Draft Scope of Work for an Environmental Impact Statement Coney Island Rezoning CEQR No. 08DME007K

A. PROJECT IDENTIFICATION

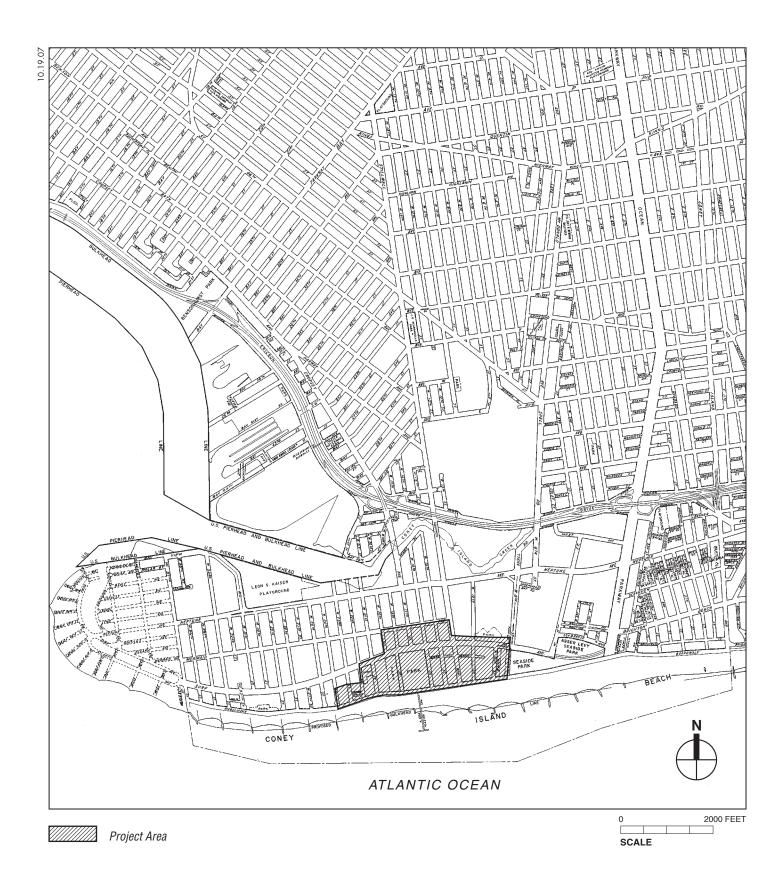
The Office of the Deputy Mayor for Economic Development, in coordination with the New York City Economic Development Corporation (NYCEDC) and the New York City Department of City Planning (DCP), proposes to rezone, obtain other land uses and approvals, and implement a comprehensive development plan in a portion of Coney Island, Brooklyn. The primary goal of the proposed actions is to safeguard and expand upon Coney Island's iconic amusements to transform the area into an affordable, year-round urban amusement and entertainment destination while building upon the prime beachfront location to facilitate the development of new residential and retail uses in the surrounding area.

The proposed actions call for the redevelopment of an approximately 47-acre area of the Coney Island peninsula. The rezoning area is generally bounded to the east by West 8th Street, to the west by West 24th Street, to the north by Mermaid Avenue, and to the south by the Riegelmann Boardwalk (see Figure 1).

Adoption of the proposed action would require public review and approvals by a number of government agencies, including the New York City Department of Housing Preservation and Development (HPD), and the New York City Planning Commission (CPC), as well as public review and approvals by the City Council and the New York State Assembly and Senate. The proposed actions would also require public review by the local Community Board and the Brooklyn Borough President. The proposed actions require environmental review and the preparation of an Environmental Impact Statement (EIS) under City Environmental Quality Review (CEQR).

This Draft Scope of Work to prepare an EIS provides a description of the proposed actions, the projected reasonable worst-case development scenario under the proposed actions, and the methods and technical approaches for all technical areas to be analyzed in the EIS. The EIS will be prepared in conformance with all applicable laws and regulations, including Executive Order No. 91, CEQR Regulations, dated August 24, 1977, and will follow the guidance of the *CEQR Technical Manual*. The EIS will contain:

- A description of the proposed actions and development program, and their environmental setting;
- An identification of the environmental impacts of the proposed actions and development program, including their short- and long-term effects;
- An identification of any significant adverse environmental impacts that cannot be avoided if the proposed actions and development program are implemented;
- A discussion of reasonable alternatives to the proposed actions and development program;



- An identification of any irreversible and irretrievable commitments of resources that would be involved in the proposed actions and development program should they be implemented; and
- The identification and analysis of practicable mitigation measures proposed to minimize significant adverse impacts.

B. PROJECT CONTEXT

BACKGROUND

In September 2003, the Mayor, the City Council, and the Brooklyn Borough President formed the Coney Island Development Corporation (CIDC) to spearhead and implement a comprehensive planning process for Coney Island and create a coordinated economic development strategy for the area. The CIDC consists of 13 members, including City officials, local and Brooklyn-wide business and community leaders, and area residents.

In 2005, Mayor Michael Bloomberg announced the release of the Coney Island Strategic Plan, developed by CIDC. Based on an analysis of the area's assets and development constraints, the Strategic Plan identified a set of land use and economic goals to be achieved through development within Coney Island, as follows:

- Strengthen the Coney Island amusement area by creating an enhanced district with new uses that are complementary to those allowed under existing zoning;
- Create a vibrant new mixed-use destination that capitalizes on the beachfront location and historic amusement area;
- Create year-round activity through new entertainment, retail, and residential uses; and
- Provide new job opportunities.

The rezoning proposal and related actions establish a comprehensive development plan to facilitate the redevelopment of Coney Island, furthering the goals outlined in the Strategic Plan.

SITE DESCRIPTION

Coney Island is located at the southern border of Brooklyn, on the Coney Island peninsula, which is defined by Coney Island Creek and the Atlantic Ocean. Coney Island is the western neighborhood of the peninsula; Brighton Beach and Manhattan Beach are located to the east. The rezoning area is accessible to the entire New York City metropolitan area via the N, Q, D, and F subway lines in the recently renovated Stillwell Avenue subway station. The area is accessible by car via the Belt Parkway, which connects Brooklyn to Staten Island through the Verrazano Bridge, and the Brooklyn-Queens Expressway, which connects the area with Manhattan and Queens. The area is also in close proximity to JFK International Airport.

The rezoning area is approximately 47 acres in size; of these, about 28 acres are publicly owned land, and about 22.5 acres are mapped parkland. The area comprises 198 tax lots located on 19 blocks (see Figure 2 and Table 1).



Project Area Blocks and Lots Figure 2

Table 1
Tax Blocks and Lots in the Proposed Rezoning Area

Block	Lots
7060	1, 3-12, 14, 16-22, 24, 27, 31, 32, 35, 41-51, 147 (entire block)
7061	1-6, 8, 9, 11, 14, 16, 20, 21, 27, 39, 40-43, 45 (entire block)
7062	1, 4-11, 14, 25, 28, 34 (entire block)
7063	1-4, 6, 8, 9, 11, 12, 32-35, 38-41 (entire block)
7064	1, 2, 4, 5, 7, 14, 16, 27, 28, 31, 32, 35, 37, 38, 43, 45, 101 (entire block)
7070	148 (southern portion of the block)
7071	26, 27, 28, 30, 32, 34, 76, 79, 81, 83, 85, 100, 123, 130, 142, 226, 231
7072	1 (entire block)
7073	portion of 101 (western portion of block/lot)
7074	1, 4, 6, 20, 23, 89, 105, 170, 190, 250, 254, 256, 300, 310, 340, 348, 360, 382 (entire block)
8694	1, 5, 11, 12, 14, 16, 18, 25, 30, 33, 421 (entire block)
8695	61, 64, 72, 85, 104, 120, 433, 468 (entire block)
8696	35, 37, 44, 47-50, 53, 70, 75, 140, 145, 166, 211, 212 (entire block)
8697	4, 8 (entire block)
7268	190, 213, 218, 225, 228, 234, 236, 244, 250, 254, 344 (southern portion of block)
7266	249, 250, 252, 254, 260, 261, 265, 270 (southern portion of block)
Sources: MapPluto, New York City Department of City Planning, 2006	

Coney Island's emergence as a world-renowned, one-of-a-kind amusement destination dates back to the mid-19th century. Over the years, Coney Island has experienced the development and the destruction of some of the most well-known amusement parks in America, including Luna Park, Dreamland, and Steeplechase Park. Since the closing of Steeplechase Park in 1964, the amusement area has significantly declined, consisting today of only a few blocks of largely seasonal amusement attractions. Some of the historic amusement structures remain and are Coney Island icons. A number of these structures are New York City Landmarks (NYCLs), including the Cyclone roller coaster, the Wonder Wheel, the Parachute Jump, and Childs restaurant. However, despite its decline, Coney Island's amusement area continues to attract millions of visitors per year, demonstrating its potential and its unique legacy as an urban beachfront amusement destination.

Much of the land throughout the proposed rezoning area is either vacant or underutilized. Most block frontages on the north and south sides of Surf Avenue—the district's major east-west thoroughfare—are either vacant or used as parking lots. KeySpan Park—built by the City in 2001—is home to the Brooklyn Cyclones, a minor league baseball team owned by the New York Mets. KeySpan Park attracts thousands of visitors a year during the summer baseball season, which runs approximately 90 days, from the end of June through early September.

To the west of KeySpan Park and south of Surf Avenue, between West 19th Street and West 22nd Street, are two parking lots currently mapped as parkland. These lots, totaling approximately 420,000 square feet (sf) in area, serve the Brooklyn Cyclones during baseball season and are dormant the rest of the year. The seasonality of these lots creates a desolate landscape between Surf Avenue and the Boardwalk, separating the surrounding community from the beach.

Between KeySpan Park and the New York Aquarium, located on Surf Avenue and West 8th Street, are a number of vacant blocks. The area containing active amusements and entertainment venues is limited to portions of three block frontages along Surf Avenue, and two blocks

between Surf Avenue and the Boardwalk between West 12th Street and the Cyclone roller coaster. During the summer, thousands of visitors come to enjoy the attractions located here: Nathan's Famous Hot Dogs, Astroland, Deno's Wonder Wheel, the Cyclone, and Coney Island USA. During the winter, the area is largely boarded up and empty.

The neighborhood immediately north and west of the proposed rezoning area consists of low-scale, one- and two-family homes, low-rise apartment buildings, and 15- to 20-story residential complexes, built largely as a result of the urban renewal plans of the 1960s and 1970s. Local retail is primarily located along Mermaid Avenue.

C. PROJECT DESCRIPTION

PROJECT OBJECTIVES

The comprehensive rezoning plan seeks to build on the area's attractions and strengths to create a development framework that will respect and enhance Coney Island's history while providing incentives to help the area realize its full potential. The proposed rezoning and other actions establish a framework for redevelopment of Coney Island that:

- Maintain Coney Island's unique history, character, and culture, and ensure the future of the amusement area by formalizing this public asset as parkland, and developing a vibrant affordable urban amusement and entertainment destination;
- Redevelop Coney Island as part of an integrated vision by strengthening existing amusements, growing indoor entertainment uses, and capitalizing on beachfront location to bring a critical mass of people who live and work there; and
- Foster economic activity that creates job opportunities for local residents by creating year-round activity and bringing new housing and retail services to the neighborhood.

PROPOSED ACTIONS

CITY ACTIONS

The proposed actions require CPC and City Council approvals through the Uniform Land Use Review Procedure (ULURP), and include the following actions:

- Mapping of Block 7074, portions of Lots 20, 23, 105 and 190; Block 7074, Lot 382 and portions of Lots 256, 310 and 360; Block 8695, Lots 61, 64, 72, 85, 104, 120, 433 and 468; and Block 8696, Lots 70, 75, 140, 145 and 166 as parkland for the purpose of protecting the historic amusement area as an open amusement area and for the development of an affordable vibrant open amusement and entertainment park. West 10th Street and portions of West 12th Street, Stillwell Avenue, and West 15th Street would also be mapped parkland as part of the open amusement park. Private properties to be mapped as parkland would be acquired by the City through sale or land transfer.
- Mapping of Block 7071, Lots 27, 28, 30, 32, 34, 76, 79, 81, 226, and 231 as parkland for the purpose of creating a new neighborhood park, tentatively named Highland View Park. Highland View Avenue and portions of West 22nd Street would also be mapped as parkland as part of Highland View Park.
- A zoning map amendment to change the zoning in the affected areas from C7 and R6/C1-2 districts to R7X/C2-4, R7A/C2-4 and R5 districts, and create an amended C7 district and a

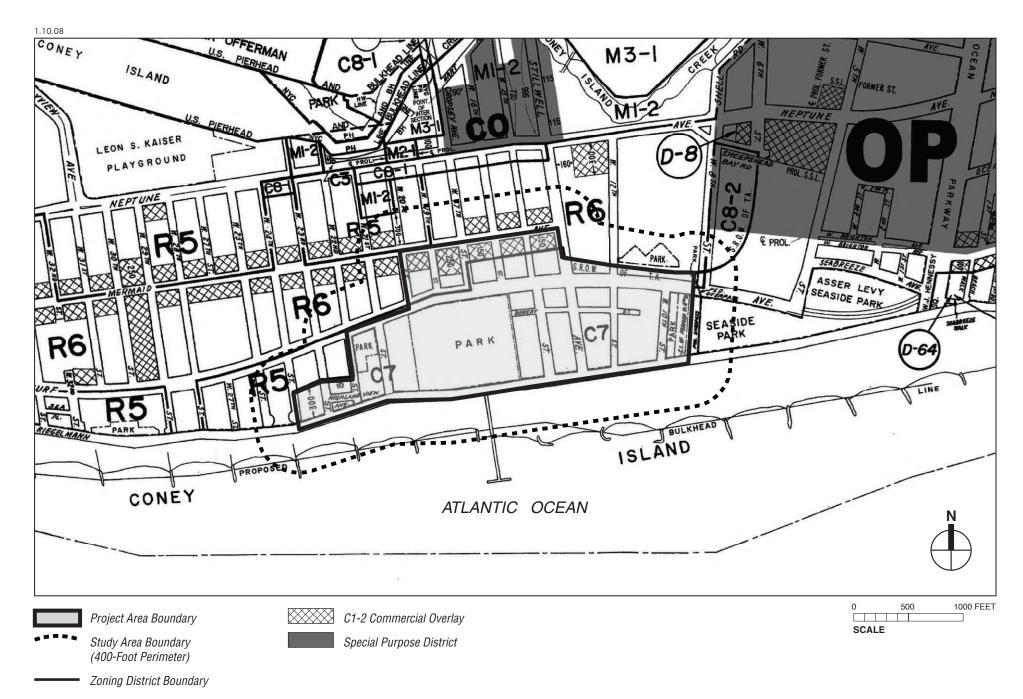
Special Coney Island District that would define density and envelope controls for four subareas: Coney North, Coney West, Coney East, and Mermaid Avenue. The Coney North and Coney West subareas would be rezoned from C7 and R6 to R7X/C2-4. Four block frontages of 100 feet in depth along Mermaid Avenue between West 15th Street and West 20th Street would be rezoned from R6/C1-3 to R7A/C2-4. Portions of Block 7070 between West 23rd Street and West 24th Street would be rezoned from C7 to R5, extending the existing adjacent R5 district. The existing zoning is shown on Figure 3, the proposed subareas are shown on Figure 4, and the proposed zoning is shown on Figure 5.

- A zoning text amendment establishing a Special Coney Island District with four subareas: Coney North, Coney West, Coney East, and Mermaid Avenue (see Figure 4). The Special Coney Island District would establish use, floor area ratio (FAR), parking requirements, and bulk regulations to encourage varied building heights, control tower dimensions, and ensure that new development respects adjacent neighborhood scale.
- A zoning text amendment to include the Coney North, Coney West, and Mermaid Avenue subareas within the Inclusionary Housing Program.
- Amendments to the City Map to demap Highland View Avenue, West 10th Street, and portions of West 22nd Street, West 15th Street, Stillwell Avenue, and West 12th Street to be included in the proposed mapped parkland area; amendments to the City Map to demap portions of Bowery between Stillwell Avenue and West 16th Street.
- Amendments to the City Map to map new streets: New Bowery (tentatively named) from Stillwell Avenue to Steeplechase Plaza; West 16th Street, West 19th Street, and West 20th Street from Surf Avenue to the Boardwalk as extensions of the existing streets north of Surf Avenue; New Bowery, an east-west street from the proposed West 20th Street to West 22nd Street between Surf Avenue and the Boardwalk.
- Disposition of City-owned property to a private developer for development under proposed zoning on Block 7073, portions of Lot 101, and Block 7073, Lot 100, which are owned by the New York City Department of Parks and Recreation (DPR), and which are currently mapped parkland and leased to the New York Mets for accessory parking for KeySpan Park; and Block 7071, Lot 142, which is owned DPR and is an unused Green Thumb Garden.
- Acquisition of private property by HPD on Block 7060 to consolidate property for the purpose of disposition and development.
- Urban Development Action Area Program (UDAAP) designation, project approval, and disposition of City-owned property to a private developer for development pursuant to the proposed zoning on vacant City-owned parcels on Block 7060 and Block 7061.
- Disposition of City-owned property to a private developer for development pursuant to the proposed zoning on Block 7074, Lots 1, 20, 170 and 190, which are owned by the New York City Department of Citywide Administrative Services (DCAS) and are currently vacant.

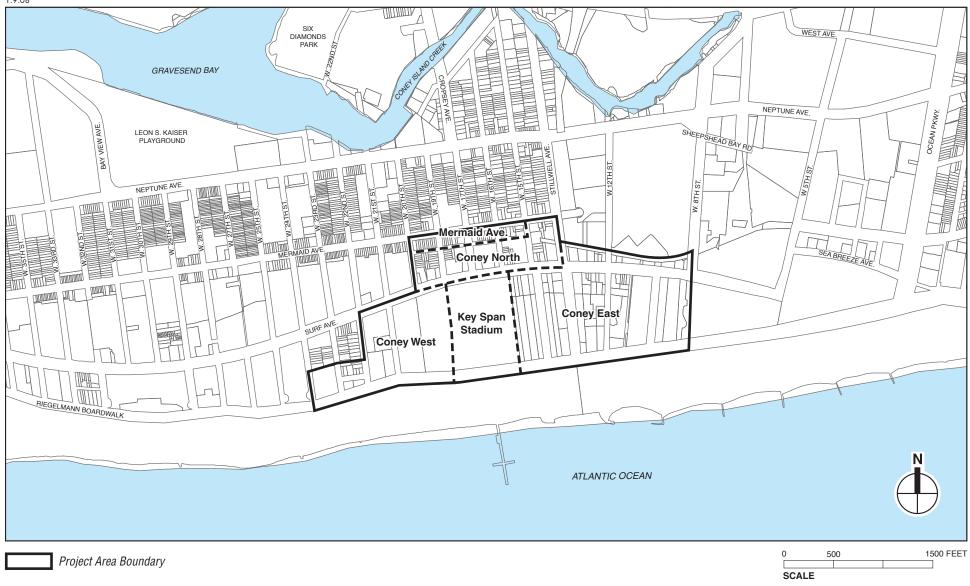
STATE ACTIONS

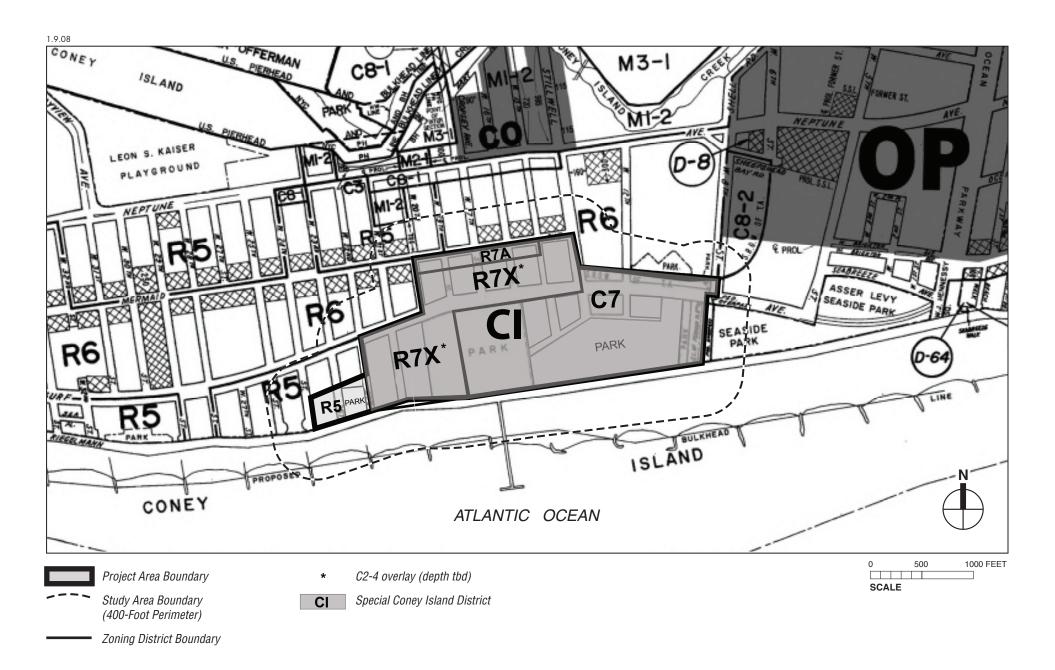
The proposed actions require State Legislation for parkland alienation and include the following actions:

• Alienation of Block 7073, portions of Lot 101 and Block 7071, Lot 100, which are currently mapped parkland, for disposition to a private developer for development under the proposed zoning.



Existing Zoning Figure 3





The proposed actions are subject to CEQR procedures. An Environmental Assessment Statement (EAS) has been prepared and the Lead Agency (the Deputy Mayor's Office for Economic Development) has determined that the proposed actions would have the potential for significant adverse impacts. Therefore, a detailed assessment of likely effects in those areas of concern must be prepared and disclosed in an EIS.

This draft scoping document sets forth the analyses and methodologies proposed for the EIS. The public, interested agencies, Brooklyn Community Board 13, and elected officials are invited to comment on the Draft Scope of Work, either in writing or orally, at a public scoping meeting to be held on February 13, 2007, 6:00 PM, at Lincoln High School, 2800 Ocean Parkway, Brooklyn, New York. Comments received during the Draft Scope's public hearing, and written comments received by 5:00 PM February 29, 2008, will be considered and incorporated as appropriate into a final scope of work. The final scope of work will be used as a framework for preparing the Draft EIS (DEIS) for the proposed actions. Once the lead agency is satisfied that the DEIS is complete, the document will be made available for public review and comment. The DEIS will accompany the ULURP application through the Community Board, Borough President, and CPC public hearings. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the ULURP applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for 10 days after the public hearing to allow additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared that will incorporate all substantive comments made on the DEIS, along with any revisions to the technical analyses necessary to respond to those comments. The FEIS will then be used by the decision-makers to prepare CEQR findings, which address project impacts and proposed mitigation measures, before deciding whether to approve the requested discretionary actions.

D. DESCRIPTION OF THE PROPOSED ACTIONS

The Office of the Deputy Mayor for Economic Development, in coordination with DCP and NYCEDC, is proposing zoning map and text amendments, street mapping and demapping, disposition of City-owned land for development, and park mapping affecting the Coney Island area of southern Brooklyn within Community District 13. The area affected by the proposed actions covers approximately 19 blocks in Coney Island, and is bounded generally by West 8th Street to the east, West 24th Street to the west, the Riegelmann Boardwalk and the beach to the south, and Mermaid Avenue to the north (see Figures 1 and 2). Table 1 provides a list of all the blocks and lots that fall within the proposed action area.

PARKLAND MAPPING

OPEN AMUSEMENT AND ENTERTAINMENT AREA

DPR is proposing to map parkland of approximately 15 acres located between KeySpan Park and the landmarked Cyclone roller coaster in order to protect the historic open amusements, and develop an approximately 650,000-sf, affordable, vibrant, open amusement and entertainment park. The proposed mapping action would create a continuous recreational parkland network in Coney Island of about 50 acres from Steeplechase Plaza to Asser Levy Park. It is envisioned that the amusement park would include—but not be limited to—entrances on Surf Avenue at the location of the existing landmarked Cyclone and through all the existing mapped streets.

Section C: "Project Description," above, provides a list of all the blocks and lots that fall within the proposed mapped parkland (see also Figure 2). Private properties within this proposed mapped parkland would be acquired by the City through sale or land transfer and disposed to DPR. DPR would issue a Request for Proposal (RFP) or Request for Expression of Interest (RFEI) to seek a developer to build, manage, and maintain the amusement park. Uses within the mapped park would range from rides, open and enclosed amusements, restaurants, indoor and outdoor performance venues, and accessory retail to park activities. As part of the alienation legislation, DPR would seek a long-term lease to facilitate the development of the proposed open amusement area.

HIGHLAND VIEW PARK

DPR is proposing to map about 65,000 sf of parkland located on Block 7071 between West 22nd Street and West 23rd Street to create a new neighborhood park, tentatively named Highland View Park.

Section C: "Project Description," above, provides a list of all the blocks and lots that fall within the proposed mapped parkland (see also Figure 2). Private properties within this proposed mapped parkland would be acquired by the City through sale or land transfer and disposed to DPR.

ZONING MAP CHANGES

DCP proposes the creation of a Special Coney Island District that would define development parameters and urban design controls to guide the redevelopment of Coney Island. The Special Coney Island District includes four subareas: Coney East, the amusement and entertainment retail core; Coney North, with residential and retail uses; Mermaid Avenue, with residential and retail uses and contextual zoning regulations transitioning to the existing neighborhood; and Coney West, a new beachfront residential neighborhood with retail and improved connections between KeySpan Park and western Coney Island, and between Surf Avenue and the Boardwalk.

As shown on Figure 3, the majority of this area is currently zoned C7, which allows a limited range of uses related to the operation of large-scale open amusements parks. The remaining portion of the rezoning area between Mermaid and Surf Avenues, West 20th Street, and Stillwell Avenue is zoned R6 with a C1-2 commercial overlay along Mermaid Avenue. The four subareas created within the proposed rezoning area are described below. Figure 4 shows the proposed zoning subareas, and Figure 5 shows the proposed zoning.

SPECIAL CONEY ISLAND DISTRICT

Coney East Subarea

The Coney East subarea comprises six blocks (8696, 8695, 8694, 7074, 7268, and 7266) encompassing the historic amusement area located between Steeplechase Plaza and KeySpan Park, and the New York Aquarium. The existing C7 zoning district permits development of large scale, open amusement uses at FAR 2.0. The existing land uses within Coney East include seasonal open amusement rides, arcades, accessory retail, limited restaurant uses, and large parcels of vacant land. The parking requirements for open amusement uses are 1 space per 2,000 sf and vary for other permitted uses.

In the Coney East subarea to be rezoned, two new 60-foot-wide mapped streets would be created: "New Bowery" (tentatively named), a diagonal street creating a direct connection from

Stillwell Avenue to Steeplechase Plaza and adjacent to the proposed mapped parkland boundary; and an extension of West 16th Street along KeySpan Park between Surf Avenue and New Bowery to serve the newly created blocks. The mapping of New Bowery between Stillwell Avenue and KeySpan Park would facilitate the creation of larger blocks to accommodate the proposed large-scale amusement and entertainment uses.

The properties fronting Surf Avenue located outside of the mapped parkland would be rezoned to an amended C7 district that would permit a broader range of amusement-related uses, including enclosed amusements, hotels, large-scale entertainment retail, dining establishments of all sizes, and performance venues. These uses would complement the uses allowed within the mapped parkland and facilitate the creation of a year-round entertainment district. The proposed FARs would range from 2.0 FAR north of Surf Avenue to 3.0 FAR east of Stillwell Avenue, and 5.0 FAR west of Stillwell Avenue. Building heights and setback regulations would be defined in the Special District text. The existing Henderson and Jones Walk, running from Surf Avenue to the existing Bowery between Stillwell Avenue and West 10th Street, would be maintained to break down the two long blocks and provide access points to the open amusement area. The existing Bowery between Stillwell Avenue and West 12th Street would remain a public street.

Coney North Subarea

The Coney North subarea would include the five blocks (7064, 7063, 7062, 7061, and 7060) between Mermaid and Surf Avenues, West 20th Street, and Stillwell Avenue. This 10.6-acre area is currently zoned C7 and R6 and predominantly contains vacant land and accessory parking lots fronting on Surf Avenue. As described above, the C7 district permits development of large open amusement uses at 2.0 FAR. The C7 parking requirements for open amusement uses are 1 space per 2,000 sf and vary for other permitted uses. The R6 district designation permits a maximum FAR of 3.0 for residential developments and 4.8 FAR for developments containing community facilities, and has an on-site parking requirement for at least 70 percent of the units.

Under the proposed action, Block 7064 and portions of Blocks 7060, 7061, 7062, and 7063 fronting on Surf Avenue would be rezoned to R7X with a C2-4 commercial overlay, allowing for high-density residential development with ground-floor retail, with a maximum FAR of 5.0 on each block, and with the provision of affordable housing through the Inclusionary Housing Program. Developments that do not elect to participate in the Inclusionary Housing Program would be limited to an FAR of 3.75. Entertainment and destination retail, local retail, community facilities, and offices would be allowed up to two stories and mandated on the ground floor on Surf Avenue. Residential building heights and setback regulations would differ from the standard R7X zoning regulations and would be defined in the proposed Special District text. Parking requirements for these blocks would be 60 percent for the residential portion of the buildings and 1 space per 1,000 sf for the commercial and community facility portion. Required parking would not count toward allowable FAR and would be required to be wrapped by active uses on all street frontages.

On four blocks within the Coney North subarea, development would be prohibited on a privately owned 40-foot-wide buffer zone at the location of the historic railroad right-of-way, 100 feet south of Mermaid Avenue (Block 7060, Lot 14; Block 7061, Lot 14; Block 7062, Lot 14; and Block 7063, portions of Lot 12). The buffer zone would separate the Coney North subarea to the south and the Mermaid Avenue subarea to the north. These historically vacant parcels would be maintained to provide a physical transition between higher density development on Surf Avenue and the lower density context on Mermaid Avenue. These buffer zones would also provide

access to residential and commercial parking garages enclosed within the proposed developments fronting on Surf Avenue but would not be open to general circulation. FAR would be generated from these parcels, and development rights could be transferred to adjacent parcels in the Coney North subarea.

Mermaid Avenue Subarea

Portions of Blocks 7060, 7061, 7062, and 7063 between West 15th Street and West 20th street within 100 feet of Mermaid Avenue would be rezoned from R6/C1-2 to R7A with a C2-4 commercial overlay at a 100-foot depth. Most of the parcels are currently vacant or occupied by one-story commercial uses and two- to four-story residential buildings with ground-floor retail.

R7A contextual zoning districts permit a maximum FAR of 4.6 for residential developments with the provision of affordable housing through the Inclusionary Housing Program. Developments that do not elect to participate in the Inclusionary Housing Program would be limited to an FAR of 3.45. The contextual regulations of R7A zoning districts would apply to all new developments. Overall building heights would be limited to 80 feet and streetwall heights limited to 65 feet; base heights would be required to be a minimum of 40 feet. New multi-family residences would be required to provide one off-street parking space for 50 percent of the dwelling units. The proposed C2-4 commercial overlay district permits 2.0 commercial FAR and allows for a broader range of commercial retail and service uses than the existing C1-3 district. The proposed C2-4 district would reduce the parking requirement for most commercial uses from 1 parking space for every 200 sf to 1 parking space for every 1,000 sf for commercial development with more than 40,000 sf of commercial floor area. Required parking spaces for developments within the Mermaid Avenue subarea could be accommodated within the entire block, including the Coney North subarea.

Coney West Subarea

The Coney West subarea would include Block 7072 and portions of Blocks 7071 and 7073 located between KeySpan Park and West 22nd Street. These blocks are located within the C7 district and contain mostly vacant land and parking lots, with the exception of the vacant landmarked Childs Restaurant and a privately owned office building containing offices for the Human Resources Administration of New York City. Portions of Block 7073, Lot 101 and Block 7071, Lot 100 are currently mapped parkland, and are used as parking lots for the adjacent KeySpan Park. Block 7073, Lot 101 also contains the Abe Stark Skating Rink, owned by DPR and used primarily for ice-hockey leagues. In addition, a vacant lot previously used as a Green Thumb community garden is located on Block 7071, Lot 142.

Under the proposed actions, portions of Block 7073, Lot 101 within the Coney West subarea, and Block 7071, Lot 100 would be demapped as parkland through State alienation and rezoned to allow future development. The existing unused Green Thumb community garden and the Abe Stark Skating Rink would be replaced at locations to be determined.

Block 7072 and portions of Blocks 7071 and 7073 located between KeySpan Park and West 22nd Street would be rezoned from C7 to R7X with a C2-4 commercial overlay. Blocks 7072 and 7071 would be rezoned to permit residential development with ground-floor retail uses, with a maximum residential FAR of 5.0, with the provision of affordable housing through the Inclusionary Housing Program. Developments that do not elect to participate in the Inclusionary Housing Program would be limited to an FAR of 3.75. Massing controls would be defined by the Special District zoning text.

Portions of Block 7073, Lot 101 within the Coney West subarea would be rezoned to permit residential development with ground-floor retail uses at a maximum FAR of 4.0 with the provision of affordable housing through the Inclusionary Housing Program. Developments that do not elect to participate in the Inclusionary Housing Program would be limited to an FAR of 3.0.

A new 80-foot-wide street, tentatively named New Bowery, would be mapped from east to west to break down the blocks and create a new street network between Surf Avenue and the Boardwalk. In addition, two new 60-foot-wide streets would be mapped between Surf Avenue and the Boardwalk as extensions of West 19th and West 20th Streets.

Uses ranging from entertainment and destination retail, local retail to community facilities and offices would be allowed up to two stories and mandated on the ground-floor frontages along Surf Avenue and New Bowery. Buildings fronting on the Boardwalk would be required to provide two stories of retail. Residential uses would not be permitted directly on the Boardwalk. Residential building heights and setback regulations would differ from the R7X regulations and would be defined in the Special District text. Parking requirements for these blocks would be 60 percent for the residential portion of the buildings and 1 space per 1,000 sf for the commercial portion. Required parking would not count toward allowable FAR and would be required to be wrapped by active uses on all street frontages.

MAP CHANGES OUTSIDE THE SPECIAL CONEY ISLAND DISTRICT

Portions of Block 7072 and 7071 located between West 22nd and West 24th Streets and within the C7 district that are not mapped parkland as part of the creation of Highland View Park would be rezoned to R5 as an extension of the existing adjacent R5 zoning district. These two portions of blocks contain vacant land, surface parking, and a health care facility. The R5 district designation allows for residential development at 1.25 FAR with a maximum building height of 40 feet.

ZONING TEXT AMENDMENTS

SPECIAL CONEY ISLAND DISTRICT

DCP proposes zoning text changes to create a Special Coney Island District, establishing distinctive massing and design regulations to accompany the zoning map changes.

The goals of the Special District are to facilitate the development of amusement-related and entertainment uses, to grow the amusement district, and to allow for residential development connecting to the existing neighborhood fabric. The Special District would redevelop Surf Avenue as a commercial boulevard with dense residential buildings, establishing the 120-foot-wide road as the spine of the district. The massing would also respect the historic legacy of Coney Island's NYCLs: the Parachute Jump, the Cyclone roller coaster, the Wonder Wheel, and Childs Restaurant. The rezoning proposal would establish height limits and massing controls that create visual corridors to ensure that future developments do not block views to these historic icons.

The proposed street network would create new east-west and north-south connections, facilitating access to the Boardwalk and the beach as well as the amusement district, linking the proposed entertainment and amusement area to the rest of the peninsula. Views to and from the

beach and the Boardwalk would be protected by limiting the location and heights of towers within the proposed developments and creating visual corridors and connections to the ocean.

Residential building heights and setback regulations defined in the Special District text would ensure that transition is created between proposed high density developments and the lower density existing neighborhood north of Mermaid Avenue and west of West 22nd Street.

Coney East

The proposed open amusement area would be located south of Bowery and New Bowery up to the Boardwalk between Steeplechase Plaza and KeySpan Park and the Cyclone roller coaster. The portions of the blocks between Surf Avenue, Bowery, and New Bowery would be fully developed with hotel, enclosed amusements, entertainment, and retail uses.

Tower location and heights would be limited on the development sites. Buildings would be required to set back from the open amusement area to create an amphitheater shape. Heights would decrease eastward from West 16th Street toward the Cyclone roller coaster at West 10th Street.

Coney North

Developments would be regulated through a base, a transition zone, and towers. Tower location and heights would be limited on the development sites. The highest towers would be mandated to be located on the 120-foot-wide Surf Avenue to create a transition with the 80-foot maximum height within the R7A on Mermaid Avenue. Setbacks would be defined to ensure visual connections to Surf Avenue and the ocean from Mermaid Avenue and the streets perpendicular to Surf Avenue.

Coney West

The creation of New Bowery would bisect the blocks in Coney West into boardwalk blocks located south of New Bowery and the Surf Avenue blocks located north of New Bowery.

The proposed text regulations would define massing regulations for blocks fronting on the Boardwalk to preserve openness and views to and from the beach. Base heights would be defined at approximately the height of the landmarked Childs Restaurant, which is approximately 40 feet in height. Developments would be regulated through a base, a transition zone, and towers. Tower location and heights would be limited on all development sites, and taller towers would be permitted along New Bowery, away from the Boardwalk.

Blocks fronting Surf Avenue, a 120-foot-wide corridor, would be allowed more bulk and height. Developments would be regulated through a base, a transition zone, and towers. Towers would be limited to Surf Avenue and New Bowery. Height limits would be defined and are anticipated to be in the range of the Parachute Jump, which is approximately 270 feet high.

The replacement of the existing parking spaces used by KeySpan Park would be required within any future development on Block 7073 and Block 7071, Lot 100 (existing KeySpan Park surface parking lots). This represents approximately 750 spaces on Block 7073 and 350 spaces on Block 7071, Lot 100. The parking garages would be required to be wrapped by active uses on all street frontages.

INCLUSIONARY HOUSING PROGRAM

The proposed Coney Island Rezoning proposal would apply the Inclusionary Housing Program to the Coney North, Mermaid Avenue, and Coney West zoning districts, establishing incentives for the creation and preservation of affordable housing in conjunction with new development in those subareas. Under the Inclusionary Housing Program, developments providing affordable housing are eligible for a floor area bonus. Affordable units can be provided either on the same site as the development earning the bonus or off-site either through new construction or preservation of existing affordable units. Off-site affordable units must be located within the same Community District or within a half-mile of the compensated development. Available city, state, and federal housing finance programs may be used to finance affordable units.

STREET DEMAPPING

DCP is proposing to amend the City Map to demap several streets within the rezoning area boundary in order to facilitate the development of the open amusement area and Highland View Park, and to allow for larger buildable footprints along Surf Avenue.

In Coney East, West 10th Street and portions of West 12th Street, Stillwell Avenue, and West 15th Street to be included in the mapped parkland area—as well as portions of the Bowery from Stillwell Avenue to KeySpan Park—are proposed to be demapped. The mapping of New Bowery from Stillwell Avenue to Steeplechase Plaza would create larger blocks fronting Surf Avenue and establish direct access from the amusement area to Steeplechase Plaza.

In Coney West, Highland View Avenue and portions of West 22nd Street are proposed to be demapped to facilitate the development of Highland View Park.

STREET MAPPING

DCP is proposing to amend the City Map to map new streets within the rezoning area boundary: New Bowery from Stillwell Avenue to Steeplechase Plaza; West 16th Street, West 19th Street, and West 20th Street from Surf Avenue to the boardwalk as extensions of the existing streets north of Surf Avenue; and New Bowery, an east-west street from the new West 20th Street to West 22nd Street between Surf Avenue and the Boardwalk.

DISPOSITION OF CITY-OWNED PROPERTY

HPD is proposing the acquisition of privately owned properties on Block 7060 for the purpose of consolidation with other City-owned properties on the block.

HPD is also proposing UDAAP designation and project approval and disposition of City-owned parcels on Block 7060 and Block 7061. The parcels are located in the Coney North and Mermaid Avenue subareas and are currently vacant. HPD would dispose of the properties to a private developer for the development of housing under the proposed zoning regulations for the area.

DCAS is proposing to dispose of Block 7074, Lots 1, 20, 170 and 190, which are currently vacant, in the Coney East subarea. The City-owned parcels are located on the edges of Block 7074 between West 15th Street and the proposed West 16th Street. Portions of these parcels south of New Bowery are also proposed to be mapped parkland for the development of the Coney East open amusement area. Portions of the DCAS-owned properties outside of the mapped parkland boundary would be disposed to a private developer for development under the proposed zoning regulations for the area.

DPR is proposing to dispose of Block 7071, Lot 142, which is an unused Green Thumb community garden located on the Boardwalk in the Coney West subarea between West 21st Street and West 22nd Street. The parcel would be disposed to a private developer for development under the proposed zoning regulations for the area. The Green Thumb community garden would be replaced in its entirety, in one or several parcels in the Coney Island area, to a location to be determined.

Contingent upon State alienation legislation approval, DPR is proposing to dispose of Block 7073, Lot 100 and Block 7071, portions of Lot 101, currently mapped parkland. Disposition would be made to a private developer for development under proposed zoning regulations for the area described in the zoning map and text amendments. Block 7073, Lot 100, and Block 7071, portions of Lot 101 (existing KeySpan Park parking lots) would be disposed under the conditions that 750 spaces on Block 7073 and 350 spaces on Block 7071, Lot 100 are replaced as part of the development. The parking garages would be required to be wrapped by active uses on all street frontages.

PARKLAND ALIENATION

As described above, the City of New York is proposing to demap two parcels currently under the jurisdiction of DPR. The parcels (Block 7071, Lot 100, and portions of Block 7073, Lot 101) contain two asphalt parking lots currently leased for use as accessory parking for KeySpan Park during the baseball season, an average of 90 days a year. The lots are used for public parking the rest of the year.

The alienation procedure would require approval by the New York State legislature in addition to the actions subject to ULURP and would result in the demapping of:

- Approximately 350,000 sf of the 11.7-acre KeySpan Park lot, located between KeySpan Park and the extension of West 20th Street, Block 7072. This mapped parkland contains the asphalt parking lot for KeySpan Park and the Abe Stark Skating Rink. This parcel would be rezoned to permit residential and retail development. The Abe Stark Skating Rink would be replaced at a location to be determined.
- A 73,561-sf parcel located on Surf Avenue between West 21st and West 22nd Streets. This parkland is also used as a satellite parking lot for KeySpan Park. This parcel would also be rezoned to permit residential and retail uses.

Development of these two parcels would be allowed under the condition that existing KeySpan Park parking spaces be replaced as part of the residential development. The replacement of approximately 750 spaces on Block 7073 and 350 spaces on Block 7071, Lot 100 would be required within future developments. The parking garages would be required to be wrapped by active uses on all street frontages.

PROJECT PURPOSE AND NEED

The proposed actions are intended to protect the historic open amusement area and facilitate its development as a year-round affordable amusement and entertainment destination. Over the last decades, the historic amusement area, located in the proposed Coney East subarea, has been slowly declining. Today, due to recent real estate speculation, most of the rides and amusement uses have disappeared. Most of the amusement area is now vacant, and all uses (except Nathan's) are open only during the summer. However, despite these issues, Coney Island

continues to attract millions of people, capitalizing on its unique legacy as one of the greatest urban amusement parks in the world.

The parkland mapping action proposes to maintain Coney Island's history, culture, and character by preserving the open amusements for generations to come. The 650,000 sf of newly mapped parkland would be developed as a 21st-century amusement park, continuing Coney Island's legacy as a one-of-a-kind entertainment destination. By mapping the open amusement area, the City proposes to create a contiguous 50-acre beachfront parkland recreational network from Steeplechase Plaza to Asser Levy Park. The network would include KeySpan Park, the redesigned Steeplechase Plaza, the proposed open amusement area, the landmarked Cyclone roller coaster, the New York Aquarium, and Asser Levy Park.

The majority of the land within the rezoning area boundary is either vacant or underutilized despite its beachfront location. The majority of this land is zoned C7, which only allows for large-scale open amusement parks and related amusement uses. The proposed Special Coney Island District would replace the existing C7 zoning district to allow for the wider range of uses to complement the open amusement area and facilitate the development of year-round uses.

The proposed actions in the Coney North, Coney West, and Mermaid Avenue subareas would allow for the development of housing and retail services to support the entertainment district by creating a critical mass of people living and working in Coney Island, and would offer a wider range of opportunities for housing in a neighborhood currently dominated by publicly subsidized housing. The retail component of the residential districts would allow for the expansion of the entertainment uses outside of the Coney East subarea as well as the development of local amenities able to service the existing and future residents. The proposal would produce new waterfront development with a sensitive transition to the adjoining neighborhoods, a pedestrian-friendly streetscape, and a compelling skyline.

E. FRAMEWORK FOR ENVIRONMENTAL ANALYSES

SCOPE OF ENVIRONMENTAL ANALYSIS

As set forth in the Positive Declaration, the lead agency has determined that the size and scope of the proposed actions may result in one or more significant adverse environmental impacts and thus requires preparation of an EIS. For area-wide rezonings, a 10-year period is typically considered to be the length of time over which developers would act on the change in zoning, and the effects of the proposed action would be felt. Therefore, the analysis year, or Build year, is 2019.

REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWDCS)

The proposed actions would change the development potential of sites within the Coney Island area and, as a result, a range of new development would occur. While the actual development would depend on a multitude of factors—including developer proposals, future market conditions, public review and input, and site constraints—the City has developed a maximum development envelope, or reasonable worst-case development scenario (RWCDS). This development scenario assumes that each block within the proposed rezoning area would develop to the maximum allowable FAR. Figure 6 provides an illustrative view of the RWCDS.

To the extent that actual development proposals differ from the RWCDS, they would be subject to additional environmental review as appropriate. This RWCDS, described in general terms



Illustrative Development Site Plan

CONEY ISLAND REZONING Figure 6

below, will be more fully described in the DEIS and will be used as a framework to assess potential impacts in the DEIS. For purposes of analysis, the average net dwelling unit size for new construction is assumed to be 1,000 sf.

The rezoning could generate up to a maximum of approximately 1.4 million sf of entertainment retail, enclosed amusements, hotel and eating establishments, 4,800 dwelling units, and 550,000 sf of local retail and services. Parking would be provided to meet the demand generated by the proposed uses. Parking demand associated with the RWCDS is anticipated to be approximately between 6,330 and 8,330 spaces for the entire rezoning area, including 1,100 KeySpan Park replacement parking spaces.

CONEY EAST

The Coney East subarea would be rezoned to facilitate the development of an expanded amusement district with entertainment retail, enclosed amusements, and hotel and eating establishment uses. Within the subarea, each block would have an FAR ranging from 2.0 north of Surf Avenue, 3.0 east of Stillwell Avenue, and 5.0 west of Stillwell Avenue. The rezoning could generate up to a maximum of 1.4 million sf of entertainment retail, enclosed amusements, and hotel and eating establishments. In addition, an approximately 650,000-sf open amusement park would be created in the proposed mapped parkland. Parking would be provided to meet the demand generated by the proposed uses. It is anticipated that this development would generate a parking demand between approximately 2,000 and 4,000 spaces. It is anticipated that approximately 600 spaces could be accommodated on-site within future developments on parcels large enough to support these structures. However, proximity of the water table at this location precludes below-grade parking solutions, especially close to the Boardwalk. The City is exploring off-site options for accommodating the remaining required parking spaces in the surroundings of the entertainment and amusement area.

CONEY NORTH

The Coney North subarea would be rezoned for residential use with ground-floor retail and wrapped parking at 5.0 FAR with participation in the Inclusionary Housing Program. The rezoning could generate up to a maximum of 1,800 dwelling units and 140,000 sf of local and entertainment retail space. It is anticipated that the approximately 100,000-sf Shore Theater at 1301 Surf Avenue would be redeveloped as a commercial or residential building. The developments would require the provision of up to 1,100 parking spaces. Required parking would be provided within the base of the buildings and would be required to be wrapped by active uses.

MERMAID AVENUE

The Mermaid Avenue subarea would be rezoned for residential use with ground-floor retail at 4.6 FAR with participation in the Inclusionary Housing Program. The rezoning could generate up to a maximum of 200 dwelling units and 40,000 sf of local retail and service space. The developments would require the provision of up to 130 parking spaces. Required parking would be provided on site or within the base of the Coney North buildings and would be required to be wrapped by active uses.

CONEY WEST

The Coney West subarea would be rezoned for residential use with ground-floor retail and wrapped parking at 4.0 FAR for Block 7073 and 5.0 FAR for Blocks 7072 and 7071, between the proposed West 20th Street and the existing West 22nd Street with participation in the Inclusionary Housing Program. The rezoning could generate up to a maximum of 2,800 dwelling units and 370,000 sf of local and entertainment retail space. It is projected that the 60,000-sf landmarked Childs Restaurant would be redeveloped as a commercial building. The developments would require the provision of 3,100 parking spaces, including 1,100 KeySpan Park replacement parking spaces. Required parking and KeySpan Park replacement parking would be provided within the base of the buildings and would be required to be wrapped by active uses.

The RWCDS for Coney West also includes the creation of the 65,000-sf Highland View Park along the Boardwalk between West 22nd and West 23rd Streets. The rezoning of the portion of Block 7070 within the existing C7 district to 1.25 FAR would not generate new development. It is occupied by a health care center that is already built at more than the proposed FAR.

For analytical purposes, it is estimated that approximately 3,840 dwelling units would be market-rate and 960 would be low- to moderate-income units. These estimates are based on the projection that approximately 20 percent of the dwelling units with the RWCDS would be low-to moderate-income units. It is assumed that developers would utilize voluntary mechanisms such as the Inclusionary Housing Program to benefit from density bonus in exchange for the provision or preservation of affordable housing units.

F. EIS SCOPE OF WORK

TASK 1. PROJECT DESCRIPTION

The first chapter of the EIS introduces the reader to the proposed actions and sets the context in which to assess impacts. The chapter contains a project identification (brief description and location of the proposed actions), the background and/or history of the proposed actions, a statement of the public purpose and need for the proposed actions, key planning considerations that have shaped the current proposal, a detailed description of the project overall, and a discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the proposed actions and gives the public and decision-makers a base from which to evaluate the proposed actions against both Build and No Build options.

The project description chapter will present the planning background and rationale for the proposed zoning map and text amendments, demapping and mapping of parkland, disposition of City-owned property, street demapping and mapping, and UDAAP designation and project approval. In addition, the chapter will summarize the RWCDS for analysis in the EIS and present its rationale.

The section on approval procedures will explain the City's ULURP process, its timing, and hearings before the Community Board, the Brooklyn Borough President's office, CPC, and the New York City Council. The role of the EIS as a full-disclosure document to aid in decision-making will be identified and its relationship to ULURP and the public hearings described.

TASK 2. LAND USE, ZONING, AND PUBLIC POLICY

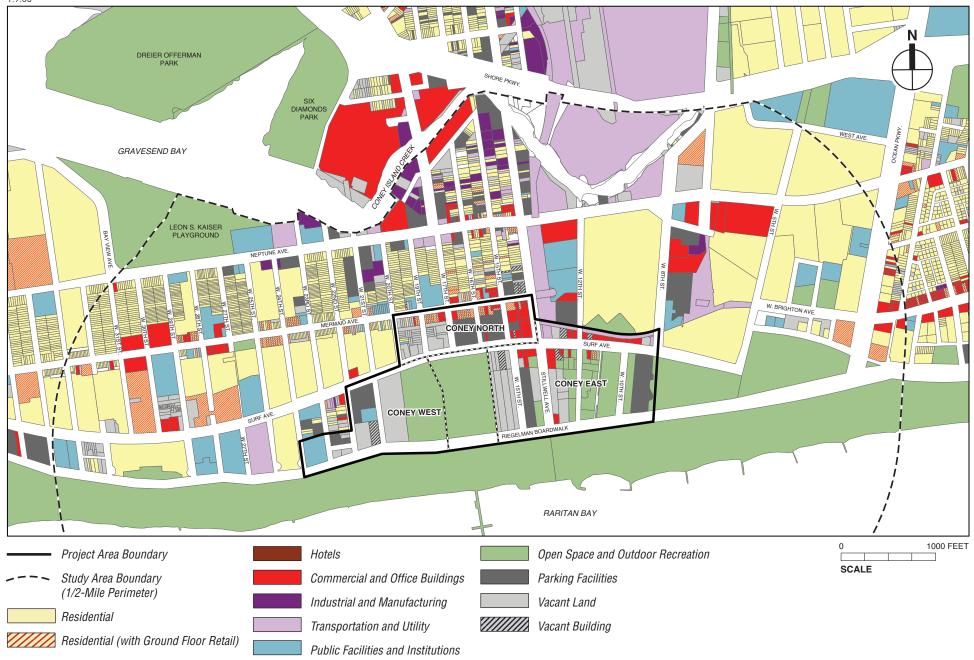
The proposed actions would affect the land use on approximately 47 acres in and around the Coney Island central amusement district and KeySpan Stadium. This chapter will analyze the potential impacts of the proposed actions on land use, zoning, and public policy. The land use study area will consist of the proposed project area, where the potential land use effects of the proposed actions will be straightforward and direct (reflecting the development scenario), and neighboring areas within an approximately ½-mile radius that could experience indirect impacts. The analysis will describe any potential impacts on land use, zoning, and public policy resulting from the proposed actions. Subtasks will:

- A. Provide a detailed description of land use, zoning, and public policy in the project area and study area. Based on CEQR Technical Manual guidelines, the study area will extend approximately ½ mile from the borders of the proposed project area; the northern boundary of the study area will be Coney Island Creek and the Belt Parkway, which create physical borders to the area (see Figure 7). This task will be closely coordinated with the socioeconomic conditions analysis described below, which will provide a qualitative analysis of the proposed actions' effect on businesses and employment in the project area and study area. Recent land use trends in the study area will also be identified.
- B. Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the study area. Describe recent land use trends and major factors influencing land use trends in the study area based, as applicable, on discussions with public or private agencies and local real estate brokers.
- C. Describe and map existing zoning and recent zoning actions in the study area.
- D. Prepare a list of future development projects in the study area that would be expected to influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area. Based on these changes, assess land use and zoning conditions in the future without the proposed actions.
- E. Describe the potential land use changes in the proposed project area based on the RWCDS.
- F. Assess impacts of the projected development resulting from the proposed actions on land use and land use trends, public policy, and zoning. Discuss the proposed actions' potential impacts related to issues of compatibility with surrounding land use, the consistency with zoning and other public policies, and the effect of the proposed actions on ongoing development trends and conditions in the area.

TASK 3. SOCIOECONOMIC CONDITIONS

This chapter will examine the effects of the proposed actions on socioeconomic conditions in the study area, including population characteristics, increase in economic activity, and the potential displacement of businesses and employment from the proposed project area. The analysis will provide an assessment of potential socioeconomic changes associated with the proposed actions, including: direct displacement of residential population, businesses, or employees; new development that is markedly different from existing uses and activities within the neighborhood; potential changes in conditions in the real estate market in the area; or an adverse impact on socioeconomic conditions in a specific industry, including the amusement industry.

Screening analyses will be conducted pursuant to the *CEQR Technical Manual* methodology. The analysis will present sufficient information regarding the effects of the proposed actions to



Land Use Study Area
Figure 7

CONEY ISLAND REZONING

rule out the possibility of significant impacts through a preliminary assessment, or to determine that more detailed analysis is required to make a determination as to impacts. The preliminary assessment will examine the following five areas of concern: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on specific industries, including the amusement industry. If it is determined that a socioeconomic impact is likely or cannot be ruled out based on the preliminary assessment, then a detailed analysis will be conducted.

The socioeconomic conditions study area will be delineated to reflect boundaries of census tracts lying approximately within a ½-mile radius of the project area and a study area map will be provided in the EIS. Subtasks for the analysis will include the following:

POPULATION CHARACTERISTICS

- A. Based on the U.S. Census of Population and Housing, describe the 2000 population characteristics of the project and study areas.
- B. Based on RPAD data and other sources, present estimates of changes in demographic conditions in the study area since 2000, and discuss population trends.
- C. Estimate population characteristics associated with development resulting from the proposed actions, and assess impacts on population.

HOUSING CHARACTERISTICS

- A. Using 2000 Census data and other information, such as reports on housing value and median rents, describe the housing characteristics of the project and study areas.
- B. Assemble and discuss information on housing market conditions, including identification of presence of any unique or predominant population groups or presence of populations particularly vulnerable to economic changes, using Census data and other sources.
- C. Estimate housing changes associated with the proposed actions and assess impacts on housing, if any, and housing trends.

ECONOMIC CHARACTERISTICS

- A. Describe existing economic activity in the project area and study area (using the most recently available data), including the number and types of businesses and institutions and employment by key sectors.
- B. Describe the existing economic characteristics (i.e., visitor estimates, seasonality, and visitor spending potential) of the existing amusement area, New York Aquarium, and the beach.
- C. Describe the physical characteristics of the existing commercial (including amusement) and manufacturing buildings in the project area and surrounding areas, including the general size of the structures, configurations, and condition. Determine the approximate vacancy rate and rent levels for buildings in the study area. This will be based on visual inspections, discussions with the Brooklyn Office of DCP, and discussions with real estate brokers.
- D. Describe recent trends in commercial, manufacturing, and institutional uses.

- E. Estimate net new employment and other economic activity in the study area under the RWCDS.
- F. Estimate direct displacement of commercial and manufacturing businesses and institutions and employment based on sites identified for likely development. Identify the types of businesses and employment that would be directly displaced, and determine whether the businesses have substantial economic value to the City or regional area. After accounting for currently vacant properties, configurations and conditions, use a ratio of number of properties converted to total properties to estimate potential displacement.
- G. Assess the impact of displacement, if any. Identify likely relocation areas nearby if necessary.
- H. Assess the potential effects of the proposed actions on the current amusement industry present in Coney Island.

TASK 4. COMMUNITY FACILITIES AND SERVICES

The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the proposed actions. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. The *CEQR Technical Manual*'s Table 3C-1: Community Facilities and Services Thresholds provides thresholds for analyses of indirect effects. Based on these thresholds, the addition of 4,800 dwelling units, of which 960 would be low- to moderate-income dwelling units, generated by the proposed actions will require detailed analyses of potential impacts on public schools, libraries, out-patient health care facilities, and publicly funded day care centers.

The proposed study area for community facilities will be located at, or close to, ½ mile, ¾ mile or a 1-mile radius of the rezoning area depending on the type of community facility, as per CEQR guidelines. The EIS will identify and locate/map all community facilities within the defined study area for general informational purposes, including schools, libraries, health care facilities, police precincts, fire houses, etc. Separate maps for each kind of facility will be provided. Subtasks will include:

PUBLIC SCHOOLS

The proposed actions are expected to generate 4,800 residential units (including 960 affordable units). Up to 1,872 elementary and intermediate school students and 316 high school students could be generated by the proposed actions, more than the CEQR threshold of 50 or more elementary/middle school students or 150 high school students. A detailed analysis is required. This analysis will:

- Identify and locate public schools within the project study area.
- Consider impacts at the study area (school planning zone 1) and community school district levels. A high school analysis will be borough-based, although public high schools within the study area will be identified and their locations shown on the Public School map in the EIS
- Assess conditions in the project study area and for Community School Districts 21 as a whole, in terms of enrollment and utilization during the current school year, noting any specific shortages of school capacity.

- Identify conditions that will exist in the future without the actions, taking into consideration
 projected increases in future enrollment, including those associated with other developments
 in the vicinity of the project area and plans to increase school capacity either through
 administrative actions on the part of the NYC Department of Education (DOE) or as a result
 of the construction of new school space.
- Analyze future conditions with the proposed actions, adding students likely to be generated by the actions to the projections for the future without the actions. Project impacts will be assessed based on the difference between the future with proposed actions projections and the future no action projections (at the sub-area and school district levels) for enrollment, capacity, and utilization in 2019.
- Planned new capacity projects from the DOE's Five Year Capital Plan, if any, will not be
 included in the quantitative analysis unless the projects have commenced site preparation
 and/or construction. They may, however, be included in a qualitative discussion after
 impacts, if any, have been identified. Sources for the information will be noted in the EIS
 text or footnotes.

HEALTH CARE

The proposed actions are projected to generate 960 affordable (low- to moderate-income) housing units, more than the CEQR threshold of 600 units of low-moderate income housing (*CEQR Technical Manual*, Table 3C-1). A detailed analysis of health care facilities is required. This analysis will:

- Identify hospital emergency room services and outpatient ambulatory care facilities (regulated by the NYS Department of Health and Office of Mental Health) within approximately one mile of the project area.
- Describe each facility in terms of its address, the type of service provided, an indicator of its size, capacity or utilization, and any other relevant existing conditions based on publicly available information and/or consultation with health care officials. Sources for the information will be noted in the EIS text or footnotes.
- Identify conditions that will exist in the future without the actions, taking into account any planned capacity changes for hospital facilities that serve the project area and the impact of any new low- to moderate-income population on these facilities.
- Analyze future conditions with the proposed actions. The effects of the addition of a low- to moderate-income population resulting from the projected development will be assessed.

DAY CARE

The proposed actions would generate 326 children eligible for publicly funded daycare, more than the CEQR threshold of 50 children eligible for publicly funded daycare (*CEQR Technical Manual*, Tables 3C-1 and 3C-4). A detailed analysis of day care facilities is required. This analysis will:

- Identify existing public day care and head start facilities within approximately one mile of the project area.
- Describe each facility in terms of its location, ages served, number of slots (capacity), existing enrollment and length of waiting list. Information will be based on publicly available information and/or consultation with the Administration for Children's Services'

Division of Child Care and Headstart (CCHS). Sources for the information will be noted in the EIS text or footnotes.

- For conditions in the future without the proposed actions, information will be obtained on any changes planned for day care programs or facilities in the area, including closing or expansion of existing facilities and establishment of new facilities. Any expected increases in the population of children under 12 within the eligibility income limitations, based on CEQR methodology (Table 3C-4), will be discussed as potential additional demand; and the potential effect of any population increases on demand for day care services in the study area will be assessed.
- The potential effects of the additional eligible children resulting from projected developments induced by the proposed actions will be assessed by comparing the estimated net demand over capacity to the net demand over capacity estimated in the future without the proposed action analysis.

LIBRARIES

The proposed actions would generate 4,800 residential units, more than the CEQR threshold of 734 units in Brooklyn for public libraries (*CEQR Technical Manual*, Tables 3C-1 and 3C-3). A detailed analysis of library facilities is required. This analysis will:

- Identify the local public library branch(es) serving the area.
- Describe existing population served by the branch(es), using information gathered for Socioeconomic conditions assessment.
- Describe the library branch collections in terms of the number of items (books, CD-roms, etc.), circulation or level of utilization, and other relevant existing conditions based on publicly available information and/or consultation with the Brooklyn Public Library administration. Sources for the information will be noted in the EIS text or footnotes.
- Identify conditions that will exist in the future without the actions, taking into account projections of population change in the area (based on the EIS Socioeconomics chapter analysis) and information on any planned changes in the capacity of the library facilities. The effects of these changes will be assessed.
- Analyze future conditions with the proposed actions. The effects of the addition of the population resulting from the projected development will be assessed in comparison to the condition in the future without the proposed actions.

POLICE AND FIRE SERVICES

The Police and Fire Departments routinely evaluate the need for changes in personnel, equipment, or facilities based on population, response times, crime levels, or other local factors. Therefore a detailed assessment of service delivery is usually conducted only if a proposed action would directly affect the physical operations of a station house or precinct house, which is not the case with the proposed actions. Nonetheless, the EIS will provide a description of the existing police and fire services in or near the project study area and will qualitatively assess the proposed actions' incremental affects on police and fire protection services.

TASK 5. OPEN SPACE

New residents, workers, and temporary amusement users generated by new development in the project area would place added demands on existing open space and recreational facilities, and

the proposed actions would generate more than the CEQR threshold of 200 residents, thereby requiring further assessment of open space. In addition, the proposed actions would demap existing parkland (occupied by two parking lots) and directly affect an existing GreenThumb community garden, the Boardwalk Garden on West 22nd Street at the Boardwalk. The project would also create a 65,000-square-foot active open space (called Highland View Park) which would replace more than the area of the proposed demapped parkland in the Coney East amusement area. Therefore, a detailed open space analysis will be conducted according to the tasks below. This analysis will assess open space conditions with and without amusement area and beach visitors, utilizing the data collected for the socioeconomic conditions analysis.

- A. Following *CEQR Technical Manual* guidelines, inventory existing active and passive open spaces within a ¼-mile study area for the non-residential population and a ½-mile study area for the residential population. The condition and usage of existing facilities will be described based on the inventory and field visits. Jurisdiction, features, user groups, quality/condition, factors affecting usage, hours of operation, and access will be included in the description of facilities. Acreage of these facilities will be determined and total study area acreage calculated. The percentage of active and passive open space will also be calculated.
- B. Prepare a demographic analysis of the commercial open space study area worker, visitor, and residential population, and residential population in the residential open space study area, including information available from the 2000 Census.
- C. Based on the inventory of facilities and study area residential, visitor, and worker population, calculate the open space ratios for the study areas, and compare to City guidelines to assess adequacy.
- D. Assess expected changes in future levels of open space supply and demand in the analysis year, based on other planned development projects within the study area. Also take account of any new open space and recreational facilities expected in the study area. Open space ratios will be developed for future conditions without the proposed actions and compared with existing ratios to determine changes in future levels of adequacy.
- E. Based on the residential, visitor, and worker population added by the RWCDS, assess project effects on open space supply and demand. The assessment of impacts will be based on a comparison of open space ratios with the proposed actions (and their associated new public space) and open space ratios in the future without the proposed actions. The analysis will also qualitatively consider new open space provided by the proposed actions.

TASK 6. SHADOWS

The proposed actions will result in the creation of multiple tall new buildings within the project area. Therefore, an analysis of shadows will be prepared focusing on the relation between the incremental shadows created by the RWCDS buildings on sensitive receptors, specifically, public open spaces, historic resources with sunlight-dependent features, and natural resources. The RWCDS for the shadow analyses will assume the maximum heights of proposed buildings, in relation to sun-sensitive uses. This analysis will include the following tasks:

A. Identify sun-sensitive landscapes and historic resources within the path of the proposed actions' shadows. In coordination with a survey for the open space and historic resources analyses, map and describe any sun-sensitive receptors. For open spaces, map active and passive recreation areas and features of the open spaces, such as benches or play equipment.

- B. Prepare a three-dimensional CAD model of the project area, including existing structures and topology as well as the proposed structures. The data for this model will come from Sanborn Fire maps, U.S. Geological Survey (USGS) topological data, surveys prepared as part of the project design, and other plans available for the proposed actions and RWCDS.
- C. Prepare shadow diagrams for time periods when shadows from the new buildings could fall onto publicly accessible open space as well as project-created open spaces. The analysis will also take into account any historic resources that may have significant sunlight-dependent features. These diagrams will be prepared for up to four representative analysis days if shadows from the proposed buildings would fall onto any of the open spaces on that day. The four analysis days will be:
- March 21—the vernal equinox, which is the equivalent of September 21, the autumnal equinox
- May 6—the midpoint between the vernal equinox and the longest day of the year, which is the equivalent to August 6—the midpoint between the longest day of the year and the autumnal equinox
- June 21—the longest day of the year
- December 21—the shortest day of the year
- D. Describe the effect of the incremental shadows on the sensitive receptors based on the shadow diagrams for each of the analysis dates. Assess the effects of the proposed actions' incremental shadow compared with shadows expected in the future without the proposed actions.
- E. If vegetation or sun-sensitive activity areas will be covered by the proposed actions' incremental shadow for a significant amount of time, the duration of the increment will be compared with the amount of sunlight on those areas in the future without the proposed actions.

TASK 7. HISTORIC RESOURCES

The CEQR Technical Manual identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated NYC Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Registers of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet their eligibility requirements. Because the proposed actions would induce new development, which could result in in-ground disturbance, the proposed actions have the potential to result in impacts to archaeological and architectural resources. There are known historic buildings and structures located within and adjacent to the project area that include the Parachute Jump, the Wonder Wheel, the Cyclone, and Childs Restaurant on the Boardwalk.

Impacts on historic resources will be considered in the project area and in a 400-foot radius area surrounding the project area. This study area will be expanded as necessary in conjunction with the shadows analysis if the buildings in the reasonable worst-case development scenario have the potential to cast shadows on historic resources outside of the 400-foot area. Archaeological

resources will be considered only in those areas where new in-ground disturbance is likely to occur; these are limited to sites that may be developed under the proposed actions. In coordination with the research conducted for the land use and hazardous materials tasks, this section will include an overview of the study area's history and land development. This history will be detailed enough to determine whether the project area may contain any potential archaeological resources, requiring further study. Subtasks will include:

ARCHAEOLOGICAL RESOURCES

- A. Submit the proposed project description and site maps to LPC for its review and determination regarding archaeological sensitivity.
- B. Research and describe the area's development history and the potential archaeologically sensitive locations in the project area as identified by LPC.
- C. Based on City and State files, identify and map inventoried archaeological resources and/or sensitive locations.
- D. Identify any other areas thought to be archaeologically sensitive within the project area.
- E. Identify sites within the project area where new in-ground disturbance is expected to occur as a result of the proposed actions and any resulting potential archaeological impacts.

ARCHITECTURAL RESOURCES

- A. Research and describe the area's development history and architecturally sensitive locations in the project area.
- B. Identify, map, and describe LPC-designated, S/NR-listed, and LPC- and S/NR-eligible architectural resources in the proposed project area. Field survey the project area and the study area to determine whether there are any potential architectural resources that could be affected by the proposed actions. Potential architectural resources comprise properties that may be eligible for listing on the Registers and/or designation as a NYC Landmark. Identification of potential architectural resources will be based on criteria for listing on the National Register as found in the Code of Federal Regulations, Title 36, part 60, and LPC's criteria for Landmark and Historic District designation. This analysis will also evaluate the potential eligibility of seven properties identified by Coney Island USA. In consultation with LPC, seek determinations of eligibility for any potential resources in the project area and study area that would be affected by the proposed actions.
- C. Qualitatively discuss any impacts on architectural resources that are expected in the future without the proposed actions.
- D. Assess any direct physical impacts of the proposed actions on architectural resources. In conjunction with the urban design task, assess the proposed actions' potential to result in any visual and contextual impacts on architectural resources.

TASK 8. URBAN DESIGN AND VISUAL RESOURCES

The proposed actions would result in the construction of new structures and, therefore, have the potential to result in impacts related to urban design and visual resources. This chapter will assess the urban design and visual resources of the project area and within a 400-foot radius of the project area, and the effects on these of the proposed actions. Following the

recommendations of the *CEQR Technical Manual*, the EIS will consider the following urban design characteristics: building bulk including height, setback, and density characteristics; building use; building arrangement; block form and street pattern; streetscape elements; and street hierarchy. Visual resources that will be considered include important public view corridors, vistas, or natural or built features. A detailed list of tasks follows:

- A. Describe the urban design and visual resources of the proposed project area and adjacent areas, using photographs and other graphic material as necessary to identify critical urban design features such as use, bulk, form, scale, and streetscape elements and to identify important visual resources.
- B. Describe the changes expected in the urban design and visual character of the proposed project area resulting from developments in the study area in the future without the proposed actions.
- C. Assess the potential changes in urban design and visual resources that could result from the proposed actions and RWCDS and evaluate the significance of those changes. An assessment of the modifications to the use and bulk regulations through the zoning map and text amendments will be included in the analysis, as these affect height, dimensions, and scale of the development in the project area. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources in the study area.

TASK 9. NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns, noise, and socioeconomic conditions. The proposed actions would permit new development that has the potential to alter certain constituent elements of the affected area's neighborhood character, including land use patterns, socioeconomic conditions, traffic and noise levels, and urban design features, and could affect historic resources. An amalgam of impact categories, a neighborhood character analysis considers the combined impacts of land use, urban design, visual resources, historic resources, socioeconomics, traffic, and noise. As suggested in the *CEQR Technical Manual*, the study area for neighborhood character will be coterminous with the ½-mile land use study area. The EIS will:

- A. Describe the predominant factors that contribute to defining the character of the area, drawing on the related EIS sections.
- B. Based on planned development projects, public policy initiatives, and planned public improvements, summarize changes that can be expected in the character of the neighborhood in the future without the proposed actions.
- C. Drawing on the analysis of impacts in various other EIS chapters, assess and summarize the proposed actions' impacts on neighborhood character.

TASK 10. NATURAL RESOURCES

This chapter will assess the degree to which natural resources of the Atlantic Ocean, Coney Island Creek, Gravesend Bay, and waterfront and upland areas could be affected by the new activities that would be expected from the proposed actions. The potential disturbances stem

primarily from construction activities and increases in residential and commercial development. Stormwater runoff from such development activities may have the potential to degrade water quality and affect natural resources. While potential impacts on dune habitat and vegetation need to be considered, there may also be opportunities for enhancing the existing terrestrial habitat that occupies portions of the project area. Because the proposed project area is within the designated boundary for the Brooklyn-Queens aquifer, it is necessary to assess the potential for impacts to groundwater resources.

WATER QUALITY

The Coney Island area of Brooklyn has a separate stormwater system that is maintained and operated by the New York City Department of Environmental Protection (DEP). Most of the existing vacant land in the area is vegetated, allowing for stormwater to infiltrate into the ground. The proposed rezoning would likely lead to more impermeable surfaces than currently exist, and these increased impermeable surfaces would in turn lead to increased stormwater flows in the DEP stormwater system and into the receiving bodies. Therefore, the EIS will include an assessment of the potential for increased stormwater from the rezoning area to affect the water quality in the receiving water bodies. This assessment will be coordinated with Task 13, "Infrastructure," which includes a stormwater disposal assessment.

In addition, the site is located over the Brooklyn-Queens Aquifer, which is a federal and state designated sole source aquifer. Even though Coney Island does not use the aquifer for drinking water and no wells are found down gradient of the rezoning area, the potential for impacts on the aquifer must be assessed.

Specific tasks include:

- A. Summarize relevant information on existing water quality and sediment conditions in the Atlantic Ocean in the project vicinity. Physical characteristics such as water quality characteristics (dissolved oxygen, water temperature, salinity, turbidity, etc.) will be described based on existing information such as the DEP New York Harbor Water Quality Survey, U.S. Environmental Protection Agency (EPA) STORET (Storage and Retrieval) water quality database, water quality data compiled by the U.S. Army Corps of Engineers as part of the Harbor Navigation Improvement projects and Dredge Material Management Plan, water quality data compiled by DEP as part of the Combined Sewer Overflow (CSO) Abatement Program, and water quality information compiled as part of the Harbor Estuary Plan (HEP). Bottom substrate conditions and sediment quality characteristics will also be described based on existing information such as sediment sampling conducted as part of the EPA's Regional Environmental Monitoring and Assessment Program (R-EMAP), and results of sediment sampling conducted for historical studies. No field sampling will be conducted.
- B. Existing information on groundwater quality in the vicinity of the proposed project will be summarized. No field sampling will be conducted. Summarize the description of the existing storm sewer system serving the area that will be provided as part of Task 13.
- C. Provide an assessment of the future conditions for water and sediment quality, and groundwater quality within the project area without the proposed actions. This will consider effects on water quality and sedimentation rates of proposed in-water activities that may occur independently of the proposed actions, as well as the potential for future projects to affect groundwater quality. The evaluation of surface water and sediment quality will be

based upon the detailed description of the existing conditions and continued improvements to water quality, sediment quality, and habitat quality that would result from ongoing programs being conducted by the City such as the 2006 Amended Drainage Plan for Coney Island that identifies future storm sewer system improvements, the Avenue V Pumping Station Upgrade, CSO Abatement Program, Shoreline Survey Program, and Floatables Program, continued infrastructure improvements such as improvements to existing sewage treatment plants and construction of additional plants, improved stormwater management, water quality improvement measures identified by the Interstate Environmental Commission (IEC), and implementation of water quality and habitat improvement measures identified by HEP and the Hudson-Raritan Estuary Ecosystem Restoration project, and potential effects of other projects planned within the New York City metropolitan region.

D. Based on the assessment of the 2006 Amended Drainage Plan storm sewer system to meet the demand generated by the RWCDS, conducted under Task 13, below, assess the potential effects of the proposed RWCDS activities on water and sediment quality, and groundwater resources within the project area. The assessment will consider potential water quality effects from project construction and operation and increased stormwater runoff from the RWCDS. The parameters to be assessed will include temperature, pH, dissolved oxygen and biochemical oxygen demand in the areas close to the outfalls. The change in the volume of stormwater percolating into the aquifer at the site will be estimated, and the potential impacts discussed qualitatively. If activities extend to the water, effects of temporary increases in resuspended materials, potential releases of contaminants from disturbed sediments, and changes in turbidity will be evaluated.

BIOLOGICAL RESOURCES

National Marine Fisheries of the United States Department of the Interior has designated waters around parts of Coney Island as an Essential Fish Habitat. The mouth of Gravesend Bay supports marshes and wetlands, which are productive nurseries for many fish and amphibian species. Using the water quality assessment described above, the potential for adverse changes to affect the productivity of these resources will be assessed. Because of the project area's proximity to the waters of the Atlantic Ocean, Gravesend Bay and Coney Island Creek, birds, mammals, reptiles and amphibians could use the area for foraging, resting and/or breeding. The effects of the RWCDS on these resources will be assessed, and the significance of those effects will be evaluated. An assessment of impacts on plant species will be done similar to that for animal species. The EIS will:

- A. Conduct literature review and site visits to describe the existing terrestrial and aquatic resources in the project area. Existing information on aquatic biota prepared by the U.S. Fish and Wildlife Service (USFWS), New York State Department of Environmental Conservation (NYSDEC), DEP, and other published and grey literature sources will be used. Describe the existing condition of the regional phytoplankton and other primary producers, zooplankton, and benthic communities.
- B. Assess the importance of this region for supporting marine fish populations, as well as its role as a migratory route for other fish species. Determine if an Essential Fish Habitat study is necessary, based on the reasonable worst-case development program.
- C. Contact the New York State Natural Heritage Program, the National Marine Fisheries Service, and USFWS to determine whether there is a potential for threatened, endangered, rare or other protected species to occur within or near the project area.

- D. Assess the future conditions for natural resources within the project area without the proposed actions. Assess the extent to which future programs intended to improve water and sediment quality may affect biological resources. Consider effects of upland and in-water activities that may be planned without the proposed actions on terrestrial and aquatic resources.
- E. Assess the potential effects of the RWCDS on terrestrial and aquatic biota and habitats within the project area. Consider potential impacts to shorebirds associated with increased human activity along the beachfront.
- F. Assess the potential for terrestrial habitat enhancement. This assessment will explore opportunities for the addition of habitat enhancement features, and will investigate the use of native plants in landscaped areas to provide possible nesting or feeding habitat.

TASK 11. HAZARDOUS MATERIALS

The hazardous materials assessment will determine which, if any, portions of the project area may have been adversely affected by current or historical uses at or adjacent to the project area. A preliminary environmental site assessment prepared pursuant to the *CEQR Technical Manual* and Chapter 24 of Title 15 of DEP rules governing the placement of E-designations will be conducted for the project area to determine which of the RWCDS parcels warrant an E-designation without the preparation of a Phase I assessment and which parcels require further assessment. If the potential for contamination is not identified on a development parcel, the screening assessment will be conducted on adjacent properties. If impacts are not identified on the adjacent properties, the screening assessment will be expanded to include properties within 400 feet of the development parcels to determine if an E-designation on the development parcel is warranted.

For City-owned sites or sites that are proposed for City ownership, E-designations will not be placed on development parcels. Instead, since development of parcels would occur through disposition to a private entity, a similar mechanism to ensure that further investigative and/or remedial activities, as well as health and safety measures, prior to and/or during construction will be required under the City's contract of sale with the private entity selected to develop the parcel. Any investigative and/or remedial work plans will be submitted to DEP for review and approval prior to start of any work.

The hazardous materials assessment will be conducted according to the following tasks:

- A. Review United States Geological Society (USGS) topographical maps to ascertain the topography. Available USGS and New York State Geological Survey documents will be reviewed for surface and subsurface geological conditions in addition to the groundwater conditions in the project area and adjacent areas.
- B. Review Sanborn Fire Insurance Maps to develop a profile on the historical uses of properties.
- C. Perform field reconnaissance to identify existing uses and assess existing conditions. The field reconnaissance will consist of observing the development parcels from public access ways (i.e., sidewalks and streets) and noting the general uses of the properties (i.e., industrial, manufacturing, residential, commercial, etc.). The field reconnaissance will include the following:
- Characterization of the range of uses and activities performed in the project area;

- Notation of surrounding properties to assess potential impacts on the subject property;
- Observation of illegal dumping of domestic refuse, hazardous waste, and/or construction debris on the development parcels or in the area;
- Evidence of electrical transformers or large capacitors on the development parcels; and
- Review of data for underground storage tanks or aboveground storage tanks (USTs and/or ASTs) in the area. In addition to the environmental database search, readily available public records will be requested and reviewed, where applicable. Freedom of Information Law (FOIL) requests will be submitted to various City and State agencies, including NYSDEC, New York City Department of Health, DEP, FDNY, and the New York City Department of Sanitation, regarding the release of petroleum products and/or hazardous materials or any other environmental concerns at the subject sites. A database search will be conducted for each development parcel on the New York City Department of Buildings website.

The mapping, literature, and field data will be evaluated to assess the potential for environmental concerns at the development parcels. A summary of findings and conclusions will be prepared for inclusion in the EIS to determine where E-designations may be appropriate. An E-designation would require that the fee owner of an (E)-designated site conduct a testing and sampling protocol, and remediation, where appropriate, to the satisfaction of DEP before the issuance of a building permit by the Department of Buildings (pursuant to ZR Section 11-15 [Environmental Requirements]). The E-designation also includes mandatory construction-related health and safety plans that must be approved by DEP.

TASK 12. WATERFRONT REVITALIZATION PROGRAM

The New York State Coastal Management Program (CMP) is designed to balance economic development and preservation by promoting waterfront revitalization and water-dependent uses while protecting fish and wildlife, open space and scenic areas, public access to the shoreline, and minimizing adverse effects on ecological systems and erosion and flooding. New York City's Local Waterfront Revitalization Program (LWRP) was approved by the New York State Department of State for inclusion in the New York State CMP. DCP is responsible for determining a project's consistency with the policies and intent of the City's LWRP.

Because the entire project area is located within the designated boundaries of New York City's Coastal Zone with much of the area below the base flood elevation, the proposed actions will be reviewed, as specified in the Waterfront Revitalization Program and in the *CEQR Technical Manual*, for consistency with all the policies comprising the LWRP. This review will incorporate the results of the analyses of potential impacts to the resource areas addressed by the LWRP. The waterfront revitalization analysis will draw from various impact analyses throughout the EIS, as relevant. These impact analyses will be based on different study areas reflecting the requirements of each analysis.

TASK 13. INFRASTRUCTURE

This chapter will describe the existing infrastructure in the proposed project area. According to the *CEQR Technical Manual*, the City's infrastructure comprises the physical systems supporting its population, including water supply, wastewater treatment and stormwater disposal. The proposed actions would induce new development that could place additional demands on infrastructure, and the *CEQR Technical Manual* specifies that an assessment of impacts on the City's water supply system be conducted for actions in Coney Island, which is at

the end of the water system where water pressure can be low. Also, based on information prepared by DEP, sewer capacity upgrades and changes to the sanitary and storm sewer systems have been identified in a 2006 Amended Drainage Plan. This task will be undertaken in coordination with DEP regarding water and sewer system capacity and infrastructure issues in the area. An analysis will be conducted to determine the potential for the projected development induced by the proposed actions to affect the City's infrastructure, including:

WATER SUPPLY

Describe the existing water distribution system serving the proposed project area based on information obtained from the DEP Bureau of Water Supply and Wastewater Collection.

- A. Examine the current water usage in the area.
- B. Assess the likely demand in the future without the proposed actions, and describe the effects on the system.
- C. Project water demand for the reasonable worst-case development induced by the proposed actions.
- D. Assess the effects of the incremental demand on the system to determine if there is sufficient capacity to maintain adequate supply and pressure.

SANITARY SEWAGE

- A. In this area, the sanitary sewage system is separate from the stormwater system, and the existing sewer systems serving the proposed project area will be described from information obtained from DEP, including available as-built sewer maps and infiltration/inflow maps.
- B. Existing and future sanitary flows to the Coney Island Water Pollution Control Plant (WPCP) that serves the area will be calculated and estimated.
- C. Any expected changes in sewer conditions to occur in the future without the proposed actions will be discussed in the chapter. Sanitary sewer improvements that are shown on the 2006 Amended Drainage Plan for existing zoning conditions will be described.
- D. The adequacy of the 2006 Amended Drainage Plan sanitary sewer system to meet demand generated by the projected development induced by the proposed actions, including adjacent sewer capacities, will be assessed. Information on sanitary sewage generation will be compiled for the reasonable worst-case development scenario induced by the proposed actions based on water usage estimates. A hydraulic study of the sanitary sewer system will be completed as part of this task and will be summarized in the EIS. Incremental effects of demand on the system will be assessed in comparison to sanitary sewer improvements identified in DEP's 2006 Amended Drainage Plan. Any sewer improvements required to adequately serve the proposed project and incremental to those in the 2006 DEP Amended Drainage Plan will be identified.
- E. The effects of the incremental demand will be assessed to determine if there will be any impact on the WPCP, or on its State Pollution Discharge Elimination System (SPDES) permit conditions.

STORMWATER DISPOSAL

- A. In this area, the stormwater system is separate from the sanitary sewer system. Information on the existing storm sewer system serving the area will be described based on information obtained from DEP, including available as-built sewer maps and infiltration/inflow maps.
- B. The 2006 Amended Drainage Plan identifies future storm sewer system improvements that would result without the action. The future improvements will be described in the infrastructure chapter.
- C. The adequacy of the 2006 Amended Drainage Plan storm sewer system to meet demand generated by the projected development, including adjacent sewer capacities, induced by the proposed actions will be assessed. To complete this task, a hydraulic study of the storm sewer system will be completed for the reasonable worst-case development scenario and will be summarized in the EIS. Incremental effects of demand on the storm sewer system will be assessed in comparison to storm sewer improvements identified in DEP's 2006 Amended Drainage Plan. Any storm sewer improvements required to adequately serve the proposed project and incremental to those in the 2006 DEP Amended Drainage Plan will be identified.

TASK 14. SOLID WASTE AND SANITATION SERVICES

The proposed actions would induce new development that would require sanitation services. This chapter will provide an estimate of the additional solid waste expected to be generated by the projected reasonable worst-case development scenario and assess its effects on the City's solid waste and sanitation services. This assessment will:

- A. Describe existing and future New York City solid waste disposal practices.
- B. Forecast solid waste generation by the projected development induced by the proposed actions based on CEQR guidelines.
- C. Assess the impacts of the proposed actions' solid waste generation on the City's collection needs and disposal capacity.

TASK 15. ENERGY

According to the CEQR Technical Manual, because all new structures requiring heating and cooling are subject to the New York State Energy Conservation Code, which reflects State and City energy policy, actions resulting in new construction would not create significant energy impacts, and as such would not require a detailed energy assessment. For CEQR purposes, energy impact analysis focuses on an action's consumption of energy. A qualitative assessment/screening analysis will be provided in the EIS, as appropriate. This would include an estimate of the additional energy consumption associated with the RWCDS induced by the proposed actions, including an estimate of the demand load on electricity, gas, and other energy sources; and an assessment of available supply.

TASK 16. TRAFFIC AND PARKING

The EIS will contain a detailed assessment addressing the traffic and parking-related issues associated with the increased vehicular traffic and changes in the parking supply and projected parking demand resulting from the proposed actions. This study will include a description of existing conditions, projection of future transportation conditions, and identification of potential adverse impacts of the proposed actions. Feasible mitigation measures for identified impacts will

be recommended as necessary. The RWCDS will include a range of uses that each generates traffic during different peak periods of the week. The EIS will also need to account for the heightened intensity of activity in the Coney Island area during the summer, particularly on summer weekends, and even more so on days when there is a ballgame at KeySpan Stadium. The peak summer season conditions will be addressed, both for analysis conditions with a sellout or near-sellout ballgame at KeySpan Stadium, as well as for analysis conditions with no ballgame.

The traffic and parking analysis will include the following tasks:

TRAFFIC

- A. Identify traffic analysis locations. Initial evaluations of candidate locations in the rezoning study area and along key traffic routes to and from the area indicate that a set of 30 analysis locations will be appropriate. These locations will include 20-22 intersections within the rezoning study area plus 7-8 intersections along Cropsey Avenue, Stillwell Avenue, and Ocean Parkway leading to the rezoning study area, which are the major feeder routes to the area (see Figure 8). These 30 locations may be modified once a preliminary trip generation and preliminary traffic assignment is completed.
- B. Conduct a preliminary trip generation projection for potential peak traffic analysis hours for each of the development uses contemplated under the proposed actions. This will be based on trip generation rate data, temporal distribution information, modal split data, and average vehicle occupancy data available from other EISs/EASs or available professional literature such as the Institute of Transportation Engineers' (ITE) Trip Generation Manual. This preliminary set of projections will provide the approximate volume of traffic that would be generated by time period and will be used to identify the appropriate traffic analysis peak hours.
- C. Conduct a preliminary traffic assignment using the above (preliminary) trip generation projections and expected trip origins and destinations to confirm or modify the 30 traffic analysis locations initially assumed for count purposes.
- D. Conduct a detailed traffic data collection program for the assumed 30 intersection analysis locations. The data collection program was conducted in July 2006, and the following five peak traffic analysis periods and analysis conditions in the summer peak period will be analyzed for reasonable worst-case conditions:
- Summer weekend midday peak hour that would address potential impacts of the proposed land uses concurrent with peak arrivals to the Coney Island area (addressed on either a game day or non-game day, most likely a game day).
- Summer weekend late afternoon/early evening peak hour that would address potential impacts of the proposed land uses concurrent with peak departures from the Coney Island area and peak arrivals to KeySpan Stadium on a game day.
- Summer weekday AM, midday and PM peak hours (the PM peak hour would either be the late afternoon peak that would be concurrent with typical commuter peaks including residential trips under the proposed rezoning, or an early evening peak hour, whichever trip generation projections and background traffic counts identify as the worst-case condition). The traffic data collection program will include a mix of 24-hour Automatic Traffic Recorder (ATR) machine counts (with an additional estimate of up to 26 ATR machine counts needed; some streets on which the ATR machines would be placed are quite wide

Traffic Study Area Figure 8

- and would require two machines to accurately count traffic per direction), manual intersection through and turning movement counts, and vehicle classification counts at select representative locations.
- E. Inventory street and lane widths, traffic flow directions, number of moving lanes, parking regulations, official signal timing (cycle length, phases), traffic control devices (stop sign, signal), the location of bus stops, as well as other items required for traffic analysis. The most recent signal timings from the New York City Department of Transportation (NYCDOT) for each study area intersection will be obtained. Record queue lengths and observed levels of service at each location to ensure that calculated levels of service match actual field conditions.
- F. Prepare traffic volume networks for each of the intersections for each of the five peak traffic analysis hours.
- G. Determine existing traffic operating characteristics—volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service using 2000 Highway Capacity Manual (HCM) procedures.
- H. Conduct travel speed and delay runs along key corridors, which will be analyzed for air quality and/or noise conditions. These corridors are expected to include Surf Avenue, Mermaid Avenue, Cropsey Avenue, and Ocean Parkway. The EIS will examine speeds for the existing conditions for each peak hour.
- I. Determine the volume of traffic that would be generated by development projects expected to be built and operational by the proposed actions' Build year of 2019. These traffic volumes will be assigned to traffic study area intersections and combined with an annual background traffic growth rate of one percent per year, in order to develop traffic volume maps for the future without the proposed actions. These projects will be identified in conjunction with DCP, and their trip generation will be quantified using standard travel demand forecasting methodologies. Changes to the roadway network likely to occur by the project analysis year will also be identified and reflected in the traffic volume network.
- J. Determine traffic operating characteristics in the future without the proposed actions—v/c ratios, average vehicle delays, and levels of service using 2000 HCM procedures.
- K. Prepare final trip generation projections for development envisioned under the proposed actions. It is assumed that six land use types will be considered including, residential, destination retail, local retail, recreational/entertainment, hotel, and outdoor amusement parkland area. Depending on the specific uses being studied, this will account for estimates of linkages among the different uses. This will be a refinement of the preliminary projections determined earlier in the analysis.
- L. Assign project-generated traffic volumes to and through each of the traffic analysis locations for each of the peak traffic hours and analysis conditions described above. Traffic volume maps will be prepared for each analysis condition in the future with the proposed actions.
- M. Determine traffic operating characteristics in the future with the proposed actions—v/c ratios, average vehicle delays, and levels of service using 2000 HCM procedures.
- N. Identify significant traffic impacts by comparing conditions in the futures without and with the proposed actions as per criteria specified in the CEQR Technical Manual. Identify and

evaluate traffic capacity improvements that would be needed to mitigate significant adverse traffic impacts.

PARKING

- A. Identify off-street parking lots and garages within a one-quarter mile radius of the project study area (i.e., the parking study area)—their locations, capacities, and occupancy levels during representative summer weekday and weekend conditions. Identify projected utilization levels in the future without the proposed actions.
- B. Identify the amounts of off-street parking that would be removed and added under the proposed actions and develop parking accumulation profiles. Parking shortfalls, if any, will be identified.
- C. Identify the typical parking regulations within the parking study area and the percentage to which those on-street spaces are currently used and would be expected to be used in the future without the proposed actions.
- D. Estimate the extent that available on-street parking spaces might be used by projected traffic under the proposed actions.

TASK 17. TRANSIT AND PEDESTRIANS

The proposed project is situated in an area served by several local and express bus routes and by the D, F, N, and Q subway lines. While vehicular travel to and from the various uses in the RWCDS is likely to be substantial, the area's transit network is also expected to experience a notable increase in activities as a result of the proposed actions. Similarly, pedestrian activities can be intense during peak periods; this high level of activity is basic to the character of the amusement area.

Similar to what was discussed above for the traffic and parking analysis, numerous peak hours will need to be analyzed for transit and pedestrian conditions to address specific travel characteristics associated with the range of possible land uses and during time periods when project-generated trips overlap with event activities at KeySpan Stadium and summer traffic to Coney Island attractions. Based on the travel demand estimates and determination of development program elements, analysis peak periods will be selected for inclusion in the EIS. Because of the current level of trip-making and the increment anticipated from the proposed actions, a detailed analysis of transit and pedestrian operations would likely be required for most, if not all, of the peak periods identified for the traffic and parking analyses.

The transit and pedestrian studies will include a description of existing conditions, projection of future conditions, identification of potential adverse impacts, and recommendation of feasible mitigation measures. The specific elements of the analysis are outlined below.

A. Identify transit and pedestrian study areas. Rapid transit service is currently available along the eastern edge of the proposed rezoning area via the number D, F, N, and Q subway lines at the terminal at Stillwell Avenue and the West 8th Street/NY Aquarium station, both of which have recently undergone major renovation and reconfiguration. Bus service is available throughout and around the rezoning area via the B36, B64, B74, B82, X28, and X29 bus routes. A detailed analysis of control areas and circulation elements at the Stillwell Avenue and West 8th Street subway stations will be conducted. A detailed analysis of the area bus routes will also be conducted. This analysis will primarily address the increased

demand anticipated for the two express bus routes (X28 and X29) serving the study area and the local routes (B36 and B74) that provide connection to the two study area and other nearby subway stations. To address existing and future pedestrian conditions, sidewalks, crosswalks, and corner reservoirs along key routes to the Stillwell Avenue and West 8th Street subway stations, as well as specific intersections along Surf and Mermaid Avenues, will be analyzed. Up to six intersections have been preliminarily selected.

- B. Review preliminary travel demand estimates for the proposed development and determine the appropriate analysis time periods. Typically, a detailed transit analysis is not required for non-commuter time periods. However, due to the level of cumulative activities anticipated for KeySpan Stadium and other Coney Island attractions, such as the beach and boardwalk, the amusement area, and the New York Aquarium, a detailed assessment of transit operations during these time periods will be conducted. To assess pedestrian operations, a detailed analysis will be conducted for all critical time periods described for the traffic and parking assessment.
- C. Assemble available data and collect new data. New data was collected at the Stillwell Avenue and West 8th Street subway stations, at nearby bus routes, and at surrounding pedestrian elements in July 2006. This effort also included the inventory of station and pedestrian element geometries and line-haul observations at key bus stops.
- D. Determine existing transit and pedestrian operating conditions. A detailed analysis will be conducted for the transit and pedestrian elements identified above and presented for the critical time periods. For the transit analysis, it is expected that a quantified analysis will be conducted for the summer weekday AM and PM (critical analysis hour with or without a ballgame at KeySpan Ballpark to be determined based on comparison of project-generated and background trip levels) peak periods, as well as the weekend late afternoon (with a ballgame) peak period. For the pedestrian analysis, all five primary analysis peak periods identified for the traffic analysis will be assessed (although an analysis of the weekday midday peak period may not be warranted depending on the types of uses incorporated into the proposed program).
- E. Determine future transit and pedestrian operating conditions. Analyses of the futures without and with the proposed actions will be conducted, incorporating background growth, trips associated with other developments in the area, and increments induced by the proposed actions. For conditions in the future with the proposed actions, the analysis will also address the anticipated effects associated with any anticipated changes in the area's infrastructure. Potential significant impacts will be identified in accordance with *CEQR Technical Manual* guidelines. Where appropriate, viable mitigation measures, such as stairway and crosswalk widenings, will be recommended and discussed with the appropriate approval agencies (i.e., MTA and NYCDOT).
- F. Assess vehicle/pedestrian safety conditions by reviewing the most recent three years of accident data from the New York State Department of Transportation for intersections in the vicinity of the proposed rezoning area. High accident locations will be identified in accordance with criteria prescribed by the *CEQR Technical Manual*. If the proposed project is anticipated to generate notable vehicular and pedestrian traffic at such locations, future safety conditions will be evaluated. Where appropriate, mitigation or improvement measures will be recommended to avoid or mitigate any safety impacts.

TASK 18. AIR QUALITY

The proposed actions would generate traffic, thus requiring an assessment of mobile sources to estimate the potential air quality impacts. For purposes of analyzing the proposed actions' RWCDS for mobile source air quality, the analysis will incorporate the reasonable worst-case findings of the traffic analysis. In addition, the proposed actions will be assessed for potential impacts associated with stationary sources, specifically: (1) the potential effects from heating, ventilation, and air conditioning (HVAC) system emissions from action-induced development on nearby receptor sites; (2) the potential effects from HVAC system emissions from action-induced development on nearby action-induced development receptors (project-on-project); and (3) the potential for future residential and commercial land uses induced by the proposed action to be affected by air pollutants emitted from existing nearby industrial, commercial, institutional, or large-scale residential uses. The potential for impacts from mobile and stationary sources will be assessed in the EIS following the general procedures outlined in the CEQR Technical Manual.

MOBILE SOURCE ANALYSES

The specific work program for the mobile source (traffic-related) air quality studies is as follows:

- A. Gather existing air quality data. Summarize existing ambient air quality data for the study area published by the NYSDEC.
- B. Determine receptor locations for the carbon monoxide (CO) microscale air quality analysis. Intersections in the traffic study area with the greatest expected changes in traffic volumes that exceed the CEQR screening threshold for this area of the City would be identified for analysis. Selection of specific intersections for analysis will depend on the baseline and future without the proposed actions conditions along with the vehicular trip generation and distribution under the proposed actions.
- C. At each intersection selected for analysis, multiple receptor sites will be simulated in accordance with CEQR guidelines and EPA-454/R-92-005 Guideline for Modeling CO from Roadway Intersections.
- D. Select dispersion model for microscale carbon monoxide analysis. At the receptor sites, it is anticipated that the U.S. Environmental Protection Agency's (EPA) mobile source CAL3QHC dispersion model will be used for the carbon monoxide microscale analysis. The CAL3QHCR modeling will be performed to determine impacts at intersections where significant impacts are predicted with the CAL3QHC model.
- E. Emissions from any on-site parking facilities will be modeled using the procedures outlined in the *CEQR Technical Manual*.
- F. Select meteorological conditions. For refined mobile source modeling with CAL3QHCR, actual meteorological data will be employed instead of worst-case assumptions concerning wind speeds, wind direction frequencies, and atmospheric stabilities. The latest available meteorological data with surface data from John F. Kennedy Airport and concurrent upper air data from Brookhaven, New York, will be used for the simulation program.
- G. Select appropriate background levels. Appropriate background levels for the study area will be obtained from DEP, or from the closest NYSDEC ambient air quality monitoring station from the proposed project area.

- H. Select emissions methodology. Vehicular emissions will be computed using the EPA-developed MOBILE6 2.03 model. DEP/NYSDEC-supplied information will be used regarding credits to account for the state vehicle emission inspection and maintenance program, and the state anti-tampering program.
- I. Determine pollutant levels. At each microscale analysis site, calculate maximum 1- and 8-hour carbon monoxide concentrations for existing, future without the proposed actions, and future with the proposed actions conditions. Contributions from any on-site parking facilities will be included where appropriate.
- J. Compare existing and future levels with standards. Future carbon monoxide pollutant levels with and without the proposed actions will be compared with the National Ambient Air Quality Standards (NAAQS) to determine compliance with standards, and the City's de minimis criteria.
- K. Assess the consistency of the proposed actions with the strategies contained in the State Implementation Plan (SIP) for the area. Consistency with the applicable SIP for the area will be determined.
- L. At any receptor sites where violations of standards occur, determine what mitigation measures will be required to attain standards.
- M. Assess particulate matter impacts from all types of vehicles. Pollutant levels for particles with an aerodynamic diameter less than 10 microns μg/m³ (PM₁₀) and less than 2.5 microns (PM_{2.5}) will be determined using available modeling tools. The PM_{2.5} analysis would follow the EPA, NYSDEC, and DEP interim guidance. It is assumed that a refined mobile source modeling with CAL3QHCR, using actual meteorological data will be employed, along with vehicle emissions computed with EPA's MOBILE6 emissions model. Future pollutant levels with the project will be assessed to determine the potential for significant impacts from PM₁₀ and PM_{2.5}. This analysis will be performed for PM₁₀ and PM_{2.5} at the location in the area where the greatest particulate emissions would be expected.

STATIONARY SOURCE ANALYSES

HVAC Analysis

An analysis will be performed of the potential for the emissions from the HVAC systems of the RWCDS buildings to significantly impact existing land uses or any of the other development buildings. An HVAC stationary source analysis will be conducted as follows:

- A. Assumptions regarding building heights and distances for locating nearest receptors will be determined based on the RWCDS.
- B. The analysis will be performed as a screening analysis for individual development sites and for a cumulative (or cluster) analysis. The analyses will be performed in accordance with the methods presented in Section 322 of the *CEQR Technical Manual*.
- C. Three criteria pollutants will be considered for the cumulative analysis: NO₂, PM₁₀, and SO₂.
- D. In the event that significant impacts are predicted using screening analyses, examine the use of fuel restrictions and other measures that would be applied as E-designations to avoid significant adverse air quality impacts.

- E. In the event of predicted exceedances associated with individual development sites, a detailed dispersion modeling analysis using the EPA AERMOD dispersion model will be performed. The estimated short-term and annual pollutant concentrations of the criteria pollutant(s) of concern will be added to appropriate background levels, and total pollutant concentrations will be compared with the NAAQS to determine whether there will be the potential for a violation of these standards.
- F. To address potential PM_{2.5} impacts from the proposed rezoning, an analysis will be performed for a single site using worst-case assumptions in terms of development size, fuel type, and source-receptor distance. In the event that impacts greater than the City's current PM_{2.5} interim guidance criteria are predicted, appropriate measures will be proposed and additional sites will be analyzed to ensure that the proposed actions would not result in any significant impacts on PM_{2.5}.

Industrial Sources

An industrial analysis will be conducted as follows:

- A. In accordance with the *CEQR Technical Manual*, emissions from industrial/manufacturing or commercial facilities located within 400 feet of any proposed new residential and commercial development will be considered.
- B. The *CEQR Technical Manual* also requires the consideration of large emission sources, such as power plants or asphalt plants and concrete plants, located within 1,000 feet of the proposed new residential and/or commercial areas. This assessment will be conducted for these large sources, if any, within 1,000 feet and potential cumulative impacts from these uses will be analyzed.
- C. A list of potential emission sources within the air quality study area will be compiled based on EPA, NYSDEC, and DEP's databases and field observations. For facility types commonly associated with potentially harmful pollutants, emission information for these facilities will be requested from DEP's Bureau of Environmental Compliance (BEC). Emission and stack parameter data contained in BEC operating permits will then be used to estimate any potential for these sources to result in air quality levels at the new residential, commercial, and amusement sites that exceed applicable air quality standards and guidelines. Field surveys and consultation with DCP and DEP will be used to determine which, if any, of these permits are associated with businesses that are no longer in operation. No analysis would be conducted for such facilities.
- D. Estimates will be made using the EPA's AERMOD refined dispersion model for each of the pollutants in the permits to calculate cumulative impacts. In the event that potential violations of standards are estimated, measures to reduce pollutant levels to within standards will be examined for these sources.
- E. Guideline values, developed by EPA and NYSDEC (as described in the *CEQR Technical Manual*) will be used for determining potential air toxics impacts. These are short-term (1-hour) SGC and long-term (annual) AGC guideline concentration values (NYSDEC Air Guide-1, *Guidelines for the Control of Toxic Air Contaminants*), and EPA's unit risks factors for inhalation (EPA Integrated Risk Information System (IRIS) and EPA Health Effect Assessment Summary Tables).
- F. Conducted for Task 21, "Public Health," below, EPA's "Hazard Index Approach" will be utilized to assess exposure levels associated with non-carcinogenic toxic air pollutants, and

- EPA's unit risk approach will be used to assess potential long-term impacts of the carcinogenic pollutants. The "Hazard Index Approach" is based on estimating the ratio of pollutant concentrations divided by their respective health-related Guideline Values (GVs).
- G. For the Public Health analysis, (Task 21, below), results of the stationary source air quality analysis for air toxics will be compared to the appropriate measures of environmental impact, as follows:
- Non-carcinogenic air pollutant results will be compared with applicable guideline values. If the total ratio of pollutant concentrations obtained by dividing by their respective GV value is found to be less than 1 for all pollutants combined, no significant air quality impacts will be predicted to occur due to non-carcinogenic toxic pollutant releases; and
- Carcinogenic air pollutant results will be compared with EPA cancer risk threshold level of
 one-in-one million. Potential impacts will be reported if the total incremental cancer risk
 estimated from the emissions of all of the carcinogenic toxic pollutants combined is greater
 than one-in-one million. Future development, where mitigation may be required as a result
 of proposed action, may receive an E-designation to ensure compliance with applicable air
 quality standards.

TASK 19. NOISE

The noise study will focus on assessing: (1) potential noise impacts due to project-generated traffic (mobile sources); (2) potential noise impacts due to building operations (i.e., stationary source noise from mechanical equipment); and (3) the level of attenuation needed in the proposed residential buildings and other proposed development buildings to satisfy CEQR requirements. For the purposes of analyzing the proposed actions' RWCDS for mobile source noise, the analyses will incorporate the reasonable worst-case findings of the traffic analyses.

The EIS noise study will include the following tasks:

- A. Select appropriate noise descriptors. Appropriate noise descriptors that characterize the noise environment and the impact of the proposed actions will be selected based on current CEQR criteria. Consequently, the 1-hour equivalent $(L_{eq(1)})$ and, where appropriate, the L_{10} noise levels will be examined.
- B. A screening analysis will be performed to determine locations where there is the potential for significant impacts due to the proposed actions. In general, these locations would be places where traffic generated by the proposed actions would result in a doubling of passenger car equivalents (PCEs). Techniques used for this screening analysis will include proportional modeling and/or use of the Traffic Noise Model (TNM).
- C. Select receptor locations for detailed analysis. Two types of receptor sites will be selected: receptor sites for detailed impact analysis, and receptor sites for building attenuation purposes. In general, receptor sites selected for impact analysis will be those locations where the proposed actions have the potential for significant impacts (based upon a screening analysis that will look for a doubling of traffic). These receptor sites would include locations where the proposed actions would have the greatest potential to affect ambient noise levels. Receptor sites for building attenuation purposes will be locations where building design measures would be necessary to meet CEQR requirements, but where no detailed impact analysis is necessary (because project-generated traffic would not result in a significant increase in noise levels). Receptor sites will include locations adjacent to busy streets.

- KeySpan Stadium, and the open amusement area. Particular attention will be paid to sensitive land uses—parks, open space, residences, etc.
- D. Determine existing noise levels. At each of the impact receptor sites, existing noise levels will be measured during five time periods—weekend midday; weekend late afternoon/early evening; and weekday AM, midday, and PM. Measurements will be made using a Type 1 instrument, and L_{eq}, L₁, L₁₀, L₅₀, and L₉₀ values will be recorded. At each site, 20-minute spot measurements will be made. Existing noise levels were measured in December 2007. Existing noise levels will be adjusted to reflect the summer peak periods using traffic data and the TNM.
- E. Noise due to amusement-related mechanical equipment and activities will be based on literature or field measurements.
- F. Determine future noise levels without the proposed actions. At each of the impact receptor locations, noise levels without the proposed actions will be determined for the project analysis year using existing noise levels, acoustical fundamentals, and mathematical models. Noise from traffic and mechanical equipment operation will be included in the analysis. Techniques used for this analysis will include proportional modeling, the Federal Transit Administration (FTA) model, and use of the TNM.
- G. Determine future noise levels with the proposed actions. At each of the impact receptor locations, noise levels with the proposed actions will be determined using existing noise levels, acoustical fundamentals, and mathematical models. Noise from traffic and mechanical equipment operation will be included in the analysis. Techniques used for this analysis will include proportional modeling, the FTA model, and use of the TNM. Noise due to stationary sources (including the proposed HVAC equipment) will be included in the analysis.
- H. Compare noise levels with CEQR impact evaluation criteria. Existing noise levels and future noise levels, both with and without the proposed actions, will be compared with the CEQR noise impact criteria to determine project impacts. In addition, noise from mechanical equipment will be compared with other relevant City noise criteria (e.g., New York City Noise Code).
- I. Determine level of building attenuation required. For the buildings analyzed as part of the proposed actions, the level of attenuation and the types of measures (e.g., alternative ventilation, double-glazed windows, etc.) necessary to achieve the attenuation specified in the *CEQR Technical Manual* will be examined.
- J. Examine mitigation measures, if necessary. If significant noise impacts are predicted to occur with the proposed actions, possible mitigation measures will be examined to reduce or eliminate such impacts. These measures will include possible rerouting of traffic and building attenuation measures (e.g., retrofitting windows and providing alternative ventilation), as well as design modifications for mechanical equipment.

TASK 20. CONSTRUCTION IMPACTS

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity could affect traffic conditions, archaeological resources and the integrity of historic resources, community noise patterns, air quality

conditions, and mitigation of hazardous materials. Because there are no specific plans for individual buildings, the construction assessment for the proposed actions will be qualitative, focusing on areas where construction activities may pose specific environmental problems. The chapter will address all proposed development sites for technical areas of concern related to construction in accordance with CEOR Technical Manual guidelines. The EIS will detail information on project sequencing and construction staging, especially as they relate to street and sidewalk closure and parking. The EIS will also include a projection of construction worker and delivery activities during peak construction. The assessment will include a discussion of the unique characteristics of Coney Island and a qualitative analysis of transportation-related issues. Suggestions on incorporating measures to avoid potential impacts will also be included such as odor suppression, etc. Construction phase noise impacts will be qualitatively assessed and recommendations will be made to comply with DEP guidelines contained in Report #CON-79-001 and the New York City Noise Code. Noise and ground-borne vibration impacts during construction will be addressed at vulnerable sites and if necessary, appropriate recommendations will be made for their control. Should potential impacts be identified, practicable mitigation measures will be developed.

TASK 21. PUBLIC HEALTH

Public health involves the activities that society undertakes to create and maintain conditions in which people can be healthy. Many public health concerns are closely related to air quality, hazardous materials, construction and natural resources. A public health assessment may be warranted if a proposed action results in a) increased vehicular traffic or emissions from stationary sources resulting in significant air quality impacts; b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect groundwater to be used as a source of drinking water; c) solid waste management practices that could attract vermin and result in an increase in pest populations; d) potentially significant impacts to sensitive receptors from noise and odors; or e) vapor infiltration from contaminants within a building or underlying soil that may result in significant hazardous materials or air quality impacts. Based on the findings of the tasks discussed above, the EIS will provide an assessment of potential public health impacts, following the guidelines presented in the CEOR Technical Manual.

TASK 22. MITIGATION

Where significant impacts have been identified in Tasks 2 through 21, measures to mitigate those impacts will be described. These measures will be developed and coordinated with the responsible City/State agencies as necessary, including LPC, NYCDOT, and DEP. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

TASK 23. ALTERNATIVES

The purpose of an alternatives section in an EIS is to examine development options that would tend to reduce action-related impacts. The alternatives are usually defined when the full extent of the proposed actions' impacts are identified, but at this time it is anticipated that they will include the following:

- The "No Action" Alternative, which assumes no project area rezoning or any elements of the other proposed actions, i.e., text amendments, mapping actions, etc., but includes as-of-right development from individual projects proposed by others in the project area;
- A No Impact Alternative;
- A lesser density alternative, which assumes a rezoning to a lower density district than what is proposed; and
- Other alternatives that may be considered as the EIS process moves forward.

The alternatives analysis is primarily qualitative, except where impacts of the proposed actions have been identified. For technical areas where impacts have been identified, the alternatives analysis will determine whether these impacts would still occur under each alternative.

TASK 24. EIS SUMMARY CHAPTERS

In accordance with CEQR guidelines, the EIS will include the following three summary chapters, where appropriate to the proposed actions:

- Unavoidable Adverse Impacts—which summarizes any significant adverse impacts that are unavoidable if the proposed actions are implemented regardless of the mitigation employed (or if mitigation is impossible);
- Growth-Inducing Aspects of the Proposed Actions—which generally refers to "secondary" impacts of a proposed action that trigger further development; and
- Irreversible and Irretrievable Commitments of Resources—which summarizes the proposed actions and their impacts in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

TASK 25. EXECUTIVE SUMMARY

The executive summary will utilize relevant material from the body of the EIS to describe the proposed actions, their significant and adverse environmental impacts, measures to mitigate those impacts, and alternatives to the proposed actions.