

Willets Point Development Plan Generic Environmental Impact Statement Draft Scope of Work

A. PREFACE

The Office of the Deputy Mayor for Economic Development and Rebuilding, in coordination with the Department of Housing Preservation and Development (HPD) and the Department of City Planning (DCP), is sponsoring an initiative by the City of New York (City) to rezone, create an urban renewal area and implement a comprehensive development plan—the Willets Point Development Plan (City Plan)—in a portion of Willets Point, Queens. The ultimate goal of these proposed actions is to develop a land use plan consistent with public policy, improve environmental conditions in Willets Point, provide new affordable and market-rate housing, promote economic growth and job creation, create a regional destination, and improve the quality of life for area residents.

The proposed actions call for the redevelopment of an approximately 61-acre area on the Willets Point peninsula, generally bounded to the east by the Van Wyck Expressway and an undeveloped lot owned by the Metropolitan Transportation Authority (MTA), to the south by Roosevelt Avenue, to the west by 126th Street, and to the north by Northern Boulevard (see Figures 1 and 2). The proposed development program for this area—the Willets Point Development District (District)—is expected to include a mix of uses, including residential, retail, hotel, convention center, entertainment, commercial office, cultural, community facility, open space, and parking. The proposed actions are intended to improve environmental conditions in Willets Point and transform this largely underutilized area into a new, enlivened destination with improved connections to surrounding neighborhoods and a mix of uses generating activity throughout the day and year, thereby providing significant economic and community benefits to the neighborhood, the Borough of Queens, and the City as a whole.

Adoption of the proposed actions would require public review and approvals by a number of government agencies, including the New York City Economic Development Corporation (NYCEDC), the local Community Board, the Queens Borough President, HPD, the New York City Planning Commission, and the City Council. The proposal also requires review and the preparation of a Generic Environmental Impact Statement (GEIS) under City Environmental Quality Review (CEQR).

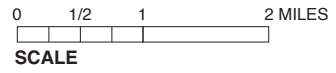
Although there is no developer or specific development plan in place at this time, the envelope of potential development anticipated under the City Plan includes up to 8.91 million gross square feet of new buildings. The anticipated uses are discussed in greater detail later in this document.

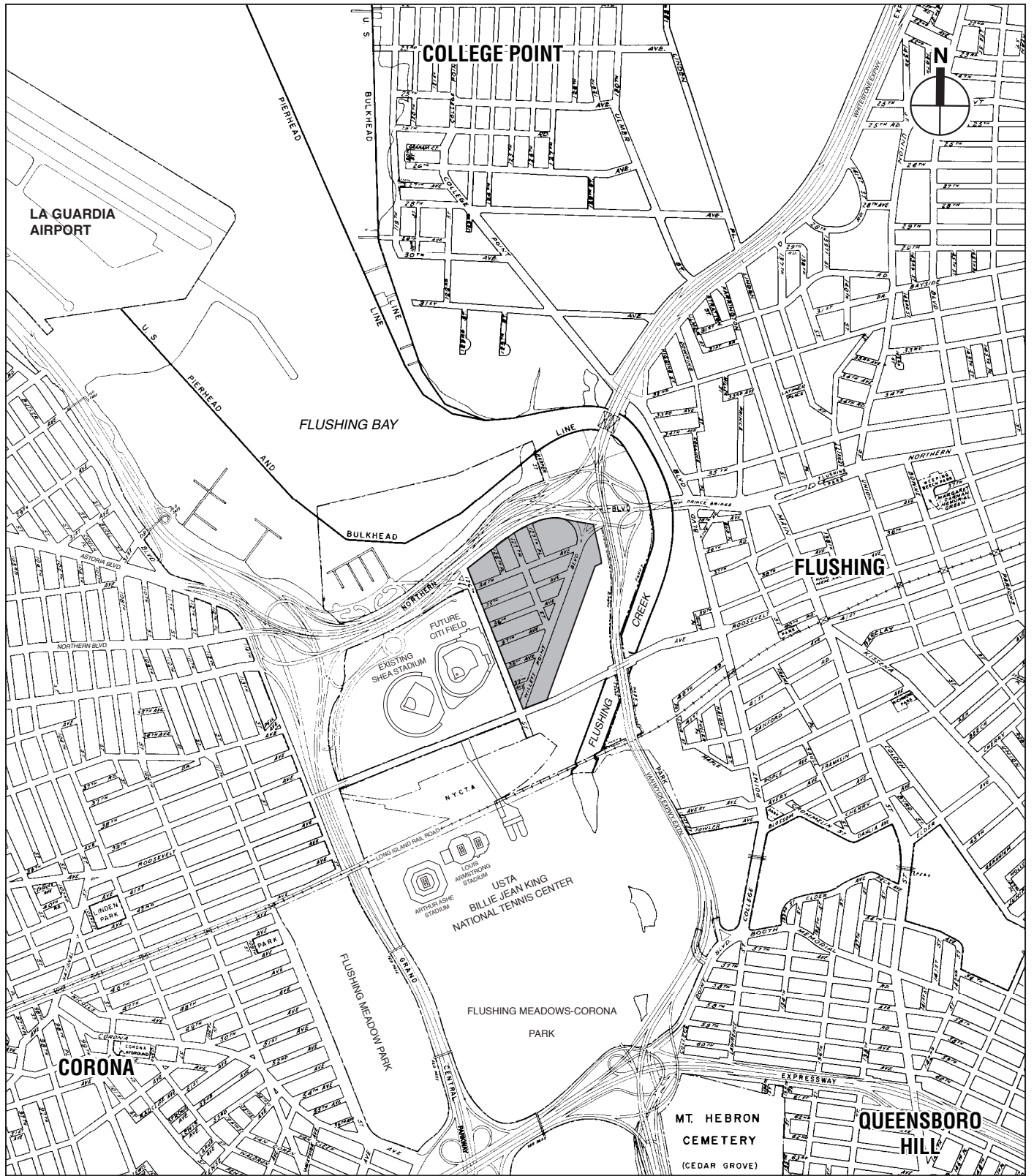
The preparation of this GEIS Draft Scope of Work will ensure that the potential environmental impacts of the proposed actions are fully identified and studied consistent with environmental law and regulations. Under those laws, public review of the proposed actions will not begin until the Office of the Deputy Mayor for Economic Development and Rebuilding, which is the “lead agency,” has determined that the environmental issues have been adequately studied in the form



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 Willets Point Development District





 Willets Point Development District

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of a Draft Generic EIS (DGEIS) in order to permit meaningful review by the public and decision-makers.

B. PROJECT CONTEXT

BACKGROUND

The City Plan represents a complex initiative for an area that has long been the subject of public interest. Subsequent to being the subject of high-profile proposals during the 1960s and 1980s for uses such as a football stadium and parkland, Willets Point was the focus of a planning study prepared by NYCEDC (at that time operating as the New York City Public Development Corporation) in the early 1990s that examined a number of redevelopment options for the area. In 1993, the Queens Borough President's office released a study entitled "Willets Point—A New Direction," which proposed the redevelopment of Willets Point into a major commercial center or as an international trade center that would be used to host import/export shows and to provide exhibition and office space for wholesalers and retailers. In 2001, HPD held a design workshop that explored potential redevelopment ideas for Willets Point. The workshop recommended land uses that would reconnect Willets Point with its neighboring communities and complement the nearby attractions and facilities. Suggested land uses included entertainment facilities such as movie theaters, an international commercial center that would utilize the mixed backgrounds of the surrounding communities, restaurants and retail shops that would profit from visitors coming to downtown Flushing, Flushing Meadows-Corona Park or Shea Stadium, and hotels servicing nearby LaGuardia and Kennedy Airports.

In 2002, the City created the Downtown Flushing Task Force to undertake a community planning process involving City and New York State (State) agencies, local and State elected officials, community members, advocacy groups, and local business leaders. The resulting development framework (Framework), completed in May 2004, identified a set of land use and economic goals to revitalize Downtown Flushing, the Flushing River waterfront, and Willets Point and to strengthen the area as a regional center, with enhanced connections to neighboring amenities and communities.

The Framework looked broadly at the development potential of Willets Point, and identified the creation of a long-term redevelopment plan for the District as one of the principal implementation goals. Based on an analysis of the area's assets and development constraints, the Framework identified a set of land use and economic goals that should be achieved through development within the District:

- Complement economic growth in Downtown Flushing and Corona and be compatible with the overall Framework vision;
- Provide physical connections through land use, site planning, and design to the District's surrounding amenities, including the Flushing River, Flushing Bay Promenade, a new Mets stadium (CitiField), Flushing Meadows-Corona Park, and Downtown Flushing;
- Improve environmental quality in the District and be sensitive to the natural environment, especially along the riverfront;
- Complement the adjacent recreational and sporting facilities, especially along 126th Street;
- Optimize use of the existing highway, public transit, and parking infrastructure to minimize local traffic impacts;

- Create substantial positive economic value for New York City and provide a source of quality jobs for area residents; and
- Be of sufficient scale to bring visitors or users from throughout the region to the Flushing area, yet reflect the ethnic and cultural diversity found locally throughout the Borough of Queens.

The proposed actions represent a critical step in implementing this development Framework.

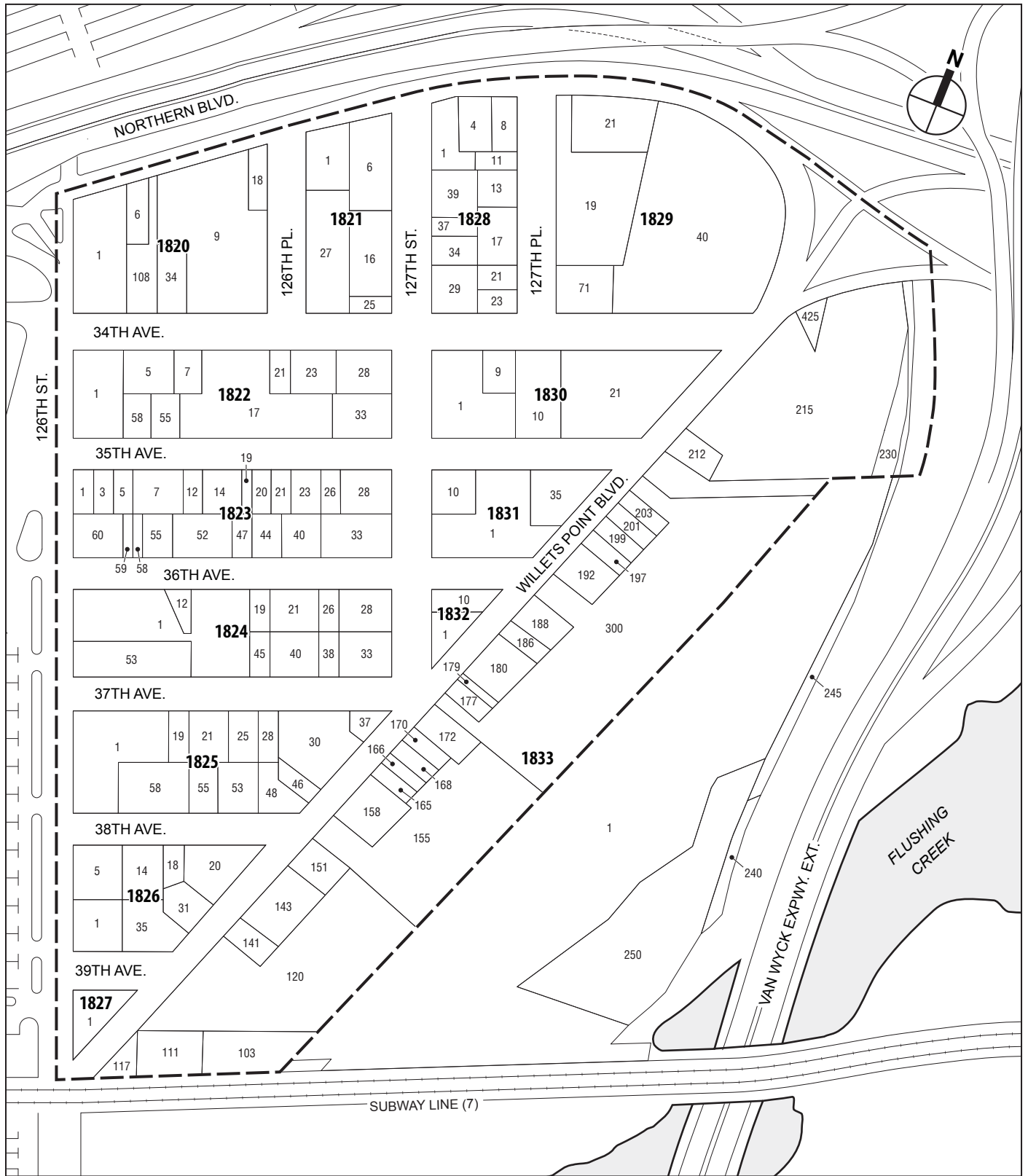
SITE DESCRIPTION

Willets Point is located in the heart of northern Queens, adjacent to Shea Stadium, the USTA National Tennis Center, and Flushing Meadows-Corona Park (see Figure 2). The neighborhood of Corona is located just west of Shea Stadium, and Downtown Flushing is located just east of Willets Point across the Flushing River. The District is located at the intersection of several major arterial highways, bordered to the east by the Van Wyck Expressway and an undeveloped lot owned by the Metropolitan Transportation Authority (MTA), to the south by Roosevelt Avenue, to the west by 126th Street, and to the north by Northern Boulevard. It is easily accessible to the entire New York City metropolitan area via the Long Island Rail Road and the No. 7 subway line, and is located in close proximity to both LaGuardia and JFK International Airports.

The District is 61.4 acres in size, of which 15.8 acres are within public street right-of-ways, 45.0 acres are privately-owned land, and 0.6 acres are owned by the MTA. The District is comprised of 127 tax lots and one partial lot (block 1833, lot 1) located on 14 blocks (see Table 1 and Figure 3). It contains approximately 250 businesses—a mixture of automotive repair and auto body shops, junkyards, wholesalers, construction companies, and auto-related retail establishments.

The District has long been characterized by environmental concerns, building code violations, and illegal activities. According to the Department of Building's Business Information System, there were 189 open building code violations in the District as of July 2006, many of which were for Work without a Permit, Occupancy Contrary to Certificate of Occupancy, and Failure to Maintain Building.

Site conditions within the Willets Point peninsula reflect a lack of infrastructure and the presence of hazardous materials, factors that will affect the implementation of the proposed actions. The area's historical use in the early 1900s was as a dumping site for ash. Today, many automotive repair and service businesses and junkyard operations have continued to add contamination to the area through illegal dumping and poor housekeeping, creating unsafe and unhealthy conditions throughout the District. In 2001 the State Attorney General announced the indictment of 21 junkyards and 35 individuals for violating State environmental laws by dumping motor oil, antifreeze, transmission fluid and other materials onto the ground and into storm drains and Flushing Bay. In addition, some businesses in the area have been linked to organized crime; in the past several years, the New York State Attorney General and the NYPD have issued several indictments for auto theft and racketeering.



--- Development District Boundary

1826 Block Number

14 Lot Number

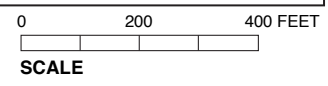


Figure 3
Block and Lot Map

**Table 1
Blocks and Lots Affected by Proposed Action**

Blocks	Lots
1820	1, 6, 9, 18, 34, 108
1821	1, 6, 16, 25, 27
1822	1, 5, 7, 17, 21, 23, 28, 33, 55, 58
1823	1, 3, 5, 7, 12, 14, 19, 20, 21, 23, 26, 28, 33, 40, 44, 47, 52, 55, 58, 59, 60
1824	1, 12, 19, 21, 26, 28, 33, 38, 40, 45, 53
1825	1, 19, 21, 25, 28, 30, 37, 46, 48, 53, 55, 58
1826	1, 5, 14, 18, 20, 31, 35
1827	1
1828	1, 4, 8, 11, 13, 17, 21, 23, 29, 34, 37, 39
1829	19, 21, 40, 71
1830	1, 9, 10, 21
1831	1, 10, 35
1832	1, 10
1833	1 (partial), 103, 111, 117, 120, 141, 143, 151, 155, 158, 165, 166, 168, 170, 172, 177, 179, 180, 186, 188, 192, 197, 199, 201, 203, 212, 215, 230, 300, 425
<p>Note: A small portion of block 1833, lot 1, a narrow strip extending from the northern portion of the lot westward to Willetts Point Boulevard, is included in the Willetts Point Development District.</p>	

C. PROJECT DESCRIPTION

PROJECT OBJECTIVES

The City seeks to initiate a rezoning and establish an urban renewal area that creates a comprehensive land use, infrastructure, and development plan for the District, with the ultimate goal of improving environmental conditions in Willetts Point, providing new affordable and market rate housing, promoting economic growth and job creation through additional private investment, creating a new regional destination, and improving the quality of life for area residents. A redeveloped District would leverage the tremendous transportation and recreational assets of the area and improve connections to surrounding neighborhoods. A mix of uses would be encouraged to provide activity throughout the day and the calendar year.

Redevelopment of the District is representative of the City’s long-term planning and sustainability goals. It would not only eliminate degradation of the natural environment, but also promote green building and sustainable design practices. It represents a transit-oriented urban infill development that would leverage the District’s superior transit and highway infrastructure. It would contribute to the City’s efforts to meet the short- and long-term demand for affordable and market-rate housing. Finally, it would serve as a world-class example of superior urban design and development.

PROPOSED ACTIONS

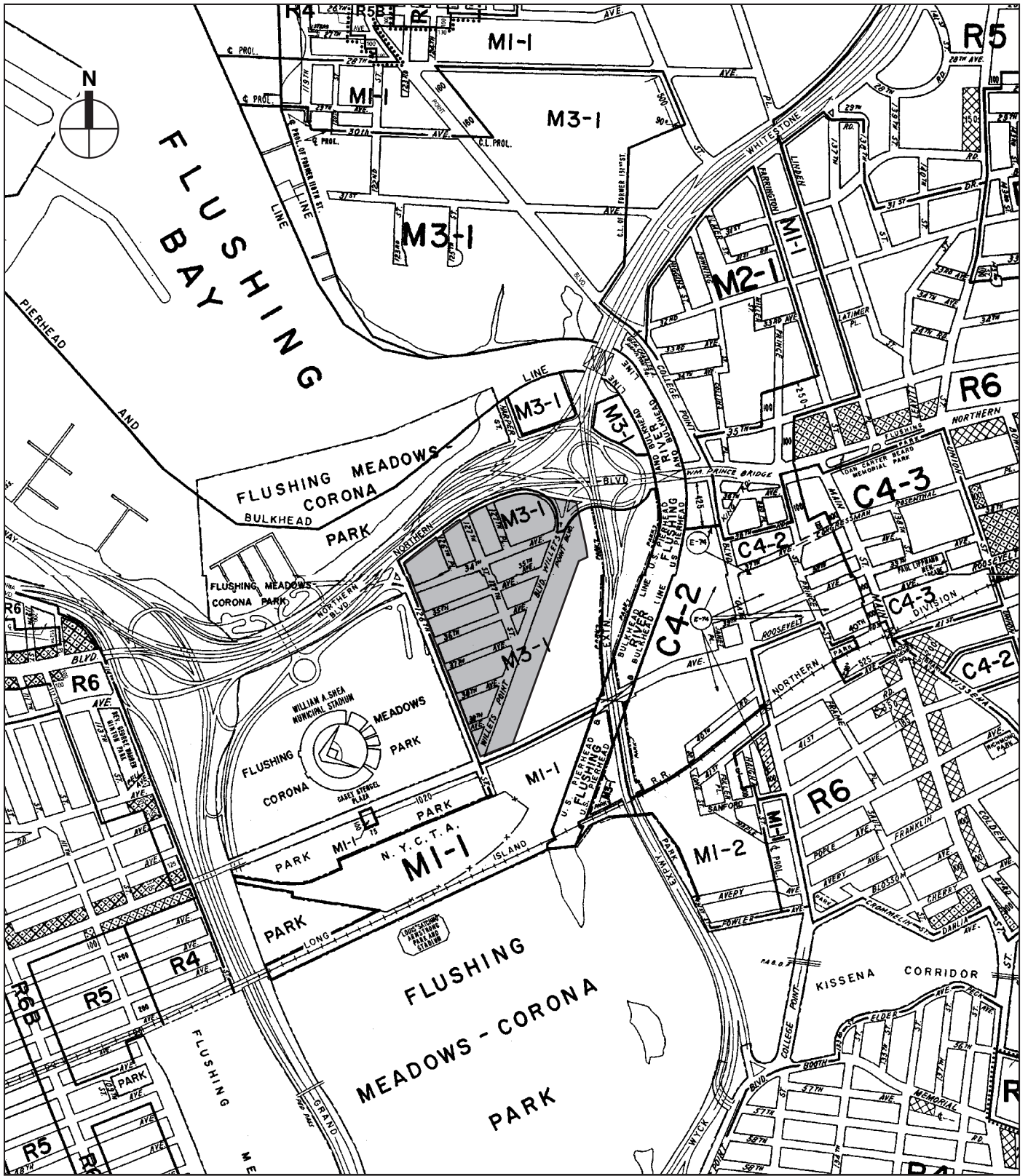
Redevelopment of the District would require a number of City and State approvals. Most of these are discretionary actions requiring review under CEQR; others are ministerial and do not require environmental review. The discretionary actions required for the project include:

DISCRETIONARY ACTIONS SUBJECT TO CEQR AND SEQRA

- Creation of a Willets Point Urban Renewal Plan (URP). A summary of the preliminary URP is appended to this document as Attachment A.
- A change to the underlying zoning of the District from the existing M3-1 district to a C4-4 district. The proposed C4-4 zoning would allow for the range of uses anticipated. The existing permitted FAR is 2.0; the proposed FAR is 3.4 for commercial, 0.87 to 3.44 for residential (up to 4.0 FAR permitted under Quality Housing on wide streets), and 6.5 for community facility uses.
- Creation of a zoning Special District to further guide development in the District. The Special District would waive some C4-4 district requirements in order to facilitate development of the District in accordance with the URP. To create an appropriate scale and density within the District's surroundings, the urban renewal area would have special provisions regarding streetscape and urban design components. A summary of the preliminary Special District Guidelines is appended to this document as Attachment B. (Figures 4 and 5 show the existing and proposed zoning, respectively.)
- Demapping of streets within the District. In order to allow maximum flexibility in the creation of the redevelopment site plan, the proposed actions would include the demapping of all streets within the District. The development rights generated from the demapping of these streets would be utilized in the development of the associated blocks and lots. Streets to be demapped include:
 - 126th Place between Northern Boulevard and 34th Avenue;
 - 127th Street between Northern Boulevard and Willets Point Boulevard;
 - 127th Place between Northern Boulevard and 34th Avenue;
 - 34th Avenue between 126th Street and Willets Point Boulevard;
 - 35th Avenue between 126th Street and Willets Point Boulevard;
 - 36th Avenue between 126th Street and Willets Point Boulevard;
 - 37th Avenue between 126th Street and Willets Point Boulevard;
 - 38th Avenue between 126th Street and Willets Point Boulevard;
 - 39th Avenue between 126th Street and Willets Point Boulevard; and
 - Willets Point Boulevard between 126th Street and Northern Boulevard.

As currently envisioned, all streets constructed under the proposed redevelopment would be private, and therefore would not require mapping actions.

- Potential construction of new stormwater outfalls. Should the proposed development necessitate the construction of new stormwater outfalls into local surface waters, Army Corp of Engineers (ACOE) permits would be required, along with a State Pollution Discharge



- Willets Point Development District
- Zoning District Boundary

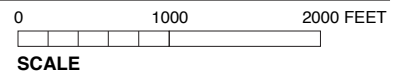
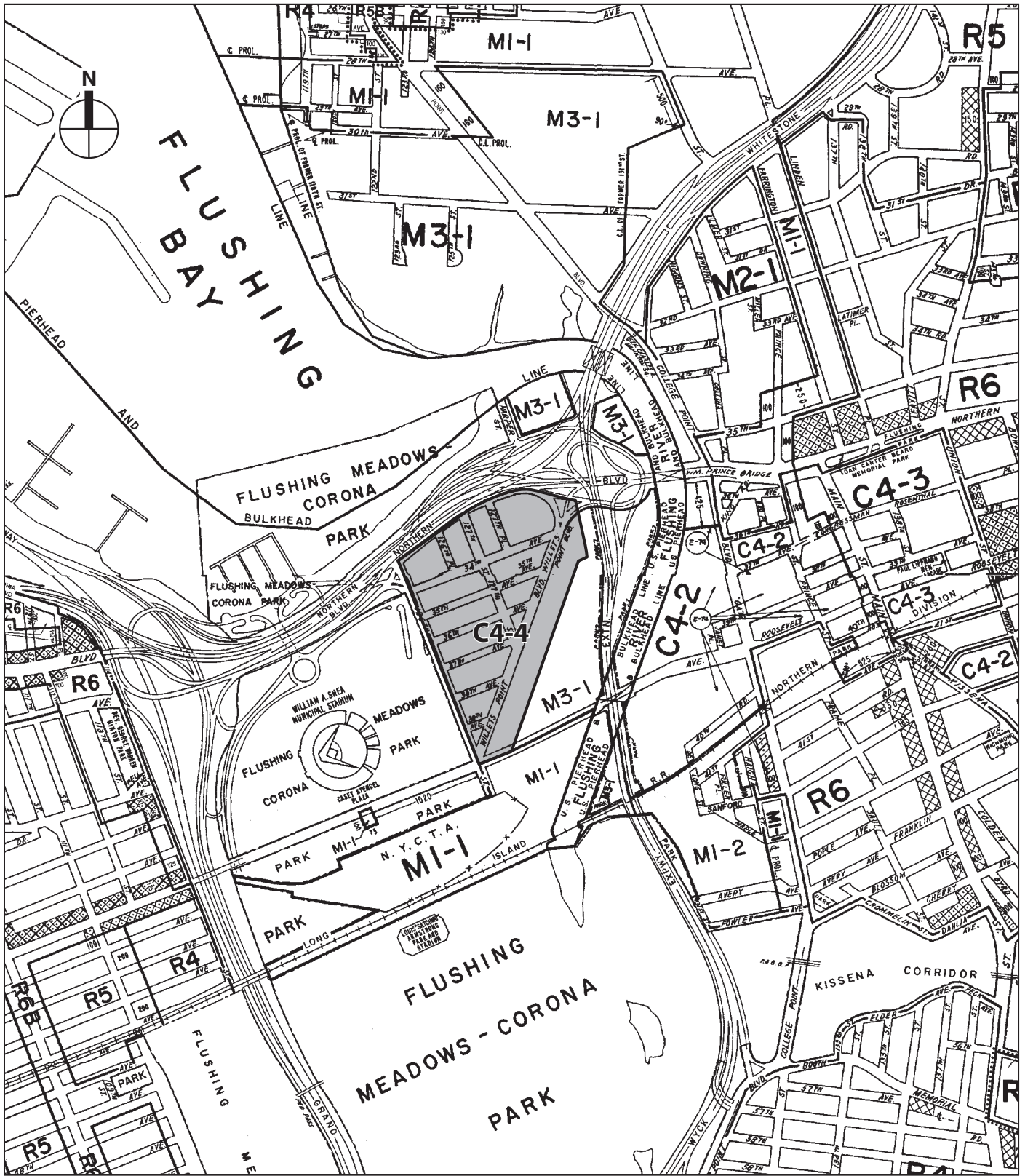
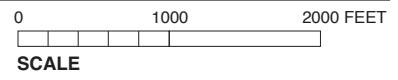


Figure 4
Existing Zoning



Willets Point Development District
 Zoning District Boundary



Willets Point Development Plan

Elimination Systems (SPDES) and Tidal Wetlands permit from the New York State Department of Environmental Conservation (DEC).

- Acquisition of property in accordance with the URP.
- Possible condemnation of property pursuant to the Eminent Domain Procedure Law (EDPL).
- Disposition of property within the District for development in accordance with the URP.
- Approval of the business terms of the disposition between the City and NYCEDC.

PROPOSED PROJECT

The proposed actions are intended to stimulate the transformation of the District from an area with significant environmental degradation that is isolated from its surroundings into a diverse and sustainable community that enhances connections to its surroundings, creates economic growth, and addresses the long term needs of the Borough of Queens and the City of New York.

The goals of the development plan envisioned by the City (the “City Plan”) are to:

- Create a vibrant, mixed-use, urban community that enhances connections between the thriving neighborhoods and amenities in Northern Queens;
- Leverage the District’s regional access and proximity to airports to drive economic growth and provide a significant number of quality new jobs for area residents;
- Continue the successful tradition of Queens’ diverse communities by creating rental and homeownership housing opportunities that serve a mix of incomes and demographics, including a significant middle income community;
- Create a sustainable, environmentally sensitive community that utilizes innovative green building technologies; and
- Catalyze future development.

The City Plan envisions residential and retail uses as the foundation of the redeveloped District. Office space, a hotel, and a convention center would build off of this foundation to enhance Flushing and Corona’s roles as regional economic centers. Community facilities, cultural space and open space would enhance the built environment, provide quality amenities, and improve the quality of life for area residents and visitors.

Although there is no developer or specific development plan in place at this time, the envelope of potential development anticipated under the City Plan includes up to 8.91 million gross square feet of new buildings. The anticipated uses are described below.

RESIDENTIAL

According to the most current New York City Housing and Vacancy Survey data published by HPD, the residential vacancy rate in Queens was only 2.82 percent in 2005, slightly lower than the citywide average of 3.09 percent. At the same time, the most recent DCP demographic study, *New York City Population Projections by Age/Sex and Borough* (2006), estimates that the population in Queens will increase by 15.1 percent between 2000 and 2030. The proposed actions would permit a substantial amount of housing to be constructed in the District, which would help accommodate future population growth in Queens, and contribute to the City’s overall efforts to meet its short- and long-term demands for housing. Under the City Plan, housing units in the District would offer both rental and homeownership opportunities for a diverse range of incomes, with a focus on middle-income residents. Therefore, housing

constructed under the City Plan would also support the goals outlined in the Mayor's New Housing Marketplace Plan, which commits to the construction or rehabilitation of 165,000 affordable housing units in the City by 2013.

RETAIL

With a population of greater than 2 million and few comparison shopping centers to serve it, Queens' residents are significantly underserved by retail of all types. The potential spending pool of Queens' residents is able to support far more retail space and entertainment venues than are currently available in the borough. Many Queens residents travel to regional malls in Nassau County, Westchester County, and New Jersey, and to entertainment venues outside the borough. The accessibility of the District via mass transit and highways presents an opportunity to create a first-class retail, recreation, and entertainment destination that would attract people from all over the borough, as well as the larger Tri-State area. Entertainment venues would satisfy local and City-wide demand while providing activities for before and after the sporting events that occur in the area.

OFFICE

New office space in the District would strengthen the role of Flushing and Corona as commercial centers in Northern Queens and would help meet demand for office space in Queens and the City as a whole. Given its proximity to two major airports and the thriving and expanding Downtown Flushing office district, the District is a particularly suitable location for new office development.

CONVENTION CENTER

A convention center would offer tremendous benefits to Northern Queens and the City by hosting large tradeshows, consumer shows, festivals, conferences, corporate events, banquets, and local events. Convention center visitors would include residents of Queens and the broader metropolitan region attending one-day events or tradeshows, as well as visitors from outside the region attending multi-day conventions and staying at the adjoining hotel.

HOTEL

Much of the demand for the hotel would be driven by visitors at the adjoining convention center. Demand for the hotel would also be driven by its proximity to LaGuardia and JFK airports, the growing Flushing community, the future Mets stadium, and the USTA National Tennis Center. Occupancy rates at hotels in the area are already very high (approximately 80 percent) and much of the hotel stock in the area is aging. Redevelopment of the District offers an opportunity to create a premier hotel facility in Northern Queens.

COMMUNITY/CULTURAL SPACE

The community/cultural use space would include a mix of facilities such as dance studios, art galleries, theaters, community arts centers, museums, library, and community recreation space.

SCHOOL

A primary school would be provided to serve the new residential community, as well as students from surrounding areas.

OPEN SPACE

Publicly-accessible open spaces would be created to serve the range of user groups introduced by the project, including residents, workers, tourists, and shoppers.

PARKING

Parking would be provided to meet the demand generated by the proposed uses. It is anticipated that parking would be dispersed throughout the District, in above- and below-grade parking facilities located in the bases of the proposed buildings, and that on-street parking would also be available in parts of the District for short-term shopping trips, loading and unloading.

SITE PLAN, URBAN DESIGN, AND SUSTAINABILITY CONSIDERATIONS

Placement of uses within the District would be guided by a series of urban design guidelines set forth in the Urban Renewal Plan and Special District Guidelines. While the Urban Renewal Plan will define the District boundaries and area to be redeveloped as per the City redevelopment goals, the Willets Point Special District Guidelines will set forth guidelines on urban design elements such as bulk, height, setback, location of specific uses, and street hierarchies. The corner of 126th Street and Roosevelt Avenue, the corner of 126th Street and Northern Boulevard, and possibly a new connection to the Van Wyck Expressway at the northeastern corner of the site would serve as the entrance gateways to the District.

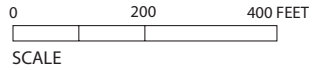
Development within the District is intended to be scaled for the pedestrian, with street walls providing variations in building heights, cornice lines, building facades, and other design elements. It is anticipated that the redevelopment would include architectural focal points to serve as visual anchors for people within the District, on adjacent highways, and in neighboring communities. The site planning and urban design of the District is intended to create a distinctive identity and sense of place, facilitate safe pedestrian activity on the streets, and reconnect the District to surrounding communities and amenities through physical links and visual connections to surrounding landmarks. Visual corridors within the District would extend inward from the site edges, to create visual access to the interior of the site; the corridors would also penetrate from the interior of the site outward through its edges to provide vistas of the waterfront, the Mets stadium, and Downtown Flushing.

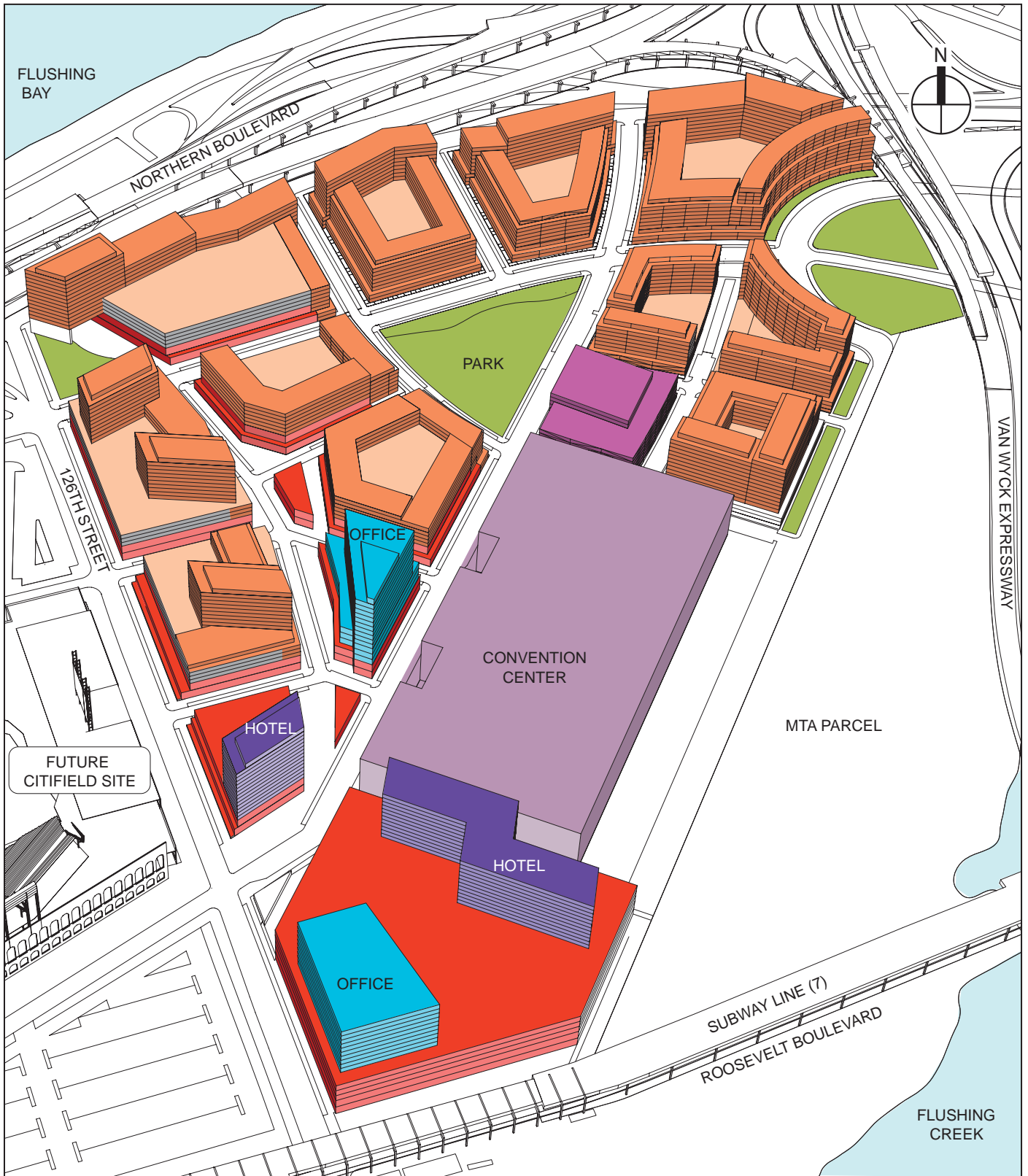
Figures 6 and 7 provide an illustrative view of how the land uses and massing could be distributed across the District. These plans are intended to be illustrative of a possible configuration of the proposed uses and the possible interactions among the proposed uses, formulated for the purpose of conducting an environmental review on a Reasonable Worst Case Development Scenario (see page 10) that includes analyses of those interactions. The eventual built configuration of uses will be subject to change based on the results of the environmental review and market factors, among other things.

Due to its proximity to LaGuardia Airport, the District is subject to height restrictions established by the Federal Aviation Administration (FAA) and the Port Authority of New York and New Jersey (PANYNJ). The western portion of Willets Point may be built to a maximum height that is no greater than the new CitiField stadium, which is approved by the FAA for 218 feet above ground level, or 232 feet Above Mean Sea Level (AMSL). The height limits are also determined by the distance from LaGuardia Airport and the “slope area” in which the site is located. The northeastern portion of the District is located within the 40:1 slope area. For every 40 feet away from the end of the runway, the building can rise 1 vertical foot AMSL. The



- Retail
- Ground Floor Retail
- Office
- Housing
- Residential Rooftop Courtyard
- Hotel
- Open Space (Not including paved sidewalks/ plazas)
- Development District Boundary
- Potential Van Wyck Expressway Access
- Convention Center
- Primary School, Community/ Cultural Use





- Red: Retail
- Blue: Office
- Orange: Housing
- Light Orange: Residential Rooftop Courtyard
- Purple: Hotel
- Green: Open Space (Not including paved sidewalks/ plazas)
- Purple: Convention Center
- Pink: Primary School, Community/ Cultural Use

Figure 7
Illustrative Bulk Diagram

PANYNJ has provided four representative points, two in each slope area, to assist in calculating allowable building heights for planned development. Because the southern end of the site is farthest from the runway, structures there can be built to a taller height. In the 40:1 slope area, buildings at the northern boundary of the District would have a maximum height of 132.7' AMSL while points near the southern boundary may rise as high as 170.2' AMSL. Each point in the District has a different allowable height associated with it, as dictated by its distance from the runway.

The Willets Point Special District Guidelines will address potential design guidelines regarding height, setback, and distance between buildings; urban design elements; and basic site planning (use zones). The proposed Special District could provide for the following: waiving parking facility special permit requirements, or requiring more parking than mandated by the underlying C4-4 zoning; providing waivers on height, setback, FAR distribution, or lot coverage; allowing the proposed convention center use; allowing indoor interactive entertainment facility use; allowing eating and drinking establishments for more than 200 people; and allowing physical culture and health establishments. See Attachment A for a summary of the preliminary Special District Guidelines.

The City Plan would transform the District from a large brownfield site into a community that would serve as a model of sustainability. The size and scope of the City Plan represent a unique opportunity to incorporate integrated sustainable design measures in meaningful ways. Not only would the Plan create a transit-oriented urban infill development that would leverage the District's superior transit and highway infrastructure, it would also encourage the latest innovative building and planning technologies. Specifically, the Plan would attempt to:

- Ensure that the District meets its energy, water, and resource requirements in a sustainable manner by minimizing pollution and treating waste products as a resource;
- Develop an energy efficient community that would utilize low carbon technologies and green building strategies;
- Encourage best management practices for onsite stormwater retention, nature conservation, biodiversity enhancement, and attractive landscaping;
- Leverage sustainable modes of transportation that prioritize walking, cycling, and public transport.

The City is currently in the process of considering how such sustainability measures might be implemented. Additional details will be provided in the final scope of work.

D. FRAMEWORK FOR ENVIRONMENTAL REVIEW

The proposed actions would change the regulatory controls governing land use and development in the District and would allow its redevelopment over the long term. The GEIS will analyze the proposed actions' potential to generate significant adverse environmental impacts as the redevelopment takes place. The GEIS will consider alternatives that would reduce or eliminate impacts identified in the technical analyses and propose mitigation for such impacts, to the extent practicable. The rezoning would permit a range of development options; from among these, the GEIS will examine the "reasonable worst-case development scenario" anticipated under the proposed Special District and Urban Renewal Plan. In addition, the analyses will account for future off-site development in order to identify conditions in the future, both without and with the proposed actions. The approach to the analysis framework is further discussed below.

REASONABLE WORST-CASE DEVELOPMENT SCENARIO

The proposed actions would change the development potential of sites within the District in a manner consistent with the proposed Urban Renewal Plan as well as the new Special District. As a result, a range of new development could occur within the District. While the actual development will depend on developer proposals and future market conditions, the City has developed a maximum development envelope, or reasonable worst-case development scenario (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 below and shown in Table 2, will be used as a framework to assess potential impacts.

Table 2
Reasonable Worst-Case Development Scenario for Analysis

Use	Anticipated GSF
Residential	5,500,000
<i>Number of Units</i>	<i>5,500</i>
Retail*	1,700,000
Office	500,000
Convention Center	400,000
Hotel	560,000
<i>Number of Rooms</i>	<i>700</i>
Community/Cultural Use	150,000
Primary School	100,000
<i>Seats</i>	<i>650</i>
Parking Spaces	+/- 11,000 spaces
Publicly-Accessible Open Space	+/- 8 acres
Total	8,910,000
Notes:	
* The retail use includes a multi-screen movie theater with up to 2,700 seats, and approximately 150,000 square feet of neighborhood retail and services.	

- *Residential*: It is anticipated that up to 5.5 million square feet, or up to 5,500 units, would be developed.
- *Retail*: The District would include up to 1.7 million square feet of retail, including a multi-screen movie theater with up to 2,700 seats and approximately 150,000 square feet of neighborhood retail and services which would primarily serve the new residential population.
- *Office*: The District would contain up to 500,000 square feet of office space.
- *Convention Center*: It is anticipated that a convention center of up to 400,000 square feet would be developed.
- *Hotel*: A full-service hotel of approximately 560,000 square feet, with up to 700 rooms and ancillary banquet and restaurant facilities, would be developed.
- *Community Facility/Cultural*: The District would include community facility and/or cultural uses up to a total of 150,000 square feet.

- *School*: Although the details of the proposed school building have not yet been determined, for purposes of analysis, the facility is assumed to be approximately 100,000 square feet in size, accommodating 650 students (grades K–8).
- *Parking*: Parking would be provided to meet the demand generated by the proposed uses. Demand associated with the RWCDs is anticipated to be approximately 11,000 spaces.
- *Open Space*: It is anticipated that approximately 8 acres of new publicly-accessible open space would be developed.

In addition, the City is considering the possibility of including certain roadway improvements, such as new connections to and from the Van Wyck Expressway and other local access improvements, as part of the proposed project. Any such improvements that will undergo further consideration will be described in the final scope of work and will be reflected in the GEIS impact studies.

It is assumed that this development would be constructed incrementally starting in 2009, and would be built out by 2017.

E. SCOPE OF WORK

The GEIS for the Willets Point Redevelopment Plan will be prepared pursuant to New York City Environmental Quality Review (CEQR) and the *CEQR Technical Manual*. The environmental review provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to evaluate reasonable alternatives, and to identify, and mitigate where practicable, any significant adverse environmental impacts. The Office of the Deputy Mayor for Economic Development and Rebuilding will act as the lead agency for CEQR review.

The first step in preparing the GEIS document is the public scoping process. “Scoping,” or creating the scope of work, is the process of focusing the environmental impact analysis on the key issues that are to be studied in the GEIS. The proposed scope of work for each technical area to be analyzed in the Willets Point Redevelopment GEIS follows. Analyses will be conducted for one Build year, 2017, by which time the full build-out associated with the proposed actions is expected to be complete.

TASK 1. PROJECT DESCRIPTION

The first chapter of the GEIS will introduce the reader to the proposed actions and set the context in which to assess impacts. The chapter will provide a detailed description of the project, based on the framework for analysis, including: the project location and boundaries; existing uses that would be replaced; and proposed uses, including new open spaces and transportation improvements. It will also include a statement of the purpose and need for the proposed actions, including relevant public policy goals and objectives relating to the development of the proposed actions and a description of the development framework developed by the Downtown Flushing Task Force. The project description also will discuss the planning history of the site. The chapter is the key to understanding the proposed actions and their impact, and gives the public and decision-makers a base from which to evaluate the proposed actions against both build and no build options.

TASK 2. ANALYSIS FRAMEWORK

This chapter will discuss the framework for the analyses for the GEIS, including the analysis year and general project phasing, and the RWCDS that will be assessed in the GEIS. The chapter will also provide detailed descriptions of the required actions and approvals necessary for project implementation, the roles of the involved public agencies, and the Uniform Land Use Review Procedure (ULURP) and CEQR processes.

TASK 3. LAND USE, ZONING, AND PUBLIC POLICY

The proposed actions would directly affect the land use on approximately 61 acres of land in the Willets Point peninsula of Queens. The land use, zoning, and public policy analysis will assess the potential impacts of the expected changes in land uses resulting from the proposed actions. The analysis will evaluate impacts within the District as well as primary and secondary study areas.

The primary study area for land use, zoning, and public policy analysis encompasses the region within roughly a ½-mile of the District, a distance that, based on *CEQR Technical Manual* guidelines, defines the area in which the proposed actions could reasonably be expected to create potential direct and indirect impacts. The ½-mile primary study area is generally bounded by 31st Street in College Point to the north, Flushing Meadows Corona Park to the south, Main Street in Flushing to the east, and 114th Street in Corona to the west. The boundaries of the larger secondary study area will extend approximately three quarters of a mile from the District boundaries and will be defined to recognize the presence of various neighborhoods in the surrounding area, including Flushing, Corona, and College Point. As the potential for impacts is generally greater in closer proximity to the District, the primary study area will be assessed at a greater level of detail than the secondary study area. The land use assessment will include a description of existing conditions and evaluations of the future with and without the proposed actions conditions in 2017. Subtasks for the land use, zoning, and public policy analysis include:

- Provide a brief development history of the District.
- Based on existing studies, information included in existing geographic information systems (GIS) for the area and field surveys, identify, describe, and graphically present predominant land use patterns and site utilization in the District and in the primary and secondary study areas. Recent land use trends and major factors influencing land use trends will be described based, as applicable, on discussions with public or private agencies and local real estate brokers.
- Describe and map existing zoning and recent zoning actions in the District and study areas.
- Describe other public policies that apply to the District and the study areas, including specific development projects and plans for public improvements.
- List future development projects in the study areas that could affect future land use patterns and trends by the project's 2017 Build year. Identify pending zoning actions or other public policy actions that could affect land use patterns and trends as they relate to the proposed actions. Based on these changes, assess future conditions in land use zoning without the proposed actions.
- Identify potential impacts of the proposed actions on land use and land use trends, zoning, and public policy, and assess the compatibility of the proposed project with surrounding land use and the consistency of the proposed actions with recognized public policies, such as the

New York City Comprehensive Waterfront Revitalization Plan, zoning, and other identified public policies.

TASK 4. SOCIOECONOMIC CONDITIONS

Socioeconomic impacts can occur when a proposed project directly or indirectly changes economic activities in an area. The purpose of the socioeconomic assessment is to disclose changes that would be created by a proposed action and identify whether they rise to a significant level. The socioeconomic chapter will examine the effects of the proposed action on socioeconomic conditions in the District and in the surrounding study areas, which will generally conform with the land use study areas outlined in Task 3.

The analysis will follow the guidelines of the *CEQR Technical Manual* in assessing the proposed project's effects on socioeconomic conditions. According to the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed project would result in significant impacts due to: (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 a specific industry.

In conformance with the *CEQR Technical Manual* guidelines, the assessment of each area of concern will begin with a screening assessment or preliminary assessment. Detailed analyses will be conducted for those areas in which the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. The detailed assessments will be framed in the context of existing conditions and evaluations of the future with the proposed actions and the future without the proposed actions in 2017.

DIRECT RESIDENTIAL DISPLACEMENT

Field observations indicate that the District contains one non-conforming residential use. The proposed project would displace all current uses in the District, including this residence. While the presence of this residence will be disclosed in the GEIS, a detailed analysis of direct residential displacement is not warranted because the displacement of a single household would not have the potential to adversely affect socioeconomic conditions in the study area.

DIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

The proposed project would directly displace approximately 250 businesses that are currently located in the District. Because of the number of businesses that could be displaced, and their heavy concentration in one industry (auto-related), it is anticipated that a preliminary assessment will not adequately demonstrate that the proposed action would not cause a significant adverse impact due to direct business displacement. Therefore, a detailed analysis will be undertaken. This analysis will be framed in the context of existing conditions and evaluations of the future without the proposed project and the future with the proposed project. Tasks will include:

- Describe the operational characteristics of the businesses to be displaced, as well as the products, markets, and employment characteristics. This discussion will be based on available data from public sources such as the New York State Department of Labor (NYSDOL) and the U.S. Census Bureau, and private companies such as Claritas, Inc. and Dunn & Bradstreet, field investigations, and interviews with business owners at Willets Point.

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- In coordination with work performed under the “Effects on Specific Industries” task outlined below, describe the effects of the businesses on the New York City economy and determine whether the businesses to be displaced are a defining element of the character of the District or the broader study area.
- In coordination with work performed under the “Effects on Specific Industries” task outlined below, determine whether the businesses to be displaced have substantial economic value to the City or region. Describe what economic value they have and the effects of their products and services.
- Describe the locational needs of the businesses to be displaced and assess whether the businesses would be able to relocate in the study area or elsewhere within the City. This assessment will be based on a comparison of the products, services, and location needs of the businesses with the consumer base and available properties in the study area and/or City. The analysis will describe any potential for neighborhoods that currently contain a high concentration of auto-related or other industrial businesses to accommodate businesses displaced by the proposed action.
- Based on information provided in the Land Use, Zoning, and Public Policy chapter, assess conditions in the study area in the future without the proposed action, including any population, employment, and real estate market changes anticipated to take place by the time the project is complete.
- Describe the likely effects of the displacement on the businesses being displaced and on the character of the District and study area. The identification of impacts will depend on whether the businesses are a defining element of neighborhood character, whether they are important to the City economy, and whether they could be relocated elsewhere within the City.
- Formulate mitigation measures, if necessary, and summarize within the GEIS.

INDIRECT RESIDENTIAL DISPLACEMENT

The RWCDS includes up to 5,500 housing units, as well as a hotel and convention center, retail and entertainment uses, cultural facilities, and approximately 500,000 square feet of office space. According to the *CEQR Technical Manual*, residential development of 200 units or less or commercial development of 200,000 square feet or less would typically not result in significant indirect socioeconomic impacts. Since the proposed project would introduce more than 200 residential units and more than 200,000 square feet of commercial development, a preliminary assessment of indirect residential impacts is required under CEQR.

The indirect residential displacement analysis will use 1990 and 2000 US Census data, as well as current real estate market data, to present demographic and residential market trends and conditions for the study area in responding to the following criteria for determining the potential for significant adverse impacts:

- If the project would add substantial new population with different socioeconomic characteristics compared to the size and character of the existing population;
- If the project would directly displace uses or properties that have had a “blighting” effect on property values in the area;
- If the project would directly displace enough of one or more components of the population to alter the socioeconomic composition of the study area;

- If the project would introduce a substantial amount of a more costly type of housing compared to existing housing and housing expected to be built in the study area by the time the project is complete;
- If the project would introduce a “critical mass” of non-residential uses such that the surrounding area becomes more attractive as a residential neighborhood complex; and
- If the project would introduce a land use that could offset positive trends in the study area, impede efforts to attract investment to the area, or create a climate for disinvestment.

If a preliminary assessment does not rule out the possibility that the proposed project could cause significant adverse impacts due to indirect residential displacement, a more detailed analysis will be conducted.

INDIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

According to the *CEQR Technical Manual*, commercial developments of 200,000 square feet or less would typically not result in significant indirect socioeconomic impacts. Since the proposed project is anticipated to introduce more than 200,000 square feet of commercial use, a preliminary assessment of indirect business and institutional impacts is required under CEQR.

The indirect business displacement analysis will use employment data from NYSDOL (and, as necessary, from sources such as Claritas Inc. and Dunn & Bradstreet), rental rate and sale price data from local brokerage firms, and zoning and land use information gathered as part of the broader GEIS effort in order to respond to the following criteria for determining the potential for significant adverse impacts:

- If the project would introduce enough of a new economic activity to alter existing economic patterns;
- If the project would add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns;
- If the project would directly displace uses that have had a “blighting” effect on commercial property values in the area, leading to rises in commercial rent;
- If the project would directly displace uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses;
- If the project would directly or indirectly displace residents, workers, or visitors who form the customer base for existing businesses in the study area; and
- If the project would introduce a land use that would offset positive trends in the study area, impede efforts to attract investment to the area, or create a climate for disinvestment in the area.

If a preliminary assessment does not rule out the possibility that the proposed project could cause significant adverse impacts due to indirect business and institutional displacement, a more detailed analysis will be conducted.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

Because approximately 75 percent of the 250 businesses that would be directly displaced by the proposed action are auto-related businesses, a detailed analysis will be undertaken to determine the potential for significant adverse impacts due to effects on specific industries. This analysis will be conducted in coordination with the “Direct Business Displacement” task described

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above, and will be similarly framed in the context of existing conditions and evaluations of the future without the proposed project and the future with the proposed project. Tasks will include:

- Using information gathered for the “Direct Business Displacement” task, characterize the businesses to be directly displaced and describe their relationship with other auto-related businesses in the City.
- Determine any factors that would affect the future operations of the auto-related industry in the City.
- Determine whether the proposed action would significantly affect business conditions in the auto-related business in the City.
- Determine whether the proposed action would substantially reduce employment or impair the viability of the auto-related industry in the City.

ECONOMIC IMPACT ANALYSIS

The socioeconomic analysis will assess the fiscal and economic impacts of the proposed actions because of their size, proposed use, and likely contribution to the economic vitality of New York City. Economic benefits associated with construction and operation of the development program outlined in the RWCDS will be estimated using the RIMS II model developed by the U.S. Department of Commerce, Bureau of Economic Analysis or the IMPLAN model from the Minnesota IMPLAN Group, Inc. Subtasks will include:

- Estimate economic and fiscal benefits accruing to New York City and New York State during construction of the development program outlined in the RWCDS. Benefits will include direct and indirect employment (presented in person-years), employee compensation, economic output, and taxes.
- Based on the type and magnitude of development outlined in the RWCDS, estimate annual economic and fiscal benefits accruing to New York City and New York State during the ongoing operation of the District. Benefits will include direct and indirect employment, employee compensation, economic output, and taxes including sales taxes, real estate taxes, personal income taxes, and hotel occupancy taxes.
- Compare the estimated economic and fiscal benefits of the RWCDS to the benefits generated by the uses that are currently present in the District.
- Describe public sector costs involved with the construction and operation of the Plan and any associated improvements, such as improvements to streets within the project area and potential subway station enhancements. These could include operational subsidies, additional municipal services, relocation, and costs to implement measures to mitigate project-related impacts (if relevant).

TASK 5. 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. This chapter of the GEIS will evaluate the effects on community services due to the proposed actions, including effects on police and fire protection, public schools, outpatient and emergency health care facilities, libraries, and publicly funded day care facilities. The community facilities and services

assessment will include a description of existing conditions, and evaluations of future conditions in 2017 with and without the proposed actions.

According to the *CEQR Technical Manual*, preliminary thresholds indicating the need for detailed analyses are as follows:

- Public Schools: More than 50 new elementary/middle school or 150 high school students.
- Libraries: A greater than five percent increase in ratio of residential units to libraries in the borough. For Queens, this is equivalent to a residential population increase of 621 residential units.
- Health Care Facilities (outpatient): More than 600 low- to moderate-income residential units.
- Day Care Centers (publicly funded): More than 50 eligible children based on the number of new low/moderate-income residential units by borough. For Queens, this is equivalent to an increase of 250 low-income or 278 low/moderate-income residential units.
- Fire Protection: The ability of the fire department to provide fire protective services for a new project usually does not warrant a detailed assessment under CEQR. Generally, a detailed assessment of fire protective services is included only if a proposed project would affect the physical operations of, or access to and from, a station house.
- Police Protection: The ability of the police department to provide public safety for a new project usually does not warrant a detailed assessment under CEQR. Generally, an assessment of police protective services is included only if the proposed project would affect the physical operations of, or access to and from, a precinct house.

Based on these thresholds and the RWCDs assumptions, detailed analyses will be conducted for public schools, libraries, outpatient health care facilities, and day care centers. The individual catchment areas for each service provider will serve as the study area boundaries for these analyses. The fire and police facilities that serve the District will be identified in the GEIS for informational purposes.

TASK 6. OPEN SPACE

The proposed actions involve the potential construction of up to 8.91 million gross square feet of new development and will exceed CEQR thresholds for a detailed open space analysis. In addition, the potential creation of several new publicly-accessible open spaces within the District is part of the RWCDs to be analyzed. Therefore, a detailed analysis of open space will be conducted. This analysis will determine whether the project will affect the quantitative and qualitative measures of open space adequacy within the ¼-mile and ½-mile study areas recommended for commercial and residential projects in the *CEQR Technical Manual*. Subtasks include:

- Establish the study area boundaries, specifically: a study area of ½-mile around the District for the residential population, and a study area of ¼-mile around the District for the worker population. All Census block groups with at least 50 percent of their area falling within these study areas will be included in the open space study areas.
- Prepare a demographic analysis of the residential and worker populations of the study areas. Determine population in the open space study areas based on the 2000 Census of Population and Housing. Estimate employment in the open space study areas using reverse journey-to-work data. Use 2000 Census data to identify the age breakdown of the study area population.

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- Compile an inventory of all publicly-accessible passive and active open spaces, both publicly and privately owned, for the study areas. This will be accomplished through coordination with the New York City Department of Parks and Recreation (DPR) and private owners of open spaces, and verified through field visits. The inventory will include an evaluation of the condition and use of existing open spaces, as well as acreage. Qualitative discussions of major publicly-accessible open spaces in proximity to the District but outside the study area, such as portions of Flushing Meadows Corona Park and Kissena Park, will also be included.
- In conformance with *CEQR Technical Manual* methodologies, assess the adequacy of existing publicly-accessible open space facilities. This analysis will include a quantitative assessment of the ratio of open space to population and a qualitative assessment that considers such factors as the adequacy of open spaces to serve particular age groups.
- For the future condition without the proposed action, assess expected changes in future levels of open space supply and demand by the project's Build year, based on other planned development projects within the study areas and any public open space expected to be developed. Develop open space ratios for future No Build conditions and compare them with existing ratios to determine changes in future levels of adequacy in the future without the project.
- Based on the residential and worker populations to be added by the proposed project, as well as the new publicly-accessible open spaces to be provided, assess the project's effects on open space supply and demand in the study areas. This will include a quantitative assessment of project impacts based on a comparison of open space ratios in the future with and without the proposed project. It will also include a qualitative evaluation that considers such factors as the proximity of other open spaces outside the study area and the adequacy of the area's open spaces to serve the particular age groups in the study area.

TASK 7. HISTORIC RESOURCES

This section of the GEIS will assess the potential of the proposed actions to affect any historic architectural and archaeological resources, either directly through construction activities or indirectly by altering the context in which the resources are located. In comments dated February 7, 2007, the New York City Landmarks Preservation Commission (LPC) indicated that no archaeological resources and architectural resources have been identified on the project site or within 400 feet of the project site. Therefore, this section will be limited to identifying whether there are any properties that may appear to meet eligibility criteria for listing on the State/National Registers of Historic Places or for designation as New York City Landmarks ("potential architectural resources") that have not yet been identified in the study area, as set for the *CEQR Technical Manual*. Tasks within this section are as follows:

- Define the study area for identifying if there are any potential architectural resources. This includes the area where direct physical impacts may occur and also accounts for a larger area where potential contextual effects may occur. The study area will be defined during the analysis, but typically includes the project site (in this case, the District) and extends 400 feet from the perimeter of the project site boundary.
- Based on visits to the District and study area by an architectural historian, survey standing structures in the study area to identify any properties that appear to meet eligibility criteria for NYCL designation or listing on the State and/or National Registers. Prepare a map if any such resources are identified.

- Assess the effects of planned development projects expected to be built by the project's build year in the future without the proposed project on any potential architectural resources.
- Assess the project's impacts on any designated or potential architectural resources, including contextual impacts as well as any direct physical impacts.
- Where appropriate, develop mitigation measures to avoid and/or reduce any adverse effects on any potential architectural resources in consultation with LPC.

TASK 8. URBAN DESIGN AND VISUAL RESOURCES

This section of the GEIS will assess changes in urban design patterns and visual resources of the study area as a result of the proposed actions. Tasks within this section are as follows:

- Define the study area for urban design and visual resources. The study area will be defined during the analysis. It is expected to encompass an area within approximately ¼-mile of the District, taking into account natural and man made features, including Flushing Bay, elevated structures including Northern Boulevard and the subway on Roosevelt Avenue, and the Van Wyck Expressway
- Based on field visits, describe the urban design of the District and the study area, using photographs and text as appropriate. Following the guidance outlined in the *CEQR Technical Manual*, the EIS will consider the following urban design characteristics: natural features, block forms, streetscape elements, street patterns and street hierarchy, as well as building bulk, use, type, and arrangement.
- As per the *CEQR Technical Manual*, based on field visits, describe visual resources and view corridors in the area.
- Based on planned development projects, describe the changes expected in the urban design and visual character of the study area that are expected in the future without the project.
- Describe the proposed actions and City Plan and assess how they would affect urban design elements in the study area compared to the No Build scenario. Assess the Plan's potential impacts on visual resources and view corridors, considering its orientation and proximity to such resources. Evaluate the significance of the changes on urban design elements and visual resources.

TASK 9. NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of development, the design of its buildings and landscapes, the presence of notable landmarks, and a variety of other physical features, including, but not limited to, traffic, pedestrian patterns and noise. Most of these elements will already be covered in other GEIS sections and, therefore, this GEIS section will essentially represent a summary of the key thoughts of these other analyses.

The proposed actions could affect the character of the area by introducing new residential, commercial, hotel, cultural, institutional, parking, and open space uses. The neighborhood character chapter will consider whether the proposed project could have moderate effects on several of the elements that contribute to neighborhood character or that in combination could have an effect on neighborhood character, and will assess the potential impact of the proposed actions on the character of the study area. CEQR impact categories that will be considered in the neighborhood character assessment include land use, urban design, visual resources, historic resources, socioeconomic conditions, traffic, and noise. Subtasks include:

- Drawing on other GEIS sections, describe the predominant factors that contribute to defining the character of the neighborhood.
- Based on planned development projects, public policy initiatives, and planned public improvements, summarize the changes that can be expected in the character of the neighborhood in the future without the project.
- Drawing on the analysis of project impacts on various GEIS sections, assess and summarize the project's impacts on neighborhood character.

TASK 10. SHADOWS

The *CEQR Technical Manual* requires a shadow analysis for proposed projects that have the potential for new shadows long enough to reach an existing publicly-accessible open space, important natural feature, or historic resource with sun-sensitive features. Based on the height and bulk of the development envelope as described in the RWCDS, the proposed actions could result in new buildings that would be greater than 50 feet in height. Therefore, a screening-level analysis will be performed to identify the project's potential to have shadow impacts on such resources, including resources located in Flushing Meadows Corona Park. If project-generated shadows would reach any existing open spaces, natural features, or historic resources with sun-sensitive features, a full shadows analysis would be performed for those resources. The analyses performed for this task would follow the methodology recommended in the *CEQR Technical Manual*, and focus on the relation between the proposed project's incremental shadow and any sun-sensitive landscape elements or activities.

TASK 11. NATURAL RESOURCES

Under CEQR, a natural resource is defined as plant and animal species and any area capable of providing habitat for plant and animal species or capable of functioning to support ecological systems and maintain the City's environmental balance. Resources such as surface and groundwater, soils (upland and wetland), drainage systems, wetlands, dunes, beaches, grasslands, woodlands, landscaped areas, gardens, parks, and built structures used by wildlife may be considered, as appropriate, in a natural resources analysis.

Since the District is essentially built out with existing uses, there are limited issues with respect to natural resources. If any new stormwater outlets to Flushing Creek are required to handle stormwater runoff from the proposed project, this task would analyze any conceptual plans developed with respect to those outlets. In addition, the District is partially located within a 100-year floodplain. Therefore, information on design criteria and constraints pursuant to floodplain regulations will be obtained and incorporated into this section of the GEIS. Methods to flood proof or raise habitable structures above the floodplain in accordance with New York City regulations will be described as appropriate.

TASK 12. HAZARDOUS MATERIALS

Phase I and Phase II Environmental Site Assessments have been completed for the District. The Phase I, which includes a visual inspection of accessible areas and a review of federal/State databases and historic maps/aerial photos, identified a variety of concerns, originating primarily from automotive uses including junk yards, body shops, and repair shops. Based on the Phase I, a program of soil and groundwater testing was developed, though access for borings was limited to streets/sidewalks. The testing found both historic fill material and evidence of low level petroleum contamination. However, based on the condition and general housekeeping of many

of the parcels, it is believed that there may be areas of more concentrated petroleum contamination (in soil and likely groundwater), especially near the underground tanks located on some individual parcels.

Based on the existing Phase I and Phase II Environmental Site Assessments, the hazardous materials analysis for the GEIS will include the following:

- The potential for hazardous materials to be present will be determined from the Phase I (which reviewed fire Insurance and other historical maps; aerial photographs, New York State Department of Environmental Coordination (NYSDEC) and New York City Fire Department records) and Phase II reports. Wherever possible, this information will be used to discuss potential contamination on individual parcels.
- The potential for subsurface disturbance (associated with implementation of the overall plan including demolition and decommissioning of existing utilities) will be provided along with the potential for exposure to workers and the community during development of the District (i.e., when any subsurface contamination would be exposed and remediated) and to site occupants/users following development (especially more sensitive uses such as residences and schools).
- Given that subsurface testing will need to be performed at many of the properties where access has not been possible, procedures to ensure that appropriate testing (and any necessary remediation) for each site is performed will be specified. This testing would include both geophysical testing to locate underground tanks (or other buried items) and soil/soil vapor/groundwater testing to determine the impacts from petroleum spills or other sources of contamination.
- Based on the potential for impacts from hazardous materials, appropriate and presumptive remedial measures will be described. These measures may include: requirements prior to or during building demolition; testing and remediation of contaminated soil or groundwater prior to or during construction; special measures for the disposal of excavated soil; mitigation measures incorporated into the project design (e.g., venting of soil gas or capping of areas with soil contamination); and measures to protect health and safety during and, if appropriate, after construction.

TASK 13. WATERFRONT REVITALIZATION PROGRAM

The project site is located within the State and City's Coastal Zone, and therefore must be assessed for its consistency with the Local Waterfront Revitalization Program (LWRP). A new WRP consisting of 10 policies was approved by the New York State Department of State (NYS DOS) in August 2002. These policies are used as the basis for evaluation of discretionary actions within the City's designated Coastal Zone. This analysis will review the 10 policies and assess where applicable, the general consistency of the project with the policies.

TASK 14. INFRASTRUCTURE

As described in the *CEQR Technical Manual*, due to the size of New York City's water supply system and the City's commitment to maintaining adequate water supply and pressure for all users, few actions would have the potential to result in a significant adverse impact on the water supply system. The proposed project would result in increased demand for infrastructure services, including an increase in the area's demand for water and wastewater treatment services. The proposed project would require infrastructure connections/extensions, as the District is not

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currently connected to the City's sewer systems. The estimated water usage, sewage generation and stormwater discharge rates associated with the RWCDS will be evaluated to determine if the capacity of the network is sufficient, and to determine whether the project will result in any significant adverse impacts. This section will also describe and account for any changes in drainage associated with the project.

Water Supply

A review of City water supply maps shows that the area is served by a 36 inch water line. Demands in the area are generally limited to the Willets Point area and the existing Shea Stadium. The proposed project also includes demapping existing mapped streets. This may require amending the local distribution system. The analysis of water supply will include the following subtasks:

- The existing water distribution system serving the District will be described based on information obtained from DEP's Bureau of Water Supply and Wastewater Collection.
- The current water usage within the District will be estimated.
- The likely demand will be assessed for future conditions without the project, and the effects on the system will be described.
- Average and peak water demand for the RWCDS will be projected.
- The effects of the incremental demand on the system will be assessed to determine if there is sufficient capacity to maintain adequate supply and pressure.

Wastewater

The entire Willets Point project area is currently without any connections to the New York City sanitary sewer system, requiring individual septic fields throughout the area. Therefore all flow generated by the RWCDS would result in additional wastewater requiring treatment. The analysis of wastewater includes the following subtasks:

- The existing sewer system serving the District will be described based on available information obtained from DEP. Flows to the Water Pollution Control Plant (WPCP) will be obtained for the latest 12-month period of record. The 12-month average monthly flow will be presented.
- The future sewage flows generated within the WPCP service area will be obtained from DEP's study of population and employment for this area. The projected 12-month average monthly flow will be presented.
- Sanitary sewage generation will be estimated for the RWCDS and the new Mets Stadium (CitiField) based on the most current water usage calculations DEP employs and on data submitted to DEP for the CitiField project.
- Proposed amendments to the drainage plan for the District will be described and evaluated, including anticipated changes associated with the Shea Stadium project.
- The effects of the incremental sewage demand on the City's sewer system, pump station(s), and waste pollution control plant will be assessed to determine if there would be any impact on the existing sewer capacity, local pumping station, the operations of the WPCP or on its State Pollution Discharge Elimination System (SPDES) permit conditions.
- The analysis will include an examination of the potential for issues related to impacts on combined sewer overflow events (CSO). This analysis would be based on the sewer

information for the area and any known CSO issues in the drainage area that covers the site, as well as the proposed amendments to the drainage plan. An analysis of the potential for separating storm and sanitary waste will also be evaluated.

Stormwater

Currently, drainage is conveyed through an interconnected sewer system within existing streets and roadways in Willets Point. The current system is reported to be in very poor condition as temporary flooding conditions occur regularly in the area. The proposed project would create new drainage patterns over the project site and would require an amendment to the existing drainage plan. This task includes:

- Describe the existing runoff characteristics of the project site, including a description of pervious and impervious surfaces.
- Based on the RWCDs, describe the potential changes to runoff characteristics, including the quantity and quality of runoff.
- Assess the potential impacts to surface water quality resulting from potential changes in stormwater management.

Solid Waste

The analysis of solid waste will include the following subtasks:

- Existing and future City solid waste disposal practices will be described, including the collection system and status of landfilling, recycling, and other disposal methods.
- Solid waste generation will be estimated for existing conditions and the future without the project.
- Solid waste generation by the project will be projected.
- The impacts of the project's solid waste generation on the City's collection needs and disposal capacity will be assessed.

Energy

The analysis of energy will include the following subtasks:

- The energy systems that supply the study area will be described.
- Projected changes in the demand for energy will be assessed, and their effect on the supply systems will be described.
- The energy usage for the RWCDs will be estimated. Any construction of new distribution lines necessary to meet the potential demand will be described.

TASK 15. TRAFFIC AND PARKING

The primary objective of the traffic and parking analysis is to assess whether the proposed action can be expected to have significant impacts on the roadway network and parking, and to identify and evaluate appropriate mitigation measures to address such impacts. The GEIS's traffic and parking studies shall include the following subtasks:

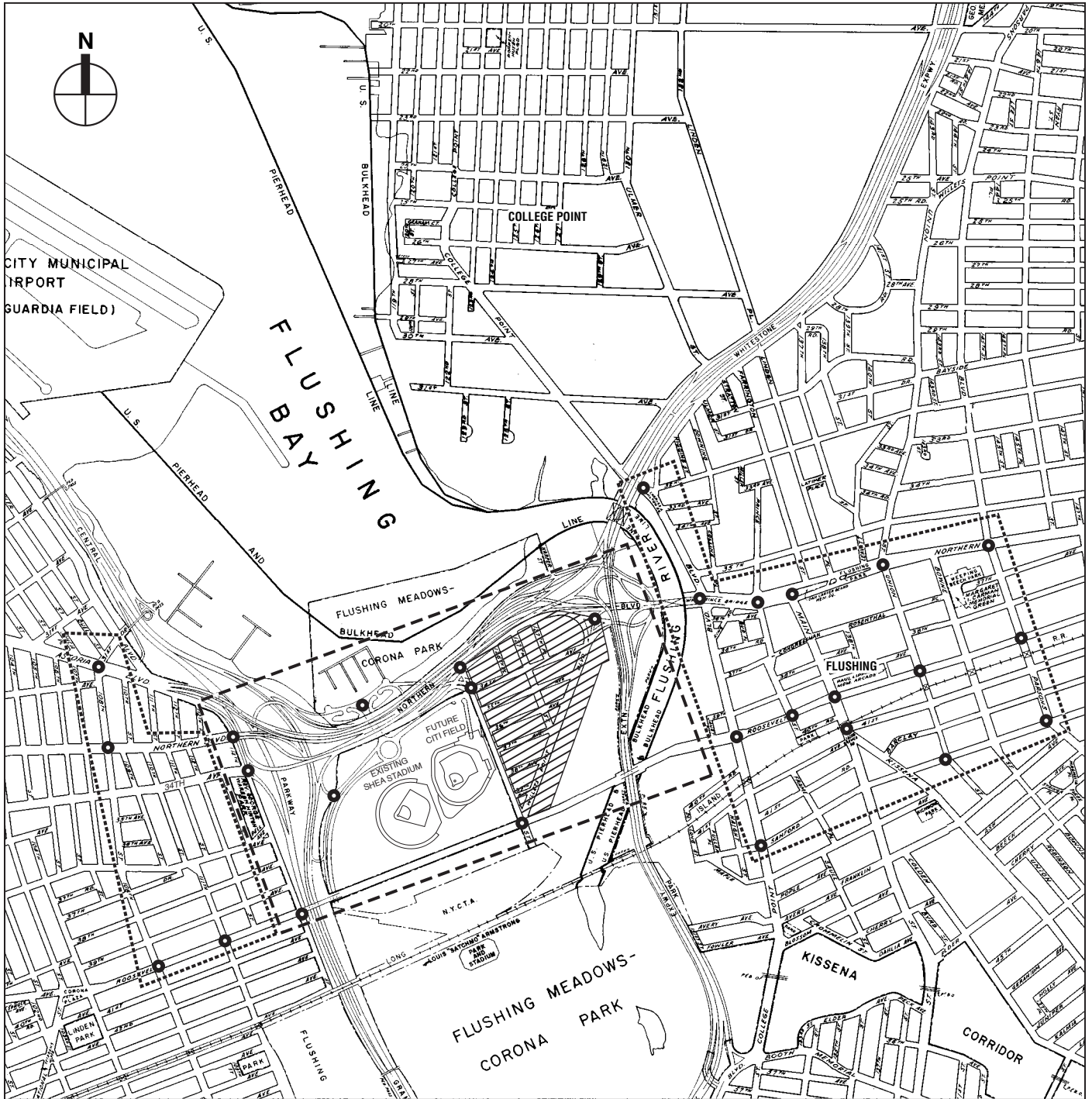
- Identify appropriate primary and secondary traffic study areas. The primary study area is the focus of more intense traffic activity generated by the proposed action closer to the project site, while the secondary area is the focus of a more targeted and less intense analysis. The primary study area focuses on the immediate intersections surrounding the proposed site as





well as critical/sensitive locations at a greater distance from the site depending on the volume of project-generated trips assigned to these critical locations. It is anticipated that the following roadway intersections and ramp/merge/diverge/weave sections along the surrounding major highways, will be analyzed (see Figure 8).

Street Network

- Parsons Boulevard @ Northern Boulevard;
- Parsons Boulevard @ Roosevelt Avenue;
- Parsons Boulevard @ Sanford Avenue;
- Union Street @ Northern Boulevard;
- Union Street @ Roosevelt Avenue;
- Union Street @ Sanford Avenue;
- Main Street @ Northern Boulevard;
- Main Street @ Roosevelt Avenue;
- Main Street @ Kissena Boulevard / 41st Avenue;
- Prince Street @ Northern Boulevard;
- Prince Street @ Roosevelt Avenue;
- College Point Boulevard @ 32nd Avenue;
- College Point Boulevard @ Northern Boulevard;
- College Point Boulevard @ Roosevelt Avenue;
- College Point Boulevard @ Sanford Avenue;
- Roosevelt Avenue @ Willets Point Boulevard;
- Northern Boulevard @ Willets Point Boulevard;
- Roosevelt Avenue @ 108th Street;
- Northern Boulevard @ 126th Street;
- 34th Avenue / Northern Boulevard Exit Ramp @ 126th Street;
- Grand Central Parkway northbound exit ramp @ West Park Loop Road;
- Astoria Boulevard @ 108th Street;
- Northern Boulevard @ 108th Street;
- Northern Boulevard @ 114th Street;
- 34th Avenue @ 114th Street;
- Roosevelt Avenue @ 111th Street;
- Roosevelt Avenue @ 114th Street;
- Worlds Fair Marina @ Boat Basin Road; and
- 126th Street @ major new project-generated intersections (likely two).

Once the magnitude and assignment of project-generated traffic volumes have been determined, it is anticipated that some of these intersections may be screened out as not requiring detailed analysis. Intersections will be selected for analysis based on the project trip generation program and preliminary assignment routes.



-  Willets Point Development District
-  Primary Study Area
-  Secondary Study Area
-  Intersection to be Analyzed

0 1000 2000 FEET
SCALE

Highway Network

- Grand Central Parkway (GCP) Mainline, both directions between the Long Island Expressway (LIE) and Northern Boulevard;
 - On-ramp access to GCP from Worlds Fair Marina/Boat Basin Road;;
 - On- and off-ramps access between GCP and west park loop road (Stadium Road);
 - Van Wyck Expressway (VWE) Mainline, both directions between the LIE and Northern Boulevard;
 - VWE off ramps to Northern Boulevard, both eastbound and westbound;
 - Northern Boulevard eastbound access ramp to 126th Street;
 - GCP access ramp to 126th Street;
 - Northern Boulevard eastbound/GCP access ramp to VWE southbound;
 - Astoria Boulevard eastbound access ramp to VWE southbound;
 - Whitestone Expressway Mainline, both directions between Northern Boulevard and Linden Place;
 - Northern Boulevard westbound ramp to VWE southbound;
 - Northern Boulevard/VWE access ramp to GCP westbound;
 - Northern Boulevard/VWE access ramp to 126th Street; and
 - Northern Boulevard westbound access ramp to Astoria Boulevard westbound.
- For the purposes of vehicular traffic analysis, a network-wide analysis will be conducted. The proposed actions assume that all existing streets within the District will be demapped, and any future streets proposed will be private streets. The traffic analysis will thus look at key entry points from the public streets to the private street network for assessment.
 - Inventory and update street widths, sidewalk widths, and traffic flow directions, number of moving lanes, parking regulations, official signal timing (cycle length, phases), traffic control devices (stop sign, signal), location of bus stops, driveways of the public streets surrounding the District, as well as other items required for traffic analysis. The most recent signal timings from DOT will be obtained for each study area intersection.
 - Determine the peak traffic analysis hours. In accordance with *CEQR Technical Manual* guidelines, all data collected or used for the analyses should be less than three years old. Existing available data may be used, and recent available data collected for the Downtown Flushing Traffic Simulation Study, EISs underway for Downtown Flushing development sites, and any recent data that could have been collected for Shea Stadium studies will be reviewed. Establish peak hours in consultation with existing sources (such as other EISs, counts, etc), with the peak traffic analysis hours informed by both the development's activities as well as background traffic. The guidelines set forth in the *CEQR Technical Manual* will be used when collecting new counts. It is anticipated that the following seven peak traffic analysis periods and analysis conditions will be analyzed:
 - Weekday AM peak hour (without Mets game);
 - Weekday midday peak hour (without Mets game);

Willets Point Development Plan

- Weekday PM peak hour (without Mets game);
 - Weekend midday peak hour (without Mets game);
 - Weekday PM peak hour (with Mets game – pregame arrivals);
 - Weekend midday peak hour (with Mets game – pregame arrivals); and
 - Weekend late afternoon peak hour (with Mets game – postgame departures).
- Examine existing 24-hour Automatic Traffic Recorder (ATR) machine counts and possible new counts, and compare the hourly data to projected peak hour trip generation for the proposed development in order to determine the exact hours to be analyzed.
 - Assemble available traffic count data and supplement it with additional traffic counts where needed. New counts would be conducted via a mix of both ATR machine counts and manual intersection counts noting through and turning volumes at each intersection being analyzed and vehicle classification counts needed to establish percentages by auto, taxi, truck, bus, etc. Traffic volume networks will be established for each of the intersections for each of the peak traffic analysis hours. Activities associated with existing uses in the District will also be surveyed via counts along 126th Street and Northern Boulevard.
 - Determine existing traffic operating characteristics—volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service using Highway Capacity Manual (HCM) procedures. Findings will be presented in graphical and tabular forms.
 - 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 Northern Boulevard, Roosevelt Avenue, 126th Street, the Van Wyck Expressway, the Grand Central Parkway, and two other principal routes. Examine speeds for the existing conditions for each peak hour.
 - Determine the volume of traffic that can be expected to be generated by development projects that are anticipated to be built and operational by the proposed project’s Build year. These traffic volumes will be assigned to the primary and secondary study area intersections and combined with an annual background traffic growth rate of one percent per year, in order to develop future No Build traffic volume maps. Background projects will include the redevelopment of Shea Stadium (which will be smaller than the existing stadium), proposed development at the Municipal Lot 1 site in Downtown Flushing, and other major developments proposed and expected to be built in Downtown Flushing and other nearby locations. 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 Build analysis year will also be identified and reflected in the traffic volume network.
 - Determine future No Build traffic operating characteristics—volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service—using Highway Capacity Manual (HCM) procedures. Findings will be presented in graphical and tabular forms.
 - Determine the volume of traffic that would be generated by the generic proposed action that is the subject of this GEIS. It is expected that a range of possible land uses will be considered, including hotel, residential, destination retail, local retail, office, recreational/entertainment, movie theater, and others. These uses will have different trip-making characteristics and vary by time periods and modes of transportation. A travel demand projection estimating the projected activities associated with these uses will form the basis on which the entire transportation impact assessment will be conducted. Trip

generation rates, temporal distributions, modal splits, and average vehicle occupancies will be researched from recent City EISs and, if necessary, from other sources such as the 2000 US Census database, the Institute of Transportation Engineers' Trip Generation Manual, and other accepted professional sources. This effort will also include an estimate of anticipated linkage of trips with the various uses being proposed and uses located surrounding the project site. DOT will be consulted in developing the appropriate linkage estimates for the various proposed uses during different analysis time periods.

- 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. Future Build traffic volume maps will be prepared for each analysis condition. This will also include a traffic reduction credit for existing land uses that would be displaced by the proposed project.
- Determine future Build traffic operating characteristics—volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service—using Highway Capacity Manual (HCM) procedures. Findings will be presented in graphical and tabular forms. If any programmed transportation improvements meet with the approval of DOT and the New York State Department of Transportation (NYSDOT), modified roadway capacities would be incorporated into the Build traffic analyses.
- Identify potential significant traffic impacts by comparing future No Build and Build conditions 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.
- Prepare traffic volume and speed-and-delay data needed for the air quality and noise analyses.
- Identify all off-street parking lots and garages within one-quarter mile of the District—their locations, capacities, and occupancy levels during representative peak weekday and weekend conditions. Identify projected utilization levels under future No Build conditions, as well.
- Identify the amount of off-street parking being proposed under the RWCDs and develop parking accumulation profiles for the overall program, noting the adequacy or inadequacy of the capacity being built by time of day for weekday and weekend conditions, with and without events at Shea Stadium and the USTA National Tennis Center. The impact assessment will focus on the adequacy of parking, location of access/egress points, means of controlling/directing traffic to appropriate parking locations, and interface operations between parking driveways and the surrounding street system.
- Identify the typical parking regulations within the primary traffic study area and the percentage to which those on-street spaces are currently used and would be expected to be used under future No Build conditions.
- Estimate the number of on-street parking spaces that might be provided under the RWCDs being evaluated in the GEIS.
- Assess vehicle/pedestrian safety conditions by reviewing the most recent three years of accident data from NYSDOT for intersections in the vicinity of the project site. 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 alleviate any safety impacts.

TASK 16. TRANSIT AND PEDESTRIANS

The transit and pedestrians analysis will incorporate project-related components, assess whether the proposed action can be expected to result in significant impacts, and evaluate appropriate mitigation measures to address such impacts. The specific elements of this analysis are outlined below.

- Identify transit and pedestrian study areas. Transit service is currently available via the No. 7 subway, Long Island Rail Road (LIRR), and the Q48 and Q66 bus routes. A detailed analysis of control areas and circulation elements at the Willets Point–Shea Stadium subway station will be conducted. Ridership and peak period train loading will also be assessed. A qualitative discussion and a review of LIRR operations will be provided. A detailed analysis of the two nearby bus routes along the northern and southern borders of the District will also be conducted. This analysis will include an evaluation of peak load points and assessment of loading conditions at nearby bus stops. To address existing and future pedestrian conditions, sidewalks, crosswalks, and corner reservoirs along Roosevelt Avenue, 126th Street and Northern Boulevard will be analyzed. In addition, specific elements associated with the proposed development, such as sidewalks and crosswalks within the District, will be assessed to determine if the projected activities could be accommodated.
- Review preliminary travel demand estimates for the proposed development and determine the appropriate analysis time periods. Due to the level of cumulative activities anticipated for Mets game day arrival and departure, a detailed assessment of transit operations during these time periods will be conducted. To assess pedestrian conditions, a detailed analysis will be conducted for all game day and commuter peak time periods described for the traffic assessment. If warranted, weekday midday and non-game day conditions will also be assessed.
- Assemble available data and collect new data. New data will be collected at the Willets Point–Shea Stadium subway station, at nearby bus routes, and at surrounding pedestrian elements. These data will be supplemented by information developed for other studies, specifically those from the Shea Stadium Redevelopment EIS.
- 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, a quantified analysis will be conducted for the weekday AM and PM (with and without a Mets game) peak periods, as well as the weekend midday (with a Mets game) and late afternoon (with a Mets game) peak periods. For the pedestrian analysis, all seven peak periods identified for the traffic analysis above will be assessed.
- Determine future transit and pedestrian operating conditions. No Build and Build analyses will be conducted incorporating background growth, trips associated with other developments in the area, and increments induced by the proposed project. For the Build conditions, the analysis will also address the potential effects associated with any anticipated changes in the area's transit and pedestrian 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 DOT).

TASK 17. AIR QUALITY

The number of project-generated trips will likely exceed the *CEQR Technical Manual* air quality analysis screening thresholds at a number of locations within the traffic study area. Thus, an

analysis of mobile emissions air quality impacts will be conducted. The potential effects of carbon monoxide (CO) and particulate matter emissions (PM₁₀ and PM_{2.5}) from the project-generated vehicles on ambient levels in the study area will be assessed at the locations where the greatest potential for project-related increases in concentrations would occur.

The stationary source air quality impact analysis will assess the effects of emissions (i.e., sulfur dioxide, CO, particulate matter, and/or nitrogen oxides) from the proposed project's heating, ventilating, and air conditioning (HVAC) systems. In addition, the proposed actions would add new residential uses and open spaces in an area with existing industrial/manufacturing uses. While the project would displace all industrial uses on the project site, there may be remaining industrial uses in the broader study area. Therefore, an analysis to examine the potential for impacts on the proposed project from industrial emissions will be performed.

MOBILE SOURCE ANALYSES

- Gather existing air quality data. Collect and summarize existing ambient air quality data for the study area. Specifically, ambient air quality monitoring data published by the NYSDEC will be compiled for the analysis of existing conditions.
- Determine receptor locations for microscale analysis. Select critical intersection locations in the study area, based on data obtained from the project's traffic analysis as well as traffic planners and engineers for the project. At each intersection, multiple receptor sites will be analyzed.
- Select dispersion model. EPA's CAL3QHC screening model will be used for less congested locations. EPA's CAL3QHCR refined intersection model will be used at intersections that are found to exceed CO standards or de minimis criteria using the CAL3QHC screening model, and for the PM10/PM2.5 intersection analysis. For the CAL3QHCR analysis, five years (2001-2005) of meteorological data from LaGuardia Airport will be used, and concurrent upper air data from Brookhaven, New York will be used for the simulation program.
- Select emission calculation methodology and "worst-case" meteorological conditions. Vehicular cruise and idle emissions for the dispersion modeling will be computed using EPA's MOBILE6.2 model. For the "worst-case" analysis (at screening locations), conservative meteorological conditions to be assumed in the dispersion modeling are a 1 meter per second wind speed, Class D stability, and a 0.70 persistence factor. In addition, the *CEQR Technical Manual* recommended winter temperature of 43 degrees Fahrenheit will be used as input to the model.
- At each mobile source microscale receptor site, calculate maximum 1- and 8-hour CO concentrations for existing conditions, future conditions without the proposed project, and the future conditions with the proposed project. Maximum 24-hour and annual PM10 and PM2.5 concentrations will be determined for the future conditions without the proposed project and the future conditions with the proposed project. CO concentrations will be determined for up to three peak periods. No field monitoring will be included as part of these analyses.
- Evaluate potential future CO concentrations on nearby receptors at the project site from the elevated Van Wyck Expressway.
- Assess the potential CO impacts associated with any proposed parking facilities. Information on the conceptual design of the parking facilities will be employed to determine potential

off-site impacts from emissions. A screening analysis will be used following the procedures suggested in the *CEQR Technical Manual* for mechanically and naturally ventilated parking structures to determine maximum potential worst-case impacts. Cumulative impacts from on-street sources and emissions from the parking facilities will be calculated where appropriate. Compare future CO pollutant levels with standards and applicable de minimis criteria, to determine potential significant adverse project impacts.

- Examine mitigation measures. Analyses will be performed to examine and quantify ameliorative measures to minimize any significant adverse impacts of the proposed project.
- Determine the consistency of the proposed project with the strategies contained in the SIP for the area. At any receptor sites where violations of standards occur, analyses would be performed to determine what mitigation measures would be required to attain standards.

STATIONARY SOURCE ANALYSES

- A stationary source screening analysis will be performed to determine the potential for significant pollutant concentrations from fossil-fueled heating, ventilating, and air conditioning (HVAC) systems. The screening analysis will consider the potential impacts of the proposed project, as well from existing or proposed large facilities within 1,000 feet of the project site, as well as commercial, institutional or large-scale residential developments within 400 feet of the project site. Project-on-project impacts will also be determined, where applicable. The screening analyses will use the procedures outlined in the *CEQR Technical Manual*.
- A field survey will be performed to identify any manufacturing or processing facilities within 400 feet of the proposed project. The NYCDEP's Bureau of Environmental Compliance (BEC) files will be examined to determine if there are permits for any industrial facilities within a 400-foot radius of the boundary of the proposed rezoning area, and a 1,000-foot radius of the proposed rezoning area for large sources with process emissions, as per the *CEQR Technical Manual* guidelines. A review of federal and State permits will also be conducted. Based upon this information a determination will be made of whether further detailed analysis is necessary. If necessary, the ISC3 dispersion model screening database will be used to estimate the short-term and annual concentrations of critical pollutants at the potential receptor sites. Predicted worst-case impacts on the project will be compared with the short-term guideline concentrations (SGC) and annual guideline concentrations (AGC) reported in the DEC's DAR-1 AGC/SGC Tables (December 2003) to determine the potential for significant impacts. In the event that violations of standards are predicted, measures to reduce pollutant levels to within standards will be provided.

TASK 18. NOISE

The noise study will focus on assessing: (1) potential noise impacts due to project-generated traffic; and (2) the level of attenuation needed in project-developed buildings to satisfy CEQR requirements. The analysis of the project's potential for noise impacts will include the following subtasks:

- Select noise descriptors to describe the noise environment and the impact of the proposed new developments. The 1-hour equivalent noise level (Leq(1)) and the 1-hour noise level exceeded 10 percent of the time (L10(1)) would be the major noise descriptors used. Other noise descriptors, such as Leq/Ldn L1, L50, and L90, would be examined, where appropriate.

- Based on residential and other sensitive locations potentially affected by the project, select appropriate noise receptor locations.
- Determine existing noise levels. Existing noise levels would be determined primarily by field measurements. Measurements would be made for both weekday and weekend conditions. Measurements would be made using a Type I, noise analyzer and would include measurements of Leq, L1, L10, L50, and L90, noise levels. Where necessary, measurements would be supplemented by mathematical model results to determine an appropriate base case of existing noise levels. Noise sources, particularly from surface traffic, aircraft, and industrial operations will be identified. Per CEQR requirements, noise from aircraft operations would be excluded from all measurements. If necessary, noise measurements will be made using the appropriate noise descriptors.
- Determine future noise levels without the proposed project. This assessment will account for anticipated future transit operations on the MTA parcel in the District. At each receptor location, noise levels without the project for the analysis year would be determined based on the modeling performed using the TNM model for vehicular traffic and FTA modeling techniques for rail and transit facility noise.
- Determine future noise levels with the proposed project. At each receptor location, noise levels with the project for the analysis year would be calculated based on modeling performed using the TNM model for vehicular traffic and FTA modeling techniques for rail and transit facility noise. In addition, the analysis will also assess potential noise impacts from stationary sources.
- Compare noise levels with standards, guidelines, and other impact evaluation criteria. Existing noise levels and future noise levels, both with and without the project, will be compared with CEQR noise criteria. In addition, future noise levels with the project would be compared with future noise levels without the project to determine the project's impacts (e.g., an increase of 3 dBA or more would be considered a significant impact).
- Examine mitigation measures. If necessary, recommendations of measures to attain acceptable interior noise levels and to reduce noise impacts to acceptable levels will be made.

TASK 19. CONSTRUCTION IMPACTS

The GEIS will assess potential project construction-related impacts. The likely construction schedule for development at the site and an estimate of activity on-site will be described. Construction impacts will be evaluated according to the *CEQR Technical Manual* guidelines. The construction assessment for the proposed actions will generally be qualitative, focusing on areas where construction activities may pose specific environmental problems. Suggestions on how to mitigate potential impacts will also be included. Construction impacts lasting more than two years will be substantially analyzed. Technical areas to be analyzed include:

- **Traffic and Parking.** Most of the construction will be contained within the District, thereby minimizing potential impacts. Therefore, as noted above, the construction assessment will generally be qualitative. It will include a determination of the volume of construction workers driving to the site and the volume of construction vehicles entering and leaving the site in the peak traffic period in the peak year of construction. Construction in the District would also displace current on-site uses. To the extent that on-site parking is utilized today by Shea Stadium patrons, this use will be estimated and disclosed.

- **Air Quality.** Describe mobile source emissions from construction equipment and worker and delivery vehicles, and fugitive dust emissions. Analyze potential CO and PM mobile source air quality impacts during construction based on information on traffic and truck volumes and on-site activities. Assess impacts of criteria pollutants from on-site construction activities, including particulate matter emissions from sources of fugitive dust. Discuss measures and emission reduction strategies to reduce impacts.
- **Noise.** Estimate construction noise levels from various pieces of construction equipment and discuss potential effects on adjacent land uses. Measures to minimize construction noise impacts will be presented, as necessary.
- **Hazardous Materials.** Construction of the proposed project would involve a variety of earthmoving and excavating activities, and construction activities in these areas could encounter contaminated soil or groundwater. The range of remedial and health and safety measures that would be employed prior to and/or during construction would vary with the types, levels, and extent of contamination identified. Site-specific Health and Safety Plans would also govern remedial and construction activities. All work with the potential to generate dust (e.g., excavation) would be done in accordance with appropriate health and safety requirements to protect workers (who have the greatest potential for exposure because of their close proximity to the work areas) and the public.
- **Infrastructure.** The proposed project would need to relocate public infrastructure, particularly water and sewer connections, as well as electric, gas, and telephone lines; thus, the services to the neighborhood during the relocation will be addressed.
- **Other Technical Areas.** As appropriate, this section will discuss the other areas of environmental assessment for potential construction-related impacts.

TASK 20. PUBLIC HEALTH

According to the guidelines of the *CEQR Technical Manual*, public health concerns for which an assessment may be warranted include: increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse hazardous materials or air quality impacts; the presence of contamination from historic spills or releases of substances that might have affected or might affect ground water to be used as a source of drinking water; solid waste management practices that could attract vermin and result in an increase in pest populations; potentially significant adverse impacts to sensitive receptors from noise and odors; and actions for which any potential impacts result in an exceedance of accepted federal, State, or local standards. Depending on the results of relevant technical analyses, a public health analysis may be warranted. If so, this analysis will be provided.

TASK 21. MITIGATION

Where significant project impacts have been identified, measures to mitigate those impacts will be identified and described. This task summarizes the findings of the relevant analyses and discusses potential mitigation measures. Where impacts cannot be practicably mitigated, they will be disclosed as unavoidable adverse impacts.

TASK 22. ALTERNATIVES

The purpose of an alternatives section in an EIS is to examine development options that would reduce or eliminate project-related impacts while substantively meeting the goals and objectives

of the action. The specific alternatives to be analyzed will include a No Build alternative, which describes the conditions that would exist if the proposed actions were not implemented and a No Unmitigated Impact alternative, which assesses a change in density or program design in order to avoid the potential for any unmitigated significant adverse impacts that may be associated with the proposed project. In addition, the GEIS may consider a Commercial Alternative, a Traffic Improvement Program (TIP) Alternative and a Flushing Bridge Alternative. The Commercial Alternative would consider a program that includes retail, office, convention center and hotel uses, and excludes the residential, school, and community cultural uses analyzed in the RWCDS. By incorporating a range of potential traffic improvements, the TIP Alternative would seek to minimize significant adverse traffic impacts of the proposed Plan. The Flushing Bridge Alternative would analyze the provision of a new pedestrian or vehicular bridge connecting the District and downtown Flushing, along with the RWCDS analyzed in the GEIS. The City is currently investigating the possibility of providing such a bridge. Although the bridge would require additional actions that are not currently part of the Willets Point Development Plan, it is viewed as an important element in the City's vision for the District, and therefore will be analyzed as an alternative. Additional alternatives to be analyzed would be based on any significant adverse impacts identified in the GEIS. The analysis of each alternative will be qualitative, except where impacts of the project have been identified.

TASK 23. EXECUTIVE SUMMARY

The Executive Summary will utilize relevant material from the body of the GEIS to describe the proposed project, its environmental impacts, measures to mitigate those impacts, and alternatives to the proposed action. *