian analyses.

11.5.14

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Pier 6–Public Transit Options
Figure B.13-1

LEVEL 2 SCREENING

As part of the Level 2 screening assessment, project-generated trips were assigned to specific intersections and pedestrian elements near the project site. As previously stated, further quantified analyses to assess the potential impacts of the proposed project on the transportation system may be warranted if the trip assignments were to identify key intersections incurring 50 or more peak hour vehicle trips or pedestrian elements incurring 200 or more peak hour pedestrian trips.

Potential Loop Road Elbow Closure

Potential closure of the Loop Road elbow, which is a private park road that lies between Parcel A and open spaces to the south and west is under consideration. Such closure would require consultation with Metropolitan Transportation Authority (MTA) and possibly the New York City Fire Department (FDNY). As the Loop Road elbow is not a City Street, it would not require consultation with the New York City Department of Transportation. The Loop Road elbow primarily serves as a layover area for the B63 bus route. In the event a site plan is selected which entails a closing of the Loop Road elbow, there would be a modest reassignment of project and baseline traffic; however this potential modification to the circulation plan would not alter the conclusions presented below.

Traffic

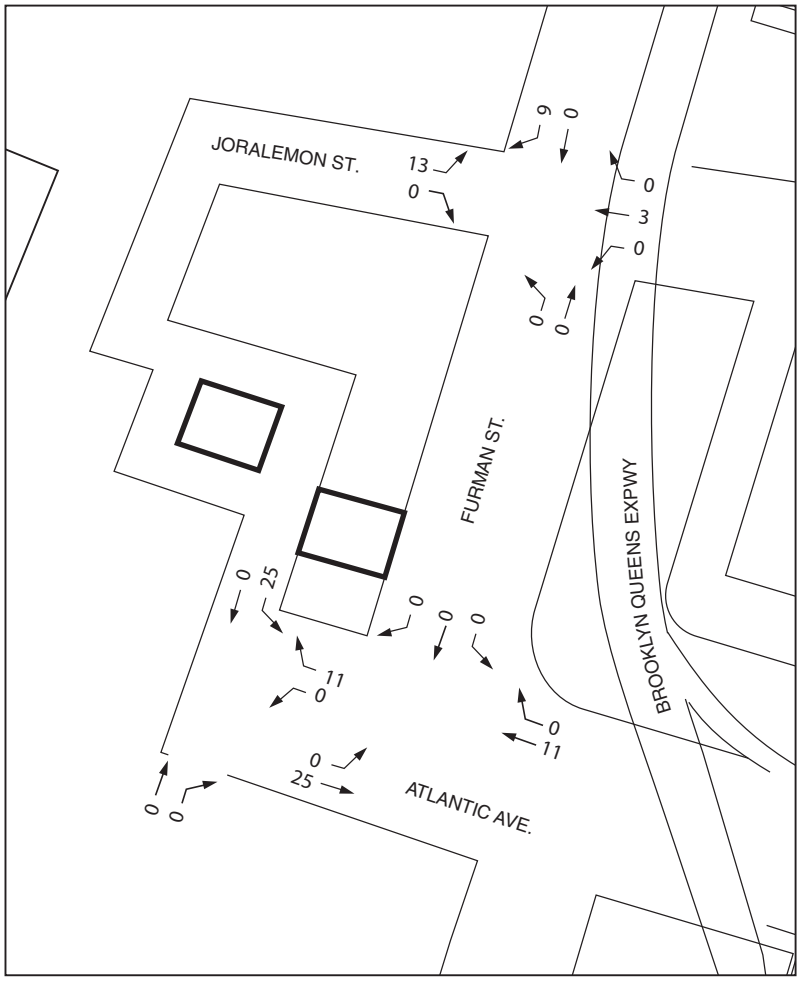
The weekday AM and PM peak hours vehicle trips were assigned to area intersections based on the most likely travel routes to and from the two development parcels, prevailing travel patterns, commuter origin-destination (O-D) summaries from the census data, the configuration of the roadway network, and the anticipated locations of site access and egress. Auto trips were assigned to the new accessory garages at the two development parcels with access and egress from the Loop Road. Site plan options for the two development parcels could include a potential curb cut along Furman Street to provide access and egress to the Parcel B on-site parking garage. However, since auto trips would still have to travel through the Furman Street intersections at Joralemon Street and Atlantic Avenue in order to access the garage, the curb cut would not materially affect the volume of auto trips traveling through these two Furman Street intersections. Taxi trips were assigned to the various block faces of the development sites along the Loop Road. All delivery trips were assigned to the development parcels via NYCDOT designated truck routes.

As shown in **Figure B.13-2**, intersections adjacent to and near the development parcels are expected to incur fewer than 50 (maximum of 36) vehicle trips from the proposed project during the weekday AM and PM peak hours. Based on criteria described in the *CEQR Technical Manual*, a detailed traffic analysis with intersection capacity and delay results is not warranted and the proposed project is not expected to result in any significant adverse traffic impacts.

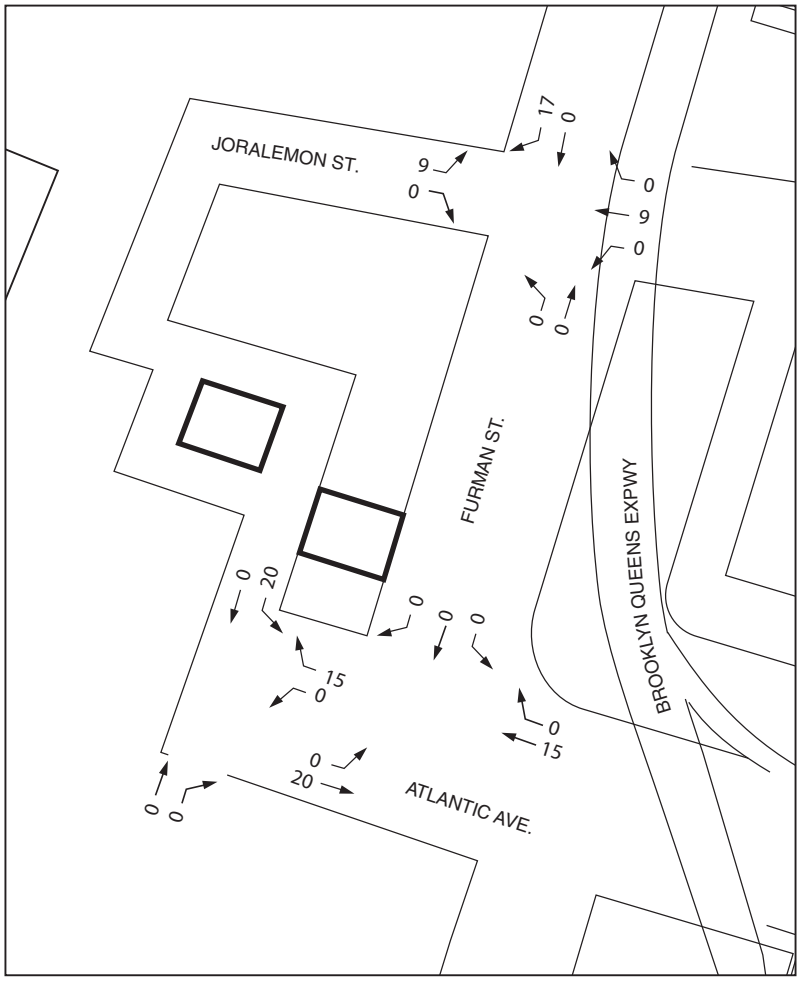
Pedestrians

Level 2 pedestrian trip assignments were individually developed for all the proposed development components and are shown in **Figure B.13-3** and discussed below. This analysis relied on the following assumptions.

- Auto Trips – Motorists would park at the project site's off-street parking facilities.
- Taxi Trips – Taxi patrons would be dropped off and picked up along the Loop Road adjacent to the two buildings on the project site.
- City Bus Trips – City bus riders would use buses stopping on Atlantic Avenue, Columbia Street, and Loop Road, and would utilized bus stops nearest to the project site.



Weekday AM Peak Hour



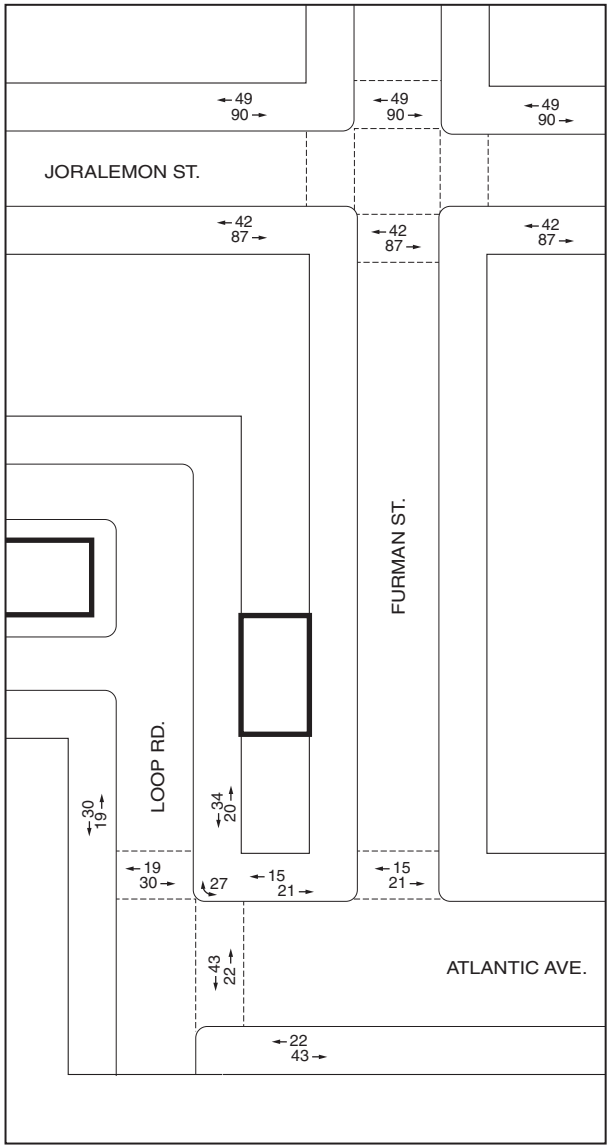
Weekday PM Peak Hour

Project Site

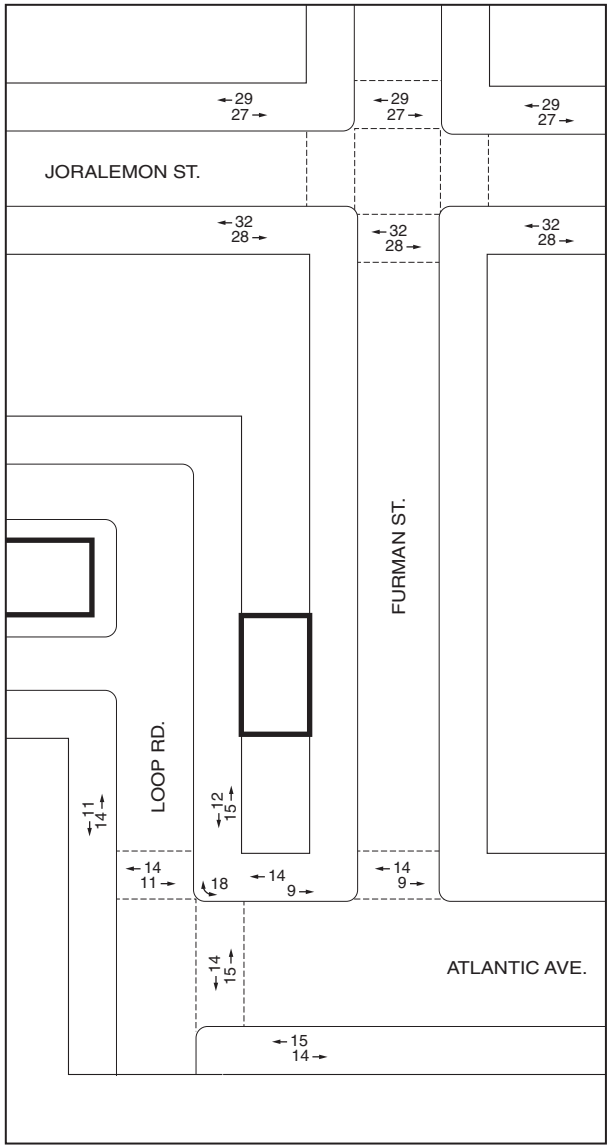
BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Project Generated Vehicle Trips
Figure B.13-2

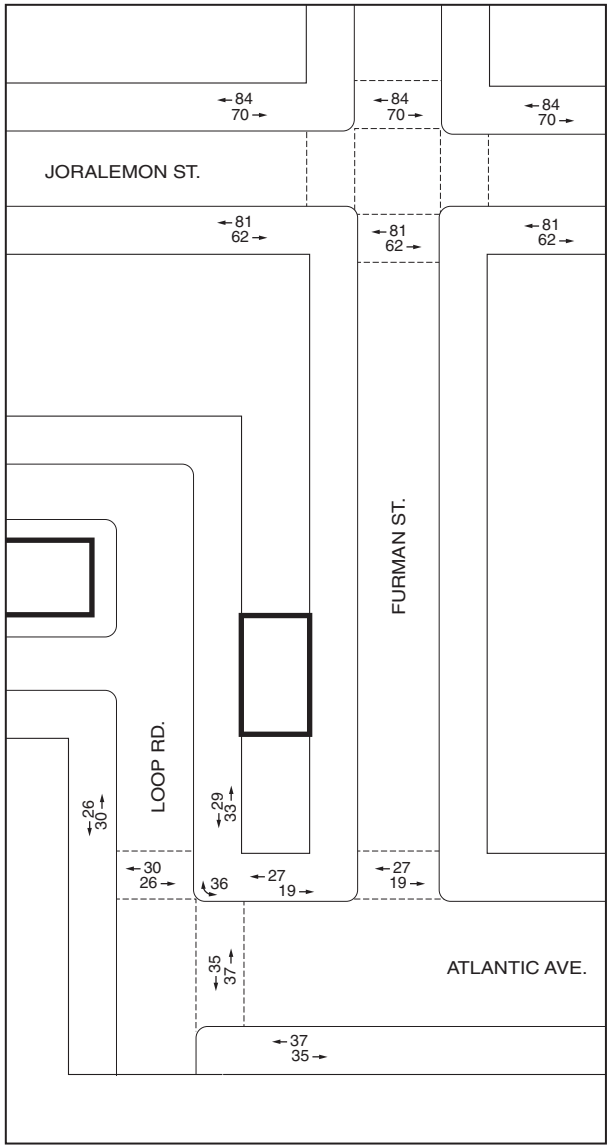
11.4.14



Weekday AM Peak Hour



Weekday Midday Peak Hour



Weekday PM Peak Hour

Project Site

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Project Generated Pedestrian Trips
Figure B.13-3

- Subway Trips – Subway riders were assigned to the Borough Hall Station (No. 2, 3, 4, and 5 trains), the Court Street Station (R train), the Jay Street/MetroTech Station (A, C, F, and R trains), and the Bergen Street Station (F and G trains). Approximately 22 percent of all subway trips were assumed to transfer to and from the B63 and B61 buses, which have stops near the project site and the Borough Hall and Jay Street/MetroTech Stations.
- Walk-Only Trips – Pedestrian walk-only trips were distributed to surrounding pedestrian facilities (i.e., sidewalks, corner reservoirs, and crosswalks) based on population data as well as the land use characteristics of the surrounding neighborhood.

Based on the detailed assignment of pedestrian trips, none of the pedestrian elements in the vicinity of the project site would exceed the *CEQR Technical Manual* analysis threshold of 200 (maximum of 154) or more peak hour pedestrian trips per element. Therefore, a detailed pedestrian analysis is not warranted and the proposed project is not expected to result in any significant adverse pedestrian impacts.

PARKING

As described above, the proposed project would provide up to 72 accessory parking spaces to accommodate the proposed project's parking demand. The *CEQR Technical Manual* states that if a quantified traffic analysis is not required, it is likely that further parking assessment is also not warranted. As discussed above, a detailed quantitative traffic study is not warranted and the proposed project is not expected to result in any significant adverse traffic impacts. Therefore, an on- and off-street parking analysis is not required and the proposed project is similarly not expected to result in significant adverse parking impacts.

B.14 AIR QUALITY

The 2005 FEIS concluded that there would be no potential significant adverse air quality impacts from HVAC systems at the proposed Brooklyn Bridge Park Project. Since the time the FEIS was prepared, some changes have occurred in National Ambient Air Quality Standards (NAAQS), NAAQS attainment status, and subsequently the methods for evaluating potential impacts under CEQR. EPA revised the NAAQS for particulate matter (PM), lowering the levels of the standards for PM less than 2.5 microns in diameter ($PM_{2.5}$) and revoking the annual average standard for PM less than 10 microns in diameter (PM_{10}). The area has since been redesignated as in attainment of the $PM_{2.5}$ standards, and the *CEQR Technical Manual* analysis methodology, therefore, now applies revised thresholds for determining the significance of potential $PM_{2.5}$ impacts. EPA established a 1-hour average nitrogen dioxide (NO_2) standard in addition to the existing annual average standard, and a 1-hour average sulfur dioxide (SO_2) standard replacing the 24-hour and annual average SO_2 standards. Therefore, the air quality analysis was updated to determine if the proposed actions would have the potential to cause significant adverse impacts not identified in the 2005 FEIS under the new standards and using the latest approved methodology.

METHODOLOGY FOR PREDICTING POLLUTANT CONCENTRATIONS FROM THE PROPOSED PROJECT'S HVAC SYSTEM

The proposed project would include fossil fuel-fired HVAC equipment. Therefore, a stationary source analysis was conducted to evaluate potential air quality impacts. An analysis was conducted to determine air quality impacts associated with emissions from the proposed Pier 6 Parcel B building's heating, ventilation, and air conditioning (HVAC) system on receptors at the proposed Pier 6 Parcel A building. The lease agreement with the designated developer will include provisions that any new development on Parcel B must ensure that fossil fuel-fired heating and hot water equipment utilize only natural gas, and heating and hot water equipment must be fitted with low-NO_x burners with a maximum emission

concentration of 30 ppm. Since the building on Parcel A would be substantially taller than the building on Parcel B and other buildings in the surrounding area, the exhaust from Building A would not impact surrounding buildings and does not require analysis. Potential 1-hour and annual NO_2 concentrations and PM_{10}, added to representative background concentrations in the area, are compared with the NAAQS. Potential 24-hour and annual incremental concentrations of $PM_{2.5}$ are compared with the City's $PM_{2.5}$ *de minimis* criteria.

Since building specific design information is not yet available, it was conservatively assumed that conventional boiler equipment would be used to provide building heat and hot water. Stack exhaust parameters and emission estimates for the conceptual boiler installation were conservatively estimated. The boiler fuel usage was estimated based on the building's size (in square feet) and development type, using the methodology referenced in the *CEQR Technical Manual*.

Based on initial evaluation, the exclusive use of natural gas-fired boilers equipped with low NO_x burners (30 ppm or less) would be required to ensure that significant adverse air quality impacts do not occur. PM emissions rates were calculated based on emission factors obtained from the EPA *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources*.

The emissions rates and stack parameters used for analyzing the Parcel B Building's HVAC source are presented in **Table B-14.1**.

Table B.14-1
Estimated HVAC Emissions from the Proposed Project

Parameter	Pier 6 Parcel B[(1)]
Exhaust Height (ft)	158
Inside Diameter[(1)] (ft)	1.0
Exit Velocity[(2)] (ft/s)	24.2
Exit Temperature[(1)] (F)	300
NO_x Emission Rate (1-hour) (lbs/hr)	0.158
NO_x Emission Rate (Annual) (lbs/hr)	0.043
PM Emission Rate (24-hour) (lbs/hr)	0.032
PM Emission Rate (Annual) (lbs/hr)	0.009

Notes:
(1) The stack exhaust diameter and temperature are based on similar sized equipment.
(2) The stack exhaust velocity is estimated based on the type of fuel and heat input rate.

Dispersion Modeling

Potential impacts from the proposed project's HVAC emissions were evaluated using the EPA AERMOD dispersion model. The AERMOD model was designed as a replacement to the EPA Industrial Source Complex (ISC3) model and has been approved for use by the EPA. AERMOD is a state-of-the-art dispersion model, applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD is a steady-state plume model that incorporates current concepts about flow and dispersion in complex terrain, including updated treatments of the boundary layer theory, understanding of turbulence and dispersion, and includes handling of terrain interactions.

The AERMOD model calculates pollutant concentrations from one or more points (e.g., exhaust stacks) based on hourly meteorological data, and has the capability of calculating pollutant concentrations in cases where the plume from the exhaust stack would be affected by the aerodynamic wakes and eddies

(downwash) produced by nearby structures. The analyses of potential impacts from exhaust stacks were made assuming stack tip downwash, urban dispersion and surface roughness length, and elimination of calms.

The AERMOD model also incorporates the algorithms from the PRIME model, which is designed to predict impacts in the "cavity region" (i.e., the area around a structure that under certain conditions may affect an exhaust plume, causing a portion of the plume to become entrained in a recirculation region). The Building Profile Input Program (BPIP) program for the PRIME model (BPIPRM) was used to determine the projected building dimensions modeling with the building downwash algorithm enabled. The modeling of downwash from sources accounts for all obstructions within a radius equal to five obstruction heights of the stack. The analysis was performed without downwash, similar to 2005 FEIS, since this option results in the calculation of worst-case impacts at elevated receptor locations.

Methodology Utilized for Estimating NO_2 Concentrations

Annual NO_2 concentrations from emission sources were estimated using an NO_2 to NO_x ratio of 0.75, as described in EPA's *Guideline on Air Quality Models*.[1]

EPA has developed guidance for assessing 1-hour average NO_2 concentrations for compliance with the NAAQS.[2] Background concentrations are currently monitored at several sites within New York City, which are used for reporting concentrations on a "community" scale. Because this data is compiled on a 1-hour average format, it can be used for comparison with the new 1-hour standards. Therefore, background 1-hour NO_2 concentrations currently measured at the community-scale monitors can be considered representative of background concentrations for purposes of assessing the potential impacts of the HVAC systems.

EPA's preferred regulatory stationary source model, AERMOD, is capable of producing detailed output data that can be analyzed at the hourly level required for the form of the 1-hour standards. EPA has also developed guidance to estimate the transformation ratio of NO_2 to NO_x, applicable to HVAC sources, as discussed further below. Therefore, an analysis was prepared.

1-Hour average NO_2 concentration increments from the HVAC systems were estimated using AERMOD model's Plume Volume Molar Ratio Method (PVMRM) module to analyze chemical transformation within the model. The PVMRM module incorporates hourly background ozone concentrations to estimate NO_x transformation within the source plume. Ozone concentrations were taken from the nearest available NYSDEC ozone monitoring stations, i.e., the Queens College monitoring station in Queens for the years 2009-2013. An initial NO_2 to NO_x ratio of 10 percent at the source exhaust stack was assumed for the boiler which is considered representative for this source type.

Total 1-hour average NO_2 concentrations were determined following methodologies that are accepted by the EPA as appropriate and conservative. The methodology used to determine the compliance of total 1-hour average NO_2 concentrations from the proposed source with the 1-hour NO_2 NAAQS[3] was based on adding the monitored background to modeled concentrations. The background 1-hour average NO_2 concentrations applied represent the seasonal 98th percentile by hour of the day averaged over five years. The highest combined daily 1-hour NO_2 concentration was determined at each receptor location and the

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1 EPA. "Appendix W to Part 51: Guideline on Air Quality Models". *40 CFR Part 51.* Section 5.2.4. November, 2005.

2 EPA. "Memorandum: Additional Clarification Regarding Application of Appendix W, Modeling Guidance for the 1-Hour NO_2 National Ambient Air Quality Standard". March 1, 2011.

98th percentile daily 1-hour maximum concentration for each of the five modeled years was calculated within the AERMOD model and then averaged over the latest five years. This refined approach is recognized as being conservative by EPA and the City and is referenced in EPA modeling guidance.

Meteorological Data

The meteorological data set consisted of five consecutive years of meteorological data: surface data collected at La Guardia Airport (2009–2013) and concurrent upper air data collected at Brookhaven, New York. The meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevation over the five-year period. These data were processed using the EPA AERMET program to develop data in a format which can be readily processed by the AERMOD model. The land use around the site where meteorological surface data were available was classified using categories defined in digital United States Geological Survey (USGS) maps to determine surface parameters used by the AERMET program.

Receptor Placement

A comprehensive receptor (i.e., location at which concentrations are projected) network was developed for the modeling analyses. Discrete receptors were analyzed and included locations on the proposed Parcel A building, at operable windows, and air intake locations.

Background Concentrations

To estimate the maximum expected total pollutant concentrations, the calculated impacts from the analyzed sources must be added to a background concentration that accounts for existing pollutant concentrations from other sources (see **Table B.14-2**). The background levels are based on concentrations monitored at the nearest DEC ambient air monitoring stations over a recent five-year period for which data are available (2009-2013), with the exception of PM_{10}, which is based on three years of data (2011-2013), consistent with current guidance from the New York City Department of Environmental Protection. For the 24-hour average PM_{10} concentration the maximum second-highest measured values over the 3-year period was used. The annual average background values are the highest measured average concentrations for these pollutants. The measured background concentration was added to the predicted contribution from the analyzed source to determine the maximum predicted total pollutant concentration. It was conservatively assumed that the maximum background concentrations occur on all analysis days.

Table B.14-2
Maximum Background Pollutant Concentrations
For Stationary Source Analysis

Pollutant	Average Period	Location	Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)
NO_2	1-Hour	Queens College, Queens	(1)	188
NO_2	Annual	Queens College, Queens	40.7	100
PM_{10}	24-hour	Division Street, NY	48.0	150
$PM_{2.5}$	24-hour	Division Street, NY	25.3	35

Notes:

(1) The 1-Hour NO_2 background concentration is not presented in the table since the AERMOD model determines the total 98th percentile 1-Hour NO_2 concentration at each receptor, so a single representative background concentration is not used.

Source: New York State Air Quality Report Ambient Air Monitoring System, DEC, 2009–2013.

$PM_{2.5}$ impacts are assessed on an incremental basis and compared with the $PM_{2.5}$ *de minimis* criteria. The $PM_{2.5}$ 24-hour average background concentration of 25.3 $\mu g/m^3$ (based on the 98th percentile concentrations, averaged over the 2011 to 2013 period) was used to establish the *de minimis* value.

EXISTING CONDITIONS

Recent concentrations of all criteria pollutants at DEC air quality monitoring stations nearest the study area are presented in **Table B.14-3**. All data statistical forms and averaging periods are consistent with the definitions of the NAAQS. It should be noted that these values are somewhat different than the background concentrations presented in **Table B.14-2**, above. These existing concentrations are based on recent published measurements, averaged according to the NAAQS (e.g., $PM_{2.5}$ concentrations are averaged over the three years); the background concentrations are the highest values in past years, and are used as a conservative estimate of the highest background concentrations for future conditions.

Table B.14-3
Representative Monitored Ambient Air Quality Data

Pollutant	Location	Units	Averaging Period	Concentration	NAAQS
CO	Queens College, Queens	ppm	8-hour	1.0	9
			1-hour	1.9	35
SO_2	Queens College, Queens	$\mu g/m^3$	3-hour	42.1	1,300
			1-hour	52.6	196
PM_{10}	Division Street, Manhattan	$\mu g/m^3$	24-hour	39	150
$PM_{2.5}$	Division Street, Manhattan	$\mu g/m^3$	Annual	10.8	15
			24-hour	25	35
NO_2	Queens College, Queens	$\mu g/m^3$	Annual	33	100
			1-hour	114	188
Lead	IS 52, Bronx	$\mu g/m^3$	3-month	0.005	0.15
Ozone	Queens College, Queens	ppm	8-hour	0.079	0.075

Notes: Based on the NAAQS definitions, the CO and 3-hour SO_2 concentrations for short-term averages are the second-highest from the year. $PM_{2.5}$ annual concentrations are the average of 2011, 2012, and 2013, and the 24-hour concentration is the average of the annual 98th percentiles in 2011, 2012, and 2013. 8-hour average ozone concentrations are the average of the 4th highest-daily values from 2011 to 2013. SO_2 1-hour and NO_2 1-hour concentrations are the average of the 99th percentile and 98th percentile, respectively, of the highest daily 1-hour maximum from 2011 to 2013.

Source: DEC, New York State Ambient Air Quality Data.

With the exception of ozone, there were no monitored violations of NAAQS at these monitoring sites in 2013.

PROBABLE IMPACTS OF THE PROPOSED PROJECT'S HVAC SYSTEM

The maximum concentrations of NO_2 and PM_{10} projected at any receptor location from the proposed project's HVAC system are presented in **Table B.14-4**. The maximum concentrations were projected to occur at elevated locations on the proposed Parcel A building. As shown in the table, the total pollutant concentrations, when added to ambient background levels, for each of the pollutant time averaging periods shown, would be below the applicable standards.

Table B.14-4
Future Maximum Modeled NO_2 and PM_{10} Concentrations from the Proposed Project (in $\mu g/m^3$)

Pollutant	Averaging Period	Concentration Due to Stack Emission	Maximum Background Concentration	Total Concentration	Standard
NO_2	Annual(1)	0.3	40.7	41	100
	1-hour(2)	-	-	166.3	188
PM_{10}	24-hour	3.8	48	51.8	150

Notes:
(1) Annual NO_2 impacts were estimated using a NO_2/NO_x ratio of 0.75.
(2) Reported concentration is the maximum total 98th percentile concentration at any receptor using seasonal-hourly background concentrations.

The air quality modeling analysis also determined the highest potential increase in $PM_{2.5}$ concentrations. The maximum projected 24-hour and discrete (local) annual average $PM_{2.5}$ increments are presented in **Table B.14-5**. The maximum projected $PM_{2.5}$ increments would be less than the applicable *de minimis* criteria.

Table B.14-5
Future Maximum Projected $PM_{2.5}$ Concentrations from the Proposed Project ($\mu g/m^3$)

Pollutant	Averaging Period	Maximum Concentration	*De Minimis*
$PM_{2.5}$	24-hour	3.8	4.9[(1)]
	Annual (discrete)	0.08	0.3

Note:
(1) $PM_{2.5}$ *de minimis* criteria — 24-hour average, not to exceed more than half the difference between the background concentration and the 24-hour standard of 35 $\mu g/m^3$.

There would not be any significant adverse air quality impacts due to the proposed Parcel B building's HVAC system. As described above, the lease agreement with the designated developer will include provisions requiring low-emission equipment.

B.15 GREENHOUSE GAS EMISSIONS

The 2005 FEIS did not include a greenhouse gas (GHG) analysis since CEQR did not require it at that time. Generally, a GHG emissions assessment is conducted only for larger projects undergoing an EIS, City capital projects subject to city-wide GHG reduction goals, and projects with special energy needs or other GHG considerations such as power generation or fundamental changes to the City's solid waste systems. The proposed project does not meet these criteria, and therefore an analysis of GHG is not warranted. In addition, the proposed actions would not intensify the energy requirements of the proposed residential buildings and as such, does not have the potential to result in any significant adverse impacts.

B.16 NOISE

The 2005 FEIS concluded that the proposed project would not result in any significant adverse noise impacts at off-site noise receptor locations. The FEIS found that noise levels at the project area are relatively high due to noise contributions from the Brooklyn-Queens Expressway and Manhattan Bridge. While on-site noise levels were higher than those recommended by *CEQR Technical Manual* guidelines for open space, there would be no feasible and practicable mitigation measures to reduce noise levels at the open space included in the proposed project. Building attenuation levels were specified for project buildings to ensure acceptable interior noise levels.

The analysis of noise levels at the Pier 6 upland was reviewed to determine if the proposed actions would have the potential to result in significant adverse impacts not identified in the 2005 FEIS. Since the time the FEIS was prepared, the building attenuation requirements in the *CEQR Technical Manual* have been updated, and the latest 2014 *CEQR Technical Manual* building attenuation requirements have been used to determine necessary levels of attenuation at project buildings. As part of this assessment, the noise exposure at buildings included in the proposed Pier 6 upland project was reviewed based on an updated noise survey.

As described above in the "Transportation" section, the number of vehicle trips generated by the proposed Pier 6 upland project is lower than the threshold that would require any detailed analysis. Consequently, it is not expected that the proposed Pier 6 upland project would generate sufficient traffic to have the potential to cause a significant noise impact (i.e., it would not result in a doubling of noise passenger car

equivalents [Noise PCEs] which would be necessary to cause a 3 dBA increase in noise levels). However, the effect of ambient noise (primarily noise from vehicular traffic) at the project site is addressed and an analysis is presented that determines the level of building attenuation necessary to ensure that the proposed Pier 6 upland project buildings' interior noise levels satisfy applicable CEQR interior noise criteria.

NEW YORK CEQR NOISE CRITERIA

The 2014 *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level (see **Table B.16-1**). Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential or community facility uses and interior noise levels of 50 dBA or lower for commercial uses and are determined based on exterior $L_{10(1)}$ noise levels.

Table B.16-1
Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise Level With Proposed Action	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[A]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)$[B] dB(A)

Notes:
[A] The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial uses would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.
[B] Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.
Source: New York City Department of Environmental Protection.

2005 FEIS BUILDING ATTENUATION RESULTS

The 2005 FEIS prescribed 35 dBA of building attenuation for buildings on the Pier 6 upland based on an exterior $L_{10(1)}$ noise level of 78.2 dBA. This noise level was the maximum $L_{10(1)}$ noise level predicted for this location based on the noise level measured adjacent to the Brooklyn-Queens Expressway and adjusted to reflect projected 2012 traffic levels.

2014 EXISTING NOISE LEVELS

Existing noise levels at the Pier 6 upland project site were measured at two (2) locations. Site 1 was located at the east façade of 360 Furman Street just above the Brooklyn-Queens Expressway, and Site 2 was located at-grade on the Loop Road at the northeast corner of Parcel A (See **Figure B.16-1**). At sites 1 and 2, 1-hour spot measurements were conducted during the AM, MD, and PM peak time periods on October 7, 2014.

EQUIPMENT USED DURING NOISE MONITORING

Measurements were performed using a Brüel & Kjær Sound Level Meters (SLM) Type 2260 and Type 2270, Brüel & Kjær ½-inch microphones Type 4189, and a Brüel & Kjær Sound Level Calibrator Type 4231. The Brüel & Kjær SLMs are a Type 1 instrument according to ANSI Standard S1.4-1983 (R2006). The SLMs have a laboratory calibration date within one year of the date of the measurements. The microphones were mounted away from any large, reflecting surfaces that could affect the sound level measurements. The SLMs were calibrated before and after readings with a Brüel & Kjær Type 4231 Sound Level Calibrator using the appropriate adaptor. Measurements at the location were made on the A-

10/16/2014

Project Site

1 *Noise Receptor*

0 500 FEET

BROOKLYN BRIDGE PARK
Pier 6 Uplands Development

Noise Receptor Locations
Figure B.16-1

scale (dBA). The data were digitally recorded by the SLM and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. All measurement procedures were based on the guidelines outlined in ANSI Standard S1.13-2005.

RESULTS OF BASELINE MEASUREMENTS

The results of the existing noise level measurements are summarized in **Table B.16-2**.

At each receptor site, vehicular traffic on the Brooklyn-Queens Expressway was the dominant noise source. Measured levels are moderate and reflect the level of vehicular activity on the adjacent highway. In terms of the CEQR criteria, the existing noise levels at site 1 are in the "clearly unacceptable" category, and noise levels at site 2 are in the "marginally acceptable" category.

Table B.16-2
Existing Noise Levels (in dBA)

Receptor Site	Measurement Location	Time	L_{eq}	L_1	L_{10}	L_{50}	L_{90}
1	Outside Third Floor of 360 Furman Street East Façade Overlooking Brooklyn-Queens Expressway	AM	83.3	89.7	85.1	82.5	80.1
		MD	83.1	88.8	85.1	82.3	80.2
		PM	81.9	87.6	83.4	81.2	79.5
2	Loop Road at Northeast Corner of Parcel A	AM	66.3	74.3	67.8	65.0	63.1
		MD	67.5	78.2	68.9	64.4	62.3
		PM	63.3	73.0	64.5	60.0	56.9
Note: Measurements were conducted on October 7, 2014							

NOISE ATTENUATION MEASURES

As shown in **Table B.16-1**, the 2014 *CEQR Technical Manual* has set noise attenuation quantities for buildings based on exterior $L_{10(1)}$ noise levels in order to maintain interior noise levels of 45 dBA or lower for residential dwellings and community facility development and interior noise levels of 50 dBA or lower for commercial uses.

Measured noise levels at site 1 represent the east façade of 360 Furman Street, at a horizontal distance of approximately 42 feet from the Brooklyn-Queens Expressway. The distance from the east boundary of Parcel B to the Brooklyn-Queens Expressway is at least 100 feet. Since the Brooklyn-Queens Expressway is the dominant source of noise at these locations, the measured noise level from site 1 was adjusted to determine the noise level at the east boundary of Parcel B. The Brooklyn-Queens Expressway can be approximated as a "line source" of noise so, as is indicated in the *CEQR Technical Manual*, the noise level was adjusted based on a 3 dBA reduction per doubling of distance. Consistent with city practices, noise levels were conservatively estimated to be 3 dBA less at an elevation more than 100 feet above the height of the Brooklyn-Queens Expressway.

The building attenuation requirements are summarized in **Table B.16-3**.

Table B.16-3
Minimum Building Attenuation Requirements

Parcel	Façade	Elevation (in feet)	Associated Noise Site	Maximum $L_{10(1)}$ (in dBA)	Attenuation Required (in dBA)[1]
A	All	All	2	68.9	N/A[2]
B	North, East, South	0 to 130	1	81.3[3]	38
		131 through top	1	78.3[3]	35
	West	All	2	68.9	N/A[2]

Notes:
[1]The composite window-wall attenuation values are for residential development. Retail and commercial uses would be 5 dB(A) less.
[2]"N/A" indicates that the L_{10} value is less than 70 dB(A). The *CEQR Technical Manual* does not address noise levels this low, therefore there is no minimum attenuation guidance.
[3]Adjusted by 3 dBA per doubling of horizontal distance from the Brooklyn-Queens Expressway and a 3 dBA reduction at elevations more than 100 feet above the Brooklyn-Queens Expressway.

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Normally, a building façade consists of wall, glazing, and any vents or louvers associated with the building mechanical systems. The building façades would be designed to provide a composite Outdoor-Indoor Transmission Class (OITC) rating[1] greater than or equal to those listed above in **Table B.16-3**, along with an alternative means of ventilation in all habitable rooms of the residential units.

Based upon the $L_{10(1)}$ values measured at the project site, the proposed project's design measures would be expected to provide sufficient attenuation to achieve the CEQR interior noise level requirements.

In addition, the building mechanical system (i.e., heating, ventilation, and air conditioning systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code and the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels.

COMPARISON TO 2005 FEIS BUILDING ATTENUATION REQUIREMENTS

At the north, east, and south façades of Parcel B up to 130 feet above grade, the attenuation requirements are 3 dBA greater than those prescribed in the 2005 FEIS. At the north, east, and south façades of Parcel B more than 130 feet above grade, the attenuation requirements are the same as those prescribed in the 2005 FEIS. All attenuation requirements will be included in the lease for the site. At the west façade of Parcel B and all facades of Parcel A, noise levels would be below the range requiring specific attenuation requirements according to *CEQR Technical Manual* noise exposure guidelines.

B.17 PUBLIC HEALTH

The 2005 FEIS did not provide an analysis of public health, as the development of Brooklyn Bridge Park did not meet the any of the thresholds warranting a public health assessment according to the guidelines

[1] The OITC classification is defined by ASTM International (ASTM E1332) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise.

of the 2001 *CEQR Technical Manual*, which applied at the time. The 2014 *CEQR Technical Manual* requires an analysis of potential public health impacts only for projects that result in unmitigated significant adverse impacts in areas such as air quality, water quality, hazardous materials, or noise, or when the lead agency determines that a project may have potential public health consequences not related to these technical areas. As described above, the proposed actions, taking into account change in background conditions, would not result in significant adverse impacts in any of these technical areas. Therefore a public health analysis is not warranted, and the proposed actions would not result in any significant adverse impacts to public health.

B.18 NEIGHBORHOOD CHARACTER

The proposed actions would not adversely affect the defining features of the neighborhood, nor create new significant adverse impacts on any of the elements that contribute to neighborhood character. Since the issuance of the FEIS, the character of the area has improved with the development of the project area. The development of portions of the park and several of the development sites has improved many of the factors that contribute to neighborhood character, including land use, open space, and visual resources. The proposed actions would be in keeping with the plan considered in the 2005 FEIS, and would further enliven the area with activity and improve the character of the area. Therefore, the proposed actions would not result in any new significant adverse impacts on neighborhood character not disclosed in the 2005 FEIS.

B.19 CONSTRUCTION IMPACTS

The 2005 FEIS analyzed the effects of the proposed project's construction activities, focusing on areas where construction activities may pose specific environmental problems such as transportation, air quality, and noise. The 2005 FEIS concluded that although there may be localized, temporary disruptions due to the construction of the Brooklyn Bridge Park Project, as is the case with any construction activity, the analysis found that the proposed project would not result in any significant adverse impacts due to construction activities. Since the 2005 FEIS, updated and more detailed construction plans have been developed for the two development parcels on the upland on Pier 6. Therefore, the construction analysis in the 2005 FEIS was revisited to determine if the proposed actions and the updated construction plans for Parcels A and B would have the potential to cause significant adverse impacts not identified in the 2005 FEIS, taking into consideration the guidelines of the 2014 *CEQR Technical Manual*.

CONSTRUCTION SCHEDULE AND TASKS

Parcels A and B on the upland of Pier 6 are anticipated to be constructed simultaneously and would proceed in three primary stages: excavation and foundation; superstructure, and; interiors and finishing. Construction would begin with the excavation of the soils, any required remediation, and the construction of the foundations. When the below-grade construction is completed, construction of the superstructure (the building's beams, columns, floor decks, and core) would begin. Superstructure construction would also include the installation of the exterior façades of the proposed buildings. Finally, interiors and finishing would commence and would include the construction of nonstructural building elements such as interior partitions and interior finishes (i.e., flooring, painting, etc.). **Table B.19-1** presents the anticipated schedule for the construction of Parcels A and B. As shown in **Table B.19-1**, based on responses to the RFP, the overall construction duration of Parcels A and B is anticipated to be approximately 19-months, a duration that is considered to be short-term (less than two years) according to the *CEQR Technical Manual* and thus not requiring detailed assessment.

Table B.19-1
Anticipated Construction Schedule

Construction Task	Anticipated Schedule	Approximate Duration (months)
Excavation and Foundation	January 2016 to July 2016	7
Superstructure	August 2016 to December 2016	6
Interiors and Finishing	January 2017 to July 2017	6
Source: Brooklyn Bridge Park		

CONSTRUCTION PRACTICES

Construction of the proposed project would be carried out in accordance with New York City laws and regulations, which allow construction activities between 7:00 AM and 6:00 PM on weekdays. Construction work would typically begin at 7:00 AM on weekdays, with most workers arriving between 6:00 AM and 7:00 AM. Normally, work would end at 3:30 PM. Necessary permits would be obtained from the appropriate agencies if work is required outside of normal construction hours (i.e., weekend and after-hour work). No work outside of normal construction hours could be performed until such permits are obtained.

Access to the construction sites for Parcels A and B would be controlled. The work areas would be fenced off, and limited access points for workers and trucks would be provided. Flaggers would be posted as necessary to control trucks entering and exiting the site to ensure the safety of pedestrians and vehicles passing through the area.

If necessary, the contractor would carry out a rodent (mouse and rat) control program.

PROBABLE IMPACTS DURING CONSTRUCTION

Construction of the proposed project, as is the case with any construction activities, may be disruptive to the surrounding area for limited periods of time throughout the construction period. The following analyses describe the overall temporary effects on transportation, air quality, noise, historic and cultural resources, hazardous materials, natural resources, infrastructure, and socioeconomic conditions during construction.

Transportation

As described in the *CEQR Technical Manual*, construction activities may affect several elements of the transportation system, including traffic, transit, pedestrians, and parking. A transportation analysis of construction activities is predicated upon the duration, intensity, complexity and/or location of construction activity.

Most of the proposed project's construction staging (i.e., storage of construction materials, construction truck loading/unloading areas, etc.) would occur within the project sites, thereby limiting any effects on surrounding roadways and pedestrian elements. However, similar to many other construction projects in New York City, temporary curb-lane and sidewalk closures are expected to be required adjacent to the project sites during construction. In addition, if the Loop Road elbow is closed, it may be used for construction staging. As currently envisioned, the sidewalk immediately adjacent to the project sites along Loop Road and the curb-lane west of Parcel A would be closed for varying periods of time during construction. Maintenance and Protection of Traffic (MPT) plans would be developed for any lane and/or sidewalk closures during construction. If the lane and/or sidewalk closures are on NYCDOT-mapped streets, then approval of these plans and implementation of the closures would be coordinated with NYCDOT's Office of Construction Mitigation and Coordination (OCMC).

As described above, construction would normally take place from 7 AM to 3:30 PM on weekdays. Construction workers are expected to park on weekdays at nearby parking resources (i.e., within ¼-mile of the project site), either on-street or within off-street parking facilities (e.g., Quik Park Garage adjacent to Pier 6, 44 State Street Corporation at 38-44 State Street, and Pro Park America at 352 Hicks Street).

Throughout the construction period, construction workers would travel to and from the project sites by personal vehicle or public transportation. In addition, the proposed project would also generate truck trips from the deliveries of materials and excavated materials. Given that construction worker commuting trips and construction truck deliveries generally occur during off-peak hours, and over a short duration of construction period (i.e., less than 24 months), the proposed actions and the construction plans as currently envisioned would not result in significant adverse transportation impacts during construction.

Air Quality

Emissions from on-site construction equipment and on-road construction-related vehicles, as well as dust generating construction activities, have the potential to affect air quality. In general, much of the heavy equipment used in construction has diesel-powered engines and produces relatively high levels of nitrogen oxides (NO_x) and particulate matter (PM). Fugitive dust generated by construction activities also contains particulate matter. Finally, gasoline engines produce relatively high levels of carbon monoxide (CO). As a result, the primary air pollutants of concern for construction activities include nitrogen dioxide (NO_2), particulate matter with an aerodynamic diameter of less than or equal to 10 micrometers (PM_{10}), particulate matter with an aerodynamic diameter of less than or equal to 2.5 micrometers ($PM_{2.5}$), and CO.

With regard to the air quality impacts during construction, the *CEQR Technical Manual* suggests that potential impacts should be analyzed only when construction activities would affect a sensitive receptor over a long period of time. Construction duration as defined by the *CEQR Technical Manual* is broken down into short-term (less than two years) and long-term (two or more years). As described above, the overall construction duration of Parcels A and B is anticipated to be completed over a 19-month construction period, a duration that is considered to be short-term and would not require a detailed assessment.

As appropriate, all necessary measures (i.e., watering of exposed areas and dust covers for trucks) would be implemented during construction to ensure adherence to the New York City Air Pollution Control Code regulating construction-related dust emissions.

Therefore, based on the information presented above, the proposed actions and the construction plans would not result in any significant adverse construction air quality impacts, and no further analysis is required.

Noise

Impacts on community noise levels during construction would include noise from the operation of construction equipment and noise from construction and delivery vehicles traveling to and from the site. Noise levels at a given location are dependent on the type and quantity of construction equipment being operated, the acoustical utilization factor of the equipment (i.e., the percentage of time a piece of equipment is operating), the distance from the construction site, and any shielding effects (from structures such as buildings, walls, or barriers). Noise levels caused by construction activities would vary widely, depending on the stage of construction and the location of the construction activities relative to noise-sensitive receptor locations.

Construction noise is regulated by the requirements of the *New York City Noise Control Code* (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113), the DEP Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28), and

the USEPA's noise emission standards. These local and federal requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. As part of the Code, a site-specific noise mitigation plan would be developed and implemented that may include source controls (i.e., reducing noise levels at the source or during most sensitive time periods), and path controls (e.g., placement of equipment and implementation of barriers between equipment and sensitive receptors).

For impact determination purposes, significant adverse noise impacts are based on whether maximum predicted incremental noise levels at sensitive receptor locations off-site would be greater than the impact criteria suggested in the *CEQR Technical Manual* for more than two years. As described above, the duration of the proposed project's construction is expected to be short-term (less than two years), and while noise associated with the proposed construction activities may be considered noisy and intrusive, as is the case with any construction activities, potential increases in noise levels as a result of construction-related activities would be of limited duration and therefore not considered significant.

Therefore, based on the information presented above, the proposed actions would not result in any significant adverse construction noise impacts, and no further analysis is required.

Historic and Cultural Resources

None of the architectural resources identified in the 2005 FEIS are located on or adjacent to the Pier 6 upland area. The proposed project would result in a shift in residential units from Parcel A to Parcel B, but would not change the building locations or overall building envelopes analyzed in the 2005 FEIS. Therefore, the proposed actions would not result in any additional adverse impacts to historic and cultural resources during construction. The proposed project would also not result in any additional ground disturbance beyond what was analyzed in the FEIS that could affect archaeological resources. As noted above, to the degree that archaeological resources could be affected by construction and depending on the methods of construction ultimately employed, the LOR would be followed and the archaeological testing protocol that was developed and has been implemented as construction in the Brooklyn Bridge Park Project area has progressed would be implemented as warranted.

Hazardous Materials

In accordance with the 2005 FEIS, a Remedial Action Plan (RAP)/Construction Health and Safety Plan (CHASP) was prepared in August 2005 for implementation during excavation and construction work involving soil disturbance to assure that the construction workers, the surrounding community, and the environment are not adversely affected by the construction activities. The plan specifies the appropriate monitoring by field personnel during construction and excavation activities and details appropriate measures in the event that underground storage tanks, soil and groundwater contamination, or other unforeseen environmental conditions are encountered, including notification of the proper regulatory agencies as necessary and clean-up under regulatory guidance. With these measures, no significant adverse impacts related to hazardous materials would be expected to occur as a result of the construction activities related to the proposed project.

Natural Resources

As discussed above under "Natural Resources," the proposed actions would not increase the amount of impervious surface on the Pier 6 upland area compared to the previously-approved project, and therefore would not affect flooding in or near Brooklyn Bridge Park or increase the amount of surface runoff. The proposed development would not displace any natural habitats or affect any threatened and endangered species and would therefore have no impacts on natural resources beyond what was analyzed in the 2005

FEIS. The construction of the two proposed buildings would comply with all relevant stormwater management commitments and permitting requirements. Therefore, the proposed actions would not result in any significant adverse natural resources impacts during construction.

Infrastructure

As discussed above under "Water and Sewer Infrastructure," the construction of the proposed project would comply with all relevant stormwater management commitments and permitting requirements. Therefore, the proposed actions would not result in any significant adverse infrastructure impacts during construction.

Socioeconomic Conditions

Construction activities associated with the proposed project would not result in any significant adverse impacts on socioeconomic conditions. Construction of the proposed project would not block or restrict access to any facilities in the area including the nearby Brooklyn Bridge Park components (e.g., Pier 6 dog run to the east of Parcel B) and the Quik Park public garage to the southeast of Parcel A, affect the operations of any nearby businesses, or obstruct major thoroughfares used by customers or businesses. Therefore, the proposed actions would not result in any significant adverse socioeconomic conditions impacts during construction.

C. CONCLUSION

Based on the analyses above for each of the impact categories, neither changes in background conditions nor changes to the proposed actions would result in any significant adverse environmental impacts that were not identified in the 2005 FEIS. Therefore, a Supplemental Environmental Impact Statement is not required. ✶

ATTACHMENT A

New York State Department of Statement Coastal Management Program
Coastal Assessment Form

NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Coastal Assessment Form

A. INSTRUCTIONS (Please print or type all answers)

1. State agencies shall complete this CAF for proposed actions which are subject to Part 600 of Title 19 of the NYCRR. This assessment is intended to supplement other information used by a state agency in making a determination of significance pursuant to the State Environmental Quality Review Act (see 6 NYCRR, Part 617). If it is determined that a proposed action will not have a significant effect on the environment, this assessment is intended to assist a state agency in complying with the certification requirements of 19 NYCRR Section 600.4.

2. If any question in Section C on this form is answered "yes," then the proposed action may affect the achievement of the coastal policies contained in Article 42 of the Executive Law. Thus, the action should be analyzed in more detail and, if necessary, modified prior to either (a) making a certification of consistency pursuant to 19 NYCRR Part 600 or, (b) making the findings required under SEQR, 6 NYCRR, Section 617.11, if the action is one for which an environmental impact statement is being prepared. If an action cannot be certified as consistent with the coastal policies, it shall not be undertaken.

3. Before answering the questions in Section C, the preparer of this form should review the coastal policies contained in 19 NYCRR Section 600.5. A proposed action should be evaluated as to its significant beneficial and adverse effects upon the coastal area.

B. DESCRIPTION OF PROPOSED ACTION

1. Type of state agency action (check appropriate response):

   (a) Directly undertaken (e.g. capital construction, planning activity, agency regulation, land transaction) ☒
   (b) Financial assistance (e.g. grant, loan, subsidy) ☐
   (c) Permit, license, certification ☐

2. Describe nature and extent of action:

The proposed project would involve the redevelopment of the project site with two buildings containing up to 430 residential units. It would also include up to 5,000 sf of neighborhood-oriented retail or non-fast food restaurant space; up to 10,000 sf of community facility use on the ground floor and second floor; and up to 72 parking spaces. The community facility use could include any combination of a pool, a universal pre-K (accommodating up to 75 students), non-profit office or art gallery space, public game room or meeting rooms.

3. Location of action:

Kings	**New York City**	**Parcel A is bounded by the BBP Loop Road on all four sides; Parcel B is bounded by Furman Street to the east and Loop Road to the west, with the Pier 6 dog run directly adjacent to the north, and BBP open space to the south.**
County	City, Town or Village	Street or Site Description

4. If an application for the proposed action has been filed with the state agency, the following information shall be provided:

(a) Name of applicant: _____

(b) Mailing address: _____

(c) Telephone Number: Area Code _____

(d) State agency application number: _____

5. Will the action be directly undertaken, require funding, or approval by a federal agency?
Yes _____ No **X** If yes, which federal agency? _____

C. COASTAL ASSESSMENT (Check either "YES" or "NO" for each of the following questions)

	YES	NO
1. Will the proposed activity be located in, or contiguous to, or have a significant effect upon any of the resource areas identified on the coastal area map:		
(a) Significant fish or wildlife habitats?		X
(b) Scenic resources of statewide significance?		X
(c) Important agricultural lands?		X
2. Will the proposed activity have a significant effect upon:		
(a) Commercial or recreational use of fish and wildlife resources?		X
(b) Scenic quality of the coastal environment?		X
(c) Development of future, or existing water dependent uses?		X
(d) Operation of the State's major ports?		X
(e) Land and water uses within the State's small harbors?		X
(f) Existing or potential public recreation opportunities?		X
(g) Structures, sites or districts of historic, archeological or cultural significance to the State or nation?		X
3. Will the proposed activity involve or result in any of the following:		
(a) Physical alteration of two (2) acres or more of land along the shoreline, land under water or coastal waters?		X
(b) Physical alteration of five (5) acres or more of land located elsewhere in the coastal area?		X
(c) Expansion of existing public services of infrastructure in undeveloped or low density areas of the coastal area?		X
(d) Energy facility not subject to Article VII or VIII of the Public Service Law?		X
(e) Mining, excavation, filling or dredging in coastal waters?		X
(f) Reduction of existing or potential public access to or along the shore?		X
(g) Sale or change in use of state-owned lands located on the shoreline or under water?		X
(h) Development within a designated flood or erosion hazard area?	X	
(i) Development on a beach, dune, barrier island or other natural feature that provides protection against flooding or erosion?		X
4. Will the proposed action be located in or have a significant effect upon an area included in an approved Local Waterfront Revitalization Program?	X	

D. SUBMISSION REQUIREMENTS

If any question in Section C is answered "Yes", AND either of the following two conditions is met:

Section B.1(a) or B.1(b) is checked; or
Section B.1(c) is checked AND B.5 is answered "Yes",

THEN one copy of the Completed Coastal Assessment Form shall be submitted to:

New York State Department of State
Office of Coastal, Local Government and Community Sustainability
One Commerce Plaza
99 Washington Avenue, Suite 1010
Albany, New York 12231-0001

If assistance of further information is needed to complete this form, please call the Department of State at (518) 474-6000.

E. REMARKS OR ADDITIONAL INFORMATION

A Technical Memorandum (see attached) has been prepared to assess whether the proposed project would result in any significant adverse impacts not identified in the FEIS prepared for the Brooklyn Bridge Park project in 2005. The Technical Memorandum concluded that the proposed project is consistent with the State's coastal policies and NYC's LWRP.

Preparer's Name:	Rachel Shatz		
	(Please print)		
Title:	VP, Planning & Environmental Review	Agency:	Empire State Development
Telephone Number:	(212) 803-3252	Date:	November 21, 2014