6.0 Open Space

A. INTRODUCTION

The Proposed Action would enable construction of approximately 2.77 million gsf of mixed-use development that would include publicly accessible open space and a new waterfront Esplanade available to residents, employees, visitors, and the community. Provided in this chapter is an assessment of the impact of the Proposed Action on Open Space, defined under CEQR as publicly accessible land that has been designated for leisure, play, or sport, or that has been set aside for the protection and/or enhancement of the natural environment. As required by CEQR, included is an assessment of whether the Proposed Action would have either a direct impact resulting from elimination or alteration of open space or an indirect impact resulting from overtaxing available open space. The findings of the open space analysis indicate that the Proposed Action would result in no significant adverse impact to open space.

The *CEQR Technical Manual* specifies that direct effects on open space occur when the Proposed Action would:

- Result in the physical loss of public open space;
- Substantially change the use of an open space so that it no longer serves the same population (the *CEQR Technical Manual* uses the example of eliminating playground equipment);
- Limit access to a public open space; or
- Cause significant adverse noise, air, odor, or shadow effects that would affect the usefulness of a public open space.

The Project would result in no direct impacts to open space. However, the Proposed Action would introduce 2,700 new residents and 3,450 new workers (see Section D.1. of this chapter). According to the *CEQR Technical Manual*, indirect impacts to open space resources may result from actions that introduce a new residential and/or employee population that would significantly increase the demand for open space resources. The *CEQR Technical Manual* recommends that two study areas are appropriate for the assessment of potential indirect impacts from a mixed-use development: a study area for residential population (Residential Study Area) encompassing parks and other open space resources within approximately ½ mile of the Project Site, and a smaller study area for new worker population (Employment Study Area) within approximately ¼ mile of the Project Site.

Pursuant to CEQR guidelines, census tracts with at least 50 percent of their area within ½ mile of the Project Site are ordinarily included in the Residential Study Area. Because the ½-mile radius encompasses a number of census tracts within less than 50 percent of their area within the radius, the Residential Study area for the Project was tailored to specific portions of each tract more closely aligned with the radius. The Residential Study Area therefore includes:

- Census Tract 1 (portion of tract within ½-mile of Project Site);
- Census Tract 7, Block Groups 1, 2, and 3;
- Census Tract 19, Block Group 2;
- Census Tract 25;
- Census Tract 27; and
- Census Tract 37 (portion of tract within ½-mile of Project Site).

The Residential Study Area is depicted in Figure 6-1. Population forecasts for 2005 are based on 2000 Census data as well as projections based on projects completed in the Study Area since that time. The New York Metropolitan Transportation Council (NYMTC) projects an increase in future population within the study area of 16 persons between 2000 and 2005.

The study area for employment population is delineated according to the boundaries of census blocks with at least 50 percent of their area within ¼ mile of the Project Site. These include:

- Census Tract 19, Block Group 2, Blocks: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2020, 2021, 2022, 2023, 2024, 2025, and 2026;
- Census Tract 37, Block Group 1, Block: 1005;
- Census Tract 1, Block Group 2, Block: 2000; and
- Census Tract 25, Block Group 1, Blocks: 1003 and 1004.

Current and projected future employment data are available for these blocks from NYCDCP.

B. EXISTING CONDITIONS

1. Population

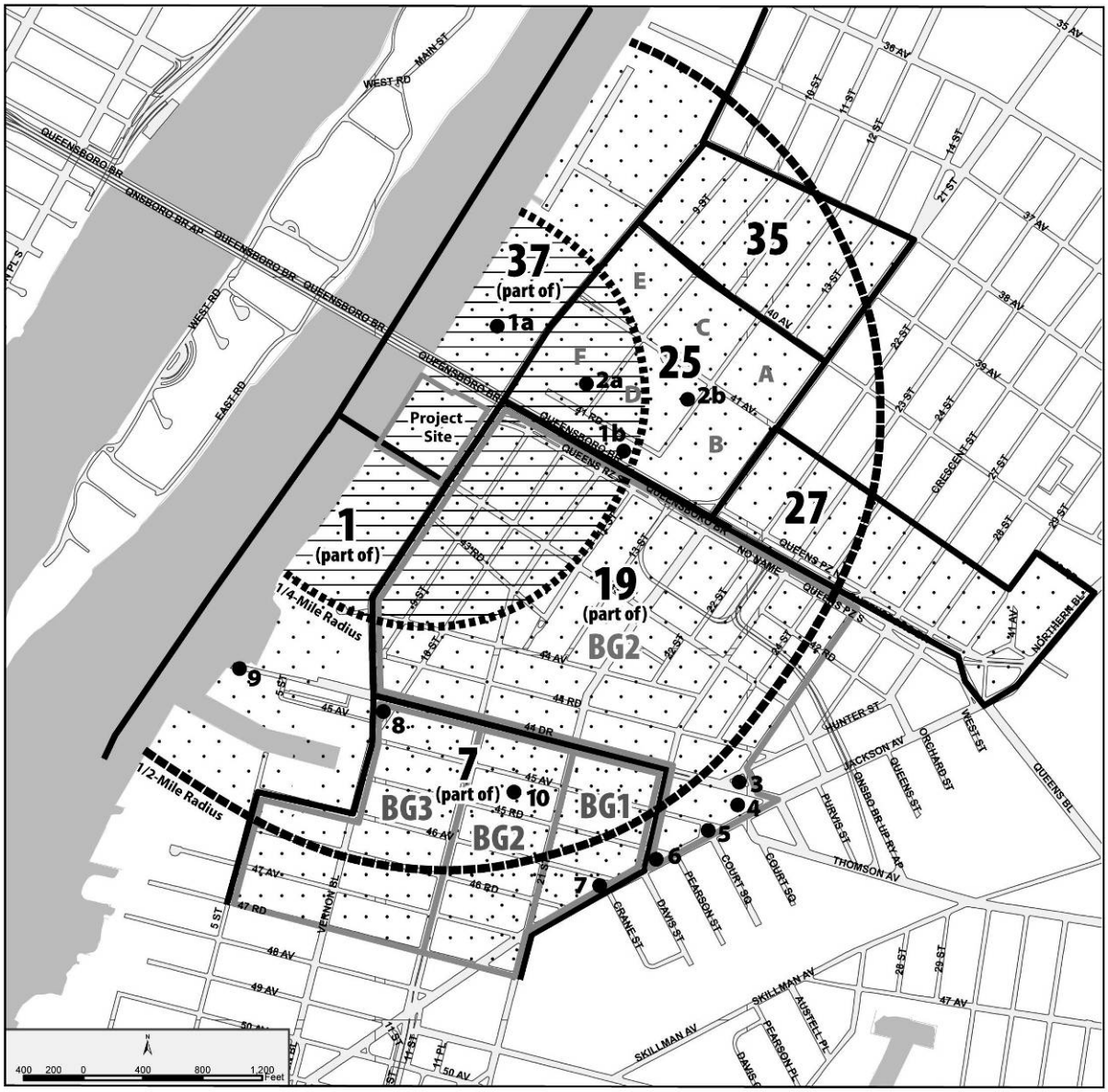
According to the Census, the Residential Study Area had a total population of 10,414 in the year 2000, primarily between the ages of 20 and 64 (58.1 percent), with about 32.4 percent age 19 and younger (Table 6-1).

TABLE 6-1: EXISTING RESIDENTIAL POPULATION (2000) BY AGE GROUP IN THE RESIDENTIAL STUDY AREA

Age Category	Number of People	Percent of Total
< 4 years	807	7.7%
5–9 years	937	9.0%
10–14 years	862	8.3%
15–19 years	771	7.4%
20–64 years	6,050	58.1%
65+ years	987	9.5%
TOTAL	**10,414**	**100%**

Source: United States Bureau of the Census, 2000 Decennial Census, STF 1.

For the five-year period between 2000 and 2005, NYMTC projected a 0.16 percent population growth rate for the Residential Study Area. This would result in a 2005 population of approximately 10,430. This accounts for births, deaths, in- and out-migration and residential projects completed in the intervening years (of which there have been none in the Study area). The approximate number of employees working in the Employment Study Area in 2005, according to NYCDCP information, is 3,188.



- Residential Study Area
- Employment Study Area
- 1 Open Space Resources
- Census Tract Boundary
- 25 Census Tract
- Block Group Boundary
- BG1 Block Group

1a *Queensbridge Park and Ballfields (including Vernon Playground) and* **1b** *Queensbridge Baby Park (part of Queensbridge Park)*
2a *Queensbridge Houses (D and F) and* **2b** *Queensbridge Houses (A, B, C, and E)*
3 *Rafferty Triangle*
4 *Citicorp Plaza (publicly accessible private space)*
5 *McKenna Triangle*
6 *Albert Short Triangle*
7 *Greenstreet*
8 *Gordan Triangle*
9 *44th Drive Public Pier*
10 *Murray Playground*

Figure 6-1:
Open Space Resources Within Residential and Employment Study Areas

2. Open Space Resources

There are 10 publicly accessible open space resources within the ½-mile radius Residential Study Area. In aggregate, they total 29.71 acres of publicly accessible open space. Of these, two (totaling 22.01 acres) are located within the ¼-mile radius Employment Study Area (Table 6-2).

Five parks are just within the Residential Study Area, concentrated around Jackson Avenue east of the Project Site, while the largest public open space in both the Employment and Residential Study Areas is the Queensbridge Park and Ballfields, located north of the Project Site, adjacent to the Queensboro Bridge. Queensbridge Park includes both active and passive use areas.

As Table 6-2 indicates, there is a relatively even mix of publicly accessible open space land suited to both passive and active recreational activities (approximately 11.10 acres of active open space and 10.91 acres of passive open space within the Employment Study Area, and approximately 16.74 acres of active open space and 12.97 acres of passive open space within the Residential Study Area). The *CEQR Technical Manual* recommends a proportion of 80 percent active open space to 20 percent passive. As indicated in Table 6-2, the existing inventory of open space in the study area does not meet that goal.

3. Existing Demand on Open Space Resources

a) Quantitative Analysis of Open Space Adequacy

i. Residential Study Area

The adequacy of open space is measured, in part, on the basis of the amount of open space per 1,000 people ("open space ratio") in a given area of the City. The open space ratio for the Borough of Queens is 3.42. This is based on a total of 7,619 acres of publicly accessible open space and a total population of 2,229,379 (2000 Census) in the Borough of Queens. Given the total acreage of active and passive open space of 30.48 acres, the open space ratio for residential population in the Residential Study Area was 2.85 acres in 2000. There were 1.61 acres of active open space per 1,000 residents and 1.25 acres of passive open space per 1,000 residents in 2000. This is equivalent to a proportion of approximately 56 percent active open space to 44 percent passive open space, which does not meet the goal articulated in the *CEQR Technical Manual* of 80 percent active to 20 percent passive open space.

The open space ratio for the Residential Study Area decreases slightly to 2.85 acres of open space per 1,000 residents in 2005, as a consequence of the NYMTC-projected net increase in population by approximately 16 people to 10,430; the active and passive ratios remain virtually unchanged at 1.61 acres of active open space and 1.25 acres of passive open space.

This ratio is significantly greater than the citywide median community district open space ratio of 1.5 acres per 1,000 residents and greater than the City's goal of 2.5 acres per 1,000 residents. The Residential Study Area currently does not meet the planning goal of 80 percent active open space and 20 percent passive, as presented in the *CEQR Technical Manual*.

TABLE 6-2: INVENTORY OF EXISTING OPEN SPACE RESOURCES IN THE RESIDENTIAL AND EMPLOYMENT STUDY AREAS

ID	Name*	Address	Owner	Description/ Amenities	Total Acres***	Active	Passive	Condition** / Utilization
1a and 1b	Queensbridge Park and Ballfields (incl. Vernon Playground) and Queensbridge Baby Park	21st Street, Bridge Plaza, East River; Baby Park is located under Queensboro Bridge, 12th Street	NYC Dept. of Parks and Recreation (NYCDPR)	*Queensbridge Park:* Open lawn, trees, walkway, 4 softball fields, 2 ad hoc field areas *Vernon Playground:* equipment, benches, swings *Queensbridge Baby Park:* walkway, trees, landscaping, handball courts, benches	19.57	9.15	10.42	Acceptable / Moderate to Heavy
2a	Queensbridge Houses (D and F) Green Space	Queensbridge House D: Vernon Blvd and 41st Avenue; Queensbridge House F: 10th Street and 41st Avenue	NYC Housing Authority (NYCHA)	Playground, benches, trees, landscaping	2.44	1.95	0.49	Acceptable / Moderate
				Total in Employment (¼-mile) Study Area	22.01	11.10	10.91	
2b	Queensbridge Houses (A, B, C, and E) Green Space	Queensbridge House A: 40th Ave and 12th Street; Queensbridge House B: 41st Ave and 12th Street; Queensbridge House C: 40th Ave and 10th Street; Queensbridge House E: 40th Ave and Vernon Blvd	NYCHA	Playground, benches, trees, landscaping	3.90	3.12	0.78	Acceptable / Moderate
3	Rafferty Triangle	Hunter Street, Crescent Street, 44th Drive	NYCDPR	Trees, landscaping	0.10	0.00	0.10	Acceptable / Light
4	Citicorp outdoor plaza (publicly accessible private space)	One Court Square, Jackson Avenue, 44th Drive	Citicorp	Benches, trees, landscaping	0.53	0.00	0.53	Acceptable / Moderate
5	McKenna Triangle	Jackson Avenue, Thomson Avenue, 45th Street	NYCDPR	Trees, landscaping	0.05	0.00	0.05	Acceptable / Light
6	Albert Short Triangle	45th Road, Jackson Avenue, 23rd Street	NYCDPR	Landscaping	0.05	0.00	0.05	Acceptable / Light
7	Greenstreet	Jackson Avenue, 46th Avenue	NYCDPR	Trees, landscaping	0.02	0.00	0.02	Acceptable / Light
8	Gordan Triangle	10th Street, Vernon Boulevard, 44th Drive, 45th Avenue	NYCDPR	Benches, trees, landscaping	0.15	0.00	0.15	Acceptable / Light
9	44th Drive Public Pier	44th Drive, East River	Water's Edge Restaurant	Fishing pier	0.38	0.00	0.38	Acceptable / Moderate
10	Murray Playground	21st Street, 45th Avenue, 11th Street, and 45th Road	NYCDPR	Basketball and handball courts, baseball field, climbing structure and play area for children, sitting areas	2.52	2.52	0.00	Acceptable / Light
				Total in Residential (½-mile) Study Area (includes parks listed in ¼-mile study area)	29.71	16.74	12.97	

Source: Field Survey conducted during mild and sunny conditions on Tuesday, June 24, 2003, between the hours of 10:00 AM and 2:00 PM.

* Parks are included if they are entirely within the Study Area.

** Condition is based on New York City Department of Parks and Recreation (NYCDPR) Inspection Data available online at http://gis.nyc.gov.

*** Acreage has been reduced to reflect the inaccessible 0.77 acre esplanade area

ii. Employment Study Area

When considering the potential impacts of employees on open space resources, CEQR guidance recommends that only passive recreation areas be used in developing open space ratios. (As a consequence, the active open space acreage is not included in the ratio for the ¼-mile Employment Study Area that follows.) Based on a total amount of passive recreation areas within the Employment Study Area of approximately 10.91 acres, and a projected total worker population in the Employment Study Area in 2005 of 3,188, the open space ratio for worker population (expressed as the amount of passive open space acreage per 1,000 people) is 3.42. This ratio is greater than the citywide median community district open space ratio of 1.5 acres per 1,000 residents and also greater than the ratio of 0.15 acres per 1,000 employees, which according to the *CEQR Technical Manual* typically satisfies worker demand.

b) Qualitative Assessment of Open Space Adequacy

Based on data collected during field surveys and on NYCDPR inspection data, it can be concluded that the open space resources in the area are all in acceptable condition. A wide variety of active recreation facilities, including facilities for handball, fishing, and softball, and children's playground equipment are observed in the Residential Study Area. Several active open space resources are also located south of this Study Area near the waterfront, including Gantry Plaza State Park Peninsula Park, the Hunters Point Community Park and John Andrews Playground. Other large waterfront parks, including Rainey Park and Socrates Sculpture Park, are located north of the Study Area. As noted, the Residential Study Area currently does not meet the planning goal of 80 percent active open space and 20 percent passive, as presented in the *CEQR Technical Manual*. However, the area's active resources have been observed to be moderately utilized.

C. FUTURE CONDITIONS WITHOUT THE PROPOSED ACTION

1. Future Residential and Employment Populations in the Study Area

NYMTC population projections for the Census tracts comprising the Residential Study Area indicate a residential population growth rate of about 0.61 percent from 2005 to 2009. This would result in a projected population base of 10,494 residents in the Residential Study Area in 2009.

The River East development would introduce 900 dwelling units, or about 2,367 new residents, into the Residential Study Area, based on average household size in the area. Residents at River East are therefore added to the projections of Residential Study Area population in 2009 without the Proposed Action, accounting for a 12,860 total Residential Study Area population.

There are no known commercial projects expected to be completed in the Employment Study Area by 2009, and no significant change to the existing worker population of 3,188 employees is anticipated.

2. Open Space Resources in the Residential and Employment Study Areas

A capital improvement project is currently underway at Queensbridge Park for the construction of a synthetic soccer field, a picnic area, volleyball courts, and greenway signage along the park's perimeter path. Construction began in September 2005 and is anticipated to be completed in December 2006. There are no further planned expansions or improvements to the existing park

facilities in the Study Areas by 2009, except for restoration of the currently inaccessible portion of the shoreline and waterfront esplanade in Queensbridge Park. It is anticipated that the New York City Department of Transportation (NYCDOT) will restore the Queensbridge Park shoreline as mitigation for its FDR Drive pile-wrapping project. Since NYCDOT is required to create 1.66 acres of open water as mitigation for its project, there is expected to be a loss of this amount of passive open space within the park by 2009. Finally, NYCDPR will begin construction of the Queens East River and North Shore Greenway in the fall of 2007. This will include the addition of pavement markings along the perimeter pathway in Queensbridge Park as well as greenway signage along Vernon Boulevard. Construction will be completed in the spring of 2008. The return of the esplanade to public use allows 0.77 acres of the Queensbridge Park to be added to available passive open space, meaning that the net loss of open space acreage from existing conditions will be 0.89 acres.

The River East development would include approximately one acre of publicly accessible open space, which would consist of a promenade, garden, and other passive open space features, and is included in the inventory for both the Employment and Residential Study Areas for Future Conditions without the Proposed Action.

3. Future Demand on Open Space Resources

a) Quantitative Analysis of Open Space Adequacy

As with Existing conditions for both the Residential and Employment Study Areas, the open space ratio in the Future without the Proposed Action would remain well above the citywide median community district open space ratio of 1.5 acres per 1,000 residents but below the City's goal of 2.5 acres per 1,000 residents. As the total population in the Residential Study Area is predicted to be 12,860 and the total acreage of active and passive open space would be 30.59, the resultant open space ratio for residential population (expressed as the amount of open space acreage per 1,000 people) would be 2.38 without the Proposed Action in 2009 including 1.30 acres of active open space per 1,000 residents and 1.08 acres of passive open space per 1,000 residents). This overall open space ratio represents a decrease from 2.85 in 2005 and is just under the optimal planning goal of 2.5 acres per 1,000 residents. The active and passive open space percentages would change slightly to approximately 55 percent active open space and 45 percent passive open space. This proportion is still not consistent with the ratio of 80 percent active open space to 20 percent passive open space suggested in the *CEQR Technical Manual.*

The total worker population in the Employment Study Area would be 3,188 and the total acreage of passive recreation areas in the Employment Study Area would be 11.79; therefore, the resultant open space ratio for worker population (expressed as the amount of passive open space acreage per 1,000 people) would be 3.70 without the Proposed Action in 2009, increasing from 3.42 in 2005, and is well above the citywide median community district open space ratio of 1.5 acres per 1,000 residents, and greater than the ratio of 0.15 acres per 1,000 employees, which according to the *CEQR Technical Manual* typically satisfies worker demand.

b) Qualitative Assessment of Open Space Adequacy

The condition and utilization of open space resources in the study area is expected to improve somewhat over existing conditions with the restoration of the shoreline and waterfront esplanade in Queensbridge Park and the introduction of new waterfront open space just south of the site at River East. The River East development would include a promenade and garden and would be designed to meet the needs of the community. The population of the study area would remain similar to Existing conditions insofar as the bulk of the population would be between the ages of 20 and 64, corresponding to similar open space utilization patterns. The trend in developing waterfront open

spaces south of the site would be furthered by Queens West Development Corporation's plans to expand Queens West and Gantry Plaza State Park, introducing approximately 2.06 acres of open space south of the study area by 2009.

D. FUTURE CONDITIONS WITH THE PROPOSED ACTION

1. Residents and Employees Introduced by the Proposed Action

The Proposed Action would develop both residential and commercial floor area, as well as publicly accessible open space. The Proposed Action would include development of approximately 1,000 apartments, introducing approximately 2,700 new residents (see Chapter 3, "Socioeconomic Conditions"). This would result in a Residential Study Area population with the Proposed Action of approximately 15,560 residents.

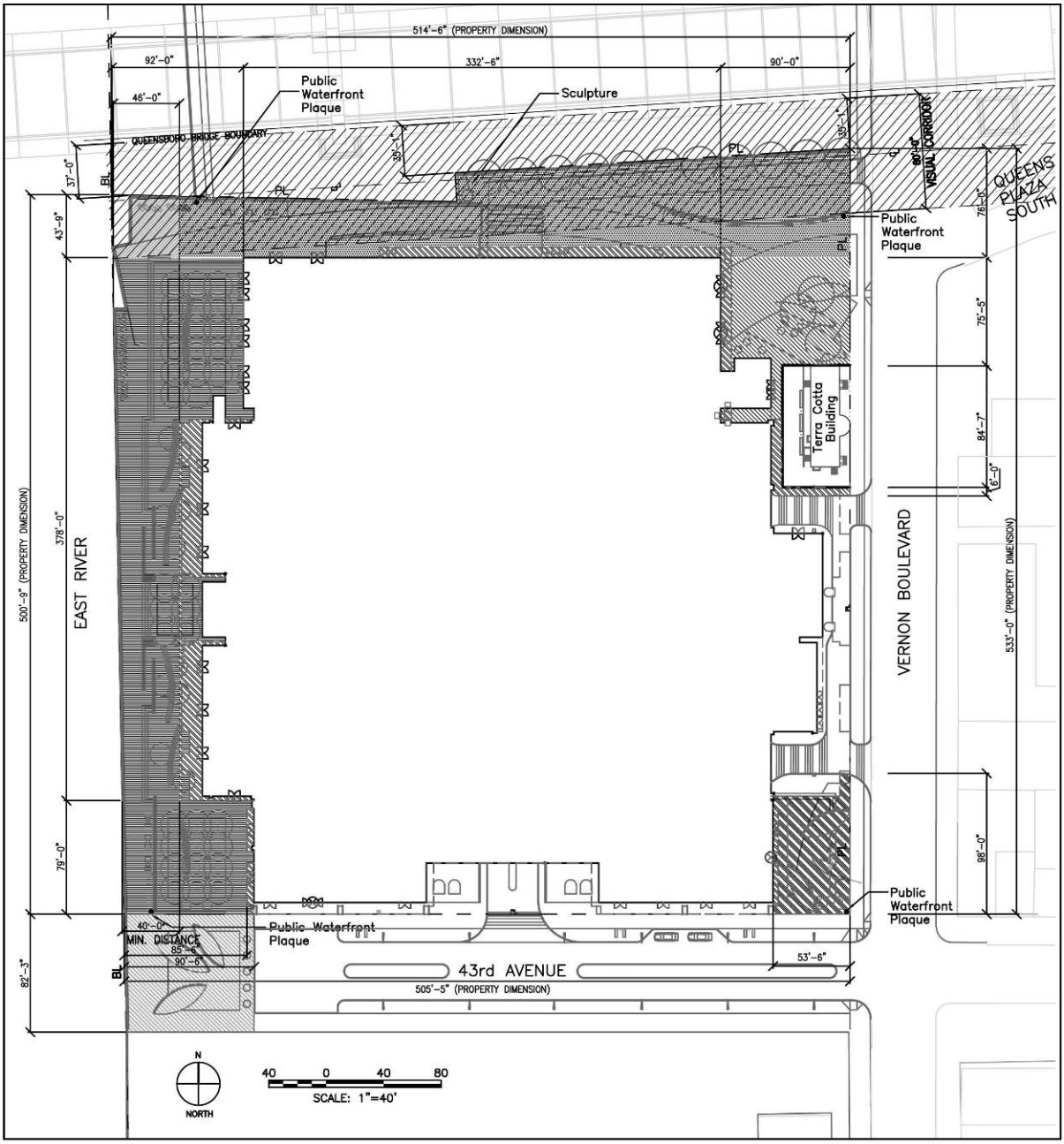
Not including the re-use of the New York Architectural Terra Cotta Company building or loading/parking space, it is assumed that 774,535 gross square feet of commercial space (excluding the catering facility) would introduce about 2,582 workers (assuming a ratio of one worker per 300 square feet). The specific function of the community facility has not yet been determined, but like the catering facility, which would not operate full-time, it would likely introduce fewer workers to the Project Site on a daily basis. It is assumed that the catering facility and community facility uses (175,460 gross square feet of space, taken together) may introduce 175 workers (assuming a ratio of one worker per 1,000 square feet). The studio/support spaces, which would total 346,574 square feet, are assumed to introduce about 693 workers (assuming a ratio of one worker to 500 square feet). In total, it is estimated that the Proposed Action could introduce up to about 3,450 new workers to the Project Site and study areas, increasing the worker population in the Employment Study Area to approximately 6,638 employees.

2. New Open Space Created by the Proposed Action

The Proposed Action would introduce approximately 0.94 acres of new public passive open space (Figure 6-2). The Proposed Action would introduce a waterfront Esplanade (Shore Public Walkway), a pedestrian walkway along the northern edge of the site (Upland Connection), and a plaza around the eastern side of the New York Architectural Terra Cotta Company building (Transition Zone) (see Chapter 1, "Project Description" for details). The development of the Upland Connection, Transition Zone, and Shore Public Walkway would together comprise about 55,285 sf of waterfront public open space (Table 6-3).

TABLE 6-3: OPEN SPACE

Facility	Square Footage
Waterfront Public Open Space	55,285 sf
Terra Cotta Plaza	8,230 sf
Vernon/43 Plaza	4,286 sf
43rd Avenue Esplanade extension	7,392 sf
Public Overlook	4,500 sf
TOTAL	**79,693 sf**



Visual Corridor
Upland Connection
Transition Zone
Shore Public Walkway

Waterfront Public Open Space:
Upland Connection
Transition Zone
Shore Public Walkway

Other On-Site Public Open Space:
Vernon Blvd-43rd Plaza
Terra Cotta Plaza

Off-Site Public Open Space:
43rd Avenue Off-Site Public Open Space
Excluded Areas from Calculations (Note: Under superstructure and under overhangs)

Figure 6-2:
Landscaping and Open Space Plan

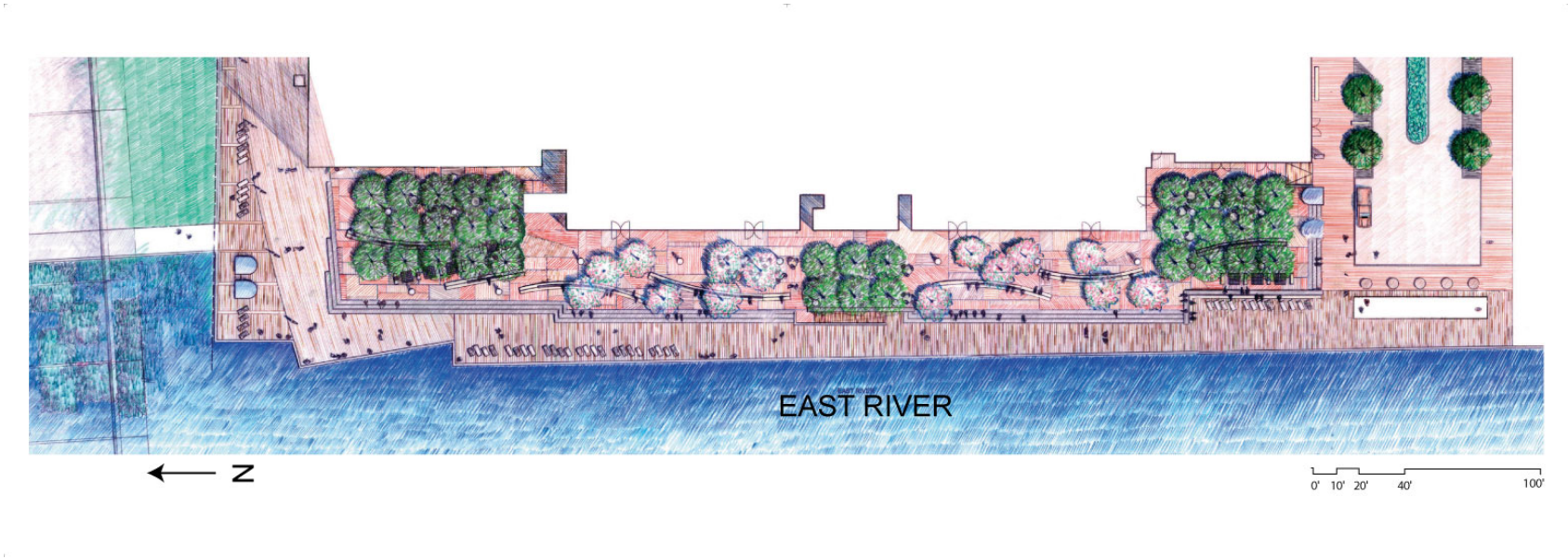


Figure 6-3:
Proposed Esplanade Plan



Figure 6-4:
Proposed Esplanade Rendering

The plaza on the southeast corner of the Project Site at Vernon Boulevard and 43rd Avenue would be 4,286 sf, and the Terra Cotta Plaza on the northeast corner of the Project Site would be 8,230 sf. An additional plaza-like area would be developed at the end of 43rd Avenue, as an extension of the Esplanade, and entail 7,392 sf of new public open space. Approximately 4,500 sf of publicly accessible open space would be provided on the Core Complex's public overlook.

The Zoning Resolution requires that a visual corridor be developed along with a pedestrian link (the Upland Connection) connecting Vernon Boulevard to the waterfront as a prolongation of Queens Plaza South. A shore public walkway must also be provided, which for the Project would be the Esplanade. The Upland Connection, which would run along the northern edge of the Project Site would include landscaping, tables, and seating. The arrangement would ensure that the view to the waterfront enabled by re-grading this portion of the Project Site would be preserved. The Esplanade, which would run the entire length of the Project Site along the East River, would provide two pedestrian circulation zones. One zone would be nearer the water's edge, while the other one, nearer the building, would include bosques of trees, benches, and tables (see Chapter 18, "Urban Design and Visual Resources" for more description of landscaping).

Terra Cotta Plaza would be designed to enhance the appearance of the New York Architectural Terra Cotta Company building and Vernon Boulevard streetscape. Both the Terra Cotta Plaza and the other plaza on Vernon Boulevard at 43rd Avenue would be the points of entry for many pedestrians crossing Vernon Boulevard at these locations (see Chapter 10, "Transit and Pedestrians" for details regarding street crossings).

The Restrictive Declaration discussed earlier would ensure the development of the waterfront public open space in connection with the requirements of the Zoning Resolution, and it would also ensure the development of the other proposed open spaces in connection with a development under the proposed Special Permit pursuant to Section 62-736 ZR.

3. Demand on Open Space Resources

a) Quantitative Analysis of Open Space Adequacy

i. Residential Study Area

The residential population of the Residential Study Area would increase by 2,700 to 15,560 residents, while the worker population would increase to 6,638 employees. The total amount of open space in the Residential Study Area would increase by approximately 1.83 acres to 32.42 acres, resulting in an open space ratio of 2.08 for the Residential Study Area (a decrease in the open space ratio of approximately 13 percent from 2.38 in the Future without the Proposed Action). There would be 1.08 acres of active open space per 1,000 residents (a decrease in the open space ratio of approximately 17 percent from 1.30 in the Future without the Proposed Action) and 1.01 acres of passive open space per 1,000 residents in 2009 (a decrease in the open space ratio of approximately 6 percent from 1.08 in the Future without the Proposed Action). The proportion of active to passive open space would decrease from 55 percent active open space and 45 percent passive open space to 52 percent active and 48 percent passive. This would be slightly further from the planning goal of 80 percent active and 20 percent passive as identified in the *CEQR Technical Manual* (Table 6-4).

The open space ratio of 2.08 for the Residential Study Area would remain above 1.50, which according to the *CEQR Technical Manual* is typical of half of the community districts in the City but below 2.5, which is the City's open space goal. As the change in open space ratio from the Future without the Proposed Action represents a large decline—of approximately 13 percent—it is necessary

to assess the adequacy of open space resources to accommodate the residential population within the Residential Study Area (see qualitative assessment below).

TABLE 6-4: ANALYSIS OF ADEQUACY OF PUBLIC OPEN SPACE RESOURCES IN THE STUDY AREA

	Existing Conditions		Future Conditions without the Proposed Action	Future Conditions with the Proposed Action
	2000	2005	2009	2009
STUDY AREA POPULATION*				
Workers (within ¼-mile)	3,188	3,188	3,188	6,638
Residents (within ½-mile)	10,414	10,430	12,860	15,560
OPEN SPACE ACREAGE†				
Within ¼-Mile Study Area				
Active	11.10	11.10	11.10	11.10
Passive	10.91	10.91	11.79	13.62
TOTAL	**22.78**	**22.78**	**22.89**	**24.72**
Within ½-Mile Study Area*				
Active	16.74	16.74	16.74	16.74
Passive	12.97	12.97	13.85	15.68
TOTAL	**29.71**	**29.71**	**30.59**	**32.42**
OPEN SPACE RATIOS				
Within ¼-Mile Study Area				
Active***	N/A	N/A	N/A	N/A
Passive	3.42	3.42	3.70	2.05
TOTAL	**3.42**	**3.42**	**3.70**	**2.05**
Within ½-Mile Study Area				
Active	1.61	1.60	1.30	1.08
Passive	1.25	1.24	1.08	1.01
TOTAL	**2.85**	**2.85**	**2.38**	**2.08**

Notes: Planning Goal Ratios: (2001 *CEQR Technical Manual*) Citywide Median Community District Ratio: 1.5 acres/1,000 residents

* Existing conditions are based on 2000 U.S. Census data and NYMTC population projections for 2005, including a residential population growth rate of 0.16 percent; Future Conditions without the Proposed Action are based on NYMTC population projections of growth in residential population of 0.61 percent from 2005 to 2009.

** Includes open space acreage within the ¼-mile Employment Study Area.

*** Per CEQR guidance, active open space acreage is not used when considering potential impacts of employees on open space resources, and is therefore not included in the open space ratio for the ¼-mile Employment Study Area.

† Values reflect the loss of parkland at the shoreline due to mitigation by the NYCDOT and the return of the esplanade to public use

N/A = Not applicable

ii. Employment Study Area

The total amount of passive open space within the Employment Study Area would increase by approximately 0.94 acres to approximately 13.62 acres in the Employment Study Area. The resultant open space ratio for the Employment Study Area would be 2.05 acres of passive open space per 1,000 employees. While this would represent a notable decrease in the open space ratio of approximately 45 percent from 3.70 in the Future without the Proposed Action, the open space ratio would remain above the citywide median community district open space ratio of 1.5 acres per 1,000 residents, and also much greater than the ratio of 0.15 acres per 1,000 employees, which according to the *CEQR Technical Manual* typically satisfies worker demand.

b) Qualitative Assessment of Open Space Adequacy

There are no planned projects or other foreseeable circumstances that would suggest that a dramatic change to age structure in the study area is likely to occur by 2009 without the Proposed Action. The bulk of the population in the study area would be between the ages of 20 and 64, as under Existing Conditions. Therefore, patterns of open space use would also be expected to be similar to Existing Conditions, and Queensbridge Park would be moderately to heavily utilized as would the 44th Drive Public Pier. Visitors to these parks nearest the Project Site would also visit the new open space to be provided nearby at River East, thus alleviating usage of other existing open space resources.

The market-rate apartments constructed as part of the Proposed Action would likely introduce a population similarly balanced in age, between the ages of 20 and 64. Per the guidance of the *CEQR Technical Manual*, adults in this age bracket typically require active recreation areas. The Proposed Action would introduce a promenade suitable for rollerblading and jogging. The large, moderately-utilized Queensbridge Park immediately north of the site would meet other open space needs of the Study Area residents. In addition to providing four softball fields, it provides ample field space to accommodate other team sporting games at the same time, while also allowing space for ad hoc active sports such as Frisbee. By the time the Project is completed, several additions will be made to the Queensbridge Park including a synthetic soccer field and volleyball courts, as discussed on page 6-7. In addition, other lightly and moderately utilized parks to the south of the Study Area, such as Murray Playground at 45th Avenue and 21st Street, provide softball, handball, and full-court basketball facilities.

The resources within the Residential Study Area are generally moderately utilized. The mix of active and passive recreation facilities are relatively even, and so a similar balance of active to passive open space in the future would meet the needs of the community in 2009. The balance of active to passive open space is approximately 55 percent to 45 percent under Existing conditions; the percentage of active open space would decrease slightly to approximately 53 percent in the Future without the Proposed Action and 50 percent in the Future with the Proposed Action. The ratio of active to passive open space would decrease and continue not to meet the ratio of 80 percent active open space to 20 percent passive open space recommended in the *CEQR Technical Manual*. However, it is unlikely that this relatively minor change in balance would be indicative of any potential for overburdening of open space resources, particularly when considering the moderate utilization of open spaces in the study area.

Although the existing open spaces in both the Residential and Employment Study Areas are well-maintained and in acceptable conditions, the Proposed Action would introduce an additional high quality open space resource to the study area. The Proposed Action would introduce a waterfront promenade, a pedestrian walkway along the northern edge of the Project Site, and a plaza around the eastern side of the New York Architectural Terra Cotta Company building. In addition to providing views of Manhattan and the Queensboro Bridge, the publicly accessible waterfront promenade would continue the trend of providing waterfront access along the Long Island City waterfront. This careful development of the Project Site would ensure that future projects in the area could achieve an integrated network of high-quality open spaces along the river. Likewise, the pedestrian walkway along the northern edge of the Project Site would link the Queens Plaza South Pedestrian corridor to the Project and the waterfront. Its proximity to the Queensboro Bridge would ensure a dramatic experience of this landmark structure, just as the plaza around the New York Architectural Terra Cotta Company building will provide a new and intimate experience of that historic building. Access to the waterfront would also be provided along the opened streetscape of 43rd Avenue. Rooftop public open space, accessible via an elevator from the Esplanade, would provide views of the East River, Manhattan, and the Queensboro Bridge. Altogether, the Project Site would be developed with

care to ensure that all the varied public spaces introduced by the Proposed Action would be publicly accessible.

As noted above, private open space would also be provided to absorb some of the demand generated by Project residents and employees. Private open space is not considered in the quantified analysis of open space adequacy, but it would serve the population that is introduced. Likewise, as noted above, the public open spaces provided throughout the Project Site would contribute to the existing and future network of open space resources, particularly along the Long Island City waterfront. The open spaces on-site would also be of an exceptional quality, drawing in large part on the position of the Project Site on the waterfront and adjacent to the Queensboro Bridge and the New York Architectural Terra Cotta Company building. Thus, the Proposed Action would complement the overall quality of open space resources in addition to introducing a sizeable amount—more than 75,000 sf—of public open space.

4. Potential Effects Resulting from the Proposed Action

No direct impacts to open space resources would result from the Proposed Action, since no open space would be directly taken, made qualitatively unusable, or physically altered in any way. As indicated in Chapter 7, "Shadows," there would be no significant adverse shadow-related impacts to open space. Further, air quality, noise, and traffic analyses predict no significant adverse impacts that could affect the usefulness of public open space in the Study Areas.

No significant adverse indirect impacts to open space would result from the Proposed Action. The quantitative analysis indicates no shortfall of open space resources. Because the Proposed Action would be adding only passive open space to the study area, existing active recreational facilities may incur some additional usage; however this could be accommodated as many of them are only moderately used and they are all in acceptable condition (see Table 6-2). Silvercup West and the opening of 43rd Avenue west of Vernon Boulevard would provide waterfront access that would otherwise be unavailable at the Project Site. Thus, Silvercup West would continue patterns of open space development and waterfront access provision, in keeping with other recent developments along the water to the south. As such, the Proposed Action would improve the network of open space resources in Long Island City overall. Therefore, the Proposed Action would not result in any significant adverse impacts to open space resources.

E. VARIATIONS

None of the three variations would result in direct impacts to open space. They would be constructed within the same footprint and building envelope as the Preferred Development Program. They would also introduce the same amount and type of open space, including a waterfront Esplanade, Upland Connection along the northern edge of the site, and a plaza around the New York Architectural Terra Cotta Company building. The number of employees and the number of residents introduced by the three variations, however, would differ from the Preferred Development Program (Table 6-5).

TABLE 6-5: RESIDENTS AND EMPLOYEES INTRODUCED BY THE PREFERRED DEVELOPMENT PROGRAM AND POTENTIAL VARIATIONS

	Preferred Development Program	Variation 1 *(Residential)*	Variation 2 *(Studio)*	Variation 3 *(Residential and Studio)*
Residents	2,700	4,469	2,700	4,469
Employees	3,450	1,266	3,581	1,397

1. Residential Study Area

Because Variation 2 would introduce the same number of residents as the Preferred Development Program, it likewise would result in no significant adverse impacts to open space in the Residential Study Area. Variations 1 and 3, however, each would introduce 1,769 more residents than the Preferred Development Program, thus creating a residential population of 17,329. The resultant open space ratio would be 1.87. This ratio would be nearer the citywide median community district open space ratio of 1.50 than the Preferred Development Program, which according to the *CEQR Technical Manual* may indicate a potential shortfall in open space resources, and would also represent a change in the open space ratio of approximately 21 percent from 2.38 in the Future without the Proposed Action, a greater percentage decrease than would result from the Preferred Development Program. However, like the Preferred Development Program, it would still exceed 1.5. The Variations, like the Preferred Development Program, would add new high-quality open space to supplement the existing resources in the Residential and Employment Study areas which are currently, for the most part, only moderately used. These variations would result in a reduction of the ratio of active open space acreage per 1,000 residents from 1.30 in the future without the Proposed Action to 0.97, a 25 percent decrease, and would decrease the passive open space ratio from 1.08 to 0.75, a 31 percent decrease. These decreases would also be greater than those resulting from the Preferred Development Program. Variations 1 and 3 would decrease the active to passive open space ratio from 55 percent active and 45 percent passive open space to 52 percent active and 48 percent passive. This proportion would continue not to meet the optimal proportion of 80 percent active to 20 percent passive open space. Therefore, Variations 1 and 3 would result in no significant adverse impacts to open space resources in the Residential Study Area. Overall, no significant adverse impacts to open space resources in the Residential Study Area would result from the Preferred Development Program or the variations.

2. Employment Study Area

Because Variations 1 and 3 would introduce less than half the number of employees introduced with the Preferred Development Program, they likewise would result in no significant adverse impacts to open space in the Employment Study Area. Variation 2 would introduce only 131 more employees than the Preferred Development Program, thus resulting in a slightly lower open space ratio of 2.08. As noted previously, the *CEQR Technical Manual* indicates that 0.15 acres of passive open space (per 1,000 workers) typically satisfies worker demand. Thus, the 2.08 open space ratio, which translates as 2.08 acres of passive open space per 1,000 workers, would far exceed demand. Therefore, Variation 2 would result in no significant adverse impacts to open space resources in the Employment Study Area.

In conclusion, none of the three variations would result in significant adverse direct or indirect impacts to open space resources in either the Residential or Employment Study Areas. Thus, in terms of the Open Space analysis, the variations are comparable to the Preferred Development Program. Like the Preferred Development Program, the variations would provide waterfront access that would

otherwise be unavailable at the site. Silvercup West would continue patterns of open space development and waterfront access provision, in keeping with other recent developments along the water to the south.