A. INTRODUCTION

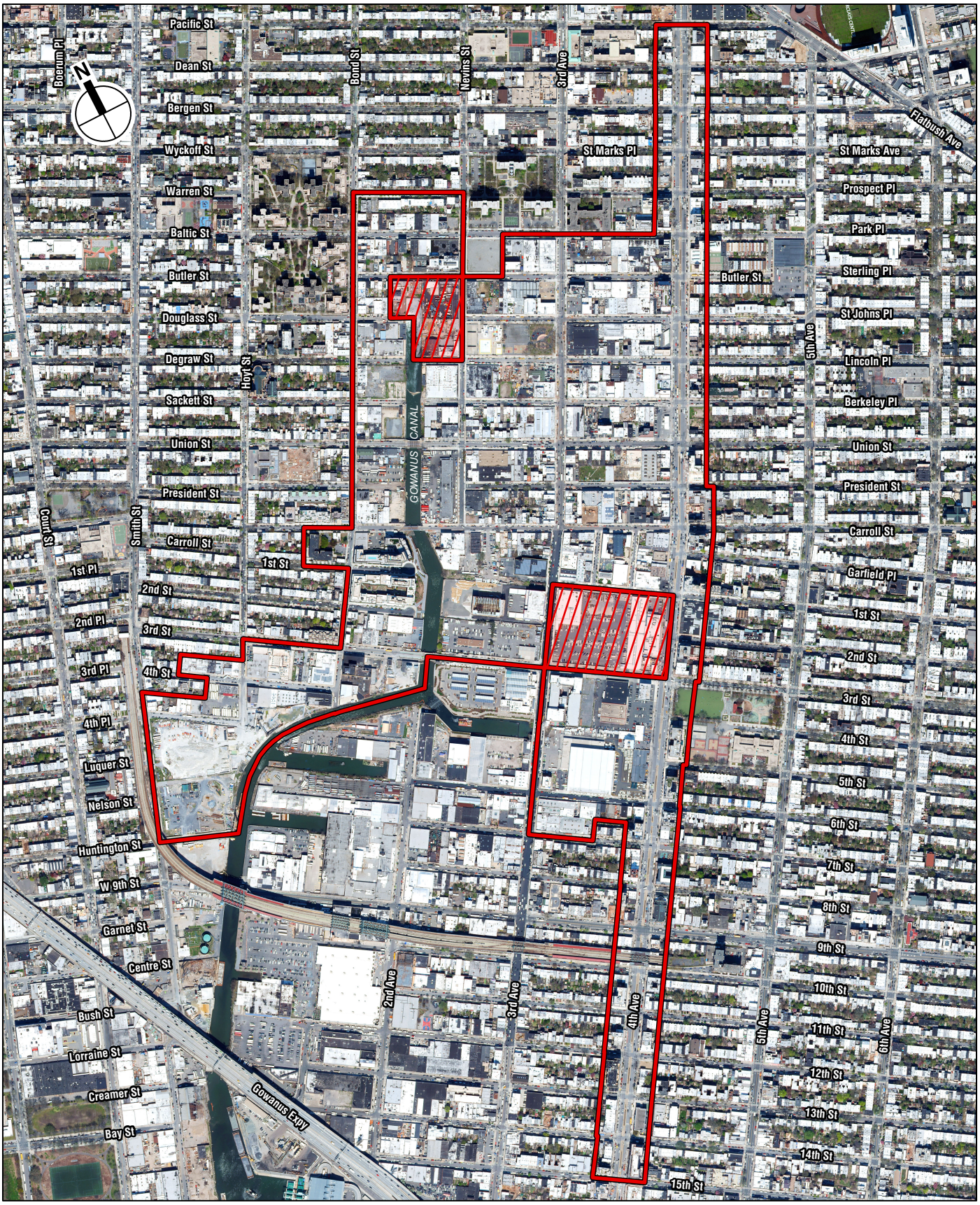
The City of New York, acting through the Department of City Planning (DCP), together with the Department of Housing Preservation and Development (HPD), the Department of Parks and Recreation (NYC Parks), and the Department of Citywide Administrative Services (DCAS) is proposing a series of land use actions—including zoning map amendments, zoning text amendments, City Map amendments, and disposition of City-owned property (collectively, the "Proposed Actions")—to implement land use and zoning recommendations in the Gowanus Neighborhood Plan (the "Neighborhood Plan" or "Plan"). The area subject to the Proposed Actions (the "Project Area") is generally bounded by Bond, Hoyt, and Smith Streets to the west; 3rd and 4th Avenues to the east; Huntington, 3rd, 7th, and 15th Streets to the south; and Warren, Baltic, and Pacific Streets to the north (see **Figures S-1** and **S-2**). The Proposed Actions would affect approximately 82-block area in the Gowanus neighborhood of Brooklyn, Community Districts 2 and 6.

The Proposed Actions are intended to facilitate development patterns that meet the long-term vision of a thriving, inclusive, and more resilient Gowanus where existing and future residents and workers can participate in civic, cultural, and economic activities and where a wholly unique resource—the Gowanus Canal—can thrive and play an active role in that equitable and sustainable growth.

Overall, the Proposed Actions are expected to result in a net increase of approximately 8,495 dwelling units (DU), 735,000 square feet (sf) of commercial space, 251,000 sf of community facility space (inclusive of a new, 500-seat public school), and approximately six acres of new open space, including over an acre of newly mapped parkland. The Proposed Actions would result in net decreases of approximately 132,000 sf of warehouse space, 125,000 sf of self-storage space, and 60,000 sf of other industrial space. On privately owned sites, the Proposed Actions could result in a net increase of approximately 7,500 DUs, including approximately 2,000 permanently affordable DUs for lower-income New Yorkers in accordance with the Mandatory Inclusionary Housing Program (MIH).[1] On City-owned sites, the Proposed Actions would result in approximately 1,000 affordable DUs, designated to serve a wide range of incomes (see Section G, "Analysis Framework," for discussion of the Reasonable Worst-Case Development Scenario [RWCDS]).

Over the past four years, thousands of stakeholders, residents, workers, business owners, and elected officials have participated in over 100 hours of meetings and workshops, including large

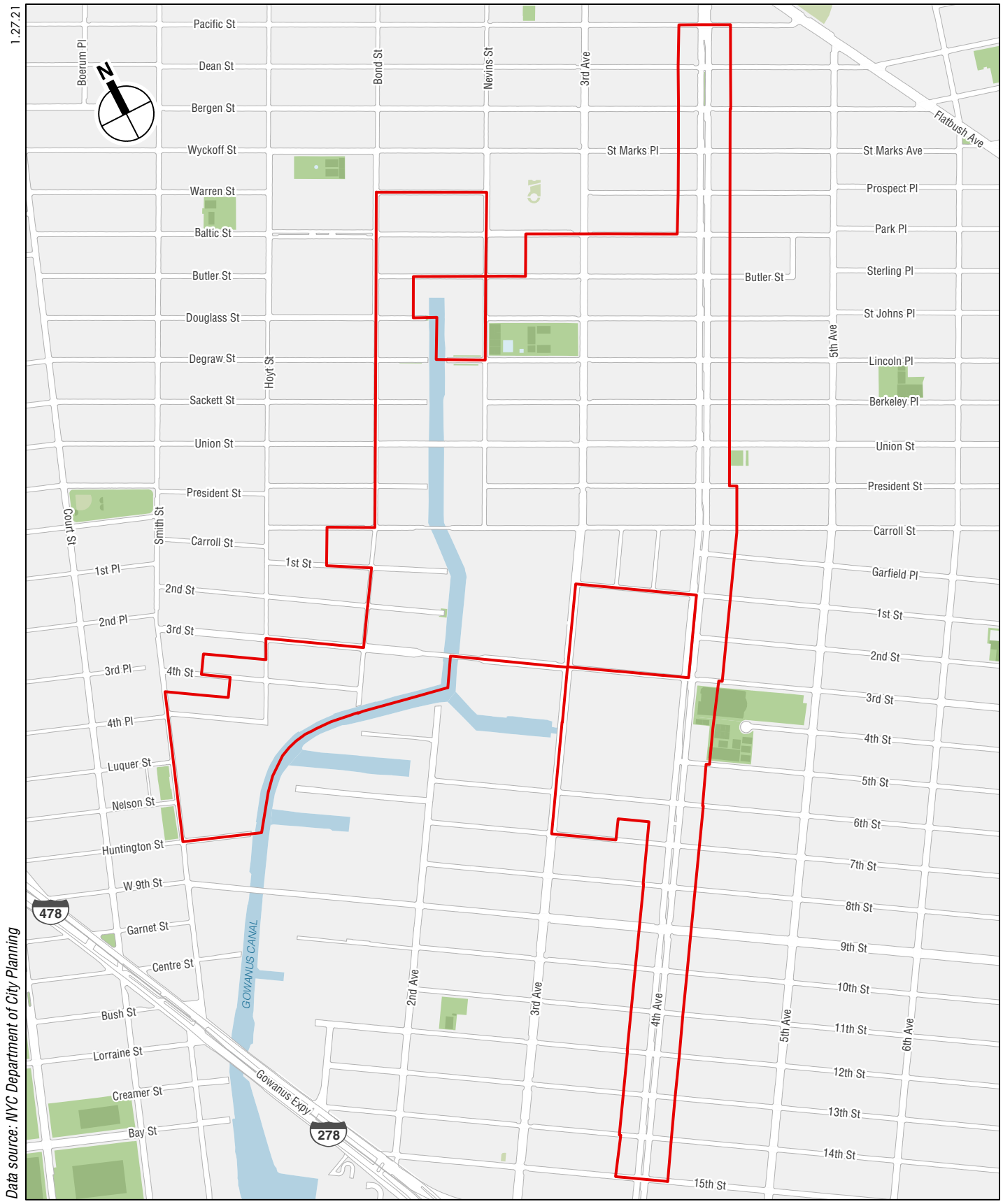
[1] A minimum percentage of housing created would be permanently affordable under MIH. The number of affordable units would be determined by a number of factors, including the MIH option ultimately selected for the Proposed Actions. The number of affordable units shown here is approximate and based on a percentage of floor area under the RWCDS, which is assumed to be MIH Option 1 (25 percent of residential floor area).



Aerial

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Figure S-1



Project Location

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Figure S-2

public events and 26 working group meetings covering five broad topics (Arts and Culture, Housing, Industry and Economic Development, Public Realm, and Sustainability and Resiliency). Coupled with DCP's first online public engagement platform (*PlanGowanus.com*), members of a broad cross-section of the community have articulated challenges and needs that Gowanus faces today and in the future. The Proposed Actions evolved from the *Gowanus PLACES Study* (the "Study"). In October 2016 DCP, together with other City agencies, launched a study of the neighborhood surrounding the Gowanus Canal. The Study builds upon a number of previous reports and planning efforts, including *Bridging Gowanus*, which was led by New York City Council Members (CM) Brad Lander and Stephen Levin from 2013 to 2015.

The Study is a collaboration between the City of New York and local elected officials and community members that takes a broad, comprehensive look at ways to support existing and future resiliency and sustainability efforts; encourage and expand neighborhood services and amenities; improve streetscapes, pedestrian safety, and access along the Canal; explore ways to support and develop space for job-generating uses—including industrial, arts, and cultural uses; promote opportunities for new housing with required permanently affordable housing and protect residential tenants against harassment and displacement; and coordinate necessary infrastructure improvements throughout the area to support the continued cleanup of the Gowanus Canal to accommodate existing and future needs.

Based on an iterative process of engagement and feedback DCP, in cooperation with other City agencies, developed *Gowanus: A Framework for a Sustainable, Inclusive, Mixed-use Neighborhood* (the "Framework"), a comprehensive framework of goals and strategies, including recommended land use changes that would be developed into a comprehensive rezoning proposal and implemented as part of an overall Gowanus Neighborhood Plan. The Framework was released in June 2018.

Through refinement and community input on the Framework, a draft Neighborhood Plan and draft zoning proposal were developed and shared with the public in February 2019. DCP held pre-certification meetings in the fall and winter of 2020 to provide updates on key aspects of the zoning proposal and to support the community's upcoming formal review of the proposal. DCP will continue to work with local elected officials and community stakeholders in refining the proposal based on the ongoing community process and advancing aspects of the Framework toward a Neighborhood Plan. A Neighborhood Plan is designed to implement a shared vision by aligning community and government resources and effectuating zoning and land use changes through the City's Uniform Land Use Review Procedure (ULURP) process, where the community and stakeholders will continue to have many opportunities to provide comments and input and shape the final Neighborhood Plan.

The Proposed Actions are the culmination of many years of planning work in and around Gowanus by local community members, elected officials, and City agencies, and reflect DCP's ongoing engagement process with community boards, residents, business owners, community-based organizations, elected officials, and other stakeholders to achieve the following land use objectives:

- Support existing clusters of economic activity and promote development of new job-generating uses through increased industrial and commercial density and updated parking and loading regulations in key areas;

- Provide opportunities for the creation of new, permanently affordable housing with options for low- and moderate-income households, while bringing existing residences into conformance with zoning;
- Facilitate the creation of new waterfront open space and neighborhood parks along the Canal through the establishment of a Waterfront Access Plan (WAP) and changes to the City Map;
- Facilitate several shared neighborhood-wide goals, including promoting a walkable, vibrant, mixed-use neighborhood, brownfield remediation, and activation of key areas by allowing higher densities and a broader range of uses and incentivizing or requiring non-residential uses in select areas;
- Create special rules to establish limits for height, bulk envelope, and density that consider neighborhood context as well as other shared goals, including encouraging variation and diversity of future programing, open spaces, site planning, and design along the Canal; and
- Support a successful Neighborhood Plan by institutionalizing a comprehensive planning framework that is inclusive of relevant capital infrastructure needs and services to support current demand and future growth.

B. REQUIRED APPROVALS AND REVIEW PROCEDURES

The Proposed Actions include discretionary land use approvals that are subject to review under ULURP, Section 200 of the City Charter, and the CEQR process. The discretionary approvals are summarized below.

- ***Zoning Map Amendments.*** The Proposed Actions would replace all or portions of existing R6, R6B, R8A, R8A/C2-4, C8-2, M1-1, M1-2, M2-1, and M3-1 zoning districts with R6A, R6B, M1-4/R6A, M1-4/R6B, M1-4/R7-2, M1-4/R7A, M1-4/R7X, C4-4D, and M1-4 zoning districts. The Proposed Actions would also eliminate an existing C2-4 overlay along 4th Avenue within the Project Area, and replace it with the C4-4D district within the Special Gowanus Mixed-Use District (GSD).
- ***Zoning Text Amendments.*** The Proposed Actions include amendments to the text of New York City's Zoning Resolution (ZR) to establish the GSD within the Project Area, create the Gowanus WAP for waterfront blocks within the Project Area, remove the Special Enhanced Commercial District – 1 (EC) within the Project Area, and amend Appendix F of the ZR to apply MIH to proposed R6A, M1-4/R6A, M1-4/R6B, M1-4/R7-2, M1-4/R7A, M1-4/R7X, and C4-4D zoning districts to require a share of new housing to be permanently affordable where significant new housing capacity would be created. In addition, the text of the ZR would be amended to:
  - create a Special Permit to allow hotels in the Project Area (as permitted by the underlying zoning district regulations);
  - create an Authorization to allow for the exemption of school floor area and modified bulk under certain conditions throughout the GSD;
  - create an Authorization to modify the use, streetscape, and bulk envelope (height and setback) regulation) for existing, large mixed-use sites seeking to redevelop while integrating new development with substantial, existing building(s); and
  - create an Authorization to allow an increase in density in exchange for identified transit improvements;
  - create a Chairperson Certification to allow an increase in density in exchange for identified transit improvements at the Union Street (R train) subway station.

- ***Disposition Approval and Urban Development Action Area Project (UDAAP) Designation.*** Urban Development Action Area Project (UDAAP) designation of City-owned property on Block 471 and project approval for the purpose of disposition and development pursuant to the proposed zoning is sought by HPD. In addition, HPD is seeking an amendment to a previously approved UDAAP designation for a City-owned property on Block 1028, Lot 7, which requires approval by the City Council and Mayor.
- ***City Map Amendments.*** The Proposed Actions include amendments to the City Map to acquire and map portions of Block 471, Lots 1 and 100, as parkland and streets; remove the "Public Place" designation on Block 471; and demap 7th Street between Smith Street and the Gowanus Canal.
- ***Disposition of City-Owned Property.*** The Proposed Actions include the disposition of City-owned property under the jurisdiction of DCAS. DCAS, on behalf of the New York City Economic Development Corporation (EDC), is seeking the disposition of development rights from a City-owned property located on Block 456, Lot 29 pursuant to the proposed zoning.

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

Once referred to as Gowanus Creek, the Gowanus Canal was originally a wide tidal creek with numerous small tributaries that extended northeast from its mouth at Lower New York Bay south of Red Hook. The creek system included Coles Mill Pond, Dentons Mill Pond, and Freeks Mill Pond. The head of the Gowanus Creek once was home to a native village named Werpos, and in 1679 a Dutch missionary wrote of eating the best oysters in the region along the Gowanus Canal.

In 1846, the Brooklyn Common Council engaged Major David B. Douglass to draw up plans to drain "the Gowanus Meadow" to "accommodate a population of 200,000 inhabitants." Before these residential development plans were set in motion, Daniel Richards, an upstate developer who founded the Atlantic Dock Company in 1840, received permission to fill, dredge, and install a bulkhead to create the approximately one-mile-long Gowanus Canal. That plan was approved in 1849 by the Brooklyn Common Council and authorized by the State of New York a month later to open the area to barge traffic. The plans resulted in increased circulation and flushing in the Canal, and facilitated the drainage of the adjacent lowlands for development. Construction of the Canal began in the 1860s with the installation of bulkheads and dredging of the creek. The Canal included five turning basins branching to the east of the main channel, which allowed vessels to turn and/or reverse direction. The First Street Turning Basin, one of the five original turning basins, was approximately 475 to 560 feet long by 50 and 60 feet wide (based on historical aerial photographs).

By 1870, the waterbody had been transformed to resemble its current configuration and was serving as a major industrial waterway by which materials arrived to support area industries. By the 1880s, the banks of the Canal had transitioned from gristmills and oyster exporters to a wide range of industrial activities, including heavy manufacturing of coal and oil, foundries, paint and ink factories, electroplating shops, and paper mills, as well as the storage and distribution of materials used to build and maintain adjacent residential neighborhoods.

The short-term industrial success of the Canal came with a long-term downside: sewage and industrial wastes from the surrounding drainage area were discharged directly into the Canal

without treatment, and the natural marshlands and freshwater streams were replaced with combined sewers and storm drains.

The urbanization of the drainage area also contributed to an estimated three-fold increase in the annual runoff volume and a six-fold increase in the peak runoff rate to the waterbody. Without the surrounding marshland buffer or freshwater flow, the Canal lacked the natural response mechanisms that might have helped absorb the increased hydraulic and pollutant loads from the local industrial toxins, untreated sewage, and increasing car and truck pollution. The Canal's limited tidal circulation and exchange with New York Harbor waters allowed pollutants to accumulate, and water quality deteriorated to such an extent that the Canal became notorious as a polluted waterway.

From its inception, wet weather events proved too much for the Canal, and combined with the growth of Brooklyn and the resulting changes in drainage to the Canal, it became flooded with mud and sediments, making it difficult to navigate outside of high tide. Efforts to address water quality in the Gowanus Canal date back to the late 1800s, when the City contracted for the design of a tunnel between the head of the Canal and Buttermilk Channel to improve circulation and flush pollutants from the Canal. In 1911, the 6,280-foot Gowanus Canal Flushing Tunnel to Buttermilk Channel was constructed. The Gowanus Canal Flushing Tunnel (or "Flushing Tunnel") pumped polluted water from the head of the Canal to Buttermilk Channel with the objective of flushing the stagnant canal water out to New York Harbor.

Peak industrial activity occurred roughly around the end of World War II, when approximately six million tons of cargo per year were handled by the Canal. However, by 1950, the Canal was handling a fraction of its previous freight volume. Structural changes, including suburbanization, decentralization, and containerization—combined with larger ships and global changes in production—led to a decline in industrial activity throughout the City and around the Canal. The Flushing Tunnel functioned until the mid-1960s, when service was suspended due to mechanical failure and, once again, the Canal returned to a more polluted state.

From 1970 to 1990, the Gowanus neighborhood saw its population drop from approximately 33,000 to 24,000, reflecting an overall decrease of the City's population. In more recent decades, broad economic and demographic trends have led to a resurgence in nearby communities and interest in both working and living in and around the Canal area. However, the nature of activity along the Canal has changed.

The reactivation of the Flushing Tunnel in 1999 under the New York City Department of Environmental Protection's (DEP) Inner Harbor Combined Sewer Overflow (CSO) Facility Plan resulted in an improvement in the Canal's water quality and aquatic habitat. At this time, the direction of flow was reversed to bring more highly oxygenated water from Buttermilk Channel to the head of the Canal.

The Canal's designation as a Federal Superfund Site by the U.S. Environmental Protection Agency (EPA) in 2010 and Superstorm Sandy in 2012 led to increased attention and community engagement on the potential to remediate and improve the infrastructure in the Gowanus area and advanced discussions about the Gowanus' future among members of the community, elected officials, and City, state, and federal agencies.

The Superfund remedy calls for the removal by dredging of contaminated sediment that has accumulated as a result of industrial and sewer discharges from the bottom of the Canal. The dredged areas would then be capped. In 2013, EPA issued a Record of Decision (ROD) identifying actions to be undertaken by various parties to remediate contamination in the Canal. As part of the

ROD, EPA mandated the design and construction of two CSO facilities known as the Head End Facility and the Owls Head Facility.

The Head End Facility will be an eight-million-gallon (mg) underground tank that would increase CSO capture for overflows that would otherwise be discharged from CSO outfall RH-034 at the "head end," or northernmost portion of the Canal. Construction of the Head End Facility would require the lease or acquisition of three privately owned parcels adjacent to the Canal, and is proposed to be located at 242 Nevins Street (Block 418, Lot 1) and 234 Butler Street (Block 411, Lot 24), with an area for construction staging at 270 Nevins Street (Block 425, Lot 1).

The Owls Head Facility would be a 4-mg tank that would increase capture for overflows that would otherwise be discharged from CSO outfall OH-007. The Owls Head Facility would be located at the middle of the Canal (approximately ½-mile south of the northernmost portion of the Canal) near the northern terminus of 2nd Avenue near the 4th Street turning basin. Construction of the Owls Head Facility would require the use of a City-owned parcel (Block 977, Lot 3) and the lease or acquisition of up to four privately owned parcels adjacent to the Canal. The Owls Head Facility is proposed to be located at 2 2nd Avenue (Block 977, Lot 3), 110 5th Street (Block 990, Lot 21), 122 5th Street (Block 990, Lot 16), 22 2nd Avenue (Block 990, Lot 1), and 5th Street (Block 977, Lot 1), with portions of this area used for construction staging. The EPA-mandated installation of the CSO tanks would require the lease or acquisition of up to seven properties to support the facilities and serve as construction staging areas.

In addition, the ROD calls for the "excavation and restoration of approximately 475 linear feet of the filled-in former First Street Turning Basin." Along with the removal of contaminants from the Canal, restoration of the 1st Street Turning Basin will mitigate the loss of surface water area as a result of new bulkhead encroachment into the Canal.

In 2014, DEP completed additional improvements to the Flushing Tunnel and installed new pumps that delivered an average flow of 200 million gallons per day to improve water circulation. Improvements in water quality also resulted from more stringent discharge standards, local community stewardship efforts, and interest in the Canal.

Remedial efforts are also underway at three former manufactured gas plants (MGP) along the Canal that contributed to its contamination. The New York State Department of Environmental Conservation (DEC) and the Mayor's Office of Environmental Remediation (OER) have developed remedial and incentive programs to facilitate the investigation and remediation of brownfield sites.

Consistent with Citywide trends over the past three decades, interest in working and living in older industrial neighborhoods, such as the area surrounding the Canal, has returned. Absent the provision of additional residential capacity and space for jobs, it has been and will continue to be increasingly difficult to accommodate this growth in Brooklyn. Strong demand for housing Citywide has played out locally by pushing up prices and limiting housing that is affordable for households at lower incomes. At the same time, over the past few decades, the City has experienced a rapidly growing and diversifying economy. Although a small portion of the land around the Canal remains industrial in character, manufacturing and industrial uses are no longer present in most locations adjacent to the Canal. Commercial businesses, offices, and other uses that serve the surrounding residential communities have increased alongside long-time resident artists and a small number of remaining industrial tenants. The reinvestment in and reactivation of older loft buildings for a variety of commercial office and artist spaces indicate a growing local demand for new office and other work spaces.

The COVID-19 pandemic has led to economic crises around the world and in New York City. It has highlighted broad inequities in our society across racial and socioeconomic spectrums. The pandemic has also elevated the importance of complete neighborhoods to a community's health and resiliency, including walkability, housing security, open spaces, and active places. The underlying aspects that make New York City successful have not changed and the trends that caused an unprecedented housing crisis before the pandemic are not anticipated to abate. New homes near jobs and proximate to transit will continue to be critical goals of the City as it plans its post-pandemic recovery and seeks to create a more just, equitable, and sustainable city.

COMMUNITY ENGAGEMENT AND INTERAGENCY PARTICIPATION

In May 2014, Mayor Bill de Blasio released *Housing New York*, the Mayor's plan to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure investments to foster a more equitable and livable New York City through an extensive community engagement process. In 2018, *Housing New York 2.0* was released, detailing progress and updates since 2014 on the construction and preservation of affordable housing in New York City. *Housing New York* calls for neighborhood studies to be undertaken in communities across the five boroughs that offer opportunities for new affordable housing.

Gowanus was selected based on previous planning efforts the community has engaged in over the past decade, including previous DCP studies in 2009 and *Bridging Gowanus* from 2013 to 2015, which was led by local elected officials to create shared goals and priorities for the area's future development. Gowanus has unique assets and features that could be leveraged to accomplish many local and Citywide goals to address contaminated land and to develop housing (including a significant amount of permanently affordable housing), new commercial and industrial space, services, jobs, and open space in an area with excellent transit access.

In October 2016, the City launched the Study of the neighborhood surrounding the Gowanus Canal. The planning process was a collaboration with local elected officials, community boards, community members, and City agencies—including HPD, NYC Parks, the Landmarks Preservation Commission (LPC), Department of Transportation (DOT), School Construction Authority (SCA), Department of Education (DOE), DEP, Small Business Services (SBS), EDC, Mayor's Office of Recovery and Resiliency, Mayor's Office of Sustainability (MOS), New York City Department of Emergency Management (NYCEM), and Department of Cultural Affairs (DCA).

The Study sought to foster a thriving neighborhood by encouraging a robust local economy anchored by a mix of uses and businesses while creating opportunities for new housing with affordable housing in appropriate locations. Because of the unique characteristics of the Gowanus area, including the prominence of the Canal and the implications of its Superfund designation, and at the request of community members, a multi-pronged outreach approach was developed to undertake the Study.

Thousands of community stakeholders, residents, workers, business owners, and elected officials participated in over 100 hours of meetings and workshops that began in 2016, including large public events and working group meetings covering five broad topics (Arts and Culture; Housing, Industry, and Economic Development; Public Realm; Sustainability; and Resiliency). Coupled with *PlanGowanus.com*, a broad cross-section of community members articulated challenges and needs that Gowanus faces today and in the future. Participants set goals and objectives and generated ideas about policies and investments to achieve a thriving, more resilient neighborhood. Through this iterative process of engagement and feedback, DCP and its partner agencies

developed the Framework, including recommended land use changes that would be developed into a comprehensive rezoning proposal and implemented as part of an overall Gowanus Neighborhood Plan.

The Framework is comprised of goals and strategies to make Gowanus a cleaner, greener, and more inclusive neighborhood. The policies and proposals aim to support the evolution of Gowanus into an eco-neighborhood where existing and future residents and workers can live, work, and play with a minimal carbon footprint and impact on climate change.

The land use framework outlined in the broader Framework is a set of guiding principles related to use, density, bulk, and waterfront access, and was intended to provide standards for developing and evaluating proposals for future land use changes. These principles were shaped by shared goals, the opportunities and challenges of achieving those goals, and an understanding of the entire Gowanus neighborhood.

The parameters of the land use framework were developed to encourage cleanup and redevelopment of sites while balancing a variety of goals. The parameters include:

- Strengthen existing clusters of light industrial and commercial activity and promote new, job-generating uses—including industrial, arts, and cultural uses;
- Encourage and reinforce a vibrant, live-work neighborhood by balancing the preservation of neighborhood scale and encouraging growth that promotes a mix of uses and allows for improvements to the public realm and local services while affirming the qualities that make the neighborhood distinct; and
- Promote the creation of an active, accessible, resilient, and diverse waterfront esplanade that celebrates the unique nature of the Canal and is flanked by a mix of uses that include new permanently affordable housing as well as commercial, artist, and manufacturing space.

WATERFRONT PUBLIC ACCESS

Redevelopment of sites on the Canal creates an opportunity to achieve public access at the Canal's edge. The framework identified parameters for the creation of public open space along the Canal in conjunction with residential and non-residential development. The parameters are intended to:

- Encourage street end design that is flood-resilient and ensures continuity of public access across sites;
- Allow and promote a mix of uses on ground floors leading to and along the Canal to support an active and lively waterfront;
- Relate the height of new buildings to the lower-scale neighboring context along upland frontages such as Bond Street;
- Set back higher portions of buildings to ensure light and air to side streets and the Canal;
- Ensure continuity of public access at bridge crossings with grade-change constraints; and
- Ensure access of light and air to inner courtyards and the Canal by staggering building heights and keeping street wall heights low.

USE, DENSITY, AND HEIGHT

In order to facilitate a dynamic, mixed-use neighborhood that considers block-specific conditions, the Framework identified parameters for use, density, and height. The land use framework recommended areas suitable for new residential or mixed-use development, in addition to areas

proposed to be maintained primarily for continued industrial and commercial activity. The Framework broke these into three broad areas, each with its own recommendations: Industrial and Commercial, Enhanced Mixed-Use, and the Canal Corridor. The interconnectedness of these areas to each other and to the adjacent neighborhoods, which include thriving residential communities and active retail corridors (e.g., 4th Avenue and Smith Street), and the vision of a mixed-use neighborhood were taken into consideration. Recommendations within these three areas were partly derived from and respond to block- and neighborhood-wide characteristics—including current and past land use patterns, market trends, site contamination, and block and lot size and orientation—and are mutually supportive in contributing to the overall objective of a dynamic, mixed-use neighborhood.

Analysis of existing land use and business activity revealed that while much of the former industrial neighborhood is no longer comprised of heavy manufacturing uses, clusters of light industrial, commercial, and arts-related activity remain in portions of the midblocks between 3rd and 4th Avenues and west of the Canal along 4th and Hoyt Streets. Therefore, in some areas, it was determined that maintenance of the current restriction on residential use is necessary to support the continuation of these uses. Other areas are characterized by lower levels of industrial and commercial activity, higher levels of vacancy and underutilization, and existing pockets of residential uses. DCP proposes to rezone these areas to permit a mix of uses, including residential, commercial, retail, light industrial, community facility, and artist spaces.

DRAFT ZONING PROPOSAL

Building upon the Framework, DCP held an open house and presented the draft zoning proposal to the public in February 2019, and in the subsequent months continued to work with local elected officials and community stakeholders in further refining the draft zoning proposal. DCP held pre-certification meetings at the end of 2020 to provide updates on key aspects of the zoning proposal. The draft zoning proposal is now being considered as part of the Proposed Actions for the Gowanus Neighborhood Rezoning and Related Actions.

PROJECT AREA

The Proposed Actions affect an approximately 82-block area (see **Figure 1-1**) surrounding the Gowanus Canal and a segment of 4th Avenue. The area directly affected by the Proposed Actions, or Project Area, is generally bounded by Bond, Hoyt, and Smith Streets to the west; 3rd and 4th Avenues to the east; Huntington, 3rd, 7th, and 15th Streets to the south; and Warren, Baltic, and Pacific Streets to the north. The area encompasses approximately 200 acres, and is defined by the 1.8-mile-long, man-made Gowanus Canal, which splits the neighborhood, and the major north–south and east–west corridors that connect the upland areas to the surrounding neighborhoods. Major corridors and areas of the neighborhood are described below.

GOWANUS CANAL

The approximately 100-foot-wide Canal defines the eastern edge of the Project Area from Huntington Street to 3rd Street and divides the Project Area from 3rd Street to Butler Street, where it terminates. The former industrial waterfront is a mix of commercial activity, parking lots, storage, and light industrial uses interspersed with vacant buildings and land. The recently completed 363-365 Bond Street residential developments, which were facilitated by a rezoning in 2010, are the first new residences along the Canal, and include a publicly accessible esplanade, community facility space, and affordable housing, all with an emphasis on resilient design. Connections across the Canal are limited within the Project Area, with only three bridges

traversing the waterbody, including only one (at 3rd Street) that allows westbound traffic. The area surrounding the Gowanus Canal is currently zoned M1-2, M2-1, and M3-1.

Designated as a Superfund Site in 2010 by EPA, remediation and cleanup of the Canal's contaminant-contributing upland sites are critical to the neighborhood's future. A high water table increases the risk of cross-property contamination and the cost of remediation and construction. Because most waterfront sites are under private ownership, access and views to the Canal are limited to public street ends, bridges, and recently constructed waterfront esplanades. Access to water-based recreational activities in the Canal is limited to the end of 2nd Street. As part of the Superfund remedy, two former lateral canals that have been filled with contaminated material over time would be reused. The former lateral canals are located at 1st Street, between the Canal and 3rd Avenue, and at 5th Street (east of the 3rd Avenue Bridge). Formerly used by boats and barges for turning movements, these basins would increase the amount of shoreline in the community.

4TH AVENUE

At 120 feet wide, 4th Avenue is the widest street corridor running through the neighborhood and is one of the main thoroughfares in Brooklyn. The D/N/R subway lines run below 4th Avenue and include local stops at Union Street and 4th Avenue/9th Street, which is also an F/G subway station. Uses along 4th Avenue vary and include one-story semi-industrial uses, various commercial uses (including local retail shops), and residential apartment and walk-up buildings.

A portion of 4th Avenue was rezoned in 2003 to R8A/C2-4. That rezoning was implemented at the request of the community to protect the scale of development in Park Slope and to allow for housing growth along 4th Avenue. The rezoning leveraged 4th Avenue's width and access to transit to accommodate new housing, albeit without any zoning tools to encourage or require the inclusion of affordable housing. New residential developments are not currently required to provide affordable housing.

In response to new housing construction with blank walls along 4th Avenue and no retail or services as a result of the rezoning, at the request of the community, DCP initiated a follow-up zoning text amendment in 2011 to map the first Enhanced Commercial District in the City to require commercial and community facility uses on the ground floor and apply transparency and curb cut location requirements for ground floors in new developments to enhance the pedestrian streetscape. The remaining portion of 4th Avenue within the Project Area, between Douglass Street and 6th Street, is currently zoned M1-2 and C8-2.

3RD AVENUE

3rd Avenue is a major corridor in the Project Area and one of two truck routes that serve Gowanus and the Southwest Brooklyn Industrial Business Zone (IBZ) to the south of the Project Area. The width and uses along 3rd Avenue vary within the Project Area.

The northern portion of 3rd Avenue from Baltic to Union Streets is a narrow, 70-foot-wide street. Uses along this portion include a hotel and parking lot, a gas station, former industrial buildings reused for commercial activities, and industrial or commercial businesses (including distribution/warehousing, contractor's storage yards, or fuel oil truck parking and repair).

Between Union Street and 1st Street, 3rd Avenue continues as a narrow street lined with multi-family and mixed-use walkup apartment buildings. As 3rd Avenue gently curves, it widens to 80 feet at 3rd Street. Uses along this segment become more industrial and commercial with self-storage, utility facilities, the American Can Factory (a repurposed former industrial loft building containing manufacturing, arts-related, and event space), a hotel, and a school.

EAST–WEST CORRIDORS

Bridge connections across the Canal and neighborhood are limited, with three bridges traversing the waterbody, including only one (at 3rd Street) that allows westbound traffic. Below are descriptions of the key corridors that provide important connections between and within neighborhoods.

Baltic Street between Bond Street and 4th Avenue

Baltic Street is a key corridor that traverses the Project Area and neighborhood north of the Canal. Baltic Street, from Bond Street to 4th Avenue, varies considerably in land use, street conditions, and width. Uses along this stretch include distribution/warehouses, bicycle and auto repair shops, and commercial uses, such as hotels. Despite its importance, Baltic Street lacks an inviting pedestrian streetscape and supportive uses for the three New York City Housing Authority (NYCHA) communities it connects.

Union Street

One of the few major east–west commercial corridors in the neighborhood, Union Street is a wide street that crosses the Canal. Traffic is one-way eastbound between Bond Street and 3rd Avenue and two-way further east to 4th Avenue. The uses and built context vary along Union Street with low-rise former industrial buildings converted to commercial retail and catering uses mixed with former manufacturing facilities and distribution/warehousing, and a gas station. Non-conforming residences are interspersed along the corridor with some of the Project Area's only new construction buildings, which are primarily hotel development.

3rd Street

3rd Street is a wide street that runs from Hoyt Street to 4th Avenue in the Project Area and is the only cross-canal connector that allows westbound traffic. Both sides of 3rd Street are currently industrial or commercial in nature with distribution/warehousing, parking lots, and a utilities facility interspersed with former loft buildings that have been renovated and reused for office or a convergence of uses, like the American Can Factory. A portion of 3rd Street is within the IBZ and includes a large supermarket with an accessory parking lot.

Carroll Street

Carroll Street is a narrow cross-canal corridor with traffic moving east to west. Restored in 1989, the Carroll Street Bridge is an LPC-designated landmark and is just north of the 363-365 Bond Street development. Between Nevins and 4th Avenue, legal, non-conforming residential walk-up buildings of two to five stories are mixed with former industrial buildings, many of which have been reused for residential use. Residential use has been allowed by way of variances and other approvals issued by the New York City Board of Standards and Appeals (BSA). Many lots in this area have frontage of 20 feet or less, which makes future use or development for industrial or manufacturing space unlikely and infeasible under the current M1-2 zoning. Other properties along the corridor include light industrial uses, such as warehouses, artist/maker space, or commercial uses like retail and entertainment. There are also a number of older residences and a neighborhood institution, 505 Carroll Street, which is undergoing an expansion of its light industrial and artist space.

AROUND THOMAS GREENE PLAYGROUND

Thomas Greene Playground is a unique neighborhood park that is heavily utilized by the community. It is proposed to be remediated and reconstructed as part of the overall effort to clean

up the Canal and surrounding neighborhood. Around the park, vacant or underutilized land is interspersed with high-lot-coverage former industrial buildings that have been reused for truck repair and storage, commercial retail and office, small-scale artisanal manufacturing, and arts-related uses. Recent new construction includes a hotel. Properties within this area are some of the most heavily polluted in the neighborhood due to past industrial activities[2] and soil composition, coupled with a high water table that has allowed contaminants to migrate underground from tanks and spills to nearby properties. Redevelopment plays a critical role in cleaning up these properties, which would otherwise remain as-is and contaminated.

BLOCK 471 AND PUBLIC PLACE

Two large properties are located directly adjacent to the Smith and 9th Street and Carroll Street F/G stations—one is a privately owned site and the other is a City-owned site. The City-owned site is referred to as "Public Place" (the "Public Place Site"). The sites are separated from the residential neighborhood to the west and the more industrial context to the south and east by the elevated train line and the Canal, respectively. The City-owned site is approximately six acres and occupies Block 471, Lots 1 and 100. It is bounded by 5th Street to the north, Smith Street to the west, and the Canal to the east. It is bounded to the south by an approximately four-acre, privately owned parcel on Block 471, Lot 200. In total, the sites contain approximately 10 acres of underutilized land that is currently vacant or, in the case of the privately owned site (Lot 200), used in connection with Superfund remediation activities (dredging and staging work). Both sites require extensive remediation from prior uses including a former MGP. Block 471 is currently zoned M3-1.

The City-owned site is commonly referred to as Public Place after a technical term for locations mapped on the City Map for a public purpose. Such Public Places are mapped throughout New York City. They may or may not be zoned or generate development rights and are typically established to allow flexibility in use. When a Public Place is proposed, CPC opines on the intended purpose. In 1974, the site was designated as a Public Place on the City Map to allow a future public purpose compatible with the surrounding residential community and to provide open space for public use.

The major defining characteristics of the City-owned site include its waterfront boundary and its significant slope from the intersection of Smith and 5th Streets to the intersection of 5th and Hoyt Streets. It has 523 linear feet of frontage along the Canal, and is constrained by below-grade infrastructure that limits the location of development. The 72-inch-diameter Bond Street combined sewer runs diagonally across the eastern portion of the site. In addition, an easement for an existing high-pressure gas main and related gas shed bisect the proposed waterfront open space. Until recently, the site was used by a construction company and concrete batching plant. Today, the City-owned site is largely vacant.

The area across 5th Street is currently zoned M1-1 and M3-1, and contains a mix of low-scale warehouses and multi-story, loft-style buildings to the north, with various commercial and light industrial uses. Recently, former loft buildings have been reused and converted to space for artist studios, co-working, technology, media and design firms, and other newly emerging business sectors, a trend that has led to property reinvestment and spurred employment growth. Most lots in this area are smaller and built with full-lot-coverage buildings containing active businesses. At

[2] Record of Decision, K - Fulton Works Operable Unit Number 01: Plant Site and Near Off-Site Brooklyn, Kings County Site No. 224051 (DEC, July 2015).

3rd and 4th Streets, the area abuts the residential neighborhood of Carroll Gardens, which contains primarily three- to five-story rowhouses.

PRIOR PLANNING EFFORTS

In the mid-2000s, the neighborhoods surrounding Gowanus were the focus of contextual zoning changes that sought to prevent out-of-scale, height factor towers. The zoning changes also had the effect of restricting opportunities for new housing production, including affordable housing. Since 2010, Brooklyn gained over 100,000 new residents and 50,000 new jobs. Without providing additional residential capacity or new space for jobs, it will be increasingly difficult to balance the anticipated growth expected in Brooklyn. Strong demand for housing Citywide has played out locally by pushing up prices and limiting housing that is affordable for households at lower incomes. Below are brief descriptions of the planning efforts by neighborhood.

PARK SLOPE AND 4TH AVENUE REZONING

The 2003 rezoning was at the request of the local community to protect the scale of development in Park Slope and to allow for housing growth along 4th Avenue. The rezoning leveraged 4th Avenue's width and access to transit to accommodate new housing, albeit without any zoning tools to encourage or require the inclusion of affordable housing. New residential developments are not currently required to provide affordable housing.

As noted above, DCP initiated a follow-up zoning text amendment in 2011 to map the first Enhanced Commercial District in the City along 4th Avenue to require commercial and community facility uses on the ground floor and apply transparency and curb cut location requirements for ground floors in new developments to enhance the pedestrian streetscape.

CARROLL GARDENS REZONING

In 2009, the Carroll Gardens Rezoning mapped contextual zoning districts that established height and bulk regulations to ensure that future development reflected the predominantly brownstone, walk-up apartment building character of the area, while allowing for modest growth on appropriate corridors and limited building upgrades. The rezoning focused on 86 blocks in the Carroll Gardens and Columbia Street neighborhoods that were primarily zoned R6. The community was concerned that new buildings would be developed and expanded under the existing R6 zoning height factor regulations and could produce developments that were out of scale with the rowhouses in these neighborhoods.

GOWANUS REZONING PROPOSAL (2009)

The City proposed zoning changes in 2009 that would have affected 25 blocks along the waterfront area and a portion of the upland area south of Sackett Street and north of 3rd Street. Building upon the existing mixed-use character of the area, the study proposed the following: a mix of uses, including residential, in certain areas zoned for manufacturing uses; continued industrial use as well as commercial uses; the redevelopment of the waterfront and the provision of public access at the Canal's edge; the enlivening of the streetscape with pedestrian-friendly, active ground-floor uses; the promotion of new housing production, including affordable housing through the City's Inclusionary Housing Program (IH); and the establishment of height and density limits that consider neighborhood context and other goals. The study was put on hold in 2010. The rezoning would have facilitated thousands of new homes adjacent to thriving communities where recent zoning changes limited new housing capacity.

BOERUM HILL REZONING

In 2011, the Boerum Hill Rezoning mapped contextual zoning districts to reflect existing building forms and uses to protect the character and scale of the neighborhood while allowing for limited expansions and development on vacant sites. The rezoning, which focused on a 31-block area formerly known as North Gowanus, also refined commercial overlays on many of the thoroughfares to more closely tailor them to the existing distribution of mixed uses, bringing existing uses into conformance, and preventing the expansion of commercial activity into residential midblocks where such uses would threaten existing neighborhood character.

GOWANUS CANAL BROWNFIELD OPPORTUNITY AREA NOMINATION STUDY

In an effort to catalyze economic development and clean up environmentally contaminated sites, a Brownfield Opportunity Area (BOA) Nomination Study was prepared in 2014 for Community Board 6 and submitted to the New York State Department of State (DOS) and DEC. The BOA study area straddles the neighborhoods of Carroll Gardens, Park Slope, and Boerum Hill. It includes areas mapped with manufacturing districts generally located on the east side of the Canal between 3rd and 4th Avenues, 1st Street, and 15th Street/Hamilton Avenue, and the east side of the Canal between 4th Avenue, Sackett Street, and Baltic Street. A portion of the study area is located within the Southwest Brooklyn IBZ. The BOA study analyzed land use, building, and economic trends; surveyed businesses; and developed a series of findings and recommendations. Nineteen sites were also studied further to explore opportunities for strategic investment and redevelopment.

Based on community outreach and an existing conditions analysis, the BOA study found that Gowanus is an employment hub for local residents with a building stock appealing to artists and start-ups, while also a neighborhood grappling with a legacy of contamination, transportation and parking challenges, and limited parks and open space, especially along the Canal. The BOA study presents three recommendations: first, support and grow industrial business in Gowanus; second, preserve a navigable canal for all users; and third, integrate evolving interests in Gowanus (cultural, environmental, recreational) with existing industrial and business interests to foster a multi-faceted, productive, and creative economy.

SUPERFUND DESIGNATION

As stated above, a legacy of pollution in and around the Canal has led to a need for substantial remediation. From the mid-19th to the mid-20th centuries, Gowanus was a center of heavy industry, including coal gasification (manufactured gas) plants, oil refineries, chemical plants, cement works, machine shops, and tanneries. Underground chemical storage and runoff from these sites spread toxins throughout the area, and coal tar and other contaminants continue to leach into soil and migrate due to container leaks, improper disposal, the natural topography, and a high-water table associated with the former wetlands and creeks that were filled to form today's neighborhood.

City, state, and federal government agencies have committed to remediation throughout the neighborhood. In 2010, EPA placed the Canal on its National Priorities (Superfund) List and has developed a remediation plan that focuses on hazardous materials located in and beneath the Canal, primarily non-aqueous phase liquid (NAPL) and associated polycyclic aromatic hydrocarbons (PAHs), which were discharged from the three former MGPs. As part of the remediation plan, EPA has also mandated the installation of underground tanks to reduce CSO discharges into the Canal and the excavation and restoration of the 1st Street Turning Basin. DEC

and OER have developed remedial programs and incentive programs to facilitate the investigation and cleanup of brownfield sites.

BRIDGING GOWANUS

From 2013 to 2015, CMs Brad Lander and Stephen Levin, in collaboration with other elected officials and the Pratt Center for Community Development, led a community-driven planning process called *Bridging Gowanus*. This process engaged community members and stakeholders with a series of public meetings, culminating in a final report published in September 2015. *Bridging Gowanus* put forth a broad vision for growth with recommendations and goals concerning sustainability and resiliency, public investments in infrastructure and programs, strengthening local jobs, and preserving and creating affordable housing.

Although *Bridging Gowanus* laid a vital foundation for a shared neighborhood vision and key priorities in connection with supporting growth, the report and its recommendations were developed without input from City agencies and did not contain a land use proposal with location-specific strategies for use and bulk. To build upon *Bridging Gowanus* DCP—in partnership with other City agencies, CMs Lander and Levin, elected officials, and community-based partners—launched the Gowanus Neighborhood Study in August of 2016 as part of a comprehensive effort to plan for the neighborhood's future.

D. EXISTING ZONING

The existing zoning in the Project Area, most of which has been in place since 1961, is composed of M1-1, M1-2, M2-1, M3-1, C8-2, M1-4/R7-2, R6, R6B, R8A, and R8A/C2-4 districts (see **Figure S-3**).

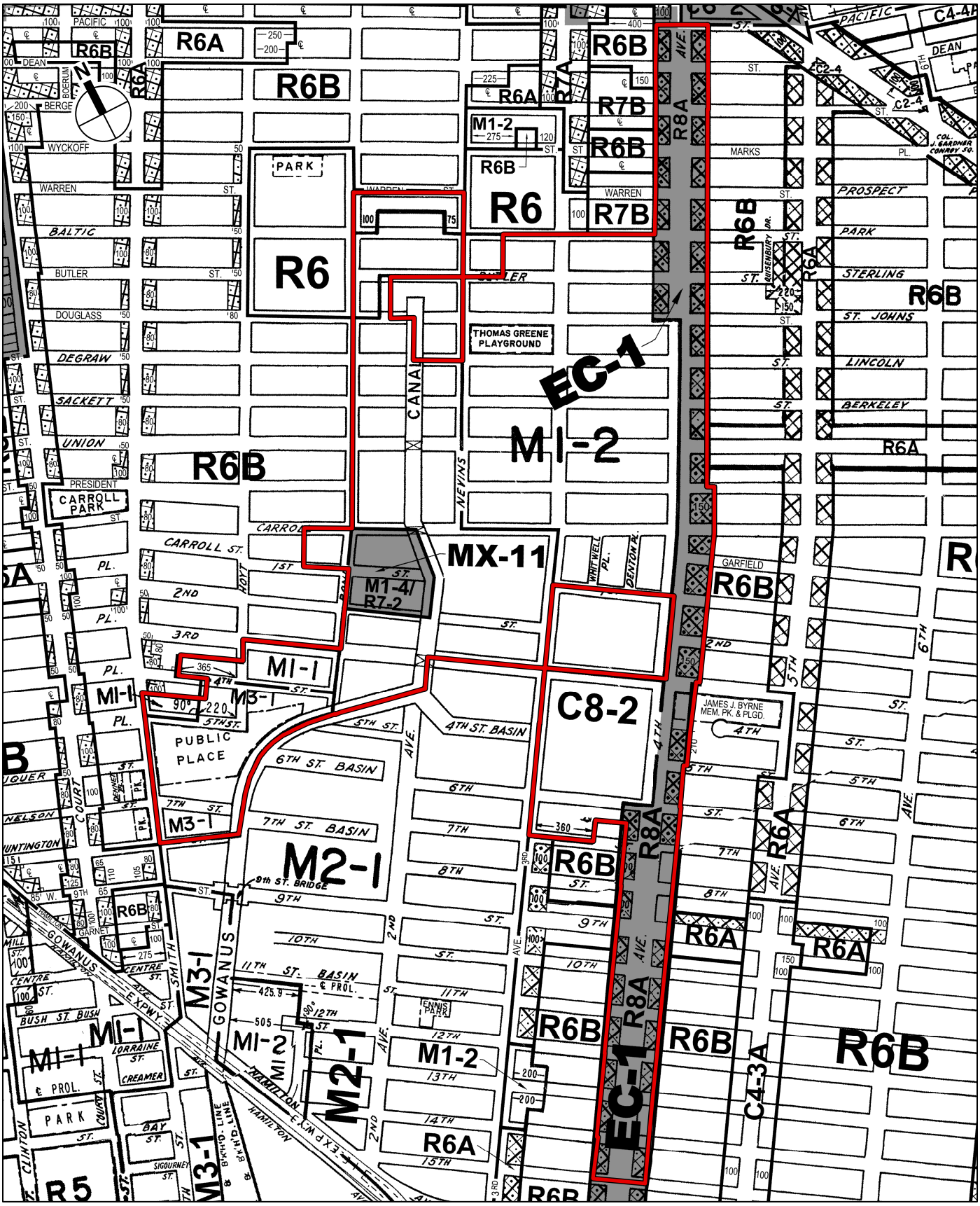
Three zoning map or text amendments have been adopted since 2000. A portion of 4th Avenue was rezoned in 2003 from R7A/C2-4 (north of President Street) and R6 (south of President Street) to R8A/C2-4. The Park Slope Rezoning changed the zoning on the superblocks between 3rd and 4th Avenues from M1-2 to C8-2 to reflect the existing land uses and broaden the permitted range of commercial activities.

In 2011, DCP initiated a follow-up zoning text amendment in response to blank walls on new buildings and a lack of retail space along 4th Avenue. The text amendment mapped the first Enhanced Commercial District in the City to require commercial and community facility uses on the ground floor and applied transparency and curb cut location requirements to new developments along 4th Avenue to enhance the pedestrian streetscape.

A private rezoning in 2009, known as the 363-365 Bond Street Rezoning, changed an M2-1 zoning district to an M1-4/R7-2 zoning district on two blocks bounded by Bond Street, 2nd Street, Carroll Street, and the Canal. The rezoning facilitated the remediation and redevelopment of an approximately three-acre site of a former waterfront industrial warehouse with residential space, including affordable housing, commercial, and community facility space and a publicly accessible waterfront open space. Currently, it is the only area mapped for IH within Community District 6 and has generated 140 affordable units to house low-income New Yorkers.

In addition to the zoning changes discussed above, since 2000 there have been over 20 applications submitted to the BSA generally for use variances. Of these applications, 12 have been granted to allow the conversion or new construction of residential space, schools, or physical culture establishments within the Project Area.

Existing zoning districts are summarized in **Table S-1,** shown in **Figure S-3**, and discussed below.



Existing Zoning

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Figure S-3

Table S-1
Summary of Existing Allowable Densities—Gowanus Rezoning Area

Zoning District	Residential FAR	Industrial/Commercial FAR	Community Facility FAR
M1-1	-	1.0	2.4
M1-2	-	2.0	4.8
M2-1	-	2.0	-
M3-1	-	2.0	-
C8-2	-	2.0	4.8
M1-4/R7-2	3.6	-	6.5
R6	2.43	-	4.8
R6B	2.0	-	2.0
R8A/C2-4	6.02	2.0	6.50

M1-1 & M1-2

An M1-1 zoning district is mapped west of the Canal around 4th Street between Smith and Bond Streets. An M1-2 district is located in a portion upland of the Canal between Nevins Street and 4th Avenue from 3rd Street to Baltic.

M1-1 and M1-2 districts generally allow a wide range of commercial and light manufacturing uses, including office, repair shops, and wholesale service facilities. Self-storage facilities and hotels are only allowed by special permit in most cases. M1 districts permit all types of industry, but are subject to more stringent performance standards than M2 or M3 districts. Many retail uses are restricted to 10,000 square feet in M1 districts, which may only be exceeded by special permit from the CPC. Residential uses and community facility uses with sleeping accommodations are not permitted in M1 districts.

The M1-1 district allows industrial and commercial uses at a maximum FAR of 1.0 and certain community facility uses at a maximum FAR of 2.4. The M1-2 district allows industrial and commercial uses at a maximum FAR of 2.0 and community facility uses at a maximum FAR of 4.8. Heights in M1-1 and M1-2 districts are governed by a sloping sky exposure plane, which begins at 30 feet above the street line in the M1-1 district, and at 60 feet in the M1-2 district. Above this height, the building must be located entirely beyond the sloping plane.

Off-street parking requirements vary by use, but typically require one parking space for every three employees or every 1,000 square feet of industrial floor area and one parking space per 300 square feet of commercial space. Parking requirements that result in less than 15 spaces may be waived, but such waiver does not apply to most manufacturing or warehousing uses. Loading requirements vary by use, and are triggered after providing 25,000 square feet of office floor area, and after providing 8,000 square feet of other commercial or manufacturing floor area.

Land uses within the M1-1 and M1-2 districts include warehouses/storage for light industrial uses, auto-related businesses (such as auto repair shops), gas stations, self-storage facilities, hotels, retail, entertainment, and fitness/recreational facilities. There is also a considerable amount of vacant or underutilized land. In certain locations, commercial activities (restaurants and food stores, recreation, entertainment establishments) that serve the adjoining residential communities as well as a broader customer base are scattered throughout much of the area, with the greatest concentration of these along 3rd Avenue north of Carroll Street (especially between 3rd and 4th Avenues along Douglass and Degraw Streets) and along Union and 3rd Streets between the Canal and 4th Avenue.

M2-1

An M2-1 district is mapped over much of the western portion of the Project Area. The M2-1 district is generally bounded by Nevins Street to the east, Bond Street to the west, Butler Street to the north, and the Gowanus Canal to the south. M2 districts are primarily found in older industrial neighborhoods and along waterfronts. The M2 district occupies the middle ground between light and heavy industrial areas and have an FAR of 2.0. The M2-1 district is subject to parking requirements based on the type of use and size of an establishment. The maximum base heights before setback is 60 feet in an M2-1 district. No new residential or community facility uses are permitted.

The former industrial waterfront is a mix of commercial activity, parking lots, storage, and light industrial uses interspersed with vacant buildings and vacant land. The recently completed 363-365 Bond Street residential developments, which were facilitated by a rezoning from M2-1 to M1-4/R7-2, are the first new residences along the Canal, and include a public esplanade, resilient design, and community facility space.

M3-1

An M3-1 zoning district, which permits a maximum FAR of 2.0 for industrial and commercial uses, is on the western side of the Canal from Huntington to 4th Streets. The M3-1 district has a base height, above which a structure must fit within a sloping sky exposure plane; the base height is 60 feet, or four stories, whichever is less, above the street line. There is no maximum building height. M3 districts are designated for areas with heavy industries that generate noise, traffic, or pollutants. The M3-1 district is subject to parking requirements based on the type of use and size of an establishment. Typical uses include power plants, solid waste transfer facilities and recycling plants, and fuel supply depots.

The M3-1 district is mapped over two large sites of approximately 10 acres of highly underutilized land; one site is a City-owned site and the other is privately owned and currently used for the Superfund dredging staging work and construction support. Along 4th Street, former loft buildings have been reused and converted to space for artist studios, co-working, technology, media and design firms, and other newly emerging business sectors.

C8-2

A C8-2 district is mapped in the southernmost portion of the Project Area generally between 3rd Street, 7th Street, 3rd Avenue, and 4th Avenue. C8 districts are found mainly along major traffic arteries. The C8-2 district permits light manufacturing, auto-related businesses, and other heavy commercial uses at a maximum FAR 2.0. C8 districts have a base height limit, above which a structure must fit with a sloping sky exposure plane; the base height is 30 feet in the C8-1 district, and 60 feet in the C8-2 district, and typically produces low-rise, one-story structures. Typical uses are automobile showrooms and repair shops, warehouses, gas stations, and car washes; community facilities, self-storage facilities, hotels and amusements (such as theatres), are also permitted. No new residential uses are permitted.

R6

An R6 district is mapped in the area bounded by Nevins, Bond, Warren, and Baltic Streets. R6 districts are medium-density residential districts that permit a wide variety of housing types. Buildings in R6 districts can be developed in accordance with either height factor or Quality Housing regulations. Under height factor regulations, the FAR ranges from 0.78 to 2.43, depending on the amount of open space provided, while under Quality Housing regulations outside

the Manhattan Core, the maximum FAR is 3.0 for buildings on or within 100 feet of a wide street and 2.2 on a narrow street or beyond 100 feet of a wide street. Higher maximum FARs are available for buildings participating in the IH Program or that provide certain senior facilities, permitting up to 2.42 and 3.0 FAR for narrow and wide streets, respectively. Under the Quality Housing regulations, the maximum FAR for affordable independent residences for seniors (AIRS) is 3.9. Under height factor regulations, the sky exposure plane starts at 60 feet; under Quality Housing regulations, the maximum base height is 45 feet on a narrow street and 65 feet on a wide street, while the maximum building height is 55 feet on a narrow street and 70 feet on a wide street, which may be increased by 5 feet with a Qualifying Ground Floor (QGF). If utilizing IH, the maximum building height may increase to 115 feet. Standard height factor regulations produce tall buildings that are set back from the street on large lots. Optional Quality Housing regulations produce high lot coverage buildings within height limits that often reflect the scale of older apartment buildings in the neighborhood that pre-date the 1961 Zoning Resolution.

Off-street parking is generally required for 70 percent of a building's DUs. The requirement is reduced to 50 percent on lots less than 10,000 sf, and eliminated for income-restricted housing units (IRHU) within the Transit Zone. Parking can be waived if five or fewer spaces are required.

R6B

An R6B district is mapped along the west side of Bond Street between Carroll and 1st Streets. The R6B district is a contextual district that typically produces traditional four- to five-story attached rowhouses set back from the street with stoops and small front yards, or apartment buildings of a similar scale. The R6B district permits residential and community facility uses to a maximum FAR of 2.0 (an FAR of 2.2 is allowed for AIRS and in areas designated as part of IH). Building base heights must be between 30 and 40 feet, with a 50-foot maximum building height (or 55 feet with a QGF) after the building is set back to a depth of 10 feet on a wide street and 15 feet on a narrow. New developments in the proposed R6B district would be required to line up with adjacent structures to maintain the continuous street wall character. New multifamily residences must provide one off-street parking space for 50 percent of DUs, which may be waived if five or fewer spaces are required.

R8A

Within the Project Area, an R8A district is mapped on both sides of 4th Avenue from Pacific Street to Douglass Street, on the eastern side from Douglass Street to 6th Street and then on both sides from 6th Street to 15th Street. The R8A district permits residential and community facility uses at a maximum FAR of 6.02 and 6.50, respectively (an FAR of 7.2 is allowed for AIRS and in areas designated as part of the IH program). The building form requires a base height between 60 feet and 85 feet and a maximum building height of 120 feet. The off-street parking requirement is one space per 1,000 sf of commercial space and health care facilities and one off-street parking space for 40 percent of DUs, which can be waived if 15 or fewer parking spaces are required or if the zoning lot is 10,000 sf or less. Current uses along 4th Avenue vary and include one-story semi-industrial uses, various commercial uses (like local retail shops), and residential apartment and walk-up buildings. Currently, new residential developments are not required to provide affordable housing.

M1-4/R7-2

An M1-4/R7-2 district (MX-11) is mapped on two blocks bounded by Bond, 2nd, and Carroll Streets and the Gowanus Canal. The uses permitted as-of-right in the MX district include new residential, community facility, commercial and light industrial uses. The maximum commercial

and manufacturing FAR allowed is 2.0. In accordance with IH, the base residential FAR is 2.7, with the potential of increasing to 3.6 with the provision of at least 20 percent of the residential floor area set aside as housing affordable to low-income households. The maximum community facility FAR is 6.5. The off-street parking requirement is 50 percent of the number of market-rate DUs and 25 percent for the affordable DUs in the development. Within an underlying R7-2 district in an MX district, the maximum permitted base height is 60 feet, with a maximum building height of 135 feet.

WATERFRONT ZONING

Properties along the Canal are also subject to waterfront zoning regulations. Generally, redevelopment, enlargements, and/or changes of use on the waterfront are required to comply with standard waterfront zoning regulations. Standard waterfront public access area (WPAA) guidelines generally require a minimum 40-foot shore public walkway and less on certain constrained sites. On larger lots, supplemental public access areas are required equal to a total amount of waterfront public access that is at least 20 percent of the total lot area. WPAA guidelines are broad guides for waterfront open space that are applied throughout the City, including the Gowanus Canal. Waterfront zoning typically does not require heavier industrial uses to provide waterfront open space or to comply with standard waterfront zoning regulations. In the case of unique places, like the Gowanus Canal, pure application of WPAA guidelines is often challenging if not impossible and may not respond to the unique nature of the local waterfront context.

COMMERCIAL OVERLAYS

A C2-4 commercial overlay is mapped within the existing R8A district mapped along 4th Avenue. C2 commercial overlays are intended to provide local shopping needs, as well as meet broader shopping and service needs. Commercial buildings in C2 overlay districts have a maximum permitted FAR of 2.0. Otherwise, residential, mixed residential/commercial, and community facility uses in C2 commercial overlays are regulated by the bulk regulations of the underlying residential districts. The C2-4 overlay district typically require one parking space per 1,000 sf of commercial space.

SPECIAL ENHANCED COMMERCIAL DISTRICT

The Special Enhanced Commercial District (EC-1) is mapped along 4th Avenue from Pacific Street south to 24th Street. From Pacific Street to Douglass Street and from 6th Street to the Prospect Expressway, the district encompasses block frontages on the east and west sides of 4th Avenue. Between Douglass Street and 6th Street and south of the Prospect Expressway, the district encompasses only the frontages on the east side of 4th Avenue.

EC-1 provisions apply ground-floor use regulations, retail transparency requirements, and limitations on parking and curb cuts to promote a vibrant mix of commercial and community facility uses on the ground floor of new developments and enlargements, enhance the pedestrian environment, and create an active streetscape on 4th Avenue. Horizontal enlargements and new developments in the EC-1 must provide windows on the ground floor facing 4th Avenue and may not locate residences or parking on the ground floor within 30 feet of 4th Avenue. At least 50 percent of the frontage must be occupied by retail and service uses as defined for the EC-1, and lobbies are limited to a maximum width of 25 feet. Curb cuts are not allowed on 4th Avenue for lots that have access to the side street.

E. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The City of New York, acting through DCP and in partnership with HPD, NYC Parks, and DCAS, propose land use actions in response to recommendations identified in the Framework and an extensive community planning process. The Proposed Actions are intended to facilitate development patterns that meet the long-term vision of Gowanus as a sustainable, mixed-use neighborhood anchored by a vibrant and resilient waterfront that can support the housing and economic needs of the community, the surrounding neighborhoods, and the City as a whole. Within this context, the Proposed Actions are intended to work in unison with the comprehensive set of strategies put forth in an overall Gowanus Neighborhood Plan, which seeks to foster a thriving, inclusive, and more resilient Gowanus where existing and future residents and workers are able to participate in civic, cultural, and economic activities, and where a wholly unique resource—the Gowanus Canal—can thrive and play an active role in that equitable and sustainable growth.

The Proposed Actions are necessary because existing land use patterns and zoning do not permit for the implementation of the Neighborhood Plan. Current land use and development patterns have been shaped by the Canal and the existing zoning that has been in place since 1961. Without zoning changes, much of Gowanus will likely remain underdeveloped and underutilized and nearby neighborhoods will continue to become more costly. The underlying aspects that make New York City successful have not changed and the trends that caused an unprecedented housing crisis before the pandemic are not anticipated to abate. Strong demand for housing Citywide along with a rapidly growing and diversifying economy will continue to push up housing prices and limit housing that is affordable for households at lower incomes.

While the Canal was originally designed to support many of the industrial uses in the immediately surrounding area with water access to shipping lanes, its utilization as an industrial waterway has waned over the years and has ceased north of the 9th Street Bridge. Today, Gowanus is significantly changed from the peak of its industrial past and is characterized by a mix of building forms and uses, including one- to two-story former industrial buildings, vacant or underutilized lots that are primarily used for open storage or parking, and larger loft-style buildings, many of which have been adaptively reused for commercial and art-related uses. The waterfront blocks contain a mix of commercial activity, parking lots, storage facilities, and light industrial facilities interspersed with vacant buildings and land. While the Canal is no longer used for industrial or commercial transport, it is accessed and used for recreational, educational, and stewardship purposes. Many of the properties are contaminated from former industrial waste or through subsurface migration of pollutants.

Current zoning around the Canal allows industrial and some commercial uses with no new residential uses or affordable housing permitted. However, new non-residential development has been precluded by the existing zoning's relatively low permitted densities coupled with high parking, loading, and other requirements. The combination of outdated zoning and broader economic and demographic conditions has resulted in few new buildings constructed within the Project Area in recent decades other than hotels and self-storage facilities. Since new commercial and industrial construction is mostly infeasible, former industrial buildings have been adaptively reused for commercial, light industrial, and arts-related uses. Two new apartment buildings were recently constructed after a private rezoning was approved in 2010 to allow a mix of uses, including residential.

Absent the Proposed Actions, future development in Gowanus would occur in a piecemeal manner and without the benefit of a comprehensive plan to coordinate redevelopment activities, infrastructure investments, and appropriate densities and urban design controls. New residential development along 4th Avenue would continue without any requirements to provide needed affordable housing. The Proposed Actions seek to avoid a haphazard approach to neighborhood development and would facilitate the implementation of the Neighborhood Plan by comprehensively updating the zoning on an approximately 82-block area to allow a wide range of uses including residential, commercial, retail, light industrial, arts-related, community facilities, and new open space.

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 of Downtown Brooklyn and Lower Manhattan. In addition, the Proposed Actions would work in tandem with the remediation activities in Gowanus by allowing new residential use where it is currently prohibited, by increasing density at select locations, and by requiring appropriate safeguards during construction and operation to protect the health and safety of workers and future occupants of new mixed-use developments from contamination. These changes are expected to spur the cleanup and redevelopment of Brownfield sites. The creation of a WAP as part of the zoning changes and proposed mapping of new parkland would create new waterfront public open space along the Canal, providing a recreational amenity for current and future residents.

Specifically, the Proposed Actions would create opportunities for new housing in mixed-use developments, particularly along major north–south corridors (3rd and 4th Avenues) and east–west corridors (Union, Carroll, and 3rd Streets), around Thomas Greene Playground, and along the Canal. In these areas, the Proposed Actions would provide significant amounts of new housing for current and future residents. The affordable housing that would be produced through the application of MIH would promote a diverse and inclusive mixed-income neighborhood.

The Proposed Actions would also create opportunities for new light industrial space, commercial space, arts-related space, and community facility space. The Proposed Actions would promote these opportunities in both new mixed-use buildings throughout the Project Area and, more directly, in portions of the Project Area that would be reserved exclusively for non-residential activity (portions of the midblocks between 3rd and 4th Avenues and an area around 4th and Hoyt Streets). In mixed-use buildings, the Proposed Actions would promote the integration and mixing of uses through ground-floor use requirements at key locations and floor area incentives. Throughout the Project Area, zoning changes to allow a wider range of uses and flexibility for evolving business and land use types would be made along with promoting new community resources for civic, arts, and cultural organizations. The Proposed Actions would support the mixed-use character of the neighborhood and support the generation of new job opportunities. The development that would occur on waterfront blocks with the Proposed Actions would achieve a variety of shared goals such as reactivating contaminated, vacant, and underutilized land, facilitating the creation of new housing, including permanently affordable housing, facilitating the creation of publicly accessible open space at the water's edge, facilitating the creation of new non-residential space and balancing the unusual physical conditions of Canal-front blocks. Development along the waterfront would also be required to raise the shoreline based on future projections of sea level rise, which would support on-going neighborhood-wide resiliency efforts.

The Proposed Actions would encourage a range of heights and building forms, allowing sufficient flexibility for building heights to achieve the development goals identified for the area while addressing unique site conditions and reflecting the existing built character of the Gowanus

neighborhood. The range of permitted heights would address the existing low-scale context of certain adjacent areas while allowing limited portions of buildings to rise higher only on certain blocks and frontages.

In order to provide an active and varied pedestrian experience, help foster a mixed-use neighborhood, and respond to site conditions and constraints, the proposal includes provisions that would require active ground-floor uses in key locations, reducing or eliminating parking requirements, and screening parking and inactive ground-floor portions of buildings, where appropriate. The Proposed Actions would also encourage new community resources and facilities through special floor area regulations and new open space through the mapping of parkland to support planning for a growing neighborhood.

The Proposed Actions include approvals necessary to facilitate development of a nearly six-acre site commonly referred to as Public Place (also referred herein as the "Gowanus Green Site" or "Gowanus Green"). The site is a major community asset and a brownfield site in need of substantial remediation. The Proposed Actions would facilitate new mixed-use development consisting of affordable housing, commercial uses, community facility space, and new waterfront open space, and it would advance many community priorities brought up during the neighborhood planning process. Among the approvals necessary to facilitate Gowanus Green is the disposition of City-owned property to a private entity—a development team—to construct the mixed-use development.

In addition, the Proposed Actions include approvals necessary to dispose of development rights from a City-owned property located at 276 4th Avenue (Block 456, Lot 29). The property is under the jurisdiction of DCAS and is currently leased to NYCT. Unused development rights from the City-owned property would be transferred to an adjacent development pursuant to the proposed zoning.

Although not part of the proposed land use and zoning approvals described below, the Neighborhood Plan calls for strategic infrastructure and community investments, such as renovating and reopening the Gowanus Houses Community Center and reconstruction of key street ends along the Canal, which would support the envisioned new level of activity; however, these investments are not directly tied to the Proposed Actions. While the Proposed Actions are integral to the implementation of the overall Neighborhood Plan, they are not dependent on these additional components and as such are not part of a coordinated environmental review. Moreover, there are components of the Plan which are not yet known to a sufficient level of detail to include in this analysis.

The Proposed Actions reflect DCP's on-going engagement process with community boards, residents, business owners, community-based organizations, elected officials, and other stakeholders to achieve the following land use objectives:

- Support existing clusters of economic activity and promote development of new job-generating uses through increased industrial and commercial density and updated parking and loading regulations in key areas;
- Provide opportunities for the creation of new, permanently affordable housing with options for low- and moderate-income residents, while bringing existing residences into conformance with zoning;
- Facilitate the creation of new waterfront open space and neighborhood parks along the Canal through establishing a WAP and changes to the city map;

- Facilitate several shared neighborhood-wide goals, including promoting a walkable, vibrant, mixed-use neighborhood, brownfield remediation and activating key areas through permitting higher densities and a broader range of uses and incentivizing or requiring non-residential uses in select areas;
- Create special rules to establish limits for height, bulk envelope and density that consider neighborhood context as well as other shared goals, including encouraging variation and diversity of future programing, open spaces, site planning, and design along the Canal; and
- Support a successful Neighborhood Plan by institutionalizing a comprehensive planning framework that is inclusive of relevant capital infrastructure needs and services to support current demands and future growth.

DETAILED OBJECTIVES OF THE PROPOSED ACTIONS

SUPPORT EXISTING CLUSTERS OF ECONOMIC ACTIVITY AND PROMOTE DEVELOPMENT OF NEW JOB-GENERATING USES THROUGH INCREASED INDUSTRIAL AND COMMERCIAL DENSITY AND UPDATED PARKING AND LOADING REGULATIONS IN KEY AREAS

Current zoning in much of the Project Area allows industrial and some commercial uses and prohibits new residential uses. New non-residential development has generally been dis-incentivized by the existing zoning's relatively low permitted densities and high parking, loading, and other requirements. The combination of outdated zoning and broader economic and demographic shifts has resulted in few new buildings constructed within the Project Area in the last few decades other than hotels and self-storage facilities. In certain areas, this has led to the adaptive reuse and conversion of former loft buildings to space for artist studios, co-working, technology, media and design firms, and other newly emerging business sectors as well as traditional distribution/warehousing and other light industrial uses. This trend has led to property reinvestment and spurred employment growth.

Overall, these trends and the resulting use mix have played a key role in creating Gowanus' existing character and vitality. While the Proposed Actions envision non-residential uses mixing with residential uses in some areas, other areas have been designated to remain exclusively for non-residential uses in order to support the existing unique business and use ecology. These areas were carefully selected based on the number and types of businesses, locations, and unique site conditions. These areas have key characteristics that can help support job-generating uses, including larger and more flexible properties, and are existing hubs of light industrial, commercial, and arts-related uses as well as being geographically situated near transit and major corridors.

The Proposed Actions seek to strengthen and promote these areas by maintaining them for industrial, commercial, and community facility uses, and by increasing the allowable density for job-generating uses and removing onerous requirements, such as required accessory parking and loading, that act as barriers to redevelopment and enlargements.

Through the establishment of the GSD, the Proposed Actions would modify maximum FARs for industrial, commercial, and community facility uses in portions of the Project Area, including the midblocks between 3rd and 4th Avenues and portions of the area bounded by 4th and Hoyt Streets, both of which are transit-accessible and adjacent to residential neighborhoods with strong walk-to-work rates.

PROVIDE OPPORTUNITIES FOR THE CREATION OF NEW, PERMANENTLY AFFORDABLE HOUSING WITH OPTIONS FOR LOW- AND MODERATE-INCOME

RESIDENTS WHILE BRINGING EXISTING RESIDENCES INTO CONFORMANCE WITH ZONING

As New York City's economy and population continues to grow steadily, with a population expected to approach nine million by 2030, the City is challenged with addressing a shortage of all types of housing, especially apartments affordable to low- and moderate-income New Yorkers. In recent decades, areas in neighboring Carroll Gardens, Boerum Hill, and Park Slope were contextually rezoned to limit development in keeping with the existing prevailing built form. At the same time, these neighborhoods experienced an increase in the number and size of historic landmarks and districts, which has dramatically escalated the neighborhoods' desirability and value. This in turn placed mounting pressure for new residential development in the relatively small areas of Gowanus where residential space exists.

Currently, most of the Gowanus area is zoned for industrial and commercial uses, which do not allow residential uses as-of-right. Over the past century, industrial and manufacturing uses that historically defined the area have steadily declined, leaving vacant buildings/lots, storage, and parking facilities along with the environmental consequences of industrial use.

In areas proposed to allow residential use, the Proposed Actions would promote the development of housing and facilitate mixed-income communities by requiring permanently affordable housing units be included in any new residential development through the application of MIH, which is not required by zoning today. The Proposed Actions include zoning updates to allow mixed-use residential and commercial development at high densities in some areas and medium density development along key corridors served by transit. The zoning changes are expected to significantly expand the supply of housing.

The Canal blocks, portions of 3rd Avenue, Union, and 3rd Streets, the area around Thomas Greene Playground, and 4th Avenue present the greatest opportunities for the development of affordable housing. These areas have some key characteristics that include underutilized or vacant properties that are adjacent to or near planned major public realm improvements, existing parks, transit, and major corridors. The width of the streets and Canal, access to transit, and presence of a number of significant sites with potential for redevelopment provide these areas with the capacity to support significant growth.

Zoning changes to allow residential development at higher densities would make possible the construction of affordable apartment buildings and would greatly expand the neighborhood's supply of affordable housing. In addition, clusters of legal non-complying residential buildings, built prior to the 1961 ZR, exist on the east side of the Canal around Carroll Street and 3rd Avenue. The residential use of these buildings would become conforming under the Proposed Actions. Bringing these homes (many of which are located in the flood plain) into conformance with zoning would remove a significant barrier to financing and renovation for current and future owners, which, in turn, would remove impediments to flood resilient adaptations.

Within the Project Area, it is expected that the housing market is strong enough to result in new multi-family construction without the need for a variety of City and state financing programs for affordable housing. The application of MIH would guarantee that new market rate housing construction provides permanent affordable housing to address the needs of residents at lower income levels. New development is expected to produce significant amounts of affordable housing for low- and moderate-income households in a transit-rich area adjacent to thriving neighborhoods.

FACILITATE THE CREATION OF NEW WATERFRONT OPEN SPACE AND NEIGHBORHOOD PARKS ALONG THE CANAL THROUGH A WAP AND CHANGES TO THE CITY MAP

Today, access to the waterfront and its edge is limited and inconsistent. To support the vision for this area, the Proposed Actions would establish a WAP that includes a set of rules and regulations to facilitate the creation of high quality public open space through future redevelopment along the waterfront. The WAP would specify the location of required shore public walkways, supplemental public access areas, upland connections, and visual corridors to ensure access to the Canal from surrounding neighborhoods and to address the configuration and varied conditions along the Canal's edge. The WAP would also modify certain design standards for public access to address the unique character of the Canal.

The WAP and the GSD would ensure that new development creates welcoming access to the Canal, responds to its distinct character, and creates a resilient shoreline that supports neighborhood-wide resiliency and adaption strategies for climate change and sea level rise.

The Proposed Actions also include a series of City Map changes to eliminate certain streets and street segments and map new streets. The Proposed Actions would promote a continuous waterfront network of neighborhood parks and open space. New mapped parkland would establish acres of open space along the Canal, and new mapped streets would provide access to new developments and venues for civic, economic, and public realm activities along active, mixed-use streets.

FACILITATE SEVERAL SHARED NEIGHBORHOOD-WIDE GOALS, INCLUDING PROMOTING A WALKABLE, VIBRANT, MIXED-USE NEIGHBORHOOD, BROWNFIELD REMEDIATION, AND ACTIVATING KEY AREAS THROUGH PERMITTING HIGHER DENSITIES AND A BROADER RANGE OF USES AND INCENTIVIZING OR REQUIRING NON-RESIDENTIAL USES IN SELECT AREAS

The existing zoning within the Project Area discourages redevelopment and brownfield remediation by restricting residential use and the total amount of allowed development. Zoning changes to allow medium- to higher-density development and a greater variety of uses along the key corridors of 3rd and 4th Avenues, Union and 3rd Streets, along the Canal, and around Thomas Greene Playground would promote mixed-use development with housing, commercial, light industrial, arts-related, and community facility space. Allowing new residential uses at medium to higher densities in key locations would encourage the redevelopment and remediation of sites that have been contaminated by former industrial uses. Remediation would be implemented through the placement of E-Designations or comparable binding mechanisms that require the approval of appropriate testing and remedial measures prior to the issuance of construction permits and Certificates of Occupancy by the Department of Buildings (DOB).

In addition, the Proposed Actions would help bring a critical mass of residents and workers to the area that would support a greater diversity of retail offerings, activate streetscapes, and public spaces. The Proposed Actions would allow for a wide range of uses including commercial, industrial, arts-related, community facility, and residential uses. The Proposed Actions would help transform the existing waterfront to one that offers a diversity of housing options, shopping, entertainment, jobs, and services to the surrounding neighborhood and draws visitors from the broader region.

The Proposed Actions would require non-residential ground floor uses (i.e., commercial space, light industrial space, arts-related space, or community facilities) along key corridors and around

certain planned investments and improvements and require active ground-floor uses at Canal crossings, which are critical junctures for east–west travel and the envisioned new public esplanade. The Proposed Actions would promote active ground floors and second-story non-residential uses along main thoroughfares, Canal crossings, and around Thomas Greene Playground, which would support the shared goals of a mixed-use neighborhood and promote job-generating uses. The broad range of uses would allow existing businesses to continue to operate, expand, and grow within the neighborhood while allowing a greater range of uses within new mixed-use developments.

CREATE SPECIAL RULES TO ESTABLISH LIMITS FOR HEIGHT, BULK ENVELOPE, AND DENSITY THAT CONSIDER NEIGHBORHOOD CONTEXT AS WELL AS OTHER SHARED GOALS, INCLUDING ENCOURAGING VARIATION AND DIVERSITY OF FUTURE PROGRAMING, OPEN SPACES, SITE PLANNING, AND DESIGN ALONG THE CANAL

The Proposed Actions would encourage a range of heights and building forms, allowing sufficient flexibility for building heights to achieve the many goals for development in the area while addressing unique site conditions and reflecting the existing built character of the Gowanus neighborhood. The range of permitted heights would address the existing low-scale context of certain adjacent areas while allowing limited portions of buildings to rise higher on blocks with sufficient depth to achieve a transition among building heights.

Along Bond Street, between Douglass and 3rd Streets, the base of new buildings would be limited to five stories; along Nevins Street, between Degraw and Carroll Streets, the base of new buildings would be limited to between six and eight stories. By limiting base heights adjacent to existing low-scale residential areas and allowing buildings to rise higher towards the midblock (up to 22 stories), the effect of the proposed maximum building heights would be minimized at street level and along the Canal. In other locations, building heights would generally relate to the width of streets: along narrow streets, building heights would be approximately five stories (in the vicinity of Carroll Street and 3rd Avenue); buildings along Union Street would have heights ranging between seven and nine stories; and buildings around Thomas Greene Playground, where the open space provides an opportunity for additional height, buildings would rise to 14 stories. At 120 feet wide, 4th Avenue is the widest street in the Project Area. New developments along 4th Avenue would include affordable housing and would have building heights up to 17 stories.

Development on waterfront blocks would achieve a variety of goals such as reactivating vacant and underutilized land; facilitating the creation of new housing, including affordable housing; facilitating the creation of publicly accessible open space at the Canal's edge; and balancing the unusual physical conditions of Canal-front blocks, which are subject to flood zone limitations and public access requirements. Consistent with the requirements of waterfront zoning, the Proposed Actions would also require the development and maintenance of publicly accessible open spaces at the Canal's edge as a condition of new residential or commercial development on sites adjacent to the Canal. The special rules would shape a built form that responds to the waterfront condition and adjacent context and promote a variety of built forms. The proposed zoning changes would also require active ground-floor uses at certain locations, such as Canal crossings, which are critical junctures for east–west travel and the envisioned new public esplanade. The Proposed Actions would help transform the waterfront to one that offers a diversity of housing options, shopping, entertainment, jobs, and services to the surrounding neighborhood and draws visitors from the broader region.

SUPPORT A SUCCESSFUL NEIGHBORHOOD PLAN BY INSTITUTIONALIZING A COMPREHENSIVE PLANNING FRAMEWORK THAT IS INCLUSIVE OF RELEVANT CAPITAL INFRASTRUCTURE NEEDS AND SERVICES TO SUPPORT CURRENT DEMANDS AND FUTURE GROWTH

Without zoning changes, much of Gowanus would remain underdeveloped and underutilized and the vision outlined in the Plan would not be realized. In the future, some property owners in Gowanus may seek discretionary land use approvals to allow for development that contains a mix of uses, including residential development, and others could choose to develop their sites on an as-of-right basis under existing zoning. Absent the Proposed Actions, future development would occur in a piecemeal manner and without the benefit of a comprehensive plan to coordinate redevelopment activities, infrastructure investments, and appropriate densities and urban design controls across the neighborhood. The Proposed Actions are intended to address community concerns about insufficient infrastructure and poor building design that is not reflective of the neighborhood's existing character.

The Proposed Actions would catalyze new development and modify and enhance the character of the Project Area. As a part of the Neighborhood Study, it was essential to coordinate not only with community partners, but also multi-agency partners to ensure that the Plan was inclusive of the relevant capital infrastructure needs and services to support growth within the Project Area.

Although many of the infrastructure and service needs are outside of the purview of zoning, they are crucial to the planning and development of the community. The Framework, through its recommendations, highlighted a number of community needs. It has been used as a guide to inform the ongoing engagement process and work between the community and the City and has been instrumental in formulating the planning framework. DCP, in coordination with other City agencies, continues to work with community members, stakeholders, and elected officials to address as many of the recommendations, as feasible, to ensure that relevant infrastructure and service needs are a part of the overall planning process.

F. DESCRIPTION OF THE PROPOSED ACTIONS

The Proposed Actions are intended to help implement the objectives of a Gowanus Neighborhood Plan and a shared long-term vision for the future of the neighborhood to create affordable housing; spur economic and job growth; facilitate brownfield remediation; foster safer, active streets; create a vibrant, accessible, and resilient waterfront; and generate new community resources. To accomplish these goals, DCP is proposing zoning map amendments, zoning text amendments, and changes to the City Map that would affect approximately 82 blocks surrounding the Gowanus Canal and a segment of 4th Avenue. These areas include or are adjacent to portions of the Gowanus, Carroll Gardens, Boerum Hill, and Park Slope neighborhoods in Brooklyn, Community Districts 2 and 6. The affected area is generally bounded by Bond, Hoyt, and Smith Streets to the west; 3rd and 4th Avenues to the east; Huntington, 3rd, 7th, and 15th Streets to the south; and Warren, Baltic, and Pacific Streets to the north. In addition, HPD is seeking UDAAP designation, project approval, and disposition of City-owned property for sites under its jurisdiction on Blocks 471. NYC Parks is proposing the acquisition (post-UDAAP disposition) and mapping of new parkland on a portion of the City-owned site on Block 471.

DCP will be acting as lead agency on behalf of CPC and will conduct a coordinated environmental review. HPD will be an applicant for the UDAAP disposition application on the City-owned site on Block 471. NYC Parks will be an applicant for the parkland mapping actions. DCAS, on behalf of EDC, which is acting as the project sponsor, will be an applicant for the disposition of City-

owned property at 276 4th Avenue (Block 456, Lot 29). HPD, NYC Parks, and DCAS will serve as involved agencies under CEQR.

The Proposed Actions include discretionary land use approvals that are subject to review under ULURP, Section 200 of the City Charter, and the CEQR process. In addition, as noted above, a potential new 500-seat public school is envisioned as part of the Neighborhood Plan. Site selection and site plan approval for the new school would be conducted in accordance with the New York City School Construction Authority Act. The SCA's approval and site selection process is not subject to ULURP. The amended UDAAP designation sought by HPD for Block 1028, Lot 7 is not subject to ULURP, but it would require the approval of the City Council and Mayor.

In addition, several citywide text amendments are anticipated to be in public review concurrent with the Proposed Actions, including the Zoning For Transit Accessibility, Health & Fitness, Open Restaurants, and Hotels text amendments. The Proposed Actions include certain provisions that would be obviated by approval of these pending proposals. While the Proposed Actions contain these provisions to reflect the desired outcomes of the Gowanus Neighborhood Plan, it is anticipated that the citywide zoning text amendments, which would have the same effect in Gowanus, would ultimately supersede these provisions.

The Proposed Actions consist of the following discretionary approvals:

ZONING MAP AMENDMENTS

The Proposed Actions would change the zoning in an approximately 82-block area of Gowanus. The proposed zoning districts are shown in **Figure S-4**.

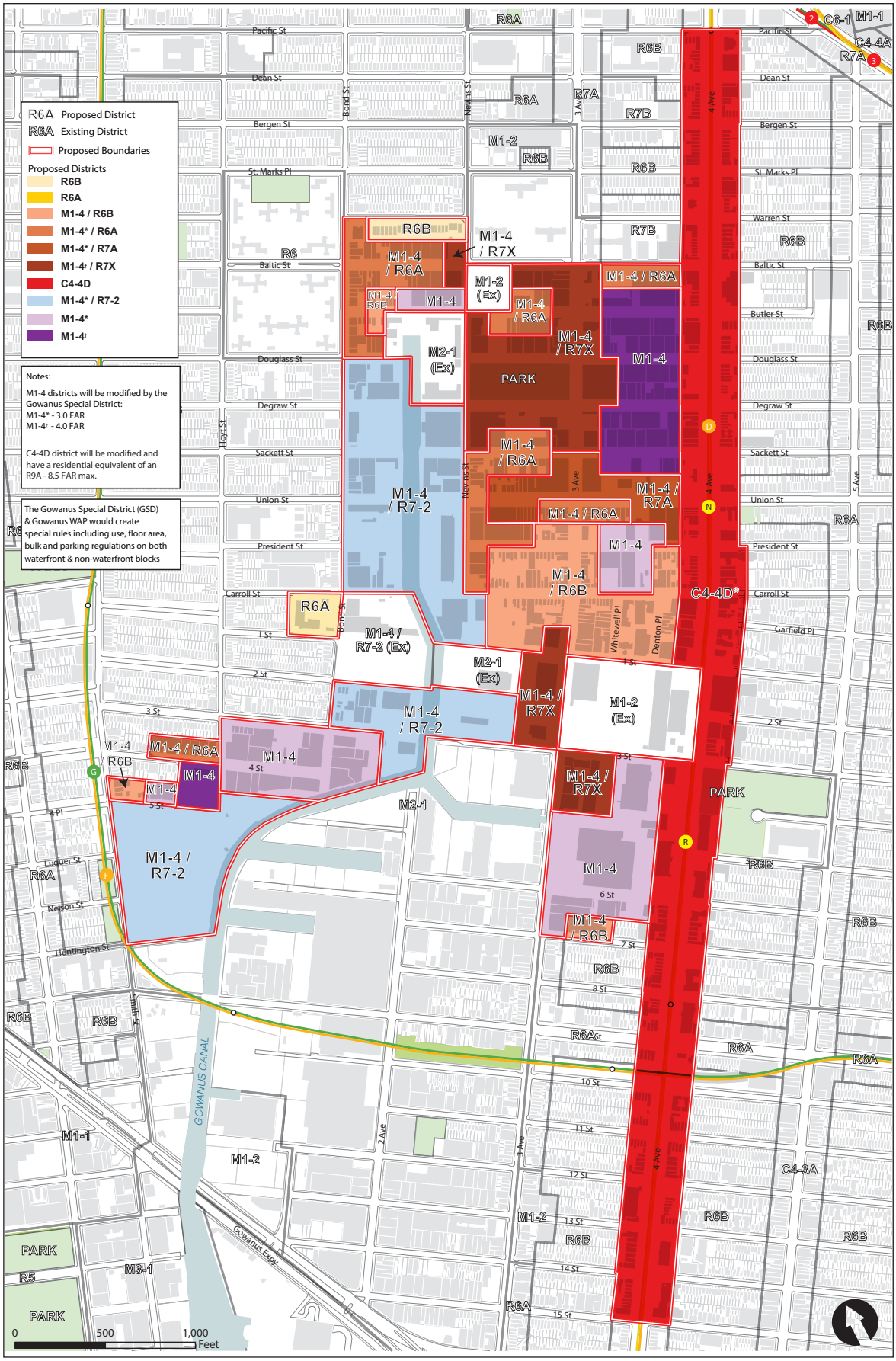
The Proposed Actions include zoning map amendments to:

- Rezone all or portions of existing R6, R6B, R8A, R8A/C2-4, C8-2, M1-1, M1-2, M2-1, and M3-1 zoning districts with R6A, R6B, M1-4/R6A, M1-4/R6B, M1-4/R7-2, M1-4/R7A, M1-4/R7X, C4-4D, and M1-4 zoning districts.
- Eliminate an existing C2-4 overlay along 4th Avenue and replace with a C4-4D district within the GSD.

ZONING TEXT AMENDMENTS

The Proposed Actions include zoning text amendments to:

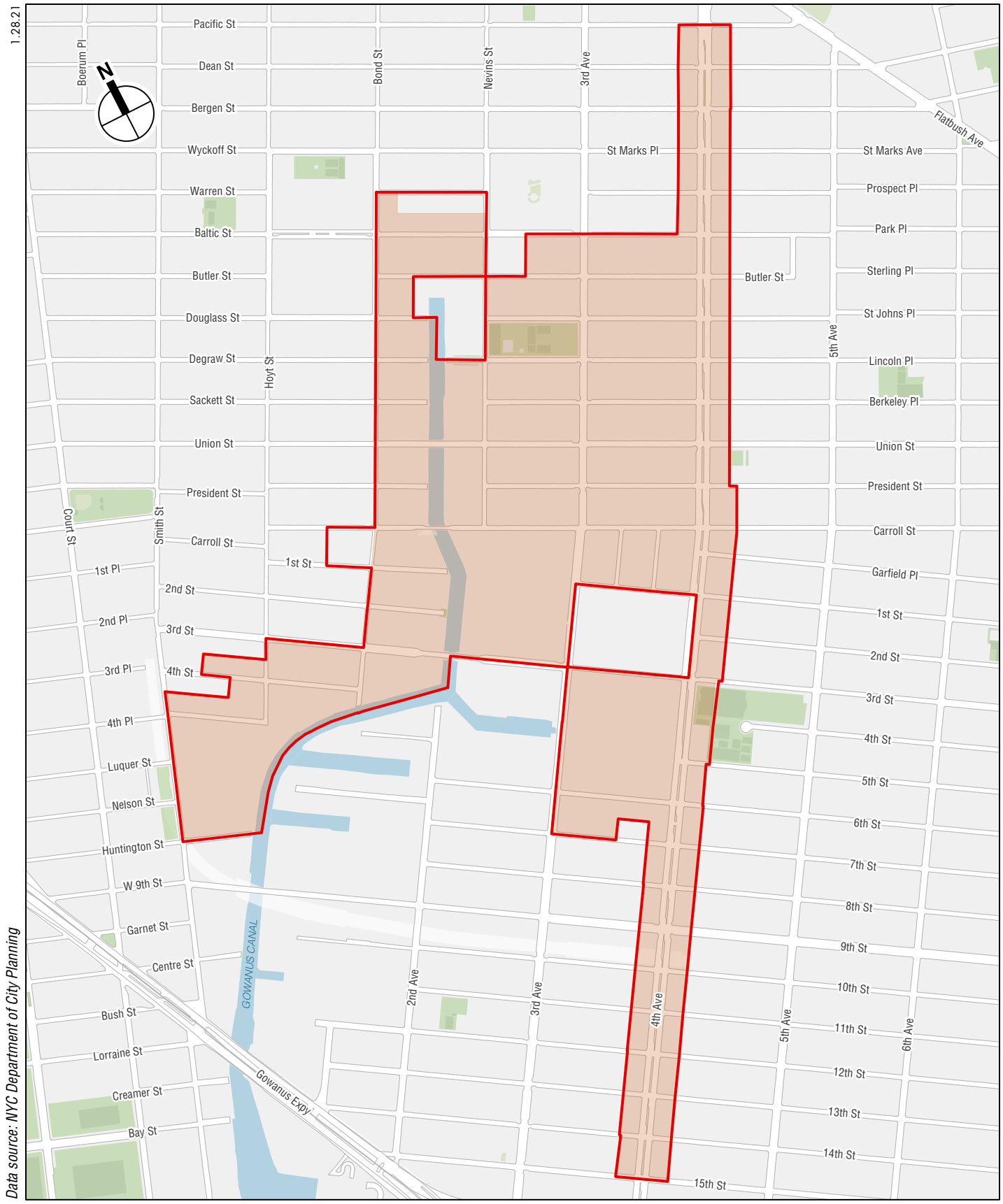
- Establish the GSD within the Project Area (see **Figure S-5**).
- The proposed GSD would create special use, floor area, bulk, and parking regulations on both waterfront and non-waterfront blocks and would establish special height and setback regulations for buildings on waterfront blocks and on select corridors among other special rules;
- Create the Gowanus WAP 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 Canal from surrounding neighborhoods and to address the configuration of and varied conditions along the Canal. The WAP would also modify requirements and standards for public access to address the unique character of the Canal;
- Replace the Special Enhanced Commercial District – 1 (EC) from Pacific to 15th Streets with similar and additional controls required through the GSD. The EC would continue to control development outside of the GSD and Project Area; and



Source: NYC Department of City Planning

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Zoning



Special Gowanus Mixed-Use District

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Figure S-5

- Amend Appendix F of the ZR to apply MIH to the proposed R6A, M1-4/R6A, M1-4/R6B, M1-4/R7-2, M1-4/R7A, M1-4/R7X, and C4-4D zoning districts to require a share of new housing to be permanently affordable where significant new housing capacity would be created (see **Figure S-6**).

The Proposed Actions include City Map amendments to:

- Acquire and map portions of Block 471, Lots 1 and 100 as parkland;
- Remove the Public Place designation on Block 471;
- Map new public streets on Block 471; and
- Demap 7th Street between Smith Street and the Gowanus Canal.

DISPOSITION APPROVAL AND URBAN DEVELOPMENT ACTION AREA PROJECT DESIGNATION

The Proposed Actions include UDAAP designation of HPD-owned property on Block 471 and project approval for the purpose of disposition and development pursuant to the proposed zoning. The UDAAP disposition actions and related approvals are described in more detail below under "Actions Necessary to Support the Gowanus Green Development."

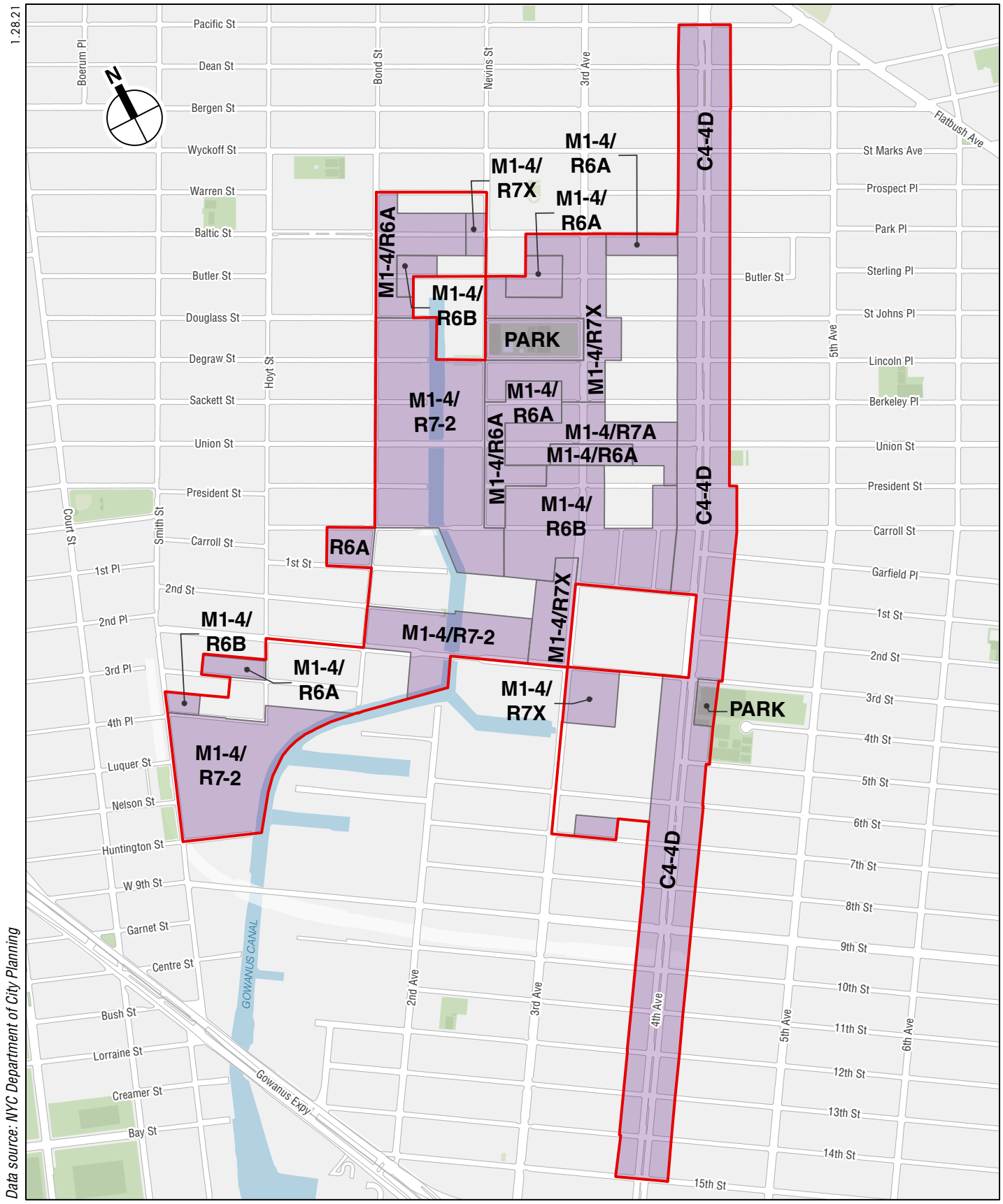
HPD is also be seeking an amended UDAAP designation for a project located on Block 1028, Lot 7. A previously approved UDAAP designation for the site allowed an eight-bed group home. The amended UDAAP approval would allow approximately 44 affordable DUs plus one unit for a superintendent for a total of 45 DUs in a mixed-use building with approximately 2,152 sf of retail space on the ground floor. The building would contain a total of 45,907 sf of floor area and would be developed in accordance with the proposed zoning. The amended UDAAP designation would require the approval of the City Council and Mayor.

DISPOSITION OF CITY-OWNED PROPERTY

DCAS, on behalf of EDC, which is acting as project sponsor, is seeking approval to dispose of City-owned property, in the form of one or more easements, located at 276 4th Avenue (Block 456, Lot 29) between Carroll Street and 1st Street pursuant to the proposed zoning. The parcel is currently zoned M1-2 and used by the MTA as a NYCT substation (known as the Garfield Substation). The substation would remain active on Block 456, Lot 29. The lot area is approximately 6,000 sf and is proposed to be rezoned to a C4-4D (R9A equivalent) district within the GSD. The proposed C4-4D would allow new mixed income housing, including market-rate and permanently affordable units, at a maximum FAR of 8.5, which would create approximately 51,000 sf of floor area. The approval of the disposition action would allow the sale of development rights and may facilitate the construction of mixed-use development on adjacent, privately-owned tax lot(s) that would comply with the proposed zoning. As described above, the purpose of the C4-4D district (R9A equivalent district) is to revitalize the 4th Avenue corridor through public realm and street improvements and requirements for permanently affordable housing.

PROPOSED ZONING MAP AMENDMENTS

The Proposed Actions would replace all or portions of existing R6, R6B, R8A, R8A/C2-4, C8-2, M1-1, M1-2, M2-1, and M3-1 zoning districts with R6B, R6A, M1-4/R6B, M1-4/R6A, M1-4/R7A, M1-4/R7-2, M1-4/R7X, C4-4D, M1-4, and M1-4 zoning districts. The proposed rezoning would also establish the GSD boundaries within the Project Area. The proposed GSD would create the WAP and special use, bulk, and parking regulations on both waterfront and non-waterfront blocks and would establish special height and setback regulations for buildings on waterfront



Mandatory Inclusionary Housing Area

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Figure S-6

blocks and on select corridors. The proposed rezoning would also eliminate an existing C2-4 district mapped within an existing R8A district along 4th Avenue, from 15th Street to Pacific Street. The proposed rezoning would replace the R8A/C2-4 district and Enhanced Commercial District along 4th Avenue within the Project Area with the proposed C4-4D district and the GSD. **Figure S-4** presents the proposed zoning map changes, which are discussed in greater detail below.

The GSD would modify certain regulations of underlying proposed zoning districts, including floor area regulations and height and setback provisions. The proposed districts are described below, and include a description of the proposed underlying zoning district regulations in comparison to the modifications proposed through the GSD. A more detailed discussion of the provisions of the proposed GSD is presented in the section thereafter.

PROPOSED M1-4 (WITHIN THE GSD)

(Existing M1-1, M1-2, M2-1, M3-1, and C8-2 Districts)

An M1-4 district is proposed on approximately 15 full or partial blocks in six areas:

- On portions of four blocks along 3rd, 4th and 5th Streets between Smith and Bond Streets currently zoned M1-1 and M3-1;
- On portions of two blocks bounded by 3rd and 4th Avenues, 6th and 7th Streets and 3rd Street currently zoned C8-2;
- On Butler Street, between Bond and Nevins Streets;
- On portions of two blocks along President Street, between 3rd and 4th Avenues currently zoned M1-2;
- On a portion of the block bounded by 3rd Street, Bond Street, and the Canal to the south and east currently zoned M2-1;
- On portions of five blocks along Butler, Douglass, Degraw, and Sackett Streets between 3rd and 4th Avenues currently zoned M1-2; and
- On a portion of the block bounded by Hoyt, 4th, and 5th Streets currently zoned M3-1.

Typically, the M1-4 district permits commercial and light industrial uses up to 2.0 FAR and community facility uses up to 6.5 FAR. Building height and setbacks in the M1-4 district is controlled by a sky exposure plane, and buildings can be constructed as towers. No off-street accessory parking is required in the M1-4 zoning district.

The Proposed Actions would establish an M1-4 district within the Project Area. The GSD would modify the M1-4 district to fill the need for a medium-density contextual district that allows commercial, industrial, and community facility uses at a moderate density in appropriate locations. As modified, the proposed M1-4 district would support the goals and objectives of the Neighborhood Plan by being mapped throughout the Project Area in isolation and paired with residential districts, which are described individually below.

Specifically, the M1-4 district, as modified, would allow retail and entertainment uses at a maximum FAR of 2.0 and industrial, certain community facilities, and other commercial uses (such as office and arts-related uses) at an FAR of 3.0 or 4.0, depending on the location (see **Figure S-4**).

Schools, houses of worship, health facilities, and non-profit hospitals would be allowed at a maximum FAR of 4.8. The 3.0 FAR district would allow buildings to rise to 65 feet before setting

back and rising to a maximum height of 85 feet. The 4.0 FAR district would allow buildings to rise to 95 feet before setting back and rising to a maximum height of 115 feet. An additional 30 feet would be allowed for sites larger than 20,000 sf. Use groups 3-14 and 16-18 would be allowed. No new residential use would be permitted. No off-street accessory parking is required in the M1-4 zoning district.

PROPOSED R6B

(Existing R6 District)

An R6B district is proposed for one partial block along Warren Street between Bond and Nevins Streets currently zoned R6.

R6B is a typical rowhouse district that includes height limits and street wall lineup provisions to ensure new buildings are consistent with the scale of the existing built context. R6B permits residential and community facility uses to a maximum FAR of 2.0 (2.2 residential FAR for AIRS or in areas designated as part of IH). Building base heights must be between 30 and 40 feet (45 feet with a QGF or IH), with 10-foot setbacks on a wide street and 15-foot setbacks on a narrow street, before rising to a maximum height of 50 feet (55 feet with a QGF or IH). New development in the proposed R6B district would be required to line up with adjacent structures to maintain a continuous street wall. Under the GSD, accessory off-street parking would be required for 20 percent of market-rate DUs. No accessory parking would be required for IRHUs.

PROPOSED R6A

(Existing R6B District)

An R6A district is proposed for one partial block along Bond Street between Carroll and 1st Streets currently zoned R6B.

The R6A district allows residential and community facility uses up to 3.0 FAR (up to 3.6 FAR is allowed in areas designated as part of IH). The district allows up to 3.90 FAR for AIRS. The building form requires a street wall between 40 and 60 feet, a setback between the minimum and maximum base, and a maximum building height of 70 feet (75 feet with a QGF and 85 feet with IH). The GSD would reduce the underlying R6A district's accessory off-street parking requirement, such that parking would be required for 20 percent of market-rate DUs. No accessory parking would be required for IRHUs.

PROPOSED M1-4/R6B

(Existing M1-1, M1-2, M2-1 and C8-2 Districts)

An M1-4/R6B district is proposed for 12 full or partial blocks in four areas:

- Along Bond Street between Baltic and Douglass Streets currently zoned M1-2 and M2-1;
- Along 3rd Avenue between Nevins Street and 4th Avenue currently zoned M1-2 and M2-1;
- Along 7th Street between 3rd and 4th Avenues currently zoned C8-2; and
- Along Smith Street between 4th and 5th Streets currently zoned M1-1.

The M1-4/R6B districts allow a maximum FAR of 2.2 for residential uses with MIH, and 2.0 for industrial, community facility, and commercial uses. Residential buildings with QGFs developed pursuant to IH have a base height of 30 to 45 feet, a setback above the street wall, and reach a maximum building height of 55 feet. No accessory parking is required for non-residential uses or IRHUs.

The GSD would modify the bulk regulations to allow non-residential and residential buildings with QGFs developed in accordance with IH to have base heights of 30 to 45 feet, setback, and reach a maximum building height of 55 feet (which currently would only apply to residential buildings). The proposed GSD would reduce the underlying R6B district's accessory off-street parking requirement, such that parking would be required for 20 percent of market-rate DUs, instead of 50 percent of market-rate DUs in a standard R6B district with MIH.

PROPOSED M1-4/R6A

(Existing R6, M1-1, M1-2 and M2-1 Districts)

An M1-4/R6A district is proposed for 12 full or partial blocks in six areas currently zoned M1-2 (and M3-1, as indicated below):

- Along blocks between Warren and Douglass Streets and between Bond and Nevins Streets;
- Along the midblock of Baltic Street between 3rd and 4th Avenues;
- Along the east side of Nevins Street between Union and Carroll Streets and portions of the midblocks between Sackett and President Streets;
- Along the southern portion of Union Street at the intersection of 3rd Avenue;
- On a portion of the block bounded by Smith, Hoyt, 4th, and 5th Streets currently zoned M3-1; and
- Along the midblock of Butler Street between Nevins Street and 3rd Avenue.

The M1-4/R6A district allows a maximum FAR of 3.6 for residential uses with MIH, 3.0 for community facility uses and 2.0 for commercial and manufacturing uses. Residential buildings with qualifying ground floors developed pursuant to IH have a street wall of 40 feet to 65 feet, a setback above the street wall and a maximum building height of 85 feet. No accessory parking is required for non-residential uses or affordable DUs, instead of 50 percent of market-rate DUs in a standard R6A district with MIH.

As modified by the GSD, the M1-4 district would allow commercial and manufacturing uses at a maximum FAR of 3.0 and retail and entertainment uses, as defined by the GSD, at a maximum FAR of 2.0. The GSD would modify the bulk regulations to apply the residential envelope to non-residential and residential buildings. The proposed GSD would reduce the underlying R6A district's accessory off-street parking requirement, such that parking would be required for 20 percent of market-rate DUs.

PROPOSED M1-4/R7A

(Existing M1-2 District)

An M1-4/R7A district is proposed for four partial blocks along Union Street between Nevins Street and 4th Avenue currently zoned M1-2.

The M1-4/R7A district allows a maximum FAR of 4.6 for residential uses with MIH, 4.0 for community facility uses, and 2.0 for commercial and manufacturing uses. Residential buildings with qualifying ground floors developed pursuant to IH have a street wall of 40 feet to 75 feet, a setback above the street wall and a maximum building height of 95 feet. No accessory parking is required for non-residential uses or affordable DUs.

As modified by the GSD, the M1-4/R7A district would allow commercial and manufacturing uses to a maximum FAR of 3.0, and retail and entertainment uses, as defined by the GSD, to a maximum FAR of 2.0. The GSD would modify the bulk regulations so that both non-residential

and residential buildings with QGFs developed pursuant to IH have base heights of 40 feet to 75 feet, a setback above the street wall and a maximum building height of 95 feet. The proposed GSD would reduce the underlying R7A district's accessory off-street parking requirement, such that parking would be required for 20 percent of market-rate DUs.

PROPOSED M1-4/R7X

(Existing R6, M1-2, M2-1, and C8-2 Districts)

An M1-4/R7X district is proposed for 11 full or partial blocks in three areas:

- Between Baltic and Sackett Streets along 3rd Avenue, and around Thomas Greene Playground;
- On portions of two block frontages at the intersection of Baltic and Nevins Streets; and
- Along 3rd Avenue between 1st and 3rd Streets.

The M1-4/R7X district allows a maximum FAR of 6.0 for residential uses with MIH, 5.0 for community facility uses, and 2.0 for commercial and manufacturing uses. Residential buildings with QGFs developed pursuant to IH have a base height ranging between 60 and 105 feet, a setback above the street wall, and a maximum building height of 145 feet. No accessory parking would be required for non-residential uses or affordable DUs.

As modified by the GSD, the M1-4/R7X district would establish a basic maximum FAR of 5.6 for residential uses with MIH. Commercial and manufacturing uses would be allowed at a maximum FAR of 4.0 and retail and entertainment uses, as defined by the GSD, at a maximum FAR of 2.0. The basic maximum FAR can be increased up to 6.0 FAR with the inclusion of certain non-residential uses (see below for additional details). The GSD would modify the height and setback regulations to allow non-residential and residential buildings with QGFs developed pursuant to IH to have base heights ranging between 60 feet and 105 feet, setback above the street wall, and have a maximum building height of 145 feet. The proposed GSD would reduce the underlying R7X district's accessory off-street parking requirement, such that parking would be required for 20 percent of market-rate DUs.

PROPOSED M1-4/R7-2

(Existing M2-1 and M3-1 Districts)

An M1-4/R7-2 district is proposed on approximately 13 full or partial blocks in three areas:

- On waterfront blocks between Douglass and Carroll Streets on the west side of the Canal, and Degraw and 1st Streets on the east side of the Canal;
- On waterfront blocks that front 3rd Street on the west side of the Canal and between 2nd and 3rd Streets on the east side of the Canal; and
- On a waterfront block that fronts Smith and 5th Streets along the west side of the Canal.

The M1-4/R7-2 district typically allows a maximum FAR of 4.6 for residential uses with MIH, 6.5 for community facility uses, and 2.0 for commercial and manufacturing uses. No accessory parking is required for non-residential uses or affordable DUs.

As modified by the GSD, the M1-4/R7-2 district would establish a basic maximum FAR of 4.4 for residential uses with MIH. Community facility uses would be allowed at a maximum FAR of 4.0, commercial and manufacturing uses would be allowed at a maximum FAR of 3.0 and retail and entertainment uses, as defined by the GSD, at a maximum FAR of 2.0. The basic maximum

FAR can be increased up to 5.0 FAR with the inclusion of certain non-residential uses (see below for details). Special street wall, height, and bulk envelope regulations would be controlled by the proposed GSD along with other special urban design and parking provisions, which are described in more detail below. The proposed GSD would reduce the underlying R7-2 district's accessory off-street parking requirement, such that parking would be required for 20 percent of market-rate DUs.

PROPOSED C4-4D

(Existing M1-2, C8-2, and R8A Districts)

A C4-4D district is proposed on 50 partial block frontages along 4th Avenue between Pacific and 15th Streets currently zoned R8A, M1-2, and C8-2.

C4-4D is typically an R8A-equivalent district that permits residential development up to 7.2 FAR with MIH, commercial uses up to 3.4 FAR, and community facilities up to 6.5 FAR. Buildings in the C4-4D district generally require a base height between 60 and 85 feet and a maximum building height of 120 feet (125 feet with a QGF and 145 feet with IH). No accessory parking is required for affordable DUs.

The GSD would modify the R8A-equivalent district and establish a residential equivalent of an R9A district with a maximum FAR of 8.5 for residential uses with MIH or AIRS and a maximum base height of 125 feet and a maximum building height of 175 feet on wide streets. The proposed GSD would eliminate the non-residential parking requirement of one space per 1,000 square feet and reduce the underlying C4-4D district's accessory off-street parking requirement, such that parking would be required for 20 percent of market-rate DUs.

PROPOSED ZONING TEXT AMENDMENTS

DCP proposes several text amendments to facilitate the land use objectives of the Gowanus Neighborhood Plan. The following is a description of the proposed text amendments.

SPECIAL GOWANUS MIXED-USE DISTRICT (GSD)

The GSD would be mapped within the Project Area and on waterfront blocks affected by the Proposed Actions (see **Figure S-5**). The proposed GSD would create special use, floor area, bulk, and parking regulations on both waterfront and non-waterfront blocks and establish special height and setback regulations for buildings on waterfront blocks and key corridors. A summary of the proposed modifications to certain districts is shown in **Table S-2** below:

Modify the established M1-4, M1-4 (w/ R6B), and C4-4D districts throughout the Project Area to support the overall goals and objectives of the Gowanus Neighborhood Plan.

Table S-2
Proposed Modification to Certain Districts

	M1-4 (w/ R6B)	M1-4*		C4-4D
Use Groups	3-14, 16, 17, 18			1-6, 8-10, 12
Maximum FAR	2	3	4	8.5
Industrial	2	3	4	-
Community Facility	2	3	4	6.5
Commercial	2	3	4	3.4
Retail / Entertainment	2	2	2	
Parking Requirements				
Non-Residential	None			

Affordable Units				
Market Rate Units	20%	-	-	20%
Note: *FARs of 3 and 4 in proposed M1-4 district vary by location as shown in **Figure S-4**.				

Use Regulations

As described above, the GSD would allow a mix of compatible light industrial, commercial, community facility, and residential uses; expand the types of community facility and commercial uses permitted as-of-right; and allow for additional flexibility for location of uses within the same building. In zoning districts that permit hotels, the GSD would require a special permit for any new hotel developments. The GSD would establish certain streetscape requirements to encourage a pedestrian-friendly environment, including requirements for ground-floor use in key locations like cross-Canal connectors on a percentage of building frontages and screening requirements for off-street parking facilities.

The GSD would include supplemental ground-floor use regulations in key locations to require active non-residential or commercial uses and minimum levels of transparency as well as limit curb cuts, where appropriate. Non-residential ground-floor uses (i.e., commercial space, light industrial space, arts-related space, or community facilities) would be required along key corridors (4th and 3rd Avenues, Union and 3rd Streets) and around certain planned investments and improvements (Thomas Greene Playground), and would require active ground-floor use requirements at Canal crossings, which are critical junctures for east–west travel and the envisioned new public esplanade space. In addition, Physical Culture and Health Establishments would be permitted as-of-right. Overall, the controls would foster a safe, varied, and walkable pedestrian experience along major corridors and at key locations where access to the waterfront esplanade should be encouraged. The ground-floor requirements would also help activate and create a mixed-use neighborhood in other areas where major private and public investments are planned for the public realm.

Floor Area Regulations

The GSD would modify floor area regulations of underlying proposed zoning districts as described above and shown in **Figure S-4**.

The GSD would establish a basic maximum FAR for the proposed districts and maximum FARs for specific uses as described above. Along 4th Avenue, the GSD would modify the underlying C4-4D district to have an R9A equivalent maximum residential FAR of 8.5. The GSD would modify the M1-4 district to fill the need for a medium-density contextual district that allows commercial, industrial, and community facility uses at a moderate density in appropriate locations. As modified, the proposed M1-4 district would support the goals and objectives of the Neighborhood Plan by being mapped throughout the Project Area in isolation and paired with residential districts, as described above. Within the M1-4 district, the GSD would allow schools, houses of worship, health facilities, and non-profit hospitals at a maximum FAR of 4.8. The GSD would create special floor area regulations where new streets are proposed to be mapped as part of the Proposed Actions. The GSD would compensate these sites with an equal amount of floor area as contained within the bed of the proposed mapped streets.

In key locations, the GSD would apply special FAR regulations to ensure a desirable mix of residential, commercial, light industrial, arts-related, and production uses that support the objectives of the Plan. Incentives would be applied to districts that are primarily proposed along the Canal and around Thomas Greene Playground to promote mixed-use residential buildings that

include a diversity of non-residential uses. One would incentivize the inclusion of a wide range of non-residential uses allowed in the proposed districts. The other would incentivize inclusion of a more specific set of uses that include light industrial, arts-related, cultural, and civic uses; and repair and production services. Along 4th Avenue, the GSD would modify the underlying C4-4D district to have an R9A equivalent maximum residential FAR of 8.5. The GSD would also apply special FAR regulations to promote community resources, such as schools.

The GSD would also apply special FAR regulations to promote community resources, such as schools. The GSD would allow floor area for schools, as defined by the GSD and under certain conditions, to be exempted. Along the Canal, exempted floor area would be accompanied by an increase in maximum permitted height to accommodate the school. The GSD would also create an authorization that would allow for the exemption of school floor area and modified bulk under certain conditions throughout the GSD.

Street Wall Location and Bulk Envelope

The GSD would modify height and setback regulations and street wall location requirements of the underlying proposed zoning districts. In order to reach a total sidewalk width of 15 feet, the GSD would require a sidewalk widening on portions of Nevins Street from Degraw to Carroll Streets, on both sides of 3rd Avenue from Baltic to Union Streets, and the south side of 5th Street between Smith and Hoyt Streets. Additional street wall location requirements would be required at certain bridge crossings. Street walls in excess of 200 feet would be required to recess or project from the street wall.

The GSD would modify underlying yard and rear yard regulations, including permitted obstructions, rear yard equivalents and rear yards along district boundaries. The GSD would modify typical yard regulations to allow rear yards to be provided at a height of 30 feet, as opposed to 23 feet and to accommodate higher floor-to-ceiling heights that commercial and industrial uses typically require, increasing the viability of these spaces in mixed-use buildings. The GSD would remove the rear yard equivalents in through lots with manufacturing and mixed-use districts. For buildings within manufacturing districts, the GSD would reduce the rear lot depth from 20 feet to 10 feet for buildings below 65 feet in height and from 20 feet to 15 feet for buildings above 65 feet and below 125 feet in height.

In addition to the zoning requirements of the underlying districts, the GSD would modify certain height, setback, and permitted obstruction regulations and create special rules for the Canal blocks. Along the frontages of Bond Street, the base of a building would be limited to a height of 55 feet followed by a required setback of 15 feet. Along the frontages of Nevins Street and the Canal from the head of the Canal to 2nd Street, the base of a building would be limited to a height of 65 feet followed by a required setback of 15 feet. Within a distance of 65 feet from Bond Street, building heights would be limited to a height of 65 feet. Beyond these frontages, building heights would be limited to a maximum of 85 feet. Certain side streets would have a base height of 85 feet.

The GSD would control width, length, coverage and height of a “tower” and regulations for sites with multiple towers. Generally, on typical Canal sites, building portions above a height of 85 feet would be considered a “tower” with a maximum height of 225 feet after a setback of 15 feet above the base height and 30 feet from a waterfront yard and Nevins Street. No “towers” would be permitted within 65 feet of Bond Street. Sites with multiple towers would have additional regulations including a required four-story or 50-foot height difference, whichever is greater, and would be required to locate the taller tower north of the midblock line at certain locations.

Additional modifications, regulations, and controls would be applied to sites with unique conditions or constraints.

Along portions of 3rd Street and portions of the proposed extensions of Nelson, Luquer, and Hoyt Streets, a building would be limited to a height of 85 feet followed by a setback of 10 feet. Along portions of 5th, Smith, Luquer, and Nelson Streets, a building would be limited to base heights ranging from 75 feet to 105 feet, followed by either a 10- or 15-foot setback depending on the location. Transition heights would be applied in these areas to allow for a graduation of height across sites. Transition heights range from 65 feet to 95 feet depending on location. In limited areas, including around new mapped parkland and new streets, transition heights would range from 115 to 145 feet and the maximum heights would range from 245 feet to 305 feet.

The 3.0 FAR M1-4 district would allow buildings to rise to 65 feet before setting back and rising to a maximum height of 85 feet. The 4.0 FAR M1-4 district would allow buildings to rise to 95 feet before setting back and rising to a maximum height of 115 feet. An additional 30 feet of height would be allowed for developments on lots greater than 20,000 sf in the modified M1-4 district to accommodate larger office buildings.

The GSD would create an authorization to modify the bulk envelope for existing, large mixed-use sites seeking to redevelop while integrating new development with substantial, existing buildings. The authorization, which would apply to zoning lots greater than 40,000 square feet and which contain predominantly non-residential uses, would allow for modifications to height and setback regulations and use and streetscape regulations to promote a mixed-use development with a superior site plan and design that better relates to the zoning lot, adjacent streets and surrounding neighborhood.

Public Access Area

In key locations, the GSD would support public access to existing and future neighborhood resources, like designed upland connections to an improved waterfront recreation area. The creation of new public areas and access points would facilitate key goals of the Neighborhood Plan by creating new publicly accessible open space and re-establishing the neighborhood's connection to and use of the waterfront.

Parking and Loading Regulations

The GSD would modify the underlying accessory residential parking requirements to 20 percent of market-rate DUs and eliminate parking requirements for non-residential uses. No parking would be required at the Gowanus Green Development to facilitate remediation and redevelopment plans. The modification would address site conditions and facilitate active ground-floor use for a percentage of site frontage. The GSD would allow for wider flexibility in off-site provision of required accessory off-street parking spaces, which would be applicable to zoning lots anywhere within the GSD. The GSD would allow for joint parking facilities to provide required accessory off-street parking for two or more buildings and for car sharing vehicles to occupy up to 20 percent of all required off-street parking spaces in a parking facility. All accessory off-street parking spaces may be made available for public use. Special curb cut regulations limiting curb cuts to off-street parking facilities and loading berths would be focused along key streets and in proximity to a shore public walkway. To encourage a more vibrant, active, and safe 4th Avenue, the GSD would allow for existing ground-floor parking to be replaced by active ground-floor uses. Loading requirements would be modified to better reflect modern business needs.

Transit Improvements

Under the proposed GSD, owners of lots adjacent to subway stations along 4th Avenue within the Project Area would be required to coordinate with MTA and DCP in order to obtain a CPC Chairperson Certification prior to any development. This process would determine whether an easement, zoning relief, or other interventions would be needed to allow for station improvements. Any floor area utilized by MTA for station circulation improvements would be exempt from FAR calculations and any development required to provide an easement for an improvement would be allowed to rise an additional story (10 feet).

The GSD would also apply special FAR regulations to promote transit improvements. The GSD would create an authorization that would allow an increase in density in exchange for identified transit improvements. The authorization, which would apply to developments or enlargements within 500 feet of a subway station, would allow for an increase in density and maximum building height up to 20 percent and modification of street wall location and street wall continuity requirements to accommodate the additional density in exchange for improvements to transit infrastructure and access to transit facilities such was subway stations. The bonus would be in addition to the proposed as-of-right maximum FAR. The GSD would also create a Chairperson Certification that would allow an increase in density in exchange for identified transit improvements at the Union Street (R train) subway station.

Waterfront Access Plan

The GSD would establish the Gowanus WAP in order to institutionalize a framework by which a continuous shore public walkway would be constructed over time through a mix of public and private investment. The WAP would cover the waterfront blocks within the Project Area. Developments, enlargements, and/or changes of use on the waterfront would be required to comply with waterfront zoning regulations.

WPAA guidelines generally require a minimum 40-foot shore public walkway on typical sites and a minimum 30-foot shore public walkway on certain constrained sites, and on larger sites supplemental public access areas that ensure that 20 percent of the lot is devoted to waterfront public access. WPAA guidelines are broad guides for waterfront open space that apply throughout the City. In the case of unique places like the Gowanus Canal, standard application of WPAA guidelines is often challenging if not impossible and may not respond to the unique nature of the local waterfront context. Moreover, simply applying the existing WPAA guidelines will not support the community vision for a unique open space with a diversity of experiences along the Canal. The Gowanus WAP would modify the underlying standard WPAA requirements to address the unique character of the Canal and support the overall goals outlined in the Gowanus Plan.

The WAP, in conjunction with the proposed zoning districts and GSD, would establish the location of required shore public walkways, supplemental public access areas, upland connections, and visual corridors to ensure access to the Canal from surrounding neighborhoods and to address the varied lot configurations and conditions along the Canal's edge. The WAP would modify requirements and standards for public access, and apply waterfront zoning regulations to Use Groups 16 (semi-industrial), 17 (light industrial), and 18 (heavy industrial). It would also modify typical dimensional and grading requirements, permitted obstructions, and design standards for public access to allow and encourage unique design solutions that are challenging to implement under standard WPAA regulations, such as flood-resilient, bi-level esplanades. The WAP would ensure long-term continuity of public access across all sites along the Canal (including at street ends and bridge crossings) with maximum grade-change constraints.

The WAP would incentivize incorporation of community amenities like comfort stations, boat launches, and historic interpretation elements, as well as include incentives that encourage programming and activation of the waterfront with design features such as tot lots and dog runs. The WAP would eliminate lawn requirement for sites smaller than 15,000 sf and expand the size of permitted kiosks on the largest sites along the Canal. Generally, on certain narrow or otherwise encumbered parcels, the minimum width of the required shore public walkway would be modified from 40 to 30 feet. On larger parcels, the minimum width of the required shore public walkway would remain 40 feet. Additionally, the WAP would require that at least 80 percent of the required circulation path be located at a level no less than 6 feet above the shoreline. Other modifications include improving adjacent streets as a continuation of the shore public walkway or supplemental public access area and modifying the minimum width of the primary and secondary circulation path. The WAP would also allow a lower average maintained level of illumination to respond to unique conditions along the Canal. These and other modifications in the WAP would help ensure the future shoreline is appropriately elevated while allowing for a shore public walkway with sufficient design flexibility to accommodate a variety of uses, activities, and experiences.

CITY PLANNING COMMISION SPECIAL PERMITS, AUTHORIZATIONS, AND CHAIRPERSON CERTIFICATIONS

The Proposed Actions include amendments to the text of the ZR to:

- create a Special Permit to allow hotels in the Project Area (as permitted by the underlying zoning district regulations);
- create an Authorization to allow for the exemption of school floor area and modified bulk under certain conditions throughout the GSD;
- create an Authorization to modify the bulk envelope (height and setback regulations), use and streetscape regulations for existing, large mixed-use sites proposed for redevelopment that integrate new development with substantial, existing building(s);
- create an Authorization to allow an increase in density in exchange for identified transit improvements; and
- create a Chairperson Certification to allow an increase in density in exchange for identified transit improvements at the Union Street (R train) subway station.

MANDATORY INCLUSIONARY HOUSING

MIH requires permanently affordable housing within new residential developments, enlargements, and conversions from non-residential to residential use within the mapped MIH Areas. The program requires permanently affordable housing set-asides for all developments over 10 units or 12,500 zoning square feet (zsf) within the MIH Areas. An additional option of a payment into an Affordable Housing Fund is available for developments between 10 and 25 units, or between 12,500 zsf to 25,000 zsf. In cases of hardship, where these requirements would make development financially infeasible, developers may apply to BSA for a special permit to reduce or modify the requirements. Developments, enlargements, or conversions that do not exceed either 10 units or 12,500 zsf of residential floor area would be exempt from the requirements of the program.

The Proposed Actions would map MIH Options 1, 2, and 3 within the rezoning area. MIH typically includes two primary options that pair set-aside percentages with different affordability levels to reach a range of low and moderate incomes while accounting for the financial feasibility trade-off inherent between income levels and size of the affordable set-aside. Option 1 would require 25

percent of residential floor area to be set aside for affordable housing units for households with incomes averaging 60 percent of the Area Median Income (AMI). Option 1 also includes a requirement that 10 percent of residential floor area be affordable at 40 percent of AMI. Option 2 would require 30 percent of residential floor area to be for affordable to households with an average of 80 percent of AMI. Additionally, Option 3—which could be applied in conjunction with Options 1 or 2—would require that 20 percent of the residential floor area be affordable to residents at 40 percent AMI.

PROPOSED AMENDMENT TO THE SPECIAL ENHANCED COMMERCIAL DISTRICT – (EC-1)

The Proposed Actions would modify the EC-1, which was mapped along portions of 4th Avenue in 2011 to enhance the vitality of emerging commercial districts ensuring that a majority of the ground-floor space within buildings would be occupied by commercial establishments that enliven the pedestrian experience along the street. The Proposed Actions would replace the EC-1 from Pacific Street to 15th Street with similar and additional controls required through the GSD. The EC-1 would continue to control development outside of the GSD and Project Area.

PROPOSED CITY MAP AMENDMENTS

The Proposed Actions include changes to the City Map to:

- Remove the Public Place designation to facilitate development of housing, community resources, and new open space;
- Map portions of Block 471, Lots 1 and 100, as parkland to provide a major new neighborhood park that would anchor nearby mixed-use developments on Lot 100 (the City-owned parcel is located at the end of 5th Street adjacent the west side of the Gowanus Canal);
- Map new public streets on Block 471 to coordinate private and public improvements and to provide access to new mixed-use developments and neighborhood open space; and
- Demap 7th Street between Smith Street and the Gowanus Canal.

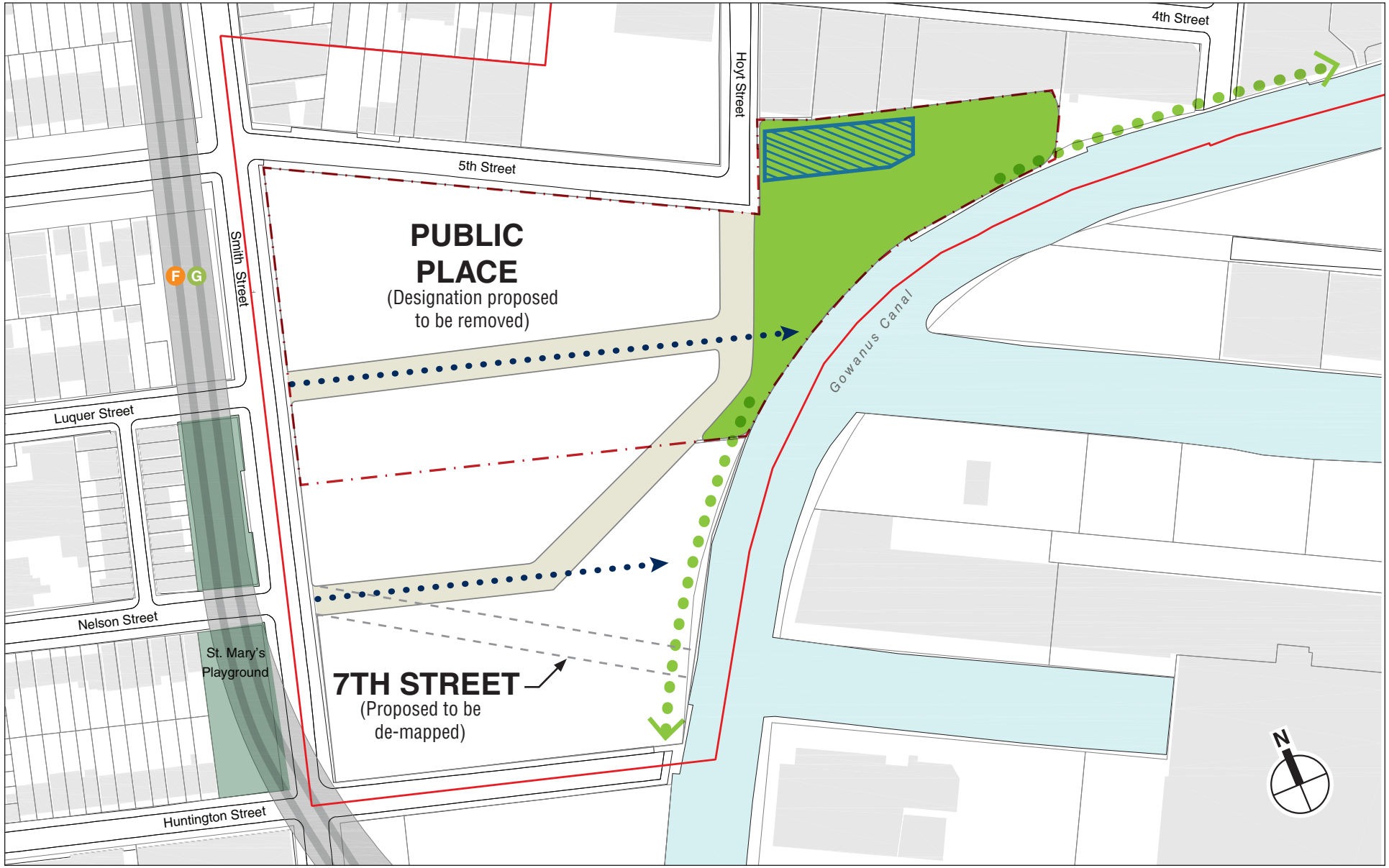
The proposed changes to the City Map (see **Figure S-7**) are intended to reconnect the community to the Gowanus Canal, improve neighborhood livability by increasing access to publicly accessible open space and the waterfront, and facilitate public realm improvements in connection with planned private and public investments. The proposed demapping of a Public Place designation and mapping of new streets and parkland would facilitate the redevelopment of City-owned property for a mix of uses, including significant amounts of affordable housing along with community facility, commercial, light manufacturing, open space or other uses allowed under the proposed zoning, and would provide new open space and help connect new parkland and waterfront open space along the Canal. The proposed mapping and demapping actions on Block 471 would reconnect the area to the street grid and surrounding communities and support the redevelopment and remediation of large vacant and underutilized sites.

WATERFRONT REVITALIZATION PROGRAM (WRP)

Portions of the Project Area are 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.

1.27.21

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY



Source: NYC Department of City Planning

Project Area
Property Line
Proposed Street Network
Existing Open Space
Future Open Space
School Yard
Future 40' Shore Public Walkway
View Corridors

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

City Map Amendments

Figure S-7

ACTIONS NECESSARY TO SUPPORT THE GOWANUS GREEN DEVELOPMENT

The Proposed Actions would support the proposed development of the City-owned site on Block 471 with a mixed-use development known as Gowanus Green (or "Gowanus Green Development") by rezoning the site from M3-1 to M1-4/R7-2, mapping new streets and parkland, and removing the "Public Place" designation on the City Map. The Gowanus Green Development would include new housing, of which a substantial amount would be affordable, and a variety of non-residential space, including a potential new school, open space, and other uses allowed under the proposed zoning. The new open space would be over one acre in size and located along the Canal. As part of the proposal, a new streets would be constructed that would include the eastern prolongation of Luquer Street east of Smith Street, and the continuation of Hoyt Street south of 5th Street connecting to Nelson Street.

In 2008, HPD designated a development team, Gowanus Green Partners, LLC, under development programs that no longer exist and economic conditions that have changed substantially since the developer designation. HPD continues to finance affordable housing on City-owned sites, but its development programs are subject to change if the availability of subsidy or other financing incentives at the local, state, and federal levels shift or if there are significant changes in the residential real estate market based on development or financing costs. For the purposes of a conservative CEQR analysis, it is assumed that the Gowanus Green Development would be a 100 percent affordable project for the publicly funded daycare analysis in the Community Facilities chapter; however, in the Socioeconomic Conditions chapter, 50 percent affordability will be assumed, as this is a more conservative approach for the indirect residential displacement analysis. HPD intends to fund a 100 percent affordable housing project at Gowanus Green. Currently HPD programs finance affordable housing at a range of incomes, from 30 percent of AMI (approximately $28,170 for a family of three) to 130 percent of AMI (approximately $122,070 for a family of three). CEQR methodology for publicly funded childcare analyses defines affordable units as those units that are affordable to households earning up to 80 percent of AMI.

In addition to the land use actions described above, approvals necessary to facilitate the Gowanus Green Development include UDAAP designation and disposition approval. Background on the site and a description of the proposed discretionary actions needed to facilitate the Gowanus Green Development is provided below.

HISTORY

From the late 1860s until 1958, the City-owned site was an MGP operated by Brooklyn Union Gas and its successor organizations, including Citizens Gas, Keyspan, and National Grid. In 1970, the City of New York adopted the first Gowanus Industrial Development Plan, an Urban Renewal Plan (URP) that designated the boundaries of an Urban Renewal Area (URA) along the Canal that included the site. The URP sought to redevelop the Gowanus URA by removing substandard and deteriorating non-industrial land uses, removing impediments to land disposition and development, creating job opportunities, and establishing appropriate industrial land uses to strengthen and support the area's industrial character. The URP permitted a mix of industrial uses, commercial uses, and public facilities and improvements on City-owned sites.

In 1974, the site was designated as a "Public Place" on the City Map to allow a future public purpose compatible with the surrounding area and to provide open space for public use. In 1975, the City of New York acquired both of the lots that today comprise the City-owned site through eminent domain. As a result of the community's desire for more community and/or residential uses, the Gowanus Industrial Development Plan was amended in 1976 and the City-owned site

was removed from the URA. The First Amended Plan removed the area between Smith and Bond Streets, from 4th to 9th Streets, from the URA. Lots 1 and 100 have remained under City control since their acquisition in 1975, are currently vacant, and under HPD jurisdiction. Due to its historical use as an MGP, the City-owned site will be the subject of substantial remediation, to be undertaken by National Grid.

DISPOSITION APPROVAL AND UDAAP DESIGNATION

HPD is seeking approval of a UDAAP designation, project approval, and disposition of a City-owned parcel to facilitate the development of Gowanus Green. The disposition area consists of portions of two City-owned lots. The requested approval would permit the construction of a mixed-use development that could include housing, community facility, commercial, light manufacturing, and other uses allowed under the proposed zoning. Pursuant to UDAAP, development rights would be transferred along with the disposition area. Affordability requirements would be contained within HPD's Land Disposition Agreement (LDA).

POTENTIAL FUTURE ACTIONS

HPD may provide construction funding through several financing programs intended to facilitate the development of new affordable housing and the preservation of existing affordable units for a range of incomes, including supportive housing and senior housing on privately owned or City-owned land. HPD's financing programs would provide both for-profit and not-for-profit developers a wide range of opportunities to build or preserve rental and homeownership units within the Project Area. HPD works together with a variety of public and private partners to achieve the City's affordable housing goals. In addition to HPD financing, in conjunction with the issuance of tax-exempt bonds, HDC may fund construction of new affordable multi-family apartment buildings and the rehabilitation of existing multi-family apartment buildings intended to upgrade existing developments and preserve affordability. In addition, developers may seek a tax exemption pursuant to Article XI of the New York Private Housing Finance Law. Affordable housing developed and/or preserved within the Project Area may also utilize funding provided by New York State Homes and Community Renewal (HCR) and the U.S. Department of Housing and Urban Development (HUD), which would be subject to separate future environmental reviews under State Environmental Quality Review Act (SEQRA) and National Environmental Policy Act (NEPA), respectively. In addition, any new public school facilities would require approval and site selection from SCA. SCA approval and site selection are not subject to ULURP.

OTHER ACTIONS THAT WOULD AFFECT THE PROJECT AREA

The Flood Resilience Zoning Text (the "2013 Flood Text") and Special Regulations for Neighborhood Recovery ("2015 Recovery Text") were adopted on an emergency basis after Hurricane Sandy to advance the reconstruction of storm-damaged properties and enable new and existing buildings to comply with flood-resistant construction standards (contained in Appendix G of the New York City Building Code).

Independent of the Proposed Actions described above, DCP is proposing to improve and make permanent these rules before they expire. Currently, the anticipated text amendment would expand the geographical area where buildings could make investments in small resiliency improvements or otherwise fully meet or exceed flood-resistant construction standards; allow optional flexibility to measure the building envelope from the reference plan, which can be between the Design Flood Elevation (DFE) and 10 feet above grade; allow dry flood-proofed, non-residential ground-floor space to be exempted under certain circumstances; allow more flexibility for resiliently locating mechanical equipment in buildings; and establish new rules to allow the City to more quickly

respond to potential future disasters and offer assistance. The text amendment was referred out on October 19, 2020 and is expected to be in public review concurrent with the Proposed Actions. Since these zoning changes would affect districts described above, their relevant and applicable effects (as currently known) on the Project Area will be analyzed as part of this environmental review in order to provide a conservative analysis.

G. ANALYSIS FRAMEWORK

REASONABLE WORST-CASE DEVELOPMENT SCENARIO

In order to assess the possible effects of the Proposed Actions, a RWCDS was developed for both the current (No Action) and proposed zoning (With Action) conditions for a build year, or analysis year of 2035. The incremental difference between the No Action and With Action conditions will serve as the basis for the impact analyses in the Environmental Impact Statement (EIS). For area-wide rezonings not associated with a specific development, a 10-year period is typically the length of time over which developers would act on the area-wide zoning map changes such as those proposed. However, a longer projected build out resulting in a build year of 2035 was assumed for the environmental analyses since the Neighborhood Plan includes long-range planning efforts involving multiple government jurisdictions in addition to the proposed rezoning.

To determine the No Action and With Action conditions, standard methodologies have been used following *CEQR Technical Manual* guidelines employing reasonable assumptions. These methodologies have been used to identify the amount and location of future development.

GENERAL CRITERIA FOR DETERMINING DEVELOPMENT SITES

In projecting the amount and location of new development, several factors have been considered in identifying likely development sites. These include known development proposals, past 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 to occur only on selected sites within the Project Area. The first step in establishing the development scenario was to identify those sites where new development could reasonably be expected to occur.

Development or adaptive reuse sites were initially identified based on the following criteria:

- Lots located in areas where a substantial increase in permitted FAR is proposed and/or where residential use would be allowed where it currently is not permitted;
- Sites on which hotel development has been proposed but building permits have not been issued or construction has progressed substantially;
- Lots with a total size of 4,000 sf or larger (may include potential assemblages totaling 4,500 sf, respectively, if assemblage seems probable[3]) or certain smaller-sized lots (2,000 sf or greater) that are substantially underdeveloped;[4] or

[3] Assemblages are defined as a combination of adjacent lots, which satisfy one of the following conditions: (1) the lots share common ownership and, when combined, meet the aforementioned soft site criteria; or (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 three distinct owners.

[4] Underdeveloped lots are defined as vacant lots or lots with buildings containing a single occupied floor, or lots constructed to less than or equal to half of the maximum allowable FAR under the proposed zoning.

- Sites occupied by a vacant building built to greater than 50 percent of the proposed FAR.

Certain lots that meet these criteria have been excluded from the scenario based on the following conditions because they are very unlikely to be redeveloped as a result of the proposed rezoning:

- Lots where construction and/or renovations are actively occurring, or have recently been completed, as well as lots with recent alterations that would have required substantial investment.
- The sites of schools (public and private), municipal libraries, government offices, large medical centers, and houses of worship. 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 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.
- Multi-unit buildings (existing individual buildings with six or more residential units are unlikely to be redeveloped because of the required relocation of tenants in rent-stabilized units).
- Certain large non-residential buildings, such as multi-story office buildings and hotels. Although these sites may meet the criteria for being built to less than half of the proposed permitted floor area, they are unlikely to be redeveloped due to their current or potential profitability, the cost of demolition and redevelopment, and their location.
- Lots whose location, highly irregular shape, or other physical encumbrances (like easements) would preclude or greatly limit future as-of-right development. Generally, development on these types of lots does not produce marketable floor space.
- Lots utilized for public transportation and/or public utilities.
- Lots or assemblages less than 20,000 sf in areas where residential use is not permitted. Throughout the Project Area, many sites are already built to less than half of the permitted FAR and new construction of as-of-right development rarely occurs, except for hotels and self-storage facilities. It is unlikely that smaller lots will be redeveloped due to the cost of redevelopment and current and or potential profitability.

These criteria have been developed to reflect observed development patterns within the Project Area. In recent years, the Project Area has experienced few entirely new ground-up developments, except for the construction of hotels and self-storage facilities, despite being situated between thriving residential neighborhoods and near transit and major corridors. Accordingly, certain sites that might be considered a soft site under the above criteria within these areas have been excluded or determined to be less likely to be developed if they meet one or more of the following criteria:

- Sites smaller than 7,500 sf occupied by existing residential development;
- Sites with multiple commercial and residential tenants;
- Sites occupied by active businesses within significant structures or buildings; and/or
- Sites occupied by unique services or prominent and successful neighborhood businesses.

PROJECTED AND POTENTIAL DEVELOPMENT SITES

To produce a reasonable, conservative estimate of future growth, the development sites have been divided into two categories: projected development sites and potential development sites. The projected development sites are considered more likely to be developed within the 15-year

timeframe. Potential sites are considered less likely to be developed over the approximately 15-year timeframe. Potential development sites were identified based on the following criteria:

- Slightly irregularly shaped or encumbered sites that would make as-of-right development difficult;
- Lots with a significant number of commercial or industrial tenants;
- Active businesses, which may provide unique services or are prominent and successful neighborhood businesses or organizations unlikely to move; and/or
- Sites divided between disparate zoning districts.

Based on the above criteria, 133 development sites (63 projected sites and 70 potential sites) have been identified in the Project Area. The incremental difference between the With Action and No Action conditions for all projected development sites is shown in **Table S-3**.

Table S-3
2035 RWCDS No Action and With Action Land Uses

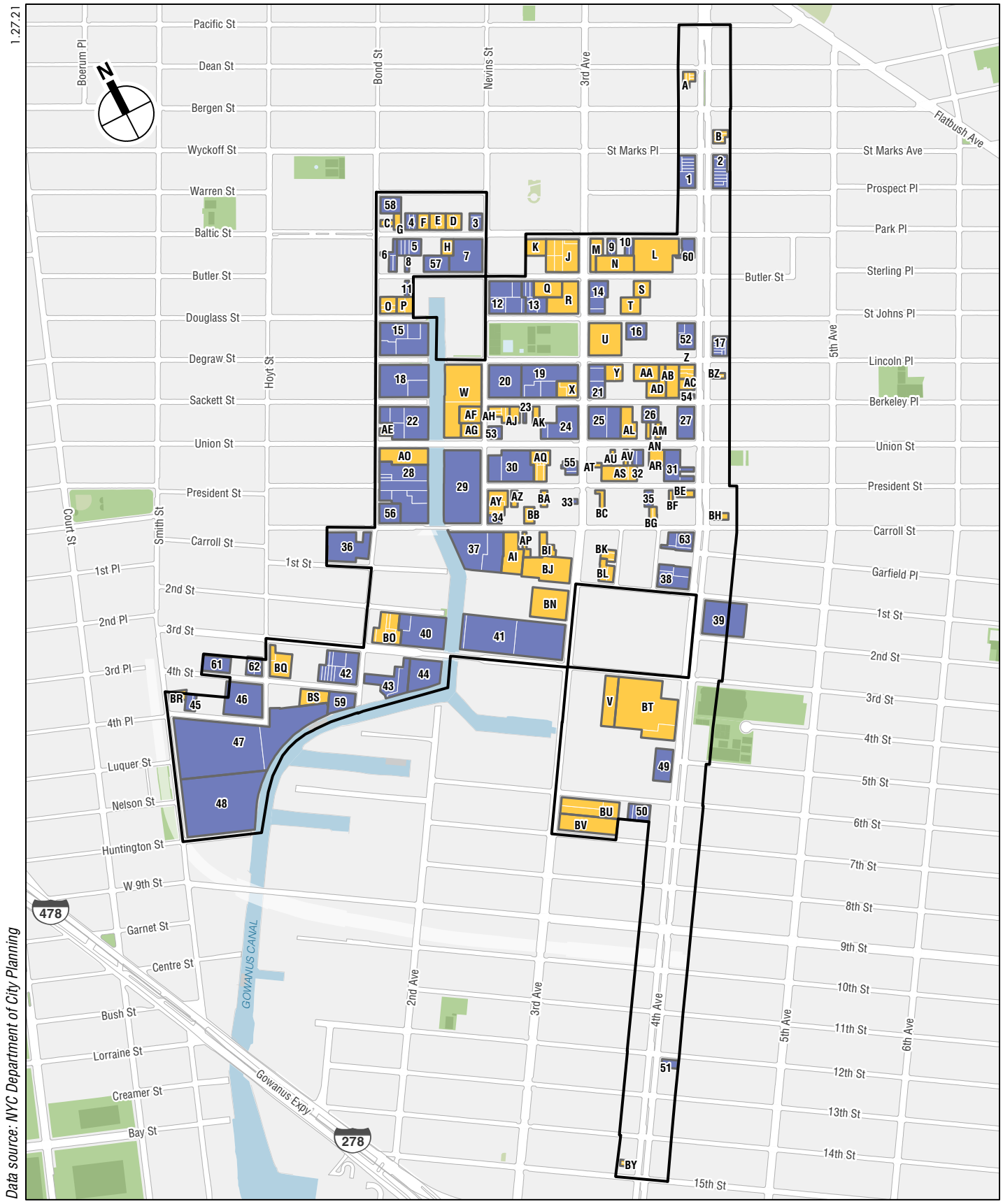
Land Use	No Action Condition	With Action Condition	Increment
Residential			
Total Residential	***816 DUs***	***9,311 DUs***	***8,495 DUs***
Commercial			
Local Retail	241,232 sf	594,340 sf	353,108 sf
Destination Retail	103,595 sf	20,125 sf	(83,470 sf)
Office	374,983 sf	936,739 sf	561,756 sf
Hotel	133 rooms	133 rooms	0 rooms
Auto-related	107,361 sf	-	(107,361 sf)
Total Commercial	***871,781 sf***	***1,606,074 sf***	***734,293 sf***
Other Uses			
Medical Office	190,093 sf	88,976 sf	(101,117 sf)
Other Community Facility	26,974 sf	379,504 sf	352,530 sf
Total Community Facility	***217,067 sf***	***468,480 sf***	***251,413 sf***
Total Industrial	***415,490 sf***	***98,571 sf***	***(316,919 sf)***
Vacant	***10,370 sf***	***-***	***(10,370 sf)***
Population[1]			
Residents	1,788	20,391	18,604
Workers	3,176	6,669	3,494

Notes: sf = square feet

1. Assumes 2.19 persons per DU for residential units in Brooklyn Community District 6. 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.

The projected and potential development sites are shown in **Figure S-8** and the detailed RWCDS tables provided in **Appendix A** identify the uses expected to occur on each of these sites under No Action and With Action conditions. As shown in **Appendix A-1**, in the No Action condition the projected and potential development sites are assumed to either remain unchanged from existing conditions or become occupied by as-of-right development. A significant amount of new ground-up development is not anticipated based on current trends and existing zoning.

The EIS will assess both density-related and site-specific potential impacts from development on all projected development sites. Density-related impacts are dependent on the amount and type of development projected on a site and the resulting impacts on traffic, air quality, community facilities, and open space.



Projected and Potential Development Sites

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Figure S-8

Site-specific impacts relate to individual site conditions and are not dependent on the density of projected development. Site-specific impacts include potential noise impacts from development, the effects on historic resources, urban design conditions, shadows, and the possible presence of hazardous materials. Development is not anticipated on the potential development sites in the near future. Therefore, these sites have not been included in the density-related impact assessments. However, review of site-specific impacts for these sites will be conducted in order to ensure a conservative analysis.

DEVELOPMENT SCENARIO PARAMETERS

Dwelling Unit Factor

The number of projected DUs in apartment buildings is determined by dividing the total amount of residential floor area by 850 and rounding to the nearest whole number.

Affordable Housing Assumptions

The number of affordable DUs assumed was estimated based on known development proposals; past and current development trends; City, state, and federal programs that support the construction of affordable housing; and the proposals in *Housing New York*, the Mayor's 10-year housing plan that aims to significantly increase the amount of affordable housing created and preserved in the five boroughs. The number of affordable units would affect the publicly funded child care and indirect residential displacement analyses in the EIS. As noted above, the EIS will conservatively assume more affordable units for the child care analysis and fewer affordable units for the indirect residential displacement analysis.

THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO ACTION CONDITION)

REASONABLE WORST CASE DEVELOPMENT SCENARIO

In the future without the Proposed Actions (No Action condition), the 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. **Table S-3** shows the No Action conditions for the projected development sites.

It is anticipated that in the No Action condition there would be a total of approximately 2.3 million square feet (msf) of built floor area on the 63 projected development sites. Under the RWCDS, the total No Action development would comprise approximately 800 DUs (about 100 affordable DUs), approximately 190,000 sf of medical office space, 27,000 sf of other community facility space, 241,000 sf of local retail space, 104,000 sf of destination retail space, 375,000 sf of office space, 133 hotel rooms, 84,000 sf of auto-related commercial uses, and 415,000 sf of industrial space. The No Action estimated population would include approximately 1,800 residents and 3,200 workers on the projected development sites.

PLANNED DEVELOPMENTS

In addition to conditions expected on the development sites absent the Proposed Actions, approximately 7,600 DUs (including approximately 2,000 affordable DUs), 364,000 sf of retail space, 544,000 sf of office space, 233,000sf of community facility space, and 323,000sf of manufacturing space is expected in the Project Area and areas within ¼-mile of the Project Area, including portions of Carroll Gardens, Boerum Hill, Downtown Brooklyn, Park Slope, and the industrial area of Gowanus south of the Project Area. These planned developments are discussed in more detail in Chapter 2, "Land Use, Zoning, and Public Policy."

REMEDIATION OF GOWANUS CANAL SUPERFUND SITE

The required EPA Superfund remediation calls for the dredging of the Canal, cleanup of former MGP sites (including the Public Place Site), and the reduction of CSO solids. All remedial requirements would apply irrespective of the Proposed Actions. In 2014, EPA issued an order to National Grid, the City of New York, and other potentially responsible parties requiring them to design the selected remedial action in the Canal. More than 300,000 cubic yards of highly contaminated sediment is expected to be dredged from the upper and middle portions of the Canal: the upper portion runs from Butler to 3rd Streets and the middle portion runs from 3rd Street to just south of the Hamilton Avenue Bridge. Another 281,000 cubic yards of contaminated sediment is expected to be removed from the lower portion of the Canal (from the Hamilton Avenue Bridge down to the mouth of the Canal). The remedy calls for the installation of new bulkheads, dredging of contaminated sediment, and installation of a multilayer cap over dredged portions of the Canal's main channel and the existing 4th Street, 6th Street, 7th Street, and 11th Street turning basins. The remedy also requires the excavation and restoration of a portion of the filled-in former 1st Street turning basin and a portion of the 5th Street turning basin beginning underneath the 3rd Avenue Bridge. The multilayer cap consists of an active layer made of clay to remove contamination that could well up from below, an isolation layer of sand and gravel to prevent the exposure of contaminants, and an armor layer of gravel and stone to prevent the erosion of underlying layers of the cap from passing boats and the Canal's currents. Lastly, clean sand will be placed above the armor layer to fill in the voids between the stones and to establish sufficient depth to restore the canal bottom's natural habitat.

National Grid undertook a remedial pilot at the 4th Street turning basin beginning in 2016, achieving completion in 2018. This work will be used to inform procedures to perform the full-scale bulkhead replacement, dredging and capping for the upper Canal from Butler to 3rd Streets.

Contaminated areas adjacent to the Canal, including the former MGP sites, will be remediated with DEC and EPA oversight. Environmental investigations or cleanups are underway at the former Fulton Municipal Works, Citizens Gas Works (Projected Development Sites 47 and 48 [see **Figure S-8**]), and Metropolitan MGP facilities along the Canal. National Grid is responsible for construction of the cutoff wall at the former Fulton MGP (to prevent the migration of coal tar to the Canal). Full-scale dredging of the remainder of the Canal is scheduled to begin in 2020, with remediation of the Canal expected to be completed by 2028.

The EPA remedy includes the design and construction of two CSO facilities known as the Head End Facility and the Owls Head Facility that would require the lease or acquisition of up to seven properties to support the facilities and construction staging areas. The Head End Facility will be an 8-mg underground tank that would increase CSO capture for overflows that would otherwise be discharged from CSO outfall RH-034 at the "head end," or northernmost portion of the Canal. The City has acquired or leased three privately owned parcels adjacent to the Canal for construction of the Head End Facility: 242 Nevins Street (Block 418, Lot 1) and 234 Butler Street (Block 411, Lot 24), with an area for construction staging located at 270 Nevins Street (Block 425, Lot 1). Up to 1.6 acres of publicly accessible open space could be provided above the tank at the Head End Facility.

The Owls Head Facility would be a 4-mg tank that would increase capture for overflows that would otherwise be discharged from CSO outfall OH-007. The Owls Head Facility would be located at the middle of the Canal (approximately one-half mile south of the northernmost portion of the Canal) near the northern terminus of 2nd Avenue near the 4th Street turning basin. Construction of the Owls Head Facility would require the use of a City-owned parcel (Block 977,

Lot 3) and the lease or acquisition of up to four privately owned parcels adjacent to the Canal. The Owls Head Facility is proposed to be located at 2 2nd Avenue, 110 5th Street (Block 990, Lot 21), 122 5th Street (Block 990, Lot 16), 22 2nd Avenue (Block 990, Lot 1), and 5th Street (Block 977, Lot 1), with portions of this area used for construction staging. The City will be exploring the potential for some publicly accessible waterfront open space at the Owls Head Facility.

CITY INFRASTRUCTURE INVESTMENTS

In 2015, DEP prepared a Long Term Control Plan (LTCP) for the Canal to identify the need for additional controls to achieve waterbody-specific water quality standards, consistent with EPA CSO policies and the water quality goals of the Clean Water Act. The LTCP includes alternatives that consider a wide range of reductions in CSO—up to 100 percent CSO control—including investments that would be made by DEP through green and grey infrastructure. The LTCP determined that the existing water quality standards are being met as a result of the significant previous improvements achieved by the City such as the operation of the reactivated Flushing Tunnel and upgraded Gowanus Wastewater Pumping Station. The LTCP concluded that with the build-out of planned green infrastructure projects and high level storm sewers (HLSS) in the area, water quality would further be improved.

Although existing water quality standards are being met, the EPA ROD directs the City to construct CSO controls that would serve to further improve water quality by reducing CSOs from being discharged to the Canal. The City has commenced construction and installation of capital projects related to HLSS in the Gowanus watershed area, which are generally located between Carroll and State Streets near the northern end of the Canal, extending to 4th Avenue to the east. Once completed, this HLSS project will create a separate stormwater discharge to the Canal through a stormwater outfall at Carroll Street and would reduce stormwater inflows to the combined sewer system, which would reduce the frequency and volume of CSO into the Canal. The HLSS is a form of partial separation that separates stormwater from streets or other public rights-of-way from combined sewers. This separation of sewers would help reduce the amount of CSO that is discharged to the Canal, and would reduce street flooding. The first phase of the project was completed in 2018 and includes improvements to the area south of Douglass Street; the second phase of construction (expected to be completed in 2020) includes improvements to the area north of Douglass Street. As part of the project, 87 new catch basins will be installed to allow stormwater to drain from the streets into 14,000 linear feet of new high-level storm sewers. In addition, all existing catch basin drainage connections will be switched from the existing combined sewer to the new high-level storm sewers.

DEP has also invested in green infrastructure that has been constructed, is in construction, or is planned in the Gowanus watershed area, including bioswales in the right-of-way and stormwater greenstreets in the area north and east of the Canal. Green infrastructure uses vegetation, soils, and other elements and practices to capture, absorb, detain, and filter stormwater. Green infrastructure should also reduce the amount of CSOs that reach the Canal.

PROPOSED CHANGES TO THE CITY'S UNIFIED STORMWATER RULE

DEP is proposing amendments to Chapters 31 and 19.1 of Title 15 of the Rules of the City of New York (RCNY) as part of a Unified Stormwater Rule. The Unified Stormwater Rule, to be administered Citywide, will update and align Chapter 31 stormwater quantity and flow rate requirements with Chapter 19.1 Construction/Post-Construction permitting program water quality requirements. Under Chapter 31 amendments, the Unified Stormwater Rule increases the amount of stormwater required to be managed on-site and further restricts the release rates for all new and

redevelopment projects that require a DEP house or site connection proposal. Additionally, under Chapter 19.1 amendments, sites that disturb 20,000 or more square feet of soil or increase impervious surfaces by 5,000 or more square feet will also be required to manage the Water Quality Volume (WQv), currently defined as 1.5 inches, using stormwater management practices (SMPs) dictated by DEP SMP hierarchies. DEP has developed hierarchies for both combined and separate sewer areas. The SMP hierarchies prioritize vegetated retention SMPs for both drainage areas with stormwater volume control and stormwater treatment communicated as the underlying goals for combined and separate sewer areas, respectively. In August 2020, the New York City Council passed Intro No. 1851, enabling DEP to move forward with the Chapter 19.1 amendments necessary to package the Unified Stormwater Rule amendments. Draft rules are anticipated to be published in 2021 and in effect in 2022.

THE FUTURE WITH THE PROPOSED ACTIONS (WITH ACTION CONDITION)

REASONABLE WORST-CASE DEVELOPMENT SCENARIO

The Proposed Actions would allow for the development of new uses and higher densities at the projected and potential development sites. Under the Proposed Actions, the total development expected to occur on the 63 projected development sites would consist of approximately 10.1 msf of built floor area, including 9,300 DUs, approximately 89,000 sf of medical office space, 380,000 sf of other community facility space, 594,000 sf of local retail space, 20,000 sf of destination retail space, 937,000 sf of office space, 133 hotel rooms, and 99,000 sf of industrial space. The projected incremental (net) change between the No Action and With Action conditions that would result from the Proposed Actions would be an increase of 8,500 DUs (a substantial proportion of which are expected to be affordable); approximately 353,000 sf of other community facility space; 353,000 sf of local retail space; 562,000 sf of office space; and a net loss of medical office space, industrial space, destination retail, and auto-related commercial space. The incremental development generated by the Proposed Actions is shown in **Table S-3**.

The Proposed Actions would support the development of the City-owned site on Block 471 with a mixed-use development known as Gowanus Green Development. The Gowanus Green Development would include new housing, of which a substantial amount would be affordable, and a variety of non-residential space, including a potential new school, a new neighborhood park, and other uses allowed under the proposed zoning. The new open space would be over one acre in size and located along the Canal.

The Proposed Actions would also support significant transit improvements in the Project Area. The GSD would require owners of lots adjacent to subway stations along 4th Avenue to coordinate with MTA and DCP prior to any development to determine whether an easement, zoning relief, or other interventions would be needed to allow for station improvements. The GSD would create an authorization that would allow for an increase in density in exchange for improvements to transit infrastructure and access to transit facilities such was subway stations. In addition, the Proposed Actions would specifically support transit improvements at the Union Street (R train) subway station by creating a chairperson certification that would allow an increase in height and density in exchange for a new entrance to the southbound platform at a projected development on the west side of 4th Avenue between Union and Sackett Streets.

Based on 2010 Census data, the average household size for residential units in Brooklyn Community District 6 is 2.19. Based on these ratios and standard ratios for estimating employment for commercial, community facility, and industrial uses, **Table S-3** also provides an estimate of the number of residents and workers generated by the Proposed Actions. As indicated in **Table**

S-3, the Proposed Actions would result in a net increase of approximately 18,600 residents and 3,500 workers.

A total of 70 sites were considered less likely to be developed within the near future and were thus considered potential development sites (see **Appendix 1**). As noted earlier, the potential sites are deemed less likely to be developed because they did not closely meet the criteria listed above. However, as discussed above, the analysis recognizes that a number of potential development sites could be developed under the Proposed Actions in lieu of one or more of the projected development sites in accommodating the development anticipated in the RWCDS. The potential development sites are therefore also analyzed in the EIS for site-specific effects.

The EIS will analyze the projected developments for all technical areas of concern and evaluate the effects of the potential developments for site-specific effects such as archaeology, shadows, hazardous materials, stationary air quality, and noise.

H. PUBLIC REVIEW PROCESS

The Proposed Actions described above are subject to public review under ULURP, Section 200 of the City Charter, as well as CEQR procedures. The ULURP and CEQR review processes are described below.

UNIFORM LAND USE REVIEW PROCEDURE

The City's ULURP, mandated by Sections 197-c and 197-d of the City Charter, is a process especially designed to allow public review at four levels: the Community Board, the Borough President and (if applicable) Borough Board, CPC, and the City Council. The procedure sets time limits for review at each stage to ensure a maximum total review period of approximately seven months.

The ULURP process begins with a certification by CPC that the ULURP application is complete, which includes satisfying CEQR requirements (see the discussion below). The application is then forwarded to the Community Board (in this case, Brooklyn Community Boards 2 and6 [CB2 and CB6]), which have 60 days to review and discuss the proposal, hold public hearings, and adopt recommendations regarding the application. Once this step is complete, the Borough President reviews the application for up to 30 days. CPC then has 60 days to review the application, during which time a ULURP/CEQR public hearing is held. Comments made at the DEIS public hearing (the record for commenting remains open for 10 days after the hearing to receive written comments) are incorporated into a Final EIS (FEIS); the FEIS must be completed at least 10 days before CPC makes its decision on the application. CPC may approve, approve with modifications, or deny the application.

If the ULURP application is approved, or approved with modifications, it moves to the City Council for review. The City Council does not automatically review all ULURP actions that are approved by CPC. Zoning map changes and zoning text changes (not subject to ULURP) nevertheless must be reviewed by the City Council; the Council may elect to review certain other actions. The City Council, through the Land Use Committee, has 50 days to review the application and, during this time, will hold a public hearing on the proposed project. The Council may approve, approve with modifications, or deny the application. If the Council proposes a modification to the proposed project, the ULURP review process stops for 15 days, providing time for a CPC determination on whether the modification is within the scope of the environmental review and ULURP review. If it is, then the Council may proceed with the modification; if it is not, then the Council may only vote on the project as approved by CPC. Following the Council's

vote, the Mayor has five days in which to veto the Council's actions. The City Council may override a Mayoral veto within 10 days.

The review of a zoning text amendment pursuant to Section 200 of the City Charter follows the same time clock as described above when coupled with a ULURP application, and is subject to the same procedures governing CPC, City Council, and Mayoral actions.

NEW YORK CITY ENVIRONMENTAL QUALITY REVIEW

Pursuant to SEQRA and its implementing regulations found at 6 NYCRR Part 617, New York City has established rules for its own environmental quality review in Executive Order 91 of 1977, as amended, and 62 RCNY Chapter 5, the Rules of Procedure for CEQR. The environmental review process provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to propose reasonable alternatives, to identify, and when practicable mitigate, significant adverse environmental effects. CEQR rules guide environmental review, as follows:

- **Establish a Lead Agency**. Under CEQR, the "lead agency" is the public entity responsible for conducting the environmental review. The lead agency is typically the entity principally responsible for carrying out, funding, or approving the proposed action. In accordance with CEQR rules (62 RCNY Section 5-03), DCP, acting as lead agency on behalf of CPC, assumed lead agency status for the Proposed Actions.
- **Determine Significance**. The lead agency's first charge is to determine whether the proposed action(s) may have a significant impact on the environment. To do so, DCP, in this case, evaluated an Environmental Assessment Statement (EAS) dated March 22, 2019 for the Proposed Actions. Based on the information contained in the EAS, DCP determined that the Proposed Actions may have a significant adverse impact on the environment, as defined by statute, and issued a Positive Declaration on March 22, 2019 requiring that an EIS be prepared in conformance with all applicable laws and regulations, including SEQRA, Mayoral Executive Order No. 91 of 1977, CEQR Rules of Procedure of 1991, as well as the relevant guidelines of the *CEQR Technical Manual*.
- **Scoping**. Once the lead agency issues a Positive Declaration, it must then issue a draft scope of work for the EIS. "Scoping," or creating the scope of work, is the process of establishing the type and extent of the environmental impact analyses to be studied in the EIS. The Draft Scope of Work was prepared in accordance with SEQRA, CEQR, and the *CEQR Technical Manual.* Along with a Positive Declaration, the Draft Scope of Work was issued on March 22, 2019. CEQR requires a public scoping meeting as part of the process. A public scoping meeting was held on Thursday, April 25, 2019, at 4:00 PM at the auditorium of Middle School (MS) 51 at 350 5th Avenue, Brooklyn, New York, 11215. The period for submitting written comments remained open until May 27, 2019. A Final Scope of Work was prepared, taking into consideration comments received during the public comment period, to direct the content and preparation of a DEIS. DCP issued the Final Scope of Work on April 19, 2021.
- **Draft Environmental Impact Statement (DEIS)**. In accordance with the Final Scope of Work, a DEIS is prepared. The lead agency reviews all aspects of the document, calling on other City agencies to participate as appropriate. Once the lead agency is satisfied that the DEIS is complete, it issues a Notice of Completion and circulates the DEIS for public review. When a DEIS is required, it must be deemed complete before the ULURP application can also be found complete.

- **Public Review**. Publication of the DEIS and issuance of the Notice of Completion signals the start of the public review period. During this period, which must extend for a minimum of 30 days, the public may review and comment on the DEIS either in writing or at a public hearing convened for the purposes of receiving such comments. As noted above, when the CEQR process is coordinated with another City process that requires a public hearing, such as ULURP, the hearings may be held jointly. The lead agency must publish a notice of the hearing at least 14 days before it takes place and must accept written comments for at least 10 days following the close of the hearing. All substantive comments become part of the CEQR record and are summarized and responded to in the FEIS.
- **Final Environmental Impact Statement (FEIS)**. After the close of the public comment period for the DEIS, the lead agency will prepare the FEIS. The FEIS incorporates relevant comments on the DEIS, in a separate chapter and in changes to the body of the text, graphics, and tables. Once the lead agency determines that the FEIS is complete, it will issue a Notice of Completion and circulate the FEIS.
- **Findings**. To document that the responsible public decision-makers have taken a hard look at the environmental consequences of a proposed action, any agency taking a discretionary action regarding a project must adopt a formal set of written findings reflecting its conclusions about the potential for significant adverse environmental impacts of the proposed action, potential alternatives, and mitigation measures. No findings may be adopted until 10 days after the Notice of Completion has been issued for the FEIS. Once each agency's findings are adopted, it may take its actions (or take "no action"). This means CPC must wait at least 10 days after the FEIS is complete to take action on a given application.

I. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

LAND USE, ZONING, AND PUBLIC POLICY

No significant adverse impacts on land use, zoning, or public policy are anticipated as a result of the Proposed Actions. The Proposed Actions would not adversely affect surrounding land uses, nor would the Proposed Actions generate land uses that would be incompatible with existing zoning and land uses. Furthermore, the Proposed Actions would not result in development that conflicts 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 and accessible 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 Downtown Brooklyn and Lower Manhattan.

With the proposed zoning, residential use would be allowed throughout most 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 and the development of Gowanus Green on City-owned land. New housing would be allowed along major north-south corridors (3rd and 4th Avenues) and east-west corridors (Union, Carroll, and 3rd Streets), around Thomas Greene Playground, and along the Canal. The new development anticipated along the Canal would reactivate contaminated, vacant, and underutilized land, and facilitate the creation of a new esplanade along the Gowanus Canal.

The Proposed Actions would create opportunities for new light industrial space, commercial space, arts-related space, and community facility space. The Proposed Actions would promote

these opportunities in new mixed-use buildings throughout the Project Area and, more directly, in portions of the Project Area that would be reserved exclusively for non-residential activity (portions of the midblocks between 3rd and 4th Avenues and an area around 4th and Hoyt Streets). In mixed-use buildings, the Proposed Actions would promote the integration and mixing of uses through ground-floor use requirements at key locations and floor area incentives. The Proposed Actions would promote transit improvements along 4th Avenue, including a zoning mechanism that supports improvements at the Union Street (R train) subway station. Bulk regulations tailored to Gowanus would encourage a range of heights and building forms, allowing sufficient flexibility for buildings to achieve the development goals identified by the community while addressing unique site conditions, such as the Canal, and reflecting the existing built character of the neighborhood. The range of permitted heights would address the existing low-scale context of adjacent residential neighborhoods while allowing limited portions of buildings to rise higher on certain blocks and frontages. The new land uses generated as a result of the Proposed Actions would support the existing residential populations of adjacent neighborhoods, would be compatible with land uses found in those areas. Development anticipated under the Proposed Actions would be compatible with the scale and use of surrounding neighborhoods, and would be supportive of public policies.

The Proposed Actions would be consistent with the City's WRP. The WRP Consistency Assessment Form (WRP #19-036) reviewed by DCP's Waterfront and Open Space Division concluded that the Proposed Actions would support the applicable policies of the City's WRP.

SOCIOECONOMIC CONDITIONS

The Proposed Actions would not result in significant adverse impacts related to socioeconomic conditions.

DIRECT RESIDENTIAL DISPLACEMENT

A screening-level assessment finds that the Proposed Actions would not result in significant adverse impacts due to direct residential displacement. Under the RWCDS, by 2035 the Proposed Actions could directly displace an estimated 20 residents living in nine DUs. The nine DUs that could be displaced are located on Projected Development Sites 4, 5, 28, 45, and 55.

According to the *CEQR Technical Manual*, direct displacement of fewer than 500 residents would not typically be expected to substantially alter the socioeconomic character of a neighborhood. The potentially displaced residents represent less than one-hundredth of one percent of the estimated 137,944 residents within the socioeconomic study area, and therefore this potential direct displacement would not substantially alter the socioeconomic character of the neighborhood.

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, projected development generated by the Proposed Actions by the 2035 Build Year could directly displace an estimated 42 businesses on projected development sites and an estimated 565 jobs associated with those businesses. The potentially displaced businesses include those in the construction, manufacturing, transportation, waste management, information, wholesale trade, retail, arts and entertainment, food services business sectors. These businesses do not represent a majority of study area businesses or the employment in any given industry sector. While all businesses contribute to neighborhood character and provide value to the City's economy, because there are alternative sources of goods, services, and employment provided within the socioeconomic study area, the

potential displacement of these businesses does not constitute a significant adverse impact on the socioeconomic conditions of the area as defined by CEQR. None of the potentially displaced businesses are within a category of business that is the subject of regulations or publicly adopted plans to preserve, enhance, or otherwise protect it. Comparable services and employment opportunities to those provided by directly displaced commercial businesses are expected to be provided as part of the redevelopment expected under the Proposed Actions.

INDIRECT RESIDENTIAL DISPLACEMENT

A detailed assessment found that the Proposed Actions would not result in significant adverse impacts due to indirect residential displacement. The preliminary assessment found that for most of the study area, the average household income of the new population in the With Action condition would be lower than the average household income of the existing population with the exception of two subareas: Subarea A, roughly bounded by Douglass Street/St. John's Place, 4th Avenue, the Prospect Expressway, and the Gowanus Canal; and Subarea B roughly bounded by Wyckoff Street/St. Marks Place, 4th Avenue, Douglass Street, and Hoyt Street. The indirect residential displacement analysis concluded that while the Proposed Actions would add a substantial new population with potentially higher incomes to both subareas, in Subarea A, the mixed-income composition of the new population would not cause substantial changes in the real estate market that would lead to indirect displacement of all vulnerable renters in unprotected units. Further, the Proposed Actions would be expected to introduce more affordable housing than in the future without the Proposed Actions, potentially slowing the existing trend of increasing rents and maintaining a more diverse mix of incomes within the subarea as compared with the No Action condition. In Subarea B, the analysis found that most low income renters in the subarea 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.

The Project Area and broader study area have well-established residential, retail and office, and manufacturing markets such that the Proposed Actions would not introduce new economic activities to the projected development sites or to the study area or add to a concentration of a particular sector of the local economy that would significantly alter or accelerate existing economic patterns. The Proposed Actions would introduce a new residential population, but the demand for goods and services from existing residents has already established a strong commercial market such that the influence on economic patterns associated with the new residents would not substantively increase commercial property values and rents throughout the study area. Additionally, the introduction of a new residential population would increase demand for the goods and services provided by existing businesses. The Proposed Actions would add an increment of 264,855 sf of Retail Trade space (local retail, with a decrease in destination retail compared with the No Action condition) and an increment of 561,756 sf of office space. There is an existing trend of increasing retail development in the study area and adaptive reuse of former industrial buildings for commercial uses, and the added retail from the Proposed Actions would not alter or accelerate ongoing trends. In terms of office uses within the wider study area, there are many businesses in industries that are often sited in office buildings, and the Proposed Actions would reinforce existing trends of office space development in the study area. In particular, within the Project Area, commercial businesses, offices, and other uses that serve the surrounding residential communities have increased in recent years. The reinvestment in and reactivation of

older loft buildings for a variety of commercial office and artist spaces indicates a growing local demand for new office and other workspaces. The new office space is expected to respond to the local demand for office space and other workspaces and is not enough to substantively alter or accelerate trends.

The Proposed Actions would not directly displace uses that provide substantial direct support for businesses in the area or bring into the area people who would form a substantial portion of the customer base for local businesses. The Proposed Actions would result in increasing economic activity in an area where commercial corridors are currently fragmented. Further, the added residential population expected with the Proposed Actions would provide new customers for existing retail businesses in the Project Area and study area, and the mix of market-rate and affordable DUs resulting from the Proposed Actions RWCDS would maintain a diverse customer base to shop at retail stores offering products at a range of price points.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

A preliminary assessment found that the Proposed Actions would not result in significant adverse impacts due to adverse effects on specific industries. 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 project 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 the business conditions in any industry or any category of business within or outside the study area. As stated above, the Proposed Actions could directly displace an estimated 42 businesses and 565 employees in several economic sectors as build out occurs through 2035. 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 to the City's economy individually and collectively, the goods and services that these potentially displaced uses offer can be found elsewhere within the socioeconomic study area, within a broader trade area, and throughout 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 the 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

The Proposed Actions would result in a significant adverse impact on publicly funded early childhood programs. Detailed analyses of potential indirect impacts on public elementary, intermediate, and high schools; public libraries; and publicly funded child care centers 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.

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) 15, Subdistrict 2 of CSD 15, and Subdistrict 1 of CSD 13. High school students routinely travel outside their neighborhoods for school; the *CEQR Technical Manual* provides for environmental review on a borough-wide basis and the study area for high schools is the entire borough of Brooklyn.

Elementary Schools

In the future with the Proposed Actions (the "With Action" condition), Subdistrict 3/CSD 15 would experience an increase of more than 5 percentage points or more in the collective utilization rate between the future without the Proposed Actions (the "No Action" condition) and the With Action condition. However, the utilization rate of elementary schools would not exceed 100 percent (because of the added capacity associated with the project-generated potential new school on Block 471). For Subdistrict 2/CSD 15, the utilization rate of elementary schools would exceed 100 percent but would not result in an increase of 5 percentage points or more in the collective utilization rate between the No Action and With Action conditions. For Subdistrict 1/CSD 13, the utilization rate of elementary schools would exceed 100 percent but would not result in an increase of 5 percentage points or more in the collective utilization rate between the No Action and With Action conditions. Therefore, the Proposed Actions would not result in a significant adverse impact to elementary schools.

Intermediate Schools

In the With Action condition, for CSD 15, the utilization rate of intermediate schools would not exceed 100 percent and would not result in an increase of more than 5 percentage points in the collective utilization rate between the No Action and With Action conditions. For Subdistrict 1/CSD 13, the utilization rate would remain below 100 percent and would not result in an increase of 5 percentage points in the collective utilization rate between the No Action and With Action conditions. Therefore, the Proposed Actions would not result in a significant adverse impact to intermediate schools in CSD 15 or Subdistrict 1/CSD 13.

High Schools

In the With Action condition, the utilization rate of Brooklyn public high schools would remain below 100 percent and the collective increase in utilization between No Action and With Action conditions would be substantially lower than the 5 percentage point increase in utilization that, according to the *CEQR Technical Manual*, could be considered a significant adverse impact. Therefore, the Proposed Actions would not result in significant adverse impacts on high schools.

POTENTIAL INDIRECT EFFECTS ON PUBLIC LIBRARIES

Six Brooklyn Public Library (BPL) neighborhood libraries are located within three-quarters of a mile of the Project Area. Some projected development sites are located within more than one library "catchment" area, defined the *CEQR Technical Manual* as the distance that one might be expected to travel to use library services (typically not more than three-quarters of a mile). The analysis focuses on the residents generated by the Proposed Actions, and assigned to the Carroll Gardens Branch, Pacific Branch, Park Slope Branch, and Red Hook Branch library catchment areas. For each of these libraries, the catchment area population increases attributable to the population generated by the Proposed Actions are above the 5 percent threshold which, according to the *CEQR Technical Manual*, may represent a noticeable change in delivery of library services and could be considered a significant adverse impact on library services. However, many of the residents in the catchment areas for each of the affected libraries also reside in the catchment areas for other nearby libraries and would also be served by these libraries. This includes the Clinton Hill and Walt Whitman Branches, for which no population increases were projected as a result of the Proposed Actions. Additionally, residents in the study area would have access to the entire BPL system through the interlibrary loan system and could have volumes delivered to their nearest library branch. Residents would also have access to libraries near their place of work. Furthermore, it is anticipated that the trends toward increased electronic research, the SimplyE mobile

application, and the interlibrary loan system would make space for increased patron capacity and programs to serve population growth. Therefore, the Proposed Actions would not be expected to result in a noticeable change in the delivery of library services and there would be no significant adverse impacts public libraries as a result of the Proposed Actions.

POTENTIAL INDIRECT EFFECTS ON CHILD CARE FACILITIES

In the With Action condition, early childhood programs in the study area would operate over capacity by approximately 1,700 slots and exhibit an increase in the utilization rate of approximately 25 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 summarized below under "Mitigation."

OPEN SPACE

It is concluded that the Proposed Actions would result in an (indirect) significant adverse impact to open space due to the added residential demand placed on active open space in an area that has limited available open space resources. In addition, the Proposed Actions would result in a (direct) significant adverse open space impact to the Douglass and Degraw Pool in Thomas Greene Playground, as incremental shadow would be cast on the pool on the May 6/August 6 analysis day.

As discussed in greater detail below, the Proposed Actions would provide new publicly accessible open space including open space along the Gowanus Canal in the form of a continuous waterfront esplanade. This waterfront open space would provide new passive and active recreational space acreage and facilities for current and future residents and reconnect the community to the Gowanus Canal waterfront. The Proposed Actions would also improve neighborhood livability by increasing access to publicly accessible open space and facilitating public realm improvements in connection with planned private and public investments.

Much of the rezoning area is not located in an area that has been identified as well-served or underserved in open space and recreational facilities, except for two sites that are located in underserved areas (Projected Development Sites 39 and 51). While the study area is expected to continue to be neither well-served nor underserved in the future with or without the Proposed Actions, per the *CEQR Technical Manual*, it will continue to have a low ratio of public open space available to the population.

The proposed zoning changes and mapping actions under the Proposed Actions would facilitate the creation of approximately six acres of additional open space through the mapping of new parkland and implementation of the WAP. The mapping actions would also facilitate the development of a new waterfront park on a portion of the Gowanus Green Site along 5th Street. The WAP would result in almost five acres of continuous waterfront esplanade on both sides of the Canal.

DIRECT EFFECTS

The Proposed Actions would result in a direct significant adverse impact to open space as a result of incremental shadow cast on the Douglass and Degraw Pool in Thomas Greene Playground. Incremental shadows would be cast on the May 6/August 6 analysis day, significantly impacting the user experience of the pool on this analysis day, affecting open space users in the warmer months of the year. The shadow impact on the pool also constitutes a significant adverse direct impact on open space. However, no other direct impacts to open space would occur with the Proposed Actions. The Proposed Actions would not result in the direct displacement of any

existing open space resources, or any significant adverse impacts related to construction, air quality, or noise impacts on open space resources. Since no open space resources would be physically displaced under the Proposed Actions, this chapter uses information from Chapter 6, "Shadows," Chapter 15, "Air Quality," and Chapter 17, "Noise," to determine whether the Proposed Actions would directly affect any open spaces within, or in close proximity to, the Project Area.

INDIRECT EFFECTS

In the non-residential study area, the detailed analysis of open space conditions finds that with the Proposed Actions the passive open space ratio would increase by approximately 16 percent, to 0.322 acres per 1,000 workers, as compared to the No Action condition. As this is above the City's planning guideline of 0.15 acres of passive space per 1,000 workers, the Proposed Actions would not result in any significant adverse impacts to passive open space in the non-residential study area.

Within the residential study area, the detailed analysis of open space conditions finds that with the Proposed Actions the total open space ratio would decrease by 1.45 percent, to 0.340 acres per 1,000 residents; the passive open space ratio would increase by 0.64 percent to 0.157 acres per 1,000 residents; and the active open space ratio would decrease by 2.7 percent, to 0.183 acres per 1,000 residents. Though the change with respect to the open space ratios would not surpass 5 percent and the passive open space ratio would not be reduced in the With Action condition, the Proposed Actions would result in significant adverse impacts to total open space and active open space due to the existing low open space per population ratio. Therefore, it is concluded that the Proposed Actions would result in a significant adverse impact on open space resources in the residential study area. Possible mitigation measures for this impact are summarized below under "Mitigation."

SHADOWS

The detailed shadow analysis concludes that development resulting from the Proposed Actions would result in significant adverse shadow impacts on two sunlight-sensitive resources: Our Lady of Peace Church due to increased shadows on stained glass windows and at the Douglas and Degraw Pool in Thomas Greene Playground due to increased spring/summer shadows on this public open space resource. The detailed analysis identified other sunlight-sensitive resources that would receive new shadows as a result of the Proposed Actions, however, these shadows would not constitute a significant adverse impact due to their limited extent, duration, or for other reasons as explained in detail below.

OUR LADY OF PEACE CHURCH

Project-generated incremental shadows would reach a maximum of 6 of the church's 23 stained-glass windows at any one time, but would result in the complete elimination of direct sunlight on the stained-glass windows for approximately 37 minutes in the morning of the March 21/September 21 analysis day and for approximately 55 minutes on the morning of the December 21 analysis day. The total duration of incremental shadow on the morning of the December 21 analysis day would be approximately 2 hours and 19 minutes, including the 55-minute period when all remaining direct sunlight would be eliminated. The long duration and at times complete elimination of direct sun would significantly affect the public's enjoyment and/or appreciation of the church interior during this time.

DOUGLASS AND DEGRAW POOL IN THOMAS GREENE PLAYGROUND

Project-generated incremental shadows would cover most of the large main pool and the small kiddie pool for approximately two hours in the late afternoon of the May 6/August 6 analysis day, significantly impacting the user experience of the pool on this analysis day. However, Thomas Greene Playground is anticipated to be renovated in No Action condition. The future programming and layout of the reconstructed park is not confirmed, and the shadow analysis focused on identifying the extent and duration of incremental shadows on various areas of the park, and how potential features and vegetation might be affected. Given the heavy use of this pool in the summer months, the analysis included a consideration of incremental shadow effects on the pool at its current location in the western part of the park, on the May 6/August 6 and June 21 analysis days. The pool is open in the summer months from 10:00 AM to 6:00 PM Eastern Standard Time (11:00 AM to 7:00 PM Eastern Daylight Time). On the May 6/August 6 analysis day the pool would be entirely in sun from the time it opens until 3:15 PM Eastern Standard Time (EST), when incremental shadow would enter from the west. From 4:00 PM EST to closing time at 6:00 PM EST (7:00 PM Eastern Daylight Time), both the main pool and the kiddie pool would be mostly covered by incremental shadow. This substantial extent and duration of new shadow would significantly impact the user experience of the pools on this analysis day.

HISTORIC AND CULTURAL RESOURCES

The Proposed Actions would result in significant adverse impacts to both archaeological and architectural historic resources. The significant adverse impacts are summarized below.

ARCHAEOLOGICAL RESOURCES

The archaeological resources analysis in the DEIS examined the projected and potential development sites. In a comment letter dated April 23, 2019, LPC determined that a number of lots (collectively referred to as the "archaeological study area") possess potential archaeological significance and determined that additional archaeological analysis in the form of a Phase 1A Archaeological Documentary Study ("Phase 1A Study") was necessary to determine the archaeological sensitivity of each development site (see **Appendix C-1**). The remaining potential and projected development sites were determined by LPC to have no potential archaeological significance and, as such, no additional archaeological analysis of those properties is warranted.

A Phase 1A Study was therefore prepared to determine the archaeological sensitivity of the 50 development sites that were identified as potentially archaeologically significant (see **Appendix C-2**). The Phase 1A Study identified all or portions of 46 of these sites as potentially sensitive for archaeological resources associated with the Gowanus Canal bulkhead and associated landfill; 19th century shaft features; and/or evidence associated with milling or agricultural activities dating between the 17th and 19th centuries, including evidence of the role of forced labor and enslavement as they related to those efforts. The Project Area was determined to have low sensitivity for precontact archaeological resources, some of which may be deeply buried; evidence of industrial uses in the 19th and 20th centuries; and for human remains associated with the Revolutionary War or with homestead burial grounds.

Based on the above, the Phase 1A Study recommended additional archaeological analysis for certain development sites, including archaeological monitoring; Phase 1B Archaeological Testing; a geomorphological assessment of deeply buried landscapes; and the preparation of an Unanticipated Human Remains Discoveries Plan in addition to continued consultation with LPC and submission and concurrence of all required work plans.

To mitigate the potential for significant adverse impacts on archaeological resources, additional archaeological analysis would need to be conducted on each of the development sites prior to redevelopment. However, because development on the sites would be as-of-right, there would be no mechanism to require archaeological analysis to determine the presence of archaeological resources (i.e., Phase 1B testing) or mitigation for any identified significant resource through avoidance or excavation and data recovery (i.e., Phase 2 or Phase 3 archaeological testing). Therefore, as-of-right development anticipated to occur as a result of the Proposed Actions would result in unavoidable significant adverse impacts on archaeological resources. One of the 46 archaeologically sensitive sites (Block 471, Lot 100) is owned by the City of New York and a Phase 1B investigation will therefore be required on this site. With the completion of additional archaeological analyses as necessary and continued consultation with LPC, the Proposed Actions would therefore not result in significant adverse impacts on Block 471, Lot 100, which is part of Projected Development Site 47.

ARCHITECTURAL RESOURCES

Direct (Physical) Impacts

As described below, the Proposed Actions would result in significant direct adverse impacts to the S/NR-Eligible Gowanus Canal Historic District due to the demolition of contributing resources in the district and alterations to the Gowanus Canal bulkheads to implement the Gowanus WAP.

Construction-Related Impacts to Adjacent Resources

There would be potential significant adverse impacts to contributing resources in the S/NR-Eligible Gowanus Canal Historic District as a result of adjacent construction located within 90 feet of projected or potential development sites, and such impacts may also result to three other S/NR-Eligible resources as a result of adjacent construction: Our Lady of Peace Church Complex, the Gowanus Canal Flushing Tunnel, and the IND Subway Viaduct.

Buildings or structures that are S/NR-Listed or New York City Landmarks (NYCLs) within 90 feet of a projected or potential new construction site would be afforded standard protection under the New York City DOB's *Technical Policy and Procedure Notice (TPPN) #10/88*. However, since the resources identified above are not S/NR-Listed or NYCLs, they are not afforded the added special protections under DOB's *TPPN #10/88*. Additional protective measures afforded under DOB's *TPPN #10/88*, which include a monitoring program to reduce the likelihood of construction damage to adjacent S/NR-Listed resources or NYCLs, would only become applicable if the S/NR-Eligible resources are listed or designated in the future prior to the initiation of construction. Otherwise, there is the potential for inadvertent construction damage and impacts to occur as a result of adjacent development resulting from the Proposed Actions. These measures are summarized below under Section J, "Mitigation."

Indirect (Contextual) Impacts

Projected and potential development sites are located within the boundaries of the S/NR-Eligible Gowanus Canal Historic District and the Proposed Actions would result in the demolition of contributing resources in the historic district. The demolition of contributing resources within the historic district and construction of new buildings on the development sites also have the potential to result in indirect impacts to the S/NR-Eligible Gowanus Canal Historic District by changing the setting of contributing resources that would not be directly affected and by constructing new buildings that may not be contextual with the primarily industrial character of the district. In addition, as discussed above in "Shadows," incremental shadows would fall on some of the

stained-glass windows of Our Lady of Peace Church (S/NR-Eligible), which may have the potential to affect the enjoyment of this historic resource for a total duration of approximately 2 hours and 19 minutes, during the mornings of the winter analysis day, which is typically a time when the church holds holiday services. Therefore this incremental shadow is considered a significant adverse shadow impact and subject to an evaluation of mitigation measures.

With respect to the other architectural resources in the Project Area and study area, although the developments that are anticipated under the RWCDS would somewhat alter the visual setting and context of certain architectural resources, such changes would not be significantly adverse. The Proposed Actions would not alter the relationship of an architectural resource 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 other architectural resources, as significant elements of the other architectural resources would remain visible in view corridors on public streets. Additionally, no incompatible visual, audible, or atmospheric elements would be introduced by the Proposed Actions to any of the other architectural resources' setting such that they would compromise or diminish the characteristics for which an architectural resource has 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 densities that accommodate and support the goals identified in the Gowanus Neighborhood Plan (the "Neighborhood Plan"). The zoning changes would provide for sufficient flexibility and variety for building envelopes that account for the unique conditions in Gowanus (such as the Canal), appropriate transitions between lower and medium density adjacencies, the creation of new waterfront open space, enhanced pedestrian oriented sidewalk conditions, and lively, active streets. Though some visual resources in the secondary study area could be obscured from certain vantage points by development facilitated by the Proposed Actions, the visual resources would be visible from other north–south and east–west streets and from the new, previously inaccessible vantage points such as the waterfront esplanade and neighborhood parks along the Canal.

The Proposed Actions would allow for new residential, mixed-use, and non-residential developments at a greater density than what is currently permitted as-of-right and support existing and new clusters of industrial and commercial activity by expanding the potential for job-generating uses. The actions would also allow for new housing, including affordable housing, along key corridors, particularly 3rd and 4th Avenues, the area surrounding Thomas Greene Playground, and the Canal Corridor. The proposed zoning changes are intended to promote a walkable, vibrant, mixed-use neighborhood where increased densities can help sustain existing and new businesses, provide employment opportunities and facilitate the creation of an urban fabric that enhances the pedestrian experience and the Canal's unique character.

The proposed mapping actions would facilitate the creation of new streets, including the eastern prolongations of Nelson and Luquer Streets, east of Smith Street, and a new street along the west side of the Canal that would run into Hoyt Street (at 5th Street). The new streets would provide access to the Canal's future waterfront esplanade areas and the new mapped park on the Gowanus Green Site. The taller buildings projected along the Canal would limit some existing views, but, because of the width of the Canal, views would not be entirely eliminated along the waterfront, and new vantage points along the Canal and to the Canal, such as the waterfront esplanade and the proposed new streets, would be created with the Proposed Actions.

While the buildings anticipated under the Proposed Actions would be taller than existing buildings in the area, the bulk controls included as part of the zoning changes would ensure that new developments are compatible with existing and planned buildings. Bulk controls also ensure sufficient flexibility where needed to promote a variety of new built forms. New developments expected under the Proposed Actions would be concentrated along major avenues and streets, preserving the low-rise character of the narrower cross streets, particularly north of 1st Street and east of the Canal. Contextual zoning envelopes would ensure that new development complements the existing scale by reinforcing the street wall, requiring minimum and maximum base heights that are contextual to existing buildings, and responding to street widths and the overall vision for the neighborhood identified in the Neighborhood Plan.

The Proposed Actions would establish the Special Gowanus Mixed-Use District (GSD), which would create special use, floor area, and special height and setback regulations for buildings on waterfront blocks and select corridors, among other special rules including tree planting, curb cut locations, and streetscape requirements. The Proposed Actions would align zoning and land use to help facilitate efforts to preserve and adaptively reuse buildings, while promoting integration and a mixing of uses throughout most of the Project Area.

The Proposed Actions would support a walkable mixed-use neighborhood and generate new neighborhood parks and open space to activate the waterfront and facilitate public access to the waterfront. New mixed-use residential, commercial, community facility and light industrial development would be encouraged along key corridors: the Canal, 3rd Avenue, the area around Thomas Greene Playground, and Block 471 (which includes lot 200 and the City-owned lots 1 and 100 [Gowanus Green Site]) by encouraging development on vacant and underutilized sites.

NATURAL RESOURCES

The Proposed Actions would not result in a significant adverse impact to natural resources. Terrestrial ecological communities within the study area are limited to regionally common Terrestrial Cultural and Open Uplands communities, which are associated with highly developed sparsely vegetated urban areas such as paved roads, buildings, and vacant lots. The Proposed Actions would result in the removal of street trees, loss of some vegetation and temporary disturbance to urban-tolerant wildlife in the study area, but would not substantially affect natural resources. Street tree removals would be performed in compliance with local laws and regulations and required replacement and/or restitution would be provided. Wildlife found within the study area are urban-adapted generalist species that can tolerate degraded environments and high levels of human activity, and would not be significantly adversely affected by the Proposed Actions. Bioswales, stormwater greenstreets, landscaping, and open space areas included in the development would provide additional habitat within the study area.

The Proposed Actions would not result in the introduction of any new groundwater contaminants, and any development that may require dewatering would be performed in accordance with all applicable federal, state, and local regulations and guidelines. Any contaminated soils encountered during development under the Proposed Actions would be managed in accordance with regulatory requirements, thereby further improving groundwater conditions in the study area. The Proposed Actions would not affect the flood elevation and would not increase risks from flooding in the study area. The Proposed Actions are expected to involve minimal in-water construction, if any, and would have the potential to result in indirect impacts to wetlands and aquatic resources associated with water quality improvements (i.e., stormwater management). Water quality and aquatic habitat would be expected to improve over time as a result of ongoing cleanup efforts

associated with the Superfund Remediation efforts, capital improvements, and improvements to stormwater and CSO systems in the study area.

HAZARDOUS MATERIALS

The Proposed Actions would not result in significant adverse impacts related to hazardous materials. Based on the assessment contained in the DEIS, the potential for significant adverse impacts related to hazardous materials resulting from the Proposed Actions would be precluded through compliance with existing regulatory requirements (for the hazardous materials in the structures) and with the placement of (E) Designations or comparable institutional controls for all development under private ownership.

An (E) Designation for hazardous materials would require that, prior to change of use or redevelopment of a site requiring ground disturbance, the owner of the site conduct a Phase I Environmental Site Assessment (ESA) and subsurface testing and remediation, as needed, to the satisfaction of the City's Office of Environmental Remediation (OER). With such controls, (E)-designated sites for which there is an application for Department of Buildings (DOB) permits associated with a change of use or ground disturbance cannot be issued without OER approval. The (E) Designation requirements would therefore ensure the protection of human health and the environment from known or suspected hazardous materials.

For the City-owned sites under the jurisdiction of HPD (Block 471, Lots 1 and 100 and Block 1028, Lot 7), it is expected that measures to require testing and remediation would be included as part of LDAs', Restrictive Declarations (RDs), or comparable binding mechanisms between the City of New York and a potential developer, and would require measures similar to those required by an (E) Designation. Development of certain sites may require additional coordination with DEC and EPA, as necessary. For the proposed new parkland on Block 471 similar measures addressing requirements for subsurface disturbance and any necessary remedial activities would be conducted in accordance with NYC Parks procedures, and with other agency involvement as required.

WATER AND SEWER INFRASTRUCTURE

The Proposed Actions would not result in significant adverse impacts related to water supply, wastewater management, or stormwater and drainage management systems, as discussed below.

WATER SUPPLY

The Proposed Actions would not result in significant adverse impacts on the City's water supply system. Projected development resulting from the Proposed Actions would be expected to generate a water demand of approximately 4.3 mgd in the With Action condition, an increase of 3.5 mgd, compared with demand in the No Action condition. Future incremental demand from the projected developments would be dispersed throughout the Project Area and would represent approximately 0.35 percent of the City's average daily water supply of approximately one billion gpd. This added demand would therefore not result in a significant impact on the City's water supply system.

WASTEWATER TREATMENT

The projected development sites are located within the Gowanus Canal sewershed. The Project Area is served by the Red Hook Resource Recovery Facility (WRRF) and the Owls Head WRRF. Within the Project Area there are five subcatchment drainage areas for the Red Hook WRRF service area and one subcatchment area in the Owls Head WRRF service area. Development under

the With Action condition is expected to generate a total of approximately 2.4 mgd of sanitary sewage of which 1.6 mgd would be directed to the Red Hook WRRF and the balance, approximately 0.8 mgd, would be directed to the Owls Head WRRF.

In the Red Hook WRRF service area, the With Action sanitary sewage generation of approximately 1.6 mgd would represent an increase of approximately 1.3 mgd over the No Action condition. With an existing flow of 27 mgd (below the maximum dry weather flow permitted capacity of 60 mgd) and the addition of approximately 1.3 mgd on the projected development sites, which represents 2.2 percent of the permitted capacity, the Red Hook WRRF would continue to have reserve capacity. Similarly, the With Action sanitary sewage generation in the Owls Head WRRF service area of approximately 0.8 mgd would represent an increase of approximately 0.6 mgd over the No Action condition. With an existing flow of 94 mgd (below the maximum dry weather flow permitted capacity of 120 mgd) and the addition of approximately 0.6 mgd on the projected development sites, which represents 0.5 percent of the permitted capacity, the Owls Head WRRF would also continue to have reserve capacity. Therefore, no significant adverse impacts to the City's wastewater treatment services would occur as a result of the Proposed Actions.

STORMWATER AND DRAINAGE MANAGEMENT

Based on the guidance of the *CEQR Technical Manual*, a detailed analysis was performed to determine the potential for the Proposed Actions to affect CSO discharges to the Gowanus Canal as well as any other impacts to the City's sewer system.

The detailed analysis (see **Appendix F**) was based on hydrologic and hydraulic modeling utilizing the InfoWorks Integrated Catchment Models (ICM) developed for DEP's long-term control plan[5] (LTCP) and Superfund projects for the Red Hook WRRF and Owls Head WRRF service areas, and updated to incorporate the stormwater infrastructure improvements being undertaken and proposed by DEP for the Gowanus Canal drainage area and the forthcoming Citywide Unified Stormwater Rule. Independent of the Proposed Actions, DEP has undertaken extensive stormwater infrastructure improvements in the Gowanus Canal sewershed to control CSOs being discharged into the waterbody, including an updated Gowanus Wastewater Pumping Station, high level storm sewers, and Green Infrastructure, expected in the No Action condition. Future additional improvements are expected to be constructed, in particular CSO control facilities mandated by the EPA in connection with the ongoing Superfund remediation of the Canal.

The analysis found that, under the With Action condition, with the additional development facilitated by the Proposed Actions, CSO volumes would decrease as compared with the No Action condition despite the increase to sanitary flows from new development. This reduction in CSO volumes is a result of the new on-site stormwater management volume requirements under the Unified Stormwater Rule, which increases the total volume of water that must be managed on new and redeveloped properties as well as updates the type and performance of on-site stormwater management practices that must be implemented. In the rezoning area, the Unified Stormwater Rule ensures that redeveloped properties manage more total stormwater and manage it more efficiently than prior to redevelopment. This improved on-site stormwater management on the redeveloped properties is substantial enough that it would offset the increase in sanitary flow, so CSO volumes to the Canal would decrease overall. While the rezoning is anticipated to add approximately 18,000 new residents to the rezoning area on 63 sites, generating additional sanitary

[5] https://www1.nyc.gov/site/dep/water/gowanus-canal.page

flow of 1.29 mgd, the vast majority of this additional flow would be conveyed to the WRRF for treatment, with the exception of during more intense wet weather events. The Unified Stormwater Rule benefits in the rezoning area more than offset the increase in sanitary flows and, even with the increased population and sanitary flow, would result in approximately 5 million gallons per year of CSO reduction to the Gowanus Canal. In addition, in the With Action condition, CSO volumes discharged to the Canal would remain well below existing conditions, and the Proposed Actions would not affect the City's ability to meet the EPA Superfund requirements.

A pollutant load assessment was also performed to analyze if the rezoning and associated development would result in greater pollutant loadings discharged to the Gowanus Canal. The assessment found that the estimated pollutant loads to Gowanus Canal decreased, due to the decrease in CSO volumes as described above. Therefore, the Proposed Actions are not projected to affect CSO discharges or water quality in the Gowanus Canal, and would not result in significant adverse impacts on DEP infrastructure in the Gowanus Canal drainage area.

SOLID WASTE AND SANITATION SERVICES

The Proposed Actions would not result in a significant adverse impact on solid waste and sanitation services. The Proposed Actions would not directly affect a solid waste management facility. Development in the With Action condition would generate an increment above the No Action condition of approximately 224 tons per week of solid waste, of which approximately 79 percent (178 tons) would be handled by the New York City Department of Sanitation (DSNY) and 21 percent (46 tons) would be handled by private carters. This incremental increase in solid waste correlates to the addition of approximately 16 additional truckloads per week of solid waste handled by DSNY and 11 truckloads per week handled by private carters.

The additional solid waste resulting from the With Action condition would be considered a negligible increase relative to the approximately 12,260 tons of solid waste handled by the DSNY every day, or the 13,000 tons handled by private carters.[6] As such, the Proposed Actions would not result in an increase in solid waste that would overburden available waste management facilities. The Proposed Actions would also not conflict with, or require any amendment to, the City's solid waste management objectives as stated in the SWMP.

ENERGY

The Proposed Actions would not result in a significant adverse impact related to energy systems. Development assumed in the future with the Proposed Actions (the With Action condition), would result in increased demand of approximately 961,437,863 thousand British thermal units (MBTUs) of energy per year as compared with future conditions without the Proposed Actions (the No Action condition). This increase in annual demand represents less than 0.1 percent of the projected service demand for New York City in the 2035 analysis year. The Proposed Actions would generate an incremental increase in energy demand that would be considered negligible when compared with the overall demand within Consolidated Edison's (Con Edison's) New York City and Westchester County service area. Any new development resulting from the Proposed Actions would be required to comply with the NYCECC, which governs performance requirements of heating, ventilation, and air condition systems, as well as the exterior building envelope of new buildings. In compliance with this code, new development must meet standards for energy conservation, which include requirements related to energy efficiency and combined thermal transmittance. In addition, should

[6] About DSNY: http://www1.nyc.gov/assets/dsny/about/inside-dsny.shtml.

there be a voluntary utilization of higher performance standard designs on the projected development sites, there would then be a reduction in the forecast energy load, detailed below. Therefore, no significant adverse impacts related to energy are expected to occur.

TRANSPORTATION

The Proposed Actions would result in significant adverse impacts to transportation, including traffic, transit, and pedestrian conditions. The transportation analyses are summarized below.

TRAFFIC

Traffic conditions were evaluated for the weekday 7:45–8:45 a.m., 1:00–2:00 p.m. (midday), 4:30–5:30 p.m., and Saturday 3:00–4:00 p.m. peak hours at 60 intersections in the traffic study area where additional traffic resulting from the Proposed Actions would be most heavily concentrated. As summarized in **Table S-4**, the traffic impact analysis indicates the potential for significant adverse impacts at 43 intersections (31 signalized and 12 unsignalized) during one or more analyzed peak hours. Significant adverse impacts were identified to 58 lane groups at 36 intersections during the weekday AM peak hour, 29 lane groups at 23 intersections in the midday peak hour, 58 lane groups at 36 intersections in the PM peak hour, and 41 lane groups at 33 intersections during the Saturday peak hour. Chapter 21, "Mitigation," discusses potential measures to mitigate these significant adverse traffic impacts.

Table S-4
Number of Impacted Intersections and Lane Groups by Peak Hour

	Peak Hour			
	Weekday AM	**Weekday Midday**	**Weekday PM**	**Saturday Midday**
Impacted Lane Groups	58	29	58	41
Impacted Intersections	37	23	36	33

TRANSIT

Subway

Subway Stations

The Proposed Actions would generate a net increment of approximately 5,823 and 6,430 new subway trips during the weekday AM and PM commuter peak hours, respectively. The analysis of subway station conditions focuses on four Metropolitan Transportation Authority (MTA) New York City Transit (NYCT) subway stations in proximity to 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, three of which are served by F and G trains operating on the Culver Line, and one of which is served by R trains operating on the 4th Avenue Line:

- Bergen Street (F/G)
- Carroll Street (F/G)
- Smith-9th Streets (F/G)
- Union Street (R)

As summarized in **Table S-5**, in the With Action condition, a total of four street stairs and one fare array at the Union Street station would experience significant adverse impacts from project-generated demand in at least one peak hour.

Table S-5
Summary of Significant Subway Station Impacts

Subway Station	Station Element	Impacted Time Period
Union Street (R)	Street Stair S2/P2	AM
	Street Stair S4/P4	AM
	Street Stair S1/P1	PM
	Street Stair S3/P3	PM
	Fare Array C010	AM

Subway Line Haul

The Project Area is served by 11 NYCT subway routes—the Nos. 2, 3, 4, and 5 trains operating along the Eastern Parkway Line; B and Q trains operating on the Brighton Line; D, N, and R trains operating on the 4th Avenue Line; and F and G trains operating along the Culver Line. The peak direction of travel is typically Manhattan-bound (northbound) in the AM peak hour and Brooklyn-bound (southbound) 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, northbound F trains are expected to be operating over capacity in the AM peak hour, and would experience an average incremental increase of 13.98 persons/car during this period, greater than the five persons/car *CEQR Technical Manual* impact threshold. As summarized in **Table S-6**, northbound F service would therefore be considered significantly adversely impacted by the Proposed Actions in the AM peak hour. 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.

Table S-6
Summary of Significant Subway Line Haul Impacts

Route	Direction	Impacted Time Period
F	NB	AM

Bus

The Project Area is served by a total of 10 local bus routes, nine operated by NYCT and one operated by MTA Bus Company (MTA Bus). These include both local and limited stop (LTD) service on the B41 route, and the limited stop service on the B103 operated by MTA Bus. It is estimated that the Proposed Actions would generate a net total of approximately 399 and 492 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 three routes—the B37 and B57 operated by NYCT and the B103 LTD operated by MTA Bus. As these routes would continue to operate with available capacity in both the AM and PM peak hours in the With Action condition, the Proposed Actions are not expected to result in significant adverse impacts to local bus service in either period.

PEDESTRIANS

The Proposed Actions would generate a net increment of approximately 2,801 walk-only trips in the weekday AM peak hour, 5,952 in the weekday midday, and 3,831 in the weekday PM peak hour. Persons en route to and from subway station entrances and bus stops would add 6,222, 3,452, and 6,922 additional pedestrian trips to Project Area sidewalks and crosswalks during these same periods, respectively. Peak hour pedestrian conditions were evaluated at a total of 217 pedestrian

elements where new trips generated by projected developments are expected to be most concentrated. These elements—81 sidewalks, 85 corner areas, and 51 crosswalks—are primarily located in the vicinity of major projected development sites and corridors connecting these sites to area subway station entrances and bus routes. As shown in **Table S-7**, based on *CEQR Technical Manual* criteria, nine sidewalks and five crosswalks would experience significant adverse impacts as a result of the Proposed Actions in one or more of the analyzed peak hours, and there would be no significant impacts to any corner areas. Chapter 21, "Mitigation," discusses potential measures to mitigate these significant adverse pedestrian impacts.

VEHICULAR AND PEDESTRIAN SAFETY

Under the *Vision Zero Brooklyn Pedestrian Safety Action Plan*, much of the area north of Degraw Street and east of Smith Street is located within a "Priority Area," where safety issues were found to occur systematically at an area-wide level. Court Street and Atlantic, Flatbush, and 4th Avenues are identified as Priority Corridors, and the intersection of Flatbush and Atlantic Avenues is identified as a Priority Intersection.

Crash data for intersections in the traffic and pedestrian study areas were obtained from DOT for the three-year period between January 1, 2015, and December 31, 2017 (the most recent three-year period for which data are available). During this period, a total of 548 reportable and non-reportable crashes, 128 pedestrian/bicyclist-related injury crashes, and one fatality occurred at analyzed study area intersections.

Table S-7
Summary of Significant Pedestrian Impacts

Corridor/Intersection	Impacted Element	Peak Hour		
		AM	Midday	PM
Smith Street between 3rd and 4th Streets	East Sidewalk	X		X
Smith Street between 4th and 5th Streets	East Sidewalk	X		X
5th Street between Smith and Hoyt Streets	North Sidewalk		X	
Union Street between Bond Street and the Gowanus Canal	South Sidewalk	X	X	X
Bond Street between 2nd and 3rd Streets	East Sidewalk	X		X
3rd Avenue between Carroll and 1st Streets	West Sidewalk	X	X	X
3rd Street between the Gowanus Canal and Third Ave	North Sidewalk			X
4th Avenue between Union Street and Subway Entrance Stair	East Sidewalk	X		
4th Avenue between Union Street and Subway Entrance Stair	West Sidewalk			X
Smith Street at President Street	North Crosswalk	X		X
3rd Avenue at Union Street	North Crosswalk			X
	South Crosswalk			X
3rd Avenue at Carroll Street	South Crosswalk	X		X
4th Avenue at President Street	East Crosswalk	X		

Under *CEQR Technical Manual* guidance, high crash locations are defined as those with 48 or more total reportable and non-reportable crashes or five or more pedestrian/bicyclist injury crashes occurring in any consecutive 12 months of the most recent three-year period for which data are available. A review of the crash data identified two study area intersections as high crash locations. 4th Avenue at Union Street experienced seven pedestrian/bicyclist-related crashes in 2016 and five in 2017, and Hamilton Avenue at Court Street, which experienced five pedestrian/bicycle-related crashes in 2015 (see **Table S-8**). Improvements to enhance pedestrian and cyclist safety have been implemented at both of these intersections, including high-visibility crosswalks, sidewalk extensions (to reduce pedestrian crossing distance) and a striped bicycle lane (on Court Street). Additional improvements that may warrant consideration at one or both locations could include improved street lighting and modifying the traffic signal timing plan to provide a leading pedestrian interval (LPI).

Table S-8
High Crash Locations

Intersection	Total Pedestrian/Bicycle Injury Crashes			Total Crashes (Reportable + Non-Reportable)		
	2015	2016	2017	2015	2016	2017
4th Avenue at Union Street	3	7	5	7	17	8
Court Street at Hamilton Avenue	5	0	1	7	4	6

PARKING

The parking analysis documents changes in parking supply and utilization within a study area extending ¼-mile from projected development sites. Within this study area, there are a total of 16 off-street public parking lots and garages of which one is located on a projected development site and would be displaced by new development under the Proposed Actions.

The RWCDS assumes that a total of 1,940 accessory parking spaces would be provided on 24 of the projected development sites under the With Action condition, compared to approximately 2,156 accessory spaces that would be provided under the No Action condition. The total number of accessory spaces in the With Action condition conservatively assumes that up to 30 percent of new residential development would be designated as affordable and would therefore not include accessory parking.

After accounting for new parking demand and the number of required accessory spaces provided on a site-by-site basis under the RWCDS, it is estimated that compared to the No Action condition, incremental parking demand from new development associated with the Proposed Actions would total approximately 2,214 spaces at off-street public parking facilities and on-street in the weekday midday period and 2,221 spaces during the overnight period. In addition, under the Proposed Actions, 120 spaces in one existing public parking facility located on a projected development site would be displaced, and no new public off-street parking capacity would be provided. Based on these changes in parking supply and demand, it is estimated that in the With Action condition there would be deficits of approximately 2,980 spaces of on-street and off-street public parking capacity within ¼-mile of projected development sites in the weekday midday period and 2,838 spaces during the overnight period. These deficits would reflect project demand not otherwise accommodated in accessory or off-street public parking facilities as well as demand displaced from existing parking facilities on projected development sites. While 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 in the midday, these shortfalls would not be considered a significant

adverse impact based on *CEQR Technical Manual* criteria due to the magnitude of available alternative modes of transportation. Therefore, the Proposed Actions are not expected to result in significant adverse parking impacts during the weekday midday peak period for commercial and retail parking demand, nor during the overnight peak period for residential demand.

AIR QUALITY

The Proposed Actions would result in a significant adverse air quality impact related to mobile sources. However, no significant adverse stationary source impacts would result from the Proposed Actions.

The mobile source analysis determined that concentrations of CO and fine particulate matter less than ten microns in diameter (PM_{10}) due to project-generated traffic at intersections would not result in any violations of National Ambient Air Quality Standards (NAAQS), and furthermore, CO concentrations were predicted to be below CEQR *de minimis* criteria. The results show that the daily (24-hour) $PM_{2.5}$ increments are predicted to be below the *de minimis* criteria. At four of the five intersection sites analyzed, the maximum annual incremental $PM_{2.5}$ concentration is below the *de minimis* criteria; however, the annual $PM_{2.5}$ maximum annual incremental concentration is predicted to exceed the *de minimis* criteria at the intersection of Smith and 5th Streets. This would be considered a significant adverse air quality impact. Therefore, traffic mitigation measures were examined to avoid a potential significant impact at this intersection location. Mitigation measures are discussed in Chapter 21, "Mitigation."

The Proposed Actions would not result in any significant adverse air quality impacts on sensitive uses in the surrounding community, and the Proposed Actions would not be adversely affected by existing sources of air emissions in the rezoning area.

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-601) 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 (located within Projected Development Site 47), 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 an LDA or comparable binding mechanism to ensure that the developer(s) satisfy these restrictions with oversight provided through HPD.

The analysis of existing manufacturing 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.

The analysis of the industrial sources associated with the RWCDS determined that certain use group categories had the potential to result in a significant adverse air quality impact at receptor locations due to emissions from one or more air toxic compounds. To ensure that there are no potential significant adverse impacts of identified air toxic compounds in the proposed Gowanus Special District (GSD), certain restrictions would be required as part of the Proposed Actions.

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 result in any significant adverse air quality impacts.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

The assessment of greenhouse gas (GHG) emissions estimated that the building energy and vehicle use associated with the Proposed Actions would result in up to approximately 131 thousand metric tons of carbon dioxide equivalent (CO_2e) emissions per year. It also found that the Proposed Actions are consistent with the applicable citywide GHG emissions reduction and climate change goals, and that there would be no significant adverse GHG emission or climate change impacts.

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.

Development on City-owned properties may have specific energy efficiency requirements that are beyond the code requirements (e.g., if developers apply for affordable housing construction funding) that would be implemented under contractual agreements with HPD or other government funding agencies). Development at these sites would meet sustainable design requirements, which would result in lower GHG emissions—these features would be specified and required through land disposition and/or funding agreements or other legally binding agreements between the City and developer(s).

The Proposed Actions would be consistent with the City's emissions reduction goals, as defined in the *CEQR Technical Manual*. The Proposed Actions would support other GHG goals by virtue of the Proposed Project's density and location in an area well-served by transit, its proximity to the Downtown Brooklyn and Lower Manhattan Central Business Districts, and through requirements to utilize natural gas in new developments (i.e., natural gas would be required to address the air quality [E] Designations). As compared to the No Action condition, the Proposed Actions would provide opportunities for increased residential density, including affordable housing, and space for new jobs in an area with very good transit access. These changes could potentially result in less GHG emissions associated with auto use and suburban sprawl, and can also serve to lessen the pressure of rising rents in the area by increasing the supply of housing, including a substantial amount of affordable housing.

Regarding resilience to potential climate conditions, the City's long-term process for addressing coastal flooding risk in New York City may ultimately include large-scale projects providing coastal protection. The Proposed Actions would not adversely affect other resources (including ecological systems, public access, visual quality, water-dependent uses, infrastructure, and adjacent properties) due to climate change. The Proposed Actions would help catalyze new development along the Canal, which would be required to meet Appendix G requirements through strategies, such as elevation, dry flood-proofing, and/or wet flood-proofing. The Proposed Actions would also require portions of the required waterfront open space be elevated based on future projections of sea level rise.

NOISE

The Proposed Actions would not result in a significant adverse noise impact. A noise assessment was undertaken to determine the levels of noise attenuation that may be needed to achieve interior noise levels that are acceptable and in accordance with the *CEQR Technical Manual* guidance. The *CEQR Technical Manual* has noise attenuation values for buildings based on exterior $L_{10(1)}$ noise levels for the purposes of achieving interior noise levels of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial office uses. The With Action condition $L_{10(1)}$ 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 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.

Based on the projected noise levels, up to 33 dBA window/wall attenuation would be required to achieve acceptable interior noise levels per the *CEQR Technical Manual* noise exposure guideline at residential and community facility uses.

To implement the attenuation requirements at non-residential spaces within the GSD and at projected and potential development sites not within the GSD, an (E) designation (E-601) would be applied specifying the appropriate window/wall attenuation. By meeting the design guidelines specified in the (E) Designation, buildings developed as a result of the Proposed Actions would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA L_{10} for residential or community facility uses and 50 dBA L_{10} for commercial office uses.

FOR THE CONDITION IN WHICH A NEWLY INTRODUCED NOISE-SENSITIVE USE (I.E., RESIDENTIAL OR DAYCARE) WOULD EXIST ON THE SAME LOT WITH MANUFACTURING USE, THE TWO USES WOULD BE SEPARATED BY A DEMISING PARTITION. DEMISING PARTITIONS SEPARATING RESIDENTIAL OR COMMUNITY FACILITY USE FROM MANUFACTURING USE ON THE SAME LOT WOULD BE REQUIRED TO PROVIDE SUFFICIENT ATTENUATION TO RESULT IN INTERIOR LEQ AND L10 NOISE LEVELS NOT GREATER THAN 45 DBA IN THE RESIDENTIAL UNITS AND/OR COMMUNITY FACILITY SPACES AND TO ACHIEVE A MINIMUM ATTENUATION OF 50 DBA. THIS REQUIREMENT WOULD BE IMPLEMENTED BY APPLICATION OF A NEWLY-INTRODUCED (E) DESIGNATION. WITH THESE MEASURES IN PLACE, THERE WOULD BE NO SIGNIFICANT ADVERSE IMPACTS WITH THE PROPOSED ACTIONS ON LOTS WITH MIXED USES.PUBLIC HEALTH

The Proposed Actions would not result in any significant adverse public health impacts. The Proposed Actions would not result in unmitigated significant adverse impacts in the areas of air quality, operational noise, water quality, or hazardous materials. While the Proposed Actions could result in unmitigated construction noise impacts as defined by *CEQR Technical Manual* thresholds, a public health assessment was conducted and it was determined that the construction noise impact would not generate a significant adverse public health impact.

NEIGHBORHOOD CHARACTER

The Proposed Actions would not result in any significant adverse impacts on neighborhood character. The Proposed Actions would not result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; urban design and visual resources; or noise.

Although there would be significant adverse impacts with respect to open space, historic resources, shadows, and transportation, these impacts would not result in a significant adverse impact to the determining elements of neighborhood character.

In the No Action condition, development is expected to occur in a piecemeal manner and without the benefit of a comprehensive plan to coordinate appropriate densities and urban design controls across the neighborhood. In contrast, the Proposed Actions would provide for sufficient predictability, flexibility, and variety for building envelopes that account for the unique conditions in the Gowanus neighborhood, including the Canal, with appropriate transitions between lower and medium density adjacencies, the creation of new waterfront open space, enhanced pedestrian-oriented sidewalk conditions, and lively, active streets. While the character of Gowanus has changed throughout the years and will continue to change with or without the Proposed Actions, the Proposed Actions would facilitate predictable development patterns that meet the long-term vision of Gowanus as a sustainable, mixed-use neighborhood anchored by a vibrant and resilient Canal waterfront. Therefore, the Proposed Actions would not result in any significant adverse neighborhood character impacts.

CONSTRUCTION

Construction activity associated with the Proposed Actions would result in temporary significant adverse impacts on noise and historic and cultural resources and could potentially result in temporary significant adverse transportation impacts. The construction effects are summarized below.

TRANSPORTATION

Construction travel demand is expected to peak in the second quarter of 2027, and the first quarter of 2032 was selected as a reasonable worst-case analysis period for assessing potential cumulative transportation impacts from operational trips for completed portions of the project and construction trips associated with construction activities. Both of these periods are therefore analyzed for potential transportation impacts during construction.

Traffic

During construction, traffic would be generated by construction workers commuting via autos and by trucks making deliveries to projected development sites. In 2027 and 2032, traffic conditions during the 6 to 7 AM and 3 to 4 PM construction peak hours are expected to be generally better than during the analyzed operational peak hours with full build-out of the Proposed Actions in 2035. Consequently, there would be less likelihood of significant adverse traffic impacts during both the 2027 peak construction period and the 2032 cumulative analysis period than with full build-out of the Proposed Actions in 2035. It is expected that the mitigation measures identified for 2035 operational traffic impacts would be similarly effective at mitigating any potential impacts from construction traffic during both the 2027 period for peak construction activity and the 2031 construction and operational cumulative analysis period.

Transit

The construction sites are located in an area that is well served by public transportation, with a total of seven subway stations or station complexes and 10 bus routes located in the vicinity of the Project Area. In 2027 and 2032, transit conditions during the 6 to 7 AM and 3 to 4 PM construction peak hours are expected to be generally better than during the analyzed operational peak hours with full build-out of the Proposed Actions in 2035 as incremental demand would be lower during construction, and most construction trips would not occur during the peak hours of commuter

demand. Consequently, there would be less likelihood of significant adverse subway and bus transit impacts during both the 2027 peak construction period and the 2032 cumulative analysis period than with full build-out of the projected development in 2035. It is anticipated that possible mitigation measures for the subway station and line haul impacts from the Proposed Actions' operational demand in 2035 will be evaluated with NYCT between the DEIS and FEIS, and that any such measures would also be effective at mitigating any potential impacts from construction subway trips during both the 2027 peak construction period and the 2032 construction and operational cumulative analysis period. Should any significant adverse subway station and/or line haul impacts occur in either of these periods, they would potentially remain unmitigated pending the implementation of practicable mitigation measures.

Pedestrians

In the 2027 peak construction period, pedestrian trips by construction workers would be widely dispersed among the nine projected development sites that would be under construction in this period. They would also primarily occur outside of the weekday AM and PM commuter peak periods and the weekday midday peak period when area pedestrian facilities typically experience the greatest demand. No single sidewalk, corner, or crosswalk is expected to experience 200 or more peak-hour trips, the threshold below which significant adverse pedestrian impacts are considered unlikely to occur based on *CEQR Technical Manual* guidelines. Consequently, significant adverse pedestrian impacts in the 2029 peak construction period are not anticipated.

In the 2032 construction and operational cumulative analysis period, pedestrian conditions during the 6 to 7 AM and 3 to 4 PM construction peak hours are expected to be generally better than during the analyzed operational peak hours with full build-out of the Proposed Actions in 2035. The Proposed Actions' significant adverse sidewalk and crosswalk impacts would therefore be less likely to occur during this construction period than with full build-out of the Proposed Actions in 2035. It is expected that the mitigation measures identified for the 2035 operational pedestrian impact in Chapter 21, "Mitigation," would be similarly effective at mitigating any potential impacts from construction pedestrian trips during the 2032 construction and operational cumulative analysis period.

Parking

Construction worker parking demand would be equivalent to approximately 463 spaces in the 2027 peak construction period and 335 spaces during the 2032 analysis period for cumulative construction and operational travel demand. While this demand would potentially contribute to a parking shortfall in the midday within ¼-mile of projected development sites, it would not be considered a significant adverse parking impact under *CEQR Technical Manual* criteria given the availability of alternative modes of transportation near the Project Area.

AIR QUALITY

Measures required to reduce pollutant emissions during construction include all applicable laws, regulations, and the City's building codes as well as New York City Local Law 77. These include dust suppression measures, idling restriction, and the use of ultra-low sulfur diesel (ULSD) fuel and best available tailpipe reduction technologies. 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 particulate matter ($PM_{2.5}$ and PM_{10}), annual-average nitrogen dioxide (NO_2), and carbon monoxide (CO) concentrations would be below their corresponding *de minimis* thresholds or National Air Quality Ambient Standards (NAAQS),

respectively. Therefore, construction under the Proposed Actions would not result in significant adverse air quality impacts due to construction sources.

NOISE AND VIBRATION

Noise

Based on the projected construction predicted at each development site, construction generated noise is expected to exceed the *CEQR Technical Manual* noise impact thresholds as well as result in "objectionable" and "very objectionable" noise level increases at some receptors. One peak construction period per year was analyzed, from 2021 to 2035. Receptors where noise level increases were predicted to exceed the construction noise evaluation thresholds for extended durations were identified.

The noise analysis results show that the predicted noise levels could exceed the *CEQR Technical Manual* impact criteria throughout the Project Area due to construction.

As projected development sites are completed and occupied while other nearby or adjacent projects are under construction, construction activities are predicted to result in "clearly unacceptable noise levels" and interior noise levels exceeding the 45 dBA criterion considered acceptable by up to 18 dBA. Construction could produce noise levels that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities. While the highest levels of construction noise would not persist throughout construction, and noise levels would fluctuate, resulting in noise increases that would be intermittent, these locations would experience construction noise levels whose magnitude and duration could constitute significant adverse impacts.

At locations predicted to experience an exceedance of the noise impact threshold criteria, the exceedances would be due principally to noise generated by on-site construction activities (rather than construction-related traffic). As previously discussed, the noise analysis examined the reasonable worst-case peak hourly noise levels resulting from construction in an analyzed month, and is therefore conservative in predicting increases in noise levels. Typically, the loudest hourly noise level during each month of construction would not persist throughout the entire month. Finally, this analysis is based on RWCDS conceptual site plans and construction schedules. It is possible that the actual construction may be of less magnitude, or that construction on multiple projected development sites may not overlap, in which case construction noise would be less intense than the analysis predicts.

Vibration

The buildings of most concern with regard to the potential for structural or architectural damage due to vibration are historic buildings that are S/NR-Listed or NYCLs and NYCT structures immediately adjacent to the projected development sites. Since these historic buildings and structures would be within 90 feet of the projected development sites, vibration monitoring would be required per DOB TPPN #10/88 regulations, and peak particle velocity (PPV) during construction would be prohibited from exceeding the 0.50 inches/second threshold.

For non-historic buildings and other 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 equipment that would have the most potential for producing levels that exceed the 65 vibration decibels (VdB)

limit is also the pile driver. However, the operation would only occur for limited periods of time at a particular location and therefore would not result in any significant adverse impacts.

Consequently, there is no potential for significant adverse vibration impacts with the Proposed Actions.

HISTORIC AND CULTURAL RESOURCES

The Proposed Actions would result in direct significant adverse impacts to the S/NR-eligible Gowanus Canal Historic District as a result of demolition of contributing buildings. In addition, the Proposed Actions may result in construction-related impacts to contributing properties located within the boundaries of the S/NR-Eligible Gowanus Canal Historic District from adjacent construction. As summarized above, the Proposed Actions would result in significant adverse impacts on archaeological resources.

J. MITIGATION

The Proposed Actions would result in significant adverse impacts related to community facilities (early childhood programs), open space, shadows, historic and cultural resources (architectural and archaeological resources), transportation (traffic, pedestrians, and transit), air quality, and construction (noise). Mitigation measures being proposed to address those impacts, where feasible and/or practical, are discussed below. If no possible mitigation can be identified, an unavoidable significant adverse impact would result.

COMMUNITY FACILITIES

The Proposed Actions would result in a significant adverse impact on publicly funded early childhood programs. With the Proposed Actions, child care facilities would operate over capacity by approximately 1,700 slots and exhibit an increase in the utilization rate of approximately 25 percentage points over the No Action condition.

Possible mitigation measures for this significant adverse impact may include provision of suitable space in projected developments for early childhood programs, provision of suitable locations within the study area that are also within a reasonable distance (at a rate affordable to DOE providers), or funding/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. These measures are to be further examined between the DEIS and the FEIS by DCP, in consultation with doe. Absent the implementation of such mitigation measures, if needed, the Proposed Actions would have an unmitigated significant adverse impact on publicly funded early childhood programs.

OPEN SPACE

The Proposed Actions would result in an (indirect) significant adverse impact associated with the active open space ratio and a (direct) significant adverse impact associated with incremental shadow cast on the Douglass and Degraw Pool in Thomas Greene Playground.

Measures being considered by DCP to mitigate the indirect significant adverse open space impact include improvements to existing parks to allow for expanded programming and enhanced usability, and making New York City public school playgrounds accessible to the community after school hours through the Schoolyards to Playgrounds Program. These measures will be explored by DCP in consultation with NYC Parks between the DEIS and FEIS.

As discussed in Chapter 4, "Open Space," the Proposed Actions would result in a (direct) significant adverse impact to the Douglass and Degraw Pool in Thomas Greene Playground. Mitigation measures for the significant adverse impact associated with incremental shadow are discussed below under "Shadows."

SHADOWS

The Proposed Actions would result in significant adverse impacts to two sunlight-sensitive resources: Our Lady of Peace Church and the Douglass and DeGraw Pool in Thomas Greene Playground.

OUR LADY OF PEACE CHURCH

Development on Projected Development Site 38 would result in project-generated incremental shadows that would reach a maximum of six of the church's 23 stained-glass windows at any one time, but would result in the complete elimination of direct sunlight on the stained-glass windows for approximately 37 minutes on the morning of the March 21/September 21 analysis day and for approximately 55 minutes on the morning of the December 21 analysis day. The total duration of incremental shadow on the morning of the December 21 analysis day would be approximately 2 hours and 19 minutes, including the 55-minute period when all remaining direct sunlight would be eliminated. Potential mitigation strategies to reduce or eliminate, to the greatest extent practicable, adverse shadow impacts to sunlight-sensitive architectural features, including changes to the bulk or configuration of projected or potential development sites that cause or contribute to the adverse impact. For adverse impacts to stained-glass windows, potential mitigation measures could also include the provision of artificial lighting to simulate the effect of direct sunlight. These mitigation measures will be explored in consultation with LPC between publication of the DEIS and FEIS. If feasible mitigation is found, the impacts will be considered partially or fully mitigated. In the absence of feasible mitigation, the significant adverse shadow impact to the church would be unavoidable.

DOUGLASS AND DEGRAW POOL IN THOMAS GREENE PLAYGROUND

Project-generated incremental shadows from Potential Development Site W and Projected Development Site 18 would cover over most of the large main pool and the small kiddie pool for approximately two hours in the late afternoon of the May 6/August 6 analysis day, significantly impacting the user's experience of the pool. Potential measures that could mitigate the significant adverse shadow impact to Douglass and Degraw Pool may include modifications to the height, shape, size, or orientation of the developments that cause or contribute to the significant adverse shadow impact. Other mitigation measure include relocating the affected feature within the open space or to another nearby location if feasible. However, the feasibility of this option is not yet known, and is contingent upon the renovation of Thomas Greene Playground. Thomas Greene Playground may be renovated in the No Action condition. Currently, the programming and layout of the reconstructed park is not confirmed. If relocation is a feasible option given scheduling and programming associated with the park renovations, relocating the pool in the northern half of the park, which would receive much less shadow than the southern half throughout the summer months, could potentially mitigate this significant adverse impact. DCP will coordinate with NYC Parks to explore all practicable mitigation measures between publication of the DEIS and FEIS. If feasible mitigation is found, the impacts will be considered partially or fully mitigated. In the absence of feasible mitigation, the significant adverse shadow impact would be unavoidable.

HISTORIC AND CULTURAL RESOURCES

The Proposed Actions would result in direct and indirect significant adverse impacts to both architectural and archaeological resources, as described below.

ARCHITECTURAL RESOURCES

The Proposed Actions would result in a significant adverse impact to architectural resources as a result of demolition and adjacent construction. The Proposed Actions would result in significant adverse direct impacts to the S/NR-eligible Gowanus Canal Historic District and the Gowanus Canal bulkheads as a result of the demolition of contributing resources to the historic district. In addition, potential significant adverse impacts would occur to contributing resources in the S/NR-eligible Gowanus Canal Historic District as a result of adjacent construction located within 90 feet of projected or potential development sites, and such impacts may also result to three other S/NR-eligible resources as a result of adjacent construction: Our Lady of Peace Church Complex, the Gowanus Canal Flushing Tunnel, and the IND Subway Viaduct. Potential mitigation measures for the significant adverse shadow impact on the S/NR-eligible Our Lady of Peace Church are discussed above under "Shadows."

The significant adverse impacts as a result of demolition would be unavoidable, as the contributing buildings and Gowanus Canal bulkheads are privately owned and could be demolished and modified to allow for developments constructed as-of-right under the Proposed Actions. The resources identified above that could experience construction-related damage are not S/NR-listed or designated NYCL and would therefore not be afforded the added special protections under DOB requirements.

ARCHAEOLOGICAL RESOURCES

The Proposed Actions would result in construction activity on 54 projected or potential development sites that were identified as potentially archaeologically significant by LPC. A Phase 1A Archaeological Documentary Study of those sites identified all or portions of 46 potential and projected development sites as archaeologically sensitive. In order to mitigate the significant adverse impact on archaeological resources, additional archaeological analysis would be required on each of the development sites prior to redevelopment. However, there are no mechanisms currently in place to ensure that such archaeological analysis would occur on private property subsequent to the rezoning, and such analysis can only be legally required on City-owned properties. Only one of the 46 archaeologically sensitive sites (Projected Development Site 47 on Block 471, Lot 100) is currently owned by the City of New York. With the completion of additional archaeological analyses as necessary and continued consultation with LPC, the Proposed Actions would not result in significant adverse impacts on Projected Development Site 47. However, none of the remaining 45 development sites identified as archaeologically sensitive are under City control. Future development on these properties would occur on an as-of-right basis and there would be no mechanism available to require archaeological analysis to determine the presence of archaeological resources; therefore, these impacts would be unmitigated.

TRANSPORTATION

The Proposed Actions would result in significant adverse impacts to: a) vehicular traffic at 43 intersections, b) four stairs and a fare array at one subway station, and c) pedestrians at nine sidewalks and five crosswalks. Mitigation measures that could address the significant adverse transportation impacts are discussed below.

TRAFFIC

The Proposed Actions would result in significant adverse traffic impacts at 43 study area intersections (31 signalized and 12 unsignalized) during one or more analyzed peak hours; specifically 58 lane groups at 37 intersections during the weekday AM peak hour, 29 lane groups at 23 intersections during the midday peak hour, 58 lane groups at 36 intersections during the PM peak hour, and 41 lane groups at 33 intersections during the Saturday peak hour. Implementation of traffic engineering improvements such as signal timing changes, the installation of new traffic signals, and modifications to lane striping and curbside parking regulations are being proposed and would provide mitigation for many of the anticipated traffic impacts. These proposed traffic engineering improvements are subject to review and approval by DOT. In addition, DCP, as lead agency, will explore further potential mitigation measures in coordination with DOT between publication of the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures that would mitigate the traffic impacts to the greatest extent practicable, the Proposed Actions would result in unmitigated significant adverse traffic impacts.

As shown in **Table S-9**, assuming that all of the proposed mitigation measures were implemented, significant adverse impacts would be fully mitigated at 10 lane groups in the weekday AM peak hour, 13 lane groups in the midday peak hour, 13 lane groups in the weekday PM peak hour, and 12 lane groups in the Saturday peak hour. Intersections where all impacts would be fully mitigated would total 7, 12, 10, and 11 during these same periods, respectively. **Table S-10** provides a more detailed summary of the intersections and lane groups that would have unmitigated significant adverse traffic impacts. In total, impacts to one or more lane groups would remain unmitigated in one or more peak hours at 34 intersections.

Table S-9
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	198/60	140/23	58/37	10/7	48/30
Weekday Midday	198/60	169/37	29/23	13/12	16/11
Weekday PM	198/60	140/24	58/36	12/9	46/27
Saturday	198/60	157/27	41/33	12/11	29/22

TRANSIT

Subway Stations

The Proposed Actions would result in significant impacts to two street stairs and one fare array in the AM peak hour and two stairs in the PM peak hour at the Union Street (R) subway station on the 4th Avenue Line. Stairway widening is the most common form of mitigation for significant stairway impacts, provided that NYCT deems it practicable (i.e., that it is worthwhile to disrupt service on an existing stairway to widen it and that a given platform and sidewalk affected by such mitigation are wide enough to accommodate the stairway widening). 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. Increasing the number of turnstiles is a common form of mitigation for significant fare array impacts. In the absence of practicable mitigation measures, the Proposed Actions' significant AM and PM peak hour stair impacts at the Union Street (R) subway station would remain unmitigated. DCP, as lead agency, will explore potential mitigation measures in coordination with NYCT between publication of the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures that would mitigate

the subway stair and fare array impacts to the greatest extent practicable, the Proposed Actions would result in unmitigated significant adverse subway station impacts.

Subway Line Haul

In the 2035 future with the Proposed Actions, northbound F 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 13.98 passengers per car. This significant adverse impact could be fully mitigated by the addition of two northbound F trains during the AM peak hour. As standard practice, NYCT routinely conducts periodic ridership counts and adjusts subway frequency to meet its service criteria, within fiscal and operating constraints.

Table S-10
Lane Groups With Unmitigated Significant Adverse Traffic Impacts

	Peak Hour			
	Weekday AM	**Weekday Midday**	**Weekday PM**	**Saturday**
Signalized Intersections				
Court Street & 4th Place	WB-TR	---	---	---
Smith Street & 3rd Street	WB-R	WB-R	WB-R	WB-R
Smith Street & Union Street	---	---	NB-TR	NB-TR
Smith Street & 9th Street	WB-R, NB-LT	---	---	---
Hoyt Street & Union Street	EB-TR	---	EB-TR	---
Bond Street & Baltic Street	NB-LTR	---	NB-LTR	---
Bond Street & Union Street	NB-TR	---	EB-LT	---
Bond Street & 3rd Street	EB-LT, WB-TR, NB-LTR	---	WB-TR, NB-LTR	WB-TR
3rd Avenue & Union Street	EB-LTR, WB-LR, NB-TR	WB-LR	WB-LR	WB-LR, NB-TR
3rd Avenue & Carroll Street	EB-LTR	EB-LTR	EB-LTR	EB-LTR
3rd Avenue & 1st Street/Driveway	WB-LTR	---	WB-LTR, SB-TR	WB-LTR
3rd Avenue & 3rd Street	EB-L, EB-TR, WB-LTR, NB-L, SB-TR	EB-L, EB-TR, WB-LTR, NB-L, SB-TR	EB-L, EB-TR, WB-LTR, NB-L, SB-TR	EB-TR, WB-LTR, NB-L, SB-TR
3rd Avenue & 9th Street	EB-L, WB-TR, SB-TR	NB-L, SB-TR	WB-TR, NB-L, NB-TR, SB-TR	NB-L, SB-TR
3rd Avenue & Prospect Avenue	SB (on-ramp)-TR	---	SB (on-ramp)-TR	SB (on-ramp)-TR
4th Avenue & Union Street	EB-LTR, WB-LTR	---	EB-LTR	SB-L
4th Avenue & Carroll Street	---	---	---	SB-L
4th Avenue & 3rd Street	NB-TR, SB-TR	---	EB-LTR, NB-L, SB-TR	---
4th Avenue & 9th Street	EB-LT	---	EB-LT, SB-TR	---
4th Avenue & 17th Street	EB-LTR, SB-L	EB-LTR	EB-LTR, NB-T, SB-L	EB-LTR, SB-L
5th Avenue & Union Street	WB-LTR	---	NB-LTR	---
Atlantic Avenue & Bond Street	NB-LTR	---	NB-LTR	NB-LTR
Atlantic Avenue & Nevins Street	WB-LT, SB-TR	WB-LT	EB-TR, SB-TR, WB-LT	SB-TR, WB-LT
Atlantic Avenue & 3rd Street	WB-T, NB-LTR	---	NB-LTR---	---
Atlantic Avenue & 4 Avenue	WB-T, NB-LR, SB-LT	---	EB-T, WB-T, NB-LR, SB-LT	SB-LT
Unsignalized Intersections				
Court Street & Luquer Street	EB-TR	---	EB-TR	EB-TR
Smith Street & 4th Street/5th Place	NB-LT	---	---	---
Smith Street & Luquer Street	NB-TR	---	---	NB-TR
Smith Street & Huntington Street	EB-LT	EB-LT	EB-LT	EB-LT
Hoyt Street & Sackett Street	WB-LT	---	---	---
Hoyt Street & 3rd Street	WB-LT	---	---	---
Hoyt Street & 4th Street	EB-TR	EB-TR	EB-TR	EB-TR
Bond Street & Butler Street	WB-R	WB-R	WB-R	WB-R
Nevins Street & Degraw Street	---	WB-LT	WB-LT	WB-LT
Nevins Street & Carroll Street	---	---	SB-LR	SB-LR

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

PEDESTRIANS

Incremental demand from the Proposed Actions would significantly adversely impact nine sidewalks and five crosswalks in one or more analyzed peak hours. There would be no significant impacts to any corner areas in any period. Recommended mitigation measures consisting of the relocation/removal of impediments to sidewalk flow and the widening of crosswalks would fully mitigate the impacts to three sidewalks and all five crosswalks. Implementation of the proposed mitigation measures would be subject to review and approval by DOT, as well as NYC Parks if a street tree is to be removed. DCP, as lead agency, will explore potential mitigation measures in coordination with DOT and NYC Parks between publication of the DEIS and FEIS. Absent the

identification and implementation of additional feasible mitigation measures that would mitigate the pedestrian impacts to the greatest extent practicable, the Proposed Actions would result in unmitigated significant adverse pedestrian impacts.

AIR QUALITY

The Proposed Actions would result in a significant adverse mobile source air quality impact at the intersection of Smith and 5th Streets, which is predicted to exceed the annual *de minimis* criterion for fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), defined as an incremental increase greater than 0.1 micrograms per cubic meter ($\mu g/m^3$).

The intersection of Smith Street and 5th Streets would experience a significant adverse traffic impact. The proposed mitigation measures for the impact is the installation of a traffic signal, and the provision of an additional turning lane by installing "No Stopping Anytime" restrictions along the east and west curbs of Smith Street and on the south curb of 5th Street to the east of Smith Street. The results of a mobile source analysis with the proposed traffic mitigation measures developed to reduce congestion and increase speeds along corridors in the affected area indicate that the maximum annual incremental concentration of $PM_{2.5}$ would be significantly lower than the With Action condition, and would not exceed the *de minimis* criteria for $PM_{2.5}$. Therefore, the incorporation of the traffic mitigation measures would mitigate the significant adverse air quality impact.

CONSTRUCTION

The Proposed Actions would have the potential to result in significant adverse construction noise impacts throughout the Project Area.

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 noise analysis results show that the predicted noise levels could exceed the *CEQR Technical Manual* impact criteria throughout the Project Area. The analysis is based on a conceptual site plan and construction schedule. It is possible that the actual construction may be of less magnitude, or that construction on multiple projected development sites may not overlap, in which case construction noise would be less intense than the analysis predicts.

Proposed mitigation could include a variety of source and path controls. Between publication of the DEIS and FEIS, all possible mitigation measures to address the identified construction noise impacts will be explored. In the event no additional practicable or feasible mitigation measures are determined, the significant adverse construction noise impacts would be unavoidable.

K. ALTERNATIVES

NO ACTION ALTERNATIVE

The No Action Alternative examines the future (2035) conditions in the Project Area under the existing zoning without the Proposed Actions (i.e., assumes none of the proposed discretionary approvals proposed as part of the Proposed Actions would be adopted). Under the No Action Alternative, the Project Area would not be rezoned and much of Gowanus would remain largely unchanged and underutilized. Any future development would occur in a piecemeal manner and without the benefit of a comprehensive plan to coordinate appropriate densities and urban design controls throughout the neighborhood. Under this alternative, it is anticipated that 30 of the 63

projected development sites would be redeveloped or undergo conversion. This would include 816 DUs, 241,232 sf of local retail space, 103,595 sf of destination retail space, 374,983 sf of other commercial space, 107,361 sf of auto-related commercial space, 190,093 sf of medical office space, 26,974 sf of community facility space, and 415,490 sf of industrial space.

Under the No Action Alternative, there would be no change to zoning and MIH would not apply to the Project Area. The substantial amount of affordable housing expected under the Proposed Actions would not be provided. Under the No Action Alternative, it is anticipated that the socioeconomic gap between higher-income and lower-income Gowanus residents would continue to grow. In addition, as compared with the Proposed Actions, the benefits associated with improved economic activity, waterfront open space, a more resilient Gowanus, and enhanced pedestrian conditions would not be realized.

Unlike the Proposed Actions, under the No Action Alternative, the significant adverse impacts related to community facilities (early childhood programs), open space, shadows, historic and cultural resources (architectural and archaeological resources), transportation (traffic, transit, and pedestrians), and construction (noise) would not occur.

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. There is the potential for the Proposed Actions to result in unmitigated significant adverse impacts related to community facilities (early childhood programs), open space, shadows, historic and cultural resources (architectural and archaeological resources), transportation (traffic), and construction (noise).

While this alternative considers development that would not result in any unmitigable significant adverse impacts, to eliminate all unmitigated significant adverse impacts, the Proposed Actions would have to be modified to such a degree that the principal goals and objectives of the Proposed Actions would not be fully realized.

The Proposed Actions would result in a significant adverse impact to publicly funded early childhood programs with the addition of a projected 615 children under the age of six eligible for publicly funded early childhood programs. With the added children, the combined utilization rate of early childhood programs within the two-mile study area would increase to approximately 167 percent, an approximately 25 percent increase over the No Action condition. Between this DEIS and the FEIS, mitigation measures will be explored with DCP and the DOE's Division of Early Childhood Education Services between the DEIS and FEIS. Should practical and feasible mitigation measures not be found, this significant adverse impact would remain unmitigated.

The Proposed Actions would result in a significant adverse quantitative impact associated with the active open space ratio. Under the Proposed Actions, the active open space ratio would decrease by approximately 2.66 percent from the No Action condition. This impact is primarily the result of the low existing active open space ratio in the study area and the addition of a substantial project-generated residential population. Mitigation measures being considered to address this impact include improvements to existing parks to allow for expanded programming and enhanced usability, and making New York City public school playgrounds accessible to the community afterschool hours through the Schoolyards to Playgrounds program. Because these measures would only partially mitigate the significant adverse impact, even with the implementation of these measures, the impact would not be fully mitigated. Since the study area has such a low open space ratio, changes in the ratio as low as 1 percent may result in result in a

significant adverse impact. A reduction of approximately 1,671 DUs would result in a decrease of 0.90 percent, which is below the 1 percent threshold; however, such a reduction in housing, including affordable housing, would conflict with one of the primary goals of the Proposed Actions.

The Proposed Actions would also result in significant adverse shadow impacts to two sunlight-sensitive resources: Our Lady of Peace Church, located on Carroll Street between Whitwell and Denton Places, and the Douglass and DeGraw Pool in Thomas Greene Playground. With regard to the church, project-generated incremental shadows would fall on some of the stained-glass windows for a portion of the day, and the extent and/or duration of the shadows would be substantial enough to significantly affect the potential enjoyment or appreciation by the public of the churches' interior spaces. With regard to the pool, project-generated incremental shadows would cover most of the large main pool and the small kiddie pool for approximately two hours in the late afternoon of the May 6/August 6 analysis day, significantly impacting the user experience of the pool on this analysis day. DCP will explore possible mitigation measures with LPC and NYC Parks. As discussed below, in order to avoid these impacts, portions of the rezoning area would need to be eliminated or building heights reduced on certain development sites. If feasible mitigation is found, the impacts will be considered partially mitigated. In the absence of feasible mitigation, the significant adverse shadow impacts to Our Lady of Peace Church and Douglass and Degraw Pool would be unavoidable.

The Proposed Actions would result in direct and indirect significant adverse impacts to both archaeological and architectural resources. This includes direct and indirect impacts on S/NR-eligible Gowanus Canal Historic District, potential construction-related impacts to contributing properties located within the boundaries of the district and to other individual architectural resources located both within and outside of the S/NR-eligible Gowanus Canal Historic District from adjacent projected construction, and construction-related impacts on properties that were determined to be archaeologically sensitive. There are no mechanisms to require mitigation at properties under private ownership; therefore, these impacts would be unmitigated.

The Proposed Actions would result in significant adverse traffic impacts at 43 study area intersections during one or more analyzed peak hours. Because of the anticipated congestion at a total of 39 intersections in the No Action condition, even small increases in incremental With Action traffic volumes at some of the congested intersection approach movements would result in significant adverse impacts that could not be fully mitigated during one or more analysis peak hours, and almost any new development in the rezoning area could result in unmitigated traffic impacts. Therefore, no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Proposed Actions' stated goals.

Finally, temporary noise level increases exceeding *CEQR Technical Manual* impact criteria are expected at several locations throughout the Project Area during construction. While construction activity is expected to follow the requirements of the New York City Noise Control Code, to completely avoid significant adverse construction noise impacts, project-generated construction would have to be limited in such a way so as to occur on the same block as, or within one to two blocks from, existing sensitive receptors, which would require elimination of the rezoning area in the vicinity of these sensitive receptors. This would compromise the Proposed Actions' goals and objectives. Overall, given the above-described limitations, in order to fully mitigate all identified significant adverse impacts, the Proposed Actions would have to be modified to a point where their principal goals and objectives would not be realized.

LOWER DENSITY ALTERNATIVE

The Lower Density Alternative was analyzed for the purpose of assessing whether lower-density residential development in some portions of the Project Area would eliminate or reduce the significant adverse impacts of the Proposed Actions while also meeting the goals and objectives of the Proposed Actions. Under the Lower Density Alternative, the residential density in the Canal Corridor Subarea would be reduced. The reduction of the residential FAR would result in fewer DUs on 11 projected development sites. Compared to the Proposed Actions, the Lower Density Alternative would result in 376 fewer residential units on projected development sites. The remaining land uses would not change and the Lower Density Alternative would result in the same mix of uses as the Proposed Actions.

As with the Proposed Actions, the Lower Density Alternative would not result in significant adverse impacts with respect to Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Urban Design and Visual Resources; Natural Resources; Hazardous Materials; Water and Sewer Infrastructure; Solid Waste and Sanitation Services; Energy; Air Quality; Greenhouse Gas Emissions and Climate Change; Noise; Public Health; and Neighborhood Character. It is noted that for CEQR impact areas that are density-related (e.g., community facilities, open space, transportation, etc.), the effects of this alternative are also reduced since there would be fewer DUs and fewer residents than under the Proposed Actions. However, compared with the Proposed Actions, the Lower Density Alternative would slightly reduce, but not eliminate, the significant adverse impacts related to community facilities (early childhood programs), open space, and transportation (traffic, pedestrians, and public transit). Compared with the Proposed Actions, the Lower Density Alternative would result in the same significant adverse impacts related to historic and cultural resources (architectural and archaeological impacts), shadows, and construction.

As compared to the Proposed Actions, the significant adverse impacts expected under the Lower Density Alternative would be generally the same, although the duration and/or extent of the impacts would be slightly lessened due to the reduced number of DUs and overall lower density. Similar to the Proposed Actions, (E) Designations would be mapped in connection with the zoning changes to preclude impacts to hazardous materials, noise, and air quality. Mitigation measures for the impacts under the Lower Density Alternative would be similar to mitigation measures under the Proposed Actions.

Like the Proposed Actions, the Lower Density Alternative would work in unison with the comprehensive set of strategies put forth in the Neighborhood Plan, which seeks to foster a resilient Gowanus where existing and future residents and workers are able to participate in civic, cultural, and economic activities, and where the Canal would continue to play an active role in that equitable and sustainable growth. The Lower Density Alternative would result in development on the same projected and potential developments sites as the Proposed Actions, and would facilitate the creation of a waterfront esplanade and new neighborhood open space. It would promote affordable housing development by increasing residential density and establishing MIH, encouraging economic development by mapping new commercial districts and increasing density in a highly transit-accessible area of the City, and create pedestrian-friendly streets through active ground floor retail uses. However, the Lower Density Alternative would result in fewer DUs, including fewer affordable units, and would be somewhat less supportive of the Proposed Action's objectives with respect to affordable housing, while also resulting in significant adverse impacts related to community facilities (early childhood programs), open space, shadows, historic and cultural resources, transportation (traffic, transit, and pedestrians), and construction noise.

L. UNAVOIDABLE ADVERSE IMPACTS

The Proposed Actions would result in significant adverse impacts with respect to community facilities, open space, shadows, historic and cultural resources, transportation, and construction. To the extent practicable, mitigation has been proposed for these identified significant adverse impacts. However, in some instances no practicable mitigation has been identified to fully mitigate significant adverse impacts, and there are no reasonable alternatives to the Proposed Actions that would meet the Proposed Actions' purpose and need, eliminate potential impacts, and not cause other or similar significant adverse impacts. In other cases mitigation has been proposed, but absent a commitment to implement the mitigation, the impacts may not be eliminated.

COMMUNITY FACILITIES

The Proposed Actions would result in a significant adverse impact on publicly funded early childhood programs. Based on the *CEQR Technical Manual* early childhood program multipliers, the development would result in approximately 615 children under the age of six who would be eligible for publicly funded early childhood programs. With the addition of these children, early childhood programs in the study area would operate at 169.1 percent utilization with a deficit of 1,700 slots. Total enrollment in the study area would increase to 4,159 children, compared with a capacity of 2,459 slots, which represents an increase in the utilization rate of approximately 25 percentage points over the No Action condition.

CEQR Technical Manual guidelines indicate that a demand for slots greater than the remaining capacity of early childhood programs and an increase in demand of five percentage points of the study area capacity could result in a significant adverse impact. In the With Action condition, early childhood programs in the study area would operate over capacity by approximately 1,700 slots and exhibit an increase in the utilization rate of approximately 25 percentage points as compared with the No Action condition. Therefore, the Proposed Actions would result in a significant adverse impact on early childhood programs.

Several factors may reduce the number of children in need of publicly funded early childhood programs DOE-contracted early childhood programs. Families in the study area could make use of alternatives to publicly funded early childhood programs. There are slots at homes licensed to provide family-based child care that families of eligible children could elect to use instead of publicly funded early childhood programs. As noted above, these facilities provide additional slots in the study area but are not included in the quantitative analysis. Parents of eligible children are also not restricted to enrolling their children in early childhood programs facilities in a specific geographical area and could use publicly funded early childhood programs centers outside of the study area.

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 an early childhood program, 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, or providing a new early childhood program within or near the project sites. As a city agency, DOE does not directly provide new early childhood programs, 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 early childhood programs.

OPEN SPACE

The Proposed Actions would result in an (indirect) significant adverse impact related to the active open space ratio, and a (direct) significant adverse impact attributed to incremental shadows on the Douglass and Degraw Pool in Thomas Greene Playground. The direct impact related to shadows on the Douglass and Degraw Pool is discussed below under "Shadows."

The active open space ratio would decrease by approximately 2.66 percent over the No Action condition. The significant adverse impact to open space is primarily due to the existing low active open space ratio in the study area and decreases between the With Action and No Action conditions. The reduction in active open space in the With Action condition would most likely affect the study area's adult and teenager population, which is expected to make up approximately 70 percent of the total study area population. Both groups use court facilities (e.g., basketball courts) and sports fields, such as football or soccer fields. They may also use facilities that provide more individualized recreation, such as cycle paths and other grade-separated jogging paths. The quantitative assessment indicates that the residential study area population is currently underserved in active open space—a trend expected to continue in the future with or without the Proposed Actions.

Measures being considered to mitigate the significant adverse open space impact include improvements to existing parks to allow for expanded programming and enhanced usability, and making New York City public school playgrounds accessible to the community afterschool hours through the Schoolyards to Playgrounds program. These measures will be explored by DCP in consultation with NYC Parks between the DEIS and FEIS. As noted above, the study area exhibits a very low open space ratio under existing conditions. Creating less project-generated demand for active open space by reducing the amount of housing to eliminate the impact would not meet the goals and objectives of the Proposed Actions, which call for the provision of housing, including a substantial amount of needed affordable housing. Because the above measures would partially mitigate the significant adverse open space impact, the impact would be an unavoidable adverse impact of the Proposed Actions.

SHADOWS

OUR LADY OF PEACE CHURCH

Our Lady of Peace Church (S/NR-listed) is located on the south side of Carroll Street, between Whitwell and Denton Places. On the morning of the winter analysis day, Projected Development Site 38, located a block southeast of the church, would cast new shadows resulting in the complete elimination of direct sunlight on the stained-glass windows for approximately 55 minutes. The total duration of incremental shadow would be approximately 2 hours and 19 minutes (from 8:51 AM to 11:10 AM), including the 55-minute period when all remaining direct sunlight would be eliminated. The long duration and at times complete elimination of direct sun would significantly affect the public's enjoyment or appreciation of the church interior during this time, especially given that winter mornings are typically when the church holds holiday services.

The *CEQR Technical Manual* identifies potential mitigation strategies to reduce or eliminate, to the greatest extent practicable, adverse shadow impacts to sunlight-sensitive architectural features, including changes to the bulk or configuration of projected or potential development sites that cause or contribute to the adverse impact. For adverse impacts to stained-glass windows, potential mitigations measures could also include the provision of artificial lighting to simulate the effect of direct sunlight. These mitigation measure will be explored in consultation with LPC between the DEIS and FEIS. If feasible mitigation is found, the impacts will be considered partially or fully

mitigated. In the absence of feasible mitigation, the significant adverse shadow impact to the church would be unavoidable.

DOUGLAS AND DEGRAW POOL IN THOMAS GREENE PLAYGROUND

Thomas Greene Playground is anticipated to be renovated in the future with or without the Proposed Actions. Currently, the programming and layout of the reconstructed park is not confirmed. The analysis in Chapter 6, "Shadows," therefore focused on identifying the extent and duration of incremental shadows on various areas of the park, and how potential features and vegetation might fare in the resulting shade conditions. However, given the heavy use of the Douglass and Degraw Pool in the summer months, the analysis included a consideration of incremental shadow effects on the pool at its current location in the western part of the park, on the May 6/August 6 and June 21 analysis days. The pool is open in the summer months from 11:00 AM to 7:00 PM Eastern Daylight Time (EDT). On the May 6/August 6 analysis day the pool would be entirely in sun from the time it opens until 3:15 PM, when incremental shadow would enter from the west. From 4:00 PM to closing time at 6:00 PM (7:00 PM EDT), both the main pool and the kiddie pool would be mostly covered by incremental shadow. This substantial extent and duration of new shadow would significantly impact the user experience of the pools on this analysis day.

To eliminate this significant adverse impact, Potential Development Site W would have to be reduced in height from 20 stories to approximately 8 stories and Projected Development Site 18 would have to be reduced from 18 to approximately 12 stories. These height reductions would reduce incremental shadow duration in the late afternoon on the pool from 2 and three-quarter hours to one hour, and much of the pool would remain in sun during the one hour duration of incremental shadow. The reduction in building height and corresponding floor area would result in the loss of needed housing, including affordable housing, and would not meet the goals and objectives of the Proposed Actions.

Potential measures that could mitigate the significant adverse shadow impact to Douglass and Degraw Pool may include modifications to the height, shape, size, or orientation of proposed developments that cause or contribute to the significant adverse shadow impact. Thomas Greene Playground is anticipated to be reconstructed, as discussed in Chapter 5, "Open Space." Currently, the programming and layout of the reconstructed park is not confirmed. Locating the pool in the northern half of the park, which would receive much less shadow than the southern half throughout the summer months, could potentially mitigate this significant adverse impact. DCP will coordinate with NYC Parks to explore all possible mitigation measures between DEIS and FEIS. In the absence of this mitigation measure, the impact to Thomas Greene Playground would be an unavoidable impact of the Proposed Actions.

HISTORIC AND CULTURAL RESOURCES

ARCHITECTURAL RESOURCES

The Proposed Actions would result in significant direct adverse impacts to the S/NR-Eligible Gowanus Canal Historic District due to the demolition of contributing resources to the historic district. These significant adverse impacts would be unavoidable, as the contributing buildings are privately owned and would be demolished to allow for developments constructed as-of-right under the proposed zoning.

There is also the potential for adverse impacts associated with inadvertent construction damage to contributing resources in the S/NR-Eligible Gowanus Canal Historic District that may result from

construction within 90 feet of projected or potential development sites. The potentially affected sites include Our Lady of Peace Church Complex, the Gowanus Canal Flushing Tunnel, and the IND Subway Viaduct. Because the resources identified above are not S/NR-Listed or NYCLs, they are not afforded the added special protections under the DOB's *TPPN* #10/88.

Buildings or structures that are S/NR-Listed or NYCLs would be afforded standard protection under DOB's *TPPN* #10/88, requirements applicable to all buildings located adjacent (within 90 feet) to construction sites; however, since the resources identified above are not S/NR-Listed or NYCLs, they are not afforded the added special protections under DOB's *TPPN* #10/88. Additional protective measures afforded under DOB's *TPPN* #10/88, which include a monitoring program to reduce the likelihood of construction damage to adjacent S/NR-Listed resources or NYCLs, would only become applicable if the S/NR-Eligible resources are listed or designated in the future prior to the initiation of construction. Otherwise, there is the potential for inadvertent construction damage and unavoidable adverse impacts to adjacent buildings resulting from the Proposed Actions.

ARCHAEOLOGICAL RESOURCES

The Proposed Actions have the potential to result in an unmitigated significant adverse archaeology impact associated with all or portions of 46 potential and projected development sites. All but one of the affected development sites are under private ownership. With respect to sites under private ownership, there is no mechanism in place to require a developer to conduct archaeological testing or require the preservation or documentation of archaeological resources, should they exist. Because there is no mechanism to avoid or mitigate potential impacts at these sites, the significant adverse impact would be an avoidable and unmitigated impact of the proposed project.

TRANSPORTATION

The Proposed Actions would result in significant adverse traffic impacts at 43 study area intersections during one or more analyzed peak hours; specifically, 37 intersections during the weekday AM peak hour, 23 intersections during the weekday midday peak hour, 36 intersections during the weekday PM peak hour, and 33 intersections during the Saturday peak hour. Implementation of traffic engineering improvements, such as signal timing changes or modifications to curbside parking regulations would provide mitigation for many of the anticipated traffic impacts. Specifically, the significant adverse impacts would be fully mitigated at 10 lane groups in the weekday AM peak hour, 13 lane groups in the midday, 13 lane groups in the PM, and 12 lane groups in the Saturday peak hour. Intersections where all impacts would be fully mitigated would total 7, 12, 10, and 11 during these same periods, respectively. In total, impacts to one or more lane group would remain unmitigated in one or more peak hours at 34 intersections.

Because of existing congestion at a number of these intersections, even a minimal increase in traffic would result in unmitigated impacts. Specifically, in the No Action Condition, a total of 39 intersections would have at least one congested lane group in one or more peak hours, and a total of 24, 9, 18 and 19 intersections would have one or more lane groups operating at or over capacity in the weekday AM, midday and PM, and Saturday peak hours, respectively. According to the *CEQR Technical Manual*, for a lane group that would operate at LOS F in the No Action Condition, a projected delay of three or more seconds is considered a significant impact. As such, small increases in incremental With Action traffic volumes at some of the congested intersection approach movements would result in significant adverse impacts that could not be fully mitigated

during one or more analysis peak hours, and almost any new development in the rezoning area could result in unmitigated traffic impacts. Therefore, no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Proposed Actions' stated goals.

CONSTRUCTION

HISTORIC AND CULTURAL RESOURCES

There would be potential significant adverse impacts to contributing resources in the S/NR-Eligible Gowanus Canal Historic District as a result of adjacent construction within 90 feet of projected or potential development sites, and such impacts may also result to five other S/NR-Eligible resources as a result of adjacent construction: Our Lady of Peace Church Complex; the BRT Powerhouse; the Gowanus Canal Flushing Tunnel, Pumping Station, and Gate House; the IND Subway Viaduct; and the former Somers Tinware Factory.

Buildings or structures that are S/NR-Listed or NYCLs would be afforded standard protection under DOB's *TPPN* #10/88, regulations applicable to all buildings located adjacent (within 90 feet) to construction sites; however, since the resources identified above are not S/NR-Listed or NYCLs, they are not afforded the added special protections under DOB's TPPN #10/88. Additional protective measures afforded under DOB's *TPPN* #10/88, which include a monitoring program to reduce the likelihood of construction damage to adjacent S/NR-Listed resources or NYCLs, would only become applicable if the S/NR-Eligible resources are listed or designated in the future prior to the initiation of construction. Otherwise, there is the potential for inadvertent construction damage and impacts to occur as a result of adjacent development resulting from the Proposed Actions.

NOISE

Noise level increases exceeding *CEQR Technical Manual* impact criteria would occur at several locations throughout the rezoning area. 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 the *NYC Noise Control Code*:

- 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 to the extent feasible and practicable:

- 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. In order to completely avoid significant adverse construction noise impacts, project-generated construction would have to be restricted in such a manner so as to not occur on the same block as, or within one to two blocks from, existing sensitive receptors, which would require elimination of the proposed rezoning area in the vicinity of these sensitive receptors. This would severely limit achievable development density and the Proposed Actions' goals and objectives. Because there is no mechanism to fully avoid or mitigate potential impacts while still accomplishing the Proposed Actions' goals, the significant adverse impact would be unmitigated.

M. GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTIONS

The term "growth-inducing aspects" generally refers to "secondary" impacts of a proposed action that trigger further development outside the directly affected area. The *CEQR Technical Manual* indicates that an analysis of the growth-inducing aspects of a proposed action is appropriate when the project: (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.

The Proposed Actions would facilitate the development of residential space, including affordable housing; create new commercial, light industrial, arts-related, and community facility space to support job creation; and preserve existing neighborhood character. The Proposed Actions reflect DCP's ongoing engagement process with the community to achieve the following land use objectives:

- Support existing clusters of economic activity and promote development of new job-generating uses through increased industrial and commercial density and updated parking and loading regulations in key areas;
- Provide opportunities for the creation of new, permanently affordable housing with options for low- and moderate-income residents, while bringing existing residences into conformance with zoning;
- Facilitate the creation of new waterfront open space and neighborhood parks along the Canal through establishing a WAP and changes to the city map;
- Facilitate several shared neighborhood-wide goals, including promoting a walkable, vibrant, mixed-use neighborhood, brownfield remediation and activating key areas through permitting

higher densities and a broader range of uses and incentivizing or requiring non-residential uses in select areas;

- Create special rules to establish limits for height, bulk envelope and density that consider neighborhood context as well as other shared goals, including encouraging variation and diversity of future programing, open spaces, site planning, and design along the Canal; and
- Support a successful Gowanus Neighborhood Plan by institutionalizing a comprehensive planning framework that is inclusive of relevant capital infrastructure needs and services to support current demands and future growth.

As previously detailed, the Proposed Actions are expected to result in a net increase of approximately 8,495 DUs, 735,000 sf of commercial space, 251,000 sf of community facility space (inclusive of a new, 455-seat public school), and approximately six acres of new open space, including over an acre of newly mapped parkland. The Proposed Actions would result in net decreases of approximately 132,000 sf of warehouse space, 125,000 sf of self-storage space, and 60,000 sf of other industrial space. On privately owned sites, the Proposed Actions could result in a net increase of approximately 7,500 DUs, including approximately 2,000 permanently affordable DUs for lower-income New Yorkers in accordance with MIH. On City-owned sites, the Proposed Actions would result in approximately 1,000 affordable DUs, designated to serve a wide range of incomes.

The projected increase in residential population is likely to increase the demand for neighborhood services in the Project Area, ranging from community facilities to local goods and services. This would enhance the growth of local commercial corridors in the Project Area. The potential growth that would be generated by the Proposed Actions is taken into account as part of the RWCDS under the assumed commercial, light industrial, arts-related, and community facility space. The Proposed Actions could also lead to additional growth in the city and state economies, primarily due to employment and fiscal effects during construction on the projected and/or potential development sites and operation of these developments after construction completion. However, this secondary growth would be expected to occur incrementally throughout the region and is not expected to result in any significant impacts in any particular area or at any particular site.

The Proposed Actions would result in more intensive land uses within the Project Area. However, it is not anticipated that the Proposed Actions would generate significant secondary impacts resulting in substantial new development in nearby areas. As stated above in "Socioeconomic Conditions," the Proposed Actions would not introduce a new economic activity that would alter existing economic patterns in the study area. As the study area includes portions of older surrounding Brooklyn neighborhoods, it already has a well-established residential market and a critical mass of non-residential uses, including retail, industrial, and community facility uses, and the Proposed Actions would not create the critical mass of uses or populations that would induce additional development outside of the Project Area. Therefore, the Proposed Actions would not induce significant new growth in the surrounding area.

N. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Resources, both natural and man-made, would be expended in the construction and operation of developments and open space projected to occur as a result of the Proposed Actions. These resources include the building materials used in construction; energy in the form of gas and electricity consumed during construction and operation of project-generated development by 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, the land use changes that would occur as a result of the Proposed Actions would be compatible in terms of use and scale with existing conditions and trends in the area as a whole. None of the projected or potential development sites possess any natural resource of significant value, and the sites are in large part developed or have been previously developed. The Proposed Actions would facilitate the creation of new open space, including new neighborhood parks and a waterfront esplanade along the Canal, enhancing the value of the Canal as a natural resource for the use and enjoyment of New Yorkers and for the overall improvement of the natural environment in Gowanus.

In addition, the public services provided in connection with the projected and/or potential development under the Proposed Actions (e.g., police and fire protection, public education, open space, and other city resources) also constitute resource commitments that might otherwise be used for 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 would offset these expenditures.

The commitments of resources and materials are weighed against the benefits of the Proposed Actions. The Proposed Actions would promote new resilient development, including residential development with significant amounts of permanently affordable housing and a new waterfront esplanade and neighborhood park, encourage new mixed-use development along key corridors, enhance and revitalize major thoroughfares through new economic activity, and preserve existing neighborhood character while promoting growth in key areas of the neighborhood.

O. CONCEPTUAL ANALYSIS

The Proposed Actions would create a new special permit and three new authorizations (the "additional zoning mechanisms") that may be pursued by applicants in the future:

- a Special Permit to allow hotels in the Project Area (as permitted by the underlying zoning district regulations);
- an Authorization to allow for the exemption of school floor area and modified bulk under certain conditions throughout the GSD;
- an Authorization to modify the use, streetscape, and bulk envelope (height and setback) regulation) for existing, large mixed-use sites seeking to redevelop while integrating new development with substantial, existing building(s); and
- an Authorization to allow an increase in density in exchange for identified transit improvements.

The additional zoning mechanisms would be created as part of the Proposed Actions and could be acted upon by applicants in the future. Development in accordance with the additional zoning mechanisms is not expected to result in any new or different significant adverse impacts as compared to the With Action condition analyzed for the Proposed Actions. The proposed hotel special permit is intended to ensure that hotel development does not conflict with the Proposed Actions' goal to create opportunities for housing, and to ensure that the neighborhood would

continue to serve diverse housing needs. The authorizations would ensure that the bulk modifications and increased floor area provided under the approvals promotes the development of community resources, preservation of important neighborhood buildings, and results in improvements to transit. ✷