

960 FRANKLIN AVENUE REZONING EIS

Chapter 5: Open Space

A. INTRODUCTION

This chapter assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2020 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment. The *CEQR Technical Manual* indicates that an open space analysis should be conducted if a proposed 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 Project Area is located in a well-served area as defined by the *CEQR Technical Manual*. According to *CEQR Technical Manual* guidance, a project that is located in a well-served area that would add more than 350 residents or 750 employees, or a similar number of similar users to an area, is typically assessed for any potential indirect effects on open space. As discussed in **Chapter 1, "Project Description,"** under the reasonable worst-case development scenario (RWCDs), the Proposed Actions would facilitate the construction of 1,578 new residential dwelling units (DUs), resulting in a net increase of approximately 2,777 residents and 140 employees over the as-of-right No-Action condition.¹ The Proposed Actions would also include the introduction of 10,790 square feet (sf) (0.25 acres) of publicly accessible open space. The project falls well below the CEQR threshold of 750 or more employees, though the anticipated number of new residents exceeds the CEQR threshold of 350 residents, requiring a detailed open space analysis. Accordingly, this analysis of open space will focus exclusively on the open space needs of the study area's residential population. A quantitative assessment was conducted to determine whether the Proposed Actions would significantly reduce the amount of open space available for the area's residential population, and is presented below.

B. PRINCIPAL CONCLUSIONS

The analysis finds that the Proposed Actions would result in a significant adverse open space impact.

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/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 and consequently result in the overburdening of existing facilities or further exacerbating a deficiency in open space. Although the Proposed Actions would not result in the physical loss of existing public open space resources and would not result in any air quality, noise, or other environmental impacts that would affect the usefulness of any study area open space, they would result in significant adverse shadow impacts at Brooklyn Botanic Garden and Jackie Robinson Playground. These direct shadows

¹ Based on 2010 census data, Brooklyn Community District 9 has an average of 2.62 persons per household. Estimates of workers are based on standard rates and are as follows: one worker per 25 DUs; three workers per 1,000 sf of retail space; three workers per 1,000 sf of community facility space; and one worker per 50 parking spaces.

impacts on these two open space resources may affect the public's use or enjoyment of these resources. Potential measures to mitigate in full or part these impacts are discussed in **Chapter 21, "Mitigation."**

As the Proposed Actions are expected to introduce an incremental 2,777 residents to the Project Area under the RWCDs, a detailed indirect effects open space analysis for a residential (½-mile) study area was conducted, pursuant to *CEQR Technical Manual* guidance. The detailed analysis determined that the Proposed Actions would not result in any significant adverse impacts to open space due to reductions in the open space ratio, as defined by the *CEQR Technical Manual*.

According to the *CEQR Technical Manual*, the Project Area is located in an area that is considered well-served by open space. CEQR guidance indicates that a decrease in the open space ratio of five percent or more is generally considered significant for a project located in an area that is currently below the Citywide median community district open space ratio of 1.50 acres per 1,000 residents. For areas that are extremely lacking in open space, a decrease of as little as one percent may be considered significant. An open space impact assessment also considers qualitative factors. As discussed below, the residential active open space ratio would decrease by more than five percent from the No-Action condition in the future with the Proposed Actions. While the residential total and passive open space ratios would remain above the City's planning guidelines of 2.50 acres and 0.50 acres per 1,000 residents, respectively, the residential active open space ratio would fall below the City's planning guideline of 2.00 acres of active open space per 1,000 residents in the future with the Proposed Actions, at 1.65 acres per 1,000 residents. However, (1) the total open space ratio would remain above the City's planning guideline of 2.50 acres of open space per 1,000 residents, at 3.74 acres per 1,000 residents; (2) the residential passive open space ratio would remain above the City's planning guideline of 0.50 acres of passive open space per 1,000 residents, at 2.08 acres per 1,000 residents; and (3) the Project Area is located in close proximity to significant regional open space resources, just beyond the study area boundaries, which provide additional active and passive open space recreational opportunities. Therefore, the Proposed Actions would not result in an indirect significant adverse impact on open space in the residential study area, in accordance with *CEQR Technical Manual* impact criteria.

C. METHODOLOGY

The analysis of open space resources has been conducted in accordance with the methodology set forth in the 2020 *CEQR Technical Manual*. Using this methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio. This quantitative measure is then used to assess the changes in the adequacy of open space resources in the future, both without and with the Proposed Actions. In addition, qualitative factors are considered in making an assessment of the Proposed Actions' effects on open space resources.

Study Area

The first step in assessing potential open space impacts is to establish the appropriate study area for the new population to be added as a result of a proposed action. According to *CEQR Technical Manual* methodologies, the open space study area is based on the distance a person is assumed to walk to reach a neighborhood open space, which differs by user. Workers typically use passive open spaces within a short walking distance of their workplaces, and are assumed to walk up to about a ¼-mile distance to reach neighborhood open spaces. Residents are more likely to travel farther to reach parks and

recreational facilities (assumed to walk up to about a ½-mile distance), and they use both passive and active open spaces. Although residents may travel farther than a ½-mile to visit certain regional parks (such as Prospect Park), such open spaces were not included in the study area’s quantitative analysis but are described qualitatively.

As detailed in **Chapter 1, “Project Description,”** the Development Site is comprised of Brooklyn block 1192, lots 41, 46, 63, and 66, and the proposed rezoning area also includes lot 40 and portions of lots 1, 77, and 85 (“the Project Area”). The Project Area is located in the Crown Heights neighborhood of Brooklyn Community District 9. As the worker population resulting from the Proposed Actions would not exceed the CEQR threshold for analysis, a non-residential (worker) analysis is not warranted. However, as indicated above, the new residential population resulting from the Proposed Actions would require a residential analysis. The *CEQR Technical Manual* recommends that the residential open space study area be comprised of all census tracts that have at least 50 percent of their area located within a ½-mile of a project area. Given the size of the census tracts located within the residential study area, strict adherence to this guideline would result in demographics that are not representative of the geographical areas that typically define a reasonable walking distance that residents would travel to reach open space and recreational areas. Specifically, given the size of census tract 177 (presented in **Figure 5-1**), the entire western quadrant of the ½-mile radius would be excluded during the analysis of the Proposed Actions. Therefore, the study area boundaries were adjusted at the western edge to include the portion of census tract 177 that is located within ½-mile of the Project Area. As shown in **Figure 5-1**, the open space study area is roughly bounded by Park Place and Eastern Parkway to the north; Classon and Ocean Avenues, as well as Prospect Park, to the west; Parkside Avenue, Fenimore Street, and Rutland Road to the south; and Nostrand and Rogers Avenues to the east. The open space study area includes the following census tracts in their entirety: census tracts 213, 217, 219, 321, 323, 325, 327, 798.01, 798.02, and 800. Additionally, as discussed above, the portion of census tract 177 located within a ½-mile of the Project Area that is publicly accessible and free of charge (i.e., excluding the Prospect Park Zoo) has been included in the open space calculations.

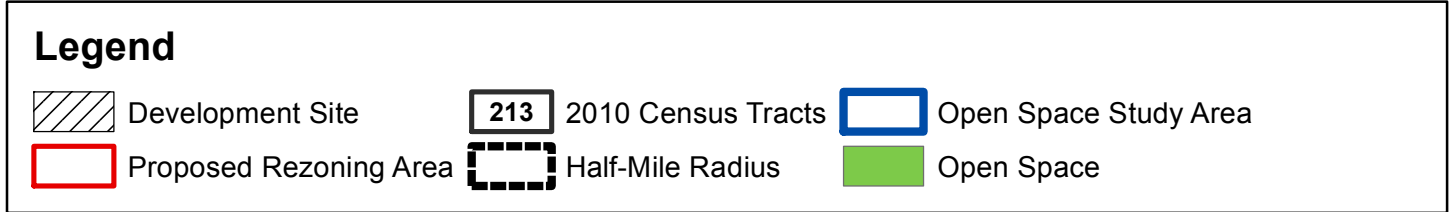
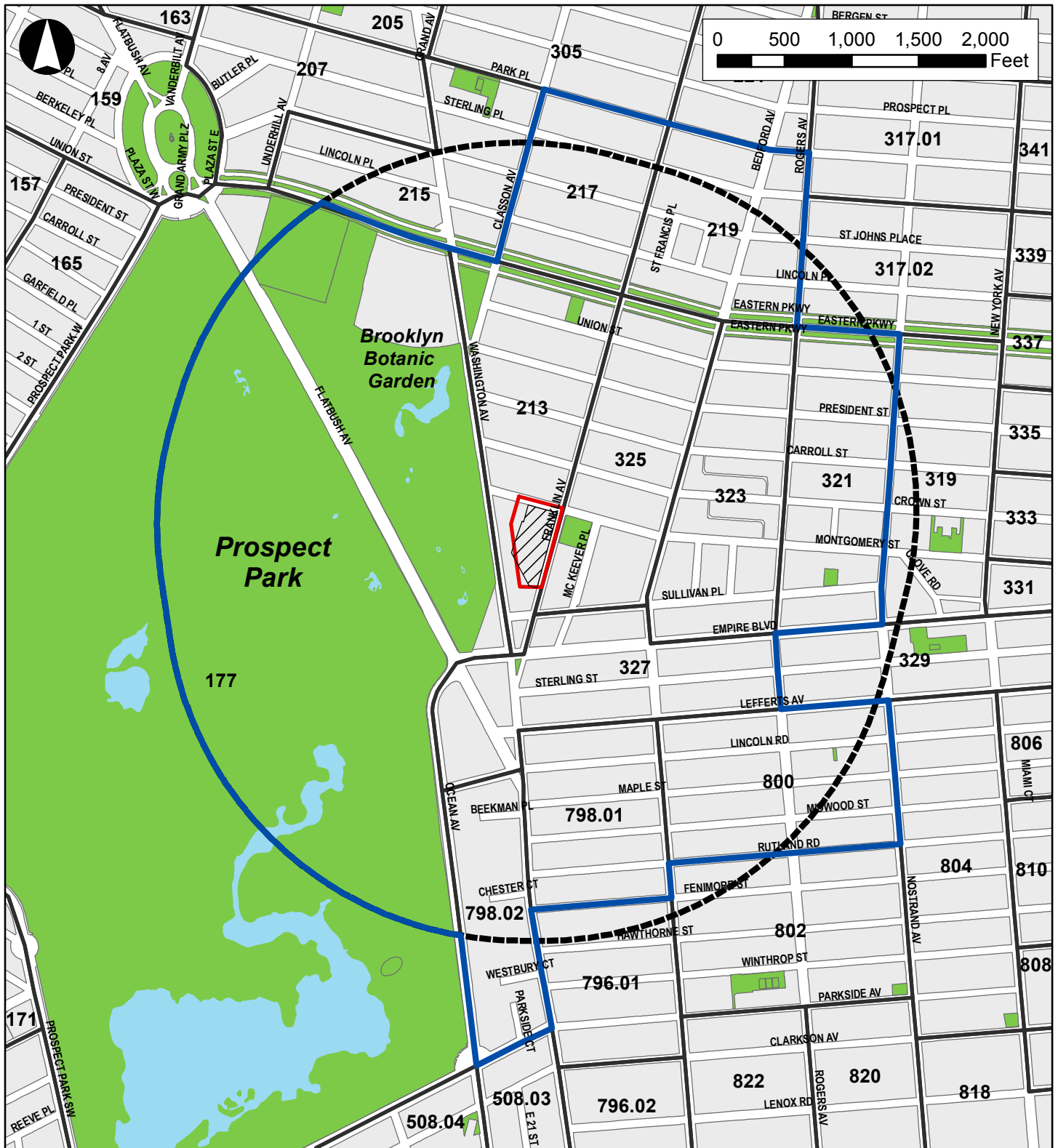
Analysis Framework

Direct Effect Analysis

According to the 2020 *CEQR Technical Manual*, a project would directly affect open space conditions if it causes the loss of public open space, changes the use of an open space so that it no longer serves the same user population, limits public access to an open space, or results in increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As no open space resources would be physically displaced as a result of the Proposed Actions, this chapter uses information from **Chapter 6, “Shadows,” Chapter 14, “Air Quality,”** and **Chapter 16, “Noise,”** to determine whether the Proposed Actions would directly affect any open spaces within, or in close proximity to, the Project Area.

Indirect Effect Analysis

As described in the 2020 *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either residential or non-residential, to noticeably diminish the capacity of open space in the area to serve the existing or future population. Typically, an assessment of indirect effects is conducted when a project would introduce more than 200 residents or 500 workers to an area; however, the thresholds for assessment are slightly different for areas of the City



that have been identified as either underserved or well-served by open space. For areas underserved by open space, the threshold for assessment is more than 50 residents or 125 workers, and for areas well-served by open space, the threshold for assessment is more than 350 residents or 750 workers. **Figure 5-1** shows the open space study area for the Proposed Actions. The Project Area is located within an area that has been identified in the *CEQR Technical Manual* as well-served. However, it should be noted that in the larger study area, census tracts 217, 219, 321, 323, and a portion of census tract 325 are located within an area that is defined as under-served by open space in the *CEQR Technical Manual*, while census tracts 213, 798.01, 798.02, and portions of census tracts 325 and 327 are in an area identified as well-served. Census tract 800 and a portion of census tract 327 are located in areas that are identified as neither a well-served area nor an under-served area.

Per *CEQR Technical Manual* guidance, the open space analysis and impact assessment is based on the anticipated development that would be facilitated by the Proposed Actions. As discussed in **Chapter 1, "Project Description,"** the RWCDs assumes that the Proposed Actions would result in the development of up to 1,578 DUs on the Development Site, which would introduce an incremental 2,777 residents to the site, compared to the No-Action condition. In addition, the Proposed Actions would introduce an increment of approximately 140 new workers to the Development Site as compared to the No-Action condition. As such, an open space assessment is only warranted for the residential population generated by the Proposed Actions.

With an inventory of available open space resources and potential users, the adequacy of open space in the study areas can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that may affect conclusions about adequacy, including proximity to additional resources beyond the boundaries of the study area, the availability of private recreational facilities, and the demographic characteristics of the study area's population. Specifically, the analysis in this chapter includes:

- Characteristics of the existing residential population. To determine the number of residents in the study area, 2010 Census data have been compiled for census tracts comprising the open space study area.
- An inventory of all publicly accessible active and passive recreational facilities in the residential open space study area.
- An assessment of the quantitative ratio of open space in the residential study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with certain guidelines. For the residential population, there are generally two guidelines that are used to evaluate residential open space ratios. The *CEQR Technical Manual* generally recommends a comparison to the median ratio for community districts in New York City, which is 1.50 acres of open space per 1,000 residents. However, the *CEQR Technical Manual* planning guidance is 2.5 acres of open space per 1,000 residents, comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).
- An evaluation of qualitative factors affecting open space use.
- A final determination of the adequacy of open space in the residential open space study area.
- An assessment of expected changes in future levels of open space supply and demand in the 2024 analysis year, based on other planned No-Action development projects and anticipated background growth within the open space study area. To estimate the residential population expected in the study

area in the future without the Proposed Actions, both background growth and study area No-Action developments are accounted for. Any new open space or recreational facilities that are anticipated to be operational by the analysis year are also accounted for. Open space ratios are calculated for the future No-Action condition and compared with existing ratios to determine changes in future levels of open space adequacy.

Impact Assessment

Impacts are based in part on how a project would change the open space ratios in the study area. According to the *CEQR Technical Manual*, for areas that are currently below the Citywide median community district open space ratio of 1.50 acres per 1,000 residents, an open space ratio decrease of more than five percent is generally considered to be a significant adverse impact. If a study area exhibits a low open space ratio (e.g., below 1.50 acres per 1,000 residents or 0.15 acres of passive space per 1,000 non-residential users), indicating a shortfall of open space, smaller decreases in that ratio as a result of the action may constitute significant adverse impacts. Conversely, in areas that are well-served by open space (such as the Project Area), a greater percentage of change (more than five percent) may be tolerated and would not necessarily constitute an impact.

In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. These include the availability of nearby designation resources, the beneficial effects of new open space resources provided by a project, and the comparison of projected open space ratios with established City guidelines. It is recognized that the open space ratios of the City guidelines described above are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks that indicate how well an area is served by open space.

D. EXISTING CONDITIONS

Study Area Population

Residential (½-Mile) Study Area

RESIDENTIAL POPULATION

As also shown in **Table 5-1**, 2010 Census data indicate that the ½-mile study area has a residential population of approximately 41,256 persons. It should be noted that there is no residential population in census tract 177, which encompasses Prospect Park and the Brooklyn Botanic Garden.

As shown in **Table 5-1**, people between the ages of 20 and 64 make up the majority (approximately 66.4 percent) of the residential population in the ½-mile study area. Children and teenagers (0 to 19 years old) account for approximately 22.1 percent of the entire study area population, and persons 65 years and over account for approximately 11.4 percent of the study area population. As also presented in **Table 5-1**, compared to Brooklyn and New York City as a whole, the half-mile study area includes a smaller percentage of children/teenagers and a larger percentage of adults (20 to 64 years); the percentage of the study area population that is elderly is also comparable to that of Brooklyn and New York City as a whole.

The half-mile study area's median age of 35.6 is approximately 1.5 years older than the median age for Brooklyn (34.1 years) and nearly identical to the median age for New York City as a whole (35.5 years). It should also be noted that the median age varies by census tract, with census tract 217 exhibiting the lowest median age (33.1) and census tract 800 exhibiting the highest median age (39.1).

TABLE 5-1
Residential Population and Age Distribution in the ½-Mile Study Area

Census Tract	Total Residential Population	Age Distribution												Median Age
		Under 5		5 to 9		10 to 14		15 to 19		20 to 64		65 and Over		
		#	%	#	%	#	%	#	%	#	%	#	%	
177	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
213	4,205	228	5.4	219	5.2	215	5.1	247	5.9	2,829	67.3	467	11.1	34.6
217	3,597	234	6.5	205	5.7	196	5.4	179	5.0	2,412	67.1	371	10.3	33.1
219	3,595	175	4.9	125	3.5	149	4.1	177	4.9	2,599	72.3	370	10.3	33.6
321	5,001	308	6.2	276	5.5	283	5.7	325	6.5	3,173	63.4	636	12.7	35.8
323	3,554	203	5.7	170	4.8	210	5.9	228	6.4	2,290	64.4	453	12.7	36.0
325	6,405	451	7.0	394	6.2	429	6.7	405	6.3	4,018	62.7	708	11.1	35.1
327	2,924	147	5.0	145	5.0	138	4.7	178	6.1	1,993	68.2	323	11.0	36.5
798.01	3,037	124	4.1	150	4.9	129	4.2	151	5.0	2,112	69.5	371	12.2	39.2
798.02	5,451	308	5.7	268	4.9	272	5.0	308	5.7	3,784	69.4	511	9.4	35.1
800	3,487	194	5.6	178	5.1	226	6.5	211	6.1	2,180	62.5	498	14.3	39.1
Half-Mile Study Area	41,256	2,372	5.7	2,130	5.2	2,247	5.4	2,409	5.8	27,390	66.4	4,708	11.4	35.6
Total for Brooklyn	2,504,700	177,198	7.1	159,391	6.4	156,563	6.3	170,684	6.8	1,553,231	62.0	287,633	11.5	34.1
Total for NYC	8,175,133	517,724	6.3	473,159	5.8	468,154	5.7	535,833	6.6	5,187,105	63.4	993,158	12.1	35.5

Source: U.S. Census Bureau, 2010 Census.

Note: ¹ Calculated median age for study area represents weighted average for all census tracts.

Within a given area, the age distribution of a population affects the way open space resources are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool-aged children. Children ages five through nine typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages ten through 14 use playground equipment, court spaces, Little League fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities, such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized forms of recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports, such as Frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation, such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, a publicly accessible open space is defined as a recreational facility open to the public at designated hours on a regular basis and can be assessed for impacts using both a quantitative and a qualitative analysis, whereas a private open space facility is not accessible to the general public on a regular basis and may be considered only qualitatively.

An open space resource is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play, such as sports or exercise, and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas (open lawns and paved areas for active recreation such as running, games, informal ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas. However, some passive spaces can be used for both passive and active recreation, such as a lawn or riverfront walkway, which can also be used for ball-playing, jogging, or rollerblading.

Within the open space study area, all publicly accessible open space resources were inventoried and identified by their name, location, owner, amenities/equipment, user groups, hours of operation, and the amount of total, active, and passive acreage, as well as the condition and utilization of each resource. The information used for this analysis was gathered through field inventories conducted in April 2019; the New York City Department of Parks and Recreation's (NYC Parks) website; and the New York City Open Accessible Space Information System (OASIS) database and other secondary sources of information.

The condition of each open space resource was categorized as "Excellent," "Good," "Fair," or "Poor." A resource was considered in excellent condition if the space was clean and attractive, and all equipment was present and in a state of good repair. A good resource had minor problems such as litter or older but operative equipment. A fair or poor resource was one that was poorly maintained, had broken or missing equipment or lack of security, or other factors that would diminish the facility's attractiveness to potential users. Determinations were made subjectively, based on a visual assessment of the open space resources.

Likewise, judgments with regard to the intensity of use of the resources were qualitative, based on an observed degree of activity or utilization on a weekday from 11 AM until 3 PM, which is considered the weekday peak utilization period according to *CEQR Technical Manual* guidance. If a resource seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered high. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Table 5-2, "Inventory of Existing Open Space and Recreational Resources in Study Area,"** identifies the address, ownership, features, and acreage of total, active, and passive open space resources in the half-mile study area, as well as their condition and utilization. **Figure 5-2** maps their location within the study area.

Open Space Resources

As shown in **Figure 5-2** and **Table 5-2**, there are nine publicly accessible open space resources located in the ½-mile open space study area. These open space resources are primarily located in the northern and western portions of the study area. In addition, there are two community gardens located within the ½-mile study area that are not included in the quantitative analysis because they do not provide consistent public hours or do not include seating or other amenities.

The study area contains a total of approximately 204.28 acres of publicly accessible open space, of which approximately 90.45 acres (44.3 percent) comprise active open space uses and approximately 113.83 acres (55.7 percent) comprise passive open space uses (refer to **Table 5-2**).



**TABLE 5-2
Inventory of Existing Open Space and Recreational Resources in Study Area**

Map No. ¹	Name	Address	Owner/ Agency ²	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
1	Brooklyn Botanic Garden	Located adjacent to Eastern Parkway and Flatbush and Washington Avenues	NYC Parks	Botanic Garden	Children, Teenagers, Adults, Senior Citizens	Seasonal variations in public hours; Additional details provided in chapter text	52.0	30	15.60	70	36.40	Excellent Condition/High Utilization
2	P/O of Prospect Park (Scenic Landmark) ³	Located adjacent to Flatbush and Ocean Avenues	NYC Parks	Playgrounds, Carousel, Benches, Walking paths, Hiking trails, Bike paths, Lawns, Landscaping, Forest	Children, Teenagers, Adults, Senior Citizens	5AM to 1AM	134.8 ⁽³⁾	50	67.40	50	67.40	Excellent Condition/High Utilization
3	P/O of Mount Prospect Park ³	Located between Eastern Parkway and Flatbush Avenue	NYC Parks	Playground, Walking paths, Benches, Lawn, Landscaping, Trees	Children, Teenagers, Adults, Senior Citizens	6AM to Dusk	7.22 ⁽³⁾	30	2.17	70	5.05	Excellent Condition/Moderate Utilization
4	Brooklyn Museum Plaza	Located adjacent to Eastern Parkway and Washington Avenue	DCLA	Benches, Sitting areas, Water features, Landscaping, Trees	Children, Teenagers, Adults, Senior Citizens	Dawn to Dusk	0.90	50	0.45	50	0.45	Excellent condition/High utilization
5	Dr. Ronald McNair Park	Bounded by Eastern Parkway, Classon Avenue, and Washington Avenue	NYC Parks	Walking paths, Benches, Game tables, Lawn, Landscaping, Trees	Teenagers, Adults, Senior Citizens	6AM to 12AM	1.36	10	0.14	90	1.22	Excellent Condition/Low Utilization
6	P/O of Eastern Parkway (Scenic Landmark) ³	Located between Underhill and Nostrand Avenues	NYC Parks/DOT	Benches, Walking paths, Bike paths, Landscaping, Trees	Teenagers, Adults, Senior Citizens	24 Hours	6.26 ⁽³⁾	50	3.13	50	3.13	Excellent Condition/Low Utilization
7	Jackie Robinson Playground	Montgomery Street between Franklin Avenue and McKeever Place	NYC Parks/DCAS/ DOE	Basketball and Handball courts, Playgrounds, Fitness equipment, Benches, Game tables, Trees, Spray Showers	Children, Teenagers, Adults	Jointly Operated Playground; When school is in session: Open to the public after school hours until dusk; When school is out of session: 8 AM to Dusk	1.00	90	0.90	10	0.10	Good Condition/Moderate Utilization
8	Dodger Playground	Sullivan Place between Rogers and Nostrand Avenue	NYC Parks	Playgrounds, Spray showers, Benches, Landscaping, Trees	Children, Teenagers	6AM to Dusk	0.29	90	0.26	10	0.03	Excellent Condition/Low Utilization

TABLE 5-2 (continued)
Inventory of Existing Open Space and Recreational Resources in Study Area

Map No. ¹	Name	Address	Owner/ Agency ²	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
9	P.S. 375K Community Playground	Located adjacent to McKeever Place and Sullivan Place	NYC Parks/DCAS/DOE	Playgrounds, Multi-purpose sports field, Basketball hoops, Game tables, Benches, Landscaping, Trees, Garden	Children, Teenagers	Jointly Operated Playground; When school is in session: Open to the public after school hours until dusk; When school is out of session: 8 AM to Dusk	0.45	90	0.41	10	0.05	Excellent condition/Low utilization
Total Open Space Acreage in Quantitative Analysis:							204.28	44.3	90.45	55.7	113.83	
A	Union Street Garden and Community Development	1029 Union Street	NYC Parks	Community Garden	-	-	0.43	-	-	-	-	-
B	Lincoln Road Garden	316 Lincoln Road	NYC Parks	Community Garden	-	-	0.06	-	-	-	-	-
Total Open Space Acreage Not Included in Quantitative Analysis:							0.49	-	-	-	-	

Sources: OASIS, NYC Parks, 2018 Primary Land Use Tax Lot Output (PLUTO) data, PHA site visits conducted in April 2019.

Notes:

¹ Refer to Figure 5-2.

² NYC Parks = New York City Department of Parks and Recreation; DOE = New York City Department of Education; DOT = New York City Department of Transportation; DCAS = New York City Department of Citywide Administrative Services; DCLA = New York City Department of Cultural Affairs.

³ Only the portions of Prospect Park, Mount Prospect Park, and Eastern Parkway located within a ½-mile of the Project Area are included in the quantitative analysis.

The open space resources located closest to the Project Area are the one-acre Jackie Robinson Playground (Map No. 7) and the 0.45-acre P.S. 375K Community Playground (Map No. 9), located on the block bounded by Franklin Avenue, McKeever Place, Montgomery Street, and Sullivan Place, directly east of the Project Area (refer to **Figure 5-2**). Both playgrounds are jointly operated by the New York City Department of Parks and Recreation (NYC Parks) and the New York City Department of Education (DOE), and are programmed with an array of uses, including basketball and handball courts, playgrounds, and fitness equipment for active recreation, and game tables and benches for passive recreation. Jackie Robinson Playground is in good condition and is moderately utilized, while P.S. 375K Community Playground is in excellent condition and utilization is low. Each of these playgrounds are open to the public during non-school hours.

Immediately west of the Project Area, to the west of Washington Avenue, is Brooklyn Botanic Garden (Map No. 1). The 52-acre open space is owned by NYC Parks and operated as a not-for-profit corporation. The garden includes numerous themed plant collections, gardens, and pavilions, as well as a plaza, a terrace, an esplanade, and many paved paths, sitting areas, and benches. The garden is in excellent condition and is highly utilized. Although the garden is a publicly owned open space, an admission fee exists to fund operations. However, admission is free to members and children aged 12 and under; admission is also free to the public on weekdays (Tuesday to Friday) from December through February and on Friday mornings before 12PM between March and November. It should be noted that the public entrance to the Brooklyn Botanic Garden at 990 Washington Avenue is located approximately one-third of a mile from the Montgomery Street frontage of the Project Area (refer to **Figure 5-2**). Similarly, the 455 Flatbush Avenue entrance is located approximately one-third of a mile from the Franklin Avenue frontage of the Project Area.

To the west of the Project Area, to the west of Flatbush Avenue, is Prospect Park (Map No. 2), a major regional open space resource and designated Scenic Landmark in Brooklyn. As described above, approximately 134.8 acres of the 526-acre park are located within a ½-mile radius of the Project Area. The portion of the park within the open space study area includes paved paths for walking, jogging/running, and cycling, benches, and an abundance of non-programmed lawns that are available for both active and passive uses, including portions of the Long Meadow and Nethermead. The Imagination Playground and Lincoln Playground are also located within the boundaries of the open space study area. The park is in excellent condition and is highly utilized.

To the northwest of the Project Area, bounded by Eastern Parkway to the north, Classon Avenue to the east, and Washington Avenue to the south, is the 1.36-acre Dr. Ronald McNair Park (Map No. 5). The park includes walking paths, benches, and game tables. The park is in excellent condition and utilization is low. To the west of Dr. Ronald McNair Park is the 0.90-acre Brooklyn Museum Plaza (Map No. 4). The plaza, which is operated by the New York City Department of Cultural Affairs (DCLA), includes benches, sitting areas, water features, and landscaping. The plaza is in excellent condition and utilization is high. Also located in the northwest portion of the open space study area is approximately 7.22 acres of the 7.79-acre Mount Prospect Park (Map No. 3). This park includes play equipment, swings, game tables, benches, and a spray shower. The park is in excellent condition and is moderately utilized.

Immediately north of Dr. Ronald McNair Park, running east to west through the open space study area is the 63.64-acre Eastern Parkway (Map No. 6), of which approximately 6.26 acres are located within the open space study area (refer to **Figure 5-2**). The Parkway, a designated Scenic Landmark, includes bike paths, paths for walking and jogging/running, and benches. The Parkway is operated by NYC Parks and the New York City Department of Transportation (DOT). It is in excellent condition and utilization is low.

Finally, approximately half-a-mile to the east of the Project Area, on Sullivan Place between Nostrand and Rogers Avenues, is the 0.29-acre Dodger Playground (Map No. 8). The playground is operated by NYC Parks and includes playgrounds, spray showers, and benches. It is in excellent condition and utilization is low.

Assessment of Open Space Adequacy

Residential (½-Mile) Study Area

The following analysis of the adequacy of open space resources within the residential open space study area takes into consideration the ratios of total, active, and passive open space resources per 1,000 residents.

QUANTITATIVE ASSESSMENT

As previously stated, there are 204.28 acres of publicly accessible open space, including approximately 90.45 acres (approximately 44.3 percent) of active open space and approximately 113.83 acres (approximately 55.7 percent) of passive open space. With a residential population of 41,256, the total open space ratio for residents is 4.95 acres per 1,000 residents, which is greater than the City’s planning guideline of 2.50 acres of parkland per 1,000 residents (see **Table 5-3**). The study area’s active open space ratio (2.19 acres per 1,000 residents) is greater than the City’s planning guideline of 2.00 acres per 1,000 residents. The area’s passive open space ratio (2.76 acres per 1,000 residents) is greater than the City’s planning guideline of 0.50 acres per 1,000 residents.

QUALITATIVE ASSESSMENT

The residential study area contains a mixture of recreational facilities, with approximately 44.3 percent dedicated to active uses and 55.7 percent dedicated to passive uses. As detailed above, under existing conditions, the total open space ratio, active open space ratio, and the passive open space ratio are above the City’s planning guidelines (refer to **Table 5-3**).

TABLE 5-3
Existing Conditions: Adequacy of Open Space Resources

Existing Population	Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
41,256	204.28	90.45	113.83	4.95	2.19	2.76	2.50	2.00	0.50

As shown in **Table 5-2**, the residential study area open spaces include a wide variety of actively programmed open spaces appropriate for the residential user groups. As noted above, the study area includes a high percentage of adults, as compared to the borough of Brooklyn and the City of New York as a whole (refer to **Table 5-1**). As indicated in the *CEQR Technical Manual*, adults tend to use court facilities for sports, as well as spaces for more individualized forms of recreation, such as rollerblading, biking, and jogging, which require bike paths, esplanades, and vehicle-free roadways. Adults also gather with families for picnicking or ad hoc active sports such as Frisbee. Five of the residential study area’s nine open spaces include such facilities (refer to **Table 5-2**). Further, some passive spaces can be used for both passive and active recreation, such as a lawns or walkways that can be used for ball playing, jogging/running, or rollerblading. In addition, as noted in **Table 5-2**, a majority of open space resources located in the study area are in excellent or good condition.

As noted in **Table 5-2** and described above, only 134.8 acres of the 526-acre Prospect Park, only 6.26 acres of the 63.64-acre Eastern Parkway, and only 7.22 acres of the 7.79-acre Mount Prospect Park are located within the residential open space study area. The remaining portion of these parks, located immediately adjacent to the boundaries of the open space study area, would likely be utilized by study area residents. As detailed above, all three open space resources contain a variety of active and passive recreational uses, and are in excellent condition. Additionally, as Prospect Park is considered a major regional park, it is likely that residents would travel farther than the ½-mile extent of the open space study area to enjoy its open space and varied recreational amenities. As such, it is expected that the remaining portions of Prospect Park, Eastern Parkway, and Mount Prospect Park not included in the quantitative analysis above would provide additional open space activities for residents of the residential study area.

Additionally, as noted in **Table 5-2** and described above, there are two community gardens located in the residential open space study area. The Union Street Garden and Community Development (Map Letter A) is located five blocks to the north of the Project Area. The approximately 0.43-acre community garden is located on Union Street between Classon and Franklin Avenues and is owned by NYC Parks. Additionally, Lincoln Road Garden (Map Letter B) is located approximately half-a-mile to the southeast of the Project Area. The approximately 0.06-acre community garden is located on Lincoln Road between Rogers and Nostrand Avenues and is owned by NYC Parks. Although these open spaces are publicly owned, they do not provide consistent public hours or do not include seating or other amenities. As such, they are conservatively not included in the quantitative analysis above.

It should be noted that the 12-acre Prospect Park Zoo is located within the portion of Prospect Park located in the residential open space study area (refer to **Figure 5-2**). The zoo is a publicly owned open space that charges an admission fee for anyone over the age of two. Unlike the Brooklyn Botanic Garden, the Prospect Park Zoo does not at any point offer free admission to the public. As Prospect Park Zoo is located in the residential open space study area, it is likely to be utilized by study area residents. However, as there is an admission fee with no available times for free public access, this open space resource is not included in the quantitative analysis.

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

Study Area Population

There are approximately 20 known and anticipated No-Action developments within the half-mile open space study area. In total, these 20 combined No-Action developments are expected to introduce approximately 5,836 residents to the ½-mile study area. In addition, a residential background growth rate was applied to the existing residential population to account for general background growth anticipated in the ½-mile study area. As indicated in **Table 5-4**, the anticipated No-Action developments, combined with the residential growth rate, are expected to increase the half-mile study area population to 51,958 residents.

Open Space Resources

While there are no planned changes to open space resources that would increase or decrease the overall study area acreage, NYC Parks has several capital projects planned within the ½-mile study area. In the portion of Mount Prospect Park that is located within the study area, NYC Parks plans to reconstruct pavement at various locations within the park. This reconstruction project is currently in the design phase, which began in March 2019. In the portion of Prospect Park located within the study area, NYC Parks has

four capital construction projects planned: (1) Reconstruction of pavement at various locations within the park (currently in the design phase, which began in March 2019); (2) Reconstruction of the Prospect Park Tea House Pavilion (currently in the procurement phase, which is anticipated to be complete in August 2019); (3) Reconstruction of the Prospect Park Lefferts House (currently in the procurement phase, which is anticipated to be complete in June 2019); and (4) Reconstruction of the Prospect Park Vale of Cashmere Path (currently in the procurement phase, which is anticipated to be complete in October 2019).

Although no completion dates have been established for these five reconstruction projects, it is expected that these improvement projects at Mount Prospect Park and Prospect Park would be fully implemented in the 2024 No-Action condition. While the capital projects would not add any additional open space acreage to the ½-mile study area, the projects would improve the conditions and functionality of the two open spaces.

In addition, it should also be noted that, under the No-Action condition, the former Bedford-Union Armory at 1555 Bedford Avenue is expected to be redeveloped. The anticipated No-Action development of the armory will include the conversion of the former drill hall into a community recreation center with a swimming pool, fitness center, basketball courts, and a flexible multi-sport court space. The Bedford-Union Armory community recreation center would provide additional active open space to residents in the open space study area. However, the center is not included in the quantitative assessment of open space below as it is expected that use will require a paid membership (although it is expected that memberships will be reserved for community members at discounted rates).

Assessment of Open Space Adequacy

Residential (½-Mile) Study Area

In the 2024 No-Action condition, the additional population introduced to the ½-mile study area would increase the demand on the area’s open space resources (i.e., would reduce the residential open space ratios). As indicated in **Table 5-4**, the No-Action total, active, and passive open space ratios per 1,000 residents are expected to decrease to 3.93, 1.74, and 2.19, respectively, from 4.95, 2.19, and 2.76, respectively, under existing conditions. Similar to existing conditions, the total and passive open space ratios would remain above the City’s community district median and the City’s optimal planning guidelines. Under the No-Action condition, the active open space ratio would fall below the City’s community district median and the City’s optimal planning guidelines.

**TABLE 5-4
Adequacy of Open Space Resources: No-Action Condition**

2024 No-Action Population	Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
51,958	204.28	90.45	113.83	3.93	1.74	2.19	2.50	2.00	0.50

F. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

This section describes the open space conditions that would result from the Proposed Actions by 2024. It evaluates the potential for the Proposed Actions to result in significant adverse impacts to open space resources directly and indirectly based on a comparison of the No-Action condition (described above) to the With-Action condition.

Direct Effects

A direct effects assessment was conducted in accordance with the definitions provided in Section 210 of the *CEQR Technical Manual* chapter 7 and the impact significance criteria specified in Section 410 of the chapter. No publicly accessible open space is currently located in the Project Area. Therefore, the Proposed Actions would not result in the physical loss of publicly accessible open space. In addition, as discussed in other chapters of this EIS, the Proposed Actions would not cause increased noise or air pollutant emissions that would affect the usefulness of any study area open space, whether on a permanent or temporary basis. However, as detailed in **Chapter 6, “Shadows,”** portions of the Brooklyn Botanic Garden and Jackie Robinson Playground would receive significant amounts of incremental shadow from the Proposed Development. Incremental shadows from the Proposed Development would threaten the vitality of vegetation within the garden and would affect the garden’s usefulness or enjoyment for residents. The duration of incremental shadows and temporary complete coverage of the playground by shadows would affect the playground’s usefulness or enjoyment by area residents. Therefore, the Proposed Actions would result in direct significant adverse open space impacts at the Brooklyn Botanic Garden and Jackie Robinson Playground. Apart from shadows impact disclosed herein, the Proposed Actions would not change the use of a publicly accessible open space so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no other significant adverse direct effects on open space would occur as a result of the Proposed Actions.

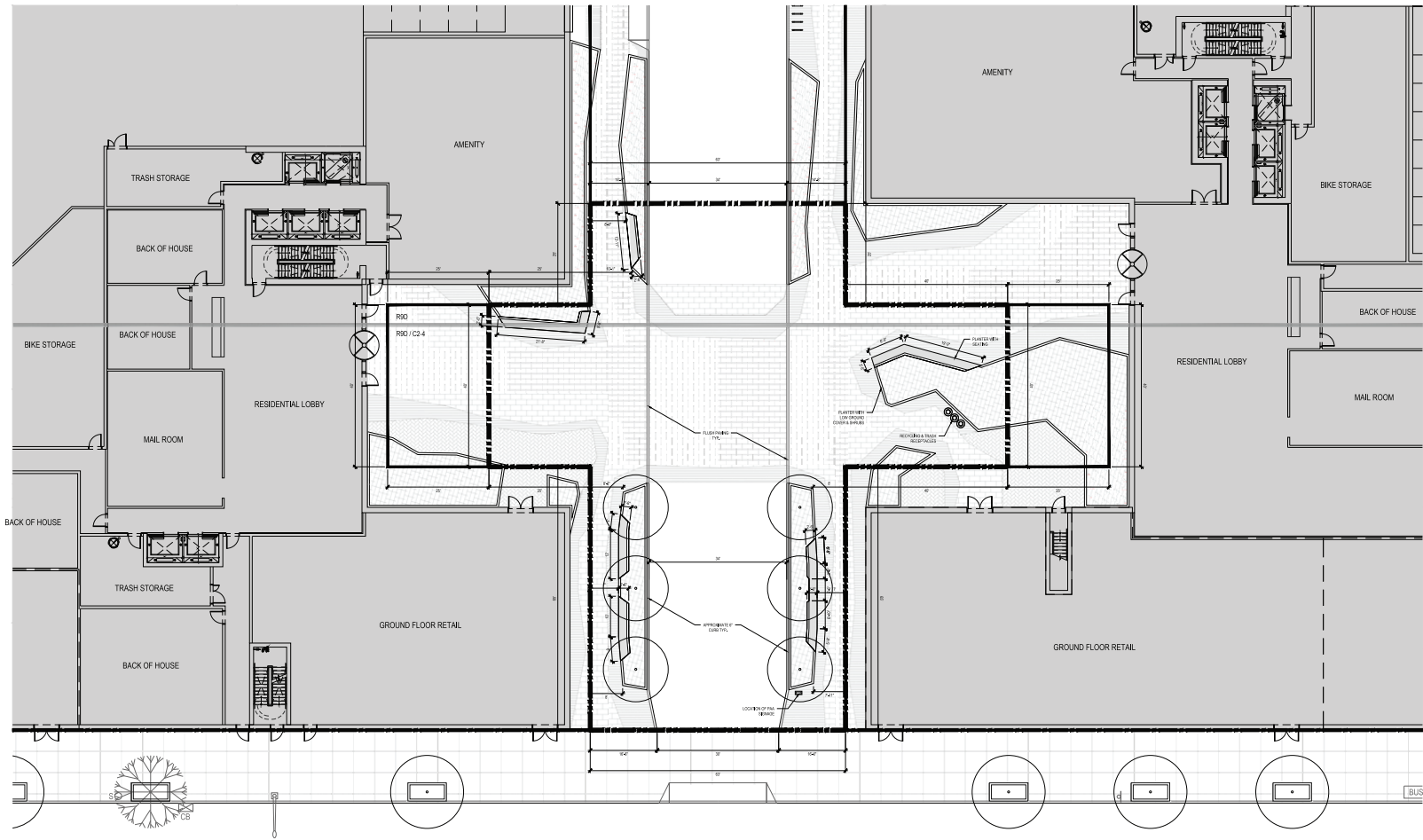
Indirect Effects

Study Area Population

In the future with the Proposed Actions, it is estimated 2,777 new residents would be introduced to the Project Area. Based on this incremental residential population growth, the study area’s population would increase to a total of 54,735 residents in the 2024 With-Action condition.

Open Space Resources

As detailed in **Chapter 1, “Project Description,”** the Proposed Development would include 51,679 sf of private passive open space uses for building residents, including roof terraces, landscaped lawns and plaza areas, benches, and an urban garden. As this project-generated open space would be private, it is not included in the quantitative analysis presented below. However, the Proposed Development would also include approximately 10,790 square feet (sf) (0.25-acre) of public open space along the interior roadway of the Proposed Development, which would be accessible to the general public daily between 6 AM and 10 PM with those hours and maintenance standards memorialized in the restrictive declaration recorded against the property. The 0.25-acre passive open space would comprise a plaza programmed with benches, sitting areas, and landscaping. As this project-generated open space would be public, and is considered a Project Component Related to the Environment (PCRE) that would be required through the project approvals. it is included in the quantitative analysis presented below. The on-site open space that would be provided under the With-Action condition is detailed in Table 5-5 and shown in **Figure 5-3**.



**TABLE 5-5
On-site Open Space, With-Action Condition**

Type of Area	Publicly Accessible Open Space	Other Open Space	Total Open Space
Open Plaza / Sitting (sf)	6,390	11,462	17,852
Interior Roadway (sf)	4,400	8,351	12,751
Green Space (along r-o-w boundary) (sf)	0	6,907	6,907
Roof Terraces (sf)	0	24,959	24,959
Total (sf)	10,790	51,679	62,469
Total (acres)	0.25	1.19	1.43

* Note: 0.25 and 1.19 appear to not sum to 1.43; this is due to rounding. The respective numbers at 3 decimals are 0.248, 1.186, and 1.434. These numbers are reported at 2 decimals for consistency with other sources, such as NYC Parks website, etc.

Assessment of Open Space Adequacy

RESIDENTIAL (½-MILE) STUDY AREA

QUANTITATIVE ASSESSMENT

In the 2024 With-Action condition, the additional population introduced to the ½-mile study area by the Proposed Actions would further increase the demand on the area’s open space resources. As indicated in **Table 5-6**, the With-Action total, active, and passive open space ratios per 1,000 residents are expected to decrease to 3.74, 1.65, and 2.08, respectively, from 3.93, 1.74, and 2.19, respectively, under the No-Action condition. Similar to the No-Action condition, the total and passive open space ratios would remain above the City’s community district median and the City’s optimal planning guidelines, while the active open space ratio would remain below the City’s community district median and the City’s optimal planning guidelines.

**TABLE 5-6
Adequacy of Study Area Open Space Resources: With-Action Condition**

2024 With-Action Population	Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Total	Active	Passive	Total*	Active	Passive	Total	Active	Passive
54,735	204.53	90.45	114.08	3.74	1.65	2.08	2.50	2.00	0.50

* Note: 1.65 and 2.08 appear to not sum to 3.74 due to rounding, which also occurs at 3 decimal places. The respective numbers at 4 decimals are 1.6525, 2.0842, and 3.7367. These ratios are reported at 2 decimals for consistency with the rest of the analysis.

QUALITATIVE ASSESSMENT

In the future with the Proposed Actions, the ratio of active open space would continue to be lower than the City’s planning guidelines for active open space, while the ratios for total and passive open space would continue to be higher than the City’s planning guidelines. The incremental population that would be generated by the Proposed Actions is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific user groups. It should also be noted that, while the amount of active open space resources in the

open space study area is, and would continue to be, deficient in comparison to the City's planning guidelines, study area open spaces were all observed to be in excellent or good condition (refer to **Table 5-2**).

Determining Impact Significance

A significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than five percent in areas that are currently below the Citywide median community district open space ratio of 1.50 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction of as little as one percent may be considered significant, depending on the area of the City. These reductions may result in the overburdening of existing facilities or further exacerbating a deficiency in open space. Conversely, in areas that are well-served by open space (such as the Project Area), a greater percentage of change (more than five percent) may be tolerated. **Table 5-7** presents the percentage change from the No-Action condition to the With-Action condition for the ½-mile open space study area.

TABLE 5-7
Residential Open Space Ratios Summary

Type of Open Space	CEQR Technical Manual Open Space Guideline	Open Space Ratios per 1,000			Percent Change (Future No-Action to Future With-Action)
		Existing	No-Action	With-Action	
Total	2.50	4.95	3.93	3.74	-4.96%
Active	2.00	2.19	1.74	1.65	-5.07%
Passive	0.50	2.76	2.19	2.08	-4.87%

RESIDENTIAL (½-MILE) STUDY AREA

With respect to the reduction in open space ratios in the ½-mile open space study area, the residential total open space ratio would decrease by approximately 4.96 percent from the No-Action condition, the residential active open space ratio would decrease by approximately 5.07 percent from the No-Action condition, and the residential passive open space ratio would decrease by approximately 4.87 percent from the No-Action condition. The *CEQR Technical Manual* states that an indirect impact on open space may occur if a project would reduce the open space ratio by more than 5 percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. As the total and passive open space ratios for the open space study area would remain above the City's planning guidelines of 2.50 acres of total open space per 1,000 residents and 0.50 acres of passive open space per 1,000 residents (refer to **Table 5-7**), residents in the ½-mile study area would continue to be well-served by total and passive open space resources and no significant adverse impacts would result, in accordance with *CEQR Technical Manual* guidance.

In the future with the Proposed Actions, the active open space ratio would remain less than the City's planning guideline of 2.00 acres of active open space per 1,000 residents (as under No-Action conditions). However, this guideline is an optimal benchmark, and is not considered a CEQR impact threshold on its own. Additionally, as discussed above, the ½-mile open space study area would continue to have an abundance of total and passive open space resources in the future with the Proposed Actions. Often, passive open spaces can be used for both passive and active recreation, such as a lawn or walkway, which may also be used for ball playing, jogging/running, and rollerblading.

The deficiency of active open space resources in the ½-mile study area, as compared to the City's planning guidelines, would be ameliorated by several factors, including the proximity of study area residents to the portions of Prospect Park (including the 40-acre Parade Ground) and Mount Prospect Park that are beyond the boundaries of the ½-mile open space study area. As detailed above, approximately 134.8 acres of the

526-acre Prospect Park, approximately 6.26 acres of the 63.64-acre Eastern Parkway, and approximately 7.22 acres of the 7.79-acre Mount Prospect Park are located within the ½-mile open space study area. The remaining portions of these parks, located immediately adjacent to the boundaries of the study area, are accessible to study area residents. Additionally, as Prospect Park is a major regional park, it is expected that residents would travel farther than a ½-mile to visit this open space resource. The additional acreage includes a mix of active and passive recreational facilities and uses. Additionally, as detailed above, the ½-mile study area includes two community gardens, as well as the Prospect Park Zoo, that provide additional open space acreage and are all located in close proximity to the Project Area.

Furthermore, the development of open space resources in the future with the Proposed Actions that were not included in the quantitative analysis would help ameliorate the deficiency of active open space resources in the study area. As detailed above, in the future without the Proposed Actions, the former Bedford-Union Armory is being redeveloped to include a community recreation center, which would provide active recreation space for residents of the study area. Additionally, the Proposed Development will include private open space for building tenants, as well as public open space for the general public. As detailed above and in **Chapter 1, "Project Description,"** a total of approximately 62,469 sf of open space areas would be provided in the Proposed Development, including the aforementioned 10,790 sf of public open space in and along the interior roadway and 51,679 sf of private open space consisting of approximately 24,959 sf of private roof garden terrace areas, approximately 19,813 sf of other open plaza along the interior roadway, and approximately 6,907 sf of at-grade landscaped area along the western property line. The 10,790 sf of public open plaza areas along the proposed interior roadway would be accessible to the general public daily between 6 AM to 10 PM. The balance of the open space areas would be private open spaces for use by building residents. The design of the private open space has not been completed at this time, however, potential future amenities for the public open space would likely include benches, sitting areas, and landscaping. The construction of these private and public open space resources could help to partially offset the quantitative deficit of active open space in the ½-mile study area.

Moreover, the population to be generated by the Proposed Actions is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific user groups. No specific user groups would be adversely affected by the Proposed Development. Additionally, the Proposed Actions would not result in the physical loss of existing public open space resources, and would not result in any adverse air, noise, or other environmental impacts. As discussed above, incremental shadows from the Proposed Project would constitute a significant adverse impact and may affect the usability and enjoyment of the Brooklyn Botanic Garden and Jackie Robinson Playground.

Therefore, in the future with the Proposed Actions, as (1) the total open space ratio would remain above the City's planning guideline of 2.50 acres of open space per 1,000 residents, at 3.74 acres per 1,000 residents; (2) the residential passive open space ratio would remain above the City's planning guideline of 0.50 acres of passive open space per 1,000 residents, at 2.09 acres per 1,000 residents; and (3) the Project Area is located in close proximity to significant regional open space resources, just beyond the study area's boundaries, that provide additional active open space recreational opportunities, the Proposed Actions would not result in an indirect significant adverse impact on open space in the residential study area, in accordance with *CEQR Technical Manual* impact criteria.