A. INTRODUCTION

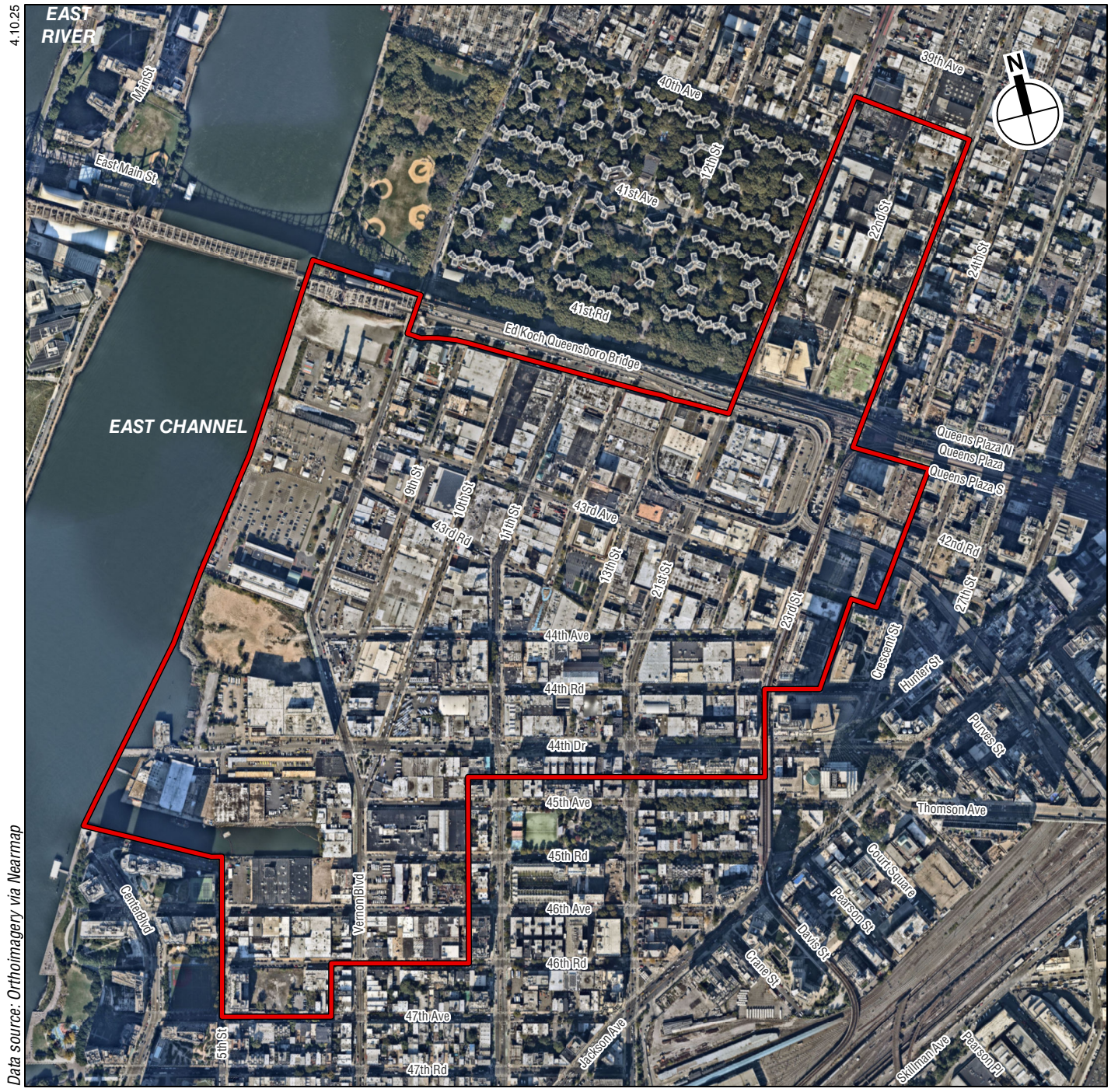
As described in greater detail below and in this Draft Environmental Impact Statement (DEIS), the New York City Department of City Planning (DCP) is proposing a series of land use actions (the Proposed Actions) to support and facilitate implementation of the Long Island City Neighborhood Plan, which is a long long-term vision for Long Island City and its surroundings as a unique, transit-rich, and culturally vibrant neighborhood.

The Proposed Actions cover an approximately 54-block area (the Project Area) (see **Figures S-1 and S-2**) and focus on Long Island City's East River Waterfront and manufacturing zoned areas. The Project Area is generally bounded by the midblock between 39th and 40th Avenues between 21st and 23rd Streets to the north; the East River, Anable Basin, and 5th Street to the west; 47th Avenue, 46th Road, and the midblock between 44th Drive and 45th Avenue to the south; and 11th, 23rd, and 24th Streets and the midblock between 24th and Crescent Streets to the east. The majority of the study area is located in Queens Community District 2, with the northern portion f (north of Queens Plaza North to the midblock between 39th Street and 40th Street, between 21st Street and 23rd Street), located in Community District 1.

The Proposed Actions are aimed at facilitating development patterns that meet the long-term vision of a thriving, prosperous, and resilient Long Island City by facilitating new residential (with affordable housing), commercial, community facility, and industrial development that would result in a net increase of approximately 14,699 dwelling units (DU), including approximately 3,245 to 4,867 permanently affordable homes for lower-income New Yorkers, approximately 3,427,450 square feet of commercial space, approximately 291,784 square feet of community facility space. (See Section H, below, "Analysis Framework," for additional details on the Reasonable Worst-Case Development Scenario [RWCDS]).

The Proposed Actions reflect the culmination and continuation of many years of planning in and around Long Island City, with the input of local community members, stakeholders, elected officials, and City agencies and represent the comments and feedback received through the City's on-going community engagement process, initiated in the fall of 2023. A goal of the plan is to leverage Long Island City's Central Business District status, excellent transportation access, and unique East River waterfront to create new housing opportunities, expand affordable housing and open space and position the area as Western Queens' primary employment hub for new and emerging industries in the context of a new mixed-use neighborhood with these primary objectives:

- Protect existing affordable housing and generate significant new housing, especially affordable housing that serves diverse types of households and family needs.



Aerial

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-1



Project Location

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-2

- Invest in existing parks and deliver new open space along the waterfront and in the Long Island City core that is high-quality, resilient, sustainable, and accessible.
- Enhance connectivity with multi-modal transportation, improve safety for pedestrians and bikers, and improve logistics for deliveries, loading zones, and truck access.
- Plan for a more resilient and sustainable Long Island City.
- Support existing businesses and the creative community, increase local job growth, and improve access to diverse, high-quality jobs and training.

Summary descriptions of the outreach process, the purpose and need for the Proposed Actions and the specific elements are described below. **Appendix A** provides a full list of the blocks and lots that comprised the Project Area.

B. REQUIRED APPROVALS AND REVIEW PROCEDURES

The Proposed Actions are discretionary land use approvals that are subject to the City's Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter and City Environmental Quality Review (CEQR) and include:

- Zoning Map Amendment (ZM) to:
    - Rezone portions of existing R6B, R6A/C1-5, R7A/C2-5, R7A, M1-3, M1-4, M1-5, M3-1, M1-4/R6A, M1-4/R7A, M1-5/R9 and M1-6/R9 zoning districts to M1-2A/R6A, M1-3A/R7A, M1-3A/R7X, M1-4A/R8A, M1-5A/R8, M1-6A/R9, M1-6/R10, M1-6A/R10, M1-4A, M1-5A and M1-6A zoning districts.
    - Expand the existing Special Long Island City Mixed-Use District (LIC Special District) to include portions of the Project Area outside of the existing LIC Special District.
    - Remove Special Mixed Use District 9 (MX-9)
    - Modify the Northern Hunters Point Waterfront Access Plan (WAP), ZR Section 62-951, for the waterfront blocks within the Project Area. The proposed WAP would specify the location of required shore public walkways, supplemental public access areas, upland connections, and visual corridors to ensure access to the Basin from surrounding neighborhoods and to address the configuration of and varied conditions along the Basin. The WAP would also modify requirements and standards for public access to address the unique character of the Basin and align with modern citywide standards.
- Zoning Text Amendment (ZR) to:
    - Amend Appendix F of the ZR, to designate Mandatory Inclusionary Housing (MIH) Areas to the proposed M1-2A/R6A, M1-3A/R7A, M1-3A/R7X, M1-4A/R8A, M1-5A/R8, M1-6A/R9, M1-6/R10, M1-6A/R10 districts.
    - Modify the existing LIC Special District (Article XI, Chapter 7) to create special use, floor area, bulk, circulation and parking regulations on both waterfront and non-waterfront blocks and to establish special height, setback, and street wall regulations for buildings on waterfront blocks and on select corridors, among other special rules.
    - Allow for space occupied by schools to be exempt from floor area calculations within the new LIC Special District subareas.

  - Create an authorization that would allow for additional flexibility in building envelope for developments utilizing the new school area floor area exemption.
  - Create a CPC chair certification to allow the transfer of development rights on contiguous zoning lots with common ownership that are otherwise separated by a mapped street on blocks within the waterfront subdistrict.
  - Create a CPC chair certification to provide a floor area bonus to rezoned waterfront lots that provide additional active open space.
  - Create a CPC chair certification to allow for the modification of height restrictions established under Sections 61-21 (Restriction on Highest Projection of Building or Structure) for Zoning Districts without a maximum height limit within the newly established Subdistricts of the LIC Special District following verification that said modifications would not pose a hazard to air navigation.
  - Create an authorization to allow sites within M1-6/R9, M1-6/R10 and M1-6A/R10 districts to access the Zoning Resolution's floor area bonus for on-site public plazas
- Designation of Urban Development Action Areas (UDAA), Approval of an Urban Development Action Area Project (UDAAP), and Disposition of City-Owned Properties:
  - The Department of Housing Preservation and Development (HPD) is seeking Designation of UDAA, project approval of a UDAAP, and disposition of City-owned property located on Block 24, Lot 7.
- Change in the City Map (MM) to:
  - De-map portions of 44th Drive west of Vernon Boulevard.
  - De-map to narrow portions of 44th Drive between Vernon Boulevard and 5th Street.
  - De-map 44th Road west of Vernon Boulevard.
  - De-map 44th Ave west of Vernon Boulevard.
  - Map new public streets in Block 488; and Block 489.
  - Map a street widening of portions of 45th Avenue between 5th Street and Vernon Boulevard.
- Disposition of Non-Residential City-Owned Property (PP) to:
  - Dispose of City-owned property located at Block 489, Lot 23 and Lot 1, and Block 488, Lot 15, and Lot 11.
  - Dispose of City-owned property located at Block 428, Lot 12, Lot 13, and Lot 16.
  - Dispose of City-owned property located at Block 429, Lot 13, Lot 15, and Lot 29.
- Combination Acquisition and Site Selection of Property by the City (PC):
  - The New York City Department of Citywide Administrative Services (DCAS) is seeking the acquisition and site selection of an easement on waterfront portions of a property located on Block 488 Lot 114. This action would allow the City to create new waterfront public open space.

The land use approvals included under the Proposed Actions are described in more detail in Section F, “Description of the Proposed Actions.”

C. BACKGROUND TO THE PROPOSED ACTIONS

STUDY AREA HISTORY

The Mespeatches Indigenous People historically inhabited the area that is now referred to as Long Island City. Maspeth, a neighborhood directly east of Long Island City, derives its name from the Mespeatches. Long Island City’s early history began with the establishment of a Mespeatches village along Newtown Creek. Historical documents indicate that around 1664, Dutch settlers paid the Indigenous People with a small amount of wampum (Indigenous currency) and supplies in exchange for an area amounting to approximately 2,200 acres. The area remained as primarily farmland for the following centuries.

In the late 19th century, the Long Island Rail Road (LIRR) moved its western terminus to Long Island City, and the Queens County Supreme Court building was constructed. Soon after, Long Island City became the commercial and civic hub of Queens County, and Long Island City was developed with a concentration of heavy industrial uses—particularly along the bustling working waterfront. Today, much of its industrial past remains in its built form, particularly within industrial sections of the Project Area. However, as New York City’s industrial economy declined due to rapid globalization, the economy of Long Island City broadened to include office space, art institutions, and educational institutions such as LaGuardia Community College and the City University of New York (CUNY) School of Law, which have repurposed industrial lofts and redeveloped underutilized sites.

NEIGHBORHOOD CONTEXT

Long Island City it a transit center and the Project Area is directly served by eight subway lines at three primary stations: the 21st Street-Queensbridge station at the intersection of 21st Street and 40th Avenue is served by the F subway line; Queensboro Plaza station located along Queens Plaza South is served by the N, W, and 7 subway lines; and Court Square station is served by the E, G, M, and 7 subway lines. IN addition, a short distance from the Project Area is the Queens Plaza station which is served by the E, M, and R subway lines. All stations provide direct access to Midtown Manhattan within one to three stops. In addition, Long Island City and Hunters Point Avenue LIRR stations provide service between Long Island and Midtown Manhattan via Grand Central and Penn Stations. There are also fifteen bus lines that provide extensive service ss to Queens, Manhattan, and Brooklyn. Finally, the NYC Ferry operates from landings at Long Island City and Hunter’s Point South with access to Queens, Manhattan, and Brooklyn. Vehicular access is also provided to and from the Midtown Manhattan central business district on the Ed Koch Queensboro Bridge (59th Street Bridge) and through the Queens-Midtown Tunnel.

Along with Downtown Flushing and Downtown Jamaica, Long Island City constitutes one of Queens’ three central business districts and Western Queens’ primary, commercial, industrial and transportation hub. In recent years, Long Island City has experienced an uptick in employment with nearly 85,000 jobs added between 2000 and 2022 with

industrial and office jobs comprising the majority of the employment opportunities with growth in sectors such as Life Sciences, Media and Entertainment, Breweries, and Distribution.

PROJECT AREA

The subareas that comprise the Project Area are as follows (see **Figure S-3**).

WATERFRONT SUBAREA

Waterfront properties account for approximately 0.5 miles of frontage along the East River and Vernon Boulevard and along Anable Basin with eight of these sites comprising over 42 acres of Long Island City's waterfront. Anable Basin is a unique inlet off the East River. The basin is nearly a ¼ mile long and 150 feet wide and is lined with a cluster of industrial buildings that are currently either vacant, demolished, or underutilized low-rise warehouses, reflecting the area's post-industrial transformation.

This waterfront subarea also includes three City-owned sites, all located around the intersection of 44th Drive and Vernon Boulevard. On the north side of 44th Drive is a six-story loft building owned and operated by the New York City Department of Education (DOE). The site is partially occupied and largely used for storage, office space and other administrative uses. To the west of the DOE building is a City-owned accessory parking lot for city employees). On the south side of 44th Drive is a one-story building owned and operated by the New York City Department of Transportation (DOT). The building is utilized by DOT street and sidewalk repair personnel. Con Edison, a public utility, maintains property along the waterfront south of 43rd Avenue. The Con Edison Learning Center is used as a training facility and education center for Con Edison staff.

INDUSTRIAL SUBAREAS

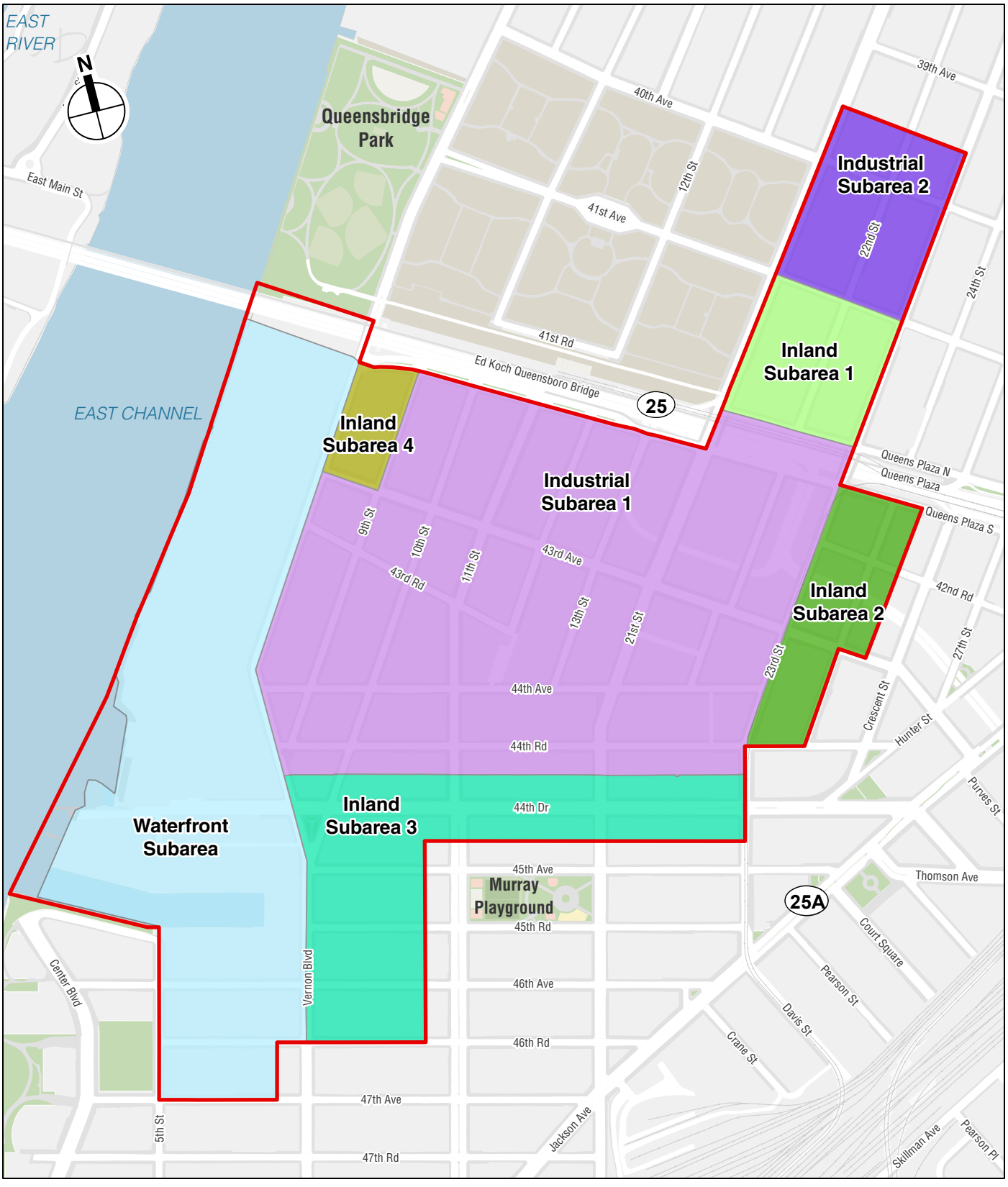
The Industrial Subareas are defined as those portions of the Project Area in the Long Island City Industrial Business Zone (IBZ) (see **Figure S-4**). IBZs are geographic areas in New York City designated to retain and promote industrial activities. Established in 2006, these zones aim to support New York City's industrial economy by offering tax credits to industrial businesses relocating to IBZs. A key feature of these zones is the commitment not to permit rezoning for residential uses.

The Project Area has two separate Industrial Subareas in the IBZ. The larger of the two, identified as Industrial Subarea 1, is located east of the waterfront properties and is bounded by Vernon Boulevard to the west, Queens Plaza South to the north, 23rd Street to the east, and the midblock between 44th Road and 44th Drive to the south.

The smaller Industrial Subarea 2 is located east of Queensbridge Houses and north of Queens Plaza South and is bounded by 21st Street to the west, 41st Avenue to the South, 23rd Street to the east, and the midblock between 39th and 40th Avenues to the north.

Much of the Long Island City IBZ is outside the Project Area, including the area north of Queensbridge Houses, east and north of the Sunnyside Railyard, and along Newtown Creek.

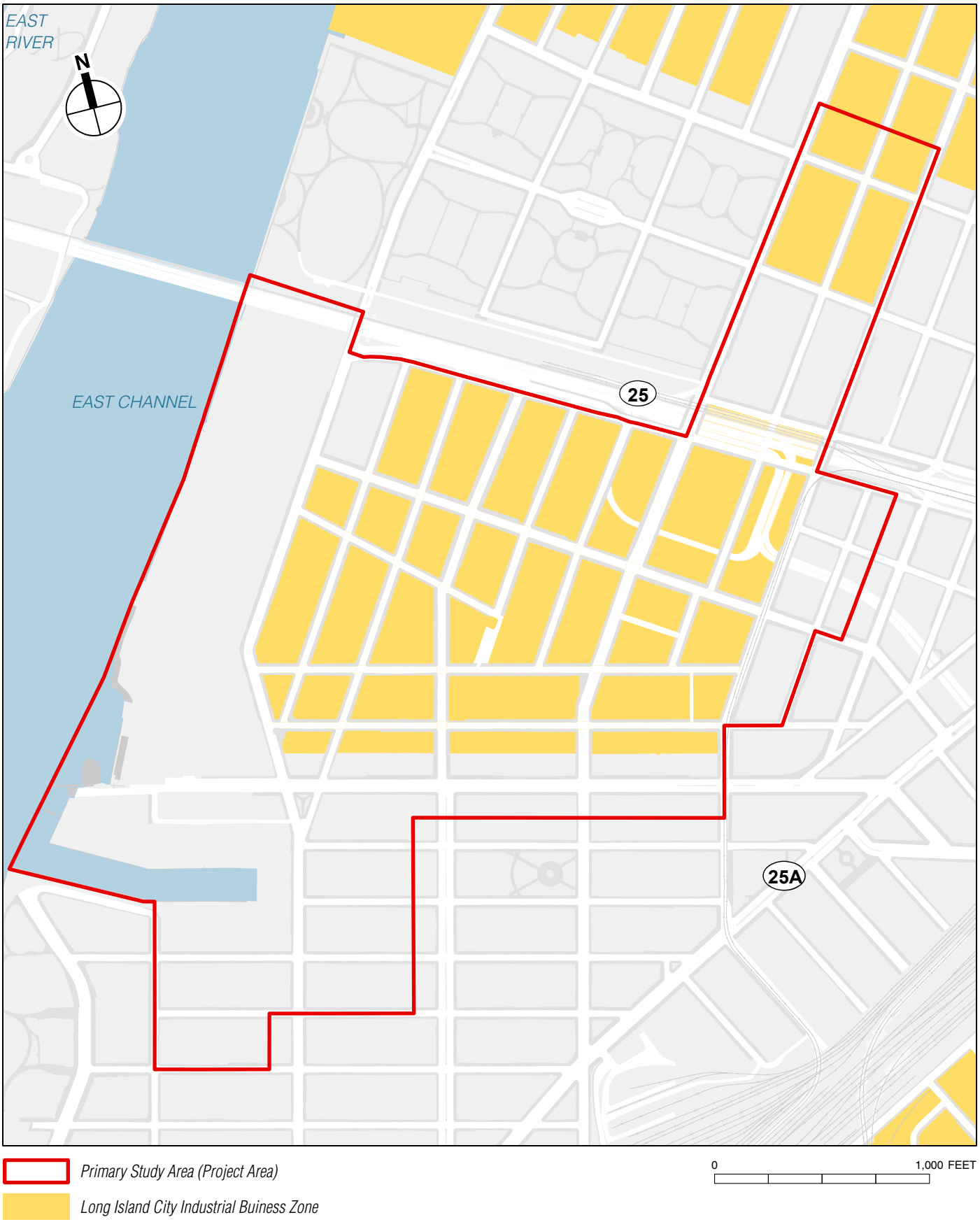
Long Island City has long been characterized by a variety of industrial uses. Today, it is home to industrial sectors that include film, construction warehousing, arts, and large-



Subareas

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-3



Industrial Business Zone

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-4

scale food production businesses. In recent years, Industrial Subarea 2 has experienced growth in uses such as restaurants, breweries, and retail storefronts. Residential uses are not allowed.

INLAND SUBAREAS

There are four Inland Subareas that comprise the remaining portions of the Project Area, including: Subarea 1 east of the Queensbridge Houses and south of Industrial Subarea 2 (bounded by 21st Street to the west, Queens Plaza North to the south, 23rd Street to the east, and 41st Avenue to the north); Subarea 2 west of Long Island City's dense center and bounded by 23rd Street to the west, 44th Road and 43rd Avenue to the south, 24th Street and midblock between 24th and Crescent Streets to the east, and Queens Plaza South to the north; Subarea 3 which is south of the primary IBZ area (or Industrial Subarea 1) and east of the Waterfront Subarea and bounded by Vernon Boulevard and 5th Street to the west, 47th Avenue and 46th Road to the south, 11th Street and 23rd Street to the east, and midblock between 44th Drive and 44th Road to the north; and the smallest Subarea 4 is positioned between the Waterfront Subarea and Industrial Subarea 1 and constitutes a single block bounded by Vernon Boulevard, Queens Plaza South, 9th Street and 43rd Avenue.

These subareas are primarily zoned as manufacturing or paired manufacturing and residential districts, which has yielded a variety of building forms from single story warehouses in Inland Subarea 3 to high density mixed-use towers in Inland Subarea 2. However, the Inland Subareas maintain an industrial character reminiscent of Long Island City's past.

ONGOING CITYWIDE EFFORTS (2024-2025)

NEW YORK CITY INDUSTRIAL PLAN

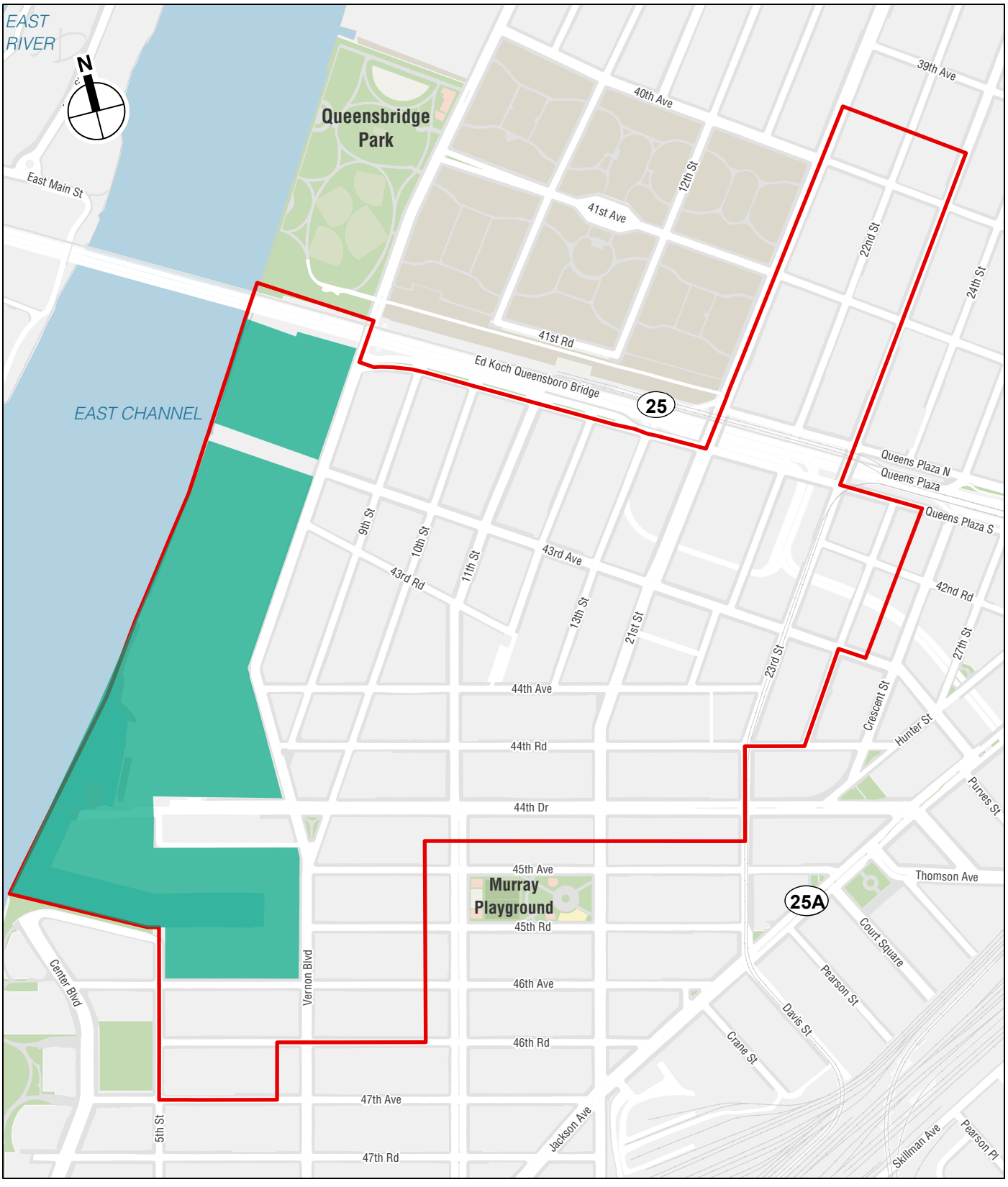
In September of 2024, DCP announced the launch of the New York City Industrial Plan that aims to bolster the City's industrial sector by creating a comprehensive framework for the development and support of industrial and manufacturing businesses and jobs. The Plan will explore how the City can best support the development of a modern and growing sustainable industrial economy and well-utilized industrial areas. This plan is being through the combined efforts of DCP, the New York City Economic Development Corporation (EDC) and the Department of Small Business Services (SBS), with input from other relevant city agencies and stakeholders with the goal of a completed plan in December of 2025.

PRIOR PLANNING EFFORTS

NORTHERN HUNTERS POINT WATERFRONT ACCESS PLAN

In 1997, DCP submitted an application to amend the ZR to establish a WAP at the Northern Hunters Point Waterfront (see **Figure S-5**). The amendment implemented several of the public waterfront access recommendations contained in DCP's Plan for Long Island City: A Framework for Development (Fall 1993, "Framework").

The City's Waterfront zoning was adopted in 1993 to manage and provide guidelines for New York City's 578 miles of waterfront property. These regulations apply generally to all



Waterfront Access Plan (WAP)

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-5

uses in commercial districts and R6-R10 districts and commercial uses in manufacturing districts. New developments in these districts, on zoning lots with at least 100 feet of shoreline and 10,000 square feet of lot area, are required to provide a 40-foot shore public walkway and an upland connection between the shore public walkway and the first upland street. A supplemental public access area must also be provided when the required shore public walkway and upland connection area falls below 15 percent of the total lot area. In addition, a visual corridor is required across waterfront zoning lots.

As part of this zoning, the Northern Hunters Point Waterfront Access Plan (WAP) was subdivided into 12 parcels based on existing and anticipated ownership patterns. Certain elements of the WAP apply to all parcels while others are modified on a parcel-by-parcel basis. Maps Q-1a through Q-1c show the boundaries of the WAP area and the location of certain features mandated or permitted by the Plan. The maps can be found in the ZR Section 62-951 paragraph (f).

To date the WAP has not rendered any completed waterfront open space as the area has experienced no redevelopment since it was adopted on September 3, 1997.

SPECIAL LONG ISLAND CITY MIXED USE DISTRICT (LIC)

In 2001, the CPC amended the Zoning Map to implement a key land use recommendation taken from the above-mentioned Framework for Development. Three amendments were proposed to provide important and innovative changes to land use regulations and applied to 37 centrally located blocks in Long Island City for the purposes of guiding the development of a compact, well-defined business district with a lively and rich mix of uses. The zoning changes provided targeted increases in the maximum allowable densities for commercial and light industrial businesses and established urban design regulations to foster new development that responds to the area's diverse built fabric and enhances its distinct sense of place.

The LIC Special District was established in the core of Long Island City, extending diagonally along Jackson Avenue between Vernon Boulevard in the south to 41st Avenue in the north. The LIC Special District consists of the Hunters Point (HP), Court Square (CS) and Queens Plaza (QP) subdistricts.

LIC– HUNTERS POINT SUBDISTRICT (HP) (ADOPTED JUNE 2004)

In 2004, the CPC established new mixed-use zoning districts throughout a 43-block area of Hunters Point in Long Island City, Queens, Community District 2. The amendments included expansion of the boundaries of the then existing LIC Special District and the HP Subdistrict and established new regulations with respect to the HP Subdistrict.

The amendments were directed at promoting a vibrant mix of housing, light industry, commercial enterprises and cultural activities in Hunters Point, a neighborhood subarea in Long Island City located between Court Square and the East River waterfront. In addition to promoting a dynamic mix of uses, zoning controls set height limits to ensure new buildings fit within the context of the neighborhood to contribute to the City's plans for creating a successful business district in the Long Island City core, centered around Queens Plaza and Court Square and to connect the area to the waterfront and Queens West.

SILVERCUP WEST (2006)

In 2006, CPC approved an application to rezone five lots south of the Queensborough Bridge, between Veron Boulevard and the East River. The application, put forth by Silvercup Studios, rezoned an M1-4 district (described below) to a new Special Mixed Use District (MX-9) with an underlying zoning of M1-5/R10 (described below). The rezoning was intended to facilitate a large-scale mixed-use development, referred toas Silvercup West, which was programmed to include a film and television production studio and residential and office towers with retail, and community facility uses and waterfront public open space. The MX-9 district contains specific provisions that allow CPC to waive restrictions on the size of illuminated signs. Since the rezoning however, the project's special permits expired, and there has been no development.

LIC– DUTCH KILLS SUBDISTRICT (DK) (ADOPTED SEPTEMBER 2008)

In 2008, DCP submitted an application for amendments to the Zoning Resolution concerning the LIC Special District (Article XI, Chapter 7), relating to the addition of the Dutch Kills Subdistrict and expansion of the LIC Special District in Community District 1, Borough of Queens. In conjunction with the related zoning map amendment, the actions facilitated the establishment of the Dutch Kills Subdistrict (DK) in LIC Special District.

The rezoning responded to concerns that the existing zoning unduly limited residential development and allowed for out-of-scale developments that did not reflect established building patterns and scales. The proposed strategies were similar to those that were undertaken to the Hunters Point subdistrict, providing new, mixed-use contextual zoning designations and extending the LIC Special District to ensure more predictable building scales appropriate to existing contexts, while allowing a broad mix of uses.

The changes affected 36 whole and 4 partial blocks in Dutch Kills, a community characterized by a diverse mix of residential, community facility, commercial, and light industrial uses. The Dutch Kills Subdistrict is bounded by 36th Avenue to the north, Northern Boulevard to the east, 41st Avenue to the south, and 23rd Street to the west. It is located north and west of Sunnyside Yards and north of the Queens Plaza Subdistrict (QP) of the LIC Special District.

SPECIAL SOUTHERN HUNTERS POINT DISTRICT (SHP) (ADOPTED SEPTEMBER 2008)

EDC submitted an application to amend the Zoning Resolution to establish the Special Southern Hunters Point District (SHP), which included a WAP for a portion of the Newtown Creek shoreline and modified certain other provisions of the Zoning Resolution. The amendments, in conjunction with related actions, facilitated new development in Hunters Point, and included provisions to ensure active, pedestrian-oriented experience with access to panoramic views of Midtown Manhattan and the East River and Newtown Creek waterfronts.

HISTORIC DISTRICTS AND LANDMARKS

Designated in 1968 by the New York City Landmarks Preservation Commission (LPC), the Hunters Point Historic District (LP-0450) is an approximately one-block district in the Hunters Point neighborhood of Queens. Located along 45th Avenue between 21st and

23rd Streets, the district is noted for the late 19th century rowhouses that comprise a unique variety of architectural styles ranging from Italianate to French Second Empire. LPC designated the district on the basis of the high quality of preservation at the time and its distinctive character in the area.

The Queensboro Bridge (LP-0828) was designated as an individual landmark by LPC in 1974. The bridge was completed in 1908 and opened to the public in 1909 for pedestrian, vehicle, and trolley use. Noted for its historical importance, architectural interest, and engineering achievement, the bridge stands today as a major vehicular, bicycle, and pedestrian connector between Queens and Manhattan.

Designated in 1982 as an individual landmark by the LPC, the New York Architectural Terra Cotta Works Building (LP-1304) is a two-story building situated along Vernon Boulevard just south of the Queensboro Bridge. The site is the former office headquarters of New York Architectural Terra Cotta Company. As the only major manufacturer of architectural terra cotta, the company had a pronounced role in the form of New York City's architecture. The landmarked building is the last remaining remnant of the company and is currently vacant.

D. EXISTING ZONING

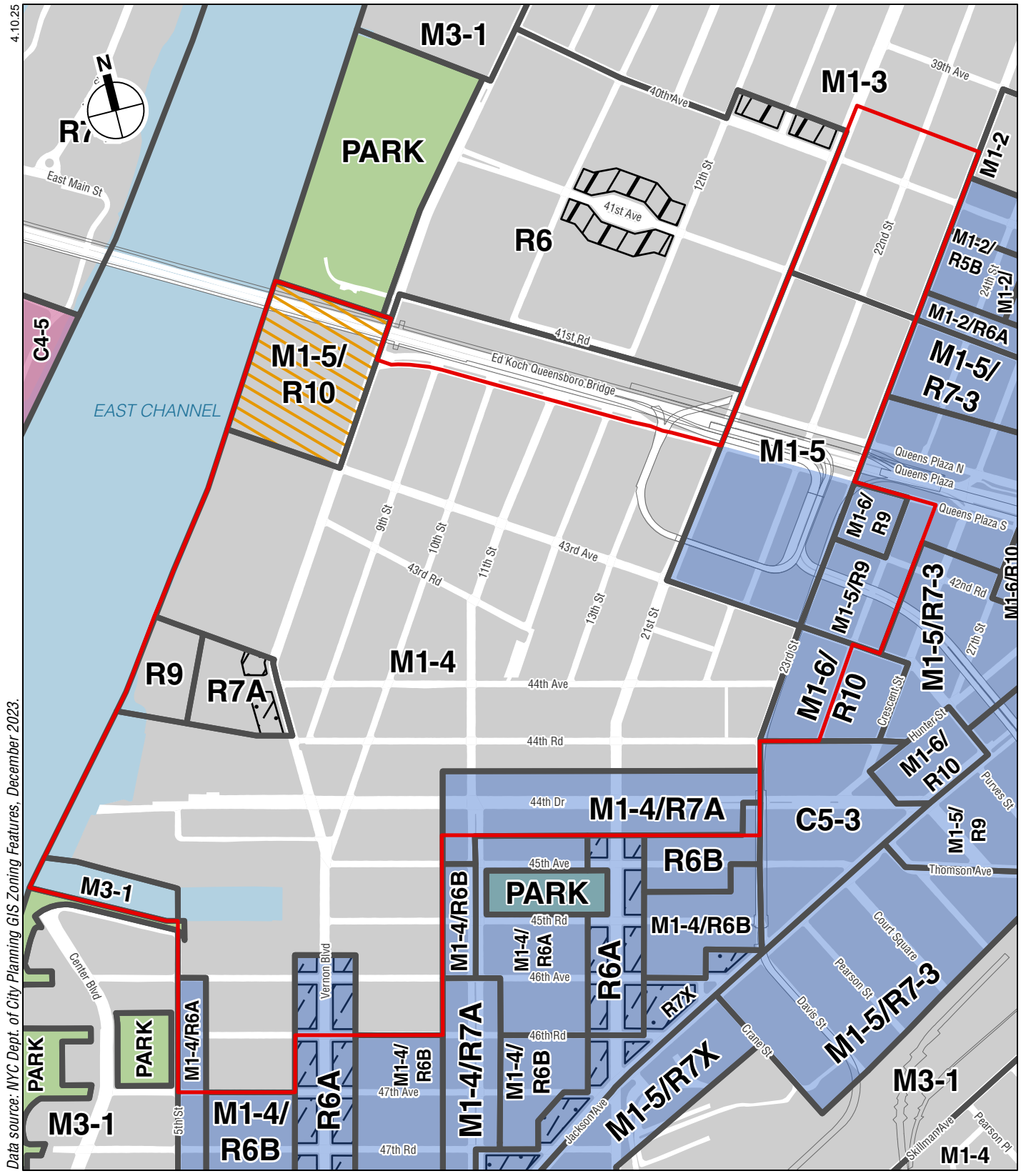
The Project Area includes the western portion of Community District 2 and southern portions of Community District 1. The 1995 Long Island City Framework Implementation Rezoning affected most of the properties in the Project Area. It restricted heavy manufacturing in favor of light manufacturing and allowed residential use in Hunters Point by amending the use and bulk regulations of the Special Hunters Point Mixed Use District. Later, the 2001 Special Long Island City Rezoning changed the zoning for properties located in the easternmost portion of the Project Area. The 2004 Hunters Point Subdistrict Rezoning affected many of the properties located along the 44th Drive corridor.

The Project Area is mapped with R6B, R6A, R7A, R9, M1-3, M1-4, M1-4/R6A, M1-4/R7A, M1-5, M1-5/R9, M1-5/R10, and M1-6/R10 zoning districts. Commercial districts mapped as overlays include C1-5 and C2-5 (see **Figure S-6**). There are two special districts in the Project Area (see **Figure S-7**). There are currently no Mandatory Inclusionary Housing (MIH) Areas mapped within the Project Area and a description of the current zoning districts is provided below.

R6A (WITHIN LIC– HP)

An R6A district is mapped at a 100-foot depth along Vernon Boulevard between 46th Road to the south and a point at the midblock between 45th Road to the north, and 46th Avenue to the south.

R6A districts are medium-density contextual districts that allow all types of residential and community facility uses. R6A districts permit a maximum residential 3.0, a maximum residential FAR of 3.90 for Qualifying Affordable Housing or Qualifying Senior Housing, and community facility uses are allowed up to an FAR of 3.0. Base heights are permitted to be between 40 and 65 feet, above which a 15-foot setback is required along a narrow street or 10 feet along a wide street. Building height may reach a maximum of 75 feet for standard residences and 95 feet for Qualifying Affordable Housing or Qualifying Senior Housing.



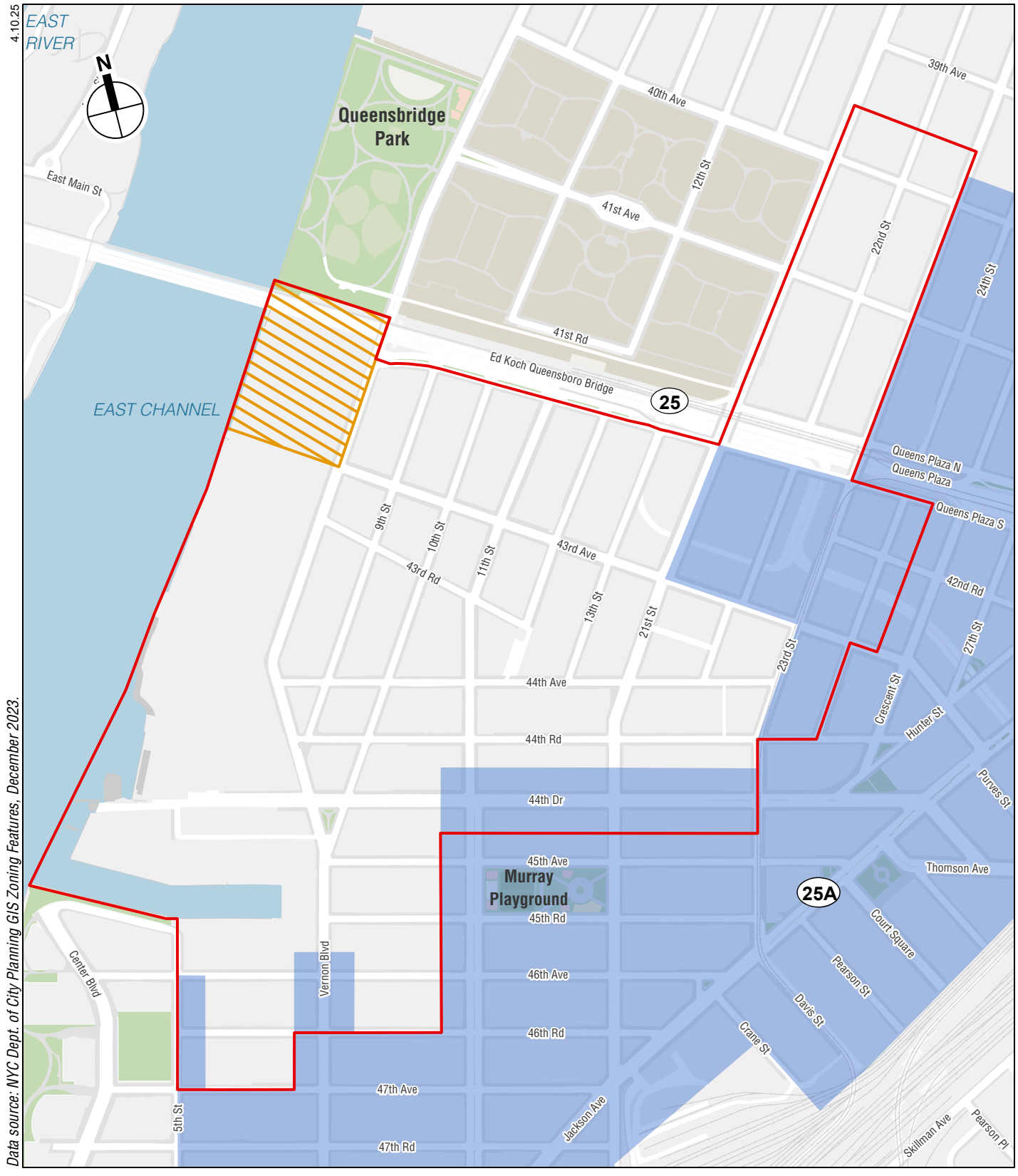
Primary Study Area (Project Area)
Zoning District Boundary
C1-3
C1-5
C2-5
Special Long Island City Mixed Use District
Special Mixed Use District (MX-9)
Special Southern Roosevelt Island District

0 1,000 FEET

Existing Zoning

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-6



Existing Mixed-Use Districts

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-7

R6B (WITHIN LIC– HP)

An R6B district is mapped on one partial block at the intersection of 23rd Street and 44th Drive.

The R6B district is a typical rowhouse district that includes height limits and street wall lineup provisions to ensure that new buildings are consistent with the scale of the existing built context. R6B districts permit a maximum residential FAR of 2.0, a maximum residential FAR of 2.40 for Qualifying Affordable Housing or Qualifying Senior Housing, and community facility uses to a maximum FAR of 2.0. Building base heights must be between 30 and 45 feet, with 10-foot setbacks on a wide street and 15-foot setbacks on a narrow street, before rising to a maximum height of 55 feet for standard residences and 65 feet for Qualifying Affordable Housing or Qualifying Senior Housing.

R7A (OUTSIDE LIC)

An R7A district is mapped on one partial block, bounded by Vernon Boulevard to the east, a DOE building to the south, the R9 zoning district to the west, and the Con Edison property to the north.

R7A districts are medium-density contextual residential districts that allow all types of community facility and residential. R7A districts permit a maximum residential 4.0, a maximum residential FAR of 5.01 for Qualifying Affordable Housing or Qualifying Senior Housing, and community facility FAR of 4.0. Base heights are permitted to be between 40 and 75 feet and 85 feet for Qualifying Affordable Housing or Qualifying Senior Housing, above which a 15-foot setback is required along a narrow street or 10 feet along a wide street. Building height may reach a maximum of 85 feet for standard residences and 115 feet for Qualifying Affordable Housing or Qualifying Senior Housing.

R9 (OUTSIDE LIC)

An R9 district is mapped on roughly one partial block that is bounded by the East River to the west, an SBS property to the south, the R7A zoning district to the east, and the Con Edison property to the north.

R9 districts are high-density non-contextual residential districts that allow residential uses and community facility uses of all types. R9 districts permit a maximum residential FAR of 7.52, a maximum residential FAR of 9.02 for Qualifying Affordable Housing or Qualifying Senior Housing, and a community facility FAR of 10.0. R9 districts, like other non-contextual districts, permit building heights to be governed by either Sky Exposure Plane regulations, or standard residence envelope. Where the standard residence envelope is utilized, base heights are permitted to be between 60 and 95 feet on narrow streets and 135 for Qualifying Affordable Housing or Qualifying Senior Housing, above which a 15-foot setback is required, and base heights are permitted to be between 60 and 105 feet on a wide street and 135 feet for Qualifying Affordable Housing or Qualifying Senior Housing, above which a 10-foot setback is required. Building heights may reach a maximum of 135 feet on a narrow street and 145 feet on a wide street for standard residences and a maximum of 185 feet for Qualifying Affordable Housing or Qualifying Senior Housing.

M1-3 AND M1-5 (OUTSIDE AND WITHIN LIC)

An M1-3 district is mapped east of the Queensbridge houses on two full and two partial blocks. The M1-3 district is bounded by 41st Avenue to the south, 23rd Street to the east, the midblock between 40th Avenue and 39th Avenue to the north, and 21st Street to the west.

The M1-5 district is mapped on four full blocks bisected by Ed Koch Bridge/Queens Plaza South, and bounded by 41st Avenue to the north, 21st Street to the west, 43rd Avenue to the south, and 23rd Street to the east.

M1-3 and M1-5 districts are medium density light manufacturing districts, which serve as buffers between other manufacturing districts and adjacent residential or commercial districts. These districts allow all types of retail and commercial uses, general service uses, manufacturing uses, and some types of community facility. Residential uses are not permitted. These M1 districts permit a maximum commercial and manufacturing FAR of 5.0 and community facility FAR of 6.5. The districts permit a maximum building base height of 85 feet or six stories, before Sky Exposure Plane regulations apply to the overall height. Additionally, towers are permitted to penetrate the sky exposure plane, provided they adhere to additional setback and coverage criteria.

M1-4 (OUTSIDE LIC)

An M1-4 district is mapped on 37 full and two partial blocks and accounts for much of the Project Area. The district is bounded by Queens Plaza South to the north; Vernon Boulevard and the East River to the west; 46th Road, 47th Avenue, and the midblock between 44th Drive and 44th Road to the south; and 11th Street, 23rd Street, and 21st Street to the east.

M1-4 districts are non-contextual light manufacturing districts, which serve as buffers between other manufacturing districts and adjacent residential or commercial districts. The district allows all types of retail and commercial uses, general service uses, manufacturing uses, and some types of community facility. Residential uses are not permitted. M1-4 districts permit a maximum commercial and manufacturing FAR of 2.0 and community facility FAR of 6.5. M1-4 districts permit a maximum building base height of 60 feet or four stories, before Sky Exposure Plane regulations apply to the overall height. Additionally, towers are permitted to penetrate the sky exposure plane, provided they adhere to additional setback and coverage criteria.

M3-1 (OUTSIDE LIC)

An M3-1 district is mapped on one partial block on the westerly portion of Anable Basin.

M3-1 is a non-contextual heavy manufacturing district, designed to accommodate the essential heavy industrial uses which involve more objectionable influences and hazards. The district allows all types of retail and commercial uses, general service uses, and manufacturing uses while residential and community facility uses are not permitted. M3-1 districts permit a maximum commercial and manufacturing FAR of 2.0. M3-1 districts permit a maximum height of the front wall of 60 feet or four stories within the permissible initial setback distance, before Sky Exposure Plane regulations apply to the overall height. The initial setback distance on narrow streets and wide streets are 20 and 15 feet, respectively. Alternatively, when an open area is provided along the full length of the front

lot line, with a depth of 15 feet on narrow streets and 10 feet along the wide streets, the Alternate Sky Exposure Plane regulations shall apply.

M1-4 / R6A (WITHIN LIC– HP)

An M1-4 district is paired with an R6A district and mapped on two partial blocks along 5th Street. Paired districts combine a manufacturing and a residential district and are mapped in the Hunters Point Subdistrict (HP) of the LIC Special District. The paired district is bounded by 5th Street to the west, 46th Avenue to the north, and 47th Avenue to the south.

M1-4/R6A districts permit a maximum residential FAR of 3.0, a maximum residential FAR of 3.9 for Qualifying Affordable Housing or Qualifying Senior Housing, an FAR for commercial and industrial uses up to 2.0, and an FAR for community facility uses up to 3.0. In paired districts, the residential envelopes govern building height. Base heights are permitted to be between 40 and 65 feet, above which a 15-foot setback is required along a narrow street or 10 feet along a wide street. Building heights may reach a maximum of 75 feet for standard residences and 95 feet for Qualifying Affordable Housing or Qualifying Senior Housing. The HP subdistrict modifies the basic paired district regulations by permitting grocery stores without a maximum size restriction and requiring new street walls to line up with adjoining buildings.

M1-4 / R7A (WITHIN LIC– HP)

An M1-4 district is paired with an R7A district and mapped on six partial blocks along the 44th Drive corridor. Paired districts combine a manufacturing and a residential district and are mapped in the HP subdistrict of the LIC Special District. The paired district is bounded by 23rd Street to the east, the midblock between 44th Drive and 44th Road to the north, a point 100 feet west of 11th Street to the west, and the midblock between 45th Avenue, and 44th Drive to the south.

uses, most retail and commercial uses, and some manufacturing uses. M1-4/R7A districts permit a maximum residential FAR of 4.0, a maximum residential FAR of 5.01 for Qualifying Affordable Housing of Qualifying Senior Housing, an FAR for commercial and industrial uses up to 2.0, and an FAR for community facility uses up to 4.0. In paired districts, the residential envelopes govern building height. Base heights are permitted to be between 40 and 75 feet and 85 feet for Qualifying Affordable Housing or Qualifying Senior Housing, above which a 15-foot setback is required along a narrow street or 10 feet along a wide street. Building height may reach a maximum of 85 feet for standard residences and 95 feet for Qualifying Affordable Housing or Qualifying Senior Housing. The HP subdistrict modifies the basic paired district regulations by permitting grocery stores without a maximum size restriction and requiring new street walls to line up with adjoining buildings.

M1-5/R9 (WITHIN LIC– QP)

An M1-5 district is paired with an R9 district and mapped on two partial blocks and one full block immediately south of Queens Plaza South. Paired districts combine a manufacturing and a residential district and are mapped in QP of the LIC Special District. The M1-5/R9 district corresponds specifically to Area B of the QP. The paired district is bound by Queens Plaza South and 42nd Street to the north, the midblock between 24th

Street and Crescent Street to the east, 43rd Avenue to the south and 23rd Street to the west.

M1-5/R9 paired districts permit a mix of uses, allowing new residential and non-residential uses within the same building. These paired districts allow all types of residential, community facility, and general service uses, most retail and commercial uses, and some manufacturing uses. The QP subdistrict modifies many standard regulations for paired districts. The subdistrict permits retail establishments of all size, specifies corridors with special retail rules, and has bulk regulations that supersede the underlying regulations. Area B permits a maximum FAR of 8.0 for all uses and a maximum residential FAR of 9.6 for Qualifying Affordable Housing or Qualifying Senior Housing. The area permits a minimum base height of 100 feet and maximum building base height of 150 feet, above which a setback of 10 feet is required on wide streets, and 15 feet on narrow streets. No overall building height applies.

M1-5/R10 (MX-9)

An M1-5 district is paired with an R10 district and mapped on an area bounded by the Queensborough Bridge to the north, unmapped 43rd Avenue to the south, Vernon Boulevard to the east and the East River to the west. Paired districts combine a manufacturing and a residential district. The M1-5/R10 district corresponds to the Special Mixed Use District - 9 (MX-9), with which it is coterminous.

The M1-5/R10 paired district permits a mix of uses, allowing new residential and non-residential uses within the same building. Paired districts allow all types of residential, community facility, and general service uses, most retail and commercial uses, and some manufacturing uses. The M1-5/R10 district permits a maximum FAR of 5.0 for manufacturing and commercial use and 10.0 for residential and community facility uses, and a maximum residential FAR of 12.0 for Qualifying Affordable Housing or Qualifying Senior Housing.

The MX-9 contains specific provisions that allows the CPC to modify regulations related to surface area, illumination, projection, or height of signs.

M1-6/R9 (WITHIN LIC–QP)

An M1-6 district is paired with an R9 district and mapped on one block. Paired districts combine a manufacturing and a residential district and are mapped in the QP of the LIC Special District. M1-6 / R9 corresponds specifically to Area D of the QP Plan. The paired district is bound by Queens Plaza South to the north, 23rd Street to the west, 42nd Road to the south, and 24th Street to the east.

M1-6/R9 districts are non-contextual, high-density light manufacturing districts paired with high-density residential districts. The paired districts permit a mix of uses, allowing new residential and non-residential uses within the same building. These paired districts allow all types of residential, community facility, and general service uses, most retail and commercial uses, and some manufacturing uses. The QP subdistrict modifies many standard regulations for paired districts. The subdistrict permits retail establishments of all size, specifies corridors with special retail rules, and has bulk regulations that supersede the underlying zoning regulations. Area D permits a maximum residential FAR of 8.0, a maximum residential FAR of 9.6 for Qualifying Affordable Housing or Qualifying

Senior Housing, community facility FAR of 10.0, commercial and manufacturing FAR of 15.0. The area permits a minimum base height of 100 feet and maximum building base height of 150 feet, above which a setback of 10 feet is required on wide streets, and 15 feet on narrow streets. No overall building height applies.

M1-6/R10 (WITHIN LIC–QP)

An M1-6 district is paired with an R10 district and mapped on one block. Paired districts combine a manufacturing and a residential district and are mapped in the QP. The M1-6/R10 district corresponds specifically to Areas A-1 and A-2 of the QP subdistrict. Portions of only Area A-2 are in the Project Area. The paired district is bound by 43rd Avenue to the north, 23rd Street to the west, 44th Road to the south, and 24th Street to the east.

M1-6/R10 districts are non-contextual light manufacturing districts paired with high-density residential districts. The paired districts permit a mix of uses, allowing new residential and non-residential uses within the same building. These paired districts allow all types of residential, community facility, and general service uses, most retail and commercial uses, and some manufacturing uses. The QP subdistrict modifies many standard regulations for paired districts. The subdistrict permits retail establishments of all size, specifies corridors with special retail rules, and has bulk regulations that supersede the underlying. Area A-2 permits a maximum FAR of 12.0 for all uses. The area permits a minimum base height of 60 feet and maximum building base height of 150 feet, above which a setback of 10 feet is required on wide streets, and 15 feet on narrow streets. No overall building height applies.

C1-5 AND C2-5 COMMERCIAL OVERLAYS (WITHIN LIC– HP)

Commercial overlays are mapped along streets in residential districts that serve local retail and service needs. C1-5 overlays are located across four full blockfronts and two partial blockfronts within the Project Area along Vernon Boulevard at a 100-foot depth where an R6A district is mapped. A C2-5 overlay is mapped to a 100-foot depth along the western side of Vernon Boulevard between 44th Road and 100 feet north of 44th Avenue.

C1-5 and C2-5 commercial overlays allow residential uses, community facility uses, and commercial uses. C1 and C2 commercial overlays generally permit commercial uses listed in Use Groups V through X, with size restrictions applicable to some retail and many services, amusement, storage and production uses. In R6 and R7 districts, a maximum FAR of 2.0 is permitted for commercial uses. In mixed-use buildings, commercial uses are limited to one or two floors. Existing uses include office space, medical offices, educational facilities, neighborhood grocery stores, restaurants, and beauty parlors.

OFF-STREET PARKING REGULATIONS FOR THE LONG ISLAND CITY AREA

Off-street parking is not required by zoning in Project Area. The regulations allow parking to be provided in a manner that supports a mass transit and pedestrian-oriented central mixed-use district.

HP SUBDISTRICT REGULATIONS

In addition to the special rules mentioned above, the LIC Special District zoning includes the following:

USE REGULATIONS

Within all paired districts there is no floor area limit to the following uses under Use Group A: food stores, including supermarkets, grocery stores or delicatessen stores.

STREET WALL REQUIREMENTS

Within R6B, M1-4/R6A, and M1-4/R7A districts, buildings with residences shall have a street wall aligned with an adjacent existing building. The street wall need not be more than 15 feet from the street line. For corner lots, this depth is reduced to five feet. Within C1 and C2 districts, all street walls are required to be built coincident with the street line.

QP SUBDISTRICT REGULATIONS

In addition to the special rules mentioned above, the LIC Special District modifies the following:

SPECIAL USE REGULATIONS

Uses with a size limitation for M1 districts under Use Group VI are permitted without a size regulation.

STREETSCAPE REGULATIONS

Streetscape regulations regarding ground floor uses restrict residential uses aside from lobbies along Jackson Avenue, Queens Plaza North, Queens Plaza South, Crescent Street, and portions of other blocks. There are also limitations to the length of a lobby and to parking. Additionally, loading berths are not permitted along the designated street frontages.

SPECIAL SIGN REGULATIONS

The QP subdistrict provides regulations to permit non-flashing signs on the rooftop of non-residential buildings, provided that the sign directs attention to a business conducted within the building. Such signs are only permitted on Queens Plaza South, Queens Boulevard, Queens Plaza East, or Queens Plaza North at a height between 70 and 150 feet above curb level. The regulations limit properties to one sign per zoning lot, a maximum height of 45 feet and 150 feet in maximum width. The regulations also limit illumination into existing residences at the time of the application for a permit within 100 feet of the building.

E. PURPOSE AND NEED FOR THE PROPOSED PROJECT

DCP is proposing the above-referenced land use actions in response to objectives and recommendations derived from many years of planning work in and around Long Island City and outreach with community members, elected officials, and City agencies, and through the City's on-going community engagement process, which was initiated in the

fall of 2023. The Proposed Actions support community goals and are informed by engagement with Community Boards 1 and 2, elected officials, nonprofits, advocacy groups, residents, businesses, property owners, and various stakeholders. These goals are intended to spur housing creation, including affordable housing; develop waterfront open spaces; and encourage job growth.

The current zoning framework in the neighborhood does not allow full implementation of the Long Island City Neighborhood Plan, which necessitates the Proposed Actions. While much of Long Island City has been rezoned since 1995, most of the Project Area has been excluded from these initiatives. The waterfront was privately rezoned, but the zoning changes did not result in any new development. Today, new residential development is not permitted in key areas and along many major corridors. Businesses located within IBZs are also restricted from expanding in response to the growing residential population directly east of it in the Long Island City core.

The Proposed Actions would therefore implement the Plan by comprehensively updating zoning to permit a wider range of uses including residential, commercial, retail, light-industrial, arts-related, and community facilities all supported by new open space. It is expected that the Proposed Actions would support new housing and job growth in Long Island City building upon very strong public transit access and direct connections to the other major Central Business Districts in eastern Queens, Downtown Brooklyn and Manhattan.

Absent the Proposed Actions, the existing zoning will continue to produce substantially less housing than surrounding areas with no mechanism to mandate permanent affordable housing. While the establishment of the LIC Special District in 2001 spurred significant development in the last two decades, the Project Area was largely omitted.

It is also expected that in the absence of the Proposed Actions, the Project Area's manufacturing districts will continue to be dominated by a range of industrial and commercial uses with a relatively low employment density that would continue to decline or remain stable. Commercial uses would expand following a pattern of increasing market trends for entertainment and eating establishments in Long Island City.

The Plan also identifies strategic infrastructure and community investments that are in development as part of the on-going planning process and are envisioned to support anticipated growth and new levels of activity; these investments are not directly tied to the Proposed Actions or its environmental review.

The Proposed Actions have been developed to achieve the following land use objectives:

- Protect existing affordable housing and generate significant new housing, especially affordable housing that serves diverse types of households and family needs.
- Invest in existing parks and deliver new open space along the waterfront and in the LIC Special District core that is high-quality, resilient, sustainable, and accessible.
- Enhance connectivity with multi-modal transportation, improve safety for pedestrians and bikers, and improve logistics for deliveries, loading zones, and truck access.
- Plan for a more resilient and sustainable Long Island City.
- Support existing businesses and the creative community, increase local job growth, and improve access to diverse, high-quality jobs and training.

Each objective is discussed in more detail below.

DETAILED OBJECTIVES OF THE PROPOSED ACTIONS

PROTECT EXISTING AFFORDABLE HOUSING AND GENERATE SIGNIFICANT NEW HOUSING, ESPECIALLY AFFORDABLE HOUSING THAT SERVES DIVERSE TYPES OF HOUSEHOLDS AND FAMILY NEEDS

The Proposed Actions seek to encourage the development of new housing in an amenity-rich neighborhood. This includes areas where housing is currently allowed as-of-right, by increasing permitted residential densities. It also includes areas where residential uses are not currently permitted, by permitting new residential uses at various densities.

Although City- and State-led projects to the south of the Project Area have provided affordable housing, most housing production in the neighborhood has been created without affordability requirements. The Proposed Actions would bring broader affordability requirements to the neighborhood through the mapping of Mandatory Inclusionary Housing (MIH) areas. MIH is proposed to be mapped over large parts of the Project Area and would require a portion of all new housing developed to be income restricted.

INVEST IN EXISTING PARKS AND DELIVER NEW HIGH-QUALITY, RESILIENT, SUSTAINABLE, AND ACCESSIBLE OPEN SPACE ALONG THE WATERFRONT AND IN THE CORE.

Long Island City has a dearth of open space, particularly in the Project Area. While investments would be required to address existing open space concerns, the Proposed Actions are a meaningful tool in accomplishing the improvement and creation of open space along the waterfront and in the Long Island City core.

Permitting residential uses along the waterfront, in areas where no residential uses are permitted today, at high densities, will also promote the redevelopment of underutilized properties and the creation of connected waterfront open spaces along the East River and Anable Basin waterfronts. The proposal will achieve this by modifying the existing WAP to guide the development of new, high-quality open space (up to 6 acres) that will connect the waterfront with the surrounding community. The amended WAP will also incentivize uses and programs to ensure a variety of uses, both active and passive. Moreover, the modified WAP would also require more robust elevation requirements to create a more resilient waterfront, ensuring the waterfront is accessible in the long term. Changing the underlying zoning of waterfront lots would encourage redevelopment, thereby requiring development of the WAP. The proposed street mapping action would also create the framework for a new public waterfront open space along the East River accomplishing a long-held community goal of connecting Gantry State Park to the south with Queensbridge Park to the north.

ENHANCE CONNECTIVITY WITH MULTI-MODAL TRANSPORTATION, IMPROVE SAFETY FOR PEDESTRIANS AND BIKERS, AND IMPROVE LOGISTICS FOR DELIVERIES, LOADING ZONES, AND TRUCK ACCESS.

Despite great access to transit, Long Island City has a constrained street network serving many modes, including pedestrians, cyclists, trucks, and vehicles. Many of the Project Areas key corridors discourage an engaging pedestrian experience.

The Proposed Actions aim to enhance public realm conditions, encourage walkability, activate streetscapes, and improve circulation. The proposed Zoning Text Amendment to special district regulations would mandate streetscape improvements and ground floor design standards to enhance pedestrian experience and the proposed City Map changes would also support goals of enhancing circulation and providing better access to waterfront sites.

Separate from the Proposed Actions, the recently adopted City of Yes for Economic Opportunity citywide text amendment also supports improvements in this area by increasing the number of tenants that can occupy space, introducing updated streetscape guidelines, and a variety of other zoning improvements that make it easier to repurpose existing buildings. Provisions were introduced to accommodate small-scale production businesses and micro-distribution uses in commercial districts, while restricting new auto repair uses to manufacturing districts.

PLAN FOR A MORE RESILIENT AND SUSTAINABLE LONG ISLAND CITY

As the impacts of climate change increase, Long Island City faces existing and emerging challenges as a rapidly growing waterfront neighborhood. Establishing a continuous, raised shoreline along the waterfront through the WAP would address sea level rise and coastal flooding. Deploying a range of stormwater management strategies and infrastructure would reduce neighborhood flooding and sewer backups.

Separate from the Proposed Actions, the recently adopted City of Yes Carbon Neutrality text amendment encourages green building practices and neighborhood resilience by providing opportunities for renewable energy generation, building retrofits, and promoting the use of sustainable, durable, and local materials. CHO would encourage other green building practices such as adaptive reuse.

The approved 2021 Zoning for Coastal Flood Resiliency text amendment would further ensure that new development facilitated by the Proposed Actions on both waterfront and inland sites within the Federal Emergency Management Agency (FEMA) floodplain can be built to, and exceed, existing flood resiliency standards. Additionally, the City's Unified Stormwater Rule, modified in 2022, requires that sites over 20,000 square feet manage stormwater on site, emphasizing detention, retention, and green infrastructure practices to reduce site runoff contributions and burdens on sewer infrastructure during rainfall events.

SUPPORT EXISTING BUSINESSES AND THE CREATIVE COMMUNITY, INCREASE LOCAL JOB GROWTH, AND IMPROVE ACCESS TO DIVERSE, QUALITY JOBS AND TRAINING.

The Project Area is home to a diverse, robust, and dynamic ecosystem of job-generating uses. In recent decades, the industrial sector has declined, following citywide trends which is due in-part to the restrictive zoning of the neighborhood's manufacturing districts.

The Proposed Actions seek to expand the permitted commercial and industrial space throughout much of the Project Area, providing the opportunity for existing businesses to expand and introduce new businesses in the neighborhood.

F. DESCRIPTION OF THE PROPOSED ACTIONS

The Proposed Actions cover an approximately 54-block area in Long Island City, with a focus on the waterfront along and north of Anable Basin, manufacturing districts west of the central business district, and key corridors including 44th Drive, Vernon Boulevard, Queens Plaza South and 21st Street and are comprised of the following discretionary approvals:

ZONING MAP AMENDMENTS

- Rezone portions of existing R6B, R6A/C1-5, R7A/C2-5, R7A, M1-3, M1-4, M1-5, M1-4/R6A, M1-4/R7A, M1-5/R9 and M1-6/R9 to M1-2A/R6A, M1-3A/R7A, M1-3A/R7X, M1-4A/R8A, M1-5A/R8, M1-6A/R9, M1-6/R10, M1-6A/R10, M1-4A, M1-5A and M1-6A.
- Expand the existing modify regulations related to surface area, illumination, projection, or height of signs to portions of the Project Area outside of the existing LIC Special District.
- Remove Special Mixed Use District 9 (MX-9).
- Modify the Northern Hunters Point WAP, ZR 62-951, for the waterfront blocks in the Project Area to specify the location of required shore public walkways, supplemental public access areas, upland connections, and visual corridors that ensure access to the Anable Basin from surrounding neighborhoods and to address the configuration of and varied conditions along the Basin. The WAP would also modify requirements and standards for public access to address the unique character of the Basin and align with modern citywide standards.

ZONING TEXT AMENDMENTS

- Amend Appendix F of the Zoning Resolution, to designate MIH areas to the proposed M1-2A/R6A, M1-3A/R7A, M1-3A/R7X, M1-4A/R8A, M1-5A/R8, M1-6A/R9, M1-6/R10, M1-6A/R10 districts.
- Modify the existing LIC Special District (Article XI, Chapter 7) to create special use, floor area, bulk, circulation and parking regulations on both waterfront and non-waterfront blocks and to establish special height, setback, and street wall regulations for buildings on waterfront blocks and on select corridors, among other special rules.
- Allow for space occupied by school to be exempt from floor area calculations within the new LIC Special District subareas.

- Create an authorization that would allow for additional flexibility in building envelope for development utilizing the new school floor area exemption rule.
- Create a CPC chair certification to allow the transfer of development rights on contiguous zoning lots with common ownership that are otherwise separated by a mapped street on blocks within the waterfront subdistrict.
- Create a CPC chair certification to provide a floor area bonus to rezoned waterfront lots that provide additional active open space.
- Create a CPC chair certification to allow for the modification of height restrictions established under Sections 61-21 (Restriction on Highest Projection of Building or Structure) or 61-22 (Permitted Projection Within any Flight Obstruction Area) for Zoning Districts without a maximum height limit within the newly established Subdistricts of the LIC Special District following verification that said modifications would not pose a hazard to air navigation.
- Create an authorization to allow sites within M1-6/R9, M1-6/R10 and M1-6A/R10 districts to access the Zoning Resolution's floor area bonus for on-site public plazas.

DESIGNATION OF AN URBAN DEVELOPMENT ACTION AREA (UDAA), APPROVAL OF AN URBAN DEVELOPMENT ACTION AREA PROJECT (UDAAP), AND DISPOSITION OF CITY-OWNED PROPERTY

HPD is seeking designation of UDAA, project approval of a UDAAP, and disposition of City-owned property located on Block 24, Lot 7.

CITY MAP AMENDMENTS

- De-map portions of 44th Drive west of Vernon Boulevard.
- De-map to narrow portions of 44th Drive between Vernon Boulevard and 5th Street.
- De-map 44th Road west of Vernon Boulevard.
- De-map 44th Ave west of Vernon Boulevard.
- Map new public streets in Block 488; and Block 489.
- Map a street widening of portions of 45th Avenue between 5th Street and Vernon Boulevard.

DISPOSITION OF NON-RESIDENTIAL CITY-OWNED PROPERTY

- Dispose of City-owned property located at Block 489, Lot 23 and Lot 1, and Block 488, Lot 15, and Lot 11.
- Dispose of City-owned property located at Block 428, Lot 12, Lot 13, and Lot 16.
- Dispose of City-owned property located at Block 429, Lot 13, Lot 15, and Lot 29.

COMBINATION ACQUISITION AND SITE SELECTION BY THE CITY

- DCAS is seeking to place an easement on waterfront portions of a property located on Block 488 Lot 114. This action would allow the City to create new waterfront public open space.

PROPOSED ZONING MAP CHANGES

The Proposed Actions would modify the existing zoning over and change the zoning in an approximately 54-block area of Long Island City. A summary of these modifications is provided below (see also **Figures S-8** and **Figure S-9)**.

PROPOSED M1-2A/R6A (EXISTING M1-4)

M1-2A/R6A zoning districts are proposed for approximately four blocks:

- An area between 46th Road to the south 45th Avenue to the north, stretching approximately 400 feet midblock, between Vernon Boulevard to the west, 11th Street to the east.
- A portion of a midblock facing 45th Avenue to the south at a 100-foot depth stretching approximately 400 feet, between Vernon Boulevard to the west, 11th Street to the east.

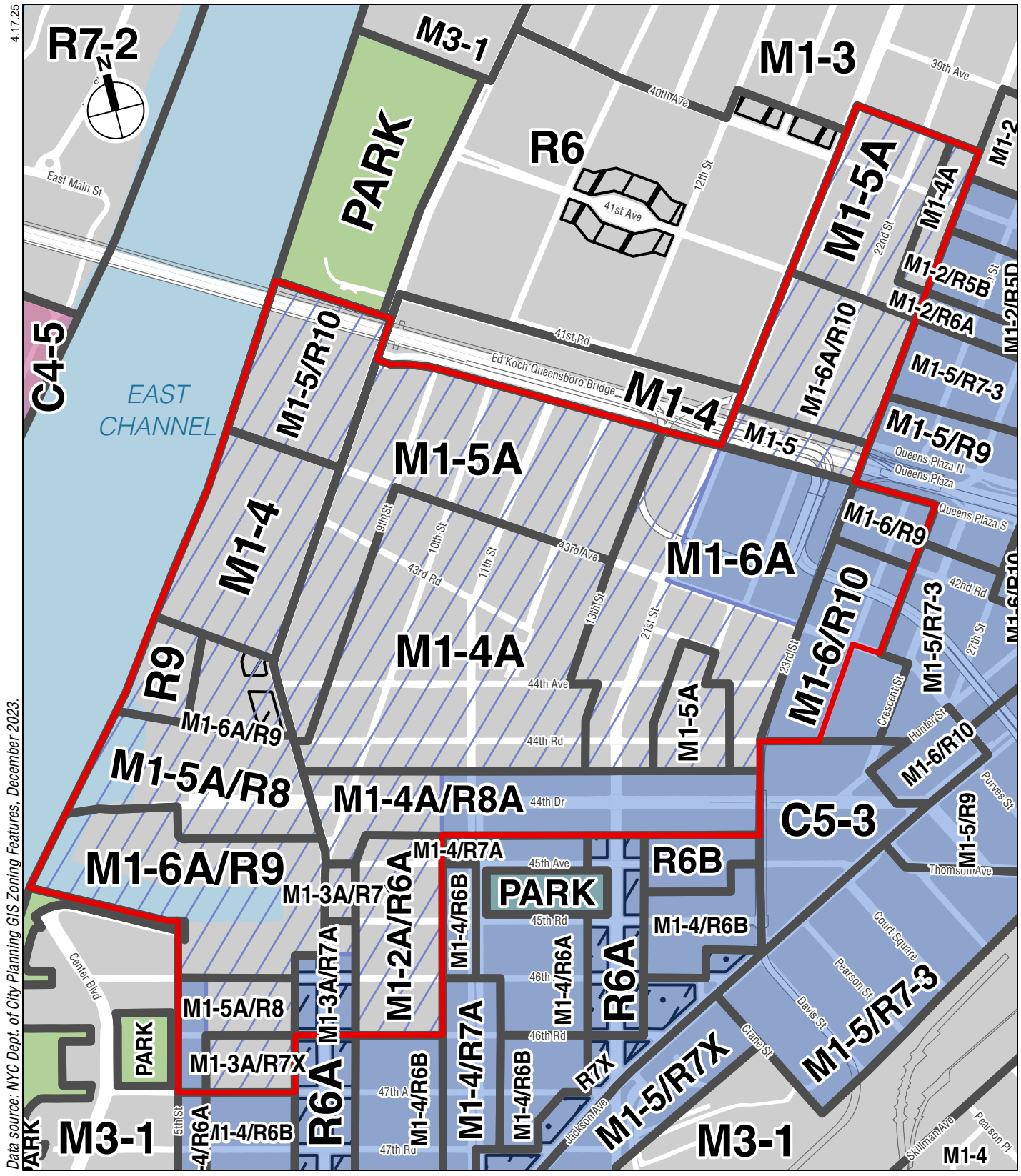
An M1-2A/R6A district is a mixed-use district that pairs an M1-2A district, a manufacturing district that supports a mix of mid-rise commercial and industrial uses, with an R6A district, a medium-density contextual residential district that allows residential uses and community facility uses. Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. M1-2A/R6A districts permit a maximum residential FAR of 3.9, when mapped with inclusionary housing, and an FAR for community facility, commercial and industrial uses up to 3.0. Mixed-use buildings with residential and non-residential uses would be allowed a maximum base height of 65 feet, above which the building must be set back, and may rise to a maximum height of 95 feet, with a maximum of eight stories. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED M1-3A/R7A (EXISTING M1-4 AND R6A/C1-5)

M1-3A/R7A districts are proposed for portions of four blocks:

- A portion of blocks between 46th Road to the south and 46th Avenue to the north, stretching approximately 100 feet from either side of Vernon Boulevard.
- A portion of a block between 46th Avenue to the south and 45th Road to the north at a depth of approximately 100 feet from the eastern side of Vernon Boulevard.
- A portion of a block at the northwestern corner of 46th Avenue and Vernon Boulevard at a depth of approximately 100 feet along 46th Avenue and approximately 75 feet along Vernon Boulevard.

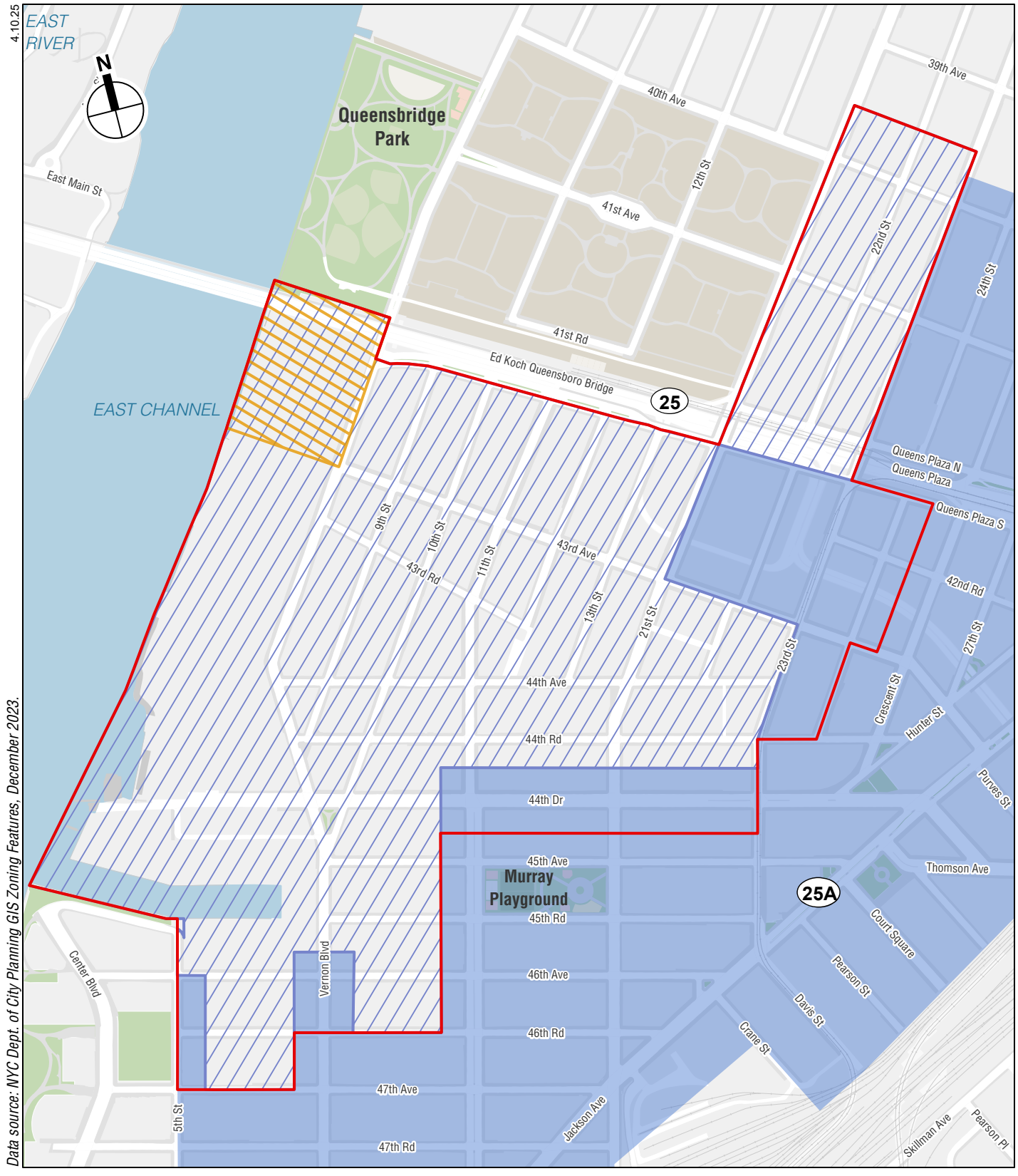
An M1-3A/R7A district is a mixed-use district that pairs an M1-3A district, a manufacturing district that supports a mix of mid-rise commercial and industrial uses, with an R7A district, a medium-density contextual residential district that allows residential uses and community facility uses. Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. M1-3A/R7A districts permit a maximum residential FAR of 5.01, when mapped with inclusionary housing, and an FAR for community facility, commercial and industrial uses up to 4.0. Mixed-use buildings with residential and non-residential uses would be allowed a maximum base height of 95 feet, above which the building must be set back,



Proposed Zoning

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-8



Primary Study Area (Project Area)

Existing Special Long Island City Mixed Use District

Proposed Special Long Island City Mixed Use District

Special Mixed Use District (MX-9)

Proposed Mixed-Use Districts

and may rise to a maximum height of 125 feet, with a maximum of 12 stories. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED M1-3A/R7X (EXISTING M1-4)

M1-3A/R7X districts are proposed for approximately portions of two blocks:

- A portion of a block between 45th Road to the south, 45th Avenue to the north at a depth of approximately 100 feet from the eastern side of Vernon Boulevard.

An area between 47th Avenue to the south, 46th Road to the north, stretching approximately 400 feet midblock, between 5th Street to the west and Vernon Boulevard to the east. An M1-3A/R7X district is a mixed-use district that pairs an M1-3A district, a manufacturing district that supports a mix of mid-rise commercial and industrial uses, with an R7X district, a medium-density contextual residential district that allows residential uses and community facility uses. Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. M1-3A/R7X districts permit a maximum residential FAR of 6.0, when mapped with inclusionary housing, an FAR for community facility uses and, commercial and industrial uses up to 4.0. Mixed-use buildings with residential and non-residential uses would be allowed a maximum base height of 105 feet, above which the building must be set back, and may rise to a maximum height of 145 feet, with a maximum of 14 stories. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED M1-4A/R8A (EXISTING R6B, M1-4 AND M1-4/R7A)

M1-4A/R8A districts are proposed over approximately seven blocks that include:

- An area between Vernon Boulevard to the west and 23rd Street to the east, along 44th Drive and reaching the midblock on either side of the street at a 100-foot depth.
- A portion of a block facing west towards Vernon Boulevard between 44th Drive to the north and 45th Avenue to the south at an approximately 100-foot depth.

An M1-4A/R8A district is a mixed-use district that pairs an M1-4A district (a manufacturing district that supports a mix of mid-rise commercial and industrial uses), with an R8A district (a high-density contextual residential district that allows residential uses and community facility uses). Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. M1-4A/R8A districts permit a maximum residential FAR of 7.2, when mapped with inclusionary housing, an FAR for community facility uses up to 6.5 and commercial and industrial uses up to 5.0. Mixed-use buildings with residential and non-residential uses would be allowed a maximum base height of 125 feet, above which the building must be set back, and may rise to a maximum height of 155 feet, with a maximum of 15 stories. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED M1-5A/R8 (EXISTING M1-4)

M1-5A/R8 districts are proposed for portions of four blocks:

- Four lots west of Vernon Boulevard at Block 488, Lots 11 and 15 and Block 489, Lots 1 and 23.
- Portions of a block between 47th Avenue to the south and 46th Road to the north, along the western side of 5th Street at an approximately 100-foot depth.
- Portions of a block between 46th Road to the south and 46th Avenue to the north at an approximately 500-foot depth.
- A block bounded by 44th Drive to the north, 45th Avenue to the south, Vernon Boulevard to the east and 5th Avenue to the west.

An M1-5A/R8 district is a mixed-use district that pairs an M1-5A district, a manufacturing district that supports a mix of mid-rise commercial and industrial uses, with an R8 district, a high-density residential district that allows residential uses and community facility uses. Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. M1-5A/R8 districts permit a maximum residential FAR of 7.2, when mapped with inclusionary housing, and FAR for community facility uses, commercial and industrial uses up to 6.5. Mixed-use buildings with residential and non-residential uses are permitted a maximum base height of 105 feet above which the building must be set back and may rise to a maximum height of 435 feet. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED M1-6/R9 (EXISTING R7A, R7A/C2-5 AND M1-5/R9)

An M1-6/R9 district is proposed as follows:

- Portions of a block (approximately half the block) between Queens Plaza South to the north, 42nd Road to the south, 24th Street to the west, and the midblock between 24th and Crescent Streets to the east.

Here, an M1-6/R9 district is within the D Area of the QP subdistrict of the LIC Special District and t pairs an M1-6 district, a manufacturing district that supports a mix of high-rise commercial and industrial uses, with an R9 district, a high-density residential district that allows residential uses and community facility uses. The paired districts permit a mix of uses, allowing new residential and non-residential uses within the same building. These paired districts allow all types of residential, community facility, and general service uses, most retail and commercial uses, and some manufacturing uses. Paired, these districts permit a maximum residential FAR of 8.0, a maximum residential FAR of 9.6 for Qualifying Affordable Housing or Qualifying Senior Housing, community facility FAR of 10.0, and a commercial and manufacturing FAR of 15.0. These districts permit a maximum base height of 150 feet. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets. The district has a height limit of 285 feet and no height limit within Area D of the QP Subdistrict of the LIC Special District.

PROPOSED M1-6A/R9 (EXISTING M1-4)

M1-6A/R9 districts are proposed for approximately three blocks:

- Portions of a block between Anable Basin to the north, 46th Avenue to the south, 5th Street to the west and a line approximately 100 feet west of Vernon Boulevard.

- Portions of a block west of Vernon Boulevard between 45th Avenue to the north and a point approximately 75 feet north of 46th Avenue.
- One lot south of 44th Drive, north of Anable Basin and west of Vernon Boulevard at Block 25, Lot 15.
- Portions of two lots west of Vernon Boulevard along either side of the unbuilt 44th Avenue at an approximately 100-foot depth.

An M1-6A/R9 district is a mixed-use district that pairs an M1-6A district, a manufacturing district that supports a mix of high-rise commercial and industrial uses, with an R9 district, a high-density residential district that allows residential uses and community facility uses. Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. M1-6A/R9 districts permit a maximum residential FAR of 9.02, when mapped with inclusionary housing, an FAR for commercial and industrial uses up to 8.0 and an FAR for community facility uses up to 10.0. Mixed-use buildings with residential and non-residential uses would be permitted a maximum base height of 135 feet and would not have a maximum building height. Along wide streets a building setback of 10 feet is required and a setback of 15 feet is required on narrow streets.

PROPOSED M1-6/R10 (EXISTING M1-5/R9)

M1-6/R10 districts are proposed over approximately two blocks:

- An area between 42nd Road to the north, 43rd Avenue to the south, 23rd Street to the west and the midblock between 24th and Crescent Streets to the east.

An M1-6/R10 district is a paired district within the A-2 Area of the QP subdistrict of the LIC Special District. The district pairs an M1-6 district, a manufacturing district that supports a mix of high-rise commercial and industrial uses, with an R10 district, a high-density residential district that allows residential uses and community facility uses. Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. Under the LIC, M1-6/R10 districts permit a maximum residential FAR of 12.0, when Mandatory Inclusionary Housing is mapped, and a community facility, commercial and industrial FAR of 12. This district permits a maximum building base height of 155 feet after which a building setback of 10 feet on wide streets, and 15 feet on narrow streets is required. The district has a height limit of 355 feet.

PROPOSED M1-6A/R10 (EXISTING M1-5)

M1-6A/R10 districts are proposed over approximately two blocks:

- An area between 41st Avenue to the north, Queens Plaza North to the south, 21st Street to the west and 23rd Street to the east.

An M1-6A/R10 district pairs an M1-6A district, a manufacturing district that supports a mix of high-rise commercial and industrial uses, with an R10 district, a high-density residential district that allows residential uses and community facility uses. Paired zoning districts also have special regulations that enable residential and certain industrial uses to be located either side-by-side or within the same building. M1-6A/R10 districts permit a maximum residential FAR of 12.0, when mapped with inclusionary housing, an FAR for

commercial and industrial uses up to 8.0 and an FAR for community facility uses up to 10.0. Mixed-use buildings with residential and non-residential uses would be allowed a maximum base height of 155 feet after which a building setback of 10 feet on wide streets, and 15 feet on narrow streets is required. The district has a height limit of 355 feet.

PROPOSED M1-4A (EXISTING M1-3 AND M1-4)

M1-4A districts are proposed over approximately 15 blocks:

- An area between Vernon Boulevard to the west, a point approximately 100 feet west of 21st street to the east and the midblock between 44th Road and 44th Drive.
- An area bound by a point approximately 225 feet north of 40th Avenue to the north, 23rd Street to the east, a point approximately 100 feet north of 41st Avenue to the south and the midblock between 22nd and 23rd Streets to the west.
- An area bounded by 43rd Avenue to the north, 9th Street to the west, 44th Avenue to the south and 13th Street to the east.
- An area bounded by 44th Avenue to the north, 9th street to the east, 44th Road to the south, and a point approximately 100 feet from 21st Street to the east.

An M1-4A district is a medium-density manufacturing district that supports a range of commercial and industrial uses and including retail, offices, business services, automotive and semi-industrial uses such as automotive repair, and light industrial uses. The district allows a maximum community facility, commercial and manufacturing FAR of 5.0 with a maximum base height of 125 feet and a maximum building height of 155 feet. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED M1-5A (EXISTING M1-3 AND M1-4)

M1-5A districts are proposed over approximately 15 blocks, including:

- An area between 44th Road to the south, Queens Plaza South to the north, Vernon Boulevard to the west and 9th Street to the east.
- An area between Queens Plaza South,9th Street to the west,13th Street to the east and 43rd Avenue to the south.
- An area between 21st Street to the west, 22nd Street to the east, 41st Avenue to the south and a point approximately 225 feet north of 40th Avenue.
- A portion of a block facing south along 41st Avenue between 22nd Street to the west and 23rd Street to the east at a 100-foot depth.
- A portion of blocks at a 100-foot depth from 22nd Street between 41st Avenue and approximately 225 feet to the north of 40th Avenue.
- An area bounded by 44th Avenue to the north, a point approximately 100 feet east of 21st Street to the west, a point approximately 100 feet west of 23rd Street to the east and the midblock between 44th Avenue and 44th Drive to the south.
- A portion of a block between 22nd Street to the east, a point approximately 100 feet from 21st Street, 44th Avenue to the south and a point approximately 150 feet from 44th Avenue to the north.

M1-5A districts are a medium-high-density manufacturing district that supports a range of commercial and industrial uses including retail, offices, business services, automotive and semi-industrial uses such as automotive repair, and light industrial uses. The district also allows a maximum community facility, commercial and manufacturing FAR of 6.5. M1-5A district massing allow a maximum base height of 155 feet and a maximum building height of 205 feet. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED M1-6A (EXISTING M1-5 AND M1-4)

M1-6A districts are proposed over approximately 10 blocks including:

- An area between 43rd Avenue to the south, Queens Plaza South to the north, 13th Street to the west and 23rd Street to the east.
- An area between 44th Avenue to the south, 43rd Avenue to the north, 21st Street to the east, and 13th Street to the west.
- An area between 44th Avenue to the south, 13th Street to the west, 43rd Avenue to the north and 21st Street to the east.
- A portion of blocks along the western side of 21st Street between 44th Avenue to the north and the midblock between 44th Road and 44th Drive to the south at an approximately 100-foot depth.
- A portion of blocks along the eastern side of 21st Street between 43rd Avenue to the north and the midblock between 44th Road to the north and 44th Drive to the south at an approximately 200-foot depth.
- A portion of blocks along the southern side of 43rd Avenue between 21st Street and 22nd Street at a 100-foot depth.
- An area bounded by 43rd Avenue to the north, 22nd Street to the west, 44th Avenue to the south and 23rd Street to the east.
- A portion of blocks along the western portion of 22nd Street between 44th Avenue and a point at the midblock between 44th Drive and 44th Road at a 100-foot depth.

M1-6A districts are a high-density manufacturing district that supports a range of commercial and industrial use including retail, offices, business services, automotive and semi-industrial uses such as automotive repair, and light industrial uses. The district also allows a maximum community facility, commercial and manufacturing FAR of 8.0. M1-6A massing allows a maximum base height of 155 feet and ha maximum building height of 245 feet. A building setback of 10 feet is required on wide streets, and 15 feet on narrow streets.

PROPOSED MODIFICATION TO NORTHERN HUNTER POINT WATERFRONT ACCESS PLAN

Under the Proposed Actions, the Northern Hunters Point WAP is to be modified for the waterfront blocks in the Project Area. The proposed modified WAP specifies the location of required shore public walkways, supplemental public access areas, upland connections, and visual corridors to ensure access to the from surrounding neighborhoods and to address the configuration of and varied conditions along Anable Basin and the East River waterfront. The WAP would also modify requirements and standards for public access to

expand the neighborhood's public space amenities, facilitate vibrant public spaces, improve coastal resiliency and local ecology, and address the unique character of Anable Basin. Additionally, to address implementation constraints of large parcels, the WAP would enable sequencing of complex multi-phased developments.

PROPOSED ZONING TEXT AMENDMENTS

DCP proposes text amendments to facilitate the Long Island City Neighborhood Plan's land use objectives. The following is a list and description of the proposed text amendments:

MANDATORY INCLUSIONARY HOUSING

The Proposed Actions include an amendment to Appendix F to add the proposed M1-2A/R6A, M1-3A/R7A, M1-3A/R7X, M1-4A/R8A, M1-5A/R8, M1-6A/R9, M1-6/R10, M1-6A/R10 districts to the list and maps of MIH Areas (see **Figure S-10**).

Mapping these districts as MIH Areas would require a share of new housing to be made permanently affordable where significant new housing capacity would be created. The MIH program requires 20 percent to 30 percent of residential floor area to be made permanently affordable within new residential developments, enlargements, and conversions from non-residential to residential use in the mapped MIH Areas. The program requires permanently affordable housing set-asides for all developments over 10 units or 12,500 zsf within MIH Areas or, as an additional option for developments below 25 units and 25,000 square feet, a payment into an Affordable Housing Fund.

The MIH program includes three primary options that pair affordable housing percentages with different affordability levels to reach a range of low and moderate incomes. Option 1 requires 25 percent of residential floor area to be for affordable housing units for households with incomes averaging 60 percent of AMI. Option 1 also includes a requirement that 10 percent of residential floor area be affordable at 40 percent of AMI. Option 2 requires 30 percent of residential floor area to be affordable to households with an average income of 80 percent of AMI. Option 3, also known as the "Deep Affordability" option, requires that 20 percent of the residential floor area in a building be made affordable to residents at an average of 40 percent AMI. The City Council and CPC could apply an additional Option 4, known as the "Workforce" option, for markets where moderate- or middle-income development is marginally financially feasible without subsidy. This requires a 30 percent set-aside at AMIs averaging 115 percent and does not allow public funding.

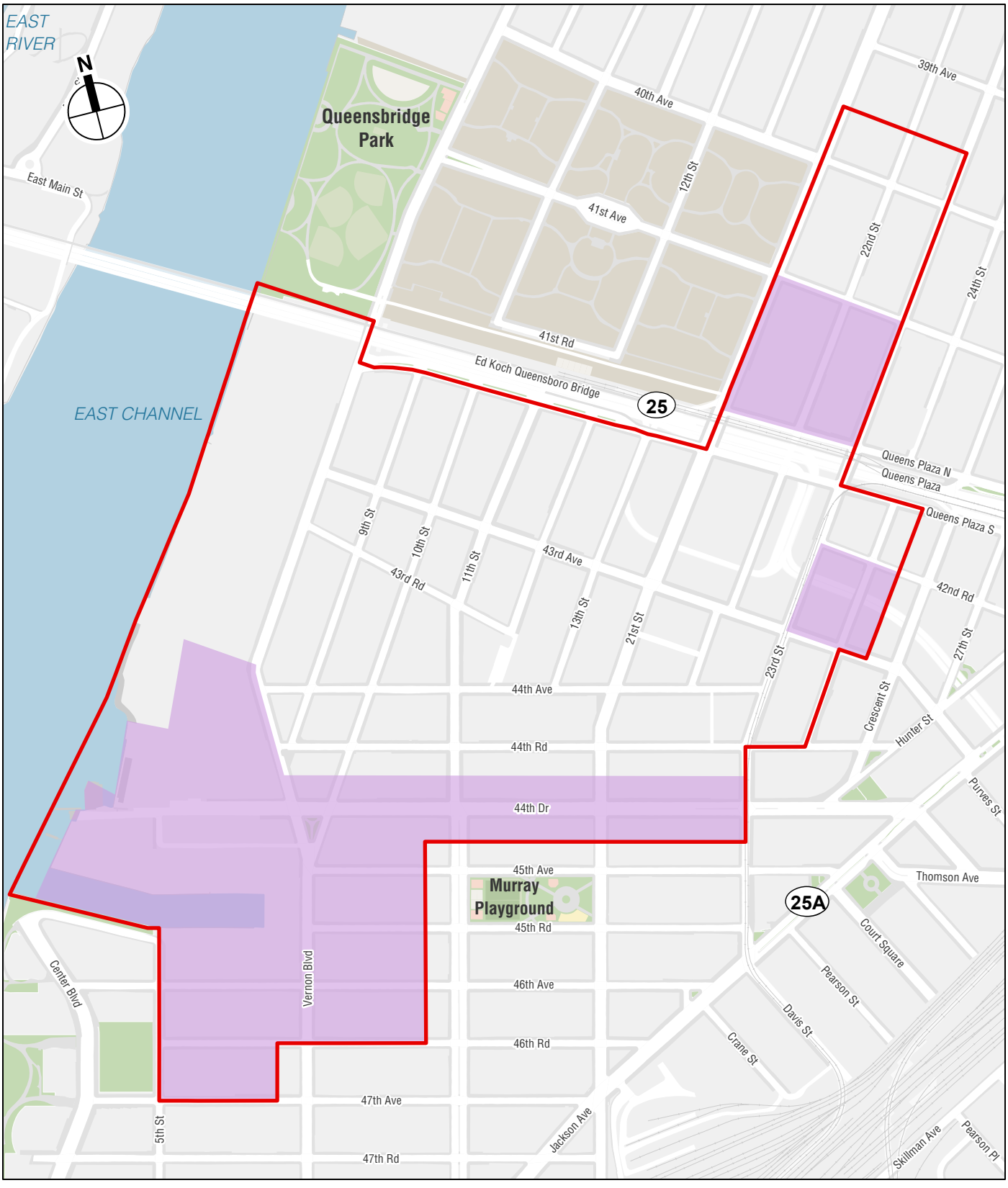
SPECIAL LONG ISLAND CITY MIXED-USE DISTRICT (LIC SPECIAL DISTRICT)

Under the Proposed Actions the existing boundaries of the LIC Special District are proposed to be modified to cover the Project Area's paired districts and manufacturing districts.

Modifications to underlying regulations and the LIC Special District's regulations are described in greater detail below.

Bulk Regulations

Table S-1 provides the maximum permitted residential FARs that would be modified in the M1-6A/R9 zoning district within the existing and proposed MIH Areas and **Table S-2**



Mandatory Inclusionary Housing

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-10

provides the maximum permitted community facility FAR that is proposed to be modified in the waterfront subdistrict in the M1-3A/R7X, M1-5A/R8, and M1-6A/R9 zoning districts to match the paired Manufacturing district.

Table S-1
Existing and Proposed Residential FAR

Zoning District	Standard MIH Residential FAR	Proposed MIH Residential FAR
M1-6A/R9	9.02	8.4

Table S-2
Existing and Proposed Community Facility FAR

Zoning District	Standard Community Facility FAR	Proposed Community Facility FAR
M1-3A/R7X	5	4
M1-5A/R8	6.5	4
M1-6A/R9	10	8*
Note: *Where residential FAR is modified to 8.4		

Table S-3 provides the maximum permitted residential, community facility, commercial and manufacturing FAR that would be modified in the M16/R9 and M16/R10 zoning districts to follow floor area regulations applicable in the Queens Plaza subdistrict of the Special Long Island City Mixed Use District and **Table S-4** provides the maximum permitted base and building height proposed to be modified in the M1-6A/R10, M1-6/R10, and M1-6/R9 zoning districts.

Table S-3
Existing and Proposed FAR

Zoning District	Underlying Floor Area Regulations				Proposed Floor Area Regulations			
	Max Residential FAR	Max Community Facility FAR	Max Commercial FAR	Max Manufacturing FAR	Max Residential FAR	Max Community Facility FAR	Max Commercial FAR	Max Manufacturing FAR
M1-6/R9	9.02	10.0	10.0	10.0	9.6*	10	15*	15*
M1-6/R10	12.0	10.0	10.0	10.0	12.0	12.0**	12.0**	12.0**
Notes: *Follows subarea D of the Queens Plaza Subdistrict **Follows subarea A-2 of the Queens Plaza Subdistrict								

Table S-4
Existing and Proposed Maximum Base and Building Heights

Zoning District	Underlying Maximum Base Height	Proposed Maximum Base Height	Underlying Maximum Building Height	Proposed Maximum Building Height
M1-6A/R10	155’	155’	355’	750’*
M1-6/R10	150’* or 155’	155’	355’ or N/A**	N/A**

M1-6/R9	135’ or 150’***	155’	285’ or N/A***	N/A***

Notes:

* Applicable to zoning lots located north of Queens Plaza North, in other areas no height limit applies
**Follows Subarea A-2 of the Queens Plaza Subdistrict

***Follows Subarea D of the Queens Plaza Subdistrict

Waterfront Bulk Controls

Along the waterfront, bulk regulations are proposed to be modified to create a zoning envelope that is appropriate for the specific conditions of Long Island City’s waterfront. Maximum base heights for buildings in the waterfront subdistrict are proposed to be modified to create an enhanced pedestrian experience and to respond to the unique context of Anable Basin and the surrounding street network. A modified transition zone between base and tower would also be established so that bulk can be distributed in a way that breaks up the vertical plane of a tower, while maintaining visual corridors to the waterfront and open views of the sky. New tower regulations would also be introduced to facilitate architectural variety and a dynamic skyline, in addition to regulations that control the spacing, location, and orientation of towers. The over-arching goal is to create a building form that relates to the waterfront and establishes a distinct waterfront community. As shown in **Table S-5**, base heights, transition zone heights, and overall heights of districts mapped within the waterfront area are proposed to be modified under the Proposed Actions.

Table S-5
Existing and Proposed Waterfront Bulk Controls

	Underlying Bulk Controls				Proposed Bulk Controls		
Zoning District	**Max Base Height (ft)**	**Max Transition Height Tier 1 (ft)**	**Max Transition Height Tier 2 (Ft)**	**Maximum Building Height**	**Maximum Base Height**	**Maximum Transition Height**	**Maximum Building Height**
M1-5A/R8	105*	145	215	435	85-125**	300	435***
M1-6A/R9	135*	185	285	N/A	85-125**	300	N/A

Notes:

*When developed within 50 feet of the shoreline, a building may rise to a maximum base height of 85 feet.

**A variety of base heights would be applied throughout the waterfront subdistrict to respond to the unique context of Anable Basin and surrounding street network.

*** Excluding underlying penthouse provisions. For sites that qualify as waterfront lots no maximum building height apply.

Waterfront Open Space Bonus

The Proposed Actions also include an open space bonus to create open spaces large enough to accommodate defined community needs, such as active recreation. The bonus would apply to M1-6A/R9 districts mapped on waterfront lots. Should lots within these districts provide additional open space, they will be able to attain a maximum residential FAR of 9.02, where MIH is mapped.

Additional Provisions

To create opportunities for publicly accessible open space near the core, Proposed Actions include a CPC authorization to allow developments in M1-6/R9, M1-6/R10 and M1-6A/R10 districts to use the Zoning Resolution's floor area bonus for on-site public plazas. The underlying public plaza program (ZR 37-70) allows bonuses at the densities, but not in the zoning districts of the the Proposed Actions. With approval of the authorization, the typical 20 percent maximum bonus would apply and for every square foot of public plaza provided, the development could include an additional four square feet (sf) of floor area in M1-6/R9 zoning districts, and six sf of floor area in M1-6/R10 and M1-6A/R10 districts. The authorization would be available for zoning lots greater than 25,000 square feet and would allow modification of street wall and maximum height requirements to accommodate the plaza and bonus floor area. In addition, the authorization would allow modifications to the plaza design requirements to encourage spaces that reflect the mixed-use character of the area.

Streetscape and Urban Design Regulations

To foster architectural excellence and enhance walkability and vibrancy, the Proposed Actions would apply active ground-floor and transparency requirements along key commercial corridors as the LIC Special District boundaries are expanded. Consistent citywide streetscape regulations are part of the recently adopted Economic Opportunity text amendments and would apply in other areas. The Proposed Actions would follow citywide regulations as it relates to ground floor and streetscape rules on designated streets in special districts.

Community Facility Floor Area Waiver

To encourage the creation of schools, a floor area waiver for providing certain types of community facilities is proposed. Within the expanded LIC Special District, the proposed bulk envelope would be modified to accommodate the added bulk.

Height Restrictions

In lieu of the Board of Standards and Appeals (BSA) special permit described in ZR 73-66 for the approval of modifications to height restrictions, a CPC chair certification would be created for sites, without a maximum height limit, following verification that such modifications would not pose a hazard to air navigation.

New Paired Districts

The Proposed Actions would establish new mixed-use districts including M1-2A/R6A, M1-3A/R7A, M1-3A/R7X, M1-4A/R8A, M1-5A/R8, M1-6A/R9 and M1-6A/R10.

DESIGNATION OF AN URBAN DEVELOPMENT ACTION AREA, APPROVAL OF AN URBAN DEVELOPMENT ACTION AREA PROJECT, AND DISPOSITION OF CITY-OWNED PROPERTIES

The Proposed Actions include the designation of a UDAA, project approval of an UDAAP and disposition of City-owned sites under HPD jurisdiction. HPD seeks to designate an UDAAP for the purpose of disposition and development of income-restricted housing on portions of Block 24, Lot 7.

The lot is approximately 42,500 square feet City-owned property. The lot is bounded by 44th Drive to the north, 5th Street to the west, 45th Avenue to the south and Vernon Boulevard to the south. The lot is currently zoned M1-4. Under the Proposed Actions, this lot is rezoned to M1-5A/R8 in an MIH Area.

PROPOSED CHANGES TO THE CITY MAP

The Proposed Actions include the following changes to the City Map:

- De-map portions of 44th Drive west of Vernon Boulevard.
- De-map to narrow portions of 44th Drive between Vernon Boulevard and 5th Street.
- De-map 44th Road west of Vernon Boulevard.
- De-map 44th Ave west of Vernon Boulevard.
- Map new public streets in Block 488; and Block 489.
- Map a street widening of portions of 45th Avenue between 5th Street and Vernon Boulevard.

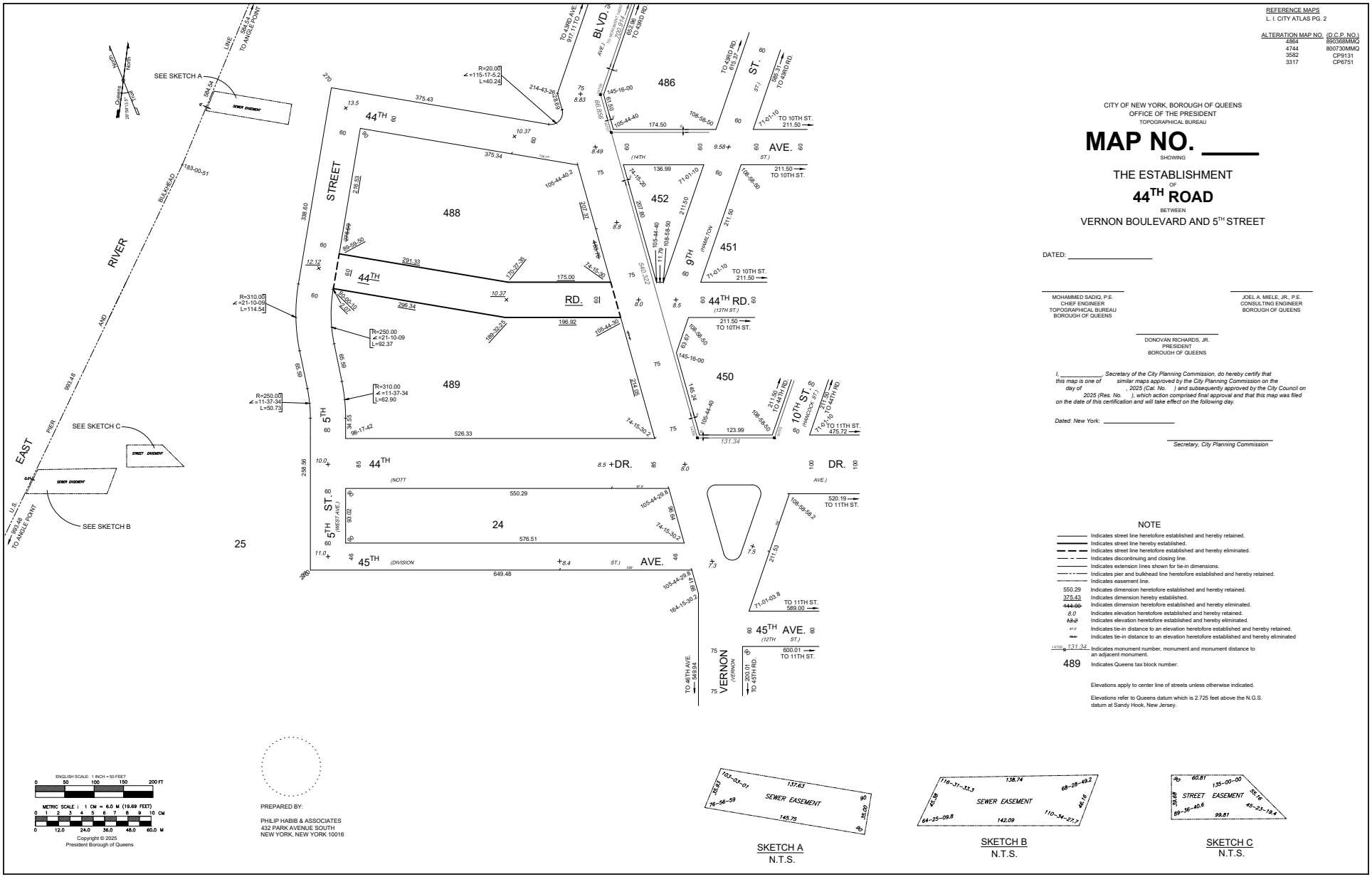
These proposed changes are intended to rationalize the street network, enhance circulation along the waterfront and would support the redevelopment of City-owned land for a mix of uses, including significant affordable housing along with community facility, commercial, light manufacturing, open space, or other uses allowed under the proposed zoning. The proposed mapping actions on Blocks 488 and 489 would reconnect the area to the street grid and surrounding communities and support the redevelopment and remediation of large, vacant and underutilized sites. The proposed street widening would enhance circulation and access to light and air on adjacent lots (see **Figure S-11**).

PROPOSED DISPOSITION OF CITY-OWNED PROPERTY

The Proposed Actions include the disposition of City-owned property under the jurisdiction of DOE and SBS in an area generally bounded by 44th Drive to the south, Vernon Boulevard to the east, the East River to the west and a point approximately 300 feet north of 44th Drive. This action would allow for the disposition of development rights to enable future redevelopment of these sites.

Disposition of City-owned property under the jurisdiction of DOT in an area generally bounded by 42nd Road to the north, 24th Street to the east, 43rd Avenue to the south and 23rd Street to the west. This action would allow for the disposition of development rights to enable future redevelopment of this site or a future merged zoning lot.

Disposition of City-owned property under the jurisdiction of DOT in an area generally bounded by 42nd Road to the north, Crescent Street to the east, 43rd Avenue to the south and 24th Street to the west. This action would allow for the disposition of development rights to enable future redevelopment of this site or a future merged zoning lot.



Proposed Changes to the City Map

Figure S-11

COMBINATION ACQUISITION AND SITE SELECTION OF PROPERTY BY THE CITY

The Proposed Actions include the acquisition and site selection of an easement by the City on waterfront portions of a property located on Block 488, Lot 114. This action would allow the City to create new waterfront public open space.

WATERFRONT REVITALIZATION PROGRAM (WRP)

Much of the Project Area is within the coastal zone and would therefore be reviewed by CPC, in its capacity as the City Coastal Commission, to determine whether the Proposed Actions are consistent with WRP policies.

G. ANALYSIS FRAMEWORK

REASONABLE WORST CASE DEVELOPMENT SCENARIO

For the purposes of assessing in this EIS the possible impacts of the Proposed Actions, a RWCDS was developed for project future scenarios both with and without the Proposed Actions (No Action condition) through a 10-year future period (i.e., through analysis year 2035). This incremental difference between the With Action and No Action conditions then serves as the basis for the EIS impact analyses.

To determine these future conditions, standard *CEQR Technical Manual* guidelines and methodologies were used employing reasonable assumptions to identify the location and size of both future project and potential developments.

In determining location and size, several factors were considered, including known development proposals, past and current development trends, and the development site criteria described below. Generally, for area-wide rezonings that create a broad range of development opportunities, new development can be expected on selected, rather than all, sites in the rezoning area. Thus, the first step in establishing the development scenarios for the Proposed Actions was to identify those sites where new development could reasonably be expected.

DEVELOPMENT SITE CRITERIA

Development site criteria were determined for sites in the proposed mixed-use districts and for sites in districts that would only permit manufacturing uses under the With Action condition and were initially identified based on the following criteria where mixed-use districts are proposed:

- Lots utilizing less than half of the permitted FAR under the relevant proposed zoning with a total size greater than or equal to 5,000 square feet (including potential assemblages totaling 5,000 square feet or more if assemblage seems probable)
    - Assemblages are defined as a combination of adjacent lots, which satisfy one of the following conditions:
        1. Lots share common ownership and, when combined, meet the aforementioned soft site criteria.

2. At least one of the lots, or combination of lots, meets the aforementioned soft site criteria, and ownership of the assemblage is shared by no more than two distinct owners.
3. Additionally, sites with 3,000 to 4,999 square feet that are underutilized (defined as vacant, occupied by a vacant building, a building with only a single occupied floor).

- Lots located in areas where changes in use would be permitted.

Development sites were initially identified based on the following criteria where only manufacturing districts are proposed.

- Lots utilizing less than half of the permitted FAR under the relevant proposed zoning with a total size greater than or equal to 20,000 square feet (including potential assemblages totaling 20,000 square feet or more if assemblage seems probable)
    - Assemblages are defined as a combination of adjacent lots, which satisfy one of the following conditions:
        1. Lots share common ownership and, when combined, meet the aforementioned soft site criteria.
        2. At least one of the lots, or combination of lots, meets the aforementioned soft site criteria, and ownership of the assemblage is shared by no more than two distinct owners.
    - Additionally, sites with 15,000 to 19,999 square feet that are underutilized (defined as vacant, occupied by a vacant building, a building with only a single occupied floor).

Certain lots that meet the following criteria were excluded as development sites based on the following conditions:

- Lots where construction or significant renovation activity is occurring or has recently been completed.
- The sites of schools (public and private), municipal libraries, government offices, union offices with control of their sites, and houses of worship with control of their sites and with limited development potential.
    - These facilities may meet the development site criteria, because they are built to less than half of the permitted floor area under the current zoning and are on larger lots. However, these facilities also have not been redeveloped or expanded despite the ability to do so, and it is extremely unlikely that the increment of additional FAR permitted under the proposed zoning would induce redevelopment or expansion of these structures. Additionally, for government-owned properties, development and/or sale of these lots may require discretionary actions from the pertinent government agency.
- Lots utilized for public transportation and/or public utilities.
- Lots containing multi-unit buildings (six or more residential units) built before 1974 are unlikely to be redeveloped as they may contain rent-stabilized units.
    - Buildings with rent-stabilized units are difficult to legally demolish due to tenant re-location requirements. Unless there are known redevelopment plans

(throughout the public review process or otherwise), these buildings are generally excluded from the analysis framework.

- Certain large commercial structures, such as multi-story office buildings, sites owned and operated by major national corporations.
    - Although these sites may meet the criteria for being built to less than half of the proposed permitted floor area, some of them are unlikely to be redeveloped due to their current or potential profitability, the cost of demolition and redevelopment, and their location.
- Certain active uses which would have difficulty relocating to other areas because of citywide restrictions on the location of said uses.
- Lots whose location, highly irregular shape, or highly irregular topography would preclude or greatly limit future as-of-right development.
    - Generally, development on highly irregular lots does not produce marketable floor space.

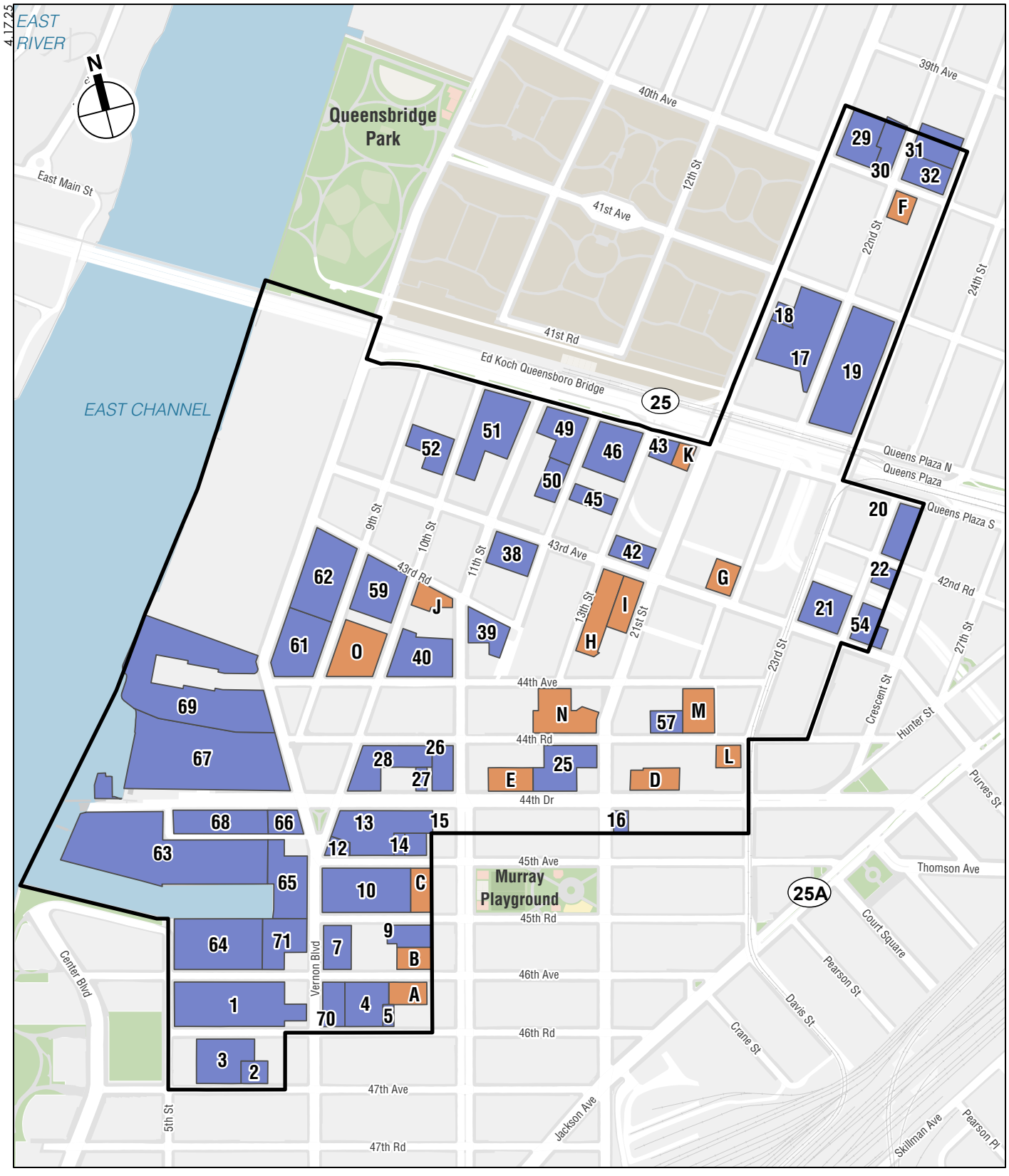
PROJECTED AND POTENTIAL DEVELOPMENT SITES

To produce a reasonable, conservative estimate of future growth under the Proposed Action, there are two categories of development sites: projected development sites and potential development sites. The projected development sites are considered more likely to be developed within the 10-year analysis period for the Proposed Actions while potential sites are considered less likely to be developed by 2035. Potential development sites were identified as follows:

- Lots whose slightly irregular shapes, topographies, or encumbrances that make development more difficult.
- Lots with three or more commercial tenants, which are less likely to redevelop in the foreseeable future.
- Active businesses, which may provide unique services or are prominent, successful neighborhood businesses or organizations that are unlikely to move.
- Lots or site assemblages occupied by active second-story commercial uses.

Based on the above RWCDS criteria, as shown on **Figure S-12** listed in **Table S-6,** 67 development sites (52 projected and 15 potential) were identified under the Proposed Actions. Detailed RWCDS tables are provided in **Appendix A** of this EIS.

Site-specific impacts relate to individual site conditions and are not dependent on the density of projected development. Site-specific impacts from development include potential noise impacts, impacts on historic resources, and the possible presence of hazardous materials. Since development is not anticipated on the potential development sites in the foreseeable future, these sites are not analyzed for density-related impacts; however, they are analyzed for site-specific impacts to provide a comprehensive conservative analysis.



Development Sites

LONG ISLAND CITY NEIGHBORHOOD PLAN

Figure S-12

DEVELOPMENT SCENARIO PARAMETERS

Dwelling Unit Factor

The number of projected dwelling units in residential use buildings is determined by dividing the total amount of projected residential floor area by 850 and rounding to the nearest whole number. In specific cases, average dwelling unit sizes of 915 square feet were assumed to reflect more reasonable development assumptions for sites along the waterfront.

NO ACTION CONDITION

In the No Action condition, the identified projected development sites are assumed to either remain unchanged from existing conditions or become occupied by uses that are as-of-right under existing zoning and reflect current trends if they are vacant lots, or occupied by vacant buildings or low intensity uses that are deemed likely to support more active uses. **Table S-6** provides lists the No Action condition for the projected development sites.

Table S-6
2035 RWCDS No Action and With Action Land Uses

Land Use	No Action Condition	With Action Condition	Increment
Residential			
Total Residential DUs	2,311	17,010	14,699
Affordable DUs @ 20%	0	3,245	3,245
Affordable DUs @25%	0	4,058	4,058
Affordable DUs @ 30%	0	4,867	4,867
Commercial			
Local Retail SF	341,300	911,053	569,753
Life Science SF	0	345,707	345,707
Office SF	1,808,364	4,373,824	2,565,460
Other Commercial SF	53,470	0	-53,470
Total Commercial SF	2,203,134	5,630,584	3,427,450
Community Facility			
Community Facility SF	0	291,784	291,784
Total Community Facility SF	0	291,784	291,784
Industrial/Auto-Related			
Warehouse SF	821,932	0	-821,932
Auto-Related SF	14,936	0	-14,936
Manufacturing SF	887,767	930,150	42,383
Total Industrial SF	1,724,635	930,150	-794,485
Population[1, 2]			
Residents	5,315	39,123	33,808
Workers	9,415	23,516	14,401

Notes: SF/sf = square feet
[1] Assumes 2.30 persons per DU for residential units in Queens Community Districts 1 and 2. Estimate of workers based on standard industry rates, as follows: 1 employee per 250 sf of office; 1 employee per 875 sf destination retail; 1 employee per 333 sf of local retail; 1 employee per 25 DU; 1 employee per 3 hotel rooms; 1 employee per 1,000 sf of industrial; 1 employee per 15,000 sf of warehouse uses; 1 employee per 450 sf of medical office space; 1 employee per 1,000 sf of other community facility space; and 1 employee per 50 parking spaces.
[2] A conservative estimate of 1 employee per 500 sf is used for other commercial.

As shown in **Table S-6**, it is projected in the No Action condition that there would be a total of approximately 5,874,568 square feet of built floor area on the 52 projected development sites. Under the RWCDS, the total No Action development comprises approximately 2,311 residential units, 341,300 square feet of retail, restaurant and grocery store uses, 1,808,364 square feet of office space and 1,724,635 square feet of industrial space with an estimated population of approximately 5,315 residents and 9,415 workers on the projected development sites. The No Action condition also assumes the following:

- New housing growth would likely be limited to where residential development is currently permitted in LIC Special District and would not include permanently affordable housing.
- New commercial growth would be limited, with the majority of new development providing additional ground-floor retail uses.
- It is expected that manufacturing districts would continue to comprise of a mix of industrial and commercial uses; however, it is also projected that the share of commercial uses would continue to increase as has been the trend over past decades

without an updated land use framework to provide development incentives and flexibility.

WITH ACTION CONDITION

As described above, the Proposed or With Action condition would allow for the development of new uses and higher densities at the projected and potential development sites with the following outcomes:

- An updated zoning framework would expand housing production in certain areas that previously only allowed manufacturing uses or limited housing production.
- The Proposed Actions would also facilitate the development of MIH units in conjunction with that new housing.
- The increases in permitted floor area would enhance flexibility for permitted commercial and manufacturing uses while also inducing growth in employment-generating development, including a diversity of uses that have not previously been developed.
- An updated WAP would expand the open space network along the waterfront with the potential to connect Queensbridge Park to the north with Gantry Plaza State Park to the south.
- The WAP would also establish stricter resiliency measures along the waterfront, with the goal of protecting development from coastal flooding events.

As shown in **Table S-6**, under the RWCDS, the total development expected r on the 52 projected development sites under the With Action condition is comprised of approximately 16,697,150 square feet of residential floor area (approximately 17,010 DUs), 20 to 30 percent of which is expected to be affordable pursuant to MIH, 5,630,584 square feet of commercial uses, 930,150 square feet of industrial uses, and 291,784 square feet of community facility uses. The With Action estimated population total a projected 39,123 new residents and 23,516 new employees on these projected development sites. The projected incremental (net) change between the No Action and With Action conditions under the Proposed Actions yields an increase of 14,436,817 square feet of residential floor area, 3,427,450 square feet of commercial space, 291,784 square feet of community facility space, and a net decrease of 794,485 square feet of industrial on the projected development sites.

H. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

Provided below is a summary of the projected impacts of the proposed project. These impacts are described in greater detail in each of the related chapters.

LAND USE, ZONING, AND PUBLIC POLICY

No significant adverse impacts on land use, zoning, or public policy are anticipated with the Proposed Actions. The Proposed Actions would not adversely affect surrounding land uses, nor would they generate land uses that would be incompatible with existing zoning and land uses. Moreover, the Proposed Actions would not result in development that would conflict with adopted public policies.

The Proposed Actions would change the zoning in the Project Area to facilitate development patterns that meet the long-term vision of a sustainable, mixed-use neighborhood anchored by a resilient waterfront. The Proposed Actions would support new housing and jobs in a neighborhood with strong public transit access and in close proximity to the Central Business Districts (CBD) of Long Island City and Midtown Manhattan.

With the proposed zoning, residential uses would be allowed throughout portions of the Project Area, expanding the City's housing supply to help meet the housing needs of current and future residents, and significantly increasing the supply of affordable housing through the application of MIH. New housing would be developed along Anable Basin and the East River, along 44th Drive and Vernon Boulevard, and near downtown Long Island City. The modified Northern Hunters Point WAP would facilitate the potential creation of approximately 4 acres of publicly accessible waterfront open space, connecting Gantry State Park to Queensbridge Park.

The Proposed Actions would create opportunities for new light industrial space, commercial space, and community facility space, particularly in the core of the Long Island City IBZ by expanding the allowable types of non-residential uses. The Proposed Actions would promote residential use outside of the IBZ.

Further, new bulk regulations would encourage a transition in heights from the waterfront to inland areas which would generally contain development at a more contextual scale and with lower building heights.

Based on a policy review it has also been determined that the Proposed Actions are consistent with the City's Waterfront Revitalization Program (WRP).

SOCIOECONOMIC CONDITIONS

The Proposed Actions would not result in significant adverse impacts with respect to socioeconomic conditions related to direct of indirect residential displacement, direct or indirect business displacement or adverse effects to specific industries.

DIRECT RESIDENTIAL DISPLACEMENT

A screening-level assessment found that the Proposed Actions would not result in significant adverse impacts due to direct residential displacement. Under the RWCDS, the Proposed Actions would displace an estimated 23 residents living in 10 residential DUs. This level of displacement would not have the potential to alter the socioeconomic character of the area.

DIRECT BUSINESS DISPLACEMENT

A preliminary assessment found that the Proposed Actions would not result in significant adverse impacts due to direct business displacement. Under the RWCDS by the 2035 build year, the Proposed Actions could result in the direct displacement of up to 28 businesses on projected development sites and an estimated 309 jobs associated with those businesses. The 28 potentially displaced businesses operate in a variety of sectors; there is no concentration in a particular industry. The industry sector with the largest number of potentially displaced employees is Manufacturing, with an estimated 54 potentially displaced workers. The largest number of displaced businesses would be

within the Arts, Entertainment, and Recreation sector, within which four businesses could be displaced.

While all businesses contribute to neighborhood character and provide value to the City's economy, the potentially displaced businesses are not essential to the local economy as defined by CEQR. The goods and services provided by the potentially displaced businesses would continue to be available to study area residents and businesses through other businesses within a trade area. Although some businesses may be displaced from the Long Island City IBZ, the potentially displaced businesses within the Long Island City IBZ areas do not individually or collectively shape the overall character of Long Island City IBZ or the broader study area. The Proposed Actions would facilitate development that supports future office, community facility, and industrial tenants within the study area, including new industrial, business services, and retail uses within the Long Island City IBZ.

INDIRECT RESIDENTIAL DISPLACEMENT

A detailed analysis found that the Proposed Actions would not result in significant adverse impacts due to indirect residential displacement. The Proposed Actions would result in an increment of 14,699 incremental DUs with 5,023 affordable units. The preliminary assessment found that the incomes of the new population in the With Action condition would be higher than the average household income of the existing population. This, in addition to the large population increase over the No Action condition, created the need for a detailed analysis to determine whether the Proposed Actions could result in significant adverse displacement impacts.

The detailed analysis focused on two subareas: Subarea A, roughly corresponding to the Queensbridge-Ravenwood-Dutch Kills Neighborhood Tabulation Area (NTA) and Subarea B roughly corresponding to the Long Island City-Hunters Point NTA. The analysis found that while the Proposed Actions would add a new higher-income population within or adjacent to the subareas, the mixed-income composition of the new population would not cause substantial changes in the real estate market that would lead to significant indirect displacement of vulnerable renters. In Subarea B, the potentially vulnerable residents as a percentage of the population did not exceed five percent such that the proposed actions would not have the potential to substantively affect the socioeconomic character of the subarea. In Subarea A, the potentially vulnerable residents as a percentage of the population exceeded 5 percent. However, the Proposed Actions are expected to introduce more affordable housing than in the Future without the Proposed Actions, potentially slowing trends of increasing rents and maintaining a more diverse mix of incomes within the subareas as compared to the No Action condition. Additionally, market rate rents in both subareas are already unaffordable to low-income households. Given the high rental housing costs in the study area, it is expected that most low-income renters in the subareas reside in protected rental units and would not be vulnerable to indirect residential displacement as a result of the Proposed Actions.

INDIRECT BUSINESS DISPLACEMENT

A preliminary assessment found that the Proposed Actions would not result in significant adverse impacts due to indirect business displacement. Concerns under CEQR are whether the Proposed Actions could lead to changes in local market conditions that could

lead to increases in commercial property values and rents within the study area, making it difficult for some categories of businesses to remain in the area. Market conditions throughout the study area have already incentivized a shift away from manufacturing and light industrial uses toward residential and commercial development. Recent developments in the study area have mirrored these larger trends and irrespective of the Proposed Actions, these trends are expected to continue. This ongoing turnover of industrial properties on projected development sites in the Project Area, and the surrounding area, has been occurring as part of a larger market reorientation.

While the Proposed Actions intend to facilitate the implementation of the Long Island City Neighborhood Plan and as a result, strengthen the local economy, some manufacturing and light industrial uses would continue to be vulnerable to displacement due to rent increases. Retail and other service-oriented businesses that are not capturing additional revenues from changes in consumer spending would also continue to be vulnerable to displacement. Many of these businesses operate in largely light industrial or mixed-use areas offering goods and services such as security systems, fabrication and welding services, wholesale food or office supplies, and fireproofing materials. The displacement of vulnerable businesses would not have the potential to result in significant adverse impacts because the potentially displaced businesses do not represent anchor institutions or function as a defining feature of the local economy, and the goods and services they provide would continue to be available to consumers within reasonable trade areas. The Proposed Actions would result in new residential and commercial development that adds to the potential consumer base of many local businesses and strengthens the ability of these businesses to alter or expand operations in response to changing market conditions.

ADVERSE EFFECTS ON A SPECIFIC INDUSTRY

A preliminary assessment finds that the Proposed Actions would not result in significant adverse impacts on a specific industry. An analysis is warranted if a substantial number of residents or workers depend on the goods or services provided by the affected businesses or if the Proposed Actions would result in the loss or substantial diminishment of a particularly important product or service within the industry. The Proposed Actions would not significantly affect business conditions in any industry or any category of business within or outside the study area. By 2035, the Proposed Actions could directly displace an estimated 28 businesses and 309 employees in several economic sectors. The businesses that could be displaced do not represent a critical mass of businesses within any City industry, category of business, or category of employment. Although these businesses are valuable individually and collectively to the City's economy, the goods and services offered by potentially displaced uses can be found elsewhere within the approximate ½-mile socioeconomic study area, within a broader trade area, and within the City as a whole. The products and services offered by potentially displaced businesses are not essential to the viability of other businesses within or outside of the socioeconomic study area. The Proposed Actions would not result in significant indirect business displacement, and therefore would not indirectly substantially reduce employment or have an impact on the economic viability in any specific industry or category of business.

COMMUNITY FACILITIES AND SERVICES

Detailed analyses of potential indirect impacts on public elementary and intermediate schools, public libraries, and publicly funded early childhood programs were conducted for the Proposed Actions. Based on the *CEQR Technical Manual* screening methodology, detailed analyses of outpatient health care facilities and police and fire protection services are not warranted, although they are discussed qualitatively. As described below, the Proposed Actions would result in significant adverse impacts on elementary schools, public libraries and early childhood programs.

POTENTIAL INDIRECT EFFECTS ON PUBLIC SCHOOLS

Following the methodologies in the *CEQR Technical Manual*, the study area for the analysis of elementary and intermediate schools is the school districts' "subdistrict" (also known as a "region" or "school planning zone") in which the project is located. The Project Area is located in Subdistrict 3 of Community School District (CSD) 30.

Elementary Schools

Under the Proposed Actions, in Subdistrict 3/CSD 30, elementary school utilization would exceed 100 percent (143.8 percent) and the Proposed Actions would generate 100 or more students (1,300) past the 100 percent utilization rate. Therefore, the Proposed Actions would result in a significant adverse impact to elementary schools in Subdistrict 3/CSD 30. Potential measures to address the significant adverse impact are discussed below in "Mitigation."

Intermediate Schools

In the With Action condition, intermediate school enrollment in Subdistrict 3/CSD 30 would increase by 401 students to 2,586 (93.5 percent utilization) with an estimated surplus of 179 seats. Intermediate school enrollment would not exceed 100 percent Therefore, the Proposed Actions would not result in a significant adverse impact to intermediate schools.

High Schools

With the Proposed Actions, the total public high school enrollment for the borough of Queens would increase to 68,901 students and utilization (92.7 percent) would be below 100 percent. Additionally, the percentage increase in utilization above the No Action condition (2.9 percent) would be less than 5 percentage points. Therefore, the Proposed Actions would not result in a significant adverse impact to high schools.

POTENTIAL INDIRECT EFFECTS ON PUBLIC LIBRARIES

The population added by the Proposed Actions would represent an increase of 79.44 percent over the No Action condition population at the Hunters Point Branch of the Queens Public Library (QPL) and an increase of 11.56 percent at the Long Island City Branch of the QPL. The increase at these library branches is greater than the 5 percent increase that CEQR defines as the threshold for a potential significant adverse impact. Although residents would have access to a new planned Court Square library branch near the Project Area and residents would have access to the entire QPL network through the inter-library loan system and could have volumes delivered directly to their nearest

library branch, there would still be a significant adverse impact on library services in the study area as a result of the Proposed Actions. Potential measures to address the significant adverse impact are discussed below in "Mitigation."

POTENTIAL INDIRECT EFFECTS ON EARLY CHILDHOOD PROGRAMS

In the With Action condition, early childhood programs in the study area would operate over capacity by approximately 67 slots (102.7 percent utilization) and exhibit an increase in the utilization rate of approximately 27.3 percentage points over the No Action condition. Therefore, the Proposed Actions would result in a significant adverse impact on publicly funded early childhood programs. Possible mitigation measures are discussed below in "Mitigation."

HEALTH CARE FACILITIES

The Proposed Actions would not trigger detailed analyses of potential impacts on health care services because they would not create a sizeable new neighborhood where none existed before. Therefore, the Proposed Actions would not result in any significant adverse impacts on health care facilities.

POLICE AND FIRE SERVICES

The *CEQR Technical Manual* recommends detailed analyses of impacts on police and fire services only in cases where facilities would be directly displaced as a result of the Proposed Actions. Because the Proposed Actions would not result in direct effects on police and fire facilities, a detailed analysis is not warranted. Therefore, the Proposed Actions would not result in any significant adverse impacts on police and fire services.

OPEN SPACE

The Proposed Actions would result in a significant adverse impact to open space due to the added residential demand placed on active and passive open spaces in an area that has limited available open space resources. The Project Area has been identified as having low total active and passive open space ratios, a condition that is expected to continue in the No Action and With Action conditions.

DIRECT EFFECTS

The Proposed Actions would not result in any direct effects related to encroachments on or loss of open space, changes in open space such that it no longer serves the same user population, or results in impacts due to noise, air, or odor emission that may affect its usability. The Proposed Actions would result in benefits associated with the potential creation of up to 6 acres of new waterfront open space developed in accordance with the amended Northern Hunters Point WAP.

New shadows resulting from the Proposed Actions would be extensive enough to cause significant adverse impacts to two open space resources in Long Island City: Gordon Triangle, a small public open space located on 44th Drive between Vernon Boulevard and 10th Street; and the 44th Drive Pier, a public open space located at the western end of 44th Drive. Incremental shadows cast on Gordon Triangle and the 44th Drive Pier would affect utilization and vegetation on the resources. In addition, the Proposed Actions

would result in significant adverse air quality impacts affecting the usability of one existing open space resource, Gordon Triangle. In addition, three new publicly accessible waterfront open spaces (on Projected Development Sites 65, 67, and 71) would be affected by significant adverse air quality impacts. Mitigation for the significant adverse shadow impacts is discussed below in "Mitigation."

INDIRECT EFFECTS

Non-Residential Study Area

The Proposed Actions would not result in any indirect significant adverse impacts with respect to non-residential study area. According to the *CEQR Technical Manual*, projects that would reduce the open space ratio for a nonresidential population should consider the project's effect on passive open space in the study area in determining impact significance. The more an open space ratio falls below the optimal ratio of 0.15 acres of passive space per 1,000 residents, the more likely the decrease would lead to a significant adverse impact. In the With Action condition, the non-residential study area's passive open space ratio would decrease by 3.58 percent between the No Action condition and the With Action condition (from 0.289 acres per 1,000 residents to 0.279 acres per 1,000 residents, respectively), and the passive open space utilization rate in the With Action condition would remain above the City's guideline ratio of 0.15 acres per 1,000 workers.

Residential Study Area

The detailed analysis of open space concluded that with the Proposed Actions, the total open space ratio in the residential study area would decrease by approximately 18.61 percent (to 0.546 acres per 1,000 residents); the active open space ratio would decrease by approximately 20.58 percent (to 0.190 acres per 1,000 residents); and the passive open space ratio would decrease by approximately 17.52 percent (to 0.355 acres per 1,000 residents). Typically, a reduction in the open space ratio exceeding 5 percent is considered to be significant. However, in an area that has a very low open space ratio, such as the Project Area, a reduction as small as 1 percent may be considered significant. According to Table 7-5 of the *CEQR Technical Manual*, a decrease in the total open space ratio of 2 percent or more is generally considered a significant adverse impact for a project in a residential open space study area where the total open space ratio is between 0.51 to 1.0, a decrease in active open space ratio of 1 percent or more is generally considered a significant adverse impact where the active open space ratio is less than 0.41, and a decrease in passive open space ratio of 4 percent or more is generally considered a significant adverse impact where the passive open space ratio is between 0.31 and 0.40. Therefore, based on the decrease in the open space ratios noted above and described in this chapter, the Proposed Actions would result in a significant adverse impact to open space in the residential study area.

SHADOWS

The shadows analysis concluded that new shadows resulting from the Proposed Actions would fall on dozens of sunlight-sensitive resources (primarily parks, pedestrian plazas, and Greenstreets medians) located in Long Island City, on Roosevelt Island, and on the East Midtown waterfront of Manhattan, but in the vast majority of cases the extent and/or

duration of new shadow would be limited and would not cause significant adverse impacts. However, the new shadows would be extensive enough to cause significant adverse impacts to three open space resources in Long Island City: several Greenstreets medians in Queens Plaza South between Vernon Boulevard and 13th Street; Gordon Triangle, a small public open space located on 44th Drive between Vernon Boulevard and 10th Street; and the 44th Drive Pier, a public open space located at the western end of 44th Drive.

HISTORIC AND CULTURAL RESOURCES

An assessment was conducted based on the methodology set forth in the 2021 *CEQR Technical Manual* and consistent with the Final Scope of Work. As described below, this assessment concludes that the Proposed Actions would result in significant adverse impacts to architectural resources. That assessment is summarized below.

DIRECT (PHYSICAL) IMPACTS

- Development of Projected Development Site 40 in the future with the Proposed Actions would result in the demolition of the State and National Registers of Historic Places (S/NR)-eligible M. Henry Chernay Building at 10-03 44th Avenue (Resource No. 15), and the S/NR-eligible Jerome Perlstein Building at 43-58 11th Street (Resource No. 16).
- Development of Projected Development Site 52 would result in the demolition of the S/NR-eligible former New York and Queens Electric Light and Power Substation Number 4 (Resource No. 2).
- Development of Projected Development Site 59 would result in the demolition of the S/NR-eligible Walter Lippmann Building at 43-42 10th Street (Resource No. 11) and the S/NR-eligible building at 43-50 10th Street (Resource No. 12).
- Development of Potential Development Site G would result in the demolition of 21-23 43rd Avenue, which has been identified as a potential architectural resource (Resource F).

The With Action development anticipated on projected and potential development sites could also result in construction-related impacts to 10 known and 8 potential architectural resources located within 90 feet of the certain development sites, listed below: known Resource Nos. 2, 3, 4, 7, 11, 12, 13, 14, 15, and 16, and potential Resources B, I, J, K, M, N, S, and Z.

It is expected that the New York City Department of Building's (DOB) *Technical Policy and Procedure Notice (TPPN) #10/88* would be implemented for the With Action development on Projected Development Site 51, in relation to the New York City Landmark (NYCL) and S/NR-listed Queensboro Bridge (Resource No. 7). The other resources listed above would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites (C26-112.4); however, since these resources are not S/NR-listed or designated NYCLs or New York City Historic Districts (NYCHD), they are not afforded special protections under *TPPN #10/88.* Since the projected and potential development sites within 90 feet of these resources are not City-owned and are not anticipated to be developed in accordance with City disposition or development agreements, there is no mechanism to require the implementation of

TPPN #10/88 or preparation of a Construction Protection Plan. Additional protective measures afforded under *TPPN #10/88* would only become applicable if the resources were listed on the S/NR or designated as NYCLs or NYCHDs in the future prior to the initiation of construction. If that does not occur, the resources would not be subject to *TPPN #10/88* and may therefore be adversely impacted by adjacent development resulting from the Proposed Actions.

The No Action development expected to occur on Projected Development Sites 2, 4, 7, 9, 10, 14, 15, 16, 17, 19, 20, 21, 25, and 70 could also potentially result in construction-related impacts to known and potential architectural resources located within 90 feet of these sites: known Resource Nos. 5, 6, and 18 and potential Resources B, C, D, G, H, R, and Z. These projected development sites are also anticipated to be developed in the With Action condition. It is expected that *TPPN #10/88* would be implemented for the No Action development on Projected Development Site 16, in relation to the S/NR-listed and NYCHD Hunters Point Historic District (Resource No. 18). It is anticipated that the S/NR-eligible Resource Nos. 5 and 6 and potential Resources B, C, D, G, H, R, and Z would be offered some protection through DOB controls governing the protection of adjacent properties from construction activities; however, the protections to avoid construction-related damage to historic structures under *TPPN #10/88* would not be required for the No Action condition projects occurring within 90 feet of these S/NR-eligible and potential architectural resources.

INDIRECT IMPACTS

The Proposed Actions would not result in indirect significant adverse impacts to historic or cultural resources. In the With Action condition, the new buildings on the projected and potential development sites could be considerably taller than the known and potential architectural resources within the Project Area and study area, which range from one story for some industrial buildings, two to four stories for most residential buildings, and up to seven stories for loft and factory buildings, which are generally located north and south of the Queensboro Bridge.

As detailed in Chapter 6, “Shadows,” the potential for shadow-related impacts to the S/NR-eligible Queensbridge Houses North and South was considered, and the analysis concluded that the Proposed Actions would not have a significant adverse shadow-related impact on this architectural resource.

Project Area

With Action development would alter the setting of many known and potential architectural resources in the Project Area. This alteration to the setting of resources in the Project Area would be most pronounced and would be identified as significantly adverse where the existing setting is very low-scale (i.e., less than 3 stories in height), including much of Industrial Subarea 1, and where With Action development on projected and potential development sites could be more than 100 feet taller than adjacent architectural resources and buildings in the surrounding area. In contrast, the architectural resources within Inland Subarea 1 and Inland Subarea 2 already exist within a setting that includes dense, tall development as well as views to additional dense, tall development in the surrounding area; therefore, the alteration to the setting of resources in these subareas is not identified as significantly adverse. The context of the resources within and adjacent to the Waterfront Subarea would notably change in the With Action

condition, with new high-rise, mixed-use buildings along the East River waterfront that would have no maximum height limit.

The known and potential resources in the Project Area would generally remain visible in surrounding street views. However, views of the 'Silvercup" metal-frame sign (located on the roof of the four-story portion of the complex and facing west) along Queens Plaza South and from the elevated bridge would be obscured by the new development along Queens Plaza South west of 21st Street. As with the No Action condition development, the With Action development on Projected Development Sites 7, 10, and 70 would obscure most existing views to potential Resource B from Vernon Boulevard; however, potential Resource B would remain visible along 45th Road and 46th Avenue.

The mapping of new public streets in Block 488 and 489 along the East River waterfront and the creation of new required shore public walkways on Projected Development Sites 63, 64, 65, 67, 69, and 71 would be anticipated to create new viewpoints along the waterfront toward architectural resources in the area, particularly the Queensboro Bridge and resources on the south side of Roosevelt Island, such as the former Strecker Memorial Laboratory and Smallpox Hospital buildings, both NYCLs and S/NR-listed. Views to the Queensboro Bridge from Vernon Boulevard south of 44th Avenue would become more constrained with the new high-rise development around and north of Anable Basin, and elevated views from the bridge itself would be altered with the addition of multiple high-rise towers along the waterfront. In addition, the context of views south along Vernon Boulevard to the New York Architectural Terra Cotta Works would change with the addition of multiple high-rise towers along the waterfront.

STUDY AREA

Other architectural resources in the 400-foot study area would not experience significant adverse indirect impacts. The closest development sites to study area architectural resources are located across streets from these architectural resources, and the cluster of known and potential architectural resources at the southeast corner of the study area is located at a greater distance from the Projected and Potential Development Sites. The Queensboro Bridge (Resource No. 7) would be located near the projected development sites on the south side of Queens Plaza South, and the With Action development on these sites would change views to the bridge from nearby streets as well as elevated views from the bridge to the surrounding area; elevated views from the bridge itself also would be altered with the addition of multiple high-rise towers along the East River waterfront. These elevated views already include high-rise development in close proximity to the bridge and the high-rise development along the river in Hunters Point. Views to the bridge would remain from multiple vantage points throughout the Project Area and study area.

While the Proposed Actions would somewhat alter the setting and visual context of certain architectural resources in the study area, such changes would not be significantly adverse. The Proposed Actions would not alter the relationship of architectural resources in the study area to the streetscape or isolate an architectural resource from its immediate setting. No projected or potential developments would eliminate or substantially obstruct important public views of the study area architectural resources, as all significant elements of these architectural resources would remain visible in view corridors on public streets. In addition, no incompatible visual, audible, or atmospheric elements would be

introduced by the Proposed Actions to any of the other study area architectural resources' setting such that they would compromise or diminish the characteristics for which these architectural resources have been determined significant.

URBAN DESIGN AND VISUAL RESOURCES

The Proposed Actions would not result in significant adverse impacts to urban design and visual resources. The Proposed Actions would facilitate new mixed-use developments at high densities, in areas where no residential uses are currently permitted, to promote the redevelopment of underutilized properties, increase the supply of housing, including needed affordable housing, and facilitate the creation of connected waterfront open spaces along the East River and Anable Basin. A mix of new commercial and light manufacturing uses would be allowed in new manufacturing districts to promote business growth and provide employment opportunities. The projected developments would have base heights and building heights that respond to existing neighborhood contexts and account for existing street widths. The bulk regulations would facilitate built forms that are complementary to the prevailing context but that also accommodate the new uses at higher densities. To enhance walkability and the pedestrian experience, the Proposed Actions would apply streetscape requirements along key commercial corridors, including street tree requirements, curb cut limitations, transparency and/or blank wall mitigation on the ground floor, regulations for screened parking, and ground-floor use requirements that can help bring new services and amenities to the neighborhood.

The projected buildings developed throughout the primary study area would be taller than existing buildings, as well as the few as-of-right developments that are illustrated in the No Action condition, but they would be compatible with existing uses and complementary to the prevailing context. The proposed height and setback requirements would create consistent street walls and buildings massed with towers set back above mid- to high-rise bases. In addition, the projected mixed-use buildings in the Waterfront Subarea would step up in height from the Queens West development south of Anable Basin, the projected buildings in Inland Subarea 3 would provide transitional medium-scale buildings between the upland neighborhoods and the new large-scale buildings constructed around Anable Basin, and the projected tall mixed-use buildings in Inland Subarea 2 and Industrial Subarea 2 would be in keeping with the height and form of existing buildings in Inland Subarea 2 and Downtown Long Island City, located immediately to the east of the primary study area. The projected buildings would enhance the pedestrian experience by bringing new neighborhood-serving uses to the ground floor of new buildings. They would replace land that is either vacant, used for parking and storage areas (enclosed by chain-link fencing), or one- and two-story industrial and commercial buildings that lack urban design elements that make for a pedestrian friendly neighborhood.

The proposed modifications to the Northern Hunters Point Waterfront Access Plan (WAP) would facilitate the creation of a shore public walkway that would run from Gantry Plaza State Park around the southern, eastern, and northern edges of Anable Basin and then north along the East River shoreline, connecting with the existing 44th Drive pier, to the northern end of the Waterfront Subarea and Queensbridge Park. The WAP framework would also include three upland connections to the shore public walkway around Anable Basin and four upland connections west from Vernon Boulevard to the East River shoreline. The modified WAP would expand the neighborhood's public space amenities

with the development of waterfront open space along approximately one mile of shoreline. The new regulations aim to facilitate vibrant public spaces, improve coastal resiliency and local ecology, and address the unique character of Anable Basin. A waterfront open space bonus would create even more public space that could facilitate diverse programming that brings new active open space amenities to this stretch of waterfront. The proposed changes to the City Map would further enhance access to the waterfront by creating a connected network of sidewalks, streets, and bike lanes.

Under the Proposed Actions, views along streets through the primary study area would include a mix of new buildings aside existing industrial, commercial, and residential buildings. While views of the Midtown Manhattan skyline would be blocked or partially obscured from some locations within the study area, some of those views would be blocked in the No Action condition. The extent that views would be obscured is dependent on exact location. Within the Waterfront Subarea, the Proposed Actions would improve physical access to the waterfront and maintain visual access along key locations. The proposed east-west upland connections along with the proposed mapped street would maintain view corridors from Vernon Boulevard to the East River and Anable Basin, with views of the Midtown Manhattan skyline in the distance. The proposed upland connections to the shore public walkway around Anable Basin would provide new views to Anable Basin, which is currently only visible from within the primary study area at the north end of 5th Street and Gantry Plaza State Park. The Proposed Actions would ensure that minimum standards and widths are met for the shore public walkway, which would provide waterfront access along the entire East River and Anable Basin shoreline within the primary study area. The proposed shore public walkway would provide new vantage points for viewing the East River and vistas that include Roosevelt Island, the Manhattan Skyline, and Queensboro Bridge.

In the With Action condition, projected buildings within the primary study area would be visible from Roosevelt Island, Manhattan, North Brooklyn, and surrounding areas within Queens.

NATURAL RESOURCES

The Proposed Actions would not result in significant adverse impacts to floodplains or exacerbate flooding in the study area. Much of the southwestern portion of the study area in the vicinity of Anable Basin and along the East River falls within the 1 percent annual chance floodplain (Zone AE and Zone VE) and 0.2 percent annual chance floodplain (Zone X). The East River is a tidal strait, whose water level is controlled by the tidal conditions within the New York Bay and the Atlantic Ocean. The floodplain within the study area is affected by coastal flooding and would not be affected by construction or regrading/filling of the floodplain resulting from the Proposed Actions. Construction facilitated by the Proposed Actions would not adversely affect the local hydrology or the floodplain, nor would it exacerbate flooding conditions in neighboring locations. Future developments would be required to have finished floor elevations at or above the most restrictive design flood elevation in compliance with the New York City Building Code.

The Proposed Actions would not result in significant adverse impacts to groundwater. Groundwater is not used as a potable water supply in New York City; therefore, construction facilitated by the Proposed Actions would not result in potential impacts to drinking water supplies. (E) Designations would ensure contaminated sites are

remediated under the New York City (E) Designation Program. Groundwater recovered during construction would be treated in accordance with the New York City Department of Environmental Protection (DEP) and the New York State Department of Environmental Conservation (DEC) requirements prior to discharge. Belowground structures (e.g., parking or basements) would not impede groundwater flow to the East River.

The Proposed Actions would not result in significant adverse impacts to wetlands, water quality, aquatic resources, essential fish habitat, or aquatic threatened and endangered species. DEC-regulated littoral zone tidal wetlands are present in the East River and Anable Basin. The Proposed Actions have the potential to facilitate in-water construction associated with shoreline and bulkhead improvements that would affect tidal wetlands, water quality, and aquatic biota. The shoreline and bulkhead improvements would result in new structures placed within the East River and Anable Basin; however, the loss of any littoral zone or aquatic habitat would be small when compared to other available habitat in the East River. Construction would be required to avoid and minimize impacts to wetlands and water quality in accordance with U.S. Army Corps of Engineers (USACE) and DEC permits, including with the implementation of erosion and sediment control measures. Stormwater discharges to the East River and Anable Basin would be treated in accordance with applicable DEP requirements. The Proposed Actions have the potential to result in increased shadows on the East River and Anable Basin; however, the affected habitat would still receive several hours of direct sunlight on all but the shortest days of the year and in-water habitat and fish behavior is not expected to be significantly impacted by the increased shadows. For these reasons, the Proposed Actions would not have the potential to result in impacts to aquatic threatened and endangered species, including Atlantic sturgeon (*Acipenser oxyrinchus*), shortnose sturgeon (*Acipenser brevirostrum*), or listed sea turtles that may be found in the East River and Anable Basin.

The Proposed Actions would not result in significant adverse impacts to ecological communities within the study area. Terrestrial ecological communities within the study area are limited to terrestrial cultural ecological communities that provide limited habitat value to wildlife. Tree clearing, protection, and replacement plans would be developed to address tree impacts to trees including street trees under the jurisdiction of the New York City Department of Parks and Recreation (NYC Parks). Trees, plants, and other landscaping features required by applicable zoning provisions would improve ecological communities within the study area.

The Proposed Actions would not result in significant adverse impacts to wildlife and terrestrial threatened and endangered species within the study area. Wildlife in the study area is limited to urban-adapted, disturbance-tolerant species. Construction activities have the potential to displace wildlife due to temporary habitat loss and noise; however, similar habitat would be available in the vicinity of the study area and the temporary disturbance of individuals of urban-adapted species would not result in adverse impacts to wildlife. Developments facilitated by the Proposed Actions would be required to comply with New York City building code requirements for the use of bird-friendly materials, and as such, will not increase the potential for daytime bird collisions with buildings. The levels of noise and human activity associated with the Proposed Actions would be comparable to levels of disturbance that the urban-adapted wildlife in the study area would be accustomed. Trees, plants, and other landscaping features implemented as part of the Proposed Actions would improve wildlife and pollinator habitat within the study area.

HAZARDOUS MATERIALS

The Proposed Actions would not result in significant adverse impacts related to hazardous materials. Potential concerns related to hazardous and contaminated materials were identified for all evaluated projected and potential sites. The potential for significant adverse impacts associated with hazardous materials resulting from the Proposed Actions would be precluded through compliance with existing regulatory requirements and the placement of an (E) Designation on all projected and potential development sites. These measures are recommended to avoid or reduce exposure to future occupants and workers at projected and potential development sites as it relates to hazardous and contaminated materials. The (E) Designation for hazardous materials requires that prior to change of use or redevelopment requiring ground disturbance, the owner of the property conduct a Phase I Environmental Site Assessment (ESA) and subsurface testing and remediation, where appropriate, to the satisfaction of the New York City Mayor's Office of Environmental Remediation (OER). DOB permits associated with such actions cannot be issued without OER approval. Additionally, certain development sites are subject to an existing (E) Designation or restrictive declaration. These existing controls and the proposed (E) Designation included as part of the Proposed Actions would ensure protection of human health and the environment from known or suspected hazardous materials. With the above measures in place, the Proposed Actions would avoid the potential for significant adverse impacts related to hazardous materials.

WATER AND SEWER INFRASTRUCTURE

The Proposed Actions would not result in any significant adverse impacts on the City's water supply, wastewater treatment, or stormwater management infrastructure.

WATER SUPPLY

The Proposed Actions would not result in any significant adverse impacts on the City's water supply system. Projected development under the Proposed Actions is expected to generate an incremental water demand of 6.5969 million gallons per day (mgd) as compared to conditions in the future absent the Proposed Actions (the No Action condition). This represents an approximately 0.61 percent increase in demand on the water supply system compared to the City's average daily water use of approximately 1.1 billion gallons per day (gpd). Existing water mains in the Project Area are expected to have sufficient capacity to handle the estimated increase in water demand.

WASTEWATER TREATMENT

The Project Area is served by the Bowery Bay Wastewater Resource Recovery Facility (WRRF) and within the Project Area there are five subcatchment drainage areas. Development in the future with the Proposed Actions (the With Action condition) is expected to generate a total of approximately 4.85 mgd of sanitary sewage, which represents an increase of approximately 3.6470 mgd over the No Action condition. With an existing average monthly flow of 11301 mgd (below the maximum dry weather flow permitted capacity of 150 mgd) and the addition of approximately 3.6470 mgd on the projected development sites, which would represent 3.27 percent of the permitted average monthly flow capacity, the Bowery Bay WRRF would continue to have reserve

capacity. Therefore, it is concluded that there would be no significant adverse impact to the City's wastewater treatment services with the Proposed Actions.

STORMWATER AND DRAINAGE MANAGEMENT

All the projected development sites identified under the RWCDS are located within five subcatchment areas of the Bowery Bay WRRF. This is a combined sewer service area, and with the Proposed Actions there would be an increase in sanitary flow from the increased residential, commercial, and community facility populations, as well as an increase in fully impervious rooftop area on the majority of the projected development sites. These additional flow volumes would be conveyed to the Bowery Bay WRRF, or discharged directly to the East Rivers as combined sewer overflow (CSO), depending on rainfall volume and duration. However, with the Proposed Actions, CSO volumes are expected to decrease as compared with the No Action condition, regardless of the projected increase in sanitary flows from the new development. This reduction in CSO volumes can be attributed to the increased direct stormwater discharge from the waterfront projected development sites, as well as the on-site stormwater management volume requirements that would be followed under the City's Unified Stormwater Rule, which would require any new and/or redeveloped properties in a CSO drainage area to increase the total volume of stormwater managed on site. Finally, because of the available capacity of the Bowery Bay WRRF, the projected increase in sanitary flows would not result in any significant adverse impacts on the WRRF infrastructure. Therefore, it is concluded that the Proposed Actions would not result in any significant adverse impacts related to the City's wastewater conveyance and treatment systems.

SOLID WASTE AND SANITATION SERVICES

The Proposed Actions would not result in any significant adverse impact on solid waste and sanitation services and would also not impact any solid waste management facility. Based on estimated truck capacities, the RWCDS development is projected to require up to 12 incremental private carter collection trucks and 56 incremental New York City Department of Sanitation (DSNY) trucks per week compared to the No Action condition.

In the 2035 analysis year, the Proposed Project would result in a net increase in solid waste of approximately 841 tons per week, comprised of an increase of approximately 697 tons of waste handled by DSNY, and an increase of approximately 144 tons of waste handled by private carters when compared to the No Action condition.

Although this would be a net increase compared with the No Action condition, the additional solid waste resulting from the Proposed Actions would be a negligible increase relative to the approximately 12,260 tons of solid waste handled by DSNY or the 9,000 tons handled by private carters per day. Therefore, it is concluded that the Proposed Actions would not result in an increase in solid waste that overburdens available waste management capacity and there would be no significant adverse impact. The Proposed Actions would also not conflict with, or require any amendments to, the City's Solid Waste Management Plan.

ENERGY

The Proposed Actions would not result in a significant adverse impact related to energy systems. The Proposed Actions would result in an annual energy consumption of up to

1,289,440 million British thermal units per year (MMBtu/year) across all development sites. The portion of this energy consumption provided by the regional electric grid would be between 272,030 mega watt-hours (MWh) and 290,729 MWh of electricity consumed per year—depending on whether buildings are designed to use fossil fuels or a fully electric system, respectively. In the 2035 analysis year, this is anticipated to be approximately 0.5 percent of New York City's predicted future total annual baseline electricity energy demand. This represents an increase of approximately 989,517 MMBTUs as compared with the No Action condition, and with 202,143 to 216,979 MWh of incremental electricity consumption. The Proposed Project would generate an incremental increase in energy demand that is considered negligible when compared with the overall demand within Consolidated Edison's (Con Edison) New York City and Westchester County service area. Therefore, it is concluded that the Proposed Actions would not result in any significant adverse energy impacts.

TRANSPORTATION

Detailed analyses were prepared for vehicular traffic, transit, ferry, and pedestrian conditions. As summarized below, as a result of that analysis potential significant adverse impacts were identified for traffic intersections, subway station elements, subway and bus line-haul conditions, ferry line-haul and ferry landing conditions, and pedestrian elements (sidewalks, corner reservoirs, and crosswalks).

TRAFFIC

Traffic conditions were evaluated for the weekday 7:45–8:45 AM, 1:30–2:30 PM (midday), 4:00–5:00 PM, and Saturday 3:30–4:30 PM peak hours at 65 intersections in the traffic study area where additional traffic resulting from the Proposed Actions would be most heavily concentrated. As summarized in **Tables S-7 and S-8**, the traffic impact analysis indicates the potential for significant adverse impacts at 65 intersections (45 signalized and 20 unsignalized) during one or more analyzed peak hours. Significant adverse impacts were identified to 68 lane groups at 38 intersections during the weekday AM peak hour, 48 lane groups at 29 intersections in the midday peak hour, 72 lane groups at 38 intersections in the PM peak hour, and 47 lane groups at 28 intersections during the Saturday peak hour. "Mitigation," below summarizes potential measures to mitigate the significant adverse traffic impacts.

Table S-7
Number of Impacted Intersections and Lane Groups by Peak Hour

	Peak Hour			
	Weekday AM	**Weekday Midday**	**Weekday PM**	**Saturday Midday**
Impacted Lane Groups	68	48	72	47
Impacted Intersections	38	29	38	28

Table S-8
Summary of Significantly Impacted Intersections

	With-Action Impacted Locations			
	With-Action Impacted Locations			
Intersections	AM	MD	PM	SAT
Signalized Intersections				
1. 21st St & 41st Ave	X		X	X
3. 11th St & 43rd Ave		X	X	
6. 21st St & 43rd Ave	X	X	X	
7. Purves St/43rd Ave & Jackson Ave	X	X	X	X
13. 11th St & 44th Ave	X	X	X	
14. 21st St & 44th Ave				
16. Vernon Blvd & 44th Ave	X	X		
18. 11th St & 44th Dr	X	X	X	X
19. 21st St & 44th Dr	X	X	X	X
20. 23rd St & 44th Dr	X	X	X	X
22. 44th Dr & Jackson Ave	X			
23. Vernon Blvd & 44th Dr	X	X	X	X
26. Vernon Blvd & 44th Rd	X	X	X	X
30. Vernon Blvd & 46th Ave	X	X	X	X
31. Vernon Blvd & 46th Rd	X	X	X	X
32. Van Dam St & 47th Ave	X			
33. Vernon Blvd & 47th Ave	X	X	X	X
34. Vernon Blvd & 47th Rd	X	X	X	X
35. 11th St & 48th Ave	X	X	X	X
37. Vernon Blvd & 48th Ave	X	X	X	X
38. Vernon Blvd & 49th Ave	X		X	X
39. Vernon Blvd & 50th Ave	X	X	X	X
40. Vernon Blvd & 51st Ave	X	X	X	X
41. Borden Ave & 21st St	X		X	
43. Borden Ave & 25th St			X	
45. Borden Ave & Vernon Blvd	X	X	X	X
47. Van Dam St & Hunters Point Ave	X	X	X	X
48. Van Dam St & Queens Blvd	X			
49. Van Dam St & Thomson Ave	X	X	X	X
50. 21st St & Queensboro Bridge Off-Ramp			X	X
51. 21st St & Queens Plaza N		X	X	X
55. 11th St & Queens Plaza S	X	X	X	X
56. 21st St & Queens Plaza S	X		X	X
58. Thomson Ave & 44th Dr	X			
62. Jackson Ave & Thomson Ave	X		X	
63. Van Dam St & Borden Ave WB	X			X
Unsignalized Intersections				
4. 12th St & 43rd Ave	X	X	X	
8. Vernon Blvd & 43rd Ave		X	X	
12. 10th St & 44th Ave	X	X	X	X
15. 9th St & 44th Ave			X	
17. 10th St & 44th Dr	X	X	X	X
27. Vernon Blvd & 45th Ave (EB)	X	X	X	X
28. Vernon Blvd & 45th Ave (WB)	X	X	X	X
29. Vernon Blvd & 45th Rd	X		X	
44. Borden Ave & 27th St	X		X	
Total Impacted Intersections	**38**	**29**	**38**	**28**

Note:

X - denotes intersection significantly impacted in peak hour.

TRANSIT

Subway

Subway Stations

The Proposed Actions would generate a net increment of approximately 11,918 and 10,615 new subway trips during the weekday AM and PM commuter peak hours, respectively. The analysis of subway station conditions focuses on three Metropolitan Transportation Authority (MTA) New York City Transit (NYCT) subway stations serving the Project Area where incremental demand from the Proposed Actions would exceed the 200-trip *CEQR Technical Manual* analysis threshold in one or both peak hours. These include the following stations listed below. The Court Square – 23rd Street station complex is served by 7 trains operating on the Flushing Line (IRT), G trains operating on the IND Crosstown Line, and E and M trains operating on the Queens Boulevard Line (QBL); the Queensboro Plaza station is served by 7 trains as well as N and W trains operating on the BMT Astoria Line; and the 21st Street – Queensbridge station is served by F trains operating on the IND 63rd Street Line.

As summarized in **Table S-9**, in the With Action condition, a total of eight stairs, two escalators and one fare array at the Court Square – 23rd Street (E/G/M/7) station and one escalator at the 21st Street Queensbridge (F) station would be significantly adversely impacted by project-generated demand in at least one peak hour. "Mitigation," below summarizes measures to mitigate these significant adverse subway station impacts.

Table S-9
Summary of Significant Subway Station Impacts

Subway Station	Station Element	Impacted Time Period
Court Square –23rd Street (E/G/M/7)	Street Stair S2/M2	AM/PM
	Street Stair S3/M3	AM/PM
	Street Stair S4/M4	AM/PM
	Platform Stair P1 (IND)	AM/PM
	Platform Stair P2/M1 (IND)	AM/PM
	Platform Stair P4 (IND)	AM
	Platform Stair P1/P3	AM/PM
	Platform Stair P2/P4	AM/PM
	Escalator E-461	AM/PM
	Escalator E-462	AM/PM
	Fare Array N307	AM/PM
21st Street – Queensbridge (F)	Escalator E-422	AM

Subway Line Haul

The Project Area is served by eight NYCT subway routes—the No. 7 trains operating along the Flushing Line; G trains operating on the IND Crosstown Line; E, F, and M trains operating on the Queens Boulevard Line; and N and W trains operating along the BMT Astoria Line. The peak direction of travel is typically Manhattan-bound (southbound) in the AM peak hour and Queens-bound (northbound) in the PM peak hour. (G trains are an exception, as they only operate between Brooklyn and Queens and do not enter Manhattan.)

In the With Action condition, southbound E, F, G, and No. 7 trains in the AM peak hour and northbound G trains in the PM peak hour are expected to operate over capacity, and

would experience an average incremental increase of more than 8.34 persons/car during this period, greater than the five persons/car *CEQR Technical Manual* impact threshold. The southbound E, G, and No. 7 service in the AM peak hour and northbound G service in the PM peak hour would therefore be considered significantly adversely impacted by the Proposed Actions. All other analyzed subway routes are projected to operate below capacity in the peak direction in both the AM and PM peak hours and would therefore not be significant adversely impacted by the Proposed Actions in either period. "Mitigation," below summarizes potential measures to mitigate these significant adverse subway line haul impacts.

BUS SERVICES

The Project Area is served by a total of 12 local bus routes, three operated by NYCT and nine operated by MTA Bus Company (MTA Bus). It is estimated that the Proposed Actions would generate a net total of approximately 1,177 and 1,079 incremental bus trips on these routes during the weekday AM and PM peak hours, respectively. Incremental demand is expected to meet or exceed the 50-trip (per direction) *CEQR Technical Manual* analysis threshold in the AM and/or PM peak hour at the maximum load points along six routes—the B32, B62, and Q32 operated by NYCT and the Q39, Q60, Q66, Q67, Q69, Q100, Q101, Q102, and Q103 operated by MTA Bus. Based on projected levels of bus service in the No Action condition, the Proposed Actions would result in a capacity shortfall on the northbound Q103 buses in the AM and PM peak hours. Therefore, one bus line would be significantly adversely impacted based on *CEQR Technical Manual* criteria. "Mitigation," below summarizes the measures to mitigate these significant adverse bus line haul impacts.

CITYWIDE FERRY SERVICE

Ferry Line Haul

The Project Area is served by Astoria ferry route, which operates between Wall Street and East 90th Street in proximity to the Project Area. The peak direction of travel is typically Manhattan-bound in the AM peak period and Queens-bound in the PM.

In the With Action condition, southbound ferries on the Astoria route are expected to be operating near or over capacity in the AM peak hour at the maximum load and ferry departure points, with a volume to capacity (v/c) ratio of 1.62 and in the PM peak hour at the ferry departure point, with a v/c ratio of 0.94, greater than the 0.90 v/c ratio *CEQR Technical Manual* impact threshold. Therefore, as summarized in **Table S-10**, there would be significant adverse ferry line haul impacts to the southbound ferries on the Astoria route in the AM peak hour at the maximum load point and point of departure from the Long Island City ferry landing and to the northbound ferries on the Astoria route in the PM peak hour at the point of departure from the Long Island City ferry landing. All other analyzed ferry routes are projected to operate below a v/c ratio of 0.90 in the peak direction in both the AM and PM peak hours and would therefore not be significant adversely impacted by the Proposed Actions in either period. "Mitigation," below summarized potential measures to mitigate these significant adverse ferry line haul impacts.

Table S-10
Summary of Significant Ferry Line Haul Impacts

Route	Direction	Impacted Time Period	Line Haul Type
Astoria	SB	AM	Maximum Load Point Ferry Departure Point
Astoria	NB	PM	Ferry Departure Point

Ferry Landing

The Project Area is served by the Long Island City ferry landing located in Gantry Plaza State Park on the Astoria Route. In the With Action condition, the Long Island City ferry landing is expected to operate over capacity in the AM and PM peak hours with v/c ratios of 1.69 and 1.22, respectively. As the Long Island City ferry landing would operate over capacity in the With Action condition in the AM and PM peak hours, this would constitute a significant adverse impact of the Proposed Actions. In addition, it is anticipated that the queuing area in the With Action conditions would extend onto the Gantry Plaza State Park esplanade. "Mitigation," below summarizes the potential measures to mitigate this significant adverse ferry landing impacts.

PEDESTRIANS

The Proposed Actions would generate a net increment of approximately 5,996 walk-only trips in the weekday AM peak hour, 11,311 in the weekday midday, and 10,345 in the weekday PM peak hour, and 11,560 in the Saturday peak hour. Persons traveling to and from subway station entrances, rail station entrances, ferry terminals, and bus stops would add 14,338, 6,942, 12,803, and 11,492 additional pedestrian trips to Project Area sidewalks and crosswalks during these same periods, respectively. Peak hour pedestrian conditions were evaluated at a total of 154 pedestrian elements where new trips generated by projected developments are expected to be most concentrated. These elements—55 sidewalks, 45 corner areas, and 54 crosswalks—are primarily located in the vicinity of major projected development sites and corridors connecting the projected development sites to area subway station and rail entrances, ferry terminals, and bus routes. As shown in **Table S-11**, based on *CEQR Technical Manual* criteria, 26 sidewalks, 16 crosswalks, and 10 corners would be significantly adversely impacted by the Proposed Actions in one or more of the analyzed peak hours. "Mitigation," below discusses potential measures to mitigate these significant adverse pedestrian impacts.

Table S-11
Summary of Significant Pedestrian Impact

Corridor/Intersection	Impacted Elements	Peak Hour			
		AM	MD	PM	SAT
Vernon Blvd and 44th Dr	SE Corner	X	X	X	X
Vernon Blvd and 44th Dr	SW Corner			X	X
Vernon Blvd and 44th Dr	NW Corner	X		X	X
Vernon Blvd and 46th Ave	NE Corner	X		X	X
Vernon Blvd and 46th Ave	NW Corner	X	X	X	X
11th St and 44th Dr	SW Corner	X	X	X	X
21st St and 44th Dr	SW Corner	X		X	
21st St and 44th Dr	NW Corner	X			
21st St and 45th Rd	SE Corner	X		X	X
21st St and 45th Rd	SW Corner	X			
Vernon Blvd and 44th Dr	North Crosswalk	X	X	X	X
Vernon Blvd and 44th Dr	South Crosswalk	X	X	X	X
Vernon Blvd and 44th Dr	West Crosswalk	X		X	X
Vernon Blvd and 46th Ave	North Crosswalk	X	X	X	X
Vernon Blvd and 46th Ave	West Crosswalk	X	X	X	X
Vernon Blvd and 46th Rd	West Crosswalk				X
11th St and 44th Rd	South Crosswalk	X	X	X	X
11th St and 44th Dr	North Crosswalk	X	X	X	X
11th St and 44th Dr	South Crosswalk	X	X	X	X
11th St and 45th Ave	South Crosswalk				X
11th St and 45th Rd	South Crosswalk	X	X	X	X
11th St and 46th Ave	North Crosswalk	X	X	X	X
11th St and 46th Ave	South Crosswalk	X	X	X	X
21st St and 44th Dr	North Crosswalk	X	X	X	X
21st St and 44th Dr	South Crosswalk	X	X	X	X
21st St and 45th Rd	South Crosswalk	X	X	X	X
Vernon Blvd between 44th Ave and 43rd Rd	East Sidewalk	X		X	X
44th Ave between Vernon Blvd and 9th St	South Sidewalk	X	X	X	
44th Rd between Vernon Blvd and 10th St	South Sidewalk				X
44th Dr between Vernon Blvd and 10th St	South Sidewalk	X	X	X	X
44th Dr between Vernon Blvd and 5th St	North Sidewalk	X	X	X	X
45th Ave between 5th St and Vernon Blvd	South Sidewalk	X	X	X	X
46th Ave between Vernon Blvd and 11th St	North Sidewalk	X		X	X
Vernon Blvd between 45th Ave and 46th Ave	West Sidewalk	X	X	X	X
46th Ave between Vernon Blvd and 5th St	North Sidewalk	X	X	X	X
10th St between 44th Ave and 44th Rd	East Sidewalk		X	X	X
10th St between 44th Rd and 44th Ave	West Sidewalk	X	X	X	X
10th St between 44th Dr and 45th Ave	East Sidewalk				X
44th Ave between 11th St and 21st St	South Sidewalk			X	X
11th St between 44th Rd and 44th Dr	East Sidewalk	X		X	X
44th Rd between 10th St and 11th St	South Sidewalk	X	X	X	X
44th Dr between 11th St and 21st St	North Sidewalk	X			
11th St between 44th Dr and 45th Ave	West Sidewalk				X
45th Rd between 11th St and 21st St	South Sidewalk	X			X
45th Rd between Vernon Blvd and 11th St	South Sidewalk	X			X
44th Dr between 21st St and 23rd St	North Sidewalk	X	X	X	X
44th Dr between 21st St and 23rd St	South Sidewalk	X	X	X	X
45th Rd between 21st St and 23rd St	South Sidewalk	X	X	X	X
Queens Plaza South between 21st St and 13th St	South Sidewalk	X		X	
Queens Plaza South between Crescent St and 27th St	South Sidewalk	X		X	
21st St between 40th Ave and 41st Ave	East Sidewalk	X		X	X
21st St between 40th Ave and 41st Ave	West Sidewalk	X		X	X

VEHICULAR AND PEDESTRIAN SAFETY

Under the Vision Zero Queens Pedestrian Safety Action Plan, much of the area north of 43rd Avenue and east of 10th Street is located within a "Priority Area," where safety issues were found to occur systematically at an area-wide level. 21st Street, 37th Avenue, Queens Plaza North, Queens Plaza South, and Queens Plaza are identified as Priority Corridors, and the intersection of Jackson Avenue at Davis Street, 21st Street at Queens Plaza North, 21st Street at 37th Avenue, 27th Street at Queens Plaza, and Van Dam Street at 47th Avenue are identified as Priority Intersections.

Crash data for intersections in the traffic and pedestrian study areas were obtained from the New York City Department of Transportation (DOT) for the three-year period between January 1, 2017, and December 31, 2019. During this period, a total of 2,301 reportable and non-reportable crashes, 1,030 pedestrian/bicyclist-related injury crashes, and two fatalities occurred at analyzed study area intersections.

Under *CEQR Technical Manual* guidance, high crash locations are defined as those along a Vision Zero priority intersection or locations where five or more pedestrian/bicyclist injury crashes have occurred in any consecutive 12 months of the most recent three-year period for which data are available. In addition, any location along a Vision Zero priority corridor with three or more pedestrian/bicyclist injury crashes in any consecutive 12 months of the three-year period for which data is available should be identified as a high crash location. A review of the crash data identified 12 intersections within a ¼-mile of the Project Area as high crash locations. Of the 12 intersections, six intersections were selected for a qualitative assessment for street user safety, which are shown in **Table S-12**.

Table S-12
High Crash Locations

Intersection	Total Pedestrian/Bicycle Injury Crashes			Total Crashes (Reportable +Non-Reportable)		
	2017	2018	2019	2017	2018	2019
Jackson Avenue at Queens Boulevard	6	5	5	41	94	93
Queens Plaza South at Ed Koch Queensboro Bridge Off-Ramp / Crescent Street	1	5	1	14	32	26
21st St at Queens Plaza North/South	0	2	3	8	12	23
21st Street at 41st Avenue	3	5	7	7	21	23
Van Dam Street at 47th Avenue	3	3	2	14	24	27
Van Dam Street at Queens Blvd / Thomson Ave	4	5	1	32	67	43

PARKING

The parking analysis documents the effects to parking within the study area as a result of the projected development sites. Parking demand generated by the various commercial, retail, light industrial, and community facility uses that would be developed under the Proposed Actions would peak during the midday hour, whereas residential parking demand would peak during the overnight period. While there would be net decreases in auto-related, light industrial, and warehouse parking demand (as result of net reductions in these land uses), the prominent generator of parking demand would be

the residential land use as result of the significant increase of proposed dwelling units under the Proposed Actions. Overall, development associated with the Proposed Actions would generate a peak net parking demand of approximately 6,086 spaces in the weekday midday period and 5,092 spaces in the Saturday morning period. In addition, the development associated with the Proposed Actions would generate a peak parking demand of approximately 4,901 spaces in the weekday overnight period. In summary, it is expected that the total increase in parking demand under the Proposed Actions' RWCDS would not be fully accommodated on-site and excess demand would seek parking availability within a ¼-mile radius of the Project Area. These projected demand as well as any demand displaced from existing parking facilities on projected development sites would have seek available on-street and off-street parking within a ¼ mile of the Project Area. Further, some drivers destined for the Project Area would potentially have to travel a greater distance (e.g., between ¼ and ½-mile) to find available parking. Any potential deficit in parking would not be considered a significant adverse impact based on 2021 *CEQR Technical Manual* criteria due to the magnitude of available alternative modes of transportation. Therefore, it is concluded that the Proposed Actions would not result in significant adverse parking impacts.

AIR QUALITY

The Proposed Actions would result in a significant adverse air quality impact. The mobile source analyses determined that concentrations of CO and $PM_{2.5}$ due to project-generated traffic at intersections would not result in any violations of National Ambient Air Quality Standards (NAAQS) at one of the two analyzed intersections for CO and at three of the four analyzed intersection locations for $PM_{2.5}$. However, the 8-hour CO maximum concentration is predicted to exceed the NAAQS and *de minimis* criteria at the intersection of Vernon Boulevard and 46th Avenue. The maximum 24-hour $PM_{2.5}$ concentrations are predicted to exceed the NAAQS at the intersection of Vernon Boulevard and 46th Avenue and the *de minimis* criterion at the intersections of Vernon Boulevard and 44th Drive and Vernon Boulevard and 46th Avenue. At the intersection of Vernon Boulevard and 46th Avenue, the total annual $PM_{2.5}$ concentration is predicted to exceed the NAAQS. Furthermore, at each of the four intersection sites analyzed, the maximum annual incremental $PM_{2.5}$ concentration is predicted to exceed the *de minimis* criterion. This would be considered a significant adverse air quality impact. Traffic mitigation measures were examined to avoid potential significant impact at the affected intersection locations. Mitigation measures are discussed in Chapter 21, "Mitigation." Between the Draft and Final EIS, additional review and evaluation will be performed which is expected to determine that the identified impacts related to mobile source 24-hour and annual average $PM_{2.5}$ increments will be avoided. Refined modeling using additional traffic periods will be performed to determine 24-hour average impacts from mobile sources at the affected intersection. Additional modeling of $PM_{2.5}$ concentrations (Grid Analysis) will be performed using more refined or comprehensive analysis procedures to determine the magnitude and extent of neighborhood-scale $PM_{2.5}$ impacts from mobile sources. Other updates may include the use of newer vehicle emissions model data and projections. It is anticipated that these additional measures will reduce $PM_{2.5}$ concentrations below the 24-hour and annual *de minimis* criterion thresholds.

The parking facilities assumed to be developed as a result of the Proposed Actions were analyzed for potential air quality effects. The analysis found that these parking facilities would not be expected to result in any significant adverse air quality impacts.

An analysis of the elevated section of the Ed Koch Queensboro Bridge and associated ramps determined that there would be no significant adverse air quality impacts on nearby development sites.

The stationary source analyses determined that there would be no potential significant adverse air quality impacts from fossil fuel-fired heat and hot water systems at the projected and potential development sites. At certain sites, an (E) Designation (E-848) would be mapped in connection with the Proposed Actions to ensure that future developments would not result in any significant adverse air quality impacts from fossil fuel-fired heat and hot water systems emissions. For the City-owned parcels, restrictions would be necessary to ensure that emissions from fossil fuel-fired heat and hot water systems would not result in any significant adverse air quality impacts. These restrictions would be set forth in a Land Disposition Agreement (LDA) to ensure that the developer(s) satisfy these restrictions with oversight provided through the New York City Department of Housing Preservation and Development (HPD).

The analysis of existing sources associated with manufacturing and processing uses in the surrounding study area determined that emissions of air toxic compounds would not result in any potential significant adverse air quality impacts on the Proposed Project. An analysis of the cumulative impacts of existing industrial sources on projected and potential development sites was performed. Maximum concentration levels at projected and potential development sites were found to be below the applicable health risk criteria. At certain sites, an (E) Designation (E-848) would be mapped to ensure that the effects of emissions of air toxic compounds from existing industrial sources is avoided. For development sites with anticipated industrial uses, an (E) Designation (E-848) would be mapped in connection with the Proposed Actions to ensure that there are no potential significant adverse impacts associated with air toxic compounds associated with these uses.

Large and major emissions sources within 1,000 feet of a projected or potential development site were also analyzed, and the analysis concluded that these sources would not result in significant adverse air quality impacts on any projected or potential development sites.

GREENHOUSE GASES AND CLIMATE CHANGE

The building energy use and vehicle use associated with the Proposed Actions would result in up to approximately 148 thousand metric tons of carbon dioxide equivalent (CO_2e) emissions per year in the 2035 With Action condition. These emissions are, however, expected to decrease or be eliminated as New York State and New York City target 100 percent renewable electricity for building energy. Additionally, approximately 96 thousand metric tons of CO_2e per year from vehicle emissions based on projected vehicle fleets for future years; however, these estimates conservatively do not include increased percentage of electric vehicles due to market behavior and regulatory controls, and thus the greenhouse gas (GHG) emissions from mobile sources in the 2035 With Action condition are considered conservatively high.

The Proposed Actions involve zoning changes that would primarily affect privately owned properties. Decisions regarding construction and building design for those sites, which would affect energy use and GHG emissions, would be made by the property developers in accordance with the City's building code requirements in effect at the time. The City is addressing citywide building energy efficiency and other GHG-related design questions through its ongoing long-term GHG policy development and implementation process.

Consistent with CEQR practice, emissions associated with construction are not estimated explicitly for zoning actions. However, analyses of similar projects have shown that construction emissions are equivalent to the total operational emissions over approximately 5 to 10 years. The *CEQR Technical Manual* defines five goals by which a project's consistency with the City's emission reduction goal is evaluated: (1) efficient buildings; (2) clean power; (3) sustainable transportation; (4) construction operation emissions; and (5) building materials carbon intensity.

Implementing the RWCDS developments would be required to comply with New York City DOB carbon intensity limits for the 2035–2039 period specified. Furthermore, development sites will be required at a minimum to achieve the energy efficiency requirements of the New York City Building Code under the New York City Energy Conservation Code (NYCECC), consistent with the NYStretch Energy Code within the 2020 Energy Conservation Code of New York State (2020 ECCNYS). Thus, development under the Proposed Actions would be required to implement the legally applicable measures of these programs which would support the goals identified in the *CEQR Technical Manual* for energy efficient buildings.

The Proposed Actions would also support other GHG goals by virtue of their proximity to public transportation and their inclusion of carbon-free/low-carbon transportation infrastructure such as bicycle, e-mobility support, and electric vehicle charging infrastructure required by the City in new developments; meeting regulations to avoid of the use of fossil fuels for on-site combustion sources; construction air quality controls; and that typical construction in New York City uses recycled steel and lower-carbon cement alternatives. All of these factors demonstrate that the Proposed Actions supports the GHG reduction goal.

Therefore, based on the commitment to energy efficiency and by virtue of location and project goals, the Proposed Actions are concluded to be consistent with the City's emissions reduction goals, as defined in the *CEQR Technical Manual*.

NOISE

A noise assessment was undertaken to determine the levels of noise attenuation that would be needed to achieve interior noise levels that are acceptable for the projected and potential developments in accordance with 2021 *City Environmental Quality Review (CEQR) Technical Manual* guidance. As part of this analysis, $L_{10(1)}$ noise levels were determined by adjusting the existing noise measurements to account for future increases in traffic with the Proposed Actions based on the Noise Passenger Car Equivalent (PCE) proportional analysis results, including the noise contribution from vehicular traffic on adjacent roadways, and by calculating the cumulative noise level in the future condition based on the playground noise and future vehicular traffic noise on adjacent roadways.

Noise PCE proportional analysis showed significant noise increases and potential for significant adverse noise impact at Monitoring Locations 5, 8, 13, and 16. Therefore, the Proposed Actions could result in significant adverse noise impacts at noise receptors other than the future Projected/Potential Development Sites. Between Draft and Final EIS, further assessment will be conducted to determine these potential impacts in detail. Based on the projected noise levels, up to 44 dBA window/wall attenuation would be required at all projected/potential development sites to achieve acceptable interior noise levels per the *CEQR Technical Manual* noise exposure guideline at residential and community facility uses. The requirement for this level of attenuation as well as the requirement for an alternate means of ventilation will be included in an (E) designation (E-848) for all privately held projected and potential development sites. For City-owned parcels/sites the requirement for attenuation as well as the requirement for an alternate means of ventilation will be required through a Land Disposition Agreement (LDA) or a similar institutional control. Therefore, with these measures in place it is concluded that there would be no significant adverse noise impacts with respect to building attenuation.

PUBLIC HEALTH

The analyses presented in this DEIS concluded that the Proposed Actions would not result in unmitigated significant adverse impacts with respect to public health factors such as water quality or hazardous materials. The DEIS air quality analysis found that the Proposed Actions would potentially exceed the annual *de minimis* criterion for the maximum annual incremental $PM_{2.5}$ concentration at one or more of the analyzed intersection locations in the With Action condition. This would be considered a significant adverse air quality impact in the absence of traffic mitigation measures. Therefore, traffic mitigation measures were examined to avoid any potential significant impacts at these intersection locations. Mitigation measures are discussed below under “Mitigation.”

Between the Draft and Final EIS, additional review and evaluation will be performed which is expected to determine that the identified impacts related to mobile source annual average $PM_{2.5}$ increments will be avoided in the event that certain traffic mitigation measures are implemented. Additional modeling of $PM_{2.5}$ concentrations (Grid Analysis) will be performed using more refined or comprehensive analysis procedures to determine the magnitude and extent of neighborhood-scale $PM_{2.5}$ impacts from mobile sources. It is anticipated that the grid analysis will show that the $PM_{2.5}$ concentrations are below the annual *de minimis* criterion threshold.

In terms of operational noise, Noise Passenger Car Equivalent (PCE) proportional analysis presented in the DEIS resulted in significant noise increases (up to 3.6 dBA) and potential significant adverse noise impact at Monitoring Locations 5, 8, 13, and 16 due to the Proposed Actions. Therefore, the Proposed Actions could result in significant adverse noise impacts at noise receptors other than the future Projected/Potential Development Sites. Between Draft and Final, further assessment and mitigation measures will be considered for these potential impacts. With that said. the predicted overall changes in noise levels would not be large enough to significantly affect public health. Therefore, no significant adverse public health impacts related to operational noise are expected as a result of the Proposed Actions. In terms of construction noise, the construction analysis determined that there are areas surrounding each of the analyzed development sites where construction noise would result in a significant adverse impact. However, while during some periods of construction the Proposed Actions could potentially result in

significant adverse impacts related to noise, the predicted overall changes in noise levels would not impact public health. Therefore, no significant adverse public health impacts related to construction noise are expected as a result of the Proposed Actions.

NEIGHBORHOOD CHARACTER

The Proposed Actions would not result in a significant adverse impact to neighborhood character and are expected to support neighborhood character by reinforcing the defining features of the neighborhood, which include the East River waterfront and iconic landmarks, a thriving arts and culture scene, and dynamic, everchanging neighborhoods.

The Proposed Actions would not result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; urban design and visual resources; and noise. Although there would be significant adverse impacts with respect to open space; historic and cultural resources; shadows, and transportation, DCP will continue to explore mitigation measures for these impacts between this DEIS and the FEIS such that these impacts would be mitigated to the extent feasible and not result in any significant adverse impact to the defining elements of neighborhood character.

CONSTRUCTION

The Proposed Actions could result in significant adverse construction period impacts related to transportation, noise, and other technical areas including historic and cultural resources.

TRANSPORTATION

The third quarter of 2030 was selected as the reasonable worst-case analysis period for assessing potential cumulative transportation impacts from operational trips from completed portions of the projected developments and construction trips associated with construction activities. An assessment of transportation generated during this peak period is presented below.

Traffic

Construction traffic includes construction workers commuting via autos and trucks making deliveries to projected development sites. Each worker vehicle was assumed to arrive in the morning and depart in the afternoon or early evening with truck deliveries distributed throughout the construction day. In the third quarter of 2030, construction-related traffic is expected to peak during the 6 AM to 7AM and 3 PM to 4 PM periods. During the 6 to 7 AM peak hour, 1,758 Passenger Car Equivalent (PCE) vehicle trips are projected, with 1,512 inbound trips and 246 outbound trips. During the 3 to 4 PM peak hour, there would be 1,352 PCE trips, including 43 inbound trips and 1,309 outbound trips.

While based on the above potential significant adverse traffic impacts are expected during construction, they are expected to be within the range of impacts identified for the for operational traffic in the 2035 build year. It is also expected that mitigation measures summarized below for the 2035 operational traffic impacts would be similarly effective at mitigating any potential construction traffic impacts.

Pedestrians

During the 2030 (third quarter) peak construction period, net incremental construction and operational travel demand on area sidewalks, corners, and crosswalks would be expected to total approximately 2,447 and 7,381 trips in the 6AM to 7 AM and 3 PM to 4 PM peak construction hours, respectively. These trips would be widely distributed among the pedestrian elements in the Project Area and would primarily be outside the weekday AM and PM peak commuter periods and weekday midday and Saturday peak periods when pedestrians at transit facilities typically create the greatest demand.

Potential significant adverse pedestrian impacts are expected during construction and these impacts would be within the range of impacts identified for the 2035 With-Action conditions. The mitigation measures summarized below under "Mitigation," are expected to be effective at mitigating these pedestrian impacts.

Transit

The Project Area is well served by public transportation with six subway stations or station complexes, 12 local bus routes, and two ferry landings, and two commuter rail stations nearby.

During the 2030 peak construction period, the net incremental construction and operational travel demand is expected to generate during the 6 AM to 7 AM and 3 PM to 4 PM peak construction hours approximately 1,793 and 3,390 subway trips, respectively, 90 and 138 rail trips, respectively, 159 and 332 bus trips, respectively, and 104 and 188 ferry trips, respectively. As peak transit demand would not meet the 200 trips/hour *CEQR Technical Manual* analysis threshold for a detailed rail analysis, there would be no significant adverse impacts to rail transit services during the third quarter of 2030 peak construction period.

The 2030 construction peak period transit conditions during the 6 AM to 7 AM and 3 PM to 4 PM construction peak hours are expected to be generally better than during the analyzed operational peak hours with full build-out of projected development in 2035 and most construction trips are not during the peak commuter period. While it is expected that there could be periodic potential significant adverse subway, bus, and ferry impacts during construction, these impacts would be within the range of impacts identified for operational phase transit in the 2035 build year. Mitigation measures for these operational subway, bus, and ferry impacts (summarized below) would likely be effective at reducing any potential construction subway, bus, and ferry impacts.

Parking

With 2035 full build-out of the projected developments there would be a parking demand for more than 5,000 vehicles between 9 AM and 5 PM. Parking conditions during the peak construction period in the cumulative analysis year (2030 third quarter) are expected to be generally better than during the analyzed operational peak hours with full build-out of projected development. Consequently, there would be less likelihood of a parking shortfall during the peak construction hours in 2030 than with full build-out of the projected developments in 2035. While the 2030 construction worker parking demand could contribute to such a shortfall at midday, most of the Project Area is located in the CEQR Technical Manual Parking Zone 2 and any potential shortfall would not be considered significant given the availability alternative modes of public transportation.

AIR QUALITY

Measures to reduce pollutant emissions during construction are required in accordance with all applicable laws, regulations, and building codes. These include dust suppression measures, idling restriction, and the use of ultra-low sulfur diesel (ULSD) fuel. With the implementation of these emission reduction measures, the dispersion modeling analysis of construction-related air emissions for both on-site and on-road sources determined that short-term particulate matter ($PM_{2.5}$ and PM_{10}), annual-average NO_2, and CO concentrations would be below their corresponding CEQR de minimis thresholds and/or NAAQS, respectively. Therefore, construction under the Proposed Actions would not result in significant adverse construction air quality impacts.

NOISE AND VIBRATION

Construction generated by the Proposed Actions would have the potential to result in significant adverse impacts related to noise. At some receptors, construction activity would result in increments that would be considered objectionable (i.e., 15 dBA or greater) or very objectionable (i.e., 20 dBA or greater). The potential for significant adverse impacts at these receptors was determined by evaluating the duration of these increments and receptors where noise level increases were predicted to exceed the construction noise evaluation thresholds for extended durations were identified. Construction activities typically produce noise levels that are significant, noticeable and potentially intrusive during the most noise-intensive nearby construction activities. However, the most elevated levels of construction noise do not persist throughout construction and noise levels fluctuate throughout the workday resulting in noise increases that are intermittent. However, the magnitude and duration of construction noise levels at the identified receptors is projected to result in significant adverse impacts.

Unless special permits are issued by DOB, building construction in NYC is during weekday daytime hours and not overnight when residents and other sensitive uses (e.g., parks) are most sensitive to noise. To that end, all construction activities need to comply with the *New York City Noise Control Code* regulations which requires a DEP approved Construction Noise Mitigation Plan that identifies control measures to manage and reduce to the extent possible impactful construction noise.

With respect to vibration, the buildings of most concern with regard to the potential for structural or architectural damage due to vibration effects are NYCT structures immediately adjacent to the projected and potential development sites and historic buildings within 90 feet. For those historic buildings listed on the S/NR, NYCLs, and/or NYCHD within 90 feet of the projected and potential development sites, vibration monitoring would be required in accordance with DOB's *TPPN #10/88* requirements, and peak particle velocity (PPV) during construction would be prohibited from exceeding the 0.50 inches/second threshold. Historic buildings that have been determined eligible for S/NR listing are not afforded special protections under TPPN #10/88, but would be offered standard DOB building protections. For non-historic buildings and structures immediately adjacent to projected development sites, vibration levels within 25 feet may result in PPV levels between 0.50 and 2.0 in/sec, which is generally considered acceptable for a non-historic building or structure.

In terms of potential vibration levels that would be perceptible and annoying, the construction equipment with the most potential for producing levels that exceed the 65

vibration decibels (VdB) limit is a pile driver. However, operation of pile-driving equipment in typical NYC construction is only for limited periods at a particular location and therefore would not result in any significant adverse impacts. Consequently, there would be no potential for significant adverse vibration impacts with the Proposed Actions.

MITIGATION

INTRODUCTION

Based on the DEIS analyses, the Proposed Actions are anticipated to result in significant adverse impacts related to community facilities (elementary schools, libraries, and publicly funded early childhood programs), open space, shadows, historic and cultural resources, transportation, air quality, noise and construction period historic resources, traffic and noise. In accordance with the procedures of the 2021 City Environmental Quality Review (CEQR) Technical Manual, mitigation measures to address these significant adverse impacts, where feasible and/or practical, are proposed below. Between this DEIS and the FEIS, DCP, as the CEQR Lead Agency, will coordinate with City agencies and further examine and refine these recommended mitigation measures. If no feasible and practicable mitigation can be identified, the impacts would remain unavoidable significant adverse impacts of the Proposed Actions.

COMMUNITY FACILITIES

Public Schools

According to the *CEQR Technical Manual*, a significant adverse elementary school impact may result if: (1) a utilization rate of elementary schools that is equal to or greater than 100 percent in the With-Action Condition; and (2) 100 or more new students generated by the Proposed Actions past the 100 percent utilization rate.

In school Subdistrict 3/CSD 30, elementary school utilization is projected to exceed 100 percent (143.8 percent) and the Proposed Actions would generate 100 or more students (1,300) past the 100 percent utilization rate thereby resulting in a significant adverse impact to elementary schools. This impact is projected with completion of approximately 1,125 residential units, and therefore, based on the conceptual build-out schedule would be expected in the 2030-2031 school year.

To mitigate the significant adverse elementary school impact an additional 1,201 elementary school seats would be needed in order to reduce the incremental increase in utilization rates to within *CEQR Technical Manual* impact thresholds.

To avoid the impact, the following mitigation measures could be applied in conjunction with the City's monitoring of capacity: 1) restructure or reframe existing school space under the DOE control to provide additional capacity; 2) relocate administrative functions to another site, thereby increasing capacity for classrooms; and/or 3) create additional capacity by constructing a new school, building additional capacity at additional schools, or leasing additional school space constructed as part of projected development.

As summarized above under "Project Description," the Proposed Actions include a zoning text amendment that would allow for space occupied by schools to be exempt from floor area calculations. This would allow the New York City School Construction Authority (SCA) to work with private property owners to identify sites that may be

appropriate for a future school siting. The Proposed Actions would also create an authorization to allow for additional flexibility in building envelopes for developments utilizing the new school floor area exemption. The development of a mixed-use building with an integrated school would be subject to the SCA and the DOE requirements and approval to be eligible to utilize the proposed authorization. Zoning bulk relief to accommodate the additional floor area and would also be the subject of a future CPC approval.

The above preliminary mitigation measures will be explored between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures this would remain a significant adverse impact of the Proposed Action.

Public Libraries

The population project with the Proposed Actions would represent an increase of 79.44 percent over the No Action condition population using the Hunters Point Branch of the Queens Public Library (QPL) and an increase of 11.56 percent at the Long Island City Branch. These increases are greater than the 5 percent increase that CEQR defines as the threshold for a potential significant adverse impact. Although residents would have access to a new planned Court Square library branch near the Project Area and also the entire QPL network through the inter-library loan system and could have volumes delivered directly to their nearest library branch, there would still be a significant adverse impact on library services in the study area as a result of the Proposed Actions.

Potential mitigation measures include: providing space for a new library of a size and at a location to be determined through additional coordination with the QPL and/or improvements to a branch facility to support the branch's programming and services year-round. These preliminary mitigation measures will be explored between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures that would fully mitigate, significant adverse impacts would an unmitigated impact of the Proposed Actions.

Early Childhood Programs

With the Proposed Actions, early childhood programs in the study area would operate over capacity by approximately 67 slots (102.7 percent utilization) and exhibit an increase in the utilization rate of approximately 27.3 percentage points over the No Action condition; this is a significant adverse impact on publicly funded early childhood programs. To mitigate this impact would require the addition of approximately 68 slots in the early childhood programs.

Several factors may also reduce this demand. For example, families could make use of alternatives to publicly funded early childhood programs as there are slots at licensed facilities to provide family-based child care in lieu of public center child care (these facilities are not included in the quantitative analysis). Parents of eligible children are also not geographically restricted and could use public early childhood programs outside of the study area. Possible mitigation measures for this significant adverse impact will be developed in consultation with DOE between the Draft and Final EIS and may include provision of suitable space on-site for a child care center, provision of a suitable location off-site and within a reasonable distance (at a rate affordable to DOE providers), or funding or making program or physical improvements to support adding capacity to

existing facilities if determined feasible through consultation with DOE's Division of Early Childhood Education, or providing new early childhood programs within or near the Project Area. As a City agency, DOE does not directly provide new child care facilities, instead it contracts with providers in areas of need. DOE is also working to create public/private partnerships to facilitate the development of new early childhood programs where there is an area of need. As part of that initiative, DOE may be able to contribute capital funding, if it is available, towards such projects to facilitate the provision of new programs. Absent the identification and implementation of feasible mitigation measures, these are significant adverse impacts of the Proposed Actions that would be unmitigated.

OPEN SPACE

The Proposed Actions would result in a significant adverse impact to open space in the residential study area. Typically, a reduction in the open space ratio exceeding 5 percent is considered to be significant. However, in an area that has a very low open space ratio, such as the Project Area, a reduction as small as 1 percent may be considered significant. According to Table 7-5 of the *CEQR Technical Manual*, a decrease in the total open space ratio of 2 percent or more is generally considered a significant adverse impact for a project in a residential open space study area where the total open space ratio is between 0.51 to 1.0, a decrease in active open space ratio of 1 percent or more is generally considered a significant adverse impact where the active open space ratio is less than 0.41, and a decrease in in passive open space ratio of 4 percent or more is generally considered a significant adverse impact where the passive open space ratio is between 0.31 and 0.40. Therefore, based on the decrease in the open space ratios noted above and described in this chapter, the Proposed Actions would result in a significant adverse impact to open space in the residential study area.

To fully mitigate this impact, a total of approximately 16.33 acres of additional new open with a minimum of 8.5 acres of passive open space and a minimum of 6.9 acres of active open space would be required, which is not feasible. However, the Proposed Actions would result in extensive new waterfront open space that would partially mitigate this impact. As below under "Conceptual Analysis," as part of the Proposed Actions, a zoning text amendment is proposed that would create a zoning authorization allowing for the bonus of floor area and bulk modifications with the provision of publicly accessible open space on zoning lots zoned M-16/R9, M1-6/R10, and M1-6A/R10 that are larger than 25,000 sf. If property owners elect to seek this authorization, it is anticipated that new publicly accessible open space would be introduced on inland projected development sites, also serving to offset some of the demand introduced by the Proposed Actions.

Although many of these potential mitigation measures would increase open space acreage, opportunities to create new publicly-accessible open space that fully mitigates the identified significant adverse open space impact (approximately 16.33 acres) are very limited. As a result, this significant adverse open space impact is not expected to be completely eliminated and, as a result, this is an unavoidable significant adverse open space of the Proposed Actions.

Other possible measures to mitigate this indirect significant adverse impact may include the expansion of existing parks, creation of new open space on publicly owned land, incentivizing encouraging owners of privately owned sites to create new open space as

part of their redevelopment, making playgrounds accessible to the community after school hours through the Schoolyards to Playgrounds program, establishing new pedestrian plazas in streets through the City's Plaza program, and/or improving existing parks to allow for more diverse programming.

As summarized below, the Proposed Actions would result in significant adverse air quality impacts affecting the usability of one existing open space resource, Gordon Triangle. In addition, three new publicly accessible waterfront open spaces (on Projected Development Sites 65, 67, and 71) would be affected by significant adverse air quality impacts. As discussed below under Air Quality, with the implementation of traffic engineering improvements, it is anticipated that the identified impacts related to mobile source air quality will be avoided. To make this determination further review and evaluation of these measures will be performed Between the Draft and Final EIS. Absent the identification and implementation of feasible mitigation measures this would remain an unmitigated impact of the Proposed Action.

In addition, incremental shadows resulting from the Proposed Actions are expected to result in significant adverse impacts to two open space resources in Long Island City: Gordon Triangle, a small public open space located on 44th Drive between Vernon Boulevard and 10th Street; and the 44th Drive Pier, a public open space located at the western end of 44th Drive.

According to the *CEQR Technical Manual*, possible measures to mitigate shadow impacts on open spaces may include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating, replacing, or monitoring vegetation for a set period of time; undertaking additional maintenance to reduce the likelihood of species loss; or providing for replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space to provide for replacement facilities, vegetation, or other features. These potential mitigation measures are currently being explored in coordination with the lead agency, DCP, and the New York City Department of Parks and Recreation (NYC Parks) and will be refined between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures these would remain significant adverse impacts of the Proposed Actions.

SHADOWS

Incremental shadows resulting from the Proposed Actions would be extensive enough to cause significant adverse impacts to three open space resources in Long Island City: several Greenstreets medians in Queens Plaza South between Vernon Boulevard and 13th Street; Gordon Triangle, a small public open space located on 44th Drive between Vernon Boulevard and 10th Street; and the 44th Drive Pier, a public open space located at the western end of 44th Drive. Specifically, the shadows cast on Gordon Triangle and the 44th Drive Pier could affect utilization and vegetation on the resources.

According to the *CEQR Technical Manual*, possible measures for mitigating significant adverse shadow impacts on open spaces include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating, replacing, or monitoring vegetation for a set period of time; undertaking additional maintenance to reduce the likelihood of species loss; or providing for replacement facilities on another nearby site.

Other potential mitigation strategies include the redesign or reorientation of the open space to provide for replacement facilities, vegetation, or other features.

The *CEQR Technical Manual* guidance also discusses other strategies to reduce or eliminate shadow impacts, including modifications to the height, shape, size, or orientation of a proposed development that creates the significant adverse shadow impact. DCP, as lead agency, will explore potential mitigation measures in coordination with NYC Parks between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures, the Proposed Actions would result in unmitigated significant adverse shadows impacts on the Greenstreets medians, Gordon Triangle, and the 44th Drive Pier.

HISTORIC AND CULTURAL RESOURCES

The Proposed Actions would result in significant direct adverse impacts to five S/NR-eligible buildings that are located on projected development sites and are expected to be demolished for new development. These resources include: the former New York and Queens Electric Light and Power Substation Number 4 (Resource No. 2); the Walter Lippmann Building at 43-42 10th Street (Resource No. 11); 43-50 10th Street (Resource No. 12); the M. Henry Chernay Building at 10-03 44th Avenue (Resource No. 15); and the Jerome Perlstein Building at 43-58 11th Street (Resource No. 16). In addition, the building at 21-23 43rd Avenue (Resource F), which has been identified as a potential architectural resource, would be demolished for redevelopment of Potential Development Site G.

These significant adverse impacts are unavoidable, as the resources are not City-designated landmarks and are privately owned and could be demolished or modified for as-of-right development either with or without the the Proposed Actions.

Potential significant adverse impacts also are also expected at 10 known and 8 potential architectural resources that are located within 90 feet of projected or potential development sites; this is a potential construction period impact. The known architectural resources are: the S/NR-eligible former New York and Queens Electric Light and Power Substation Number 4 (Resource No. 2); the S/NR-eligible Steinway Van Storage building at 42-45 12th Street (Resource No. 3); the S/NR-eligible former Silvercup Bakery at 42-22 22nd Street (Resource No. 4); the Queensboro Bridge (Resource No. 7), which is a NYCL and S/NR-listed; the S/NR-eligible Walter Lippmann Building at 43-42 10th Street (Resource No. 11); the S/NR-eligible 43-50 10th Street (Resource No. 12); the S/NR-eligible building at 43-56 10th Street (Resource No. 13); the S/NR-eligible Tom Cat Bakery at 43-05 10th Street (Resource No. 14); the S/NR-eligible M. Henry Chernay Building at 10-03 44th Avenue (Resource No. 15); and the S/NR-eligible Jerome Perlstein Building at 43-58 11th Street (Resource No. 16). The potential architectural resources are: 10-15 and 10-27 46th Avenue (Resource B); 40-18 22nd Street (Resource I); 40-15 22nd Street (Resource J); 44-02 23rd Street (Resource K); 44-01 21st Street (Resource M); 21-49 44th Drive (Resource N); 42-25 Vernon Boulevard (Resource S); and 45-32 to 43-44 11th Street (Resource Z).

It is expected that the New York City Department of Building's (DOB) *Technical Policy and Procedure Notice (TPPN) #10/88* which protects historic resources from such impacts would be implemented for Projected Development Site 51, in relation to the NYCL and S/NR-listed Queensboro Bridge (Resource No. 7). The other listed resources

would be afforded protection under DOB regulations applicable to all buildings located adjacent to construction sites (C26-112.4); however, since these resources are not S/NR-listed or designated NYCLs or New York City Historic Districts (NYCHD), they are not afforded special protections under *TPPN #10/88.* Since the projected and potential development sites within 90 feet of these resources are not City-owned and are not anticipated to be developed in accordance with City disposition or development agreements, there is no mechanism to require the implementation of *TPPN #10/88* or preparation of a Construction Protection Plan. Additional protective measures afforded under *TPPN #10/88* would only become applicable if the resources were listed or designated as NYCLs or NYCHDs in the future prior to the initiation of construction. If not, these resources would not be subject to *TPPN #10/88* and there is the potential for indirect impacts resulting construction under the Proposed Actions.

The Proposed Actions also have the potential to result in indirect significant adverse impacts to five individual historic architectural resources, with new buildings on the projected and potential development sites in close proximity to these resources that could adversely impact their setting. The affected resources are: the S/NR-eligible Steinway Van & Storage Company building at 42-45 12th Street (Resource No. 3); the S/NR-eligible Tom Cat Bakery at 43-05 10th Street (Resource No. 14); the S/NR-eligible building at 43-56 10th Street (Resource No. 13); and the S/NR-eligible Metropolitan Building at 44-01 11th Street (Resource No. 17). In addition, views of the "Silvercup" metal-frame sign above the S/NR-eligible former Silvercup Bakery (Resource No. 4) along Queens Plaza South and from the Queensboro Bridge would be obscured by the new development along Queens Plaza South west of 21st Street in the future with the Proposed Actions.

Measures to partially mitigate these significant adverse impacts will be explored in consultation with LPC between the DEIS and FEIS. If no feasible mitigation is identified, these significant adverse impacts would be unmitigated.

TRANSPORTATION

Traffic

As described summarize above under "Transportation," the Proposed Actions would result in significant adverse traffic impacts at 44 study area intersections (35 signalized and nine unsignalized) during one or more analyzed peak hours; specifically 68 lane groups at 38 intersections during the weekday AM peak hour, 48 lane groups at 29 intersections in the midday peak hour, 72 lane groups at 38 intersections in the PM peak hour, and 47 lane groups at 28 intersections during the Saturday peak hour. Implementation of traffic engineering improvements such as signal timing changes, the installation of new traffic signals or all-way stop controls, and modifications to lane striping and curbside parking regulations are being proposed as mitigation for some of these projected traffic impacts, subject to final review and approval of DOT. If DOT determines that an identified traffic engineering improvement is not feasible, and no alternative and equivalent measure is identified, then that impact would remain unmitigated and would constitute an unavoidable adverse impact of the Proposed Actions.

Assuming all the proposed mitigation measures are implemented, **Table S-13** identifies significant adverse impacts that would be fully mitigated at 34 lane groups in the weekday AM peak hour, 36 lane groups in the midday peak hour, 39 lane groups in the weekday PM peak hour, and 36 lane groups in the Saturday peak hour. Intersections where these impacts would be fully mitigated total 18, 23, 20, and 22 during these same periods, respectively**. Table S-14** also provides a summary of the intersections and lane groups with unmitigated significant adverse traffic impacts. In total, impacts to one or more lane groups would remain unmitigated in one or more peak hours at 25 intersections (23 signalized and two unsignalized).

Table S-13
Summary of Lane Groups/Intersections with Significant Adverse Traffic Impacts

Peak Hour	Lane Groups/ Intersections Analyzed	Lane Groups/ Intersections With No Significant Impacts	Lane Groups/ Intersections With Significant Impacts	Mitigated Lane Groups/ Intersections	Unmitigated Lane Groups/ Intersections
Weekday AM	239/65	171/27	68/38	34/18	34/20
Weekday Midday	239/65	191/36	48/29	36/23	12/6
Weekday PM	239/65	167/27	72/38	39/20	33/18
Saturday	239/65	192/37	47/28	36/22	11/6

Table S-14
Lane Groups With Unmitigated Significant Adverse Traffic Impacts

Signalized Intersection	Peak Hour			
	Weekday AM	Weekday Midday	Weekday PM	Saturday
1. 21st St & 41st Ave	EB-LT, SB-T		NB-LT, NB-R, SB-L, SB-T	NB-R, SB-T
3. 11th St & 43rd Ave			WB-LT	
6. 21st St & 43rd Ave				
7. Purves St/43rd Ave & Jackson Ave				
13. 11th St & 44th Ave			EB-LT	
14. 21st St & 44th Ave				
16. Vernon Blvd & 44th Ave	NB-R			
18. 11th St & 44th Dr	EB-T, WB-L, WB-TR	WB-L, WB-TR	EB-L, EB-TR, WB-L, WB-TR, SB-LT	WB-L, WB-TR
19. 21st St & 44th Dr	EB-L, WB-TR			
20. 23rd St & 44th Dr	EB-L, WB-TR	WB-TR	WB-TR	
22. 44th Dr & Jackson Ave				
23. Vernon Blvd & 44th Dr	EB-TR, WB-L, WB-TR, NB-LT, SB-LT	WB-L, WB-TR, NB-LT, SB-LT	WB-L, WB-TR, NB-LT, SB-LT	WB-L, WB-TR, NB-LT
25. 21st St & 44th Rd				
26. Vernon Blvd & 44th Rd	WB-LT, NB-LT		NB-LT	
30. Vernon Blvd & 46th Ave	NB-LT, SB-LT	NB-LT, SB-LT	NB-LT, SB-LT	NB-LT, SB-LT
31. Vernon Blvd & 46th Rd	SB-LT		SB-LT	
32. Van Dam St & 47th Ave	NB-LT			
33. Vernon Blvd & 47th Ave				
34. Vernon Blvd & 47th Rd				
35. 11th St & 48th Ave	NB-L		NB-L, SB-LT	
37. Vernon Blvd & 48th Ave				
38. Vernon Blvd & 49th Ave	SB-LT			
39. Vernon Blvd & 50th Ave	SB-LT		SB-LT	
40. Vernon Blvd & 51st Ave	NB-LT		NB-LT	
41. Borden Ave & 21st St				
43. Borden Ave & 25th St				
45. Borden Ave & Vernon Blvd	EB-LT, SB-LR	EB-LT, SB-LR	EB-LT, SB-LR	SB-LR
47. Van Dam St & Hunters Point Ave				
48. Van Dam St & Queens Blvd	EB-T			
49. Van Dam St & Thomson Ave	NB-L, SB-T			
50. 21st St & Queensboro Bridge Off-Ramp			NB-TR	
51. 21st St & Queens Plaza N		WB-LT	WB-LT, NB-LT	WB-LT
55. 11th St & Queens Plaza S			EB-LT, SB-LT	
56. 21st St & Queens Plaza S				
58. Thomson Ave & 44th Dr				
62. Jackson Ave & Thomson Ave	WB-L, WB-R			
63. Van Dam St & Borden Ave WB				
Unsignalized Intersections	**Peak Hour**			
	Weekday AM	**Weekday Midday**	**Weekday PM**	**Saturday**
4. 12th St & 43rd Ave				
8. Vernon Blvd & 43rd Ave				
12. 10th St & 44th Ave				
15. 9th St & 44th Ave				
17. 10th St & 44th Dr				
27. Vernon Blvd & 45th Ave (EB)	EB-LR		EB-LR	
28. Vernon Blvd & 45th Ave (WB)				
29. Vernon Blvd & 45th Rd	SB-LT		SB-LT	
44. Borden Ave & 27th St				
Total Number of Unmitigated Intersections	**20**	**6**	**18**	**6**

Notes: NB-northbound, SB-southbound, EB-eastbound, WB-westbound L-left-turn, T-through, R-right-turn

Transit

Subway Stations

The Proposed Actions would result in significant impacts to a total of eight stairs, two escalators, and one fare array at the Court Square – 23rd Street (E/G/M/7) subway station and one escalator at the 21st Street – Queensbridge (F) subway station in one or both peak hours. Stairway widening is the most common form of mitigation for these impacts, provided that NYCT deems it feasible. Another potential mitigation measure would be to add vertical capacity (i.e., adding an elevator, escalator, or additional stairway) in the vicinity of the impacted stairway. Potential mitigation measures would fully mitigate the impacts to two stairs in the AM and/or PM peak hours at the Court Square – 23rd Street (E/G/M/7) subway station. Absent the identification and implementation of feasible mitigation measures that would mitigate the subway stair impacts at two stairs at the Court Square – 23rd Street (E/G/M/7) subway station to the greatest extent practicable, the Proposed Actions would result in unmitigated significant adverse subway station impacts. In addition, no feasible mitigation measures were identified at six stairs, one fare array, and three escalators, and these significant adverse subway impacts would also remain unmitigated.

Subway Line Haul

With the Proposed Actions, southbound 7, E, F, and G trains are expected to be operating over capacity in the AM peak hour and the Proposed Actions would increase this demand by an average of approximately 8.34, 10.71, 5.43, and 8.80 passengers per car, respectively and northbound G trains are also expected to be operating over capacity in the PM peak hour with an average increase of approximately 8.64 passengers per car due to the Proposed Actions. The significant adverse impacts during the AM peak hour could be fully mitigated by the addition of two southbound 7 trains, three southbound E trains, one southbound F train, and two southbound G trains. The significant adverse impacts during the PM peak hour could be fully mitigated by the addition of two northbound G trains. As is standard practice, NYCT routinely conducts periodic ridership counts and adjusts subway frequency to meet its service criteria, which would mitigate this impact. In the absence of these measures, this impact would remain an unmitigated significant impact of the Proposed Actions.

Bus

The Proposed Actions would result in significant adverse impacts adverse bus line haul impacts on the northbound Q103 bus in the AM and PM peak hours. The significant adverse impact could be fully mitigated through the addition of one standard bus on the northbound Q103 bus route in both the AM and PM peak hours. The general policy of NYCT is to provide additional bus service as demand warrants, taking into account financial and operational constraints. It is therefore expected that NYCT would address this added demand; however, if not this would remain an unmitigated of the Proposed Actions.

Pedestrians

Incremental demand from the Proposed Actions would significantly adversely impact 26 sidewalks, 16 crosswalks, and 10 corners in one or more analyzed peak hours. Recommended mitigation measures consisting of the relocation/removal of impediments to sidewalk, curb extensions at corners, and the widening of crosswalks would fully mitigate the impacts to seven sidewalks, three crosswalks, and nine corners. **Table S-15**

shows a summary of fully mitigated and unmitigated significant adverse impacts. Implementation of the proposed mitigation measures would be subject to final review and approval by DOT. If an identified pedestrian improvement is infeasible, and absent the identification and implementation of alternative mitigation measures, the Proposed Actions would result in unmitigated significant adverse pedestrian impacts.

Table S-15
Summary of Significant Pedestrian Impacts

Peak Hour	Sidewalks/ Crosswalks/ Corners Analyzed	Sidewalks/ Crosswalks/ Corners with No Significant Impacts	Sidewalks/ Crosswalks/ Corners with Significant Impacts	Mitigated Sidewalks/ Crosswalks/ Corners	Unmitigated Sidewalks/ Crosswalks/ Corners
Weekday AM	55/54/45	34/40/36	21/14/9	6/3/8	15/11/1
Weekday Midday	55/54/45	43/41/42	12/13/3	2/5/2	10/8/1
Weekday PM	55/54/45	35/40/37	20/14/8	6/4/7	14/10/1
Saturday	55/54/45	33/38/38	22/16/7	9/5/6	13/11/1

AIR QUALITY

Based on a detailed air quality analysis, it was determined that maximum predicted carbon monoxide (CO) and particulate matter ($PM_{2.5}$) concentrations related to traffic generated under the Proposed Actions would not result in any violations of National Ambient Air Quality Standards (NAAQS) at one of the two analyzed intersections for CO and at three of the four analyzed intersection locations for $PM_{2.5}$. However, the 8-hour CO maximum concentration is predicted to exceed the NAAQS and *de minimis* criteria at the intersection of Vernon Boulevard and 46th Avenue and the maximum 24-hour $PM_{2.5}$ concentrations are predicted to exceed the NAAQS at the intersection of Vernon Boulevard and 46th Avenue and the *de minimis* criterion at the intersections of Vernon Boulevard and 44th Drive and Vernon Boulevard and 46th Avenue. At the intersection of Vernon Boulevard and 46th Avenue, the total annual $PM_{2.5}$ concentration is predicted to exceed the NAAQS. Furthermore, at each of the four intersection sites analyzed, the maximum annual incremental $PM_{2.5}$ concentration is predicted to exceed the *de minimis* criterion. This is considered a significant adverse air quality impact under CEQR.

Implementation of traffic mitigation and engineering improvements, such as signal timing changes or modifications to curbside parking regulations (see above) would also provide mitigation for some of these anticipated air quality impacts. **Table S-16** presents the results of the CO analysis with the proposed traffic mitigation measures in place, and **Tables S-17 and S-18** present the results of the 24-hour and annual $PM_{2.5}$ analyses, respectively, with the proposed traffic mitigation measures in place.

Table S-16
Maximum Predicted 8-Hour CO
With Action Concentrations With Traffic Mitigation (ppm)

Analysis Site	Location	Increment	Increment (With Mitigation)	De Minimis
2	Vernon Boulevard and 46th Avenue	19.12	1.22	5.1

Notes:
8-hour standard is 9 ppm.
Concentration includes a background concentration of 1.2 ppm.

Table S-17
Maximum Predicted 24-Hour Average $PM_{2.5}$
Concentrations With Traffic Mitigation (µg/m³)

Analysis Site	Location	With Action		With Traffic Mitigation		Criterion
		Total Concentration	Increment	Total Concentration	Increment	
1	Vernon Boulevard and 44th Drive	-	19.19	-	4.25	8.6[1]
		28.32 [2]	-	22.24 [2]	-	35[3]
2	Vernon Boulevard and 46th Avenue	-	75.32	-	5.20	8.6 [1]
		65.55 [2]	-	23.58 [2]	-	35[3]

Notes:
[1] $PM_{2.5}$ de minimis criterion—24-hour average, not to exceed more than half the difference between the background concentration (17.8 µg/m³) and the 24-hour standard of 35 µg/m³.
[2] The 24-hour $PM_{2.5}$ concentration presented represents the maximum of the total 98th percentile. Concentrations presented include a background concentration of 17.8 µg/m³.
[3] NAAQS.

Table S-18
Maximum Predicted Annual Average $PM_{2.5}$
Concentrations With Traffic Mitigation (µg/m³)

Analysis Site	Location	With Action		With Traffic Mitigation		Criterion
		Total Concentration	Increment	Total Concentration	Increment	
1	Vernon Boulevard and 44th Drive	-	1.18	-	0.27	0.1[1]
		8.79 [2]	-	7.98 [2]	-	9[3]
2	Vernon Boulevard and 46th Avenue	-	7.03	-	0.76	0.1 [1]
		14.46 [2]	-	8.44 [2]	-	9[3]

Notes:
[1] $PM_{2.5}$ de minimis criterion—annual (neighborhood scale.
[2] The annual $PM_{2.5}$ concentration presented represents the modeled five-year average. Concentrations presented include a background concentration of 7.6 µg/m³.
[3] NAAQS.

As shown in the tables, the results of this modeling analysis conclude that incremental concentrations of CO and $PM_{2.5}$ would be significantly lower than the With-Action condition, without mitigation. CO concentrations would not exceed the *de minimis* criteria, and CO and $PM_{2.5}$ concentrations would not exceed the NAAQS. However, $PM_{2.5}$

incremental concentrations are predicted to exceed the annual *de minimis* criterion at each of the four analyzed sites. Therefore, the air quality impacts identified would not be fully mitigated. To address this unmitigated impacts, between this DEIS and Final EIS, further traffic and air quality modeling analyses will be performed with the objective of reducing or eliminating these impacts. Additional modeling of $PM_{2.5}$ concentrations will be performed using more refined or comprehensive analysis procedures to determine the magnitude and extent of neighborhood-scale $PM_{2.5}$ impacts and other updates may include the use of newer vehicle emissions model data and projections. It is anticipated that these additional measures will reduce $PM_{2.5}$ concentrations below the annual *de minimis* criteria threshold and eliminate the identified impacts. However, absent the identification and implementation of feasible mitigation measures, these impacts would remain unavoidable.

NOISE

Chapter 17, "Noise," presents future increases in traffic with the Proposed Actions based on the Noise Passenger Car Equivalent (PCE) proportional analysis results, including the noise contribution from vehicular traffic on adjacent roadways. Based on noise PCE proportional analysis, Monitoring Locations 5, 8, 13, and 16 resulted in significant noise increases (up to 3.6 dBA) and potential significant adverse noise impact due to the Proposed Actions. Therefore, the Proposed Actions could result in significant adverse noise impacts at noise receptors other than the future Projected/Potential Development Sites. Between Draft and Final, further assessment and mitigation measures will be considered for these potential impacts. Potential mitigation measures include upgrades at the noise receptor with insulated windows and an alternate means of ventilation. It should be noted that even if above mitigation measures were determined to be feasible and practicable, some significant adverse noise impacts could potentially continue to be experienced at sensitive receptors and, as a result, be unavoidable.

CONSTRUCTION

Historic Resources

As described above, in the absence of protective measures afforded under *TPPN #10/88* which would only apply if all the identified resources were listed or designated as NYCLs or NYCHDs there is the potential for indirect construction impacts resulting from the Proposed Actions.

Transportation

Traffic

While it is projected that there would be potential significant adverse traffic impacts during construction, these impacts would be within the range of those identified for the for the 2035 operational year. Therefore, the mitigation measures that have been identified for the operational traffic impacts (see above) would be similarly effective at mitigating any potential construction traffic impacts. All mitigation measures would be subject to DOT review and approval. If DOT determines that an identified improvement is infeasible, and no alternative and equivalent measure is identified, then the impact would remain unmitigated and would constitute an unavoidable significant adverse impact of the Proposed Action.

TRANSIT AND pedestrians

While there may be potential significant adverse subway, bus, and ferry impacts and pedestrian elements due to increased ridership during construction these impacts are expected to be temporary and within the range of impacts identified under the Proposed Action for the 2035 operational phase and may also be mitigated through the measures identified for transit and pedestrian mitigation under the Proposed Action (see above).

Noise

During construction it is expected that there would be significant adverse impacts from construction noise. For example, at some receptors, construction activity would result in increments considered objectionable (i.e., 15 dBA or greater) or very objectionable (i.e., 20 dBA or greater). The potential for significant adverse impacts at these receptors was determined by evaluating both the intensity and the duration of these incremental noise increases and the sensitivity of the uses. It is expected that construction would produce noise levels that are potentially intrusive during the most noise-intensive construction activities (e.g. excavation); however, these elevated significant construction noise levels would not persist throughout construction and typically vary resulting in intermittent noise impacts both daily and over the course of the construction period. However, the magnitude and duration of construction noise levels at the identified receptors would constitute significant adverse impacts given that the construction noise analysis is based on the CEQR worst-case conservative time periods. Therefore, since the impact analysis is based on RWCDS conceptual site plans and construction schedules, the actual construction noise may be of a lesser magnitude.

All construction needs to comply with the noise control measures developed for a noise mitigation plan(s) as required under the New York City Noise Control Code. These measures could include a variety of source and path controls that may partially mitigate significant adverse impacts (and substantially reduce construction-related noise levels) by incorporating:

- Noise barriers to a height of 12 to 16 feet above grade to provide shielding;
- Isolation pads between the pile driver hammer and piles;
- Acoustical shrouds surrounding the pile driver hammer and piles;
- Use of electric cranes or cranes with exhaust silencers with lower noise emission levels; and
- Excavators with exhaust silencers that have lower noise emission levels.

The feasibility and practicability of these potential mitigation measures is currently being explored by the lead agency, DCP, and will be refined between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures, it is anticipated that significant adverse impacts would be fully unmitigated and even if all of the above mitigation measures were determined to be feasible and practicable, some significant adverse construction noise impacts may still occur and be unavoidable.

ALTERNATIVES

NO ACTION ALTERNATIVE

The No Action Alternative examines future conditions in the Project Area, but assumes the absence of the Proposed Actions (i.e., none of the discretionary approvals proposed as part of the Proposed Actions would be adopted). Under the No Action Alternative, existing zoning would remain in the area affected by the Proposed Actions. It is anticipated that this area would experience moderate growth under the No Action Alternative by 2035. Twenty one of the 103 projected development sites are expected to be redeveloped in the No Action Alternative, resulting in a net increase of 2,802 dwelling units (DU), 113,519 gsf of commercial uses, 26,570 gsf of community facility uses, and a reduction of 105,862 gsf of industrial uses on the projected development sites, compared to existing conditions. The technical chapters of this EIS have described the No Action Alternative as “the Future Without the Proposed Actions.”

The significant adverse impacts anticipated related to community facilities, open space, shadows, historic and cultural resources, transportation, mobile source air quality, noise and construction that would occur with the Proposed Actions would not occur under the No Action Alternative. However, the No Action Alternative would not meet the goals of the Proposed Actions. The benefits expected to result from the Proposed Actions—including promoting affordable housing development by increasing residential density and establishing Mandatory Inclusionary Housing (MIH), delivering new waterfront open space, enhancing connectivity and facilitating pedestrian-friendly, improving the resilience and sustainability of Long Island City, and supporting existing businesses and the creative community and promoting local job growth — would not be realized under this alternative, and the No Action Alternative would fall short of the goals and objectives of the Proposed Actions.

NO UNMITIGATED SIGNIFICANT ADVERSE IMPACTS ALTERNATIVE

The No Unmitigated Significant Adverse Impacts Alternative examines a scenario in which the density and other components of the Proposed Actions are modified to avoid the unmitigated significant adverse impacts associated with the Proposed Actions, which include impacts related to community facilities (elementary schools, early childhood programs, and libraries), open space, shadows, historic and cultural resources, transportation (traffic, transit and pedestrians), mobile source air quality, noise, and construction (historic architectural resources, transportation and noise). This alternative considers a development scenario that would not result in any significant adverse impacts that could not be fully mitigated. However, to eliminate all identified unmitigated significant adverse impacts, the Proposed Actions would have to be modified to a point where the principal goals and objectives of the Proposed Actions would not be fully realized.

DOE SITE DEVELOPMENT ALTERNATIVE

The DOE Site Development Alternative considers a development scenario on Projected Development Site 67 that would utilize public funding sources to provide a greater amount of affordable housing as compared to development projected in the With Action Condition. The Alternative is intended to provide more affordable housing on a City-owned site. Development under this scenario would result in an increase in affordable

DUs and retail space, but a decrease in total unit count, total floor area, and building height. This increment could worsen the significant adverse impacts to Community Facilities (Early Childhood Programs), Transportation, and Air Quality.

GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTIONS

Growth-inducing aspects generally refers to "secondary" impacts of a proposed action that trigger further development outside the directly affected area. The 2021 *City Environmental Quality Review (CEQR) Technical Manual* indicates that an analysis of the growth-inducing aspects is appropriate when a proposed action: (1) adds substantial new land use, residents, or new employment that could induce additional development of a similar kind or of support uses, such as retail establishments to serve new residential uses; and/or (2) introduces or greatly expands infrastructure capacity (e.g., sewers, central water supply).

The environmental consequences of the RWCDS growth expected under the proposed actions is the subject of this EIS including the projected increase in residential population that is likely to increase the demand for neighborhood services ranging from community facilities to local goods and services. This would enhance the growth of local commercial corridors in the Project Area that is also addressed in the RWCDS by the projected commercial, retail, and community facility elements. The Proposed Actions could also lead to additional growth in the City and State economies, primarily due to employment and fiscal benefits during construction and operation of the RWCDS developments. However, this secondary growth is expected to be realized incrementally throughout the region over the 10-year analysis period and would not expected to result in any significant impacts in a particular area or at any particular location.

The Proposed Actions would result in more intensive land uses within the Project Area. However, this is not anticipated to generate significant secondary impacts resulting in substantial new development in City neighborhoods. Finally, the the Proposed Actions would not introduce new infrastructure or expand infrastructure capacity that would result in indirect development. Therefore, it is concluded that the Proposed Actions would not result in any growth inducing impacts.

UNAVOIDABLE ADVERSE IMPACTS

COMMUNITY FACILITIES

Public Schools

The Proposed Actions would result in a significant adverse impacts related to elementary schools. Under the Proposed Actions, in Subdistrict 3/CSD 30, elementary school utilization would exceed 100 percent (143.8 percent) and the Proposed Actions would generate 100 or more students (1,300) past the 100 percent utilization rate. Therefore, the Proposed Actions would result in a significant adverse impact to elementary schools in Subdistrict 3/CSD 30. To mitigate the significant adverse elementary school impact in Subdistrict 3/CSD 30, the number of incremental dwelling units (DU) generated by the Proposed Actions could be reduced to approximately 1,120, generating approximately 99 elementary school students, as compared to the No Action condition; however, this would not meet the purpose and need of the Proposed Actions, which is intended to generate housing, including affordable housing. Other mitigation measures could include

increasing the capacity of elementary school seats in Subdistrict 3/CSD 30 by 1,201 elementary school seats, which would be needed to reduce the incremental increase in utilization rates to less than the *CEQR Technical Manual* impact thresholds.

To avoid the impact, the following mitigation measures could be applied in conjunction with the City's monitoring of capacity: (1) restructure or reframe existing school space under the DOE control in order to provide additional capacity; (2) relocate administrative functions to another site, thereby increasing capacity for classrooms; and/or (3) create additional capacity by constructing a new school, building additional capacity at additional schools, or leasing additional school space constructed as part of projected development.

These preliminary mitigation measures will be explored between this DEIS and the FEIS. Absent the implementation of these mitigation measures, the Proposed Actions would result in an unavoidable significant adverse impact on elementary schools.

Libraries

The population added by the Proposed Actions would represent an increase of 79.44 percent over the No Action condition population at the Hunters Point Branch of the Queens Public Library (QPL) and an increase of 11.56 percent at the Long Island City Branch of the QPL. The increase at these library branches is greater than the 5 percent increase that CEQR defines as the threshold for a potential significant adverse impact. Although residents would have access to a new planned Court Square library branch near the Project Area and residents would have access to the entire QPL network through the inter-library loan system and could have volumes delivered directly to their nearest library branch, there would still be a significant adverse impact on library services in the study area as a result of the Proposed Actions. Potential mitigation measures include the provision of space for a new library of a size and at a location to be determined through additional coordination with the QPL and/or improvements to a branch facility to support the branch's programming and services year-round.

The mitigation measures will be explored between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures that would fully address the shortfall, the significant adverse impact related to libraries would be an unavoidable impact of the Proposed Actions.

Early Childhood Programs

In the With Action condition, early childhood programs in the study area would operate over capacity by approximately 67 slots (102.7 percent utilization) and exhibit an increase in the utilization rate of approximately 27.3 percentage points over the No Action condition. Therefore, the Proposed Actions would result in a significant adverse impact on publicly funded early childhood programs. The addition of approximately 68 slots would be needed to mitigate the significant adverse impact to early childhood programs.

Possible mitigation measures for this significant adverse impact will be developed in consultation with DOE and may include provision of suitable space on-site for a child care center, provision of a suitable location off-site and within a reasonable distance (at a rate affordable to DOE providers), provision of funding or construction of physical improvements to add capacity to existing facilities, or providing new early childhood programs within or near the Project Area. As a City agency, DOE does not directly provide new child care facilities; it contracts with providers in areas of need. DOE is also working

to create public/private partnerships to facilitate the development of new early childhood programs where there is an area of need. As part of that initiative, DOE may be able to contribute capital funding, if it is available, towards such projects to facilitate the provision of new programs.

The mitigation measures will be explored between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures that would fully address the shortfall, the significant adverse impact on publicly funded early childhood programs would be an unavoidable impact of the Proposed Actions.

OPEN SPACE

The Proposed Actions would result in a significant adverse impact to open space due to the added residential demand placed on active and passive open spaces in an area that has limited available open space resources

The detailed analysis of open space concluded that with the Proposed Actions, the total open space ratio in the residential study area would decrease by approximately 18.6 percent (to 0.546 acres per 1,000 residents); the active open space ratio would decrease by approximately 20.6 percent (to 0.190 acres per 1,000 residents); and the passive open space ratio would decrease by approximately 17.5 percent (to 0.355 acres per 1,000 residents). Typically, a reduction in the open space ratio exceeding 5 percent is considered to be significant. However, in an area that has a very low open space ratio, a reduction as small as 1 percent may be considered significant. Therefore, based on the decrease in the open space ratios noted above, the Proposed Actions would result in a significant adverse impact to open space in the residential study area.

The Proposed Actions would result in significant adverse air quality impacts affecting the usability of one existing open space resource, Gordon Triangle. In addition, three new publicly accessible waterfront open spaces (on Projected Development Sites 65, 67, and 71) would be affected by significant adverse air quality impacts.

Shadows resulting from the Proposed Actions would be extensive enough to cause significant adverse impacts to two open space resources in Long Island City: Gordon Triangle, a small public open space located on 44th Drive between Vernon Boulevard and 10th Street; and the 44th Drive Pier, a public open space located at the western end of 44th Drive.

Possible measures that could mitigate the indirect significant adverse impact to open space in the residential study area may include expanding existing parks, creating new open space on publicly owned land, encouraging owners of privately owned sites to create new open space as part of their redevelopment, making playgrounds accessible to the community after school hours through the Schoolyards to Playgrounds program, establishing new pedestrian plazas in streets through the City's Plaza program, and/or improving existing parks to allow for more diverse programming. Possible measures that could mitigate direct effects air quality impacts on open spaces may include the implementation of traffic engineering improvements related to avoid mobile source air quality impacts. Further review and evaluation will be performed Between the Draft and Final EIS, which is expected to make this determination. Absent the identification and implementation of feasible mitigation measures the impacts could remain unmitigated.

Possible measures that could mitigate direct effects shadow impacts on open spaces may include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating, replacing, or monitoring vegetation for a set period of time; undertaking additional maintenance to reduce the likelihood of species loss; or providing for replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space to provide for replacement facilities, vegetation, or other features.

These potential mitigation measures are currently being explored in coordination with the lead agency, DCP, and the New York City Department of Parks and Recreation (NYC Parks) and will be refined between the DEIS and FEIS.

As summarized below under "Conceptual Analysis," as part of the Proposed Actions, a zoning text amendment is proposed that would create a zoning authorization allowing for the bonus of floor area and height modification with the provision of publicly accessible open space on zoning lots zoned M-16/R9, M1-6/R10, and M1-6A/R10 that are larger than 25,000 sf. If property owners elect to seek this authorization in the future, it is anticipated that new publicly accessible open space would be introduced on inland projected development sites in the future, serving to offset the new demand introduced by the Proposed Actions.

Although many of the potential mitigation measures being considered would increase the amount and/or usability of open space resources, opportunities to create new publicly accessible open space resources in sufficient amounts within the study area to fully mitigate the identified significant adverse open space impact (approximately 16.33 acres) are very limited. As a consequence, the Proposed Actions' significant adverse open space impact may not be completely eliminated and, as a result, an unavoidable significant adverse open space impact would occur.

Absent the identification and implementation of feasible mitigation measures, the significant adverse open space impacts would be an unavoidable impact of the Proposed Actions.

SHADOWS

Incremental shadows resulting from the Proposed Actions would be extensive enough to cause significant adverse impacts to three open space resources in Long Island City: several Greenstreets medians in Queens Plaza South between Vernon Boulevard and 13th Street; Gordon Triangle, a small public open space located on 44th Drive between Vernon Boulevard and 10th Street; and the 44th Drive Pier, a public open space located at the western end of 44th Drive.

Possible measures that could mitigate significant adverse shadow impacts on open spaces may include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating, replacing, or monitoring vegetation for a set period of time; undertaking additional maintenance to reduce the likelihood of species loss; or providing for replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space to provide for replacement facilities, vegetation, or other features.

The *CEQR Technical Manual* guidance also discusses other strategies to reduce or eliminate shadow impacts, including modifications to the height, shape, size, or

orientation of a proposed development that creates the significant adverse shadow impact. DCP, as lead agency, will explore potential mitigation measures in coordination with NYC Parks between the DEIS and FEIS. Absent the implementation of feasible mitigation measures, the significant adverse shadow impact would constitute an unavoidable impact of the Proposed Actions.

HISTORIC RESOURCES

Architectural Resources

As discussed in Chapter 7, "Historic and Cultural Resources," the Proposed Actions would result in a significant adverse impact to architectural resources as a result of demolition, adjacent construction, and contextual impacts.

Demolition

The Proposed Actions would result in significant direct adverse impacts to five buildings that have been determined eligible for listing on the State and National Registers of Historic Places (S/NR-eligible) located on projected development sites, which would be demolished for redevelopment of the projected development sites in the With Action condition. Development of Projected Development Site 40 would result in the demolition of the S/NR-eligible M. Henry Chernay Building at 10-03 44th Avenue (Resource No. 15) and the S/NR-eligible Jerome Perlstein Building at 43-58 11th Street (Resource No. 16). Development of Projected Development Site 52 would result in the demolition of the S/NR-eligible former New York and Queens Electric Light and Power Substation Number 4 (Resource No. 2). Development of Projected Development Site 59 would result in the demolition of the S/NR-eligible Walter Lippmann Building at 43-42 10th Street (Resource No. 11) and the S/NR-eligible building at 43-50 10th Street (Resource No. 12). Development of Potential Development Site G would result in the demolition of 21-23 43rd Avenue, which has been identified as a potential architectural resource (Resource F). As all of the affected architectural resources are privately owned and could be demolished and modified to allow for developments constructed as-of-right subsequent to approval of the Proposed Actions, the significant adverse impact would constitute an unavoidable impact of the Proposed Actions.

Construction-Related Impacts

Potential significant adverse impacts also could occur to 10 known and 8 potential architectural resources located within 90 feet of projected or potential development sites as a result of adjacent construction. The known architectural resources are: the S/NR-eligible former New York and Queens Electric Light and Power Substation Number 4 (Resource No. 2); the S/NR-eligible Steinway Van Storage building at 42-45 12th Street (Resource No. 3); the S/NR-eligible former Silvercup Bakery at 42-22 22nd Street (Resource No. 4); the Queensboro Bridge (Resource No. 7), which is a NYCL and S/NR-listed; the S/NR-eligible Walter Lippmann Building at 43-42 10th Street (Resource No. 11); the S/NR-eligible 43-50 10th Street (Resource No. 12); the S/NR-eligible building at 43-56 10th Street (Resource No. 13); the S/NR-eligible Tom Cat Bakery at 43-05 10th Street (Resource No. 14); the S/NR-eligible M. Henry Chernay Building at 10-03 44th Avenue (Resource No. 15); and the S/NR-eligible Jerome Perlstein Building at 43-58 11th Street (Resource No. 16). The potential architectural resources are: 10-15 and 10-27 46th Avenue (Resource B); 40-18 22nd Street (Resource I); 40-15 22nd Street (Resource J); 44-02 23rd Street (Resource K); 44-01 21st Street (Resource M); 21-49 44th Drive

(Resource N); 42-25 Vernon Boulevard (Resource S); and 45-32 to 43-44 11th Street (Resource Z).

It is expected that the New York City Department of Building's (DOB) *Technical Policy and Procedure Notice* (*TPPN*) *#10/88* would be implemented for the With Action development on Projected Development Site 51, in relation to the New York City Landmark (NYCL) and S/NR-listed Queensboro Bridge (Resource No. 7). The other resources listed above would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites (C26-112.4); however, since these resources are not S/NR-listed or designated NYCLs or New York City Historic Districts (NYCHD), they are not afforded special protections under *TPPN #10/88*. Since the projected and potential development sites within 90 feet of these resources are not City-owned and are not anticipated to be developed in accordance with City disposition or development agreements, there is no mechanism to require the implementation of *TPPN #10/88* or preparation of a Construction Protection Plan. Additional protective measures afforded under *TPPN #10/88* would only become applicable if the resources were listed on the S/NR or designated as NYCLs or NYCHDs in the future prior to the initiation of construction. In the absence of such protection, the construction related impacts would constitute an unavoidable impact of the Proposed Actions.

Contextual Impacts

The Proposed Actions also have the potential to result in indirect significant adverse impacts to five individual historic architectural resources, with new buildings on the projected and potential development sites in close proximity to these resources that could adversely impact their setting. The affected resources are: the S/NR-eligible Steinway Van & Storage Company building at 42-45 12th Street (Resource No. 3); the S/NR-eligible Tom Cat Bakery at 43-05 10th Street (Resource No. 14); the S/NR-eligible building at 43-56 10th Street (Resource No. 13); and the S/NR-eligible Metropolitan Building at 44-01 11th Street (Resource No. 17). In addition, views of the "Silvercup" metal-frame sign above the S/NR-eligible former Silvercup Bakery (Resource No. 4) along Queens Plaza South and from the Queensboro Bridge would be obscured by the new development along Queens Plaza South, west of 21st Street in the future with the Proposed Actions.

Measures to partially mitigate these significant adverse impacts will be explored in consultation with LPC between the DEIS and FEIS. If no feasible mitigation is identified, these significant adverse impacts would be unavoidable.

TRANSPORTATION

The Proposed Actions would result in significant adverse impacts to: vehicular traffic at 44 intersections in one or more peak hours; eight stairs, three escalators, and one fare array at two subway stations; bus line haul conditions on one bus route; ferry line haul conditions on one ferry route; ferry landing conditions on one ferry landing; and pedestrian elements at 26 sidewalks, 10 corners, and 16 crosswalks.

Traffic

The Proposed Actions would result in significant adverse traffic impacts at 44 study area intersections (35 signalized and nine unsignalized) during one or more analyzed peak hours; specifically, 68 lane groups at 38 intersections during the weekday AM peak hour,

48 lane groups at 29 intersections in the midday peak hour, 72 lane groups at 38 intersections in the PM peak hour, and 47 lane groups at 28 intersections during the Saturday peak hour.

As demonstrated below, many of these impacts could be mitigated through the implementation of traffic engineering improvements, including:

- Modification of existing traffic signal phasing and/or timing,
- Installation of new traffic signals or all-way stop controls,
- Elimination of on-street parking to add a travel lane, and
- Modifications to lane striping.

As discussed above under "Mitigation," implementation of traffic engineering improvements would fully mitigate the significant adverse impacts to 34 lane groups in the weekday AM peak hour, 36 lane groups in the midday, 39 lane groups in the PM, and 36 lane groups in the Saturday peak hour. Intersections where these impacts would be fully mitigated would total 18, 23, 20, and 22 during these same periods, respectively. In total, impacts to one or more lane group(s) would remain unmitigated in one or more peak hours at 25 intersections. Consequently, these impacts would constitute unavoidable significant adverse traffic impacts as a result of the Proposed Actions.

Implementation of the recommended traffic engineering improvements are subject to review and approval by the New York City Department of Transportation (DOT). If DOT determines that an identified traffic engineering improvement is deemed infeasible, and no alternative and equivalent measure is identified, then that impact would remain unmitigated and would constitute an unavoidable adverse impact.

Transit

Subway Stations

The Proposed Actions would result in significant impacts to a total of eight stairs, two escalators, and one fare array at the Court Square – 23rd Street (E/G/M/7) subway station complex and one escalator at the 21st Street – Queensbridge (F) subway station would be significantly adversely impacted by project-generated demand in one or both peak hours. Potential measures to mitigate significant escalator impacts include adding appropriate vertical processor capacity (preferably an escalator, elevator, or additional stairway), increasing operating speeds for escalators, and increasing escalator tread widths, provided that New York City Transit (NYCT) deems it practicable. Potential mitigation measures would fully mitigate the impacts to two stairs in the AM and/or PM peak hours at the Court Square – 23rd Street (E/G/M/7) subway station. Absent the identification and implementation of feasible mitigation measures that would mitigate the subway stair impacts at two stairs at the Court Square – 23rd Street (E/G/M/7) subway station to the greatest extent practicable, the Proposed Actions would result in unmitigated significant adverse subway station impacts. If any one of these measures is deemed infeasible, and no alternative and equivalent measure is identified, the corresponding subway line haul impact would constitute an unavoidable adverse impact. In addition, no feasible mitigation measures were identified at six stairs, one fare array, and three escalators, and these significant adverse subway impacts would remain unmitigated and would constitute an unavoidable adverse impact.

Subway Line Haul

Under the Proposed Actions, AM peak hour demand on southbound 7, E, F, and G trains would exceed practical capacity, and the Proposed Actions would increase this demand by an average of more than five passengers per car. In addition, PM peak hour demand on northbound G trains would exceed practical capacity, and the Proposed Actions would increase this demand by an average of more than five passengers per car. As discussed in Chapter 21, "Mitigation," the significant adverse impacts during the AM peak hour could be fully mitigated by the addition of two southbound 7 trains, three southbound E trains, one southbound F train, and two southbound G trains. The significant adverse impacts during the PM peak hour could be fully mitigated by the addition of two northbound G trains. If any one of these adjustments is deemed infeasible, and no alternative and equivalent measure is identified, the corresponding subway line haul impact would constitute an unavoidable adverse impact.

Bus

The Proposed Actions would result in significant adverse impacts adverse bus line haul impacts are on the northbound Q103 buses in the AM and PM peak hours. As discussed in Chapter 21, "Mitigation," the significant adverse impact to bus services could be fully mitigated by the addition of a total of one standard bus on the northbound Q103 bus route in both the AM and PM peak hours. The general policy of NYCT is to provide additional bus service where demand warrants, taking into account financial and operational constraints. Absent the provision of additional bus service on this route, the corresponding impacts would remain unmitigated and would constitute an unavoidable adverse impact.

Citywide Ferry Service

Ferry Line Haul

Ferry Line Haul. As described in Chapter 14, "Transportation," with the Proposed Actions, southbound ferries on the Astoria route would be considered significantly adversely impacted in the AM peak hour. In addition, northbound and southbound ferries on the Astoria route would be considered significantly adversely impacted in the PM peak hour. As summarized above under "Mitigation," the significant adverse impacts during the AM peak hour could be fully mitigated increasing the operating service to every 27 minutes and increase the vessel capacity to 350 passengers per vessel on the southbound ferries on the Astoria route. Similarly, the significant adverse impacts during the PM peak hour could be fully mitigated by increasing operating service to every 38 minutes on the northbound ferries on the Astoria route. If any one of these adjustments is deemed infeasible, and no alternative and equivalent measure is identified, the corresponding ferry line haul impact would constitute an unavoidable adverse impact.

Ferry Landing As discussed in Chapter 21, "Mitigation," with the Proposed Actions, the significant adverse impacts ferry landing impacts to the Long Island City ferry landing on the Astoria Route during the AM and PM peak hours could be fully mitigated by the addition of a gangway or extending the gangway by 50 feet by 19 feet as well as the increase of operating service to every 27 minutes on the northbound and southbound ferry service in the AM peak hour and to every 38 minutes on the northbound ferry service in the PM peak hour. If any one of these adjustments or improvements is deemed infeasible, and no alternative and equivalent measure is identified, the corresponding ferry landing impact would constitute an unavoidable adverse impact.

Pedestrians

Incremental demand from the Proposed Actions would significantly adversely impact 26 sidewalks, 16 crosswalks, and 10 corners in one or more analyzed peak hours. As summarized above under "Mitigation," recommended mitigation measures relocation/removal of impediments to sidewalk, curb extensions at corners, and the widening of crosswalks would fully mitigate the impacts to seven sidewalks, four crosswalks, and nine corners. Implementation of the proposed mitigation measures would be subject to final review and approval by DOT and by the New York City Police Department for enforcement-related measures. Practicable mitigation measures could not be identified for significant adverse impacts in one or more peak hours at 19 sidewalks, 12 crosswalks, and one corner. Absent the identification and implementation of additional feasible mitigation measures that would mitigate the pedestrian impacts to the greatest extent practicable, the projected impacts would remain unmitigated and would therefore be considered unavoidable adverse impacts.

AIR QUALITY

The mobile source analyses determined that the 8-hour CO maximum concentration is predicted to exceed the National Ambient Air Quality Standard (NAAQS) and *de minimis* criteria at the intersection of Vernon Boulevard and 46th Avenue. The maximum 24-hour $PM_{2.5}$ concentrations are predicted to exceed the NAAQS at the intersection of Vernon Boulevard and 46th Avenue and the *de minimis* criterion at the intersections of Vernon Boulevard and 44th Drive and Vernon Boulevard and 46th Avenue. At the intersection of Vernon Boulevard and 46th Avenue, the total annual $PM_{2.5}$ concentration is predicted to exceed the NAAQS. Furthermore, at each of the four intersection sites analyzed, the maximum annual incremental $PM_{2.5}$ concentration is predicted to exceed the *de minimis* criterion. Implementation of traffic engineering improvements, such as signal timing changes or modifications to curbside parking regulations would provide mitigation for some of the anticipated air quality impacts. Specifically, the significant adverse impacts relative to the CO and $PM_{2.5}$ NAAQS and the CO and 24-hour $PM_{2.5}$ *de minimis* criterion would be fully mitigated. However, at each of the four intersection sites analyzed, the maximum annual incremental $PM_{2.5}$ concentration is predicted to exceed the *de minimis* criterion. Therefore, at these locations, the Proposed Actions would result in a significant adverse mobile source air quality impact.

Between the DEIS and FEIS, additional review and evaluation will be performed, which is expected to determine that the identified significant adverse impact related to the mobile source annual $PM_{2.5}$ increments will be avoided. Additional modeling of $PM_{2.5}$ concentrations (Grid Analysis) will be performed using more refined or comprehensive analysis procedures to determine the magnitude and extent of neighborhood-scale $PM_{2.5}$ impacts from mobile sources. Other updates may include the use of newer vehicle emissions model data and projections. It is anticipated that these additional measures will reduce $PM_{2.5}$ concentrations below the annual *de minimis* criterion thresholds. However, if the additional review and evaluation determines that there would still be a significant adverse mobile source air quality impact at one or more of the analyzed locations and there is no feasible or practical mitigation for these impacts, then they would constitute an unavoidable adverse impact of the Proposed Actions.

NOISE

Based on noise PCE proportional analysis, Monitoring Locations 5, 8, 13, and 16 resulted in significant noise increases (up to 3.6 dBA) and potential significant adverse noise impacts due to the Proposed Actions. Therefore, the Proposed Actions could result in significant adverse noise impacts at noise receptors other than the future projected and potential development sites. Between the Draft and Final EIS, further assessment and mitigation measures will be considered for these potential impacts. Potential mitigation measures include upgrades at the noise receptor with insulated windows and an alternate means of ventilation. It should be noted that even if above mitigation measures were determined to be feasible and practicable, some significant adverse noise impacts could potentially continue to be experienced at sensitive receptors and, as a result, be unavoidable.

CONSTRUCTION

Historic and Cultural Resources

As discussed above, potential significant adverse impacts could occur to 10 known and 8 potential architectural resources as a result of adjacent construction located within 90 feet of projected or potential development sites. It is expected DOB's *TPPN #10/88* would be implemented for the With Action development on Projected Development Site 51, in relation to the NYCL and S/NR-listed Queensboro Bridge (Resource No. 7). The other resources listed above would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites; however, since these resources are not S/NR-listed or designated NYCLs or NYCHDs, they are not afforded special protections under *TPPN #10/88*. Since the projected and potential development sites within 90 feet of these resources are not City-owned and are not anticipated to be developed in accordance with City disposition or development agreements, there is no mechanism to require the implementation of *TPPN #10/88* or preparation of a Construction Protection Plan. In the absence of such measures, the construction related impacts would constitute an unavoidable impact of the Proposed Actions.

TRANSPORTATION

The third quarter of 2030 was selected as the reasonable worst-case analysis period for assessing potential cumulative transportation impacts from operational trips from completed portions of the projected developments and construction trips associated with construction activities. An assessment of transportation generated during this peak period is presented below.

Traffic

During construction, traffic would be generated by construction workers commuting via autos and by trucks making deliveries to projected development sites. Each worker vehicle was assumed to arrive in the morning and depart in the afternoon or early evening, while truck deliveries would occur throughout the construction day. In the third quarter of 2030, construction-related traffic would be expected to peak during the 6 AM to 7AM and 3 PM to 4 PM periods. During the 6 to 7 AM peak hour, there would be 1,758 Passenger Car Equivalent (PCE) vehicle trips, including 1,512 inbound trips and 246

outbound trips. During the 3 to 4 PM peak hour, there would be 1,352 PCE trips, including 43 inbound trips and 1,309 outbound trips.

Potential significant adverse traffic impacts could occur during construction. The impacts would be within the range of impacts identified for the for operational traffic in the 2035 build year. The mitigation measures identified in Chapter 21, "Mitigation," for 2035 operational traffic impacts would be similarly effective at mitigating any potential construction traffic impacts.

Pedestrians

During the 2030 (third quarter) peak construction period, net incremental construction and operational travel demand on area sidewalks, corners, and crosswalks would be expected to total approximately 2,447 and 7,381 trips in the 6AM to 7 AM and 3 PM to 4 PM peak construction hours, respectively. These trips would be widely distributed among the projected development sites that would be under construction in the third quarter of 2030 and would primarily occur outside the weekday AM and PM peak commuter periods and weekday midday and Saturday peak periods when pedestrians at area transit facilities typically create the greatest demand.

It is expected that potential significant adverse pedestrian impacts could occur during construction and that these impacts would be within the range of impacts identified for the 2035 With-Action conditions. The mitigation measures identified in Chapter 21, "Mitigation," operational pedestrian impacts would likely be effective at mitigating any potential construction pedestrian impacts.

NOISE

The Proposed Actions would have the potential to result in significant adverse construction noise impacts throughout the Project Area. Four representative construction sites (Projected Development Site 67A, and Sites J29, J48, and J67 from the *Jamaica Rezoning EIS*) with long-term (i.e., greater than 24 months) construction duration were selected for quantitative prediction of construction noise levels during each stage of construction (i.e., Demolition/Excavation/Foundation, Building Superstructure/Exterior, and Interior Fit-Out). No significant adverse construction noise impacts are expected from construction of development sites whose construction duration would be considered short-term (i.e., less than 24 months). Based on the magnitude of construction noise during each stage and the duration of each construction stage at each development site according to the conceptual schedule, receptors expected to experience an exceedance of the construction noise impact thresholds were determined (refer to Figure 20-2).

Because the analysis is based on construction phases, it does not capture the natural daily and hourly variability of construction noise at each receptor. The level of noise produced by construction fluctuates throughout the days and months of the construction phases, while the construction noise analysis is based on the worst-case time periods only, which is conservative. The analysis is based on RWCDS conceptual site plans and construction schedules, with the possibility that the actual construction may be of less magnitude, in which case construction noise would be less than the analysis predicts.

Construction activities would follow the requirements of the *NYC Noise Control Code* (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) for construction noise control measures. Specific noise control measures would

be incorporated in noise mitigation plan(s) required under the *NYC Noise Control Code*. These measures could include a variety of source and path controls. In terms of source controls (i.e., reducing noise levels at the source or during the most sensitive time periods), the following measures would be implemented in accordance with New York City Regulations:

- Equipment that meets the sound level standards specified in Subchapter 5 of the *NYC Noise Control Code* would be utilized from the start of construction.
- As early in the construction period as logistics would allow diesel- or gas-powered equipment would be replaced with electrical-powered equipment such as welders, water pumps, bench saws, and table saws (i.e., early electrification) to the extent feasible and practicable.
- Where feasible and practicable, construction sites would be configured to minimize back-up alarm noise. In addition, all trucks would not be allowed to idle more than three minutes at the construction site based upon Title 24, Chapter 1, Subchapter 7, Section 24-163 of the *NYC Administrative Code*.
- Contractors and subcontractors would be required to properly maintain their equipment and mufflers.

In terms of path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors), the following measures for construction would be implemented in accordance with New York City Regulations:

- Where logistics allow, noisy equipment, such as cranes, concrete pumps, concrete trucks, and delivery trucks, would be located away from and shielded from sensitive receptor locations.
- Noise barriers constructed from plywood or other materials would be erected to provide shielding; and
- Path noise control measures (i.e., portable noise barriers, panels, enclosures, and acoustical tents, where feasible) for certain dominant noise equipment would be employed to the extent feasible and practical based on the results of the construction noise calculations.

Construction activity is expected to follow the requirements of the *NYC Noise Control Code*. However, the implementation of these measures would not eliminate the identified significant adverse construction noise impacts predicted to occur during hours when the loudest pieces of construction equipment are in use. Further mitigation measures will be explored between the DEIS and FEIS. If no practicable or feasible mitigation is identified, these impacts would constitute significant adverse construction noise impacts as a result of the Proposed Actions.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Resources, both natural and man-made, would be expended in the construction and operation of developments projected under the Proposed Actions including building materials used in construction; energy in the form of gas and electricity consumed during construction and operation of various mechanical and processing systems; and the human effort (time and labor) required to develop, construct, and operate various

components of project-generated development. These are considered irretrievably committed because their reuse for some other purpose would be highly unlikely.

The projected and/or potential development under the Proposed Actions also constitutes a long-term commitment of land resources, thereby rendering land use for other purposes highly unlikely in the foreseeable future. However, these land use change are compatible with existing conditions and trends in the area. None of the projected or potential development sites possess any natural resource values, and the sites are in large part developed or have been previously developed. While the funds committed to the planning and design, construction/renovation, and operation of these developments would not be available for other projects, this is not a significant adverse fiscal impact on City or private resources.

In addition, the public services provided in connection with the the Proposed Actions (e.g., police and fire protection, public education, open space, and other city resources) also constitute resource commitments that might be allocated to r other programs or projects. However, the Proposed Actions would enliven the area and produce economic growth that would generate substantial tax revenues providing a new source of public funds that offsets these expenditures. The commitment of resources and materials is also weighed against the benefits of the Proposed Actions which include supporting the community-based goals of creating a more prosperous neighborhood that promotes affordability and supports investment activity and business opportunities with community-based land use objectives, such as expanding housing opportunities by requiring permanently income restricted housing through the MIH program in new developments to support the neighborhood diversity and further the city's equity and Fair Housing goals and reinforcing the area as a regional business district by strengthening the existing economic ecosystem while also promoting the development of new job-generating uses through increased industrial and commercial density.

EFFECTS ON DISADVANTAGED COMMUNITIES

The Proposed Actions are located with census tracts identified as DACs—with both comparatively higher and lower burdens and vulnerabilities—as well as non-DACs in the study area. As disclosed in this EIS the Proposed Actions have the potential to result in significant adverse impacts in the following CEQR technical areas: community facilities and services (elementary schools, intermediate schools, libraries, early childhood programs); open space; shadows; historic and cultural resources; transportation (traffic, transit, pedestrian conditions, and ferry service); mobile source air quality; noise; and construction. However, the Proposed Actions would not result in a disproportionate pollution burden on DACs as these potential impacts would occur in non-DACs or in DACs with “lower burdens and vulnerabilities,” and would not cause a greater or more severe pollution burden in DACs as compared to non-DACs with the exception of air quality and noise impacts that are being further evaluated between the DEIS and the FEIS to reduce or eliminate these impacts.

CONCEPTUAL ANALYSES

AUTHORIZATION FOR PUBLIC PLAZA FLOOR AREA BONUS

Development under the proposed authorization to utilize the public plaza floor area bonus is not expected to result in any new significant adverse impacts as compared to the With Action condition. The proposed authorization is intended to incentivize the provision of publicly accessible open space in new developments in exchange for a floor area bonus and could result in additional development and greater maximum building heights. While the increments are not expected to be substantial and significant adverse impacts are generally not anticipated, projects requesting the authorization for the public plaza floor area bonus would undergo a site-specific environmental review to assess the potential effects of the proposed authorization in accordance with the *CEQR Technical Manual*. Should sites other than development sites assessed in the conceptual analysis utilize the proposed authorization, additional areas of assessment may be warranted.

AUTHORIZATION FOR MODIFIED BULK IN MIXED-USE DEVELOPMENTS THAT INCLUDE A SCHOOL

The proposed authorization to allow bulk modifications for new mixed-use developments that include a school are not expected to result in new significant adverse impacts as compared to the With Action condition. The proposed authorization would provide additional flexibility in building envelopes for developments utilizing the new school floor area exemption, which would be allowed in the expanded LIC Special District under the Proposed Actions. The proposed authorization would not generate additional floor area, but could result in changes to building bulk, potentially affecting technical areas related to building bulk and height, such as shadows, urban design, and stationary source air quality. Although significant adverse impacts are generally not anticipated, projects requesting the proposed authorization would undergo a site-specific environmental review to assess the potential effects of the proposed authorization in accordance with the *CEQR Technical Manual*.

REVOCATION OF THE SILVERCUP WEST RESTRICTIVE DECLARATION

The Proposed Actions would expand the boundaries of the LIC Special District and incorporate the Silvercup West site (Block 477, Lots 13, 15, 20, and 24), currently mapped as a Special Mixed Use District (MX-9). Additionally, the Proposed Actions would amend the Hunters Point Waterfront Access Plan (WAP) to include the Silvercup West site. While no development is projected in the Reasonable Worst-Case Development Scenario (RWCDS), future development in this location could occur, but would require the revocation of an existing RD governing development on the site.

The RD was recorded against the property when it was rezoned in 2006 to an underlying M1-5/R10 district as part of the Silvercup West Rezoning. The RD requires development to adhere to an approved site plan, restricts building forms to specific envelopes, and limits the overall density of the site to an FAR of 7.9, which is lower than the FAR of 10 that is allowed under the underlying M1-5/R10 zoning district. Revocation of the RD affecting the Silvercup West site is a discretionary approval that requires a site-specific environmental review. In the event the RD recorded against the property is revoked, the provisions of the underlying M1-5/R10 zoning would govern development on the site.

Development would have a maximum permitted FAR of 5.00 for manufacturing and commercial uses and a maximum FAR of 10.0 for residential and community facility uses.

The revocation of the RD would result in a net increase up to a FAR of 2.1 or approximately 550,000 zoning square feet (zsf) allowing substantially more development on the site and building and open spaces arranged in a site plan that may differ from what is currently allowed. Further, the site currently contains the New York Architectural Terra Cotta Works Building, listed as a New York City landmark and on the State and National Registers of Historic Places (S/NR). Under the RD, the development would be constructed around the historic building, which would be protected and surrounded with a public plaza. The conceptual analysis concludes that the revocation of the RD would require a future environmental review and that the review could disclose the potential significant adverse impacts.

REZONING OF THE CON EDISON LEARNING CENTER SITE

Under the Proposed Actions, a portion of Block 488, Lot 114 would be acquired by the City of New York for the potential future development of waterfront open space. Mixed-use development of the Con Edison Learning Center site could occur in the future and would likely require discretionary approvals subject to environmental review, including zoning changes to allow mixed-use development, including residential use. Residential use is currently not allowed. The rezoning of the Con Edison Learning Center site was not analyzed as part of the Proposed Actions, and the site was therefore not included as a projected development site in the RWCDS. If discretionary actions are sought in the future to facilitate redevelopment of this site, it is anticipated that site-specific environmental review would be conducted at the time specific actions are sought, and impacts would be studied when a specific development proposal is known.

If a future application were to propose a rezoning of the site to an M1-6A/R9, consistent with zoning district proposed on adjacent sites to the south under the Proposed Actions, it would have a maximum permitted FAR of 9.02 with Mandatory Inclusive Housing (MIH). The development on the site could reach a maximum base height of 125 feet or 12 stories, before setting back, and would have no maximum building height. The potential rezoning could facilitate more than 4 million zsf of mixed use development with affordable housing, community facility, and commercial space. The predicted increment has the potential to result in significant adverse impacts, requiring the preparation of an EIS pursuant to the New York State Environmental Quality Review Act (SEQRA) and in accordance with the guidance in the *CEQR Technical Manual*. A specific build year is not assumed for the Future Discretionary Action Scenario; however, it is expected to occur after the 2035 build year for the Proposed Actions.

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