### **Chapter 2 : Land Use, Zoning, and Public Policy**

#### I. INTRODUCTION

This chapter assesses the potential impact of the Proposed Actions on land use, zoning, and public policy in the surrounding area. As described in Section 210 of Chapter 4 of the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, the land use, zoning, and public policy assessment evaluates the uses and development trends in the area and considers whether a proposed project is compatible with those conditions or may affect them. Similarly, the assessment considers the project's compliance with, and effect on, the area's zoning and other applicable public policies.

As described in Chapter 1, "Project Description," the Applicant is seeking a set of Proposed Actions in the form of discretionary approvals to include zoning map and text amendments, a large-scale general development (LSGD) special permit, a City Map Amendment to re-establish a portion of Beach 52nd Street south of Rockaway Beach Boulevard to reconnect with Rockaway Freeway, and public funding and/or financing from various City and New York State agencies and/or programs related to affordable housing development on the Project Site located in Queens Community District 14 (CD 14). The Proposed Actions would facilitate the Proposed Project, which would consist of an approximately 2,371,000 gross square feet (gsf) development on the Project Site, comprised of 11 buildings with approximately 2,200 mixed income dwelling units (DUs), of which 1,927 DUs would be income-restricted up to 80% of Area Median Income (AMI) to include 201 DUs set aside for Affordable Independent Residences for Seniors (AIRS), with the remaining 273 DUs restricted to income levels not exceeding 130% of AMI. In addition to the residential DUs, the Proposed Project would include approximately 72,000 gsf of retail space, including a fitness center and a supermarket, approximately 77,000 gsf of community facility space, approximately 24,000 square feet (sf) of publicly-accessible open space, and approximately 973 accessory parking spaces.

The 2014 *CEQR Technical Manual* guidelines require that an assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. This assessment describes existing, No-Action and With-Action conditions related to land use, zoning, and public policy issues in the 2034 analysis year for the Project Site and within the land use study area as defined below. Changes that would occur between the No-Action and With-Action conditions are disclosed.

#### II. PRINCIPAL CONCLUSIONS

As described in detail in this chapter, no significant adverse impacts on land use, zoning, or public policy are anticipated due to 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 redevelop the Project Site that has remained vacant and underutilized since the closure of the Peninsula Hospital in 2012. The rezoning of the Project Site to C4-4 and C4-3A zoning districts and zoning text amendment to provide Mandatory Inclusionary Housing (MIH) would be compatible with existing zoning districts near the Project Site. The redevelopment of the Project Site would result in the provision of mixed income housing, including 1,927 DUs intended to be affordable including 201 DUs set aside for senior housing and an additional 273 moderate income DUs. Proposed community facility and retail uses, including the supermarket and physical culture establishment (fitness center), would help address the community's need for such supportive uses and provide local employment opportunities. The

overall scale of the Proposed Project would be consistent with the context of the surrounding area, which includes higher density New York City Housing Authority (NYCHA) developments.

The Proposed Project is located within the current 1% annual chance flood zone, or 100-year floodplain, and as such would incorporate resiliency and flood management techniques in its design and site plan to address potential flood risk.<sup>1</sup> This would ensure that the new construction would provide the community with residential, commercial, and community facility programming that would be resilient when faced with a potential major storm event.

#### III. METHODOLOGY

Existing land uses were identified through the New York City (NYC) Zoning and Land Use (ZoLa) database and PLUTO<sup>™</sup> 17v1 shapefiles, which were verified through site visits during July of 2016. NYC Zoning Maps and the Zoning Resolution of the City of New York (ZR) were consulted to describe existing zoning districts in the land use study area and provided the basis for the zoning evaluation of the future No-Action and With-Action conditions. Research was conducted to identify relevant public policies recognized by the NYC Department of City Planning (DCP) and other City agencies. Land use, zoning, and public policy are addressed and analyzed for a land use study area as defined below.

The assessment of land use, zoning, and public policy was conducted for the analysis year 2034, the year in which the Applicant anticipates completing the Proposed Project. The future No-Action condition accounts for known land use and development projects, initiatives, and proposals that are expected to be complete or in effect by 2034.

#### **Study Area Definition**

As described in the *CEQR Technical Manual*, the study area for land use, zoning, and public policy is based on the type and size of the proposed project, and the location and context of the area that could be affected by the project and may range from 400 feet for a small project to 0.50-mile for a large project. Based on the scale of the proposed high-density development, a 0.25-mile study area was defined from the boundaries of the Project Site and will be used for the land use and zoning assessments herein. The study area is roughly bounded by Beach 45<sup>th</sup> Street to the east, Rockaway Beach to the south, Beach 58<sup>th</sup> Street to the west, and the Rockaway Community Park to the north. The land use study area is depicted in **Figure 2 1: Land Use Map**.

#### **IV. EXISTING CONDITIONS**

#### Land Use

#### **Project Site**

The Project Site is in the Edgemere neighborhood of Queens and is comprised of three tax lots: Block 15842, Lot 1; Block 15843, Lot 1; and Block 15857, Lot 1, which have a total lot area of 409,928 square feet (sf) (approximately 9.34 acres). The approximately 392,296 sf (approximately 9 acres) North Parcels of the Project Site are comprised of two contiguous tax lots (Block 15842, Lot 1 and Block 15843, Lot 1) and forms an "L"-shape bounded by Beach 50<sup>th</sup> Street to the east, Rockaway Beach Boulevard to the south, Beach 53<sup>rd</sup> Street to the west, and Beach Channel Drive to the north. The approximately 14,407 sf (approximately 0.33 acres) South Parcel of the Project Site occupies Block 15857, Lot 1 and is bound by

<sup>&</sup>lt;sup>1</sup> NYC Department of City Planning, NYC Flood Hazard Mapper, Retrieved from

http://dcp.maps.arcgis.com/apps/webappviewer/index.html?id=1c37d271fba14163bbb520517153d6d5

Rockaway Beach Boulevard to the north, Block 15857, Lot 7 to the east, Beach 52<sup>nd</sup> Street to the west, and Rockaway Freeway to the south. Rockaway Beach Boulevard and Beach Channel Drive are both wide streets as defined in the ZR; Beach 53<sup>rd</sup> and Beach 52<sup>nd</sup> Streets are both narrow streets, as defined in the ZR. The North Parcels of the Project Site were cleared of all vacant hospital structures the vacant former warehouse building on the South Parcel was also removed in Spring 2018.

The North Parcels of the Project Site were previously occupied by the 173-bed Peninsula Hospital Center. Founded in 1908, it closed operations in April 2012 after its lab failed a state examination and was shut down by the New York State Department of Health.<sup>2</sup> The North Parcels of the Project Site continue to be served by water, sewer, and utility infrastructure that previously served the hospital. An existing 10-inch sanitary sewer fronting the Project Site in Rockaway Beach Boulevard travels north up Beach 49<sup>th</sup> Street to connect directly into a 48-inch branch interceptor in Beach Channel Drive. This branch interceptor connects to an interceptor at Beach 62<sup>nd</sup> Street which takes the flow directly to the Rockaway Wastewater Treatment Plant (WWTP). The NYC Department of Environmental Protection (DEP) indicates that there are planned infrastructure capital improvements that would serve the Project Site which would provide infrastructure needed to service the South Parcel of the Project Site.

#### Study Area

Existing land uses within the quarter-mile study area are predominantly residential. Residential uses east of the Project Site are comprised almost entirely of one- to two-story detached single-family homes, interspersed with vacant lots. North of the Project Site is occupied by NYCHA's Ocean Bay Apartments (Bayside). West of the Project Site, residential developments have higher density and are primarily characterized by four to nineteen-story multi-family buildings, including the four- to nine-story NYCHA Ocean Bay Apartments (Oceanside) and the four- to nineteen-story Arverne View apartment complex. Vacant lots are prominent south of Edgemere Avenue. Proximate to the Project Site are portions of two Urban Renewal Areas (URAs): the Arverne URA to the southwest and southeast of the Project Site, and the Edgemere URA to the north and east of the Project Site (**Figure 2-2: Edgemere and Arverne Urban Renewal Areas**). In addition, while beyond the study area but within CD 14, the City of New York recently designated and approved an Urban Renewal Area and Plan in the Downtown Far Rockaway neighborhood of Queens in 2017.

Other uses in the study area include open space and recreational resources, public facilities and institutions, industrial and manufacturing, retail, transportation, and parking.

Several open space and recreational resources are situated within a 0.25-mile study area of the Project Site. Six publicly-accessible open space resources, as described in Chapter 5, "Open Space" near the Project Site, include Arverne Playground and Cardozo Playground to the west, Conch Playground and Edgemere Urban Renewal Park to the northeast, Rockaway Beach and Boardwalk to the southeast, and Rockaway Community Park to the north.

Public facilities and institutional uses in the study area include two public schools: P.S. 105, located to the northeast of the Project Site at 420 Beach 51<sup>st</sup> Street, and Goldie Maple Academy located to the west of the Project Site at 36-5 Beach 56<sup>th</sup> Street. Located east of the Project Site is an assisted living facility (Rockaway Care Center), a retirement home (Seaview Manor Home for Adults), and the NYC Fire Department (FDNY) Emergency Medical Services Station 47. A religious facility (the Solid Rock Seventh Day Adventist Church) is located directly south of the Project Site. A nursing home (Lawrence Nursing Care Center) and public library (Queens Library at Arverne) are located immediately west of the Project Site.

<sup>&</sup>lt;sup>2</sup> Nir, S. M. (2012, May 20). Down to One Hospital, Rockaway Braces for Summer Crowds. The New York Times. Retrieved January 25, 2017, from http://www.nytimes.com/2012/05/21/nyregion/closing-of-peninsula-hospital-in-rockaway-raises-fears.html

The Peninsula Center for Extended Care and Rehabilitation is directly adjacent to the Project Site at 50-15 Beach Channel Drive. A 200-bed nursing home and rehabilitation center, it provides both long-term and short-term care. It is housed in an approximately 128,000 sf, four-story building built in 1974.

A small cluster of industrial uses is located directly adjacent to the east from the South Parcel of the Project Site, south of Rockaway Beach Boulevard. These include a moving and storage warehouse and a hardwood warehouse.

Retail storefronts are found primarily on Beach Channel Drive and Rockaway Beach Boulevard— including fast food establishments located on the corner of Beach 49<sup>th</sup> Street and Beach Channel Drive, a medical association and medical office on Beach 54<sup>th</sup> Street between Rockaway Beach Boulevard and Beach Channel Drive, and local retail stores on Rockaway Beach Boulevard between Beach 52<sup>nd</sup> Street and Beach 54<sup>th</sup> Street.

Two Metropolitan Transportation Authority (MTA) bus facilities are located east of the Project Site: an MTA bus depot located on Rockaway Beach Boulevard, between Beach 49<sup>th</sup> Street and Beach 47<sup>th</sup> Street, and an MTA bus parking lot is located across the Rockaway Beach Boulevard from the MTA bus depot—adjacent to the eastern side of the Project Site along Beach 50<sup>th</sup> Street.

#### Transportation Network

Major thoroughfares near the Project Site include Beach Channel Drive that runs in the east-west direction north of the Project Site, and Rockaway Freeway that runs in the east-west direction south of the Project Site. Nearby public transit access includes the Q22 bus route, and the QM17 express bus route to Manhattan. The closest Q22 stop to the Project Site is located at the intersection of Beach Channel Drive and Beach 51<sup>st</sup> Street, and the closest QM17 stop to the Project Site is located at the intersection of Beach Channel Drive and Beach 54<sup>th</sup> Street (one block west of the Project Site), which is also a Q22 bus stop. Elevated tracks of the MTA-New York City Transit (NYCT) Rockaway (A train) Line run along Rockaway Freeway, with subway stops at Beach 44<sup>th</sup> Street (approximately five blocks east of the Project Site) and Beach 60<sup>th</sup> Street (approximately four blocks west of the Project Site). Additionally, the NYC Ferry Service operated by Hornblower on the Rockaway Route lands at 108-16 Rockaway Beach Boulevard where the Q22 shuttle bus is accessible with a local stop just one block northwest of the Project Site at Beach Channel Drive and Beach 54<sup>th</sup> Street. The Rockaway ferry route is a new key connection between the Rockaways, Sunset Park Brooklyn, and Lower Manhattan.

#### Zoning

#### **Project Site**

As described previously, the Project Site includes two subareas: the North Parcels (Block 15841, Lot 1 and Block 15842, Lot 1) bound by Beach 50<sup>th</sup> Street to the east, Rockaway Beach Boulevard to the south, Beach 53<sup>rd</sup> Street to the west, and Beach Channel Drive to the north and a smaller South Parcel (Block 15857, Lot 1) bound by Rockaway Beach Boulevard to the north, Lot 7 of Block 15857 to the east, Beach 52<sup>nd</sup> Street to the west, and Rockaway Freeway to the south. The North Parcels are currently mapped with an R5 zoning district (Block 15841, Lot 1), and an R5 zoning district with a C1-2 commercial overlay (Block 15842, Lot 1), while the South Parcel of the Project Site (Block 15857, Lot 1) is mapped as a C8-1 zoning district (**Figure 2-3: Current Zoning Map**). The existing zoning on the Project Site was established with the enactment of the ZR in 1961 and has not been updated to reflect the changing uses in the area near the Project Site or in the Edgemere neighborhood.

Each of these districts is described below.

#### <u>R5</u>

The R5 zoning designation constitutes 80.5% of the total 113 tax lots within the study area, including the Project Site. R5 districts allow a variety of housing at a higher density than permitted in R3-2 and R4 districts. With a height limit of 40 feet, R5 districts provide a transition between lower and higher density neighborhoods, which typically produces three- to four-story attached houses and small walkup apartment buildings.

The maximum floor area ratio (FAR) in R5 districts is 2.0 for community facility use while residential use is limited to 1.25 FAR. To ensure compatibility with neighborhood scale, the maximum street wall height of a new building is 30 feet. Above a height of 30 feet, a setback of 15 feet is required from the street wall of the building; in addition, any portion of the building that exceeds a height of 33 feet must be setback from a rear or side yard line. Apartment houses need two side yards, each at least eight feet wide. Front yards must be 10 feet deep or, if deeper, a minimum of 18 feet to prevent cars parked on-site from protruding onto the sidewalk. Cars may park in the side or rear yard, in the garage or in the front yard within the side lot ribbon; parking is also allowed within the front yard when the lot is wider than 35 feet. Off-street parking is required for 85% of the DUs in the building.

#### <u>C1-2</u>

C1-2 overlays are mapped within residential districts and along streets that serve local retail needs commonly found throughout the City's lower and medium density areas and occasionally in higher density districts. Typical retail uses include neighborhood grocery stores and restaurants. When mapped in a R5 district, the maximum commercial FAR is 1.0 and subject to commercial bulk rules. Unless otherwise indicated, the depth of overlay districts ranges from 100 to 200 feet; however, C1-2 commercial overlays are typically mapped to a depth of 150 feet. In mixed-use buildings, commercial use is limited to one or two floors and must always be located below the residential use. Off-street parking requirements vary by use but generally one parking space is required for every 300 square feet of floor area.

#### <u>C8-1</u>

C8 districts, bridging commercial and manufacturing uses, provide for automotive and other heavy commercial services that often require large amounts of land. Typical uses include automobile showrooms and repair shops, warehouses, gas stations and car washes. All commercial uses (except large, and open amusements) as well as certain community facilities are permitted in C8 districts. Housing is not permitted in C8-1 districts and performance standards are imposed for semi-industrial uses (Use Group 11A and 16). C8 districts are commonly mapped along major traffic arteries where concentrations of automotive uses have developed. The maximum FAR in a C8-1 district is 2.4 for community facility use and commercial FAR is limited to 1.0 with off-street parking requirements varying per use group but generally one parking space is required for every 300 square feet of floor area.

#### Study Area

In addition to the zoning districts described above, the study area also includes a range of other residential zoning districts and commercial zoning districts/overlays. The northern and eastern portions of the study area are zoned R4, while the southern portion of the study area, closer to the waterfront, is zoned R6 and interspersed with C2-4 commercial overlays. Designated commercial zoning districts, such as C4-3A and C3, are found in the eastern portion of the study area. West of the Project Site, the study area is zoned R5 and R4A with C1-2 and C2-4 commercial overlays concentrated along Arverne Boulevard and Beach Channel Drive. Additionally, a C3 zoning district is mapped just northwest of the Project Site. The characteristics of the zoning districts found in the study area are summarized in **Table 2-1: Zoning Districts Located in the Study Area**. Existing zoning in the surrounding area consists of medium-density mixed residential and commercial districts, including the C4-3A and C4-4 zoning districts just east and southeast of the Project Site along Rockaway Beach Boulevard. Additionally, the surrounding area has a mix of low-

density residence districts (R4 and R5), commercial overlays (C1-2 and C2-2), a medium-density residence district (R6), and an automotive/semi-industrial district (C8-1). The surrounding area is characterized by a mix of uses including low- and mid-rise residential buildings, community facilities, transportation and semi-industrial uses, and public open space. A high concentration of public and publicly-subsidized housing and long-term care facilities are also present in the surrounding area.

Zoning District	Maximum FAR	Uses/Zone Type				
Residential Distric	cts					
R4	Maximum FAR for community facility use is 2.0 and residential FAR is limited to 0.75, plus attic allowance of up to 20% for inclusion of space under the pitched roof	Residential district allows all residential building types; typically produces buildings with three stories.				
R4-1	Maximum FAR for community facility use is 2.0 and residential FAR is limited to 0.75, plus attic allowance of up to 20% for inclusion of space under the pitched roof	Contextual residential districts permitting only one- and two-family detached and semi-detached houses.				
R5	Maximum FAR for community facility use is 2.0 and residential FAR is limited to 1.25	Residential district that typically produces three- and four-story attached houses and small apartment houses.				
R6	The maximum FAR for community facility use is 4.8 and the maximum residential FAR varies. Under height factor regulations, FAR 0.78-2.43; under optional Quality Housing Regulations, 2.20 FAR on narrow streets and 3.00 FAR on wide streets, which can be increased to 2.42 and 3.60 FAR, respectively, for buildings participating in the Inclusionary Housing Program.	Medium-density residential district with either height factor regulations or optional Quality Housing regulations.				
Commercial Distri	icts					
C1-2 overlay	When mapped within R1-R5 districts, commercial FAR 1.0; when mapped within R6-R10 districts, commercial FAR of 2.0	Commercial overlay mapped within residential districts typically for local retail and service uses within a mixed-use building; commercial uses are limited to the ground floor.				
C2-4 overlay	When mapped within R1-R5 districts, commercial FAR 1.0; when mapped within R6-R10 districts, commercial FAR of 2.0	Commercial overlay mapped within residential districts typically for local retail and service uses. Commercial uses are limited to two stories; however, within a mixed-use building, commercial uses are limited to the ground floor.				
C3	1.0 for community facility use and residential FAR is limited to 0.5	Commercial district that permits waterfront recreational activities, primarily boating and fishing, in areas along the waterfront that are usually adjacent to residential zoning districts.				
C4-3A	3.0 FAR for commercial use, 3.0 FAR for community facility use and 3.6 FAR for residential use with Mandatory Inclusionary Housing	Contextual district permitting larger retail and entertainment facilities and residential uses at medium density (R6A equivalent).				
C8-1	FAR 1.0Maximum FAR is 2.4 maximum for community facility use and commercial use is limited to 1.0 FAR	Commercial districts bridging commercial and manufacturing uses, provide for automotive and other heavy commercial services that often require large amounts of land.				

#### Table 2-1: Zoning Districts Located in the Study Area

#### <u>R4</u>

Much of the study area north of the Project Site is zoned with an R4 zoning district, which encompasses areas with both public housing and private homes. R4 districts allow housing typologies at a slightly higher density than permitted in R3 districts. With an FAR of 0.75, plus an attic allowance of up to 20% for inclusion of space under the pitched roof common to these districts, R4 districts generally produce buildings with three stories. To accommodate a potential third floor beneath a pitched roof, the perimeter wall in R4 districts may rise to 25 feet before set back to the maximum building height of 35 feet. Front yards must be 10 feet deep, or a minimum of 18 feet to provide sufficient space for on-site parking if desired. Cars may park in the side or rear yard, in the garage, or in the front yard within the side lot ribbon. The driveway must be within the side lot ribbon unless the lot is wider than 35 feet. Detached houses must have two side yards that total at least 13 feet and each one must be at least five feet wide. Semi-detached buildings need one side yard with a minimum width of eight feet. Multifamily residences must have two side yards a minimum of eight feet. The maximum street wall length for a building on single lot is 185 feet. One off-street parking space is required for each dwelling unit.

#### <u>R4-1</u>

A small portion to the northwest of the study area is mapped with an R4-1 zoning district. R4-1 contextual districts permit only one- and two- family detached and semi-detached houses, permit a minimum lot width of 25 feet for detached houses and 18 feet for semi-detached houses, and have a maximum FAR of 0.75, plus an optional 20% increase in FAR as an attic allowance. The R4-1 zoning district requires a minimum 10-foot front yard, a minimum 30-foot rear yard, and two 8-foot side yards for detached houses. The minimum side yard for semi-detached houses is four feet. The maximum building height is 35 feet. One off-street parking space is required for each dwelling unit.

#### <u>R6</u>

A large portion of the study area south of the Project Site is mapped with an R6 zoning district. R6 zoning districts have characters that can range from neighborhoods with a diverse mix of building types and heights to large-scale "tower in the park" developments. Bulk is governed either by standard height factor regulations or Quality Housing regulations. Height factor regulations produce small multi-family buildings on small zoning lots and, on larger lots, tall buildings that are set back from the street. The FAR in R6 districts ranges from 0.78 (for a single-story building) to 2.43 at a typical height of 13 stories; the open space ratio ranges from 27.5 to 37.5. There are no height limits for height factor buildings although they must be set within a sky exposure plane which beings at a height of 60 feet above the street line and then slopes inward over the zoning lot. Quality Housing regulations, on the other hand, produce high lot coverage buildings set at or near the street line. Pursuant to the Quality Housing regulations, the maximum lot coverage for a corner lot is 100% and for an interior/through lot is 60% on a wide street and 60% on a narrow street. On a wide street, the maximum FAR is 3.0, with a base height of 40-60 feet and a maximum building height of 70 feet. On a narrow street, the maximum FAR is 2.2 The residential FAR will increase to a maximum of 2.42 on a narrow street and 3.6 on a wide street with the MIH Program. In CD 14, R6 districts are subject to off-street parking regulations of an R5 district to which off-street parking is required for 85% of the DUs in the building, or 42.5% of income-restricted housing units (IRHU).

#### <u>C2-4</u>

Like the C1-2 commercial overlay described above, C2-4 commercial overlays are typically mapped to a depth of 100 feet within residential districts and along streets that serve local retail needs. C2-4 districts permit a slightly wider range of uses compared to C1-2 districts and include funeral homes and repair services. Within an R6 district the maximum commercial FAR of 2.0. Off-street parking requirements vary by use but generally one parking space is required for every 1000 square feet of floor area.

#### <u>C3</u>

C3 commercial districts permit waterfront recreational activities, primarily boating and fishing, in areas along the waterfront that are usually adjacent to residential zoning districts. In addition to facilities for docking, renting, servicing, and storing of fishing and pleasure boats, permitted activities in a C3 district include aquatic sports equipment sales and rentals, bicycle shops, ice cream establishments, and public and private beaches (Use Group 14). C3 districts also allow residential and community facilities uses (Use Groups 1-4). The maximum commercial FAR for C3 districts is 0.5 with buildings no more than two stories or 30 feet high. Residential development in C3 districts is governed by R3-2 district regulations. R3-2 zoning districts permit a residential FAR of 0.5 FAR that may be increased by 20% for attic allowance and 1.0 FAR for community facility use. For residential use, the maximum building height is 35 feet, a 15-foot front yard is required, and maximum lot coverage for a residence is 35%. Off-street parking requirements are high and vary with use but are typically one parking space for every 150 square feet of floor area.

#### <u>C4-3A</u>

C4-3A commercial districts are mapped in regional commercial centers that are located outside of the central business districts. In these areas, specialty and department stores, theaters, and other commercial office uses serve a larger region and generate more traffic than neighborhood shopping areas. Use Groups 5, 6, 8, 9, 10, and 12 are permitted in C4 districts. C4-3A is also designated as a contextual district in which the commercial and residential bulk and density regulations differ from corresponding non-contextual commercial districts. Maximum allowed commercial FAR is 3.0 with a maximum residential FAR of 3.0 (R6A equivalent) that can increase within the MIH Program to 3.6. The C4-3A (R6A residential equivalent) requires off-street parking for 85% of DUs. Outside the Transit Zone, off-street parking would be required for 15% of the income-restricted DUs. Outside the Transit Zone, AIRS DUs have a parking requirement of 10% of the total number of DUs. Commercial parking requirements vary but are typically one parking space for every 1,000 square feet of floor area.



Source: 2015 PLUTO, NYCDCP

Project Site

(\_) Study Area

One & Two Family Residence
Multi-Family Residence (Walkup)
Multi-Family Residence (Elevator)
Mixed Residential & Commercial
Commercial Use

Industrial / Manufacturing	LAND
Transportation / Utility	USE
Public Facilities & Institutions	MAP
Open Space & Recreation	
Parking	Figure 2-1
Vacant Land	



Edgemere URA

Study Area

( ])

ARVERNE URBAN RENEWAL AREAS

Figure 2-2



#### **Public Policy**

Per the *CEQR Technical Manual*, a detailed assessment of public policy is warranted since the Proposed Actions to facilitate the Proposed Project includes the designation of the Project Site as a MIH area. Additionally, the Project Site resides within the City's Coastal Zone, requiring a Waterfront Revitalization Program (WRP) Consistency Review of public policies for the City's coastal areas. The Project Site and study area are governed by five major public policy initiatives: Housing New York: A Five-Borough, Ten-Year Plan, the NYC WRP, PlaNYC/OneNYC, Jamaica Bay Watershed Protection Plan (JBWPP), and Urban Renewal Plans. Neither the Project Site nor the study area is governed by any 197-a plans. The study area is not affected by any additional public policies besides those also governing the Project Site.

#### PlaNYC/OneNYC

The City's long-term sustainability plan, *PlaNYC: A Greener, Greater New York*, continued and enhanced in *OneNYC*, advances the City's sustainability initiatives and goals related to land use, open space, brownfields, energy use and infrastructure, transportation systems, water quality and infrastructure, and air quality, while reducing greenhouse gas emissions and increasing the City's resilience to climate change.

In 2007, the Bloomberg administration released *PlaNYC*: a comprehensive plan for a sustainable and resilient NYC. The 2007 plan, and 2011 update, include policies to address three key challenges the City faces over the next 20 years: population growth, aging infrastructure, and global climate change. Elements of the plan are organized into six categories—land, water, transportation, energy, air quality, and climate change—with corresponding goals and objectives for each. In 2015, *OneNYC* was released by the de Blasio administration, building upon the sustainability goals established by *PlaNYC*. *OneNYC* includes updates on the progress towards the 2011 sustainability initiatives and 2013 resiliency initiatives, with additional goals and new initiatives under the organization of four visions: growth, equity, resiliency, and sustainability.

#### Housing New York: A Five Borough, Ten-Year Plan

In 2014, the de Blasio administration released *Housing New York: A Five-Borough, Ten-Year Plan* a comprehensive plan to build or preserve 200,000 affordable housing units over the next decade – 120,000 preserved and 80,000 newly built. Building on the foundation laid through Housing New York, in November 2017, the de Blasio administration committed to completing the initial goal of 200,000 affordable homes two years ahead of schedule, by 2022, and generating an additional 100,000 homes over the following four years. To accomplish this accelerated and expanded plan, the administration launched *Housing New York 2.0* (HNY 2.0), a roadmap for how the City will help reach a new goal of 300,000 by 2026. So far, the plan has financed over 87,557 affordable homes since its inception in 2014. The plan emphasizes affordability for a wide range of incomes, with the program serving households ranging from middle- to extremely low-income (under \$25,150 for a family of four). The plan, which was created through coordination with 13 agencies and with input from more than 200 individual stakeholders, outlines more than 50 initiatives that will accelerate affordable construction, protect tenants, and deliver more value from affordable housing. HY 2.0 also introduced a suite of new initiatives to help thousands more families and seniors afford their rent, buy a first home, and stay in their neighborhoods.

#### Waterfront Revitalization Program

The NYC WRP is the City's principal Coastal Zone management tool and establishes a broad range of public policies for the City's coastal areas. The guiding principle of the WRP is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront, while minimizing the conflicts among these objectives. The WRP was originally adopted by the City of New York in 1982, revised in 2002, and revised once more in 2016. A local waterfront revitalization program, such as NYC's, is subject to approval by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront

Revitalization of Coastal Areas and Inland Waterways Act and the Federal Coastal Zone Management Act. All proposed actions subject to CEQR, Uniform Land Use Review Procedure, or other local, state, or federal agency discretionary actions that are situated within NYC's designated Coastal Zone must be reviewed and assessed for their consistency with the WRP. The Project Site is located within the City's designated Coastal Zone (**Figure 2-4: NYC Coastal Zone**).

Additionally, the WRP sets forth five types of special area designations included in the City's Coastal Zone, such that if a project is located adjacent to or within a special area designation it is subject to conformance with the priority policies associated. These types include Special Natural Waterfront Areas (SNWAs), Significant Maritime and Industrial Areas (SMIAs), the Arthur Kill Ecologically Sensitive Maritime and Industrial Area (ESMIA), Priority Marine Activity Zones (PMAZ), and Recognized Ecological Complexes (RECs). Jamaica Bay is characterized as a SNWA and is located adjacent the Project Site to the north.

#### Jamaica Bay Watershed Protection Plan (JBWPP)

In 2005, a City Council Bill was signed requiring the NYC DEP to create a watershed protection plan for the watershed, or sewershed, of Jamaica Bay. The JBWPP legislation outlined the development of a comprehensive plan aimed towards restoring and maintaining water quality and ecological integrity of Jamaica Bay. The managing document evaluates the technical, legal, environmental, and economic feasibility of protection measures as well as current and future threats to the bay, to facilitate research, restoration, and water quality improvement strategies. The protection of the bay is interconnected with the activities and uses contained within the watershed. Urban residential development around the shoreline introduces environmental stresses and future developments have the potential to present adverse impacts to the ecological services provided by vital wetlands. The JBWPP, developed pursuant to Local Law 71, mandates that the NYC, in coordination with the Mayor's Office of Environmental Coordination (MOEC), review and track proposed development projects in the Jamaica Bay Watershed. The Project Site is located within the Jamaica Bay Watershed Boundary, and as such the Proposed Project is to be detailed according to the JBWPP Project Tracking Form to monitor growth and trends.

#### Urban Renewal Plan

The Urban Renewal Law authorizes the City of New York to acquire sites in a URA for redevelopment in accordance with an Urban Renewal Plan (URP, or "Plan"). The URP outlines the requirements in which the City disposes of the property that is or was subject to the Plan, either by selling or leasing the site for redevelopment. Therefore, the City maintains compliance by disposing of the property as a condition of the URP according to a predesignated expiration date. The property owner is subject to an urban renewal covenant in the form of the property Deed and/or Land Disposition Agreement which established an expiration date, if not otherwise stated in the Plan.

Proximate to the Project Site are portions of two URAs: the Arverne URA to the southwest and southeast of the Project Site, and the Edgemere URA to the north and east of the Project Site. (Figure 2-2: Edgemere and Arverne Urban Renewal Areas). NYC Department of Housing Preservation and Development (HPD) proposed a comprehensive development plan for the Arverne URA which was adopted in 2003 and analyzed pursuant to CEQR in a Final Environmental Impact State (FEIS) completed in 2003. The Edgemere Urban Renewal Plan was originally adopted in 1997 and revised in 2008 to promote the development of residential, commercial, community facility, and public space uses, with new infrastructure including street widening and realignment in some areas. In addition, while beyond the study area but within CD 14, the City of New York recently designated and approved a URA and URP to redevelop an approximately 23-block area of the Downtown Far Rockaway neighborhood of Queens; the project includes a 22-block Rezoning Area and a 2-block, or approximately 13-acre, URA. The Proposed Actions consist of establishing the Special Downtown Far Rockaway District (the "Special District") comprised of a MIH area in the Rezoning Area for proposed R6 and R7 districts.



Source: NYC Coastal Zone Boundary, DCP, May 2016 Data



**Project Site** 

NYC Coastal Zone Boundary NYC COASTAL ZONE

Figure 2-4

#### V. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

#### Land Use

#### **Project Site**

As described in Chapter 1, "Project Description," in the future absent the Proposed Actions (the "No-Action" condition), the Project Site would remain under the existing zoning designations and an as-of-right residential development and supporting retail space would be feasible on the Project Site (see **Table 2-2**: **No-Action Condition and Figure 2-5**: **No-Action Condition Site Plan**). As-of-right development on the Project Site would yield 12 buildings, including approximately 482,523 gsf of residential space (equivalent to approximately 568 DUs), approximately 21,659 gsf of local retail space, approximately 800 gsf of community facility space, and approximately 557 accessory parking spaces. The No-Action condition would result in approximately 544,982 gsf of development on the Project Site.

Block/Lot	Building	Residential (gsf)	Residential Units	Local Retail (gsf)	Medical (gsf)	Structure Parking (gsf)	Total Parking Spaces (Surface Lots and Structure)	Total Area (gsf)	Height (feet)
15843/1	А	44,897	53	0	0		46	44,897	40
15843/1	В	44,433	52	0	0		45	44,433	40
15843/1	С	45,319	53	0	0		45	45,319	40
15843/1	D	45,319	53	0	0		45	45,319	40
15843/1	E	45,319	53	0	0		45	45,319	40
15843/1	F	45,319	53	0	0	40.000	45	45,319	40
15843/1	G	45,319	53	0	0	40,000	45	45,319	40
15843/1	Н	45,319	53	0	0		45	45,319	40
15843/1	I	45,319	53	0	0		45	45,319	40
15842/1	J	44,319	53	0	800		47	45,319	40
15842/1	K	30,641	32	15,585	0		84	47,026	40
15857/1	L	0	0	6,074	0		20	6,074	15
тот	AL	482,523	568	21,659	800	40,000	557	544,982	

#### Table 2-2: No-Action Condition



Source: Aufgang Architects Note: For illustrative purposes only

#### **EDGEMERE, QUEENS**

### NO-ACTION CONDITION SITE PLAN

Figure 2-5

#### Study Area

Based on consultation with DCP and HPD, plus a review of recent building permits issued by the NYC Department of Buildings, planned developments that would potentially be fully occupied by the 2034 analysis year include continued development in the Arverne and Edgemere URAs and the Ocean Bay Retail project, located at 53-05 Beach Channel Drive. In addition, while not located immediately near the Project Site, the City of New York designated and approved a URA and URP to redevelop an approximately 23-block area of the Downtown Far Rockaway neighborhood of Queens; the project includes a 22-block Rezoning Area and a 2-block, or approximately 13-acre, URA located in CD 14 (the "Downtown Far Rockaway Project") (see Table 2-3: No-Action Developments Near the Proposed Project and Figure 2-5: No-Action Developments near the Project Site).

#### Edgemere and Arverne URAs

The Project Site is located near the 1) Arverne URA, which is located south of the Project Site and bounded by Beach 32<sup>nd</sup> Street, Beach 81<sup>st</sup> Street, Rockaway Freeway, and the Rockaway Boardwalk; and the 2) Edgemere URA, which is located east of the Project Site, and is bounded by Conch Basin, Beach Channel Drive, and Norton Basin on the north, Beach 35<sup>th</sup> Street on the east, Beach Channel Drive, Rockaway Beach Boulevard and the northern boundary of the Rockaway Freeway on the south, and Beach 51<sup>st</sup> and Beach 49<sup>th</sup> Streets on the west (see **Figure 2-6: No-Action Developments Near the Project Site**).

The No-Action condition would include approximately 500 DUs and 100,000 sf of commercial space anticipated to be developed in the Edgemere URA. A school is also expected to be developed in the Edgemere URA, but the timeline for its development has yet to be determined. In addition, the No-Action condition would include 1,200 DUs, 200,000 sf of commercial space, and 1,300 parking spaces anticipated to be developed in the eastern portion of the Arverne URA. It is assumed that approximately half of the housing in the Arverne URA would be restricted to household incomes up to 80% of AMI. In addition, approximately 722,919 sf in the central portion of the Arverne URA is anticipated to be developed as a nature preserve and passive recreation area.

#### Ocean Bay Retail

The Ocean Bay Retail project is located at 53-05 Beach Channel Drive (Block 15890, Lots 54, 55, 58, 62, 64, 66, and 69) and would be developed to include approximately 9,999 gross square feet (gsf) of supermarket space, 5,214 gsf of local retail/restaurant space, 21,664 gsf of office space, and 9,577 gsf of community facility/office space.

#### Downtown Far Rockaway Project

While not located directly near the Project Site, the City of New York designated and approved an URA Plan in an approximately 23-block area of the Downtown Far Rockaway neighborhood located in the CD 14 (the "Downtown Far Rockaway Project") (CEQR#16DME010Q). An FEIS and Notice of Completion were issued for the project in June of 2017 and assumed that by the 2034 analysis year the project would result in a net increase of 3,123 DUs, 164,595 gsf of local retail space, and 30,000 gsf of community facility space.

#### Beach Green Dunes II

The Beach Green North Development Project (CEQR#15HPD068Q) is comprised of two independent phases of construction for the development of 100% affordable multifamily buildings; the Phase 1 site is located at 44-19 Rockaway Beach Boulevard (Block 15853, Lot 48) and the Phase 2 site is located at 46-01 Rockaway Beach Boulevard (Block 15853, Lot 40). Phase 1 consists of a seven-story building comprised of approximately 107,000 gsf of residential use for 101 rental apartments and approximately 488 gsf of commercial space. Phase 1 was completed in the fall of 2017.

Phase 2 would consist of approximately 127 DUs within approximately 3,000 gsf of retail space in an eightstory building. The project is expected to complete full construction buildout by December 2019.

#### **Beach Channel Senior Residences**

The Beach Channel Senior Residences (CEQR#17BSA064Q) is located at 34-11 Beach Channel Drive (Block 15950, 7501) northeast of the Project Site and would consist of a 100% affordable, approximately 155,571 gsf mixed-use development. The seven-story building would contain 154 DUs, comprised of 153 DUs for seniors and one superintendent unit, within approximately 144,660 gsf of residential space. Additionally, the development would include approximately 10,911 gsf of community facility space for medical office purposes. On August 8, 2017, it was the decision of the BSA to issue a negative declaration prepared in accordance with Article 8 of the New York State Environmental Conservation Law and 6 NYCRR Part 617 to permit the requested reduction in the required number of accessory parking spaces for an ambulatory diagnostic or treatment facility. The anticipated build year for the project is 2019.

#### Zoning and Public Policy

In the No-Action condition, no changes to zoning or public policy are expected to occur on the Project Site or in the study area.

Map No	Project	Block	Lot	Total Residential DUs	Commercial sf	Commercial Type	Community Facility sf	Community Facility Type	Open Space sf	Parking
1	Edgemere Site #1	15852	64, 68	44	25,911	local retail	-		-	44
2	Edgemere Site #2	15851	44,40,35,33,58,59, 42	19	0		-		-	19
3	Edgemere Site #3	15850	6	16	0		-		-	16
4	Edgemere Site #4	15849	17,9,8,18,27,29,20, 6,19,28,10	24	0		-		-	24
5	Edgemere Site #5	15848	67,52,65,60,62,63, 57,58,54,55	18	0		-		-	18
6	Edgemere Site #6	15847	83,80,79,82,88,85, 86,81,87,84,89	18	0		-		-	18
7	Edgemere Site	ere Site	1, 4, 8, 10, 13, 14, 15, 21, 28, 29, 30, 32, 35	202	74,089	local retail	-		-	202
	#7	15825	1, 7, 9							
		15826	31							
8	Edgemere Site #8	15834	30,38,42	18	0		-		-	18
9	Edgemere Site #9	15973	1	60	0		-		-	60
10	Edgemere Site #10	15965	115	7	0		-		-	7
	Edgemere			71	0		-		-	71
11	(Small Sites)	Varies	Varies		3,543	local retail				
	( ,									
		15888	1							
		15887	1							
	Quarteral	15886	1							
12	Central	15885	1	-	-	-	-	-	722,919 <sup>3</sup>	-
	Arverne <sup>3</sup>	15883	1							
		15884	1							
	ŀ	15881	1							
		15882	1							

#### Table 2-3: No-Action Developments Near the Proposed Project

<sup>&</sup>lt;sup>3</sup> Nature preserve and passive recreation area

1		15880	1		1					
		15879	1							
		15878	1							
		15877	1							
		15859	1		1					
		15860	1							
		15861	1							
		15862	1							
		15863	1							
		15864	1							
		15865	1							
		15866	1			50% Local Retail,				
		15867	1			50% Destination				
13	Arverne East	15868	1	1,200	200,000	Retail to be consistent with	-	-	-	1,300
		15869	1			Ocean Bay Retail				
		15870	60, 71			EAS				
		15871	1							
		15873	1							
		15874	8, 41							
		15875	1							
		15876	1							
		15947	1							
		15948	1							
					9,999	supermarket				
	Ocean Bay		390 54, 55, 58, 62, 64, 66, 69	0	5,214	local retail		-	-	10
14	Retail EAS	15890			21,664	office space	-			
					9,577	community facility/office space				
					189,275	local retail	6,305	day care		
15	Downtown Far	Various	Various	3,131	-24,680	auto repair	36,295	community center	30,000	
15	Rockaway FEIS	vanous	vanous	5,151	-	-	20,500	house of worship	30,000	-
					-		17,847	MOB		
16	15-20 Central Avenue Private Charter School	15537	133	-	-	-	75,400	charter school	0	
	Arverne		1							
47	West/Arverne	45005	500				N1/A	charter		
17	by the Sea Private Charter School	15905	501	-	-	-	N/A	school	-	-

18	22-06 Cornaga Ave	15706	1	113	0		0		0	113
19	Beach Green Dunes Phase II	15853	40	127	3,000	local retail	-	-	0	50
20	Beach Channel Senior Residences	15950	7501	154	-	-	10,911	medical facility	0	33



(1) Map ID Number (See Table	e 2-3)
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- Mixed-Use Developments
- Nature Preserve and **Passive Recreation Area**

#### **EDGEMERE, QUEENS**

### **NO-ACTION DEVELOPMENTS NEAR THE PROJECT SITE**

Figure 2-6

Project Site (]) Study Area Edgemere URA Arverne URA

# VI. FUTURE WITH THE PROPOSED ACTIONS (THE "WITH-ACTION" CONDITION)

As described in detail in Chapter 1, "Project Description", in the future with the Proposed Actions (the "With-Action" condition), the proposed zoning map amendment would rezone the Project Site as follows: the North Parcels (Block 15842, Lot 1 and Block 15843, Lot 1) and Block 15842, p/o Lot 100 from R5 and R5/C1-2 zoning districts to a C4-4 zoning district, and the South Parcel (Block 15857, Lot 1) and Block 15857 p/o Lot 7 from a C8-1 zoning district to a C4-3A zoning district and a zoning text amendment to designate the entire Project Site an MIH area (see **Figure 2-7: Proposed Zoning Map**). Furthermore, the Applicant is seeking a City Map Amendment to re-establish a portion of Beach 52<sup>nd</sup> Street south of Rockaway Beach Boulevard to reconnect with Rockaway Freeway.

The Proposed Actions also include the following LSGD special permits: (i) to permit waiver of applicable height, setback, street wall location requirements, (ii) side yard and rear yard equivalent waivers, and (iii) to modify applicable signage regulations to allow flexibility for future retail tenants. The Proposed Actions will also include a text amendment to modify use regulations to permit a physical culture establishment (fitness center) as-of-right within the LSGD in addition to designating the Project Site an MIH area. The Proposed Actions also include a City Map Amendment to establish a portion of Beach 52<sup>nd</sup> Street between Rockaway Beach Boulevard and Shore Front Parkway.

#### Land Use

#### **Project Site**

The Proposed Actions, as fully described in Chapter 1, "Project Description," would facilitate the development of a 11-building, approximately 2,371,000 gsf mixed-use affordable housing, retail, and community facility development on the Project Site. The 11 buildings would be distributed on six subsections of the Project Site (sub-sections A, B, C, D, E and F), as shown in Figure 2-8: Proposed Project Site Plan, with sub-sections A, B, C, D, and E on the North Parcels of the Project Site and sub-section F on the South Parcel of the Project Site. The development program for each subsection of the Project Site is shown in Table 1-1: Proposed Project of Chapter 1, "Project Description." The Proposed Project would provide approximately 2,200 DUs income-restricted DUs, of which 1,927 DUs would be income-restricted up to 80% of AMI, to include approximately 201 DUs set aside for senior housing, with the remaining 273 DUs restricted to income level not exceeding 130% of AMI. Additional uses would include approximately 72,000 gsf of retail space, approximately 77,000 gsf of community facility space programmed for medical offices; and approximately 24,000 sf of publicly-accessible open space. The publicly-accessible plaza and play area programmed between Subsection D and E is described in Chapter 5, "Open Space." Retail and residential uses would be distributed across all six sub-sections of the Project Site, while community facility uses are anticipated to be located on sub-section E within the North Parcels of the Project Site. Building heights would range from approximately 90 feet to 200 feet. The 201 senior DUs are proposed to be in subsections D2 of the Project Site.

The Proposed Project would include a privately-owned, publicly-accessible internal street network with two new 60-foot wide publicly-accessible private streets. The first private street would be an extension of the existing Beach 52<sup>nd</sup> Street, which currently terminates at Rockaway Beach Boulevard. The extension of Beach 52<sup>nd</sup> Street would proceed northward from Rockaway Beach Boulevard, cut through the center of the Project Site and terminate to Beach Channel Drive. The second would be a new east-west street named Peninsula Way that would extend between Beach 50<sup>th</sup> Street and Beach 53<sup>rd</sup> Street. The two new streets would break up the superblock, intersecting to form a core or central area for the development. Beach 52<sup>nd</sup> Street and the Beach 51<sup>st</sup> Street plaza are also intended to reorient pedestrians towards the waterfront. The internal roadway would break up the existing superblock to improve pedestrian circulation within the mixed-use development and allow for enhanced connections to the surrounding neighborhoods and publicly-accessible open space resources to the north and south of the Project Site.





Study Area

Manufacturing Districts Μ R

С

C1-2 Overlay

 $\bigotimes$ 

 $\otimes$ **Residential Districts** 

**Commercial Districts** 

C2-4 Overlay

**Proposed Zoning** 

### **PROPOSED ZONING MAP**

Figure 2-7

Peninsula Hospital Site Redevelopment



Source: Aufgang Architects

**EDGEMERE, QUEENS** 

### PROPOSED PROJECT SITE PLAN

#### Study Area

Land uses in the study area are characterized by a mix of uses including low- and mid-rise residential buildings, community facilities, transportation, semi-industrial uses, and open space. There is a high concentration of public and publicly-subsidized housing and long-term care facilities within the surrounding area. The area to the north of the Project Site is occupied by NYCHA's Ocean Bay Apartments (Bayside), P.S. 105 (The Bay School), and Rockaway Community Park. The area to the south of the Project Site between Rockaway Boulevard and Edgemere Avenue consists of warehouses, the MTA's Far Rockaway bus depot, and the elevated tracks of the MTA's A train, which run above Rockaway Freeway, a major east/west corridor south of the Project Site.

South of Edgemere Avenue is an undeveloped portion of the Arverne URA designated for open space and a nature preserve that will serve as a resiliency buffer to the greater peninsula, Rockaway Beach, the Atlantic Ocean, and the recently renovated Rockaway Boardwalk.

East of the Project Site are two long-term care facilities: the six-story nursing home that was part of the former Peninsula Hospital Site and the six-story senior rehabilitation center located along Beach 48<sup>th</sup> Street, two surface parking facilities, an FDNY fire station, low-scale residential buildings, and a significant amount of vacant land within the Edgemere URA.

West of the Project Site are a long-term care facility, the Arverne branch of the Queens Library, NYCHA Ocean Bay Apartments (Oceanside), and P.S./M.S. 333. The Ocean Bay Oceanside campus consists of 417 units in seven seven-story buildings. Further west is the Beach Green Dunes, an HPD-sponsored energy-efficient and resilient, 100% affordable housing development, that completed construction in the fall of 2017 and is located at 44-19 Rockaway Beach Boulevard (approximately six blocks west of the Project Site). There are smaller public open spaces at Arverne Playground just west of the Project Site at Beach 54<sup>th</sup> Street and Rockaway Beach Boulevard, in addition to Cardozo Playground between Beach 56<sup>th</sup> Street and Beach 57<sup>th</sup> Street.

The Proposed Actions are not expected to alter any land uses in the study area. Land use patterns and trends, supporting intensive mixed-use development, would continue as under the No-Action condition as described above.

#### Zoning

The proposed zoning map amendment would rezone the Project Site as follows: the North Parcels (Block 15842, Lot 1 and Block 15843, Lot 1) and Block 15842, p/o Lot 100 from R5 and R5/C1-2 zoning districts to a C4-4 zoning district, and the South Parcel (Block 15857, Lot 1) and Block 15857 p/o Lot 7 from a C8-1 zoning district to a C4-3A zoning district.

#### Project Site

Currently, the Project Site is zoned with R5, R5/C1-2, and C8-1 zoning districts, which are insufficient to achieve the proposed density. As described above in the description of the Project Site, the existing zoning would allow a maximum FAR of 1.25 for residential, 1.0 for commercial, and 2.0 for community facility. The Proposed Actions would rezone the Project Site to C4-4 (R7-1 equivalent) and C4-3A (R6A equivalent), and map an MIH area over the Project Site, which would be consistent with the existing zoning and bulk in the area surrounding the Project Site (see **Figure 2-5: Proposed Zoning Map**). The proposed zoning districts, along with establishing the proposed MIH area, would allow an increase of maximum FAR on the North Parcels to 4.6 for residential use, 5.01 for residential use for seniors (AIRS), 1.0 for commercial uses, and 2.0 for community facility uses. It would also increase the maximum FAR to 3.6 FAR for residential use and 3.9 FAR for AIRS on the South Parcel. It is anticipated that the Project Site would be designated under MIH Option 1, where 25% of the residential floor area shall be provided as housing affordable to households at an average of 60% of the AMI, with no unit targeted at a level exceeding 130% AMI.

#### Proposed C4-4 Zoning District (R7-2 Equivalent)

The proposed C4-4 district would be mapped over the North Parcel. The proposed C4-4 zoning district would replace the existing R5 and R5/C1-2 zoning districts. The C4-4 district permits residential uses (Use Groups 1 and 2), community facility uses (Use Groups 3 and 4), hotels, and local retail and service establishments (Use Groups 5 and 6), amusement or service establishments (Use Group 8), retail and service establishments that serve a larger area (Use Group 9), large retail establishments such as department stores (Use Group 10) and fairly large entertainment facilities (Use Group 12). The C4-4 district would allow commercial uses 3.4 FAR, residential uses utilizing height factor provisions a maximum 3.44 FAR (through a residential equivalent of an R7-2 district), and community facility uses a maximum 6.5 FAR. Buildings in C4-4 districts using these regulations have no fixed height limits and building envelopes are regulated by a sky exposure plane. Residential development under the optional Quality Housing program in MIH designated areas have a maximum FAR 4.6 regardless of the width of the street and a maximum of 5.01 FAR for AIRS units. The entire Project Site will be an MIH designated area.

For Quality Housing buildings within an MIH area, the maximum permitted building height is 135 feet or 13 stories for buildings with qualifying ground floors.<sup>4</sup> Off-street parking is required for 50% of all DUs, or it can be waived if five or fewer spaces are required. In Queens CD 14 however, R6 and R7 zoning districts are subject to the accessory off-street parking regulations of an R5 district (required for 85% of all DUs), except for developments located within a URA established prior to August 14, 2008 or to income-restricted units. Outside the Transit Zone, off-street parking would be required for 15 percent of the IRHUs and 10 percent of the AIRS housing units.

#### Proposed C4-3A Zoning District (R6A Equivalent)

The proposed C4-3A district would be mapped over Block 15857, Lot 1 on the South Parcel. The proposed C4-3A zoning district would replace the existing C8-1 zoning district. The C4-3A district permits residential uses (Use Groups 1 and 2), community facility uses (Use Groups 3 and 4), hotels, and local retail and service establishments (Use Groups 5 and 6), amusement or service establishments (Use Group 8), retail and service establishments that serve a larger area (Use Group 9), large retail establishments such as department stores (Use Group 10) and fairly large entertainment facilities (Use Group 12). The maximum base height in an R6A district is 65 feet and the maximum building height is 85 feet or 8 stories. The C4-3A district (R6A residential equivalent) would allow commercial uses a 3.0 FAR, residential uses a maximum of 3.0 FAR, and community facility uses a maximum 6.5 FAR. Residential buildings developed under the Quality Housing regulations in MIH designated areas have a maximum FAR of 3.6 and a maximum FAR of 3.9 for AIRS units. The entire Project Area will be an MIH designated area. The C4-3A

<sup>&</sup>lt;sup>4</sup> A qualifying ground floor is a ground floor with at least 13 feet in height used for commercial or community facility use.

(R6A residential equivalent) requires off-street parking for 85 percent of the DUs. Outside the Transit Zone, off-street parking would be required for 15 percent of the IRHUs. Outside the Transit Zone, AIRS have a parking requirement of 10 percent of the total number of the DUs.

The proposed medium density C4-4 and C4-3A districts would be appropriate because the Project Site is located on two wide streets—Rockaway Beach Boulevard and Beach Channel Drive that can support increased density and the commercial development. Additionally, the proposed zoning and development is consistent with the medium and higher density residential zoning districts and resulting developments within the greater surrounding area. Farther to the southwest is the Arverne by the Sea development, an effort by the City to redevelop that area and increase residential development as reflected in the zoning changes to a C4-4 zoning district and C4-3A zoning district. Arverne View is a 13-acre complex with 11 buildings ranging in height from four to nineteen stories similar to the Proposed Project. In addition, the C4-4 and C4-3A medium density zoning districts are appropriate in an area that is located within close proximity to public transportation options such as the elevated A subway, multiple bus lines and the new NYC Ferry shuttle with connection from the Rockaways to both Sunset Park Brooklyn and Lower Manhattan. The Project Site is well served by major public open spaces that counterbalance the increase in development. These public open spaces include Rockaway Park to the north and the undeveloped portion of the Arverne URA designated for open space and nature preserve to the southwest, and Rockaway Beach, Rockaway Boardwalk and the Atlantic Ocean farther to the south support the increase in density in this location.

The increase in density through the proposed C4-4 and C4-3A zoning districts is supportive of the City's goal to redevelop vacant and underutilized land for affordable housing by providing 2,200 housing units, most of which will be affordable (under 80% of AMI) and 201 units that will be affordable senior housing. The Proposed Project would substantially advance the goals of Mayor Bill de Blasio's *Housing New York: A Five Borough, Ten-Year Plan.* Proposed retail and community facility uses would cater to the community's need for such supportive uses, and provide local employment opportunities. In addition, there is a documented need for additional housing and supportive retail in the Borough of Queens, and on the Rockaway Peninsula in particular, as demonstrated by the successful completion of the "Arverne By the Sea" mixed-use development to the immediate west of the Project Site.

The C4-4 and C4-3A zoning districts proposed to be mapped over the Project Site would permit a wider range of both residential and commercial uses than what would be permitted under the existing R5 and R5/C1-2 zoning districts beyond local retail (Use Group 6) to permit amusement or service establishments (Use Group 8), retail and service establishments that serve a larger area (Use Group 9), large retail establishments such as department stores (Use Group 10) and fairly large entertainment facilities (Use Group 12). The broader range of uses permitted by the C4 districts enable the Proposed Project to not only provide 2,200 DUs of low- and moderate-income housing, but also to become a new destination for retail and medical office space within this area of the peninsula where it is much needed.

#### Zoning Text Amendments

The proposed zoning text amendment to Appendix F of the Zoning Resolution would designate the Project Site as an MIH area. While 100% of the DUs in the Proposed Project are intended to be restricted as affordable housing units by a regulatory agreement, the MIH requirements ensures that a set percentage of the residential floor area for any future development within the MIH area would be permanently affordable. The Applicant proposes MIH Option 1, where 25% of the residential floor area shall be provided as housing permanently affordable to households at an average of 60% of the AMI, with no unit targeted at a level exceeding 130% AMI (approximately 550 DUs).

The proposed zoning text amendment to ZR Section 74-744(a) to allow the development of a PCE ("fitness center") as-of-right without obtaining a special permit from the BSA, as currently required. The addition of a physical and cultural establishment would provide a needed amenity for the residents of the Proposed Project and the surrounding community.

#### Large-Scale General Development (LSGD)

The LSGD special permit would allow variations in the height and setback regulations within a LSGD. Pursuant to ZR Section 74-74, et seq., of the ZR, the City Planning Commission may permit certain modifications of the underlying district regulations for a general large-scale development to allow greater flexibility in securing a better site plan. The LSGD special permit modifications will allow the Applicant to address the unique circumstances of the Project Site as a vacant, underutilized existing superblock that was a former hospital campus. The requested modifications through the LSGD special permit would maximize the amount of space within the Project Site that could be devoted to open spaces and the street network by permitting additional bulk to be placed closer to zoning lot lines, and at greater heights than would be permitted by the current or proposed zoning districts. These open spaces and street networks would break up the Project Site's superblock character into six subsection Building Blocks and add additional pedestrian and vehicular routes to the existing street network. The massing would allow variation in heights to break up the bulk of the development with shorter buildings fronting on Beach Channel Drive and along the corners of the development before stepping up to taller buildings at the center of Project Site, the intersection of the new street network formed by Peninsula Way and the extension of Beach 52nd Street. An LSGD Restrictive Declaration will be recorded at the time all land use-related actions required to authorize the Proposed Project are approved. The LSGD would restrict the physical bulk envelope of the Proposed Project and the total developable floor area.

#### Study Area

The Proposed Actions would not alter any zoning designations within the 0.25-mile study area. The current mix of residential and commercial zoning district in the study area would remain as in the existing condition.

#### Public Policy

#### OneNYC/PlaNYC

The Proposed Project would be consistent with Visions 1 and 2 in *OneNYC*. A consistency assessment is provided below.

#### Vision 1: Our Growing, Thriving City

Vision 1 strives to maintain NYC's status as the world's most dynamic urban economy where families, businesses, and neighborhoods thrive. The Proposed Project will support Vision 1 of *OneNYC* through the following initiatives:

The Proposed Project would help achieve Initiative 1 under Goal 3 (Housing), which aims to "create and preserve 200,000 affordable housing units over ten years..." The redevelopment of the Project Site would result in the provision of up to 2,200 DUs, approximately 1,927 of which are intended to be restricted to household incomes up to 80% of AMI, with approximately 201 DUs set aside for seniors to help address the need for additional affordable housing and senior housing in the City. The Proposed Project would be in an area with existing connections to water and sewer infrastructure such that the Rockaway WWTP should not be adversely impacted or inundated due to the Proposed Actions. Furthermore, DEP maintains a planned infrastructure capital improvement project in the area along Rockaway Beach Boulevard that would include the installation of new water mains, storm sewers, and sanitary sewers. Under the With-Action condition, the Project Site would be designated as a MIH area and provide permanent affordable housing. The Applicant proposes Option 1, where 25% of the residential floor area shall be provided as housing permanently affordable to households at an average of 60% of the AMI, with no unit targeted at a level exceeding 130% AMI (approximately 550 DUs).

The Proposed Project would also help facilitate Initiative 3 under Goal 3 (Housing), which strives to "expand housing and related services to support the City's most vulnerable populations." Approximately 201 DUs

would be reserved for seniors and are intended to be restricted to households with incomes up to 80% AMI. The median household income in the study area surrounding, as it relates to the affordability of residential units in the Proposed Project, is discussed in Chapter 3, "Socioeconomic Conditions."

Finally, the Proposed Project would help achieve Initiative 1 under Goal 4 (Thriving Neighborhoods) that aims to "Support creative of vibrant neighborhoods by alleviating barriers to mixed-use development and utilizing available financing tools." The Proposed Actions would facilitate a mixed-use development that would provide both residential and commercial uses to a site located near a variety of transit options. The Proposed Project would introduce 2,200 DUs at mixed income levels and bring additional retail uses to a neighborhood with limited retail opportunities. The Proposed Project may also seek public funding from various City, state, and federal agencies.

#### Vision 2: Our Just and Equitable City

Vision 2 strives to achieve an inclusive, equitable economy that offers well-paying jobs and opportunity for all to live with dignity and security in NYC. The Proposed Project will support Vision 2 of OneNYC through the achievement of Initiative 2 under Goal 3 (Healthy Neighborhoods, Active Living), which aims to "create environments that encourage New Yorkers to be physically active regardless of age." As described in Chapter 5, "Open Space," the Proposed Project would introduce 24,000-sf publicly-accessible passive open space on the Project Site that would serve both its own residents and those of the surrounding community. This passive open space introduced by the Proposed Project would consist of a pedestrian plaza and play area designated to the area in the Project Site between the internal roadway traversing the site from east to west, and Rockaway Beach Boulevard. These open space resources would include landscaped areas with seating and play spaces such as a large timber platform that would be adjacent to a play area to encourage multi-generational use. The plaza would be planted with native, coastal species suited for the Project Site that would require low maintenance and provide habitat for naturally-occurring species on the Rockaway Peninsula. Lighting in the pedestrian plaza would consist of pole-mounted fixtures and overhead wire-mounted catenary fixtures to create a sense of enclosure. The design would limit light trespass and nuisance to adjacent residential units. In addition, the fixtures would be above flood elevation. In addition, rooftop recreation areas would be provided on the Project Site for private residential use. The Project Site is also located near a variety of open space and recreational facilities, including NYCHA open space areas, Edgemere Urban Renewal Park, the Hip Hop Community Garden, Rockaway Youth Task Force Urban Farm and Community Garden, Beach 59th Street Playground, Bayswater Park, and the Rockaway Beach and Boardwalk.

#### Housing New York

The Proposed Project would result in the development of approximately 1,927 DUs of housing permanently restricted to households with incomes up to 80% of AMI (201 DUs of which would be reserved for senior housing) and would support the *Housing New York* plan.

#### VII. WRP CONSISTENCY ASSESSMENT

#### The Coastal Zone Boundary

The Project Site is located within the City's Coastal Zone (**Figure 2-4: NYC Coastal Zone**) and the Proposed Project is consequently subject to the policies of New York City's Waterfront Revitalization Program (WRP). The WRP established the City's policies and objectives for maximizing benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form for the Proposed Project (WRP #16-148, **Appendix B**) identifies whether the Proposed Project would "promote" or "hinder" relevant policies, and provides a written assessment to determine consistency with each applicable WRP policy.

This section provides additional information for policies that the Proposed Project would promote. No WRP policies would be hindered by the Proposed Project.

# Policy 1.1: Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.

As described in Chapter 1, "Project Description," the Proposed Actions would facilitate a mixed-use development including commercial, community facility, residential, and open space uses on the Project Site. The Project Site is in an area that includes properties that have mixed commercial and residential land uses. The underutilized Project Site does not have any unique or significant natural features that would limit its redevelopment and is substantially vacant. As of the spring of 2018, the North Parcels of the Project Site have been cleared of all the past structures of the former Peninsula Hospital which was closed in April 2012 and the South Parcel of the Project Site was cleared of an unutilized warehouse. Both the North and South Parcels are presently vacant and enclosed with a perimeter fence. The Project Site is served by water, sewer, and utility infrastructure that previously served the hospital.

Therefore, the Proposed Project would be consistent with Policy 1.1.

# Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed

The Proposed Project would be built at a density compatible with the capacity of the surrounding roadways, mass transit, and essential community services. The Project Site is served by multiple modes of public transit, including bus, subway, and ferry service. The Q22 bus route and the QM17 express bus route serve the Project Site. Elevated tracks of the MTA-NYCT Rockaway (A train) Line run along Rockaway Freeway, with subway stops at Beach 44<sup>th</sup> Street (approximately five blocks east of the Project Site) and Beach 60<sup>th</sup> Street (approximately four blocks west of the Project Site). Additionally, the NYC Ferry Service operated by Hornblower on the Rockaway Route stops just one block west of the Project Site at Beach Channel Drive and Beach 54<sup>th</sup> Street and provides access to the ferry landing located at Beach Channel Drive and Beach 108<sup>th</sup> Street. The Rockaway ferry route is a new key connection between the Rockaways and Sunset Park Brooklyn, and Lower Manhattan.

As described in Chapter 10, "Water and Sewer Infrastructure," the NYC DEP indicates that there are planned infrastructure capital improvements that would serve the Project Site, including new 36-inch water

mains; new 24-inch and 30-inch storm sewers; and new 10-inch and 18-inch sanitary sewers along Rockaway Beach Boulevard extending from Beach 49<sup>th</sup> Street to Beach 59<sup>th</sup> Street.

As described in Chapter 18, "Construction," substantial new infrastructure improvements are planned or ongoing in the study area, including roadway, water, sanitary, and stormwater infrastructure improvements associated with the Proposed Project. These improvements would provide infrastructure needed to service the Project Site and are anticipated to be completed in August 2021.

The Proposed Project would not result in any significant adverse impacts on public high schools and libraries. However, the Proposed Actions would result in significant adverse impacts on public elementary and intermediate schools, as well as publicly funded child care centers. Measures to mitigate these impacts are addressed in Chapter 4, "Community Facilities" and Chapter 20, "Mitigation." The Proposed Project would neither result in the physical loss of open space resources or result in any significant adverse shadow, air quality, noise, or other environmental impacts to affect the utilization of any publicly-accessible open space in the residential and non-residential study areas.

Therefore, the Proposed Project would be consistent with Policy 1.3.

# Policy 1.5: Integrate the consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development.

The Proposed Project has been designed to integrate features that account for potential risks due to the effects of climate change including the potential for more severe storms and coastal flooding. Central to the design of the Proposed Project are two new, sloping privately-owned and publicly-accessible streets that intersect at the core of the development at a raised elevation of four feet above the 1% annual chance flood elevation, or base flood elevation (BFE) of +10 feet North American Vertical Datum of 1988 (NAVD88) at the Project Site. Consequently, the design flood elevation (DFE) of the Proposed Project is 11 feet NAVD88. The privately-owned, publicly-accessible internal street network would consist of two new 60-foot streets intended to be fully publicly-accessible at all times. The first private street would be an extension of Beach 52<sup>nd</sup> Street, which currently terminates at Rockaway Beach Boulevard. The extension of Beach 52<sup>nd</sup> Street would proceed northward from Rockaway Beach Boulevard, cut through the center of the Project Site and terminate to Beach Channel Drive. The second private street would be a new east-west street named Peninsula Way that would extend between Beach 50<sup>th</sup> Street and Beach 53<sup>rd</sup> Street. The two new streets would break up the superblock, intersect to form a core or central area for the development, and break up the existing superblock. The new street network is also intended to reorient pedestrians towards the water.

By elevating the center of the Proposed Project, almost 30% of its street frontage would be located completely out of the flood hazard area. Another 24% of the Proposed Project's street frontage would only need reduced flood mitigation measures. The DFE of the Proposed Project is 11 feet NAVD88, with the lowest point of elevation for ground level project features at 6 feet. Project features at or below DFE includes ground floor retail uses, ground floor community facility space, residential lobbies, open space areas, enclosed parking structures, surface parking areas, and some building mechanical systems. All residential apartments and critical mechanical equipment would be located at or above the DFE.

As a means of flood mitigation, all habitable spaces and critical infrastructure for the Proposed Project would be located at or above the DFE, with any potential flooding events mitigated via flood vents and barriers. Areas of the Proposed Project below the DFE would have flood protection measures in place to meet floodplain standards. Specifically, the parking structures would have wet floodproofing with flood vents; the ground floor commercial space, and areas for critical mechanical systems would include deployable flood barriers prior to flood events. Such spaces would have dry floodproofing with waterproof walls and floodproof barriers. Additionally, the building envelope would exceed energy code thermal requirements resulting in a reduced rate of heat loss in the winter and heat gain in the summer. This will

allow the building to retain habitable conditions during prolonged periods without power. In the event of a power outage, all buildings will have standby natural-gas emergency generators to provide backup power. In addition to providing emergency power systems for fire detection equipment, one elevator, exit signs, and means of egress lighting, generators will be sized to provide potable water throughout the building.

Therefore, the Proposed Project would be consistent with Policy 1.5.

#### Policy 5.1: Manage direct or indirect discharges to waterbodies.

The Proposed Project would not result in an increase in impervious surfaces. The adequacy of the water and sewer infrastructure would be determined in consultation with DEP. Required water and sewer infrastructure improvements will be identified in consultation with DEP and incorporated into the project design. As part of the State Pollutant Discharge Elimination System (SPDES) process, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared and would describe stormwater controls during and post-construction. Therefore, the Proposed Project would promote this policy. As described in Chapter 10, "Water and Sewer Infrastructure," DEP plans to install new 10" and 12" sanitary sewers scheduled for completion by August 2021 along Rockaway Beach Boulevard, and would allow additional sanitary sewer runoff rate would be reduced, and there would be no significant adverse impacts on stormwater conveyance infrastructure.

Therefore, the Proposed Project would be consistent with Policy 5.1.

# Policy 5.2: Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

Stormwater would be managed by utilizing one or a combination of detention and/or infiltration techniques identified in the NYC Green Infrastructure Plan. Green technologies, such as green subsurface detention and infiltration, and permeable surfaces would retain or release stormwater with slowed discharge rates to control peak run-off rates (see Chapter 10, "Water and Sewer Infrastructure").

Stormwater runoff from impermeable surfaces on the Project Site would be discharged through existing catch basins located along the perimeter of the Project Site along with additional engineering controls implemented to adequately account for storm events. Anticipated stormwater discharge from the Proposed Project varies depending on the rainfall volume and duration and would range between 0.09 to 0.57 million gallons. Stormwater detention tanks would be installed within the internal street network of the Project Site (Beach 52nd Street and Peninsula Way) as well as below grade beneath the buildings and within at-grade parking areas. The on-site detention tanks would discharge at a restricted flow to DEP storm sewers located to the north along Beach Channel Drive and south to stormwater sewers along Rockaway Beach Boulevard; the latter sewer is part of a planned capital improvement project set for completion by August 18<sup>th</sup>. 2021 to provided additional stormwater capacity. Roadway basins and roadway bioswales would also be implemented at the Project Site for further stormwater retention, connecting to DEP sewers at a restricted flow rate.

Permeable surfaces may include proposed raised planters made from cast-in-place concrete and precast pavers on gravel setting beds in pedestrian corridors that can be lifted, cleaned, and reset following a significant flood. On-site detention may take the form of roof detention, tanks in the parking area, and bioswales. Trees would be planted in conformance to City street tree requirement to capture and store water below an enhanced tree pit. Plant species would be selected that are salt water tolerant. In addition, all tree pits would be intended to provide a Silva Cell System to reduce the water run-off. As part of the SPDES process, a SWPPP would be prepared and identify stormwater controls during and post-construction.

Therefore, the Proposed Project would promote Policy 5.2.

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

See response to WRP Policy 6.2, below. The Proposed Project will employ comprehensive storm water strategies that are both structural and non-structural to address a coastal storm event. Buildings A though E of the Proposed Project (Block 15842, Lot 1 and Block 15843, Lot 1) is bound on all four sides by the existing NYC street grid, with roadway elevations ranging between 4.85 - 7.01 (NAVD 88). The proposed internal street network has been designed to raise as much of the site as possible out of the flood zone. while still complying with the Americans with Disabilities Act requirements for longitudinal slopes in nonramped areas (5% max). Building areas that are unable to be elevated out of the flood zone, will be wet- or dry-floodproofed in accordance with the NYC Building Code Appendix G "Flood-Resistant Construction" and ASCE 24 "Flood-Resistant Design and Construction". In addition to raising the site and floodproofing Buildings A through E, and in order to comply with DEP storm detention requirements: approximately 32,000 cubic-feet of roof detention and underground storage will be provided on-site to detain stormwater runoff. While sewers in the street will surge during a coastal flooding event, these detention systems represent a large volume of run-off that would be removed from the surface. In addition to stormwater detention, green spaces that will filter stormwater and lower the overall impervious footprint from the Project Site's existing conditions, have been incorporated into the design. In order to comply with DEP's pending MS-4 regulation, Buildings A through E will have green roofs on portions of the new buildings.

Building F of the Proposed Project (Block 15857 Lot 1) is bound on two sides by existing roadways between 5.21-6.40 (NAVD 88). The Proposed Project will be wet- or dry-floodproofed in accordance with the NYC Building Code Appendix G "Flood-Resistant Construction" and ASCE 24 "Flood-Resistant Design and Construction. In addition to floodproofing the building, and in order to comply with DEP storm detention requirements: approximately 925 cubic-feet of roof detention and underground storage will be provided to detain stormwater runoff. While sewers in the street will surcharge during a coastal flooding event, this volume of run-off would be removed from the surface. In order to comply with the DEP's pending MS-4 regulation, Building F1 will have a green roof on portions of the building.

Therefore, the Proposed Project would be consistent with Policy 6.1.

#### Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zones.

Guidance provided by DCP includes a detailed methodology to determine the consistency of project with Policy 6.2. This guidance identifies three basic steps to determine the consistency of a project with this policy: (1) identify vulnerabilities and consequences; (2) identify adaptive strategies; and (3) assess policy consistency. A summary of this process as applied the Proposed Project is provided in the following discussion.

1. Identify vulnerabilities and consequences

- 1(a). Complete the Flood Elevation Worksheet to identify current and future flood elevations in relation to the elevations of the site and project features.
- 1(b). Identify any project feature that may be located below the elevation of the 1-Percent Floodplain over the lifespan of the project under any sea level rise scenario.

For this assessment, building features are defined in one of four categories: (1) *vulnerable*: project features that have the potential to incur significant damage if flooded; (2) *critical*: project features that if damaged would have severe impacts on the project and its ability to function as designed; (3) *potentially hazardous*:

project features that if damaged or made unsecure by flooding could potentially adversely affect the health and safety of the public and the environment; and (4) *other*: project features that are entirely open and unenclosed spaces, except the open storage of potentially hazardous materials, which may be damaged by flooding, but are not likely to present significant consequences and are more easily repaired.

The Flood Elevation Worksheet was prepared for the Proposed Project and is provided in **Appendix B**. This tool identifies current and future flood elevations in relation to the elevations of the site and project features, presents a range of future flood elevations as affected by sea level rise, from high (90<sup>th</sup> percentile) to low (10<sup>th</sup> percentile), where <u>the</u> "high\_estimate" represents a high-end projected increase in flood elevation.

According to the NYC Panel on Climate Change (NPCC), sea level rise projections in the middle range (25th to 75th percentile) in NYC are likely to have an increase of 4 to 8 inches by the 2020s, 11 to 21 inches by the 2050s, 18 to 39 inches by the 2080s, and 22 to 50 inches by 2100. Under the "high estimate" scenario (90th percentile), sea level rise projections reach 10 inches by the 2020s, 30 inches by the 2050s, 58 inches by the 2080s, and 75 inches by 2100. Sea level rise projections are relative to a 2000-2004 base period (the most recent projections from the NPCC were issued in 2015). According to 2015 Preliminary Flood Insurance Rate Maps (FIRMs), the Project Site is located within the 1% annual chance flood hazard area, Zone AE (an area of high flood risk subject to inundation by the 1% annual chance flood event), with a BFE of +10 feet NAVD88 (see Figure 2-9: 2015 Floodplain Preliminary FIRM). Based on the NPCC "high estimate" scenario, the 1% annual chance flood BFE for the Project Site could increase up to 10.83 feet in the 2020s, 12.50 feet in the 2050s, 14.83 feet in the 2080s, and up to 16.25 feet by 2100 (NAVD88) as compounded by sea level rise projections (see Figure 2-9 through Figure 2-13 for floodplain projections). The Proposed Project buildings are anticipated to have a lifespan of about 50 years, or until 2084, when adaptive reuse in the form of major rehabilitation or reconstruction would be required. The proposed buildings and open space elements of the Proposed Project are evaluated for projected flood levels through 2100 (the farthest data projection currently available).



Source: Federal Emergency Management Agency 2015 Preliminary Flood Insurance Rate Map





Source: NYC Flood Hazard Mapper, NYCDP





Source: NYC Flood Hazard Mapper, NYCDP





Source: NYC Flood Hazard Mapper, NYCDP



Peninsula Hospital Site Redevelopment



Source: NYC Flood Hazard Mapper, NYCDP



### 1(c). Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.

Based on the range of sea level rise predictions described above, Mean Higher High Water (MHHW) at the National Oceanic and Atmospheric Administration (NOAA) Station nearest the Project Site (Beach Channel Station #8517137) could range up to 8.68 feet NAVD88 by 2100 under the "high estimate" (90th percentile) scenario. Current tidal and flood heights of the Beach Channel NOAA Station is 2.43 feet NAVD88, as adjusted for changes in sea level since the 1983-2001 tidal epoch. The BFE at the Project Site is 10 feet NAVD88 with the lowest elevation of the Project Site at 6 feet. As shown in Figure 2 14: Building Features and 1% Annual Chance Flood Elevations, vulnerable features of the Proposed Project that would be located below the current 1% annual chance flood elevation includes the local retail distributed across the Project Site, the community facility space programmed on sub-section C, the publicly-accessibly open space, and the enclosed, underground garages located on all sub-sections of the Project Site. These features would be vulnerable to sea level rise under current conditions and for all future sea level rise scenarios until 2100. The lowest floor of residences (a vulnerable feature) of the Proposed Project, along with the lowest possible elevation for the critical mechanical systems (a critical feature) however, would be located above the current 1% annual chance flood elevation, as well as above the 1% annual chance flood evaluation for all future sea level rise scenarios until 2100, the farthest time horizon for which these projections are available.

Potential consequences of the publicly-accessible open space being located within the current and future 1% Annual Chance Floodplain include flood damage to paving materials and plantings, and interruption to public access.

Potential consequences of parking, retail space, and community facility space located with the current and future 1% annual chance flood elevation include flood damage to property, cars, and building structure/ loss of inventory, or potentially increased flood insurance costs.

### 1(d). Describe how any additional coastal hazards are likely to affect the project, both currently in the future, such as waves, high winds, or debris.

Since the Project Site is located within Zone AE, it currently and would continue to be at risk for inundation from 1% annual chance flood events. However, wave action hazards (i.e. Zone VE or Coastal A Zone) have not been designated for the Project Site. Therefore, storm impacts due to waves, high winds, or debris would not be expected to affect the project features. No hazardous features would be located below the elevation of <u>MHHW</u> over the lifespan of the Proposed Project under any sea level rise scenario.

#### 2. Identify adaptive strategies.

#### 2(a). For any features identified in Step 1(b), identify adaptive strategies:

The Proposed Project is not designed with any residential units or critical mechanical features located below the current <u>or</u> future (until 2100) 1% annual chance flood elevation. However, there would be vulnerable features, including <u>commercial</u> retail, community facility, parking, and publicly-accessible open space located below the 1% annual chance flood elevation.\_All spaces, except for parking and storage, with frontage below the 1% annual chance flood elevation would be protected by removable flood barriers, which would consist of permanent brackets installed on the facades and gates that are dropped in <u>prior to an</u> anticipated <u>storm event</u>. In addition to the flood barriers, emergency flood egress stairs <u>would</u> be located in all dry floodproof areas, which would rise to a level above the 1% annual chance flood panels will be stored on the Project Site and the stairs act as permanent fixtures within the Proposed Project buildings. The Proposed Project would also incorporate flood damage resistant materials and vents to allow vulnerable features below the 1% annual chance flood elevation to flood without experiencing significant damage. For example, the perimeter walls of the dry floodproof spaces would be poured in place with

reinforced concrete and a waterproofing system that would wrap from the slab, around the footing and up to the exterior wall to the DFE and connect to the exterior wall waterproofing system that would continue up the building. <u>Furthermore, central to the design of the Proposed Project are two new, sloping publicly-accessible streets that intersect at the core of the development at a raised elevation of three feet above the DFE, or 14 feet NAVD88, to serve as an evacuation meeting ground for Project Site occupants in the event of a flood.</u>

Low elevation features of the Proposed Project, such as the ground floor commercial space, ground floor community facility space, open space areas, parking structures, and surface parking areas are projected to be below the elevation of the "high estimate" MHHW scenario (90th percentile) by year 2080 when daily tidal floodwater levels are projected to reach 7.26 feet NAVD88 as compounded by projected sea level rise (see Figure 2-15: Future High Tide with Sea Level Rise for the 2080s). Active ground floor spaces would be located at 6 feet NAVD88 for commercial, publicly-accessible open space uses, and surface and enclosed parking, and at 7 feet NAVD88 for community facility use. Critical maintenance systems and habitable residential space for the buildings would be located at or above the elevation of the "high estimate" MHHW scenario (90th percentile) at a base elevation of 11 feet and 21 feet, respectively (NAVD88). The Climate Resiliency Guidelines developed by the Mayor's Office of Recovery and Resiliency recommend designing adaptive strategies for a proposed project with features below the projected elevation of the "middle range estimate" MHHW (50th percentile) scenario and sea level rise combined, over a project's anticipated useful life. The MHHW compounded by the effects of sea level rise in the 50<sup>th</sup> percentile scenario at the Project Site is projected to be 4.85 feet NAVD88 by year 2080, to which the ground floor elevation of vulnerable features exceed the projections for daily tidal flooding, including retail space, structured parking, and surface parking areas, which would be located at an elevation of 6 feet NAVD88, as well as community facility space which would be located at an elevation of 7 feet NAVD88. As noted above, the 90th percentile MHHW projection at the Project Site is projected to be 7.26 feet NAVD8 by year 2080, which represents a high range estimate of anticipated daily tidal flooding, or nuisance flooding, to exceed the elevation of ground floor level project features. The future MHHW scenarios by year 2080 would occur as the Proposed Project is nearing the end of its useful life, as described in Section 1(b). Any major rehabilitation or redevelopment at that time will conform to NYC Building Code regulations, including applicable resiliency measures based on future projections for MHHW.

While the Project Site will consider adaptive reuse strategies for projected tidal flooding in 2080, such strategies must be considered in the wider regional context and resiliency plans for the future beginning at the federal level with the United States Army Corp of of Engineers (USACE). The Project Site would benefit from regional coastal flood protection strategies that are currently being analyzed. These include the release of the USACE Integrated Hurricane Sandy General Reevaluation Report and Environmental Impact Statement final report, issued May 2019, which examined the coastal storm risk management problems and opportunities for the Rockaway Beach shoreline which encompasses the Project Site. The East Rockaway Inlet to Rockaway Inlet, and Jamaica Bay study area detailed in the USACE final report has experienced coastal storms and hurricanes with varying degrees of severity to warrant infrastructure and service recovery, as well as beach nourishment efforts aimed to improve the resiliency of coastal areas through a combination of retrofit adaptive strategies and design, as well as the enhancement of natural storm surge buffers. The plan includes implementation of broad coastal protection measures such as reinforced dunes, new and rehabilitated groins, and high frequency flood risk reduction features for areas along the shoreline to reduce vulnerabilities and enhance the adaptive capacity of surrounding neighborhoods from future flood events. The planning objectives identified in the USACE final report are intended to span a 50-year period of analysis, from 2020 to 2070. Site-specific measures would rely on the implementation of best practices and technology available at that time, which would consider the options of relocating vulnerable features within the Project Site, such as moving community facility spaces to higher elevation, and/or the consideration of implementation of a passive barrier strategy to protect vulnerable features that cannot be feasibly relocated to higher elevation.

2(b). Describe any additional measures being taken to protect the project from additional coastal hazards such as waves, high winds, or debris.

As described in Chapter 14, "Greenhouse Gas Emissions and Climate Change," the Proposed Project would comply with all local codes, including the 2014 NYC Building Code (or updated current version), and specifically with Appendix G (Flood-resistant <u>Construction</u>). As previously described, additional measures have been incorporated into the planning and design of the Proposed Project to ensure long-term resiliency to climate change and sea level rise in the City's Coastal Zone.

In addition, all landscaping materials for the Proposed Project would be selected with the understanding that coastal flooding is likely to occur on the Project Site within the life span of those materials. The proposed raised planters in the sidewalk would be cast-in-place concrete. Precast pavers proposed in the pedestrian corridor are on a gravel setting bed. These pavers can be lifted, cleaned, and reset following a significant flood. All plant species would be selected that are <u>saltwater</u> tolerance. In addition, tree pits are intended to provide a Silva Cell System to reduce the water run-off. All landscape lighting would be pole-mounted to raise fixtures out of flood zone, except at the high point intersection of the two new sloping streets, which would not be located in the flood zone.

2(c). Describe how the project would affect the flood protection of adjacent sites, if relevant. How would the project lead to increased flooding on adjacent sites? How would the project protect upland sites from coastal hazards? Does the project complement or conflict with planned, adjacent flood protection projects?

Because the floodplain within NYC is controlled by astronomic tide and meteorological forces (e.g., nor'easters and hurricanes) and not by fluvial flooding, the proposed modifications would not have the potential to adversely affect the floodplain or result in increased coastal flooding at adjacent sites or within the study area. Although the Proposed Project would result in a change in elevation of the Project Site, the proposed modifications would not encroach into adjacent areas. During and following construction, activities at the Project Site would be completed in accordance with applicable stormwater regulations. Therefore, the construction and operation of the Proposed Project would not exacerbate future projected flooding conditions on adjacent sites. <u>Through the implementation of adaptive actions which will mitigate and enhance the resiliency of the Project Site from flood events,</u> the Proposed Project <u>will compliment</u> adjacent flood protection projects.

3. Assess policy consistency

Based on this information, the Proposed Project would promote Policy 6.2. As described above, vulnerable and critical Proposed Project building features within the 1% annual chance flood would be protected from flood water damage with the implementation of adaptive strategies such as wet and dry floodproofing measures and incorporation of flood damage resistant materials and vents. Vulnerable project features below the projected elevation of the future "high estimate" of MHHW combined with projected sea level rise would be made resilient through the implementation of site-specific adaptive strategies such as vertical retreat, for project features that can feasibly be relocated, and implementation of a permanent flood wall, for project features that cannot feasibly be relocated to higher elevation. Furthermore, the Proposed Project will benefit from broader coastal protection plans for the Rockway Beach shoreline.



ALL EVELATIONS SHOWN ARE NAVD88 FUTURE 1% ANNUAL CHANCE FLOOD ELEVATIONS SHOWN ARE THE HIGH-RANGE 90TH PERCENTILE





Source: NYC Future High Tide With Sea Level Rise, DCP, January 2015 Data

**Project Site** 

2080s Mean Higher High Water (10th Percentile)
2080s Mean Higher High Water (25th Percentile)
2080s Mean Higher High Water (50th Percentile)
2080s Mean Higher High Water (75th Percentile)
2080s Mean Higher High Water (90th Percentile)

### FUTURE HIGH TIDE WITH SEA LEVEL RISE FOR THE 2080s

Figure 2-15