

**A. INTRODUCTION**

The proposed project would replace existing surface public parking lots on the North Site and South Site with new mixed-use development that would include retail, hotel, the Observation Wheel, food and beverage establishments, exhibition and theater space, and public and accessory parking that would be sited along the waterfront in the St. George area of northern Staten Island. The waterborne transit landing described in Chapter 1, “Project Description,” would not affect the open space analysis, and therefore is not considered in this chapter. The addition of new commercial uses to this waterfront area of Staten Island would create new demands for open space in the area. Because the proposed project would add a new worker population, this chapter examines the proposed project’s potential significant adverse impacts on open space in the area in accordance with the 2012 *City Environmental Quality Review (CEQR) Technical Manual*. This chapter examines potential direct effects of the proposed project on nearby publicly accessible open spaces as well as indirect effects created by changes in demand for and use of the area’s open spaces. The proposed project would not introduce any new residents; the analysis therefore focuses on the potential impacts of the project’s worker population on study area open spaces.

**PRINCIPAL CONCLUSIONS**

The preliminary analysis of the proposed projects’ indirect effects on open space conducted to determine the need for a detailed analysis concluded that the proposed project would not result in a significant adverse impact on open space.

**Table 5-1** provides a summary of the open space analysis including a comparison of conditions with and without the proposed project. As shown in the table under the No-Action condition, there is a large open space ratio of 1.04 acres per 1,000 workers, a ratio that far exceeds the City’s recommended guideline of 0.15 acres. This is based on the study area’s proximity to the North Shore Waterfront Esplanade and its relatively low density of workers. With the proposed project’s net increase of ~~7.81~~ ~~4.76~~ acres of publicly accessible open space on the North Site and South Site, the ratio would increase to ~~2.17~~ ~~4.64~~ acres per 1,000 workers. The proposed project also would not result in any significant adverse direct impacts to open space related to shadows, air quality, noise, or odors.

**Table 5-1  
Open Space Ratios Summary**

Ratio	City Guideline Ratio	Open Space Ratios (Acres/1,000 Workers)			Percent Change No-Action to With-Action Condition
		Existing Conditions	No-Action Condition	With-Action Condition	
Passive Acreage Per 1,000 Workers	0.15	1.16	1.04	<del>2.17</del> <del>4.64</del>	<del>108.7%</del> <del>54.8%</del>

## B. METHODOLOGY

### DIRECT EFFECTS ANALYSIS

According to the *CEQR Technical Manual*, a proposed 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, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space. This chapter uses information from Chapter 6, “Shadows,” Chapter 15, “Air Quality,” and Chapter 17, “Noise,” to determine whether the proposed project would directly affect any open spaces near the project sites. A proposed project can also directly affect an open space by enhancing its design or increasing its accessibility to the public.

### INDIRECT EFFECTS ANALYSIS

Open space can be indirectly affected by a proposed action if the project would add enough population—residents or non-residents—to noticeably diminish the capacity of open space in an area to serve the future population. Typically, an assessment of indirect effects is conducted when a project would introduce 200 or more residents or 500 or more 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. Because the project sites are not located within an area that has been identified as either underserved or well-served, the 200 resident and 500 worker thresholds were applied in this analysis.

The proposed project would not introduce any new residents into the study area. As such, an analysis of potential impacts on residential users of open space is not warranted.

Because the proposed project would introduce an estimated 1,333 workers to the project sites, it would exceed the *CEQR Technical Manual*’s threshold for employees.<sup>1</sup> Therefore a quantitative assessment was conducted to determine the potential of the proposed project to have indirect effects on open space in the area. Following the *CEQR Technical Manual*’s methodology, a preliminary assessment was first conducted to determine whether a more detailed analysis was appropriate.

Using the methodology described in the *CEQR Technical Manual*, the adequacy of open space in the study area was assessed by comparing the ratio of existing publicly accessible open space acreage to population—the open space ratio—with that recommended by the City. This comparison is also applied to open space conditions in the No-Action and With-Action conditions in order to determine the proposed project’s potential incremental impact on open space resources in the study area. A qualitative assessment is also used to supplement this quantitative analysis in order to fully examine the effects of the proposed project.

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<sup>1</sup>As discussed in Chapter 1, “Project Description,” it is possible that the proposed sites could be developed with a No Catering Facility Scenario. The No Catering Facility scenario would introduce approximately 1,211 workers, which is lower than the proposed project’s employment estimate. Therefore, for the purposes of conducting a conservative analysis, this assessment considers the effects of the proposed project, which would maximize the worker population.

### *STUDY AREA*

The *CEQR Technical Manual* recommends first establishing and mapping a study area for an open space analysis. Residential and commercial projects require different open space study areas, each defined by the reasonable walking distance that residents and workers would travel to reach local open space or recreation areas. Workers tend to use passive open spaces within ¼ mile, or a typical walking distance, from their workplaces. Therefore, projects that would add a substantial worker population require an analysis of their effects on passive open spaces within approximately ¼ mile of the project sites. Because the proposed project would not introduce a residential population, this open space analysis is limited to the impacts on passive open space resources in the commercial study area. Therefore, the study area for the proposed project was defined as the area within a ¼-mile radius of the project sites.

The *CEQR Technical Manual* explains that this ¼-mile study area should be modified to include all census tracts with at least 50 percent of their area within the study area. As shown in **Figure 5-1**, the study area for this analysis has been defined as Census Tracts 3 and 7. The project sites are located in Census Tract 7, which extends from Wall Street to Jersey Street via Crescent Avenue. Although these census tracts have less than 50 percent of their areas in the ¼-mile area study area, they were included in the study area because the project sites are located within these tracts and so as to account for adjacent areas where the project would be likely to affect open space conditions.

### *USER POPULATIONS*

#### *Existing Conditions*

The worker population in the study area was estimated using employment data from ESRI, Inc., a commercial data provider.

#### *No- Action Condition*

As described in Chapter 1, “Project Description,” the proposed project’s Build year is 2016. The analysis of the No-Action condition assumes that none of the proposed discretionary actions are approved at that time and the proposed project is not developed. As discussed in Chapter 2, “Land Use, Zoning, and Public Policy,” there are several new developments in the area that are expected to be constructed by 2016 in the ¼-mile study area. To estimate the worker population expected to be generated in the study area, standard employment density ratios were applied to the expected square footage for each of the uses generated by projects to be completed by the 2016 Build year.

#### *With-Action Condition*

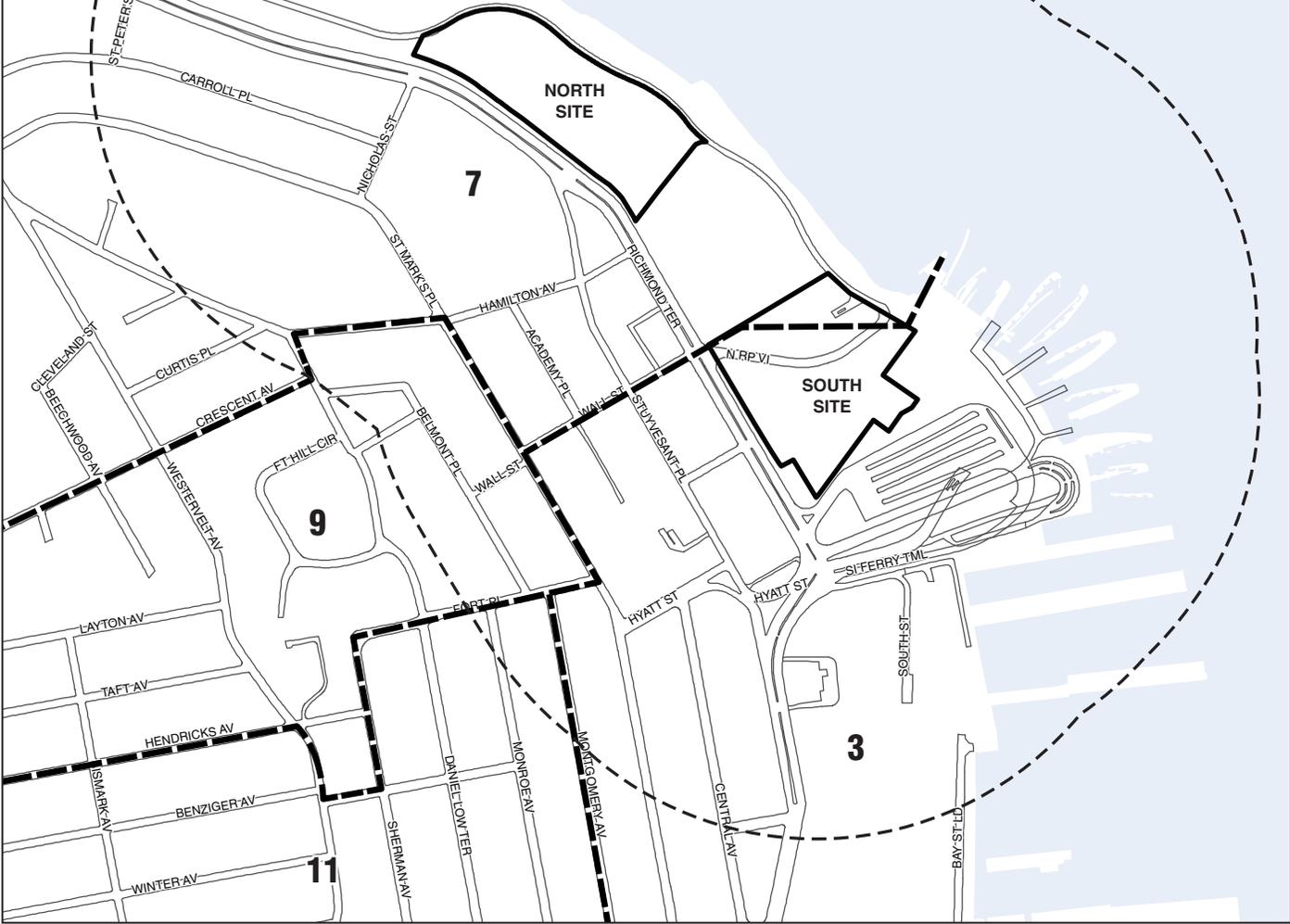
The worker population introduced by the proposed project was estimated and added to the worker population expected in the No-Action condition to determine the total passive open space user population in the With-Action condition.

### *INVENTORY OF OPEN SPACE RESOURCES*

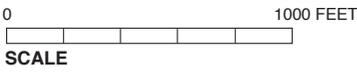
The *CEQR Technical Manual* defines public open space as open space that is regularly open to the public during designated daily periods. Open spaces that do not fit this definition because they are not available to the public on a regular basis or are available to a limited set of users are considered private open space and are not included in the quantitative open space analysis.



UPPER NEW YORK BAY



-  Project Sites
-  Study Area Boundary (1/4-Mile Perimeter)
-  Census Tract Boundary



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Examples of private open space include a private, fee-charging health club or a roof deck for residents of a particular building.

All publicly accessible open spaces and recreational facilities within the study area were identified. The inventory of open spaces was assembled based on field visits conducted in July 2012 and information from the New York City Department of City Planning (DCP).

During the July 2012 field visits, the size, character (both active and passive as described below), condition, and use of the public open spaces within the commercial study area were recorded. Each space was further examined in terms of the amount of active and passive space and amenities included. Active open space is intended for sports, exercise, or active play, such as children's play areas, and includes playgrounds, sports fields and courts, pools, greenways, and golf courses. Passive open space is intended for relaxation and invites sitting, strolling, picnicking, and dog walking, and includes walking paths, gardens, and yards with sitting areas. Spaces such as lawns and esplanades can accommodate both active and passive uses.

In addition to the open spaces located in the commercial study area, open spaces falling outside of the study area were considered in the qualitative analysis as they may also be used by the worker population.

### ***ADEQUACY OF OPEN SPACE RESOURCES***

#### ***Comparison to City Guidelines***

Using the methodology of the *CEQR Technical Manual*, the adequacy of the open space in the study area was quantitatively assessed by comparing the ratio of useable open space acreage to the study area population (or the "open space ratio") with guidelines established by DCP. For non-residential or worker populations, 0.15 acres of passive open space per 1,000 workers is considered an adequate ratio.

#### ***Impact Assessment***

Impacts of the proposed project were assessed based on how the project would change the open space ratios in the study area. According to the *CEQR Technical Manual*, if a proposed project would result in a decrease approaching or exceeding 5 percent, it is considered to substantially change open space conditions and a detailed analysis may be warranted. However, in areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant, depending on the area of the City. Furthermore, in areas that are well-served by open space, a greater change in the open space ratio may be tolerated.

The *CEQR Technical Manual* recommends that the quantitative open space analysis described above be supplemented by an examination of qualitative factors. These factors include the proximity to "destination" resources and the nature of any open space added by the proposed project.

### **PRELIMINARY ASSESSMENT**

A preliminary assessment of open space consists of calculating total population, tallying the open space acreage within the area, and comparing the open space ratios for existing conditions and the No-Action and With-Action conditions.

## C. EXISTING CONDITIONS

### OPEN SPACE USER POPULATION

According to 2012 data, the study area has a non-residential worker population of 3,618 (see **Table 5-2**).

**Table 5-2**  
**Existing Worker Population in the**  
**Study Area—2012 Estimate**

Census Tract	Worker Population
3	2,537
7	1,081
<b>TOTAL</b>	<b>3,618</b>
<b>Source:</b> ESRI Business Analyst, Inc, Business Summary Report	

### OPEN SPACE INVENTORY

The study area contains a total of 6 publicly accessible open spaces, which contain a total of 7.40 acres of public open space, of which 4.21 acres are passive open space and 3.19 acres are active open space (see **Table 5-3** and **Figure 5-2**). The total open space in the study area is presented below for information purposes, but only the passive space is examined in the analysis that follows (since the proposed project does not include a residential component). Notable passive open spaces in the study area are described below.

Approximately 4.32 acres—over half of the total open space in the study area—fall within the North Shore Waterfront Esplanade, of which approximately half is passive open space and half is active open space. The park is in excellent condition and has walking and running paths along the waterfront, circuit fitness equipment, and several benches and picnic areas.

### ADEQUACY OF OPEN SPACES

As described above, the analysis focuses on passive open spaces because these are the open spaces that workers introduced by the proposed project would be most likely to use. **Table 5-4** compares the ratio of existing passive open space per 1,000 workers in the study area with the City guidelines. The study area has a passive open space ratio of 1.16 acres per 1,000 workers, which is far above the City's guideline of 0.15 acres of passive open space per 1,000 workers.

### QUALITATIVE ANALYSIS

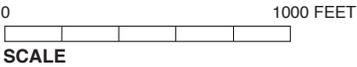
As noted above, North Shore Waterfront Esplanade is the largest open space in the study area. Several other open spaces that provide passive recreation resources include: Lt. Lia Playground, Barrett Triangle, Baker Square, and the Richmond County Courthouse Plaza. In addition, Fort Hill Park at the corner of Fort Place and Sherman Avenue and Mahoney Playground located at Beechwood and Crescent Avenues are other open spaces that provide passive recreation resources located just outside the study area. As shown in **Table 5-3**, the open space resources in the study area are mostly in good or excellent condition and are moderately used. Overall the area is well-served by passive open space resources.



UPPER NEW YORK BAY



-  Project Sites
-  Study Area Boundary (1/4-Mile Perimeter)
-  Open Space Resource



**Table 5-3  
Study Area Open Space Inventory**

	Name	Location	Owner	Features	Size (Acres)			Condition/ Utilization
					Passive Space	Active Space	Total Acres	
1	North Shore Esplanade	Richmond Terrace from St. Peter's Place to Nicholas Street <sup>1</sup>	DPR	Benches	1.12	0	1.12	Fair/Low
2	Lieutenant Lia Playground <sup>2</sup>	Wall Street btw. St. Marks Place and Belmont Place	DPR	Playground equipment, fountain, chess tables, benches	0.34	1.03	1.37	Good/Moderate
3	Barrett Triangle	Hyatt Street, Bay Street, Stuyvesant Place, and Richmond Terrace	DPR	Benches, statue, landscaping	0.16	0	0.16	Good/Moderate
4	Baker Square	Hyatt Street, Bay Street, and Stuyvesant Place	DPR	Benches, landscaping	0.09	0	0.08	Excellent/Low
5	Richmond County Courthouse Plaza	Richmond Terrace between Schuyler Street and Bay Street	DCAS	Benches, grass area, landscaping	0.34	0	0.34	Excellent/ Moderate
6	North Shore Waterfront Esplanade	Shoreline from south side of the Stadium to approximately 550 feet south of St. Peter's Place	DSBS	Benches, circuit fitness equipment, landscaping, walking paths	2.16	2.16	4.32	Excellent/ Moderate
<b>Study Area Total</b>					<b>4.21</b>	<b>3.19</b>	<b>7.40</b>	

**Notes:** See Figure 5-2 for open space locations.

1. This does not include portions of the North Shore Esplanade southeast of Nicholas Street because it does not include street furniture or other amenities associated with passive open space.

2. Lieutenant Lia Playground is also known as Nicholas Lia Memorial Park.

DPR= New York City Department of Parks and Recreation  
 DCAS= Department of Citywide Administrative Services  
 DSBS= Department of Small Business Services

**Sources:** AKRF Field Surveys, July 2012; Richmond County Courthouse Plaza, North Shore Esplanade, and the North Shore Waterfront Esplanade open space acreage estimated based on AKRF field surveys.

**Table 5-4  
Existing Conditions: Adequacy of Open Space Resources**

Existing Worker Population	Guideline Ratios (Acres/1,000 Workers)	Passive Acres Needed to Meet Guidelines	Passive Acres Present	Actual Ratio
3,618	0.15	0.54	4.21	1.16

**D. THE FUTURE WITHOUT THE PROPOSED PROJECT**

**OPEN SPACE USER POPULATION**

In the No-Action condition, there will be no change in employment on the project sites as they will remain as surface parking lots. As described in Chapter 2, "Land Use, Zoning, and Public

Policy,” a small handful of new developments in the study area are planned or under construction and are expected to be completed by 2016. These developments will introduce approximately 429 new workers to the study area.<sup>1</sup> Therefore, the total worker population in the study area will increase to approximately 4,047 workers.

**OPEN SPACE INVENTORY**

None of the projects described in Chapter 2, “Land Use, Zoning, and Public Policy” expected to be completed by 2016 would add any open space to the study area. Therefore, in the No-Action condition, the total passive open space in the study area will remain at 4.21 acres.

**ADEQUACY OF OPEN SPACES**

*QUANTITATIVE ANALYSIS*

Though the development projects expected to be completed in the study area in the No-Action condition would generate 429 new workers and therefore place more demand on the open spaces in the study area, the area would remain well-served by open space resources. The ratio of passive open space per 1,000 workers would be 1.04 acres, still well above the City’s guideline ratio of 0.15 acres per 1,000 workers (see **Table 5-5**).

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

<b>Worker Population</b>	<b>Guideline Ratios (Acres/1,000 Workers)</b>	<b>Passive Acres Needed to Meet Guidelines</b>	<b>Passive Acres Present</b>	<b>Actual Ratio</b>
4,047	0.15	0.54	4.21	1.04

*QUALITATIVE ANALYSIS*

In the No-Action condition, as in existing conditions, workers in the study area will continue to be served by the parks located in the study area. As noted above, Fort Hill Park and Mahoney Playground are other open spaces that provide passive recreation resources located just outside the study area. These open spaces will provide additional recreational resources for the study area population.

**E. THE FUTURE WITH THE PROPOSED PROJECT**

**DIRECT EFFECTS**

As discussed in Chapter 1, “Project Description,” with the proposed project, Bank Street would be widened from a 24-foot to a 30-foot roadway from Jersey Street to the easternmost boundary of the North Site. As a result of the street widening, the North Shore Waterfront Esplanade would decrease by ~~0.32~~ 0.16 acres from 4.32 acres to ~~4.16~~ 4.00 acres of open space (which would include ~~1.84~~ 2.00 acres of passive open space and 2.16 acres of active open space). The With-Action condition would have a positive direct effect on open space by creating ~~4.94~~ 7.88 acres of publicly accessible passive

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<sup>1</sup> Employment density ratios were applied to the expected square footage for each use to estimate future employment. The ratios used assume one worker each per: 400 sf of retail space; 1,000 sf of community facility; 25 residential units; and 50 parking spaces.

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and active open space on the North Site and enlivening an area currently covered with surface parking. The net increase of open space acreage on the North Site would be ~~4.62~~ 7.72 acres.

In addition, approximately ~~0.30~~ 0.25 acres of passive open space would be added on the South Site as a result of the proposed project. However, due to the reconfiguration of the service road, as described in Chapter 1, "Project Description," the net increase of open space on the South Site would be ~~0.14~~ 0.09 acres.

In total, approximately ~~5.24~~ 8.13 acres of publicly accessible open space would be developed on the North Site and South Site. However, as a result of the widening and reconstruction of Bank Street, the net increase is ~~4.76~~ 7.81 acres, of which approximately 7.45 ~~4.47~~ acres would be passive open space and 0.36 ~~0.29~~ acres would be active open space. ~~The proposed project would also result in an additional 2.28 acres of open space on the North Site that would include sustainable features such as cylindrical wind turbines and solar panels. However, this space is expected to be inaccessible and would not be directly for active or passive recreation; therefore, this 2.28 acres has not been included in the open space analysis.~~ The proposed project would not have any adverse impacts on open space in terms of air quality, noise, odors, or shadows. See Chapter 6, "Shadows," Chapter 15, "Air Quality," and Chapter 17, "Noise" for additional information.

### INDIRECT EFFECTS

#### *OPEN SPACE USER POPULATION*

The proposed project would result in the development of retail, hotel, an Observation Wheel, food and beverage establishments, exhibition and theater space, and public and accessory parking. The proposed project is estimated to introduce approximately 1,333 workers.<sup>1</sup> Therefore, the proposed project is expected to increase the study area's worker population to 5,380.

It is anticipated that customers of the Wheel and retail development may utilize the North Shore Waterfront Esplanade and other public spaces as part of their trip to St. George. However, as these customers do not constitute a permanent user population, they have not been included in the assessment of the potential impacts of the proposed project.

#### *OPEN SPACE INVENTORY*

As previously described, the proposed project would create a net increase of approximately 7.81 ~~4.76~~ acres of publicly accessible open space on the North Site and South Site. In the With-Action condition, the study area's total passive open space acreage would increase to ~~8.68~~ 11.66 acres. On the North Site, this new passive open space would consist primarily of landscaped green spaces, walkways with benches, and scenic vantage points. On the South Site, this new passive open space would consist of landscaped seating areas on the Bank Street Esplanade. In the With-Action condition, the study area's total active open space acreage would increase to ~~3.48~~ 3.55 acres. This new active open space would consist of a children's playground located in the southwest corner of the North Site.

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<sup>1</sup> Employment estimate for the Observation Wheel was provided by the Applicant. Employment estimates for other project components are based on assumptions provided by New York City Economic Development Corporation.

*Adequacy of Open spaces*

*Quantitative Analysis*

As presented in **Table 5-6**, the calculated open space ratio is 2.17 ~~4.64~~ acres per 1,000 workers. In the With-Action condition, the ratio of passive open space would increase from 1.04 in the No-Action condition to 2.17 ~~4.64~~ and the passive open space ratio would remain well above the City’s guideline of 0.15 acres per 1,000 workers (see **Table 5-7**).

**Table 5-6  
With-Action Condition: Adequacy of Open Space Resources**

Worker Population	Guideline Ratios (Acres/1,000 Workers)	Passive Acres Needed to Meet Guidelines	Passive Acres Present	Actual Ratio
5,380	0.15	0.81	<del>8.68</del> 11.66	<u>2.17</u> <del>4.64</del>

**Table 5-7  
Open Space Ratios Summary**

Ratio	City Guideline Ratio	Open Space Ratios (Acres/1,000 Workers)			Percent Change No-Action to With-Action Condition
		Existing Conditions	No-Action Condition	With-Action Condition	
Passive Acreage Per 1,000 Workers	0.15	1.16	1.04	<u>2.17</u> <del>4.64</del>	<u>108.7%</u> <del>54.8%</del>

*Qualitative Analysis*

By creating a net increase of 7.81 ~~4.76~~ acres of new public active and passive open space and activating an area currently used for parking, the proposed project represents a substantial improvement to open space resources in the area. The open space on the North Site and South Site would be easily accessible from the Staten Island Ferry and would enhance open space along the North Shore Waterfront Esplanade. This open space would provide additional active and passive open space resources for the study area population.

*Pedestrian Connectivity*

The proposed development on the North Site and South Site would also increase pedestrian connections between the waterfront and upland St. George, thereby increasing access to the North Shore Waterfront Esplanade from downtown St. George. On the North Site, a new pedestrian path on the eastern side of the site would connect the Richmond Terrace Entrance Plaza and the waterfront. In addition, a pedestrian pathway through the open space on the North Site would start near Nicholas Street and would connect to the waterfront. On the South Site, the retail stores would be located along open pedestrian promenades, visually and physically connecting Richmond Terrace and St. George’s civic center to the waterfront (see Figure 1-12). Therefore, the pedestrian paths that would be provided on the North Site and South Site would enhance pedestrian connectivity between downtown St. George and the North Shore Waterfront Esplanade.

**F. CONCLUSIONS**

The With-Action condition would increase the passive open space ratio in the study area by 108.7 ~~54.8~~ percent over the No-Action condition. The open space ratio for workers in the study area would remain well over the City’s recommended guideline ratio, and the open space conditions in the area would be improved with the addition of new open space on the project sites. Furthermore, the proposed project would not result in any adverse direct effects to open space related to shadows, air quality, noise, or odors. Therefore, the proposed project would not result in any significant adverse impacts on open space in the study area, and a more detailed analysis is not warranted. \*