Chapter 4:

Open Space

A. INTRODUCTION

This chapter assesses the potential impact of the Proposed Actions on open space resources surrounding the Industry City Project Area. Open space is defined by the 2014 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, sport, or serves to protect and enhance the natural environment. *CEQR Technical Manual* guidelines indicate that an open space analysis should be conducted if an action would result in a direct effect, such as the physical loss or alteration of public open space, or an indirect effect, such as when a substantial new population could place added demand on an area's open spaces.

The Density-Dependent Scenario was conservatively chosen for analysis in the open space assessment, as this scenario would introduce 8,010 additional non-residents to the study area in comparison with 7,460 additional non-residents in the Baseline Scenario and 7,430 additional non-residents in the Overbuild Scenario. Thus, the Density-Dependent Scenario would respectfully introduce 550 and 580 more non-residents to the study area than the Baseline and Overbuild scenarios. The Proposed Actions under the Density-Dependent Scenario would facilitate new development and re-tenanting of existing buildings, resulting in an increment of approximately 700,000 sf of retail space, 33,003 sf of event space, 1,509,380 sf of Innovation Economy uses, 287,000 sf (420 rooms) of hotel uses, 627,674 sf of academic and community facility uses, 61,172 sf of vertical circulation/mechanical space, and 928 to 1,283 accessory parking spaces over the No Action condition. The Density-Dependent Scenario also would result in approximately 1,707,558 sf less of storage/warehousing space. The size of the Brooklyn Nets Training Facility would be the same with and without the Proposed Actions.

The Proposed Project would substantially increase the non-residential population in the area. Therefore, in accordance with *CEQR Technical Manual* guidelines, an open space assessment was conducted to determine whether the Proposed Project would result in any significant adverse indirect open space impacts.

PRINCIPAL CONCLUSIONS

This analysis of publicly accessible open space found that the Proposed Project would not result in a significant adverse impact. The Proposed Project would not result in the physical loss or alteration of existing public open space resources and would not introduce a new residential population. The Proposed Project would, however, exceed the *CEQR Technical Manual* threshold for an assessment of the indirect impacts resulting from additional non-residents introduced into the area by the Proposed Project, which is 500 employees in an area considered neither well-served nor under-served.

The open space within the study area (based on Census Tracts with at least 50 percent of their area within a ¹/₄-mile radius of the Project Area) currently exceeds New York City's planning goals for

open space. According to the *CEQR Technical Manual*, a ratio of 0.15 acres of passive open space per 1,000 non-residents is considered an optimal benchmark.

The CEQR Technical Manual indicates that a decrease in the open space ratio of 5 percent or more is generally considered significant, although for areas that are extremely lacking in open space, a decrease as small as 1 percent may be considered significant. The Proposed Project would result in a decrease in the passive open space ratio of more than 5 percent compared to the No Action condition. However, the passive open space ratio would remain at approximately three times above the City's guideline. Additionally, two of the three open space resources in the study area currently have low utilization. There are also several additional open space resources just outside the study area that would be readily accessible to non-residents in the study area. In addition, the Project Area includes the Industry City Courtyards as outdoor spaces accessible to Industry City non-residents and visitors. The Courtyards provide 2.0 acres of entirely passive space for the current and new non-residents anticipated in the With Action condition. The additional open space resources just outside of the study area and the Courtvards would further reduce the burden on open space resources. Therefore, the Proposed Project would not be expected to place a substantial burden on open space resources and would not result in any significant adverse impacts on open space resources in the study area. Further, as described in Chapter 5, "Shadows," the Proposed Project would not result in any significant adverse shadow impacts on open spaces.

B. METHODOLOGY

STUDY AREA

The *CEQR Technical Manual* recommends establishing a study area or areas as the first step in an open space assessment. The study areas are based on the distances that the respective users—workers (or non-residents) and residents—are likely to walk to an open space. According to the *CEQR Technical Manual*, workers typically use passive open spaces and are assumed to walk approximately 10 minutes, or ¼-mile from their place of work to an open space. Residents are assumed to walk approximately 20 minutes, or ½-mile to an open space, to reach both passive and active open spaces.

The Proposed Project would not include any new residential units; therefore, a residential open space assessment was not warranted. However, the Proposed Project is expected to result in new commercial and community facility development that would introduce a new non-residential population to the area. The Proposed Project would introduce new non-residential population above the 500-worker threshold described in the *CEQR Technical Manual* for areas considered to be neither well-served nor under-served. According to the *CEQR Technical Manual*, the Proposed Project is located in an area that is considered neither well-served nor underserved by open space resources. Therefore, the effect on the Proposed Project on open spaces was analyzed following *CEQR Technical Manual* guidelines.

The non-residential open space study area comprises all Census Tracts with at least 50 percent of their area within a ¹/₄-mile of the Project Area. As shown in **Figure 4-1**, the ¹/₄-mile study area includes the area within Census Tracts 2, 18, and 84.¹ These three Census Tracts cover an area bounded approximately by Hamilton Avenue to the north, 3rd and 5th Avenues to the east, the Belt Parkway to the south, and Upper New York Bay to the west (see **Figure 4-1**). These Census Tracts are mapped within Brooklyn Community District 7.

¹ 2010 U.S. Census





1/4-mile boundary

Census Tracts

Open Space Study Area

Open Space Resource

STUDY AREA POPULATION

EXISTING CONDITIONS

Information regarding the existing worker population within the non-residential study area was compiled based on data from ESRI Business Analyst, a national provider of geographic planning data.

INVENTORY OF OPEN SPACE RESOURCES

Publicly accessible open spaces and recreational facilities within the study area were inventoried to determine their size, character, utilization, and condition. In accordance with the *CEQR Technical Manual*, publicly accessible open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts using both a quantitative and a qualitative analysis, whereas private open space is not accessible to the general public on a regular basis and is considered qualitatively. Open spaces that are not accessible to the general public or that do not offer usable recreational areas were excluded from the survey. Information on the size of the open spaces was obtained from the New York City Department of Parks and Recreation (NYC Parks) and using Geographic Information System (GIS) measurements. The amenities, condition, and utilization of the resources was determined through field surveys conducted during working hours in November 2017.

At each open space, active and passive recreational spaces were noted. Active open space acreage is used for activities such as jogging, field sports, and children's active play. Passive open space usage includes activities such as strolling, reading, lounging, and people-watching. Some spaces, such as lawns and public esplanades, can be considered both active and passive recreation areas since they can be used for passive uses such as sitting or strolling, as well as active uses, such as jogging. For the purpose of this analysis, special attention was paid to the passive open space resources in the study area, as non-residential users are unlikely to participate in activities that require active space during the day. Based on the methodology in the *CEQR Technical Manual*, the utilization level at each facility was determined based on observations of the amount of open space or equipment seen to be in use. Open spaces with less than 25 percent of space or equipment in use were categorized as low usage; those with 25 to 75 percent utilization were classified as moderate usage; and those with over 75 percent utilization were considered to have heavy usage.

ADEQUACY OF OPEN SPACE RESOURCES

COMPARISON TO GUIDELINES

The adequacy of open space in the study area is quantitatively assessed using a ratio of usable open space acreage to the study area population—referred to as the open space ratio. To assess the adequacy of open space resources, open space ratios are compared with planning goals set by the City as described in the *CEQR Technical Manual*. Although these open space ratios are not meant to determine whether a proposed project might have a significant adverse impact on open space resources, they are helpful guidelines in understanding the extent to which user populations are served by open space resources. For non-residential populations, 0.15 acres of passive open space per 1,000 non-residents is typically considered adequate.

IMPACT ASSESSMENT

Impact assessment is both quantitative and qualitative. The quantitative impact assessment considers how a project would change the open space ratios in the study area. According to the *CEQR Technical Manual*, an open space ratio decrease is generally considered to be a substantial

change, warranting a detailed analysis, if it would approach or exceed 5 percent. If a study area exhibits a low open space ratio, indicating a shortfall of open space, smaller decreases in that ratio as a result of the action may constitute significant adverse impacts. The qualitative impact assessment considers nearby destination resources and open space created by a project not available to the general public. It is recognized that the City's open space goals are not feasible for many areas, and quantitative measurements are not considered impact thresholds on their own. Rather, these are benchmarks that indicate how well an area is served by open space. The *CEQR Technical Manual* indicates that a significant adverse impact may result if a project would reduce the open space ratio of 1.5 acres per 1,000 residents or by as little as 1 percent in areas that are determined to be extremely lacking in open space.

C. EXISTING CONDITIONS

STUDY AREA NON-RESIDENTIAL POPULATION

Based on the data compiled from ESRI Business Analyst, the three Census Tracts in the open space study area (Census Tracts 2, 18, and 84) contain 1,295 businesses employing 14,066 people (see **Table 4-1**).

Existing Non-Residen	tial Population within the Study Area
Census Tract	Non-Residential Population
2	2,349
18	9,267
84	2,450
Total	14,066
Source: ESRI Business Analyst	

 Table 4-1

 Existing Non-Residential Population within the Study Area

 Concurrent

 Non Residential Population

STUDY AREA OPEN SPACE RESOURCES

As shown in **Table 4-2** and **Figure 4-1**, there are three open space resources located within the non-residential study area. The largest open space resource, Bush Terminal Park, is a park recently opened on a former landfill site adjacent to Upper New York Bay. The park contains 21.6 acres of open space split between active and passive uses. Features include walking paths, benches, an accessible rock jetty extending into Upper New York Bay, tidal pools, restored wetlands, a bike path, soccer and baseball fields, water fountains, bike racks, and extensive night lighting. Several of these features are very desirable for passive recreation usage. The park is currently in excellent condition and has low utilization.

Мар			Owner/		Total	Active	Passive		
No.	Name	Location	Agency	Amenities	Acres	Acres	Acres	Condition	Utilizatio
1	Bush Terminal Park	Marginal Street between 44th Street and 50th Street	EDC/NYC Parks	Paths, benches, rock jetty, bike path, soccer and baseball fields, comfort stations, water fountains, bike racks, tidal pools, restored wetlands, night lighting	21.60	10.80	10.80	Excellent	Low
2	Sunset Park Entrance to Green-Wood Cemetery	4th Avenue between 34th and 36th Streets	Green-Wood Cemetery	Walking paths, landscaping, tombstones	2.67	0	2.67	Adequate	Low
3	D'Emic Playground	3rd Avenue between 34th and 35th Streets	NYC Parks	Playground equipment, seating area with benches, chess tables, water fountains, hopscotch, swings, basketball and handball courts, spray showers	1.13	0.85	0.28	Adequate	Heavy
		Tota	ls	· · · ·	25.40	11.65	13.75		
lotes									

Table 4-2 Inventory of Publicly Accessible Open Space in the Study Area

The acreage of the Sunset Park Entrance to Green-Wood Cemetery does not include the Cemetery maintenance yard, which is not a publicly accessible portion of this resource.

Sources: NYC Parks; Field Surveys, November 2017; MapPLUTO

The Sunset Park Entrance to Green-Wood Cemetery is the second largest open space resource in the study area. This 2.67-acre section is entirely passive in nature, and features an ornate entrance, walking paths, landscaping, and tombstones. There is also a maintenance yard for the cemetery, the acreage of which has not been included as part of the quantitative assessment, as it is located behind a fence and is not intended to be a publicly accessible portion of this open space resource. The publicly accessible section of the Sunset Park Entrance to the cemetery also features a decorative underpass below 5th Avenue into the main section of the cemetery, located just outside of the study area. The Sunset Park Entrance to Green-Wood Cemetery is currently in adequate condition and has low utilization.

The third open space resource in the study area is D'Emic Playground, a 1.13-acre playground containing primarily active recreational uses such as playground equipment, spray showers, hopscotch, swings, basketball courts, handball courts, water fountains, and spray showers. However, there are some areas in the playground intended for passive uses, featuring a seating area with benches and chess tables. D'Emic Playground is currently in adequate condition and has heavy utilization.

ADEQUACY OF OPEN SPACE RESOURCES

QUANTITATIVE ASSESSMENT

As described above, this analysis focuses on passive open space resources as these are the resources that non-residents would be most likely to use. To assess the adequacy of the open space resources in the study area, the ratio of non-residents to acres of passive open space is compared with the City's planning goal of 0.15 acres of passive open space per 1,000 non-residents. The open space study area has an existing ratio of 0.978 acres of passive open space per 1,000 non-residents, which is above the City's planning goal (see **Table 4-3**).

Table 4-3

			Existing	g Condit	tions: A	dequa	cy of Op	<u>pen Spa</u>	ice Res	sources
		Onen	Smaan Ar			•	tios per	Onen	Snoos	Casla
		Open a	Space Ad	reage	1,0	000 Peoj	bie	Open	Space	Goals
Total Population		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Non-Residents 14,066 25.40 11.65 13.75 1.806 0.828 0.978 2.5 2.0 0.15										
Notes: Ratios in acres per 1,000 people.										
The City's open space ratio goals for total and active open spaces are not applicable to the Proposed										
Project under CEQR Technical Manual methodology, as the project would only be introducing a non-										
residential popu	atio	n to the st	tudy area							
Sources: NYC Parks	s; Fi	eld Surve	ys, Nover	mber 2017	7; MapPL	UTO				

QUALITATIVE ASSESSMENT

The four existing open space resources in the study area incorporate several passive features, such as benches, dining areas, and walking pathways and are generally in good condition. Two of the resources also have low utilization. These factors make the existing open space resources in the study area well-suited to providing passive recreation opportunities for existing non-resident population in the study area.

There are also several additional open space resources outside the study area (beyond Census Tracts 2, 18, and 84) that are either within a ¹/₄-mile of the Project Area or are just beyond a ¹/₄-mile and would be readily accessible by non-residents of the study area (see **Figure 4-1**). These open spaces include a large park, two playgrounds, and the Green-Wood Cemetery area beyond the entrance included in the quantitative analysis, as well as courtyards located at Industry City. All include passive spaces that non-residents in the study area may utilize (see **Table 4-4**).

		l Open Space Reso				
Map No.	Name	Location	Owner/Agency			
А	Gonzalo Plasencia Playground	3rd Avenue between 40th and 41st Streets	NYC Parks			
В	P.S. 172 Beacon School of Excellence Schoolyard to Playground	4th Avenue between 29th and 30th Streets	DOE/NYC Parks			
С	Green-Wood Cemetery	5th Avenue between 24th and 36th Streets	Green-Wood Cemetery			
D Sunset Park 5th and 7th Avenues between 41st and NYC Parks 44th Streets						
Е	Industry City Courtyards	2nd Avenue between 34th and 37th Streets	Industry City			
P.S. 172 B Playgr non-so	e 4-1 for a map of additional of leacon School of Excellence i rounds program, under which chool hours. NYC Parks; Field Surveys, No	s a participant in the Sc schoolyards are open to	o the public during			

Additional Open Space Resources Considered				I able 4-4
	Additiona	l Open Space	Resources	Considered

Gonzalo Plasencia Playground is a playground that is not located within the open space study area but is within a ¹/₄-mile of the Project Area (approximately 1,000 feet to the south). Gonzalo Plasencia Playground is mostly active in nature, but contains some passive features such as a seating area with benches and chess tables. The playground is in good condition and has heavy utilization.

The Public School (P.S.) 172 Beacon School of Excellence schoolyard is participating in the PlaNYC Schoolyards to Playgrounds program, under which schoolyards are opened to the public during non-school hours. The schoolyard is located within a 1/4-mile of the Project Area (approximately 1,150 feet to the east) and is open to the public every day from 8 am to dusk when school is not in session. Though primarily active in nature, this open space features benches for passive use. The schoolyard is in good condition and has moderate utilization.

Green-Wood Cemetery is a large, 478-acre cemetery first opened in 1838 when the area was still rural in nature. Green-Wood Cemetery, a National Historic Landmark, is known for its hills, valleys, glacial ponds and paths, as well as being the burial ground of numerous famous people. Though a small portion of the Cemetery (the Sunset Park Entrance) is located within the study area and has been included as part of the quantitative assessment, the vast majority of this large open space resource is located outside of the study area, approximately 1,500 feet to the southeast of the Project Area. The Cemetery is entirely passive in nature, and includes features such as undulating pathways, extensive landscaping, ponds, and mausoleums well suited for passive recreation. It is in good condition and has low utilization.

Sunset Park is a large public park located approximately 2,000 feet to the south of the Project Area, just beyond a ¹/₄-mile. The park is evenly divided between active and passive uses and contains passive features such as benches, dog-friendly areas, Wi-Fi hotspots, eateries, and walking paths, as well as active features such as basketball and handball courts, playground equipment, spray showers, a recreation center, and an outdoor pool. Sunset Park also features impressive views of Upper New York Bay and the Lower Manhattan skyline, further increasing

its attraction as a passive open space resource. The park is in good condition and has moderate utilization.

The Industry City courtyards are not considered publicly accessible as they are reserved for onsite workers and visitors to Industry City, and therefore have only been considered in the qualitative analysis. The courtyards are within the Project Area, located between Industry City Buildings 1 and 2, 3 and 4, and 5 and 6. The Industry City Courtyards total 2.0 acres of entirely passive outdoor space, featuring benches, tables, chairs, food kiosks, sunken dining areas, pathways, planted areas, statues, and a stage. The Courtyards are currently in excellent condition and have low utilization.

D. THE FUTURE WITHOUT THE PROPOSED ACTIONS

STUDY AREA NON-RESIDENTIAL POPULATION

PROJECT AREA

As described in Chapter 1, in the No Action condition, it is expected that no new development would take place within the Directly Affected Area; however, it is anticipated that that approximately 140,000 gsf of the currently vacant space within the existing building stock at Industry City would be re-occupied by Innovation Economy, storage/warehousing, or retail uses. This development would add approximately 1,160 additional non-residents to the Project Area in the No Action condition compared to existing conditions.²

STUDY AREA

<u>FiveFour</u> development projects within the study area are currently planned or underway, and are expected to introduce new non-residents by 2027, the Proposed Project's build year. The locations of these projects are shown in Figure 2-57 of Chapter 2, "Land Use, Zoning, and Public Policy." As shown on **Table 4-5**, the independent No Action condition projects within the study area are expected to introduce a total of 7601,010 additional non-residents to the study area by 2027.

Under the No Action condition, the addition of non-residents within the Project Area (1,160), and the non-residents from additional No Action projects (7601,010) in the study area expected to be completed by 2027, the non-residential population within the study area is expected to increase to 15,98616,236.

STUDY AREA OPEN SPACE RESOURCES

In the No Action condition, the New York City Department of Transportation (DOT) has plans for a bike path along 2nd Avenue that would run adjacent to the Project Area and through the study area. The proposed bike path is part of the larger Brooklyn Waterfront Greenway, which is an initiative to provide a bike connection from Greenpoint to Bay Ridge. The initiative is comprised of a number of capital projects, one of which is the DOT Sunset Park North Brooklyn Waterfront Greenway project. The portion of the Sunset Park North Brooklyn Waterfront Greenway project within the study area will run along 2nd Avenue between 29th and 39th Streets, and will widen the west sidewalk to incorporate a two-way bike path alongside a wider pedestrian sidewalk. The quantitative analysis does not assume any increase in open space acreage in the study area as a result of this initiative. Therefore, the total acreage of open space resources within

² The number of additional non-residents that would be added in the No Action condition was determined using data from HR&A.

the study area would remain at 25.40 in the No Action condition, with 11.65 acres of active open space and 13.75 acres of passive open space.

	Table 4-5
No Action Condition: Population from Additiona	ıl Projects
in the S	tudy Area

Map Ref. No. ¹	Project Address	Development Program	Additional Non- Residents ²
1	Moore McCormack (EDC)	60,000 sf of industrial space	60
2	South Brooklyn Marine Terminal (EDC)	Expanded maritime and industrial uses ³ <u>Redevelopment as Equinor</u> offshore wind farm support facility ³	9<u>250</u>
3	NY Campus at Bush Terminal (EDC)	200,000 sf of industrial space	200
5	Brooklyn Army Terminal (EDC)	500,000 sf of industrial space	500
	Total		760<u>1010</u>

Notes:

¹ See <u>Chapter 2, Figure 4-2-7</u>.

² Based on estimates of 1 worker per 1,000 sf of industrial space.

³ The South Brooklyn Marine Terminal (SBMT) is expected to expand maritime and industrial uses, specifically the Sims Recycling Facility. However, it is not anticipated to introduce a significant number of new workers. be redeveloped as an offshore wind farm support facility. Employment at the facility is reported to be approximately 500 people, however, it is assumed that this would be split over two shifts. Therefore, no more than 250 people are assumed to be working at the site at any time. Sources: DCP; NYC Department of Buildings; YIMBY News; Politico

ADEQUACY OF OPEN SPACE RESOURCES

As shown on **Table 4-6**, with a total non-residential population of $\frac{15,98616,236}{16,236}$ and 13.75 acres of passive open space, the passive open space ratio within the study area would decrease to $\frac{0.8600.847}{0.847}$ acres per 1,000 non-residents in the future without the Proposed Actions. Therefore, it would remain above the City's planning goal of 0.15 acres of passive open space per 1,000 non-residents.

Table 4-6

No A	Action	Condition:	Adequac	y of Open	Space	Resources

	Open Space Acreage 1,000 People Open Space Goals									
Total Popul	ation	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
			Non-R	esidential (¼-Mile) S	tudy Are	a			
Non-Residents 15,986 16,236 25.4 11.65 13.75 1.589 1.564 0.729 0.717 0.860 0.847 2.5 2.0 0.15										
The City's open under CEQ population t	Instant Instant <thinstant< th=""> Instant</thinstant<>									
Sources: NYC	Parks; Fie	eld Surve	ys, Nove	mber 2017;	MapPLU [*]	TO.				

E. THE FUTURE WITH THE PROPOSED ACTIONS

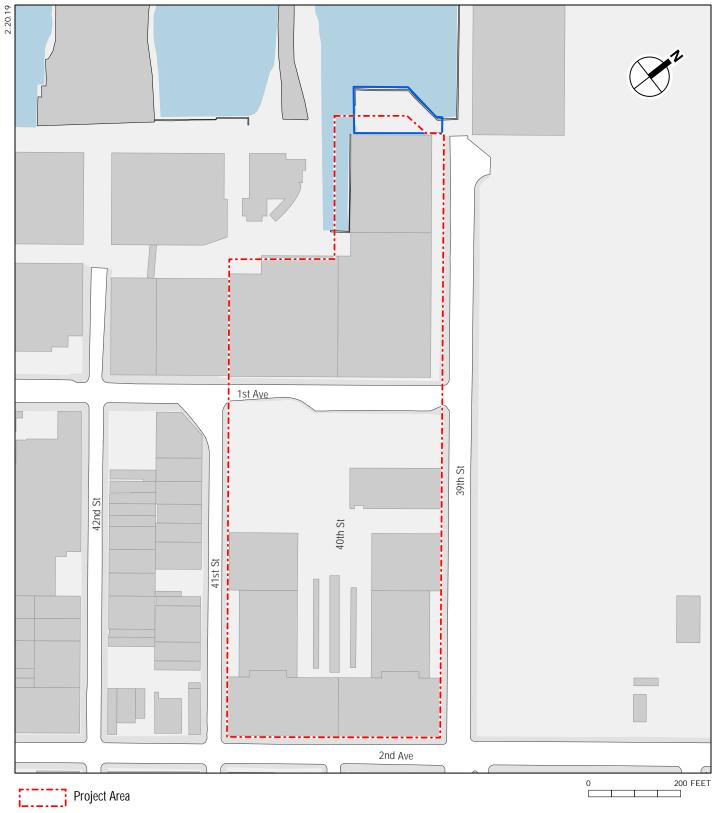
STUDY AREA NON-RESIDENTIAL POPULATION

The Proposed Actions would facilitate the development of new commercial, Innovation Economy, community facility, hotel, and parking garage spaces and the reduction of the amount of warehousing, vacant, and accessory parking lot spaces within the Project Area. This analysis was conservatively conducted using the Density-Dependent Scenario, which would add more non-residents to the study area than either the Baseline Scenario or the Overbuild Scenario. Under the Density-Dependent Scenario, the Proposed Project would add an increment of approximately 700,000 sf of retail and restaurant uses, 33,003 sf of event space, 1,509,380 sf of Innovation Economy uses, 287,000 sf (420) rooms of hotel uses, 627,674 sf of community facility uses, 61,172 sf of vertical circulation/mechanical space and shared lobbies, and 928 to 1283 accessory parking spaces. The Proposed Project would reduce storage/warehousing space by 1,707,558 sf and vacant and unimproved spaces by 679,960 sf. The size of the Brooklyn Nets Training Facility would be the same with and without the Proposed Actions.

The Proposed Project is anticipated to introduce approximately 8,010 additional workers and 5,021 additional students to the study area compared to the No Action condition. This would increase the total number of non-residents in the study area to approximately $\frac{29,01729,267}{29,267}$ in the future with the Proposed Actions.

STUDY AREA OPEN SPACE RESOURCES

There is the potential for the Proposed Project to introduce a new open space resource within the Project Area. This space is conceptual, and is not included in the quantitative analysis due to its uncertain status in the future and the potential for additional required discretionary approvals, which are separate from the Proposed Project. The proposed special permit would establish a public access area requirement specifically tailored to the portion of the special district adjacent to Building 24 in conjunction with the development, enlargement, or change of use of this building that is now predominantly industrial (UG 16, 17, or 18). In the event Building 24 is converted to a use that is not predominantly industrial and the Industry-City-owned portion of the waterfront apron adjacent to Building 24 is combined with the New-York-City-owned portion of the waterfront apron, a public access area would need to be developed and opened to the public on such waterfront apron. While the applicant has not stated an intention to acquire the portion of the City-owned lot, should this occur, development of a publicly accessible open space that includes the portion of the City-owned lot would require additional discretionary approvals by the City Planning Commission and could result in the development of approximately 16,100 sf of publicly accessible open space (see Figure 4-2). The new open space would likely be passive in nature, similar to waterfront esplanades in other portions of the city, and could contain features such as benches and pathways. However, since there is currently no plan to convert Building 24 to a nonpredominantly industrial use or to combine the Industry City and City-owned portions of the waterfront apron, for the purposes of a conservative analysis, the provision of public open space in this area has not been assumed as part of the quantitative analysis. In addition, there is the potential that in the With Action condition the portion of the Brooklyn Waterfront Greenway that will be built in the study area in the No Action condition could be extended through Building 25 of Industry City so as to connect to rest of the Bush Terminal complex to the south. The quantitative analysis does not assume any increase in open space acreage in the study area related to the Brooklyn Waterfront Greenway initiative.



Potential Public Access Area

Therefore, the total acreage of open space resources within the study area would remain at 25.40, with 11.65 acres of active open space and 13.75 acres of passive open space.

ADEQUACY OF OPEN SPACE RESOURCES

QUANTITATIVE ASSESSMENT

As shown on **Tables 4-7 and 4-8**, with a total non-residential population of $\frac{29,017}{29,267}$ and 13.75 acres of passive open space, the passive open space ratio within the study area would decrease in the With Action condition compared with the No Action condition by approximately 45 percent. However, the With Action condition passive open space ratio of $\frac{0.4740.470}{0.470}$ would remain well above the City's planning goal of 0.15 acres of passive open space per 1,000 non-residents.

Table 4-7

		Open	Space Ac	reage	-	opace Ra	atios per	Oper	Space	Goals
Total Popula	ation	Total	Active	Passive			Passive	Total	· · · · · · · · · · · · · · · · · · ·	Passive
•	<u> </u>		Non-Res	idential (1/	₄-Mile) St	tudy Are	а			
	29,017				0.875	0.401	0.474			
Non-Residents 29,267 25.4 11.65 13.75 0.868 0.398 0.470 2.5 2.0 0.15										
Notes: Ratios in The City's open under CEQ/ population t Sources: NYC F	space rat R <i>Technic</i> o the stud	tio goals fo c <i>al Manua</i> dy area.	or total and / methodo	logy, as the	e project	would on				

Density-Dependent Scenario: Adequacy of Open Space Resources

Passive Open Space Ratios Summary			Table 4-8
I assive Open Space Ratios Summary	Passive Open Sp	pace Ratios	Summary

Ratio	City Goal (acres per 1,000 non-residents)	No Action Condition	With Action Condition	Percent Change
Passive	0.15	<u>0.8600.847</u>	<u>0.4740.470</u>	<u>-45-44.51</u> %

The *CEQR Technical Manual* indicates that a decrease in the open space ratio of 5 percent or more in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents would generally be considered a substantial change that requires a more detailed analysis. Therefore, as a quantitative assessment, the Proposed Project would result in a significant impact resulting from an approximately 4544.51 percent decrease in the passive open space ratio. However, this analysis is limited to non-residents using passive open spaces. Although there would be a decrease in the passive open space ratio in the With Action condition compared to the No Action condition that is greater than 5 percent, at a passive open space ratio of 0.4740.470, the study area ratio would remain approximately three times higher than the City's planning goal of 0.15 acres of passive open space per 1,000 non-residents. The anticipated effects of the Proposed Project on open space resources in the study area are discussed below in the qualitative assessment.

QUALITATIVE ASSESSMENT

The passive open space ratio of 0.4740.470 in the With Action condition would remain well above the ratio of 0.15 acres per 1,000 non-residents recommended by the City. In addition, the Project Area includes the Industry City Courtyards as open spaces accessible to Industry City nonresidents and visitors. As described above, the Courtyards located between Industry City Buildings 1 and 2, 3 and 4, and 5 and 6, total 2.0 acres of entirely passive open space. They are in excellent condition and include a variety of features, which would make them the first choice of open space to visit for many of the current and new Industry City non-residents. Factoring in this additional 2.0 acres, the 29,01729,267 non-residents in the study area would be served by 15.75 acres of open space in the With Action condition. This would result in a passive open space ratio of 0.5430.538 acres per 1,000 non-residents. Therefore, a sufficient amount of passive open space would remain in the study area to support the new non-residential population. Furthermore, the Proposed Project would not directly impact any open space resources and would not substantially burden nearby open spaces resources through the introduction of a new non-residential population.

In addition to the existing open space resources, and as noted above in the discussion of the study area's open space resources in the With Action condition, the proposed special permit would establish a public access area requirement specifically tailored to the portion of the waterfront apron adjacent to Building 24. A public access area would be required to be developed in the event the applicant obtains an interest in the City-owned portion of the waterfront apron and develops, enlarges, or changes the use of Building 24 from predominantly industrial (UG 16, 17, or 18) to predominantly non-industrial. The new open space that would result would likely be passive in nature, similar to waterfront esplanades in other portions of the City, and could contain features such as benches and pathways. Note that none of the scenarios analyzed in this EIS assume these conditions are met, and therefore this analysis does not assume such open space would be constructed within the build year for the Proposed Project. As noted above, the field surveys also suggested that the existing open space resources were not overcrowded by non-residents during the daytime; in fact, Bush Terminal Park and the Sunset Park Entrance to Green-Wood Cemetery were noticeably underused. This indicates that the existing non-residential population's open space needs are currently being met in the area.

The largest open space near the Proposed Project—the recently completed Bush Terminal Park includes many features, such as winding pathways, benches, and a rocky jetty extending into Upper New York Bay that make it well-suited for non-residential passive recreation uses. Bush Terminal Park also currently has low utilization, allowing for an influx of new non-residents to be easily accommodated. The other two open space resources in the study area also include passive features like pathways and benches that would allow them to accommodate new non-residential recreational users.

Furthermore, there are several passive open spaces located just outside the study area that would be easily accessible to the Proposed Project's new non-residential population and other non-residents of the study area. The Gonzalo Plasencia Playground contains passive features such as a seating area with benches and chess tables. The P.S. 172 Beacon School of Excellence Schoolyard to Playground is open to the public every day from 8 am to dusk when school is not in session and features benches for passive use. The schoolyard is in good condition and has moderate utilization. Green-Wood Cemetery, a total of 478 acres in size, is entirely passive in nature, and includes features such as undulating pathways, extensive landscaping, ponds, and mausoleums well suited for passive recreation. It is in good condition and has low utilization. Finally, Sunset Park, another

large park outside of the study area, contains passive features such as benches, dog-friendly areas, Wi-Fi hotspots, eateries, and walking paths. The park also features impressive views of Upper New York Bay and the Lower Manhattan skyline, further increasing its attraction as a passive open space resource. The park is in good condition and has moderate utilization.

These additional open space resources would further reduce the burden on open space resources within the study area.

F. CONCLUSION

Currently the study area's passive open space ratio for non-residential users is well above the City's guidelines as indicated in the *CEQR Technical Manual*, and would remain well above the guidelines in both the No Action and With Action conditions. Though the Proposed Project would result in a decrease in the passive open space ratio of more than five percent compared to the No Action condition, the passive open space ratio would remain approximately three times higher than the City's guideline. Open spaces within the study area that have low utilization and additional passive open space resources located outside the study area would further reduce the effect of the additional demand generated by the Proposed Project. Further, as described in Chapter 5, "Shadows," the Proposed Project would not result in any significant adverse shadow impacts on open spaces. Therefore, the Proposed Project would not result in any significant adverse impacts on open space resources in the study area.