5

Open Space

This chapter assesses the potential impacts of the Proposed Actions on open space. The *2021 City Environmental Quality Review (CEQR) Technical Manual* defines open space as publicly or privately-owned land that is publicly accessible and available for leisure, play, or sport, or is set aside for the protection and/or enhancement of the natural environment.

Introduction

The Queens Future Project, a new commercial development, would include at least 20 acres of public park space. The Proposed Project is anticipated to comprise up to approximately 3.7 million square feet (sf) of new construction, with destination entertainment that includes a music hall, hotel, a gaming facility,[1] convention and meeting space, restaurant and retail space, and office and community facility space. The Proposed Project would also include at least 20 acres of public park space and other public realm improvements as well as structured parking facilities to accommodate up to 13,750 spaces. See **Chapter 1, Project Description**, for the proposed program and city and state approvals being sought. With regards to open space, the Proposed Project will require legislation authorizing the alienation of portions of parkland for the purpose of developing the Proposed Project. This chapter provides an assessment of existing and future conditions with and without the Proposed Actions for the Development Site, which are described in detail below.

Principal Conclusions

According to the *CEQR Technical Manual*, a proposed project may result in a significant impact on open space resources if (a) there would be direct displacement or alteration of existing open space within the study area that would have a significant adverse effect on existing users; or (b) it would reduce the open space ratio (OSR) and consequently result in the overburdening of existing facilities

[1] The inclusion of a gaming facility is contingent upon receiving a gaming license from the New York State Gaming Commission. See Required Approvals section below.

or further exacerbate a deficiency in open space. The *CEQR Technical Manual* indicates that a decrease in the non-residential OSR below City guidelines of 0.15 acres of passive space per 1,000 non-residents could be considered significant.

Given that the Development Site is mapped as parkland and the Proposed Project would result in uses that are not considered to be park use, the Proposed Project thus requires parkland alienation legislation. However, the Proposed Project would not have a direct effect on open space resources in the study area as defined in the *CEQR Technical Manual*. Although mapped as parkland, the Development Site contains surface parking lots leased to the Mets, is not available to the general public—except for Citi Field, United States Tennis Association, and Flushing Meadows Corona Park events and commuter parking—and is not otherwise used for recreational purposes.[2] The Proposed Project would replace the existing surface parking with structured parking and introduce at least 20 acres of active and passive public park space with landscaping and open space amenities as well as private rooftop open space for visitors to the new entertainment uses. It would also provide new connectivity between the Malcolm X Promenade and Flushing Meadows Corona Park. The Proposed Project would not have any significant adverse impacts on existing open space in terms of air quality, noise, or shadows (see **Chapter 6, Shadows**; **Chapter 15**, **Air Quality**; and **Chapter 17, Noise**; for additional information). With the addition of the new public park space and no loss of existing open spaces (but rather a net increase in usable public open space), the Proposed Project would not result in a significant adverse direct impact to open space resources.

The Proposed Project is expected to introduce new non-residents. As such, pursuant to the *CEQR Technical Manual*, a detailed open space analysis was conducted for a quarter-mile study area to assess the potential for indirect effects. In the With-Action condition, there would be a passive OSR of approximately 1.092 acres per 1,000 non-residents. The passive OSR is well above the City's guideline of 0.15 acres of passive open space per 1,000 non-residents. Furthermore, the combined residential and non-residential passive OSR would be 0.892 and remain well above the project-specific weighted guideline of 0.214 acres of passive open space per 1,000 residents and non-residents.

As noted above, with the introduction of least 20 acres of active and passive public park space and no reduction in existing open space, the Proposed Project is creating a net increase in usable public open space as compared to existing and No-Action conditions. However, both open space ratios would be reduced from the No-Action condition due to the increase in the number of open space users (non-residents) resulting from the Proposed Project. As noted above, these ratios would remain well above City guidelines. For these reasons, there would be no significant adverse impact in the study area to open space resources as a result of the Proposed Project.

Methodology

As per guidance in the *CEQR Technical Manual*, an open space analysis is generally conducted if a proposed project would generate greater than 200 new residents and/or greater than 500 new employees. As shown in **Table 5-1**, the With-Action condition would result in a net increase of approximately 7,534 workers to the Development Site compared to the No-Action condition. Additionally, there would be approximately 33,822 non-employee park users. This number includes all anticipated overnight guests and a conservative estimate of the number of additional park visitors at

[2] There are temporary pop-up events that operate in the parking lots of Citi Field on a seasonal basis under temporary agreements such as outdoor movie nights and carnivals. None of these events have long term contracts, nor are there other standing businesses within the Development Site

peak times, for a total non-residential population of 41,356 frequenting the site under the Proposed Actions. Overnight visitors are calculated based upon the proposed 2,300 hotel rooms, using an assumption of two people per occupied hotel room and an average daily hotel occupancy rate of 87 percent.

Table 5-1 Future No-Action and With-Action Population/Employment Summary

	Number of Workers			
Use	Existing Conditions[1]	Future No-Action Condition[1]	Future With-Action Condition	Increment
Area of Development A				
Hotel	-	-	470	+470
Restaurants	-	-	1,774	+1,774
Entertainment, Retail, and Support	-	-	4,435	+4,435
Open Space	-	-	41	+41
Parking	-	-	142	+142
Area of Development B				
Retail	-	-	96	+96
Restaurants	-	-	354	+354
Community Facility	-	-	75	+75
Office	-	-	148	+148
Total Workers[2]	0	0	7,534	+7,534
Total Visitors[3]	0	0	33,822	+33,822

Notes:

[1] The Existing and Future No-Action conditions would contain surface parking lots accommodating 7,423 unattended parking spaces, and therefore there are no associated workers.

[2] Worker estimates for Area of Development A were provided by the Applicant. The remainder of the estimates for Area of Development B were derived using ratios provided by the NYC Department of City Planning. The number of workers for retail, restaurants, and community facility space was calculated by dividing by 333.3 sf. The number of workers for the office space was calculated by dividing by 250 sf.

[3] Based on 2 guests per hotel room and 87% occupancy rate and includes a conservative estimate of the number of additional park visitors at peak times.

The open space analysis was conducted in accordance with the methodology outlined in the *CEQR Technical Manual*. The purpose of the analysis is to provide an evaluation of the study area's existing open space conditions relative to the open space needs of the study area's users, and to predict and compare conditions relative to open space needs in the future without and with the Proposed Actions. The Proposed Actions would introduce additional workers and visitors to the area, which would place demands on the study area's passive open space resources. In order to quantify the potential impact from the Proposed Actions, the analysis examines the amount of passive open space available in the future with and without the Proposed Actions.

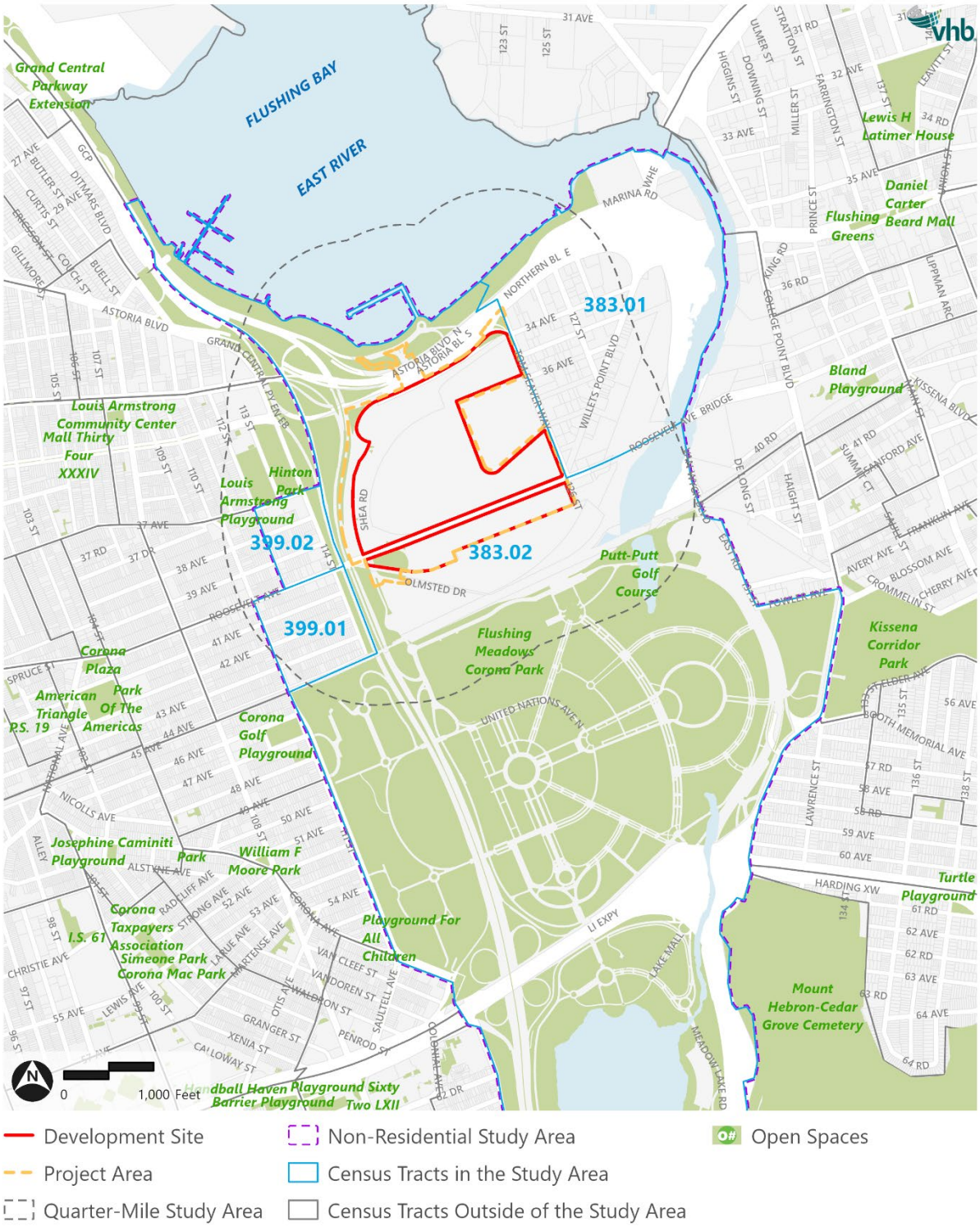
Open Space Study Area

According to the *CEQR Technical Manual*, the first step in an open space analysis is to define and map a study area to allow analysis of both the open spaces and the population using those open spaces within a specified distance of a project. The study area for the analysis is shown on **Figure 5-1**. The size of the study area is based on the distance a person may be reasonably assumed to walk to reach a local open space. Workers typically use passive open spaces within a quarter mile of their

workplace, while residents use both passive and active open spaces and are more likely to travel farther—up to a half-mile from their places of residence—to reach open spaces.

Because the Proposed Actions would generate a net increase in workers above the 500-worker threshold, a non-residential open space analysis is warranted. Because the Proposed Project would

Figure 5-1 Non-Residential Open Space Study Area Map



Source: MapPLUTO; NYC DCP; U.S. Census Bureau

not generate a net increase in residents above the 200-resident threshold, a residential study area is not warranted.

Pursuant to *CEQR Technical Manual* guidance, the study area comprises all census tracts that have at least 50 percent of their area located within a quarter-mile radius of the Project Area. Three census tracts have at least 50 percent of their area located within a quarter-mile radius of the Project Area—however, an additional census tract is included (CT 383.02) because without it the Project Area would have been excluded from the analysis. For the purposes of a conservative analysis, only the portions of the open spaces within a quarter-mile radius of the Project Area are included, but the census tract's entire worker and resident populations are included. Therefore, four census tracts form the non-residential study area: Census Tracts 383.01, 383.02, 399.01, and 399.02 (see **Figure 5-1**).

Analysis Year

The open space analysis for the Proposed Project is based on the 2030 build year, the date by which the Proposed Project would be fully constructed and operational and the largest increment of new employees in the study area would be realized.

Direct Effects Analysis

Consistent with the *CEQR Technical Manual*, a direct effects analysis should be performed if a proposed project would directly affect open space conditions by causing the loss of public open space; changing the use of an open space so that it no longer serves the same user population; limiting public access to an open space; or increasing noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space.

While the parking areas that comprise the majority of the Development Site are located in Flushing Meadows Corona Park, which is mapped parkland, these areas are not open to the general public—except for Citi Field, United States Tennis Association, and Flushing Meadows Corona Park events and commuter parking—and is not otherwise used for recreational purposes. Therefore, this use is not considered a public open space use as defined under the *CEQR Technical Manual*. The Proposed Actions include authorizing the alienation of portions of parkland and related City Map amendments to allow for the portions of the Proposed Project that would not constitute park uses. The alienation and City Map amendments would also include a portion of Flushing Meadows Corona Park just north and south of the Whitestone Expressway that is proposed for a new Grand Central Parkway highway ramp. Therefore, an assessment of the direct effects of the Proposed Project will be conducted. The analysis also considers the potential for any effects from increased noise, air pollution, odors, or shadows on nearby open spaces and designated parkland.

Indirect Effects Analysis

The *CEQR Technical Manual* states that indirect effects may occur when the population generated by a project would overtax the capacity of open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished.[3] The Proposed Actions would

[3] New York City has set a goal that 85 percent of New York City residents live within walking distance of a park by 2030 culminating in the Walk-to-a-Park initiative. According to the *CEQR Technical Manual*, all projects should be reviewed to determine if it is in an area of the City with a Walk to a Park Service Area. Project sites that are located outside of a Walk to a Park Service Area (i.e., located in a known walk gap area) suggests there is a need for a detailed analysis. According to Walk-to-a-Park service area geographic data provided by the City, the Development Site does not overlap with any known walk gap areas.

result in a net increase of approximately 41,356 non-residents compared to the future No-Action condition. Therefore, a non-residential analysis of indirect effects is required within a study area with an approximately quarter-mile-radius. The purpose of the indirect effects analysis is to quantitatively assess the adequacy of open space in the study area for existing and potential future users—based on an inventory of open space resources and the effect of the non-residential population increase anticipated with the Proposed Actions as well as any population increase in the No-Action condition due to other planned or proposed developments.

Specifically, an indirect effects analysis for non-residential populations includes:

- The number of employees in the non-residential study area, which was calculated based on reverse journey-to-work data from the US Census 2020 Longitudinal Employer-Household Dynamics (LEHD) estimates. The number of employees introduced by the Proposed Project was provided by the Applicant.
- In addition to employees, the non-residential population also includes visitors to the study area, which were estimated as part of the detailed analysis. Visitors to the study area were estimated using data from STR,[4] a subsidiary of CoStar Group.
- The number of residents in the study area, which was calculated based on population data from the 2020 Decennial Census for census tracts within the study area.
- A quantitative assessment of the OSR in the study area for non-residents—calculated as the ratio of open space acreage to user population—compared to guidelines established in the *CEQR Technical Manual*. These include the optimal ratio for employee populations, which is 0.15 acres of passive open space per 1,000 non-residents.
- A quantitative assessment of the OSR for the combined residential and non-residential populations. The benchmark for the combined populations is determined by creating a weighted average of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents. This blended ratio changes depending on the proportion of residents and non-residents in the study area.

According to the *CEQR Technical Manual*, projects that may result in significant quantitative impacts on open space resources are typically further assessed in a qualitative assessment to determine the overall significance of the impact. The quantitative assessment for the Proposed Actions determined that non-residential passive OSRs are above City guidelines. However, a qualitative assessment is also provided to supplement the direct effects analysis.

Impact Assessment

The determination of significant adverse impacts is based on how a proposed project would affect the OSRs in the study areas, as well as qualitative factors not reflected in the quantitative assessment. According to the *CEQR Technical Manual*, a proposed project may result in a significant adverse impact under the following circumstances:

- There would be a direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users, unless the proposed project would provide a comparable replacement (size, usability, and quality) within the study area (i.e., there is a net loss of publicly accessible open space).

[4] STR provides data benchmarking, analytics, and marketplace insights for global hospitality sectors.

› The project would reduce an OSR by more than the general guidelines for the open space percentage change guided in the *CEQR Technical Manual* and consequently result in overburdening existing facilities, or if it would substantially exacerbate an existing deficiency in open space

  - In general, for projects that would reduce the non-residential population's open space ratio below the optimal ratio of 0.15 acres of passive space per 1,000 non-residents, the greater the decrease below the optimal ratio, the greater the potential for a significant impact. In areas that have been determined to be extremely lacking in open space, a reduction as small as 1 percent may be considered significant, warranting further analysis.

Furthermore, if a proposed project results in a significant physical effect on existing open space by increasing shadow, noise, air pollutant emissions, or odors compared to the future No-Action condition, then there may be a significant impact requiring mitigation. If a proposed project does not affect quantitative open space needs, but causes a qualitative impact compared to the No-Action Condition, such as changing or eliminating park features for a certain user group, there may be a significant impact on open space requiring mitigation.

Detailed Assessment

Existing Conditions: Direct Effects

The Project Area, which is primarily located within Flushing Meadows Corona Park, is located west of a tidal expanse along the Flushing River and south of Flushing Bay. For most of the late nineteenth and early twentieth century, the site was an industrial dumping ground and landfill.

In the 1920s and 1930s, a period when the City was investing in major municipal parks projects, the landfill was targeted for development as a large recreation area (NYC DPR, 2001).[5] In addition, the area was planned as the venue of the 1939 World's Fair (NYC DPR, 2001). The Development Site served as a parking lot in 1938 for the World's Fair and has continued to operate, at least in part, as surface parking ever since.

The fairgrounds south of the Development Site hosted subsequent events. From 1946 to 1950, the United Nations convened at the New York City Pavilion, now the Queens Museum and one of the few remaining structures from the 1939 World's Fair (NYC DPR, 2001). The 1964 World's Fair was also held on the fairgrounds park site. On June 3, 1967, Flushing Meadows Corona Park was established, encompassing the fairgrounds, the Development Site, and the site of Citi Field. (NYC DPR, 2001).

In 1961, the state enacted legislation (codified in Section 18-118 of the Administrative Code of the City of New York) that authorized the City through the New York City Department of Parks and Recreation to enter into agreements with private parties for the use of a stadium and parking lots on the Development Site and on the current site of Citi Field. Shea Stadium opened on April 17, 1964, on the western portion of the Development Site, where the Citi Field parking lots are located today (NYC DPR, 2001). The stadium contained 56,000 seats for baseball and was designed to be capable of converting from baseball to football use (NYC DPR, 2001). Parking lots surrounded the stadium. In 1967, Flushing Meadows-Corona Park was established.

[5] New York City Department of Parks and Recreation, (2001)."Shea Stadium Redevelopment FEIS". (CEQR No: 02DPR001Q). Dated December 17, 2001.

In 2001, an Environmental Impact Statement was published by the New York City Department of Parks and Recreation (NYC DPR) to allow the replacement of the William A. Shea Municipal Stadium for use by the New York Mets baseball team on a portion of the parking lot adjacent to the existing stadium (NYC DPR, 2001). The stadium underwent demolition and replacement in an adjacent portion of the site in 2009, and the 42,000-seat baseball stadium that exists today was built to improve viewing conditions for fans. The parking spaces were redistributed to the west and south portions of the site of the new stadium.

Today, the 78-acre Development Site is comprised primarily of surface parking lots that are accessory to Citi Field, located west of Seaver Way. It also includes Shea Road under the jurisdiction of New York City Department of Parks and Recreation (NYC Parks) as well as small areas of landscaping adjacent to the roadways (see **Table 5-2** and **Figure 5-2**). It is mapped parkland but not open to the public—except for Citi Field, United States Tennis Association, Flushing Meadows Corona Park events—and the parking supports the stadium use and commuter parking. Intersecting the Development Site and within the Project Area are the Mets-Willets Point NYCT No. 7 Train Subway Station and the Passerelle Bridge, an elevated historic walkway that connects the subway to the recreational areas within Flushing Meadows Corona Park (see **Chapter 7, Historic and Cultural Resources** for more information on the Passerelle Bridge).

The surface parking is used only on game days during the baseball season, for commuter parking, and for other park events, including the U.S. Open. Up to 1,795 spaces are designated as paid commuter parking on business days. Otherwise, approximately 53 acres of vacant asphalt parking is not available to the public and left unused.

Figure 5-2 Project Area Existing Conditions

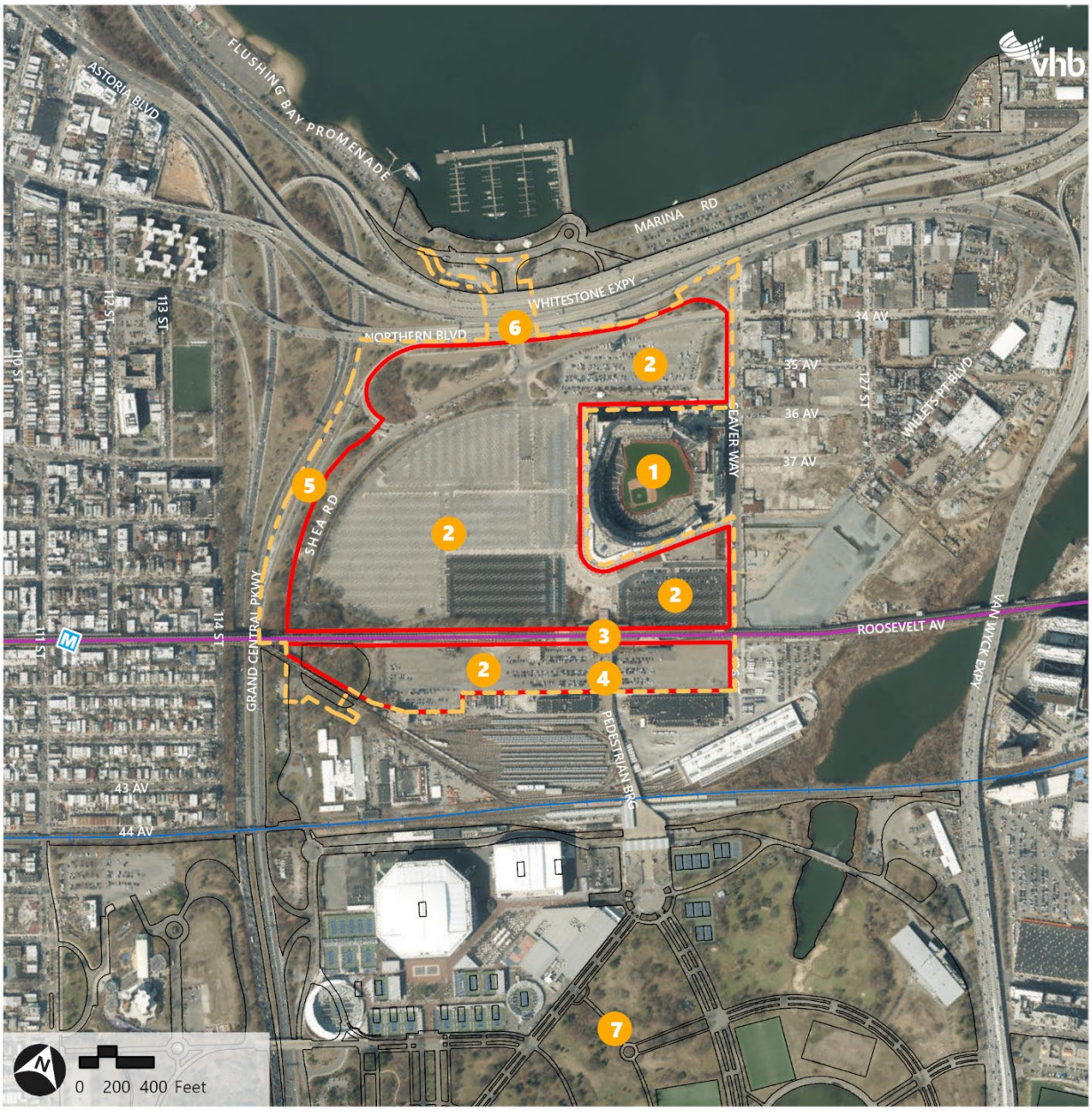


Table 5-2 Existing Conditions Map Key

ID	Description
1	Citi Field (excluded from Project Area)
2	New York Mets Game Day Parking
3	Mets-Willets Point NYCT No. 7 Train Subway Station
4	Pedestrian Bridge (the Passerelle Bridge)
5	Grand Central Parkway Exit 9E Ramp
6	Boat Basin Place
7	Portion of Flushing Meadows Corona Park

Existing Conditions: Indirect Effects

Study Area Population

Based on the 2020 Census LEHD Origin-Destination Employment Statistics (LODES) data via OnTheMap, the four census tracts in the non-residential open space study area contain a total employee population of 6,138 (see **Table 5-3**).[6] According to the New York City Capital Planning Platform, there are no college/post-secondary educational institutions within the study area. According to data from STR,[7] a subsidiary of CoStar Group, there are two hotels in the study area as of April 2023, comprising a total of 304 rooms. According to research performed by STR in 2018, the average daily hotel occupancy rate was 87 percent. Using the assumption of two people per occupied hotel room, hotel occupancy in the study area was estimated at approximately 529 persons. Therefore, the total non-residential population is 6,667.

Table 5-3 Existing Population in Non-Residential Quarter-Mile Study Area

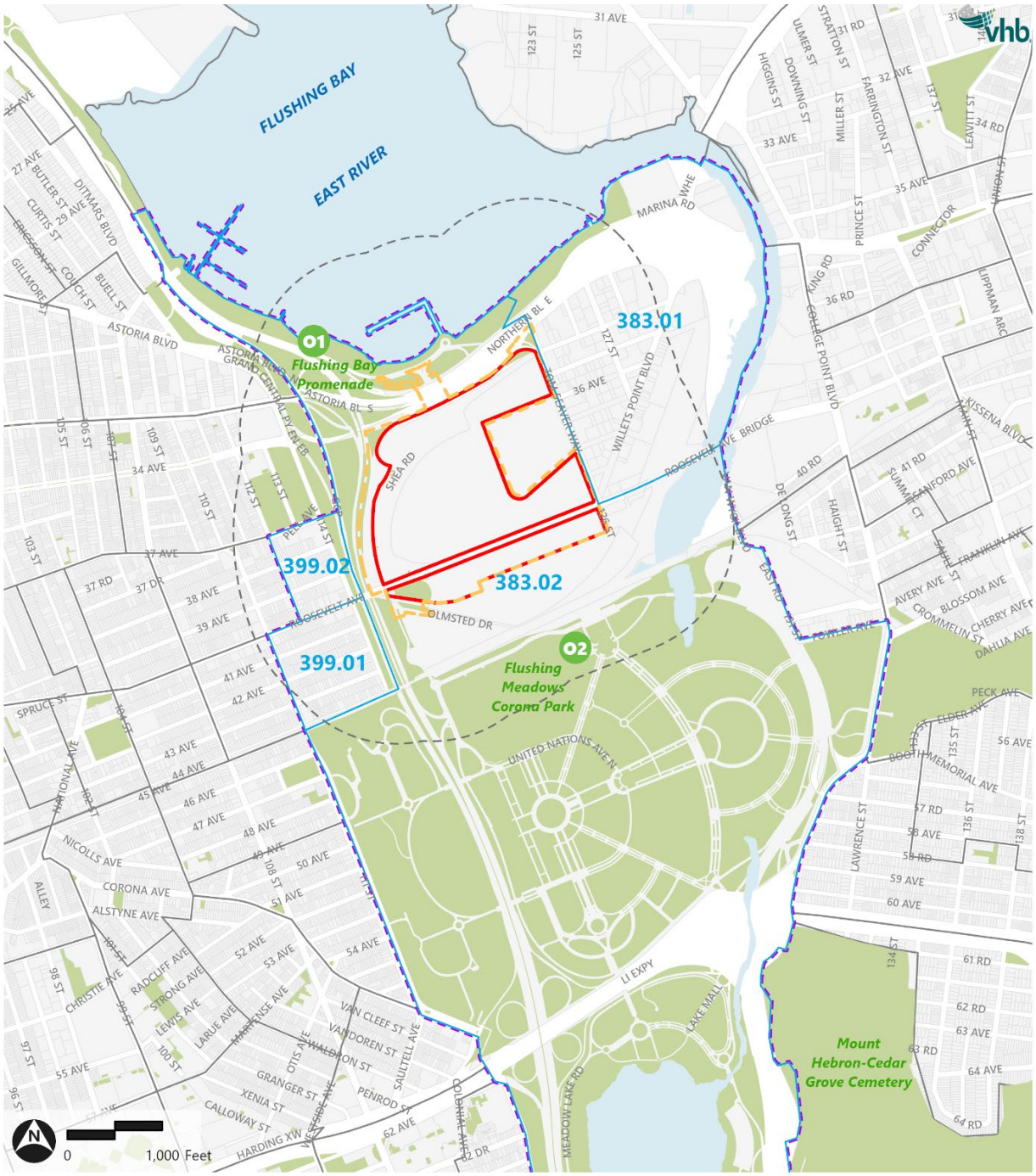
Census Tract	Employee Population	Visitor Population[1]	Total Non-Residential Population	Residential Population	Total Population (Non-Residential + Residential)
383.01	1,641	-	1,641	2	1,643
383.02	2,752	-	2,752	44	2,796
399.01	1,603	157	1,760	2,875	4,635
399.02	142	372	514	2,285	2,799
Total	**6,138**	**529**	**6,667**	**5,206**	**11,873**

Source: 2020 LEHD LODES data via OnTheMap; NYCDCP Capital Planning Platform; STR June 2021, 2020 Decennial Census
Notes:
[1] The visitor population is calculated by assuming an average daily hotel occupancy rate of 87 percent and two people per hotel room.

[6] 2020 is the most recent LEHD data available at the census tract level from the U.S. Census Bureau's OnTheMap (https://onthemap.ces.census.gov/) as of April 2023.

[7] STR provides data benchmarking, analytics, and marketplace insights for global hospitality sectors.

Figure 5-3 Non-Residential Open Space Inventory Map



The existing residential population in the non-residential study area was calculated using population data at the census tract level from the 2020 Decennial Census. As detailed in **Table 5-3**, the total residential population within the non-residential study area is 5,206. Therefore, the combined non-residential and residential population in the study area is 11,873.

Study Area Open Space Resources

Open space that is accessible to the public on a constant and regular basis, including for designated daily periods, is defined as publicly accessible and is analyzed as such per *CEQR Technical Manual* guidelines. Publicly accessible open space may be under public or private jurisdiction and includes open space designated through regulatory approvals, such as public plazas. Private open space—that which is not publicly-accessible or is available only to limited users and is not available to the public on a constant and regular basis—is excluded from the quantitative open space analyses.

In addition to the distinction between public and private open spaces, individual spaces may also be classified as either active or passive, according to the types of activities for which the space is primarily used. Open space that is used for sports, exercise, or active play is classified as active and consists mainly of recreational facilities, while open space that is used for relaxation, such as a plaza, is classified as passive. Some types of open space facilities, such as esplanades, may be devoted to both active and passive uses.

In conducting the open space analysis for the Proposed Actions, publicly accessible open spaces within the study area were inventoried (see **Table 5-4** and **Figure 5-3**). The open space resources were identified by their location, owner, features, total acreage, and acreage of passive and active areas. The secondary sources for this analysis included land use and geographic PLUTO data at the tax-lot level and additional data provided by NYC Parks. According to the *CEQR Technical Manual*, public open space does not include Greenstreets, malls without seating, or sidewalks.

There are two open spaces in the study area, consisting of a promenade and the destination park Flushing Meadows Corona Park, described in detail below. Together, the open spaces total 51.08 acres, including 36.65 acres of passive open space and 14.44 acres of active open space. This total includes only open space areas with recreational amenities that are accessible to visitors. As noted above, this analysis conservatively includes only the portion of Flushing Meadows Corona Park that occurs within the quarter mile radius of the Project Area. Additionally, the Development Site is excluded from the open space overall acreage and the indirect effects analysis because, pursuant to guidance in the *CEQR Technical Manual*, it is not considered "public" and does not function for recreational purposes. Furthermore, Louis Armstrong Playground and Hinton Park are located within the quarter mile radius but were excluded from the analysis because neither location is within the selected census tracts.

Table 5-4 Existing Non-residential Study Area Open Spaces

Map No.	Name	Owner/ Agency	Features and Amenities	Total Acreage	Active Acreage	Passive Acreage	Condition/Utilization
O1	Malcolm X Promenade[1]	NYC Parks	Benches, paved promenade, and the World's Fair Marina	6.66	3.33	3.33	Moderate
O2	Flushing Meadows Corona Park[2]	NYC Parks	Benches, paved walkway, tennis courts, golf course, boating	44.42	11.11	33.32	Good/Moderate
			Non-residential Study Area Total	**51.08**	**14.44**	**36.65**	
			Percent of Study Area Open Space	**100%**	**28%**	**72%**	

Source: NYC Department of Parks and Recreation, NYC Capital Planning Platform. (As of April 2023)

Note: 1. For conservative analysis purposes, only the area of the promenade and the park that occurs within the quarter mile radius was included in the quantitative analysis.

2. Percentage of passive and active open space for the portion of the Flushing Meadows Corona Park located within the study area determined by Parks (September 2024)

Malcolm X Promenade

The Malcolm X Promenade is a 1.4-mile greenway that runs along Flushing Bay from LaGuardia Airport to Flushing Meadows Corona Park. The promenade was built in 2001 and includes an asphalt biking and walking path, benches, and lighting. Shea Road and Northern Boulevard provide access to the promenade, but the Grand Central Parkway and Northern Boulevard largely isolate the promenade from adjacent residential uses. The portion of the promenade within the study area includes a biking/walking path and seating as well as the World's Fair Marina. The World's Fair Marina is a public recreational boating facility managed by NYC Parks. As a result, 6.66 acres of the promenade, half of which is considered active space and half of which is considered passive open space, are included in the non-residential study area.

Flushing Meadows Corona Park

Flushing Meadows Corona Park is a major destination park comprising approximately 898 acres of active and passive recreation. It is Queens's largest park and one of the largest in New York City. The conversion of a large historic ash dump to a recreation area transformed this environmentally degraded area into one that contains restored wetlands, landscaping, access to Flushing Bay, and provides a critical open space resource to the surrounding communities. The Park is home to 11 major monuments and several cultural institutions, including the Hall of Science, the Queens Wildlife Conservation Center, Queens Zoo (part of the Wildlife Conservation Society), Queens Theatre, and Queens Museum. Flushing Meadows Corona Park also houses the United States Tennis Association Billie Jean King National Tennis Center, which is open to the public free of charge for 11 months out of the year and offers below-market court rentals to the public. Each year Flushing Meadows Corona Park draws over nine million people from all over the world for both spectator and recreational activities.

The study area covers a portion of the park that falls within a quarter mile of the Project Area and is publicly accessible. As a result, 44.42 acres of open space within Flushing Meadows Corona Park were included in the analysis. The portion of the park in the study area contains soccer fields, a portion of the pitch and putt golf course, and a large field for passive and active uses. Given the significant size of Flushing Meadows Corona Park, the precise breakdown of active versus passive open space is unknown. This analysis assumes that approximately half of Flushing Meadows-Corona Park is for active recreation and half is dedicated to passive recreation. Therefore, in the study area, approximately 11.11 acres of Flushing Meadows Corona Park is assumed to be active open space, and the remaining 33.32 acres of Flushing Meadows Corona Park is for passive open space uses.

As shown in **Table 5-4**, these two open space resources in the study area were found to be in "good" condition and moderate utilization.

Adequacy of Open Spaces

The non-residential open space analysis focuses on passive open spaces that may be used by non-residential populations of employees and other daytime users. Consistent with *CEQR Technical Manual* guidance, the adequacy of open space was first analyzed quantitatively by comparing the existing non-residential passive OSR with the CEQR benchmark of 0.15 acres of passive open space per 1,000 non-residents. In addition, the quantitative analysis compares the OSR for the combined non-residential and residential passive OSR in the study area to the CEQR benchmarks, based on the recommended weighted average of 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000

residents. The study area contains 36.65 acres of passive open space. The existing non-residential population in the study area is approximately 6,667, and the combined residential and non-residential population is approximately 11,873. As shown in **Table 5-5**, the study area has an existing passive OSR of 5.497 acres per 1,000 non-residents, which is well above the recommended average of 0.15 acres. The combined passive OSR is 3.086 acres per 1,000 non-residents and residents, which is well above the weighted average benchmark of 0.303.

New York City, as part of the OneNYC 2050 Building a Strong and Fair City plan, has put forth a goal for 85 percent of New York City residents to live within walking distance of a park by 2030. To help the City reach this goal, NYC Parks has a Walk-to-a-Park initiative that focuses on increasing access to parks and open space in areas of the City where residents live further than a walk to a park. According to Walk-to-a-Park service area geographic data provided by the City, the Project Area does not overlap with any known walk gap areas. Therefore, based on the quantitative analysis, there are ample passive open spaces within the study area.

Table 5-5 Existing Conditions – Adequacy of Open Space Resources

	Population	Passive Open Space Acreage	Passive Ratios[1]	CEQR Guidelines
Non-Residents	6,667	36.65	5.497	0.150
Combined Non-residents and Residents	11,873	36.65	3.086	0.303[2]

Notes:
[1] Acres per 1,000 people.
[2] Based on a target OSR established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents.

No-Action Condition: Direct Effects

In the No-Action condition, no additional development would occur in the Project Area, the Development Site would continue to be mapped as parkland and contain surface parking lots not available to the public for recreational purposes. Renovations and reconstructions of existing NYC Parks structures and spaces are expected under the No-Action condition and are described in more detail in **Table 5-6**. Furthermore, the Development Site would be used for events at the soccer stadium introduced by the Willets Point Phase 2 development anticipated to be operational by 2026.

No-Action Condition: Indirect Effects

Study Area Population

In the No-Action condition, no additional development would occur in the Project Area and no new employees would be introduced. There are two anticipated developments that would add residents and non-residents to the study area by the project build year (see **Table 5-6** and **Table 5-7**). The developments, which fall within the study area, would introduce approximately 606,756 gross square feet (gsf) of commercial space, 131,159 gsf of community facility space, 250 hotel rooms, and 2,500 residential units. These developments would result in approximately 2,408 employees, 435 visitors, 650 students, and 6,372 residents in the study area.

Table 5-6 Planned Development Projects Non-residential Study Area

Development Name/Location	Commercial GSF	Community Facility GSF	Hotel Rooms	Residential Units
Willets Point Phase 1	23,756 (retail)	131,159 (3,159 sf community facility, 128,000 sf [650-seat] public school)	--	1,100 (220 senior units)
Willets Point Phase 2	583,000 (83,000 sf retail; 500,000 sf soccer stadium)	--	250	1,400
Total	**606,756**	**131,159**	**250**	**2,500**

Sources: Willets Point – Phase 2 Development Second Supplemental Environmental Impact Statement (SSEIS); Air Train Draft Environmental Impact Statement; Special Flushing Waterfront District EAS; Queens DCP; DOB Active Major Construction database; YIMBY.com.

Table 5-7 No-Action Population in Non-Residential Quarter-Mile Study Area

Study Area	Residents[1]	Employees[2]	Visitors[3]	Students[4]
Non-residential	6,372	2,408	435	650

Notes:

[1] Based on the average renter household size of 2.65 residents per non-senior unit in Queens Community District 7 and 1.5 residents per senior unit.

[2] Assumes 1 employee per 333.33 sf of retail or community facility space, 1 hotel employee per 2.67 hotel rooms (400 gsf per hotel room), 1 residential building employee per 25 DUs (1,000 sf per DU unless specified).

[3] Visitor population represents an estimate of the number of hotel guests based on the hotel room inventory as of July 2021, multiplied by an 87 percent occupancy rate (STR, 2018), multiplied by 2 people per occupied hotel room.

[4] Student population was provided by AKRF.

Study Area Open Spaces

In the No-Action condition, there are several new publicly accessible open spaces anticipated to be constructed in the study area. The Willets Point Phase 1 Development would include 0.87 acre of publicly accessible open space with active and passive programming. The Willets Point Phase 2 development would include 2.77 acres of open space consisting of a pedestrian plaza and smaller plazas.

NYC Parks also proposes to reconstruct the Candela structures at Flushing Meadows Corona Park. Additionally, NYC Parks proposes to reconstruct the deteriorated fixed piers; floating docks; bulkhead; and related components, including Sandy-damaged elements, at the World's Fair Marina of Flushing Meadows Corona Park. However, these latter two projects would not introduce new open space and were therefore excluded from the quantitative assessment.

Adequacy of Open Spaces

In the No-Action condition, the passive open space acreage in the study area would increase to 40.29 acres, while the OSRs would decrease, as detailed in **Table 5-8**. The population in the No-Action condition accounts for planned developments or projects that would be constructed regardless of the Proposed Project as discussed above. The No-Action condition population would total

approximately 10,160 non-residents, and the combined residential and non-residential population would be approximately 21,738. The study area would have a passive OSR of 3.965 acres per 1,000 non-residents and would remain very high above the City guidance of 0.15 acres (by approximately 3.8 acres per 1,000 non-residents). The combined passive OSR would be 1.853 acres per 1,000 non-residents and residents and would remain well above the weighted average benchmark of 0.336 acres per 1,000 combined residents and non-residents. Therefore, based on the quantitative analysis, in the No-Action condition there would be more passive open space within the study area than under City guidance.

Table 5-8 No-Action Condition – Adequacy of Open Space Resources

	Existing Population	Planned Development Projects Population	No-Action Population	Passive Open Space Acreage	Passive Ratios[1]	CEQR Guidelines
Non-Residents	6,667	3,493	10,160	40.29	3.965	0.150
Combined Non-residents and Residents	11,873	9,865	21,738	40.29	1.853	0.336[2]

Notes:
[1] Acres per 1,000 people.
[2] Based on a target OSR established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents.

With-Action Condition: Direct Effects

As mentioned above, the Development Site is currently mapped parkland and part of Flushing Meadows Corona Park. The Proposed Project would require State legislation authorizing the alienation of portions of parkland and City Map amendments for the purpose of developing the Proposed Project. The Proposed Project would introduce new open spaces that would be used for passive and active recreation as well as non-park uses within Area of Development A—which, along with the roadways serving such development, would be demapped as parkland. The Proposed Project also includes modifications to the highway and roadway network and improvements to the Mets-Willets Point NYCT No. 7 Train Subway Station. The areas of proposed parkland demapping are shown in **Figure 5-4** and described below.

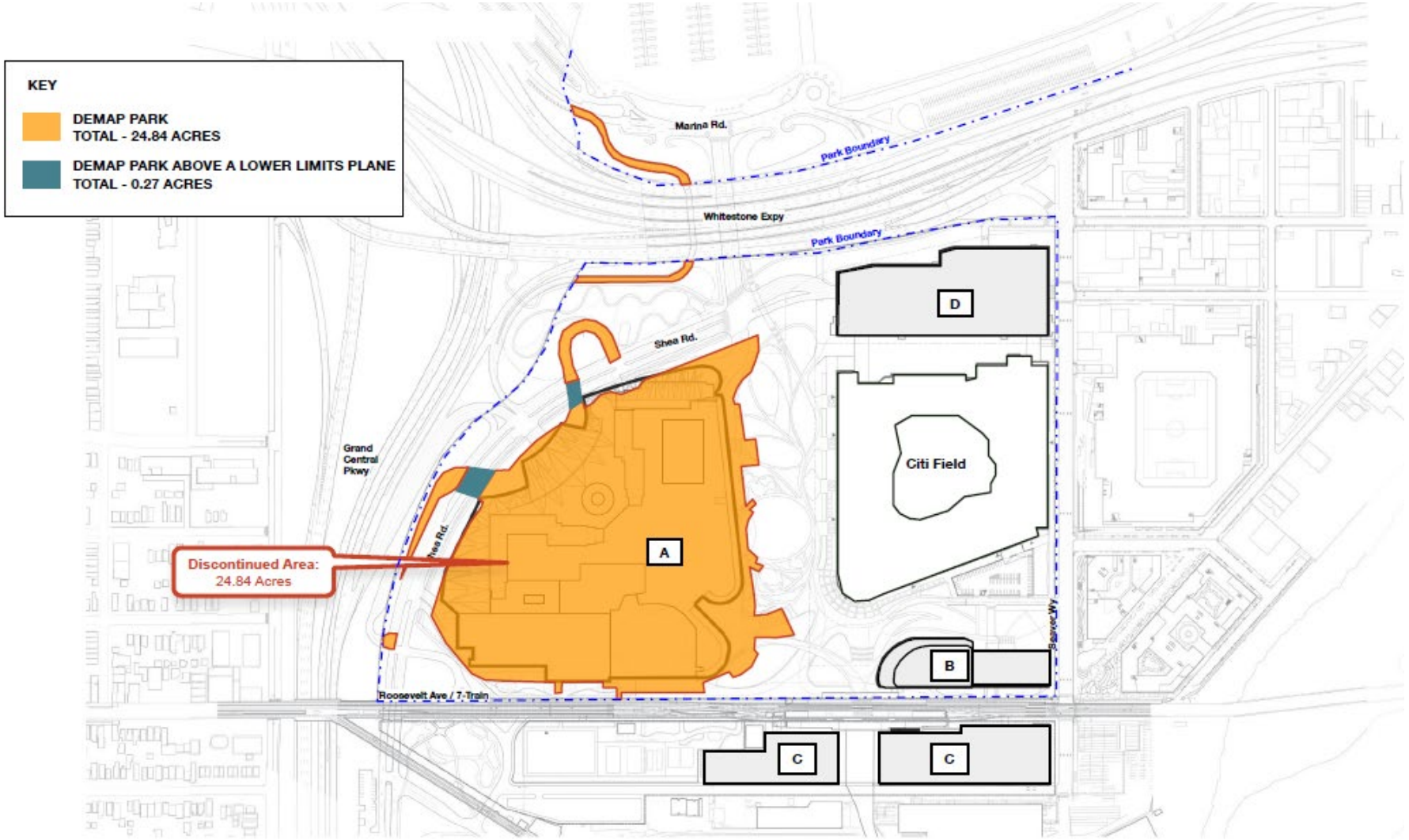
The footprint of the proposed building in Area of Development A would be demapped as parkland. In addition, the areas proposed for a new Grand Central Parkway highway ramp that would be located in a portion of Flushing Meadows Corona Park just north and south of the Whitestone Expressway would require demapping. The area to the north of the Whitestone Expressway would be near the marina; the area of the proposed ramp within the mapped parkland intersects with a small perimeter portion of a parking lot, a narrow, unusable landscaped area between an existing ramp to Grand Central Parkway (Marina Road) and the Whitestone Expressway and a portion of Marina Road[8]. This parking lot has an NYC Parks sign indicating it as "Marina Parking Lot B" and is located to

[8] The proposed highway ramp (reviewed by New York State Department of Transportation) is necessary to enhance the safety and overall capacity of the ramp system. The National Park Service has determined that the construction of the proposed highway ramp would result in a conversion under the requirements of the Land Water Conservation Fund (LWCF) program. To satisfy the requirements of a conversion, the Applicant proposes providing as replacement property an area that is currently mapped street (within the Grand Central Parkway) that would be mapped as parkland under the Proposed Project and improved as part of the Open Space 2 (OS-2) passive recreational area. The determination whether the new parkland comprising part of Open Space 2 (OS-2) would satisfy requirements for replacement property, will be subject to review by the National Park Service, with the involvement of the New York State Office of Parks and Recreation.

the west of Boat Basin Place. The Marina Parking Lot B (as well as Marina Parking A directly to the east) is meant to serve boat permit holders. Although the parking spaces in Marine Parking Lot B are not striped, it is estimated that the lot has an approximate capacity of 60 spaces. The proposed highway ramp would eliminate approximately less than 20 surface parking spaces on the perimeter of the lot, with approximately 40 spaces remaining in the surface parking lot. Additionally, ample parking for marina uses is available in Marina Parking Lot A located directly east of Marine Parking Lot B to the east of Boat Basin Place and as well as the Marina East Lot and Marina West Lot located north of Marina Road. See **Chapter 14, Transportation** for detailed information about the capacity and utilization of these existing surface parking lots. As a result, the elimination of the parking spaces in Marina Parking Lot B would not result in a significant adverse parking impact to the users of the marina. The area to the south of the Whitestone Expressway currently contains surface parking for buses for Citi Field.

The proposed access ramp to Area of Development A from the Grand Central Parkway would extend over Shea Road, which is mapped parkland. Since the proposed access ramp would be elevated coming from the Grand Central Parkway, the demapping of a volume of space over Shea Road would be required. No publicly accessible open space would be affected.

Figure 5-4 Proposed Parkland Demapping



Source: SHoP Architectects and Field Operations

A direct effects analysis is required to assess whether or not the Proposed Actions would directly affect open space conditions by causing the loss of public open space, changing the use of an open space so that it no longer serves the same user population; limiting public access to an open space; or increasing noise or air pollutant emissions, odors, or shadows that would temporarily or permanently affect the function, usability, or enjoyment of a public open space.

Currently, the Development Site is improved with surface parking lots to provide parking for visitors to Citi Field. While this land is mapped as parkland, it does not function as recreational open space. The land was occupied by Shea Stadium and associated parking and circulation space until it was replaced by Citi Field in 2009; it is now occupied exclusively by surface parking and does not provide open space to the public. A majority of the site is surrounded by cast-iron fencing, and access to the site requires tickets or verification showing that the individual is a visitor to Citi Field. Similarly, as noted above, the area of parkland demapping for the highway access ramp and the volume of space over Shea Road is currently not used for public open space purposes. These uses are therefore not considered a public open space use as defined by CEQR. Developing this mapped parkland has no direct effect on the adequacy of open space for the study area residential and non-residential populations and, therefore, it is excluded from the open space inventory in the indirect effects analysis. However, it is assessed for direct effects due to the discontinuance of parkland required by the Proposed Actions.

Proposed Uses

In order to facilitate the Proposed Development, the footprint associated with the building area in Area of Development A, in addition to some highway access improvement areas and the volume of space over Shea Road, would be demapped and discontinued as parkland. This area amounts to 25.17 acres. The remainder of the Development Site, including the parking structures serving Citi Field, Area of Development B, and the at-grade open spaces would remain parkland and serve parkland purpose.

In addition to the proposed mixed-use development and structured parking, the Proposed Project includes at least 20 acres of public park space, which would allow for significantly more public access for recreational purposes than on the Development Site under existing and No-Action conditions.

The design and orientation of the public park space provided under the Proposed Project would enhance connectivity between Flushing Bay and Flushing Meadows Corona Park. The Proposed Project's public park space would provide new active and passive recreational spaces, including picnic areas, walking paths, playgrounds, gardens, a number of athletic courts and fields, public restrooms, and bike lanes (see **Figure 5-5**)**.** Hours of operation and detail regarding the operations of the public park space would be coordinated with the Applicant and NYC Parks. A more detailed description of the proposed open spaces is described under **Indirect Effects Analysis – Study Area Open Spaces**. The Proposed Project would also implement green infrastructure practices such as green roofs and infiltration trenches. See **Chapter 11, Water and Sewer Infrastrcuture** for a more detailed description of stormwater management measures in the With-Action condition.

Figure 5-5 Proposed Open Space Improvements



For illustrative purposes only
Source: SHoP Architectects and Field Operations

Determining Impact Significance

The parking spaces needed for Citi Field and other existing events surrounding the Development Site would continue to be provided on site within structured parking. With parking located in proposed parking structures instead of surface lots, the Proposed Project is able to provide substantial on-site open space, including at least 20 acres of passive and active recreational open space as well as additional areas for landscaping and pedestrian/cyclist circulation. The loss of approximately 20 parking spaces at Marina Parking Lot B for the proposed new Grand Central Parkway highway ramp would not affect the adequacy of parking for park users because there is ample parking for marina uses in Marina Parking Lot A as well as the Marina East Lot and Marina West Lot. In addition, there would be no significant adverse impacts on existing open space in terms of air quality, noise, or shadows in the With Action condition (see **Chapter 6, Shadows**, **Chapter 15**, **Air Quality**, and **Chapter 17, Noise**, for additional information).

The change in use of the parking lots on the Development Site would therefore not constitute a direct impact on open space resources and no further assessment is warranted.

With-Action Condition: Indirect Effects

Study Area Population

The Proposed Project is anticipated to result in a net increase of approximately 3.7 million sf of non-residential mixed uses. Accordingly, the Proposed Actions would introduce an estimated 7,534 additional employees and 41,356 non-employee park users to the study area compared with the No-Action condition.

Study Area Open Spaces

The Proposed Actions would result in the development of at least 20 acres of new public park space (see **Figure 5-5** and **Figure 5-6**) that would surround the proposed buildings and Citi Field. **Table 5-9** details the acreages and proposed amenities within the proposed park space, which are discussed in more detail below. The newly created open spaces would provide areas for gathering, play, respite, public restrooms, and critical pedestrian and cycling connections to transit and other surrounding open spaces—including the Malcolm X Promenade and the Flushing Meadows Corona Park—and provide connectivity within the Development Site. With the addition of the proposed open space and no reduction in existing open space, the total passive open space acreage in the study area would increase to 56.28 acres.

Open Space 1 (OS-1)

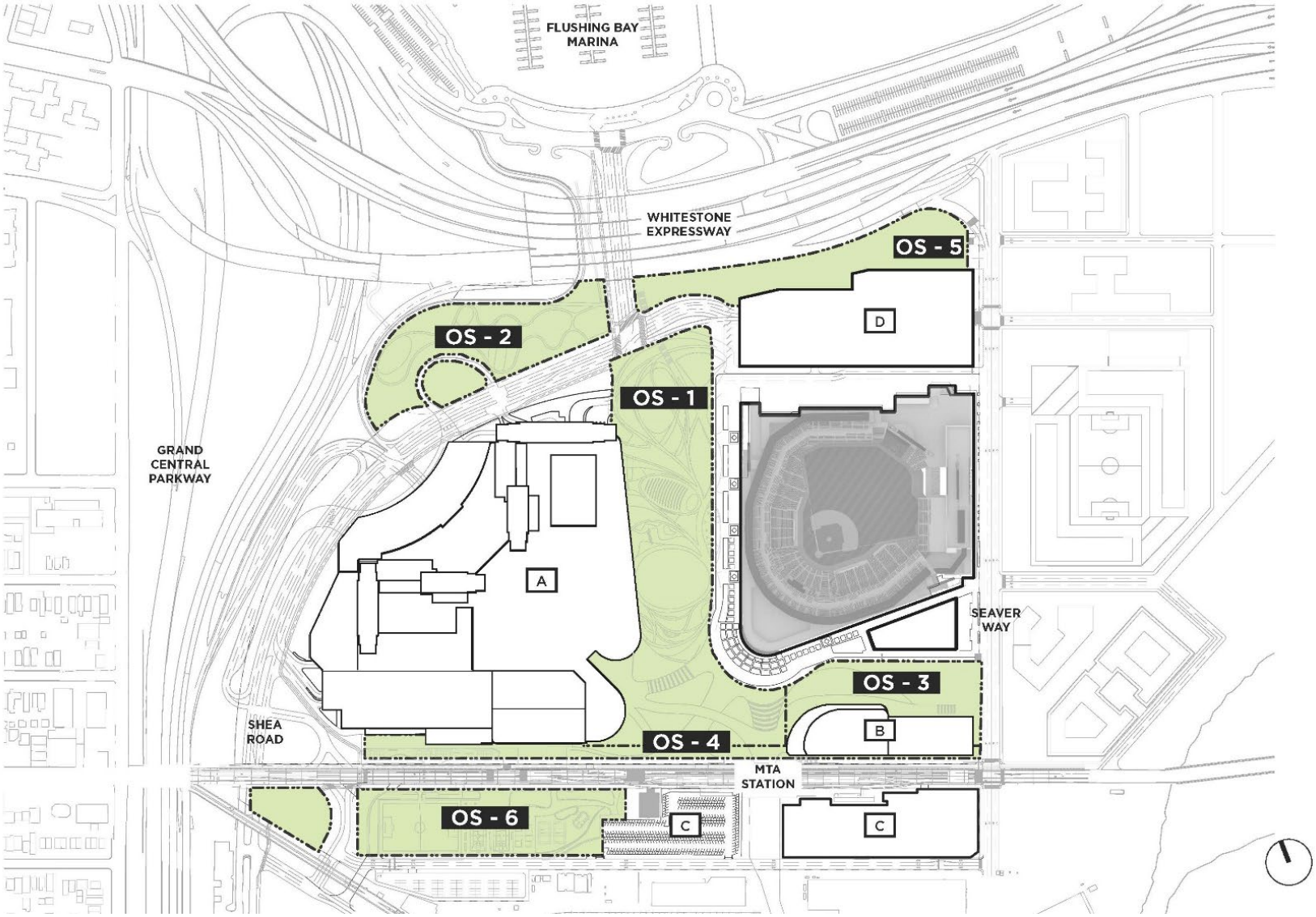
The proposed open space identified as OS-1 would be located between Citi Field and the east side of Area of Development A in an area that is currently a surface parking lot. There would be a collection of multipurpose areas within OS-1, and, although the details of the proposed design have not been finalized at this time, it is anticipated to include an outdoor event space, gardens, moveable seating, picnicking areas, and several smaller active spaces (totaling roughly 0.69-acres) that include flexible lawn areas and a tree-lined promenade within this 10.5-acre space (see **Figure 5-5**). Each space would be ADA accessible. An illustrative rendering of OS-1 is shown in **Figure 5-7**, **Figure 5-8**, and **Figure 5-9**.

Table 5-9 With-Action Condition – Proposed Open Spaces

Name	Active Acreage	Passive Acreage	Total Acreage	Proposed Amenities
OS-1	0.69	9.81	10.50	Outdoor event space, gardens, moveable seating, picnic areas, open lawns, promenades, and landscaped pathways
OS-2	0.76	0.94	1.70	Dog run, passive recreation spaces, picnic areas and seating, and bike and pedestrian connections
OS-3	0.00	1.60	1.60	Landscaping, walkways, eating areas, event space, and seating
OS-4	0.30	0.90	1.20	Sports courts, walkways, seating, planting, bike lanes, and bike parking
OS-5	0.26	0.94	1.20	Passive recreation spaces, seating, and bike and pedestrian connections
OS-6	2.00	1.80	3.80	Active recreational spaces for sports such as basketball, racket sports, soccer, playgrounds, and fitness areas.
Total	**4.01**	**15.99**	**20.00**	

Notes:

Figure 5-6 With Action Condition - Proposed Open Space Map



Source: SHoP Architectects and Field Operations

Figure 5-7 Illustrative Image of Open Space (OS-1) Looking Northwest from Mets Plaza



Source: SHoP Architectects and Field Operations

Figure 5-8 Illustrative Image of Open Space (OS-1) adjacent to the Western Perimeter of Citi Field Stadium, View North



fiSource: Field Operations

Figure 5-9 Illustrative Image of Open Space (OS-1) Looking Southeast



Source: Field Operations

Open Spaces 2 (OS-2)

The proposed open space identified as OS-2 would be located at the north side of Area of Development A in an area that is currently covered with trees and an asphalt bus parking lot. OS-2 would maintain many of the existing trees and remove the existing asphalt bus parking lot to include proposed picnic areas and seating, passive recreation areas, and improved bike lanes and pedestrian connections—all amounting to 1.70 acres. An illustrative rendering of OS-2 is shown in **Figure 5-10**.

Figure 5-10 Illustrative Image of Open Space (OS-6) South of Roosevelt Avenue, West of Stadium Place South, View North



Source: Field Operations

Open Space 3 (OS-3)

This open space would occur along the perimeter of the Area of Development B and would feature landscaping, walkways, and a variety of picnicking and seating areas, amounting to 1.60 acres of passive open space. An open plaza space at the corner of Seaver Way and Roosevelt Avenue would support events throughout the year, such as farmers' markets, community events, and gatherings associated with events at Citi Field. Pathways would provide additional connections to OS-1 and Areas of Development A and C. An illustrative rendering of OS-3 is shown in **Figure 5-11**.

Figure 5-11 Illustrative Image of Open Space (OS-3) near Area of Development B, View East



Source: SHoP Architectects and Field Operations

Open Space 4 (OS-4)

Lining Roosevelt Avenue would be a combination of active recreation space amounting to 1.20-acres, anticipated to include sports courts as well as passive space filled with seating, walkways, planting, bike lanes, and bike parking. Amenities to facilitate pedestrian circulation and transit access would also be included within this area. An illustrative rendering of OS-4 is shown in **Figure 5-12**.

Figure 5-12 Illustrative Image of Open Space (OS-4) North of Roosevelt Avenue, West of the Mets-Willets Point NYCT No. 7 Train Subway Station, View East



Source: Field Operations

Open Space 5 (OS-5)

Located to the north of Area of Development D, OS-5 would be a 1.20-acre walkway that would connect pedestrians from Seaver Way to the Project Area and Boat Basin Place. The open space would feature passive recreation spaces, seating, and bike and pedestrian connections.

Open Space 6 (OS-6)

Located south of Roosevelt Avenue to the west of the surface parking area of Area of Development C, would be a 3.80-acre space dedicated to active recreation, with a variety of activities and attractions anticipated to include a fitness area; playgrounds; and active recreational spaces for sports such as basketball, racket sports, and soccer.

Private and Other Open Space

The Proposed Project would also introduce approximately 1.30 acres of rooftop private open space for visitors to the entertainment uses proposed within Area of Development A and additional indoor recreational amenity space. including pools and associated recreational areas. Furthermore, new landscaping and pedestrian access would be provided throughout the other areas of the Development Site. Along Shea Road, sidewalks and bike facilities would be added in addition to new landscaping and stormwater gardens. This will provide new pedestrian amenities and green space that is not currently accessible but is considered to be pedestrian circulation space and not open space. These spaces are not included in the quantitative open space assessment but are discussed qualitatively below.

Adequacy of Open Spaces

Quantitative Assessment

In the With-Action condition, the non-residential population in the study area is estimated to be 51,516 and the combined residential and non-residential population is estimated to be 63,094. As shown in **Table 5-10**, in the With-Action condition the non-residential population would have a passive OSR of 1.092 acres per 1,000 non-residents and would be well above the City guidance of 0.15 acres.

Table 5-10 With-Action Condition – Adequacy of Open Space Resources

	No-Action Condition Population	Proposed Project Population	With-Action Population	Passive Open Space Acreage	Passive Ratios[1]	CEQR Guidelines
Non-Residents	10,160	41,356	51,516	56.28	1.092	0.150
Combined Non-residents and Residents	21,738	--	63,094	56.28	0.892	0.214[2]

Notes:
[1] Acres per 1,000 people.
[2] Based on a target OSR established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents.

The combined non-residential and residential passive OSR would be 0.892 acres per 1,000 non-residents and residents and would remain well above the weighted average benchmark of 0.214 acres. The With-Action condition combined passive OSR represents a decrease over the No-Action condition of approximately 0.961 acres per 1,000 combined non-residents and residents, or a percent decrease in the passive OSR of approximately 51.87 percent from the No-Action condition.

Qualitative Assessment

All open spaces in the non-residential study area were found to be in "acceptable" to "good" condition and to have varying utilization rates. Of the 78 acres that comprise the Development Site currently, 53 acres consist of asphalt surface parking lots and the remainder includes roadways and other circulation areas. Therefore, under Existing Conditions, there is no usable open space. With the Proposed Project, of the 78 acres that comprise the Development Site currently, at least 20 acres would be usable public park space. As mentioned above, the newly created open spaces are intended to provide new open space amenities for the surrounding community, new workers, and visitors to the Proposed Project and Citi Field. The open spaces would provide areas for gathering; play; respite; and critical pedestrian and cycling connections to transit and other surrounding open spaces in the form of new walking paths, bicycle paths, and landscaping. The proposed public open space would form a connection between Flushing Bay and Flushing Meadows Corona Park, stitching together two major open space assets in Queens. Additionally, while not included in the quantitative open space assessment, the Proposed Project would also include private open space as discussed above. This would consist of rooftop open space on the top of Area of Development A, with amenities for visitors and indoor recreational amenities.

Furthermore, the quantitative open space assessment did not consider the remainder of Flushing Meadows Corona Park, or the neighborhood parks that are located directly adjacent to the Project Area. As mentioned above, Flushing Meadows Corona Park contains 11 major monuments, and

several cultural institutions, including the Hall of Science, the Queens Wildlife Conservation Center, Queens Museum, and Queens Zoo, which provide both active and passive recreation. Louis Armstrong Playground is located directly west of the Project Area and contains play areas and basketball courts for active recreation. Hinton Park is also located to the west of the Project Area and contains game tables, benches, baseball diamonds, and play areas for both passive and active recreation. Non-residents working or visiting the Development Site would also have access to these open spaces.

Determining Impact Significance

According to the *CEQR Technical Manual*, for projects that would reduce the open space ratio for a non-residential population consideration must be given to the project's effect on passive open space in the study area. The more the open space ratio falls below the optimal ratio of 0.15 acres of passive space per 1,000 population, the more likely the decrease would result in a significant impact.

In the With-Action condition, the Proposed Project would add 33,822 non-employee park users and 7,534 workers for an incremental non-residential population of 41,356 people. It would also add 20 acres of open space, including 15.99 acres of passive open space (see **Table 5-11**) and would not result in any reduction of existing open space, creating a net increase of usable public open space as compared to the existing and No-Action conditions.

Table 5-11 Comparison of Open Space Ratios

	Passive Ratios[1]				
	Existing	No-Action	With-Action	Percent Change (%)	CEQR Guidelines
Non-Residents	5.497	3.965	1.092	(72.45)	0.150
Combined Non-Residents and Residents	3.086	1.853	0.892	(51.87)	0.214[2]

Notes:
[1] Acres per 1,000 people.
[2] Based on a target OSR established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents.

Both open space ratios would be reduced from the No-Action condition due to the increase in the number of open space users (non-residents) resulting from the Proposed Project. However, the Proposed Actions would not reduce the open space ratios below the optimal 0.15 acres per 1,000 non-residential population (or the weighted 0.214 acres per 1,000 residents and non-residents in the With-Action condition). The open space ratios would remain high at approximately 1.092 acres per 1,000 non-residents and 0.892 acres per 1,000 combined residents and non-residents. Despite the increase in workers and visitors to the study area, non-resident and combined resident and non-resident ratios within the non-residential study area would continue to be well above City guidance for passive open space resources. The Proposed Actions would also add significant public and private open space to an area that is currently not used for recreation by the public while maintaining the needed parking spaces for visitors to Citi Field. Based on this information, the Proposed Actions would not result in significant adverse indirect impacts to open space in the study area and further assessment is not warranted.