Chapter 2:

Environmental Analysis

This chapter assesses the potential environmental effects of the Proposed Action, consistent with National Environmental Policy Act (NEPA), State Environmental Quality Review Act (SEQRA), and the methodology set forth in the *New York City Environmental Quality Review* (*CEQR*) *Technical Manual* (Mayor's Office of Environmental Coordination, 2001).

A. LAND USE, ZONING AND PUBLIC POLICY

See Chapter 2, Section A, "Land Use, Zoning, and Public Policy."

B. SOCIOECONOMIC CONDITIONS

According to the *CEQR Technical Manual*, a socioeconomic assessment should be conducted if any action may reasonably be expected to create substantial socioeconomic changes within the area affected by the action that would not occur in the absence of the action. Actions that would trigger a CEQR analysis include the following:

- Direct displacement of a residential population so that the socioeconomic profile of the neighborhood would be substantially altered.
- The displacement of substantial numbers of businesses or employees; or the direct displacement of a business or institution that is unusually important because of its critical social or economic role in the community, that would have unusual difficulty in relocating successfully; because it is of a type or in a location that makes it the subject of other regulations or publicly adopted plans aimed at its preservation; because it serves a population uniquely dependent on its services in its present location; or because it is particularly important to neighborhood character.
- Introduction of substantial new development that is markedly different from existing uses, development, and activities within the neighborhood. Such an action could lead to indirect displacement of residential populations. Residential development of 200 units or fewer would typically not result in significant socioeconomic impacts.

The proposed reconstruction of Catherine, Rutgers, and Montgomery Slips would not displace residential populations or businesses, nor would it introduce development different from existing uses in the surrounding area. Consequently, the Proposed Action would not result in any significant adverse impacts to socioeconomic conditions, and no further analysis is required.

C. COMMUNITY FACILITIES AND SERVICES

The proposed reconstruction of Catherine, Rutgetrs, and Montgomery Slips would not physically alter or displace community facilities nor would it directly affect the delivery of public services. In addition, the project would not add residential units to the area; therefore, the Proposed

Action would not result in significant indirect effects on public schools, libraries, hospitals, or daycare centers.

Public School 126 is located on Catherine Slip between Monroe and Cherry Streets. Implementation of the Proposed Actions would result in sidewalk improvements adjacent to the school and would improve the visual character of the area. These changes would not adversely affect the existing or future use of the school.

The police department regularly reviews its operations for each precinct. Based on the geographic area, population change, and crime statistics, it would adjust staffing in order to maintain adequate community protection. The fire department similarly adjusts its operations as needed. The Proposed Action is not expected to impact the delivery of local police or fire protection nor would it directly displace a police or fire station. Therefore, no further analysis is necessary and the Proposed Action would not result in significant adverse impacts to community facilities.

D. OPEN SPACE

The *CEQR Technical Manual* recommends conducting a detailed open space assessment if a proposed action would add 200 residents or 500 employees to an area.

The Proposed Action would not add any new residents or employees to the area. In addition, the project would have a beneficial impact on open space ratios by providing increased open space for passive recreation. Lower Manhattan is currently underserved in this respect according to New York City Department of City Planning (DCP) open space guidelines. Therefore, the Proposed Action would not result in significant adverse impacts to open space.

E. SHADOWS

Under *CEQR*, a shadows analysis is required if a proposed action would result in shadows long enough to reach a publicly-accessible open space or sun-sensitive historic resource (except within an hour and a half of sunrise and sunset). Therefore, assessments are only required if the action would result in a new structure or a substantial addition to an existing structure.

With the Proposed Action, only benches, trees, and other design elements would be added to the project site, and all structures would be less than 50 feet tall. Consequently, the Proposed Action would not result in any significant adverse impacts by casting shadows on publicly-accessible open space or sun-sensitive historic resources, and no further analysis is required.

F. HISTORIC RESOURCES

See Chapter 2, Section B, "Historic Resources".

G. URBAN DESIGN/VISUAL RESOURCES

See Chapter 2, Section C, "Urban Design and Visual Resources".

H. NEIGHBORHOOD CHARACTER

Neighborhood character is considered to be an amalgam of the various elements that define a community's distinct personality. These elements include land use, urban design, visual and

historic resources, socioeconomics, traffic, air quality, and noise. As discussed elsewhere in this Environmental Assessment, the proposed reconstruction of Catherine, Montgomery, and Rugers Slips would not have any significant adverse impacts on any of these categories. Therefore, the Proposed Action would not result in significant adverse impacts to neighborhood character.

I. NATURAL RESOURCES AND FLOODPLAINS

A natural resources assessment is conducted when a natural resource is present on or near the project site and when an action involves the disturbance of that resource. The identification and evaluation of threatened or endangered species includes an area with a radius of at least ¹/₂-mile from the project site.

Requests for information on rare, threatened or endangered species within the vicinity of Rutgers, Montgomery, and Catherine Slips were submitted to U.S. Fish and Wildlife Service (USFWS), and the New York Natural Heritage Program (NYNHP). In addition, a request for information on Significant Coastal Fish and Wildlife Habitats within the vicinity of the project site was submitted to the New York State Department of State (NYSDOS).

The East River is not considered Significant Coastal Fish and Wildlife Habitat by NYSDOS (Welsch 2006). No records of rare, threatened or endangered species or sensitive habitats were reported by the USFWS (Olin 2006). The NYNHP records indicated three potential nest sites for peregrine falcon (Falco peregrinus) (New York State endangered) in the Lower Manhattan area. Since 1999, a pair of peregrine falcons has been located in a nest on Water Street, in the Wall Street area of lower Manhattan. Since 1995, an eyrie has been located on the Brooklyn Bridge that connects Manhattan Island and Brooklyn across the East River. The third recorded peregrine falcon nest is located on the Williamsburg Bridge (Ketcham 2006), however, the Endangered Species Unit of NYNHP does not anticipate any adverse impacts to the nest sites (Loucks 2006) (see Appendix A). Because of the distance between the nesting locations and the project site, as well as the nature of the proposed plans for the slips, the Proposed Action would not adversely affect future use of these nesting locations. In addition, correspondence from the National Oceanic and Atmospheric Administration (NOAA), dated July 21, 2009, confirmed the possibility of occasional transient shortnose sturgeon (Acipenser brevirostrum), loggerhead turtle (Caretta caretta), and Kemp's ridley (Lepidochelys kempi) within the project area. However, because there will be no in-water work, further agency coordination is not necessary.

In summary, the Proposed Action is not expected to result in significant adverse impacts to any federally or state-listed endangered species.

Montgomery Slip is not located within the 100-year floodplain, but portions of Catherine and Rutgers Slips are within the floodplain. The project would not substantially raise ground level and would not include any habitable structures that would require flood proofing. Although Catherine and Rutgers Slip are located within the floodplain, there are no alternative locations for the improvements; moreover, the Proposed Action would improve the Slips' ability to absorb stormwater through the addition of new pervious surfaces. Therefore, the Proposed Action is not expected to result in significant adverse impacts to floodplains.

J. HAZARDOUS MATERIALS

See Chapter 2, Section D, "Hazardous Materials".

K. WATERFRONT REVITALIZATION PROGRAM

The project sites are located within New York City's coastal zone boundary as outlined in the Department of City Planning's DCP's coastal zone boundary of New York City, and therefore, the project requires a Chairperson certification for consistency with the Local Waterfront Revitalization Program (LWRP). See Appendix B, "Waterfront Revitalization Program," for a Waterfront Revitalization Program Consistency Assessment Form. The Proposed Action is consistent with the LWRP.

L. INFRASTRUCTURE AND ENERGY

The Proposed Action would involve only minimal infrastructure and energy demands within the overall context of New York City's infrastructure usage. Therefore, the Proposed Action would not create any significant adverse impacts on infrastructure.

M. SOLID WASTE AND SANITATION SERVICES

The Proposed Action would involve only minimal demands for solid waste removal and sanitation services. Therefore, the Proposed Action would not create any significant adverse impacts on solid waste and sanitation services.

N. ENERGY

The Proposed Action would involve only minimal infrastructure and energy demands within the overall context of New York City's energy usage. Therefore, the Proposed Action would not create any significant adverse impacts on energy.

O. TRAFFIC AND PARKING

See Chapter 2, Section E, "Traffic and Parking".

P. TRANSIT AND PEDESTRIANS

The Proposed Action is not expected to result in more than 200 peak hour rail or transit riders, nor is it expected to result in an increase of more than 200 peak hour pedestrian trips at any pedestrian elements in the vicinity of the project site. Therefore, transit and pedestrian trips would not exceed the 200-trip threshold specified in the *CEQR Technical Manual*, and quantified transit and pedestrian analyses are not warranted. No significant adverse impacts to transit or pedestrian conditions would occur as a result of the Proposed Action.

As described in Chapter 2, Section E, "Traffic and Parking," high accident locations were not identified near the project site. Therefore, the Proposed Action is not expected to result in significant adverse impacts on pedestrian safety.

Q. AIR QUALITY

STATIONARY AND MOBILE SOURCES

According to the *CEQR Technical Manual*, an air quality analysis is necessary if a project would result in direct or indirect impacts on ambient air quality. Direct impacts stem from emissions

generated by stationary sources on a project, such as emissions from fuel burned on site for heating, ventilation or air conditioning (HVAC) systems. Indirect impacts stem from emissions generated by motor vehicles traveling to and from the project site.

Since the Proposed Action is the reconstruction of Catherine, Rutgers, and Montgomery Slips with trees, benches, and other design elements, the project would not result in any structures that need heating, ventilation, or air conditioning. Furthermore, the project would not be expected to generate or divert more than 100 vehicle trips to and from the project site in an hour. Therefore, the project would not create any significant adverse impacts to air quality and no further analysis is needed.

CLIMATE CHANGE

The Proposed Action is not expected to substantially contribute to the release of greenhouse gases except minor amounts attributed to manufacturing of construction materials and air emissions during construction. By adding vegetation to the existing paved plazas, the Proposed Action would mitigate any release of greenhouse gases to the maximum extent practicable.

R. NOISE

CEQR NOISE CRITERIA

According to the *CEQR Technical Manual*, a noise analysis is appropriate if an action would generate any mobile or stationary sources of noise or would be located in an area with high ambient noise levels. Specifically, an analysis would be required if an action generates or reroutes vehicular traffic, if an action is located near a heavily trafficked thoroughfare, or if an action would be within one mile of an existing flight path or within 1,500 feet of existing rail activity (and with a direct line of sight to that rail facility). A noise assessment would also be appropriate if an action would result in a playground or cause a stationary source to be operating within 1,500 feet of a receptor (with a direct line of sight to that receptor), if the action would include unenclosed mechanical equipment for manufacturing or building ventilation purposes, of if the action would be located in an area with high noise levels resulting from stationary sources.

The Proposed Action would not double vehicular trips, nor would it contain any unenclosed mechanical equipment. Therefore, the project would not create any significant adverse impacts to noise levels in the area and no further analysis is needed.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD) NOISE CRITERIA

The potential noise impacts of the Proposed Action were also evaluated relative to United States United States Department of Housing and Development (HUD) noise criteria. Table 2-1 summarizes HUD site-acceptability standards based on external noise levels. HUD assistance for the construction of new noise sensitive land uses is generally prohibited for projects with "unacceptable" noise exposure and is discouraged for projects with "normally unacceptable" noise exposure without suitable mitigation measures. However, the Proposed Action is not considered a noise sensitive land use, and as such, no impact with regard to HUD noise criteria would result from the Proposed Action.

Table 2-1 HUD Site Accentability Standards (dBA)

IIOD Site Acceptability Standards (uDA)	
	Exterior Day-Night Average Noise Level (Ldn)
Acceptable	Not exceeding 65 dBA
Normally Unacceptable	Above 65 dBA but not exceeding 75 dBA
Unacceptable	Above 75 dBA
Source: Title 24, Code of Federal Regulations (CFR), Part 51.103(c), Exterior Standards.	

S. CONSTRUCTION IMPACTS

The Proposed Action would result in demolition and construction activities. Like all construction projects, work at the project sites would result in temporary disruptions to the surrounding community. These activities would occur over approximately 18 to 24 months. These effects would be temporary and are not considered significant.

Construction activities for the Proposed Action would normally take place Monday through Friday, although the delivery or installation of certain critical equipment could occur on weekend days. The permitted hours of construction are regulated by the New York City Department of Buildings, apply in all areas of the city, and are reflected in the collective bargaining agreements with major construction trade unions. In accordance with those regulations, work would begin at 7 AM on weekdays, although some workers would arrive and begin the prepare work areas between 6 and 7 AM. Normally, work would end by 6 PM.

The construction of the Proposed Action would be required to comply with applicable control measures for construction noise. Construction noise is regulated by the New York City Noise Control Code and by noise emission standards for construction equipment issued by the U.S. Environmental Protection Agency. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction material be handled and transported in such a manner as to not create unnecessary noise. Compliance with those noise control measures would be ensured by including them in the contract documents as materials specification and by directives to the construction contractors. No significant noise impacts are expected to occur as a result of the construction.

Dust emissions can occur from hauling debris and traffic over unpaved areas. All necessary measures would be implemented to ensure that the New York City Air Pollution Control Code regulating construction-related dust emissions is followed. As a result, no significant air quality impacts from dust emissions would be expected.

The City of New York would coordinate construction activities with the Lower Manhattan Construction Command Center. Furthermore, the City would comply with the requirements of New York City Local Law 77, the New York City Noise Control Code, and the Lower Manhattan Development Corporation's Environmental Performance Commitments.

T. PUBLIC HEALTH

According to the *CEQR Technical Manual*, public health comprises the activities that society undertakes to create and promote a community's wellness. Public health may be jeopardized by poor air quality resulting from traffic or stationary sources, hazardous materials in soil or

groundwater used for drinking water, significant adverse impacts related to noise or odors, solid waste management practices that attract vermin and pest populations, and actions that result in exceedances in city, state, or federal standards.

As described previously, the Proposed Action would not result in significant adverse impacts to air quality or noise. No exceedances of city, state, or federal standards would occur. The project would not involve solid waste management practices that would attract vermin or pest populations. Therefore, the Proposed Action would not result in any significant adverse impacts to public health, and no further analysis is necessary.