A. INTRODUCTION

This chapter assesses the potential impacts of the ~~Proposed Project~~previously proposed project on open space resources.[1] 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 and enhance the natural environment. An open space assessment may be necessary if a project would have a direct effect, such as eliminating or altering a publicly accessible open space, or an indirect effect, such as when an increase in population could overtax the capacity of an area's open spaces. Direct effects could also include a proposed action's effects on open spaces due to increased noise, air pollutant emissions, odor, or shadows.

As described in Chapter 1, "Project Description," the Applicant seeks a special permit, modifications to a previously approved large scale general development (LSGD), zoning text amendments, and authorizations (the Proposed Actions) from the City Planning Commission (CPC) to facilitate the ~~Proposed Project~~previously proposed project in the South Street Seaport neighborhood of Lower Manhattan, Community District 1. The ~~Proposed Project~~previously proposed project would consist of the development of a mixed-use building of up to approximately 680,500 gross square feet (gsf), containing market-rate and affordable housing, retail, office, and community facility spaces as well as parking at 250 Water Street (Block 98, Lot 1; the Development Site), as well as the restoration, reopening, and potential expansion of the South Street Seaport Museum (the Museum) at 89-93 South Street, 2-4 Fulton Street, and 167-175 John Street (Block 74, a portion of Lot 1; the Museum Site). The ~~Proposed Project~~previously proposed project would also include operation changes to facilitate passenger drop off on the Pier 17 access drive as well as minor improvements to the Pier 17 access drive area and building, and may include streetscape, open space, or other improvements (e.g., planters) under the Proposed Actions within the Project Area.

The ~~Proposed Project~~previously proposed project would result in new residential and worker populations as compared to future conditions absent the ~~Proposed Project~~previously proposed project. The projected residential and worker populations could result in additional demand for open space in the area. In addition, the ~~Proposed Project~~previously proposed project could potentially have effects related to air quality, noise, and shadows that may affect the use of nearby open spaces. Therefore, in accordance with *CEQR Technical Manual* guidance, an assessment of the ~~Proposed Project~~previously proposed project's direct and indirect effects on open space was

[1] Since the publication of the DEIS, the Applicant has withdrawn the application for the previously proposed project and submitted a modified application (Application Number C 210438(A) ZSM; the "A-Application") with proposed changes to the project—this modified version of the project is described and considered in this FEIS as the Reduced Impact Alternative, as outlined in Chapter 18, "Alternatives."

conducted to determine whether the ~~Proposed Project~~previously proposed project would result in significant adverse open space impacts.

PRINCIPAL CONCLUSIONS

The ~~Proposed Project~~previously proposed project is not anticipated to result in a significant adverse indirect impact to open space. The ~~Proposed Project~~previously proposed project would, however, result in a in a significant adverse ~~direct~~ shadows impact to one open space resource (the Southbridge Towers complex open spaces) resulting from new shadow cast by the ~~Proposed Project~~previously proposed project.

DIRECT EFFECTS

The ~~Proposed Project~~previously proposed project would result in a significant adverse direct impact to one open space resource resulting from new shadow cast by the ~~Proposed Project~~previously proposed project. The Development Site's shadow would pass across portions of the Southbridge Towers complex open spaces from early to late morning in the spring, summer, and fall, covering large areas at times, and significantly altering the use of the spaces for users seeking sun, and potentially impacting the health of the trees and plantings in one limited area. See Chapter 5, "Shadows," for more information.

The ~~Proposed Project~~previously proposed project would not result in any direct impacts to open space in the technical areas of air quality, noise, and construction air quality or would it result in direct impacts as a result of open space displacement. Two open space resources, the Pearl Street Playground and the Imagination Playground, located near the Development Site and Museum Site respectively, would experience temporary disruptions from construction noise. Construction could produce noise level increases that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities and would produce noticeable increases over the course of construction, and the effects of construction noise would constitute a significant adverse impact as per the *CEQR Technical Manual*. See Chapter 17, "Construction," for more information.

INDIRECT EFFECTS

The ~~Proposed Project~~previously proposed project would increase utilization of study area resources due to the introduction of new residential and worker populations. In both the future without the ~~Proposed Project~~previously proposed project (the "No Action" condition) and the future with the ~~Proposed Project~~previously proposed project (the "With Action" condition), the total open space ratio in the residential open space study area would remain below the City's median of 1.5 acres of total open space per 1,000 residents and the City's planning goal of 2.5 acres of total open space per 1,000 residents.

With the ~~Proposed Project~~previously proposed project, as compared to the No Action condition, the residential study area's total, active, and passive open space ratios would all decrease by approximately 0.3 percent; the total open space ratio (0.87 acres per 1,000 residents) and active open space ratio (0.219 acres per 1,000 residents) would remain below the City's goals, while the passive open space ratio (0.652 acres per 1,000 residents) would continue to meet the City's goal. In the non-residential study area, the passive open space ratio within the study area would decrease in the With Action condition compared with the No Action condition by approximately one percent. However, the With Action condition passive open space ratio of 0.175 acres per 1,000 non-residents would continue to meet the City's planning goal of 0.15 acres of passive open space per 1,000 non-residents.

According to the *CEQR Technical Manual*, an action may result in a significant adverse open space impact if it 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. Therefore, as there would be a less than 5 percent decrease in the total, active, and passive open space ratios in the With Action condition compared with that of the No Action condition, the ~~Proposed Project~~previously proposed project would not result in a significant adverse indirect impact to open space and a detailed open space analysis is not required.

B. METHODOLOGY

DIRECT EFFECTS

According to the *CEQR Technical Manual*, a project would directly affect open space conditions if it causes the loss of publicly accessible 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, odor, or shadows that would temporarily or permanently affect the usefulness of publicly accessible open space. This chapter uses information from Chapter 5, "Shadows," Chapter 12, "Air Quality," Chapter 14, "Noise," and Chapter 17, "Construction") to determine whether the ~~Proposed Project~~previously proposed project would have the potential to directly affect any open spaces near the Project Area. A project can also directly affect an open space by enhancing its design or increasing its accessibility to the public. The direct effects analysis is included below in "The ~~Future~~ future with the ~~Proposed Project~~previously proposed project."

INDIRECT EFFECTS

Following the methodology of the *CEQR Technical Manual*, indirect open space effects may occur when a project would add enough of a population, either residents or workers, to noticeably diminish the ability of an area's open space to serve the future population. Typically, for an area that is considered neither well-served nor underserved an assessment of indirect effects is conducted when a project would introduce 200 or more residents or 500 or more workers to an area.

This assessment considers the anticipated residential and worker populations' effect on open space ratios. While the ~~Proposed Project~~previously proposed project is expected to introduce less than 200 residents compared to the No Action condition, an analysis of indirect effects from the ~~Proposed Project~~previously proposed project's incremental residential population is provided in this EIS for informational purposes. The ~~Proposed Project~~previously proposed project is expected to introduce an incremental increase of approximately 1,000 workers to the area compared to the No Action condition, and therefore an analysis of non-residential open space is included as well consistent with the *CEQR Technical Manual*. For many projects, a preliminary assessment is typically provided as an initial assessment of conditions within the study area and to clarify the degree to which a project would affect open space and the need for further analysis. If the preliminary assessment indicates the need for further analysis, a detailed analysis of open space should be performed.

The following sections describe the methodology for the analysis of indirect effects on open space, including establishing the study area(s), identifying open space user populations, creating an inventory of open space resources, and assessing the adequacy of open space resources.

STUDY AREAS

The *CEQR Technical Manual* recommends establishing study area boundaries as the first step in an open space analysis. The study area is based on the distance that users are likely to walk to an open space. According to the *CEQR Technical Manual*, residents use both passive and active open spaces and are assumed to walk approximately 20 minutes, or up to ½-mile, to an open space. The adequacy of open space resources was assessed for a study area extending ½-mile from the Project Area, which was adjusted to include all census tracts with at least 50 percent of their area within the ½-mile boundary. This adjustment to the study area allows analysis of both the open spaces in the area, as well as population data.

Workers and visitors are assumed to travel up to ¼-mile to use passive open spaces. Therefore, as recommended in the *CEQR Technical Manual*, a ¼-mile study area is used in the non-residential indirect effects analysis, and the non-residential study area was adjusted to include all census tracts with at least 50 percent of their area within a ¼-mile of the Project Area.

Figure 4-1 shows the open space study areas and the census tracts that comprise the study areas. The residential (½-mile) study area includes Census Tracts 7, 8, 9, 15.01, 15.02, 25, 27, 29, and 31. The non-residential (¼-mile) study area includes only Census Tracts 7, 15.01, 15.02, and 25.

OPEN SPACE USER POPULATIONS

Existing Conditions

The existing residential population of the study area was calculated using 2014–2018 American Community Survey (ACS) data. Information on the existing worker population within the study area was compiled from ESRI Business Analyst worker and business data for the census tracts in the study area.

No Action Condition

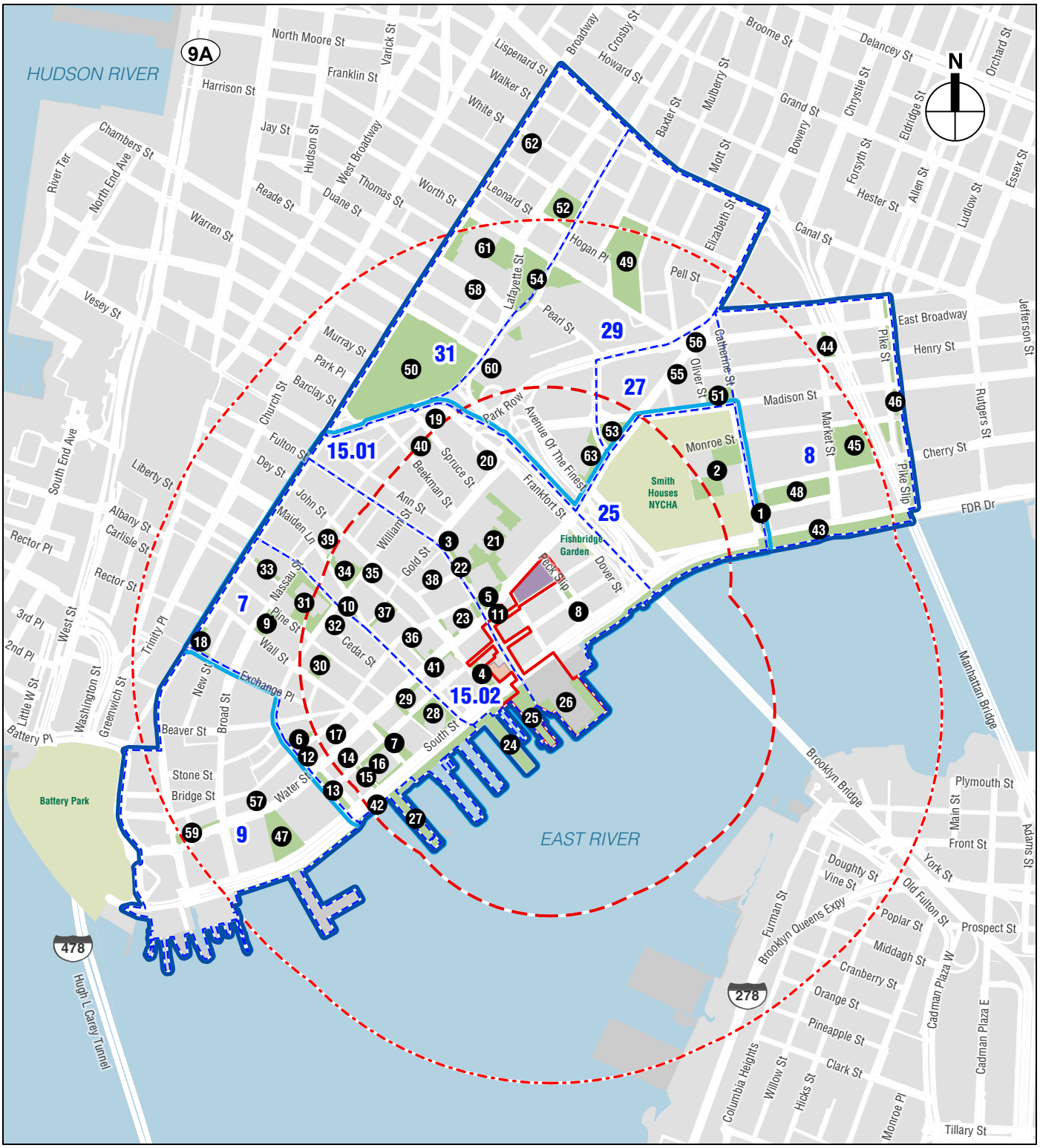
The future residential and worker populations in the study area in the No Action condition were projected by adding the number of residents and workers anticipated to result from developments that are expected to be completed in the study area by the analysis year to the existing residential and worker populations. The No Action condition populations also include the projected number of residents and workers expected to be introduced to the Project Area by the as-of-right building anticipated to be built on the Development Site absent the ~~Proposed Project~~previously proposed project.

With Action Condition

The future residential and worker populations in the With Action Condition were determined by adding the incremental number of residents and workers anticipated from the ~~Proposed Project~~previously proposed project to the residential and worker populations in the No Action condition.

INVENTORY OF OPEN SPACE RESOURCES

The *CEQR Technical Manual* defines publicly accessible open space as open space that is regularly open to the public during designated daily periods. Open spaces that do not fit this definition because they are not available to the public on a regular basis or are available only to a limited set of users are considered private open space and are not included in the quantitative open space analysis. Publicly accessible open spaces and recreational facilities located within the study area were inventoried using information from the New York City Department of Parks and



Open Space Study Areas and Resources

250 WATER STREET

Figure 4-1

Recreation (NYC Parks). Additional non-public open spaces that also serve the study area populations (e.g., open space on New York City Housing Authority [NYCHA] developments) are included on a qualitative basis. In addition to the open spaces located in the study area, open spaces located just outside of the study area were considered in the qualitative analysis, as they are available for use by residents and workers within the study area.

Information on open space amenities and utilization was developed based on previous environmental reviews conducted in the area, where available, online resources, and field visits in March 2021. Active and passive amenities were noted at each open space. Active facilities are intended for vigorous activities, such as jogging, field sports, and children's active play. Such facilities might include basketball and handball courts, jogging paths, ball fields, and playground equipment. Passive facilities encourage such activities as strolling, reading, sunbathing, and people watching. Passive open spaces are characterized by picnic areas, walking paths, or gardens. Certain areas, such as lawns or public esplanades, can serve as both active and passive open spaces. Where noted, condition and utilization at study area open spaces are based on pre-pandemic levels as assessed by recent environmental reviews, which are assumed to return as the pandemic subsides.

The analysis also accounts for open space within the study area that will be created in the No Action condition.

ADEQUACY OF OPEN SPACE RESOURCES

The adequacy of open space in the study area is quantitatively assessed using a ratio of usable open space acreage to the study area population; this is referred to as the open space ratio. To assess the adequacy of open space resources, open space ratios are compared with planning goals set by the City as described in the *CEQR Technical Manual*. Although these open space ratios are not meant to determine whether a project might have a significant adverse impact on open space resources, they are helpful guidelines in understanding the extent to which user populations are served by open space resources.

For residential populations, there is a City-wide median open space ratio of 1.5 acres per 1,000 residents, which is used as a guideline. In addition to this median ratio, the City has set an open space ratio planning goal of 2.5 acres per 1,000 residents, which includes 0.50 acres of passive space and 2.0 acres of active space per 1,000 residents. For worker populations, 0.15 acres of passive open space per 1,000 workers is typically considered adequate.

If an assessment shows that a study area's open space ratio falls below the City guidelines, and a proposed action would result in a decrease in the ratio of more than 5 percent, it could be considered a substantial change warranting a more detailed analysis. However, in areas which have been determined to be extremely lacking in open space, a reduction in the open space ratio as small as one percent may be considered significant.

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, when warranted. These include the capacity and utilization of open space resources, the connectivity of open space, distance to regional parks or other parks located just outside the study area, and the beneficial effects of new open space provided by a project, as applicable.

C. EXISTING CONDITIONS

STUDY AREA POPULATION

RESIDENTIAL POPULATION

The nine Census Tracts that make up the residential open space study area have a total residential population of 50,415 (see **Table 4-1**).

Table 4-1
Existing Residential Study Area Population

Census Tract	Residential Population
7	8,809
8	8,993
9	1,731
15.01	6,993
15.02	7,926
25	5,508
27	1,431
29	6,365
31	2,659
Total Residents	**50,415**

Note: See **Figure 4-1**
Source: 2014–2018 ACS. Accessed through NYC Population Fact Finder in February 2021.

NON-RESIDENTIAL POPULATION

The four Census Tracts that make up the non-residential study area have a population of approximately 92,027 workers (see **Table 4-2**). The worker population consists primarily of office workers. Typically, these non-residential open space users seek leisure in passive open spaces during the lunch hour and midday period.

Table 4-2
Existing Non-Residential Study Area Population

Census Tract	Worker Population
7	48,557
15.01	10,073
15.02	32,871
25	526
Total Workers	**92,027**

Source: ESRI Business Analyst. Accessed February 2021.

OPEN SPACE INVENTORY

There are a total of 63 publicly accessible open spaces located within the residential (1/2-mile) study area; of these, 42 publicly accessible open spaces are located within the non-residential (1/4-mile) study area (see **Figure 4-1 and Table 4-3**). These open spaces include publicly accessible open spaces and privately owned spaces that are open to the public. Open spaces within the study area include a variety of parks, playgrounds, gardens, and plazas that are accessible for use by the

public. These spaces include parks or recreational areas operated by NYC Parks and other public agencies, as well as plazas and seating areas attached to residential or office buildings; several of these are privately owned public spaces (POPS) introduced through provisions in the New York City Zoning Resolution.

Table 4-3
Open Space Resource Inventory

Ref. No.[1]	Name	Location	Owner/ Agency	Features	Total Acres	Active Acres	Passive Acres	Condition	Utilization
Non-Residential (1/4-Mile) Study Area									
1	Catherine Slip Park	Catherine Slip between Cherry Street and South Street	NYC Parks	Landscaping, benches	0.25	0	0.25	Good	Moderate
2	Alfred E Smith Playground	Catherine Street and Monroe Street	NYC Parks	Playgrounds, monuments, bathrooms, plaza, seating, basketball courts, handball courts, spray showers, recreational center	1.75	1.31	0.44	Good	Moderate
3	DeLury Square	Fulton Street and Gold Street	NYC Parks	Fountain, trees, plantings, benches	0.21	0	0.21	Good	Moderate
4	Imagination Playground	John Street, South Street, and Front Street	NYC Parks	Playground, benches	0.39	0.31	0.08	Good	Heavy
5	Pearl Street Playground	Fulton Street, Pearl Street, and Beekman Street	NYC Parks	Playground, spray showers, benches, landscaping	0.34	0.27	0.07	Good	Heavy
6	QE II 9/11 Garden	Hanover Street, Pearl Street, and William Street	NYC Parks	Seating, statue, planters, trees, landscaping	0.12	0	0.12	Excellent	Low
7	Mannahatta Park	Wall Street between Water Street and South Street	NYC Parks	Trees, fountain, seating	0.47	0	0.47	Good	Low
8	Peck Slip	Peck Slip between Front Street and South Street	NYC Parks	Plaza, seating, planters	0.19	0	0.19	Good	Low
9	Federal Hall Steps	Wall Street, Broad Street, and Nassau Street	NPS	Steps, statue	0.06	0	0.06	Excellent	Heavy
10	Louise Nevelson Plaza	Maiden Lane and William Street	NYC Parks	Benches, trees, sculpture, lighting	0.25	0	0.25	Good	Low
11	Titanic Park (Fulton Street Plaza)	Fulton Street, Front Street, Pearl Street	HPD	Benches, trees, monument	0.20	0	0.20	Good	Low
12	86 Water Street/10 Hanover Square	Pearl Street, Water Street, William Street	Private[2]	Stairs, tables, seating, plantings	0.08	0	0.08	Good	Low
13	Old Slip Plaza	Old Slip and South Street	NYC Parks	Trees, lighting, fountain, plantings, benches	0.05	0	0.05	Good	Low
14	77 Water Street Plaza	Water Street, Front Street and Gouverneur Lane	Private[2]	Benches, fountains, trees, sculpture	0.32	0	0.32	Good	Low
15	Gouverneur Lane (32 Old Slip)	Front Street, South Street, Gouverneur Lane	Private[2]	Trees, benches, lighting	0.41	0	0.41	Good	Low
16	111 Wall Street Plaza	Front Street, Gouverneur Lane, Wall Street	Private[2]	Benches, trees, planters, bike racks	0.31	0	0.31	Good	Low
17	75 Wall Street Plaza	Water Street and Pearl Street	Private[2]	Seating, planters, trees	0.30	0	0.3	Good	Low
18	Bank of New York Plaza	Broadway and Exchange Place	Private[2]	Seating, planters, trees	0.11	0	0.11	Good	Low
19	Pace Plaza	Park Row and Spruce Street	Private[2]	Trees, plants, seating, statue	0.07	0	0.07	Good	Heavy
20	Drumgoole Plaza	Frankfort Street and Gold Street	NYC Parks	Benches, trees, plantings	0.18	0	0.18	Good	Moderate

Table 4-3 (cont'd)
Open Space Resource Inventory

Ref. No.[1]	Name	Location	Owner/ Agency	Features	Total Acres	Active Acres	Passive Acres	Condition	Utilization
Non-Residential (1/4-Mile) Study Area (cont'd)									
21	Southbridge Towers complex open spaces	Southbridge Towers complex	Private[2]	Seating, pedestrian boulevard, landscaped areas, playground	1.99	0.40	1.59	Good	Low
22	St. Margaret's House	Fulton Street and Cliff Street	Private[2]	Seating, plants, trees	0.01	0	0.01	Good	Heavy
23	200 Water Street	Pearl Street, Fulton Street, Water Street	Private[2]	Art, seating, tables, plantings	0.17	0	0.17	Good	Moderate
24	Pier 15	South Street	SBS	Grass, plantings, seating, panoramic views	0.69	0	0.69	Good	Heavy
25	Pier 16	South Street	NYC Parks	Seating, panoramic views	1.57	0	1.57	Good	Heavy
26	Pier 17	South Street	HHC	Seating, panoramic views	1.52	0	1.52	Good	Heavy
27	Pier 11	Gouverneur Lane and South Street	DOT	Benches, covered sitting areas	0.76	0	0.76	Good	Heavy
28	180 Maiden Lane	Front Street, South Street, Maiden Lane	Private[2]	Benches, trees, indoor open space, lighting	0.52	0	0.52	Good	Low
29	Wall Street Plaza/88 Pine Street	Water Street, Front Street, Pine Street	Private[2]	Benches, trees, sculpture, water feature, lighting	0.23	0	0.23	Good	Low
30	60 Wall Street/JP Morgan	Wall Street and Hanover Street	Private[2]	Indoor space with seating, plants, restrooms, pedestrian throughway	0.35	0	0.35	Good	Moderate
31	Chase Manhattan Plaza	William Street and Cedar Street	Private[2]	Benches, trees, planters, lighting, sculpture	1.31	0	1.31	Excellent	Moderate
32	10 Liberty Street	Cedar Street between William Street and Pearl Street	Private[2]	Plantings, seating, trees, water feature	0.11	0	0.11	Good	Moderate
33	140 Broadway Plaza, south side	Cedar Street between Broadway and Broad Street	Private[2]	Planters, trees, seating, sculpture	0.46	0	0.46	Good	Moderate
34	Home Insurance Company Plaza	Maiden Lane and William Street	Private[2]	Seating, landscaping, lighting, trees	0.19	0	0.19	Good	Moderate
35	100 William Street	William Street between Dey Street and Fulton Street	Private[2]	Covered pedestrian space, seating	0.12	0	0.12	Good	Low
36	160 Water Street	Pearl Street and Fletcher Street	Private[2]	Open plaza	0.13	0	0.13	Adequate	Low
37	2 Gold Street	Platt Street between Gold Street and Pearl Street	Private[2]	Seating, trees	0.19	0	0.19	Good	Low
38	Cliff Street Plaza	Cliff Street between John Street and Fulton Street	Private[2]	Seating, plants, trees	0.04	0	0.04	Good	Low
39	Two Federal Reserve Plaza	Nassau Street and Dey Street	Private[2]	Covered pedestrian space, seating	0.10	0	0.1	Good	Low
40	8 Spruce Street	Beekman Street and Spruce Street	Private[2]	Benches, tables, chairs, plants, trees	0.26	0	0.26	Good	Low
41	175 Water Street	Water Street, Fletcher Street, and John Street	Private[2]	Open plaza	0.13	0	0.13	Good	Low
42	East River Waterfront Esplanade[3]	East River between Old Slip and Catherine Street	NYC Parks	Seating, landscaping, tables, dog run, pedestrian path, bike lane	3.88	1.94	1.94	Good	Heavy
Non-Residential (1/4-Mile) Study Area Total					**20.78**	**4.23**	**16.55**	-	

Table 4-3 (cont'd)
Open Space Resource Inventory

Ref. No.[1]	Name	Location	Owner/ Agency	Features	Total Acres	Active Acres	Passive Acres	Condition	Utilization
Residential (1/2-Mile) Study Area									
43	East River Waterfront Esplanade[4]	East River between Broad Street and Old Slip and Catherine Street Pike Slip	NYC Parks	Seating, landscaping, tables, dog run, pedestrian path, bike lane	2.48	1.24	1.24	Good	Heavy
44	Sophie Irene Loeb Playground	Henry Street, Market Street, East Broadway	NYC Parks	Playground, seating areas	0.12	0.06	0.06	Good	Low
45	Coleman Square Playground	Cherry Street, Pike Street, Monroe Street	NYC Parks	Baseball field, handball courts, playground, skate park and spray shower	2.61	2.61	0	Adequate	Low
46	Pike Street Malls	Pike Street between Division Street and South Street	NYC Parks	Bikeway, walkway, benches, tables	0.92	0.46	0.46	Good	Moderate
47	Vietnam Veterans Plaza	Water Street and South Street between Broad Street and Old Slip	NYC Parks	Memorial, landscaping, steps, benches, trees	2.07	0	2.07	Good	Moderate
48	Tanahey Playground	Cherry Street to Water Street, West Catherine Slip to Market Slip	NYC Parks	Basketball courts, playgrounds, roller hockey, seating area	1.25	0.94	0.31	Good	Low
49	Columbus Park	Baxter Street, Mulberry Street, Bayard Street, and Worth Street	NYC Parks	Benches, bathrooms, a pavilion, chess tables, a statue, a soccer field, a volleyball field, tree coverage, water fountains, playground equipment, swings, basketball courts, ping-pong	3.23	1.94	1.29	Good	Heavy
50	City Hall Park	Broadway, Park Row, and Chambers Street	NYC Parks	A large fountain, a plaza area, art installations, landscaped areas, tree coverage, statues, chess tables, Wi-Fi hotspots, eateries, benches	5.08	0	5.08	Good	Heavy
51	Playground One	Madison Street between Catherine Street and Oliver Street	NYC Parks	Basketball courts, playgrounds, spray showers	0.44	0.44	0	Good	Low
	Collect Pond Park	Leonard Street, Centre Street, and Lafayette Street	NYC Parks	A pond, a plaza area, planters, water fountains, tree coverage, tables, benches	0.99	0	0.99	Good	Moderate
53	James Madison Plaza	Pearl Street, Madison Street, and St James Place	NYC Parks	Monument, benches, plaza, game tables	0.36	0	0.36	Good	Low
54	Thomas Paine Park (Foley Square)	Lafayette Street, Centre Street, and Worth Street	NYC Parks	Benches, lawn areas, a plaza area, a large fountain, statues, a garden, tree coverage, Wi-Fi hotspots	1.88	0	1.88	Good	Moderate
55	St. James Triangle	St. James Place and Oliver Street	NYC Parks	Pathway, bench, plants	0.04	0	0.04	Good	Low
56	Kimlau Square	Chatham Square, Oliver Street, and East Broadway	NYC Parks	Monuments, benches, pathway	0.24	0	0.24	Good	Moderate
57	Coenties Slip	Coenties Slip, Water Street, and Pearl Street	NYC Parks	Sculpture, benches, landscaping	0.13	0	0.13		
58	African Burial Ground National Monument	Duane Street between Elk Street and Broadway	NPS	A monument, landscaped areas, a plaza area, benches	0.11	0	0.11	Good	Moderate
59	Water/Whitehall Plaza	Whitehall Street, Broad Street, and Water Street	DOT	Softscaped plaza, planters, benches	0.37	0	0.37	Good	Heavy
60	David M. Dinkins Municipal Building Plaza	Centre Street, Park Row, and Foley Square	DCAS	Centre Street, Park Row, and Foley Square	2.52	0	2.52	Adequate	Moderate

Table 4-3 (cont'd)
Open Space Resource Inventory

Ref. No.[1]	Name	Location	Owner/ Agency	Features	Total Acres	Active Acres	Passive Acres	Condition	Utilization
Residential (1/2-Mile) Study Area (cont'd)									
61	Jacob K. Javits Federal Building Plazas	Lafayette Street, Duane Street, Broadway, and Worth Street	USGSA	Plaza areas, benches, landscaped areas, planters, a fountain, sculptures	1.39	0	1.39	Good	Moderate
62	Mandarin Plaza	Broadway and White Street	Private[2]	Large planters, water fountain, pergola, seating area with benches, bike racks	0.08	0	0.08	Good	Low
63	375 Pearl Street	Pearl Street and Avenue of the Finest	Private[2]	Seating areas	0.34	0	0.34	Good	Low
Residential (1/2-Mile) Study Area Total					**47.43**	**11.92**	**35.51**	**-**	

Notes:
[1] See **Figure 4-1**.
[2] Resources in this table with the owner listed as "Private" are publicly accessible.
[3] Portion of East River Waterfront Esplanade within nonresidential (1/4-mile) study area only.
[4] Portion of East River Waterfront Esplanade within residential (1/2-mile) study area only.
Totals may not sum due to rounding.
NYC Parks = NYC Department of Parks and Recreation
NPS = National Park Service
HPD = NYC Department of Housing Preservation and Development
SBS = NYC Department of Small Business Services
HHC = Howard Hughes Corporation (Private Applicant)
DOT = NYC Department of Transportation
DCAS = NYC Department of Citywide Administrative Services
USGSA = U.S. General Services Administration
Sources: NYC Parks; *Two Bridges LSRD FEIS; NYC Borough-Based Jail System EIS; Field Observations March 2021*

Prominent open space resources within the study areas include City Hall Park (which is within the residential study area but outside of the non-residential study area) and the East River Esplanade. The East River Esplanade is an extended bike and pedestrian path which includes seating and landscaping and offers both active and passive recreational open space. The Esplanade is part of the extended open space network that runs along the East River from the Battery to Harlem; the portion of the Esplanade within the residential study area is located between Broad Street and Pike Slip, and a smaller segment (between Old Slip and Catherine Street) is within the non-residential study area. For the purposes of analysis, only these portions of the East River Esplanade were included in the quantitative assessment. In addition, the piers located along the East River near the Project Area (Piers 11, 15, 16, and 17) are part of the Esplanade network and provide additional passive open space, particularly seating areas with waterfront views.

As shown in **Table 4-3**, the open space resources in the study areas primarily provide passive open space including seating areas and plazas. Major active open spaces include Columbus Park, located north of Worth Street between Baxter and Mulberry Streets, which features athletic fields and basketball courts. There are also several NYC Parks playgrounds that provide for active recreation.

Within the ½-mile residential open space study area, there are 62 publicly accessible open spaces with a total area of 47.30 acres, of which 11.92 acres are considered active recreational open space and 35.38 acres are considered passive recreational open space. Within the ¼-mile non-residential open space study area, there are 41 publicly accessible open spaces with a total area of 20.66 acres, of which 4.23 acres are considered active recreational open space and 16.42 acres are considered passive recreational open space (see **Table 4-3**).

The open space inventory does not include non-public resources or resources that are located immediately adjacent to (but outside of) the study areas. In particular, Battery Park, the large (approximately 22-acre) park located at the tip of Lower Manhattan, is immediately adjacent to the study areas. In addition, the New York City Housing Authority (NYCHA) Alfred E. Smith Houses campus is located within the study areas; this campus features approximately 18 acres of open space, including walking paths, garden areas, basketball courts, and a baseball diamond. A community garden, Fishbridge Garden, also exists near the Project Area. This garden is open to the public on Saturday and Sunday between 8 AM and 8 PM and features landscaping and a pathway, and it also includes a dog-friendly area open more regularly. The portions of Fulton Street, Front Street, and Water Street within the Project Area are also pedestrianized and can be used for both passive and active recreation. However, open space within a public housing development is primarily meant for use by residents of that housing development, the community garden is not open throughout the week, and the pedestrianized streets remain streets. Therefore, for a conservative analysis, these areas were not included in the open space inventory and quantitative analysis.

ADEQUACY OF OPEN SPACES

RESIDENTIAL STUDY AREA

As shown in **Table 4-4**, with a residential population of 50,415, the residential study area has a total open space ratio of 0.941 acres per 1,000 residents, which is lower than the City's median of 1.5 acres per 1,000 residents. **Table 4-4** also compares the existing open space ratios to the City's planning goal of 2.5 total acres of open space per 1,000 residents (with 2.0 acres of active open space and 0.5 acres of passive open space per 1,000 residents). The study area currently has 0.236

acres of active open space and 0.704 acres of passive open space per 1,000 residents. Therefore, the residential study area is below the City's goals of 2.5 acres of total active open space and 2.0 acres of active open space, but meets the goal of 0.5 acres of passive open space per 1,000 residents.

Table 4-4
Existing Conditions: Adequacy of Open Space Resources
(Residential Study Area)

Total Population		Open Space Acreage			Open Space Ratios			Open Space Goals		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residential (½-Mile) Study Area										
Residents	50,415	47.43	11.92	35.51	0.941	0.236	0.704	2.5	2.0	0.5
Note: Ratios in acres per 1,000 people										

NON-RESIDENTIAL STUDY AREA

As described above, the non-residential analysis focuses on passive open space resources, as these are the open space resources that non-residents would be most likely to use. To assess the adequacy of the open space resources in the non-residential study area, the ratio of workers to acres of passive open space is compared with the City's planning goal of 0.15 acres of passive open space per 1,000 non-residents. As shown in **Table 4-5**, with a worker population of 92,027 and 16.55 acres of passive open space, the non-residential study area has an existing ratio of 0.180 acres of passive open space per 1,000 non-residents, which is above the City's planning goal.

Table 4-5
Existing Conditions: Adequacy of Open Space Resources
(Non-Residential Study Area)

Total Population		Open Space Acreage			Open Space Ratios			Open Space Goals		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Non-Residential (1/4-Mile) Study Area										
Non-Residents	92,027	20.78	4.23	16.55	N/A	N/A	0.180	N/A	N/A	0.15
Note: Ratios in acres per 1,000 people										

D. THE FUTURE WITHOUT THE PREVIOUSLY PROPOSED PROJECT

As described in Chapter 1, "Project Description," in the No Action condition, the Development Site is anticipated to be redeveloped with a new as-of-right building that would not require any discretionary approvals. The No Action development would be a 120-foot tall, approximately 327,400-gsf building containing approximately 302,670 gsf of residential uses (approximately 302 DU, all market-rate), 19,730 gsf of retail uses, 5,000 gsf of community facility uses, and 65 parking spaces. On the Museum Site, it is assumed that absent the ~~Proposed Project~~previously proposed project, the Museum would permanently close. Therefore, while the existing Museum buildings would remain, it is assumed that they would be vacant in the No Action condition.

DIRECT EFFECTS ON OPEN SPACES

In the No Action condition, the as-of-right building constructed on the Development Site would cast new shadow on nearby open space resources, including the Southbridge Towers complex

open spaces. The new shadow would however be of a lesser extent than under the ~~Proposed Project~~previously proposed project.

STUDY AREA POPULATION

Residential Population

There are numerous development projects anticipated to be completed within the residential open space study area by 2026. Overall, approximately 1,515 DUs are anticipated to be completed within the residential open space study area. Applying an average household size of 2.16 persons per household (the average household size of the census tracts within the residential study area as of the 2014–2018 ACS), these projects are expected to introduce an estimated 3,272 new residents to the study area. In addition, as noted above, the No Action development on the Development Site would introduce 302 DUs; applying The CD 1 average household size of 1.91 persons per household, this project would introduce an estimated 577 new residents to the study area. Therefore, the residential population within the study area is anticipated to increase by 3,849, for a total of 54,264 in the No Action condition.

Non-Residential Population

The development projects within the non-residential study area that are anticipated to be completed by 2026, including the No Action development on the Development Site, are expected to introduce an estimated 1,521 additional workers. Therefore, under the No Action condition, the non-residential study area's population is expected to increase to 93,548 non-residents.

STUDY AREA OPEN SPACES

No new open spaces are expected to be completed within the study areas by 2026. As a result, the total amount of open space in the residential study area would remain at 47.43 acres, including 11.92 acres of active open space and 35.51 acres of passive open space. In the non-residential study area, the total amount of open space would remain at 20.78 acres, with 4.23 acres of active open space and 16.55 acres of passive open space.

ADEQUACY OF OPEN SPACES

Residential Study Area

As shown in **Table 4-6**, with a residential population of 54,264, the total open space ratio in the residential study area would decrease to 0.874 acres per 1,000 residents, and would remain lower than the City's median of 1.5 acres per 1,000 residents and the city goal of 2.5 acres per 1,000 residents. The active open space ratio would decrease to 0.220 acres of active open space per 1,000 residents, and would remain below the goal of 2.0 acres; the passive open space ratio would decrease to 0.654 acres of passive open space per 1,000 residents, and would continue to meet the goal of 0.5 acres of passive open space per 1,000 residents.

Table 4-6
No Action Condition: Adequacy of Open Space Resources
(Residential Study Area)

Total Population		Open Space Acreage			Open Space Ratios			Open Space Goals		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residential (½-Mile) Study Area										
Residents	54,264	47.43	11.92	35.51	0.874	0.220	0.654	2.5	2.0	0.5
Note: Ratios in acres per 1,000 people										

Non-Residential Study Area

As shown in **Table 4-7**, with a worker population of 93,548, the passive open space ratio in the non-residential study area would decrease slightly to 0.177 acres of passive open space per 1,000 non-residents, and would remain above the City's planning goal.

Table 4-7
No Action Condition: Adequacy of Open Space Resources
(Non-Residential Study Area)

Total Population		Open Space Acreage			Open Space Ratios			Open Space Goals		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Non-Residential (1/4-Mile) Study Area										
Non-Residents	93,548	20.78	4.23	16.55	N/A	N/A	0.177	N/A	N/A	0.15
Note: Ratios in acres per 1,000 people										

E. THE FUTURE WITH THE PREVIOUSLY PROPOSED PROJECT

The assessment of conditions in the future with the ~~Proposed Project~~previously proposed project examines conditions that are expected to occur as a result of the ~~Proposed Project~~previously proposed project. The capacity of open space resources to serve future populations in the study area is examined using quantitative and qualitative factors. The potential for direct effects on open space is also considered.

DIRECT EFFECTS ON OPEN SPACES

According to the *CEQR Technical Manual*, a proposed project may result in a significant direct impact on open space resources if 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 an imposition of noise, air pollutant emissions, odors, or shadows on public open space that may alter its usability. The ~~Proposed Project~~previously proposed project would not cause increased air pollutant emissions that would affect the usefulness of any study area open space, whether on a permanent or temporary basis, nor would the ~~Proposed Project~~previously proposed project's operational noise affect the usefulness of any study area open space. The ~~Proposed Project~~previously proposed project would not result in direct impacts as a result of open space displacement as it would not limit public access to any open spaces, nor would it change the use of a publicly accessible open space so that it no longer serves the same user population.

The ~~Proposed Project~~previously proposed project, however, is anticipated to result in a significant adverse shadows impact to one open space resource, resulting from new shadow cast by the ~~Proposed Project~~previously proposed project. The Development Site's shadow would pass across portions of the Southbridge Towers complex open spaces from early to late morning in the spring,

summer, and fall, covering large areas at times, and significantly altering the use of the spaces for users seeking sun, and potentially impacting the health of the trees and plantings in one limited area. See Chapter 5, "Shadows," for more information.

The Southbridge Towers complex open spaces, while publicly accessible, is composed of the grounds of a private residential development. It is not a public open space resource operated by NYCParks or another governmental entity, nor is it listed as a POPS. During the time periods in which the Southbridge Towers complex open spaces is impacted by incremental shadows, many other existing and planned plazas, gardens, and parks with passive open space features are located within the study area would continue to provide passive open space amenities for residents and workers.

Two open space resources, the Pearl Street Playground and the Imagination Playground, located near the Development Site and Museum Site respectively, would also experience temporary disruptions from construction noise. Construction could produce noise level increases that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities and would produce noticeable increases over the course of construction, and the effects of construction noise would constitute a significant adverse impact. See Chapter 17, "Construction," for more information.

INDIRECT EFFECTS ON OPEN SPACE

STUDY AREA POPULATION

As described in Chapter 1, "Project Description," the With Action condition would see the construction of the ~~Proposed Project~~previously proposed project on the Development Site. The ~~Proposed Project~~previously proposed project would consist of an approximately 680,500-gsf building including approximately 394,400 gsf of residential uses (in order to ensure a conservative analysis, the environmental review assumes approximately 394 total DU, of which approximately 25 percent, or 99 DU, are assumed to be affordable), 267,747 gsf of office uses, 13,353 gsf of retail uses, 5,000 gsf of community facility uses, and 108 parking spaces in an underground garage. The With Action condition would also include the restoration and reopening of the existing South Street Seaport Museum on the Museum Site, as well as the potential development of a new Museum expansion. The restoration and reopening of the Museum would consolidate its spaces within approximately 86,691 gsf of renovated, reopened, and potentially expanded space at the corner on the Museum Site (89-93 South Street, 2-4 Fulton Street, and 167-175 John Street) and provide a new, more prominent entrance at the corner of Fulton Street and South Street.

In total, as compared to the No Action condition, the ~~Proposed Project~~previously proposed project would result in incremental development of 92 DUs (302 DUs would be constructed on the Development Site in the No Action condition, and 394 DUs would be constructed in the With Action condition), 267,747 gsf of office uses, and 63 parking spaces, with an incremental decrease in retail space of -6,377 gsf; no change in the amount of community facility space would occur. On the Museum Site, the renovated, reopened, and potential expansion of the Museum would result in 86,691 gsf of museum space; including the 5,000 gsf of community facility space in the new development on the Development Site, the ~~Proposed Project~~previously proposed project would, accordingly, result in a total of 91,691 gsf of community facility space.

Residential Population

Applying the CD 1 average household size of 1.91 persons per household to the 394 DUs that would be introduced by the ~~Proposed Project~~previously proposed project would result in 753 residents. The ~~Proposed Project~~previously proposed project would result in an incremental increase 92 DUs and 176 residents as compared to the No Action condition. Therefore, the population in the residential study area would increase to a total of 54,440 residents in the With Action condition.

Non-Residential Population

The ~~Proposed Project~~previously proposed project is expected to introduce approximately 1,215 workers; as compared to the No Action development (which would introduce 67 workers); this would represent an incremental increase of 1,148 workers. Therefore, in the With Action condition, the worker population in the non-residential study area would increase to 94,696 non-residents.

STUDY AREA OPEN SPACE RESOURCES

The ~~Proposed Project~~previously proposed project would not have a direct effect on the acreage or access to existing or proposed open space resources in the Project Area or within the study area. The total amount of open space in the residential study area would therefore remain at 47.43 acres, including 11.92 acres of active open space and 35.51 acres of passive open space. In the non-residential study area, the total amount of open space would remain at 20.78 acres, with 4.23 acres of active open space and 16.55 acres of passive open space.

ADEQUACY OF OPEN SPACES

Quantitative Assessment

Tables 4-8 and 4-9 present the With Action condition open space ratios in the residential and non-residential study areas, incorporating the incremental residential and worker populations expected to be introduced by the ~~Proposed Project~~previously proposed project. **Table 4-10** presents a summary of the open space ratios, and the percentage decrease in the ratios between the No Action and With Action conditions.

Table 4-8
With Action Condition: Adequacy of Open Space Resources
(Residential Study Area)

		Open Space Acreage			Open Space Ratios			Open Space Goals		
Total Population		**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**
Residential (½-Mile) Study Area										
Residents	54,440	47.43	11.92	35.51	0.871	0.219	0.652	2.5	2.0	0.5
Note: Ratios in acres per 1,000 people										

Table 4-9
With Action Condition: Adequacy of Open Space Resources
(Non-Residential Study Area)

		Open Space Acreage			Open Space Ratios			Open Space Goals		
Total Population		**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**
Non-Residential (1/4-Mile) Study Area										
Non-Residents	94,696	20.78	4.23	16.55	N/A	N/A	0.175	N/A	N/A	0.15
Note: Ratios in acres per 1,000 people										

Table 4-10
Open Space Ratios Summary

Ratio	City Goal (acres per 1,000 non-residents)	No Action Condition	With Action Condition	Percent Change
Residential Analysis				
Total	2.5	0.874	0.871	-0.33%
Active	2.0	0.220	0.219	-0.32%
Passive	0.5	0.654	0.652	-0.32%
Non-Residential Analysis				
Passive	0.15	0.177	0.175	-1.19%

As shown in **Table 4-10**, in the With Action condition the residential study area's total, active, and passive open space ratios would all decrease by approximately 0.3 percent; the total open space ratio (0.871 acres per 1,000 residents) and active open space ratio (0.219 acres per 1,000 residents) would remain below the City's goals, while the passive open space ratio (0.652 acres per 1,000 residents) would continue to meet the City's goal.

In the non-residential study area, the passive open space ratio within the study area would decrease in the With Action condition compared with the No Action condition by approximately one percent. However, the With Action condition passive open space ratio of 0.175 acres per 1,000 non-residents would continue to meet the City's planning goal of 0.15 acres of passive open space per 1,000 non-residents.

The *CEQR Technical Manual* indicates that a decrease in the open space ratio of 5 percent or more in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents would generally be considered a substantial change that requires a more detailed analysis. With the ~~Proposed Project~~previously proposed project, there would be a less than 5 percent decrease in all of the relevant open space ratios in the With Action condition compared to those of the No Action condition. In both the residential and non-residential study areas, the passive open space ratio would continue to meet the City's planning goals of 0.5 acres per 1,000 residents and 0.15 acres per 1,000 non-residents. Therefore, based on the *CEQR Technical Manual* guidelines, the ~~Proposed Project~~previously proposed project would not result in a significant adverse impact to open space, and a detailed open space analysis is not required.

In addition to this quantitative assessment approach to determine overall impact significance, a qualitative assessment is provided below.

Qualitative Assessment

Battery Park, a large destination park, is located immediately adjacent to the residential study area, and features extensive amenities for passive and active recreation, including a bikeway and playground space. Similarly, the East River Esplanade, which extends well beyond the study area, provides additional space for both active and passive recreation. These resources are destination open spaces that serve local residents in the study area as well as visitors from throughout the City, and provide extensive areas for active recreational activities, such as jogging and biking.

In addition, as noted above, there is a NYCHA housing development (the Alfred E. Smith Houses) with open spaces located in the residential and non-residential study areas. While this area was not included in the open space inventory and quantitative analyses, as it is primarily meant for use by residents of the housing development, it would help serve the recreational needs of the study area, in particular by providing additional playgrounds and passive seating areas. Furthermore, the

~~Proposed Project~~previously proposed project would feature a fitness center and other amenities for residents as well as separate outdoor spaces onsite for residents and office workers respectively. These project features would further ameliorate the new populations' effects on study area resources.

Therefore, these additional open space amenities would help meet some of the passive and active open space needs of the residents introduced by the ~~Proposed Project~~previously proposed project. As noted above, based on the quantitative analysis, the ~~Proposed Project~~previously proposed project would not result in a significant decrease in the relevant open space ratios for residential and non-residential populations. Therefore, the ~~Proposed Project~~previously proposed project would have a significant adverse open space impact resulting from new shadows. ✶